

LOCAL FOUNDATIONS AND MEDICAL RESEARCH
SUPPORT IN INDIANAPOLIS AFTER 1945

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DEDICATION

For Audrey Grace

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Suzann Weber Lupton

LOCAL FOUNDATIONS AND MEDICAL RESEARCH

SUPPORT IN INDIANAPOLIS AFTER 1945

Philanthropy plays an important and often publicly visible role in modern medicine. Names like Carnegie, Rockefeller, and Gates are associated with medicine both personally and through the foundations they created. This phenomenon also played out on a local level, where communities are dotted with hospitals, university laboratories, and medical schools bearing the names of families who contributed to build, literally and figuratively, the institutions of medical research. Little is known about these local philanthropists, including why they decided to support research and how they organized and carried out the work of grantmaking. Consequently, there is no deep understanding of the value of their contributions. I seek to remedy that omission through this study of the history and work of three small foundations dedicated to medical and scientific research and located in a single, midsized American city. Ultimately this work considers a question fundamental to medical research philanthropy: Can smaller foundations make a meaningful contribution to modern medical research given the scale, complexity, and cost of the work as well as the dominance of federal government funding? This work concludes that the primary value of the foundations under study was not their financial support for research per se, but their flexible and sustained contributions to the local research infrastructure, including philanthropic investments that helped launch research projects and the careers of individual scientists; provided capital for needed physical space; and supported recruiting efforts to bring innovative and productive faculty members to staff new research and patient care departments. The foundations in this

study, both individually and collectively, served as valuable strategic allies to the research institutions in their community. As a result, the foundations contributed directly and meaningfully toward the expansion and improvement of the research institutions. The resulting growth in the size and reputation of these programs and facilities generated economic gain that benefitted the broader community. This finding supports a call for the development of a more nuanced and complete understanding of the potential impact that smaller funders can have in a large and complicated system.

Nancy Marie Robertson, Ph.D., Chair

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CHAPTER ONE

Why Study Local Foundations that Support Medical Research?

Philanthropy plays an important and often public role in modern medicine. Names like Carnegie and Rockefeller, and more recently Hughes and Gates, are associated with medicine both personally and through the foundations they created. This phenomenon played out on a local level as well, where communities are dotted with hospitals, university laboratories, and medical schools bearing the name of local families who contributed to build, literally and figuratively, the institutions of medicine and research.

Medical philanthropy, in fact, was never limited to the very wealthy. Individuals of even modest means found ways to contribute to organizations trying to defeat disease and improve health. Americans chipped in to support the construction of new hospitals in their communities. They bought Christmas Seals for the American Lung Association and canvassed their neighborhoods collecting money to support the fight against polio, tuberculosis, or cancer. Organizations referred to as voluntary health organizations aggregated small contributions and used the money to educate and advocate for increased government support for research in the organization's chosen field. Campaigns run by voluntary health organizations and local hospital funding drives gave individuals the opportunity to participate in the search for treatments for diseases that affected them, their families, and communities.

Another source of medical research funding became popular in the 1950s and 1960s as more individuals and families created private philanthropic foundations. Many of these new foundations supported medical research either occasionally or exclusively as part of a larger philanthropic portfolio. The growth of smaller foundations supporting

medical research grew as the largest foundations slowed or ceased their support of medical research.

By the end of the Second World War, a new entity came to dominate medical research funding—the federal government. The National Institutes of Health (NIH), in fact, became the largest single funder of medical research in the world. Some traditional funders, including large foundations, felt that they could no longer have a meaningful impact on the direction of research and moved to work in other areas. If funders with the capacity of Rockefeller and Carnegie felt crowded out by the size and influence of the national government, what role could smaller foundations play at their level of financial support? Yet, small and midsized foundations continue to make grants to support medical research across the country.

According to Foundation Center data, 9,087 (some 14%) of America’s nearly 65,000 grantmaking foundations identified medical research support as a priority in 2016. These funds made 21,603 grants valued at more than \$1.2 billion to medical researchers and institutions.¹ Few foundations dedicated to medical research today are wealthy enough to take on projects of a size and scope reminiscent of early heavyweights like Rockefeller. Only 390 foundations, or 4% of all foundations included in the 2016 census, managed assets of more than \$100 million, while 188 foundations held over \$500 million in assets. Foundations managing smaller holdings distribute less annually.² Additionally,

¹ The Foundation Center’s online Foundation Directory was used to identify the number and asset value of foundations supporting medical research. The search filtered for non-governmental grantmakers located in the United States funding “researchers” working on “diseases and conditions” or “medical specialties” or “biology.”

² Under current United States Internal Revenue Service regulations, private grantmaking foundations must annually pay out at least 5% of the value of their endowment in

smaller organizations typically work without the assistance of professional or administrative staff. There is no generally accepted standard for classifying foundations by size, though descriptions such as “small” and “midsized” are commonly used descriptors. For purposes of this dissertation, a small foundation is one that manages less than \$100 million, while a midsized foundation manages between \$100 and \$500 million.

Research studies typically focus on single foundations that are either large or controversial, or both. Alternately, some works examine the collective effort of foundation clusters in areas like education, advocacy, or social services.³ Individual foundations that could be described as midsized or smaller are typically omitted from scholarly consideration. The focus on large foundations is not surprising. Whales are more enticing than minnows; they are easier to spot and their potential impact is more visible. Yet, as in the natural world, smaller organizations far outnumber the larger ones and organizations of all sizes have influence on the entire system. This study seeks to contribute to the broader understanding of foundations by examining one type of foundation typically omitted from review: smaller foundations.

furtherance of their charitable purpose. Thus, a foundation with a \$50,000,000 corpus will make an estimated annual payout of \$2.5 million.

³ Exemplary works include: Helmut Anheier and David C. Hammack, eds. *American Foundations: Roles and Contributions* (Washington D.C.: Brookings Institution Press, 2010); Lucy Bernholz, “Private Philanthropy and Public Schools: San Francisco in the 1960s and 1970s” (PhD diss.: Stanford University, 1995). Daniel J. Kevles, “Foundations, Universities, and Trends in Support for the Physical and Biological Sciences, 1900-1992,” *Daedalus* 121, no. 4 (Fall 1992): 195-235; Raymond Blaine Fosdick, *The Story of the Rockefeller Foundation* (New York: Harper & Brothers, 1952); William H. Schneider, ed., *Rockefeller Philanthropy and Modern Biomedicine: International Initiatives from World War I to the Cold War* (Bloomington: Indiana University Press, 2002).

This work examines the history of small and midsized private grantmaking foundations that supported medical research in one city, Indianapolis, Indiana, during the period between 1965 and 2016, the last year before several long-term foundation leaders retired. Common approaches used by foundation historians include operational history, organizational and sector history, and often social history.⁴ Operational histories focus on how a single entity worked.⁵ Frequently, operational histories are commissioned by the organization, and are therefore of limited analytical value. Both organizational and social histories take a larger view and consider a foundation or foundations within a larger context. In these studies, foundations are considered one actor in a larger system and the focus in these studies is often on the larger system and not the component parts.⁶

This investigation proposes a different and, perhaps, more precise approach by looking at a small group of foundations. The three foundations identified in Table 1, below, are the focus of this work. Each foundation was created between 1969 and 1985 and has operated continuously in Indianapolis, Indiana. These foundations are ripe for study as a group because they were founded within 20 years of one another in the same city, they are relatively similar in terms of size, and each foundation in this study donates exclusively to medical and scientific research. Other foundations working in the same community are also considered, but not at length.

⁴ Lucy Bernholz “The Future of Foundation History,” in *Philanthropic Foundations: New Scholarship New Possibilities*, ed. Ellen Condliffe Lagemann (Bloomington: Indiana University Press, 1999), 362-365.

⁵ For example, Raymond Fosdick, *The Story of the Rockefeller Foundation* (New York: Harper and Brothers, 1952).

⁶ For example, Waldemar A. Nielsen, *The Big Foundations* (New York: Columbia University Press, 1972); Kathleen D. McCarthy, *American Creed: Philanthropy and the Rise of Civil Society* (Chicago: University of Chicago Press, 2003); Olivier Zunz, *Philanthropy in America: A History* (Princeton: Princeton University Press, 2012).

Table 1: Three dedicated medical research foundations in Indianapolis.⁷

Foundation	Date Formed	Assets (2016)
Regenstrief Foundation	1969	\$178,189,723
Showalter Trust	1973	\$39,757,294
Walther Cancer Foundation	1985	\$146,762,412

This study takes up the challenge issued by authors including David Hammack, Helmut Anheier, and Lucy Bernholz to deepen and enrich our understanding of the American foundation by examining the purpose, practices, and procedures developed and modified over time by a variety of types of foundations working in diverse fields and places.⁸ This work engages that challenge by looking at the development and choices that three foundations made to support medical research and then organize and carry out the work of grantmaking. In addition to motivation and structural and operational decisions, this study also examines what Robert Kohler described as the “evolving partnerships between patrons and recipients.”⁹ These foundations participated in a set of steady relationships among and between grantmakers and recipients in a single community. Ultimately, this study asks: How we can best assess and understand the impact of smaller foundations in both the areas they fund as well as on the broader communities where they work?

⁷ Information from the Foundation Center “990 Finder” at foundationcenter.org.

⁸ David C. Hammack and Helmut Anheier, *A Versatile American Institution: The Changing Ideals and Realities of Philanthropic Foundations* (Washington, D.C.: The Brookings Institution, 2013); Bernholz, “The Future of Foundation History,” 372-373.

⁹ Robert E. Kohler, *Partners in Science* (Chicago: University of Chicago Press, 1991): 2.

1. *Animating research questions.*

Answering this core question requires addressing a number of smaller questions. This work explores many questions: Why do funders choose to support medical research despite the complexity and challenges of working in this area? How do these foundations organize to make funding choices? How do they structure their contributions? Does evidence demonstrate whether these gifts advanced research? What types of relationships do small and mid-sized funds develop with external actors, including potential and actual recipients? How do these relationships influence an organization's behavior? Finally, do these foundations share common traits or characteristics that might inform future research on and practice of smaller and locally-orientated foundations? These questions—and many others—remain largely unaddressed by current literature.

Smaller foundations are rarely studied. Therefore, answering these questions will help fill a gap in current knowledge about the nature, behavior, and value of smaller foundations in general and their roles in contemporary medical research in particular. This work is built on the historic and operational records maintained by the three foundations at the heart of this study as well as other relevant literature and archives. The three organizations highlighted in this study have provided generous access to their files, records, and archives. Their openness and cooperation made this work possible.

2. *What are the challenges of choosing medical research funding?*

Medical research is not for the faint of heart. It is complex and agonizingly slow. As one researcher put it, “New knowledge about disease has a fifteen to twenty-five year gestation from basic discovery to clinical application, an interval that may be

lengthening.”¹⁰ Individual projects often focus only on a narrow part of a larger problem. The complexity and interrelated nature of scientific research require the participation of a growing number of specialists and technicians. The researcher toiling alone in a laboratory is no longer the vehicle of medical research, if indeed it ever was. Collaborations sprawl across specialized disciplines, organizations, and geography. Working over time and distance can consume energy and time. Fights over primacy on a research team or ownership of resulting intellectual property can distract from work and even derail projects. In clinical research, shortages of qualified investigators and willing patients can stall progress and derail agendas.¹¹ Government regulations touch many aspects of medical science and add further challenge to the work. Rules and regulations impact the operation of laboratories, control of materials and specimens, protection of confidential health information, all aspects of clinical testing, and patient protection.

Another fundamental challenge of contemporary research is its high and growing cost. Research project budgets cover the cost of highly trained specialists such as physicians, research scientists, students, and assistants. Other costs include the acquisition, maintenance, and operation of sophisticated laboratories and facilities; acquisition of materials; hazardous waste use and disposal; information technology; and data storage. Medical research often includes expenses associated with patient recruiting and care as well as regulatory compliance. This list of expenses is daunting. Even with a solid research design and sufficient resources, success is elusive.

¹⁰ Hamilton Moses, III, M.D., *et. al*, “The Anatomy of Medical Research: US and International Comparisons” *JAMA*. 313(2): 174-189 (2015): 181, doi:10.1001/jama.2014.15939.

¹¹ Nancy S. Sung, *et al*; “Central Challenges Facing the National Clinical Research enterprise,” *JAMA* 289(10) (March 12, 2003) :1278-1287 doi:10.1001/jama.289.10.1278.

Strategic grantmaking requires foundations to undertake a sophisticated and multi-variable analysis of a grant's potential impact. It is necessary to understand and evaluate the proposed scientific work. Foundations must weigh technical proposals, assessing the promise of work and weighing that potential against the value of competing options. The need for sophisticated assessment does not stop at examining the proposals. Once work is underway, it is important to track and evaluate progress. Is the funded work moving as promised? Is continued funding necessary or appropriate? Funders must feel confident that they can peek behind the researchers' often rosy assessment and reach their own conclusion. Even large foundations with professional staff may lack the technical acumen to evaluate the scientific merit of a program or proposal internally. Compensating for the absence of expertise means identifying experts willing and able to assist the organization voluntarily or the resources to compensate them.

In addition to assessing the scientific quality of a proposal, this work urges that foundations should also consider the important secondary impact of grant funding. Philanthropic funding does more than allow a particular line of research to move forward. Grant funds generate benefits beyond the project. Consequently, and in addition to weighing the promise of science, funders should also understand what a grant could mean to the institution receiving funds and to that institution's community. Will the grant allow the institution to add new employees to expand the capacity of a research team or department beyond what currently exists? Will the money support construction or improvement of a physical facility and thereby create benefits for local companies and laborers? Does the grant facilitate an expansion of care services to patients? Thoughtful consideration of the benefits a grant might bring to an institution and to a community is

additional work in an already complicated process, but it is an essential step for a funder who wishes to bring a strategic approach to their grantmaking.¹²

Finally, scientific and medical discovery can be agonizingly slow. Foundations eager for quick and visible return on investment could easily lose patience. Given the complexity of medical research, the high cost of working in the area, and the time it takes to accomplish anything worthwhile, the question will inevitably be asked: why do foundations continue to make grants to medical researchers rather than selecting a different focus for their work?

3. *What motivates foundations to choose medical research?*

Literature focused on donor motivations more generally is extensive. Authors suggest motivations ranging from selfless to self-serving.¹³ Researchers examining the narrower question of why wealthy individuals choose to form charitable foundations span a similar and often more politically ideological spectrum.¹⁴ Fewer studies examine the

¹² William McKersie provides a useful discussion of locally-focused strategic philanthropy in, “Local Philanthropy Matters: Pressing Issues for Research and Practice,” in *Philanthropic Foundations*, 329-358. FIRST MENTION—you need full cite

¹³ Waldemar Nielsen, *The Big Foundations*, 1st ed. (New York: Columbia University Press, 1973); Warren Weaver, *U. S. Philanthropic Foundations*, (New York: Harper and Row, 1967); Susan Ostrander and Paul A. Schervish, “Giving and Getting: Philanthropy as a Social Relation,” in *Critical issues in American Philanthropy*. John Van Til, ed. (San Francisco: Jossey-Bass, 1990).

¹⁴ Foundation critics argue that the wealthy use the foundation as a tool to engage in self-serving efforts to improve their public image, assuage personal guilt, or advance their interests and as well as those of the elite classes. Others challenge the organizations as anti-democratic consolidations of private wealth. See, for example, the works Robert F. Arnove, *Philanthropic and Cultural Imperialism: The Foundations at Home and Abroad* (Boston: G.K. Hall, 1980); Teresa Odendahl, *Charity Begins at Home: Generosity and Self-Interest Among the Philanthropic Elite* (New York: Basic Books, 1990); James T. Bennett, *Health Research Charities: Image and Reality* (Washington D.C.: Capital Research Center, 1990); Mark Dowie, *American Foundations: An Investigative History*, (Cambridge: MIT Press, 2001). Authors including Joel Fleishman take a more generous

reasons for selecting one particular area of work over another or for maintaining that focus in cases where the foundation's organizational documents allow subsequent decision makers the latitude to change. This work focuses on a more specific question: What motivates foundations to dedicate their funds to medical research? The remainder of this section discusses the theories and literature addressing this question.

The most common popular theory about why a charitable funder chooses to support medical research, either personally or through a foundation, centers on the "grateful patient" concept. This theory posits that patients or their loved ones will develop a relationship of gratitude with some part of the medical establishment that motivates philanthropic giving. An emerging body of literature explores this concept, though almost exclusively from the angle of examining potential ethical challenges that arise in these situations or from the more positively oriented language of professional literature encouraging more effective exploitation of the provider's link to the patient.¹⁵ No identified literature considers this phenomenon as a motivation to begin a foundation or to direct the resources of an existing foundation toward this work, though question of whether the grateful patient theory applies to the creation or governance of a foundation is worthy of future exploration.

view, suggesting that the overarching reason for placing personal wealth into foundations is to "create a vehicle for promoting large-scale, lasting social change." Joel Fleishman, *The Foundation: A Great American Secret How Private Wealth is Changing the World*, (New York: PublicAffairs, 2007), 40.

¹⁵ Rosalyn Stewart, *et al.* "Success in Grateful Patient Philanthropy: Insights from Experienced Physicians" *The American Journal of Medicine*, (2001) 124 no. 12; Scott M. Wright, Leah Wolfe, Roslyn Stewart, *et al.* "Ethical Concerns Related to Grateful Patient Philanthropy," *Journal of General Internal Medicine* (2013) 28: 645. <https://doi.org/10.1007/s11606-012-2246-7>.

Historians provide some insight into why large American foundations supported medical research at the beginning of the twentieth century. Steven C. Wheatley identifies a philosophical and strategic motive, one that grew out of the popular Progressive-era orientation known as scientific philanthropy. Scientific philanthropists acted out of a combination of fear and confidence. They feared that unrestricted benevolence served only to foster dependence. This risk could be avoided, however, through application of scientific reason and efficiency toward efforts to solve social problems at their root. Scientific philanthropists preferred a permanent cure to the temporary relief of symptoms. Medical research, Wheatley argues, provided an ideal target for practitioners of this new philosophy of philanthropy. An investment in medical research “would constitute the most basic and symbolic expression of the ideal of scientific philanthropy: the quest for disease cures was much more important than mere mitigation of suffering.”¹⁶ Consequently, foundations interested in addressing problems of health would use their funds to empower scientists and physicians to find cures and treatments

In *American Foundations and the Funding of Science*, Kenneth Prewitt argues that for industrial barons like John D. Rockefeller and Andrew Carnegie, medical and scientific research was logically connected to their commercial endeavors. Rockefeller, for example, “built his wealth through the exploitation of scientific and technological advances and it took no great leap of imagination to appreciate the ways in which science could realize other human purposes, especially that of improved health.”¹⁷ Prewitt

¹⁶ Steven Wheatley, *The Politics of Philanthropy: Abraham Flexner and Medical Education*; (Madison: University of Wisconsin Press, 1988).

¹⁷ Kenneth Prewitt, “American Foundations and the Funding of Science,” *Essays on Philanthropy*, No. 21, Indiana University Center on Philanthropy, (1996), 6.

suggests that these donors were attracted to opportunities that allowed them to apply trusted methods and technologies to new problems.

Another potential factor motivating a donor to choose medical research is the influence of donor's trusted advisor. Rockefeller's selection of medicine as a central subject of his philanthropy resulted from the urging of his personal advisor, Frederick Gates, a former minister with a personal interest in medicine. Andrew Carnegie was encouraged to support the reform of medical research at the urging of his advisor, Henry S. Pritchett. In their profile of the Commonwealth Fund, A. McGehee Harvey and Susan L. Abrams noted that the large medical and educational foundations of the early twentieth century shared one characteristic: "the presence of strong administrators" who led their patrons toward the support of medical research.¹⁸

Administrators in early, large foundations exerted influence on questions beyond who would receive funding. They also determined the form that gifts took. In *Partners in Science, Foundations in Natural Science: 1900-1945*, Robert Kohler traces the evolution of private support for research from the block grants to institutions that were common in the 1920s to the current preference for grants to individual researchers. The movement in the 1930s away from block grants and to individual grants, Kohler argues, was driven partly by the fact that even the largest foundations could no longer make the capital investment required to support research institutions. Instead, these funders moved to smaller, less costly individual grants and "hundreds of medical foundations followed

¹⁸ A. McGehee Harvey and Susan Abrams, *For the Welfare of Mankind: The Commonwealth Fund and American Medicine* (Baltimore: Johns Hopkins University Press, 1986), 2.

the leaders into research in the 1940s and 1950s, doling out their modest funds to worthy subjects.”¹⁹

A contemporary director of a medical research foundation suggests that serendipity and personal acquaintance are often significant in a foundation’s decision to select medical research as an area of grantmaking focus. Notably, this proposal does not come from a scholarly source. Instead the author is a participant-observer in the system he critiques. His remarks and reflections can be regarded as primary source material worthy of consideration and examination. Greg Simon, head of the medical research foundation FasterCures, finds that many donors enter medical research inadvertently. Individuals with money to give typically turn to their own past, perhaps their university, a doctor who treated an early illness, or a friend or neighbor who works in medicine, in search of an idea and winds up supporting a suggested area of scientific inquiry.²⁰ In other cases, Simon suggests, a wealthy donor may be intrigued by a chance encounter with a provocative researcher who occupied a nearby seat on a flight or at a social event.²¹ Simon’s idea extends the theory of the trusted advisor as motivator. He observes that a chance encounter can be sufficient to motivate some donors to action.

¹⁹ Robert E. Kohler, “Philanthropy and Science,” *Proceedings of the American Philosophical Society* 129, no. 1 (March 1, 1985): 9-13.

²⁰ Simon presented his critical view of the nature of donor selection during The Arthur C. Frantzreb Lecture at Indiana University’s Center on Philanthropy 19th Annual Symposium, “Health and Philanthropy: Leveraging Change.” His remarks were published as: Greg Simon, “Entrepreneurial Philanthropy and Innovative Medical Research: The Arthur C. Frantzreb Lecture at Indiana University’s Center on Philanthropy 19th Annual Symposium: ‘Health and Philanthropy: Leveraging Change,’” *Nonprofit and Voluntary Sector Quarterly* 37, no. 1 (March 1, 2008): 6S -16S.

²¹ Simon, “Entrepreneurial Philanthropy,” 12S.

What Simon concludes is that contemporary donors, like their philanthropic predecessors, are likely to enter medical research as a result of personal contacts or even chance encounters. His comments suggest that unlike the large funders of the past who depended on trusted and long-term philanthropic advisors, smaller contemporary funders may act in response to fleeting contacts or the recommendations of individuals who are less likely to have the donor and their strategic goals in mind.

When answering questions about motivation, it is important to be mindful of a simple reality: smaller foundations have less to spend on any effort. Regardless of the motivation, a donor or a foundation that decides to support medical research must possess both a desire to improve health or cure a disease and the belief that this goal can be accomplished through their contributions. For a very large foundation, it is possible to make grants significant enough to advance an effort in a meaningful way or to bring sufficient public attention to a problem to move it onto the public agenda so that others, including wealthier public and private actors, will contribute. Few foundations occupy that rare space. Consider, for example, the Gates Foundation's efforts to address the challenges of HIV/AIDS, including supporting research on a vaccine. The Gates Foundation has made grants of nearly \$4 billion to AIDS-related research and care delivery. In 1999, Gates made a \$25 million grant to the International AIDS Vaccine Initiative, a gift that immediately doubled the initiative's development efforts.²²

However, the Gates Foundation itself recognizes that its resources "represent only a small

²² "Bill and Melinda Gates Make \$25 Million Grant to International AIDS Vaccine Initiative." Gates Foundation last modified May, 1999, <http://www.gatesfoundation.org/Media-Center/Press-Releases/1999/05/International-AIDS-Vaccine-Initiative> (1999).

portion of worldwide funding” committed to the effort.²³ Consequently, smaller funders working in medical research soon face the reality that their ability to solve a problem is limited. It is reasonable to consider how this practical fact influences a smaller donor or foundation’s decision to begin or persist in medical research funding.

Researchers and authors who have examined donor motivation typically did so through the lens of the large funders. There are many intriguing issues around the question of motivation and smaller funders. Do smaller foundations respond to different factors or express other motivations, or do all donors, regardless of size, respond to the same influences? Did historical factors encourage or discourage donors toward medical research support? For example, did smaller foundations created in the decades following the Second World War choose medical research support simply to mimic the major foundations in both purpose and method, as Kohler suggests, or were post-1950s foundations acting on a different set of motivations and in response to a different set of influences? Were they influenced by the success of voluntary health organizations like the American Cancer Society and the March of Dimes? What role, if any, did the changing relationship between the lay public and medicine in the post-war decades have in donors’ decisions to support medical research?²⁴ Did persuasive outsiders or events influence contemporary benefactors toward medical research, or do smaller donors, like

²³ “What We Do: HIV Strategy Overview. The Bill and Melinda Gates Foundation,” Gates Foundation, accessed May 30, 2016, www.gatesfoundation.org/What-We-Do/Global-Health/HIV#bodyregion_0_interiorarticle_0_strategysections_2_strategysubsections003d5bb5b7d94917b0e1f (May 30, 2016).

²⁴ Creager, “Mobilizing Biomedicine”; Keith Wailoo, “Sovereignty and Science: Revisiting the Role of Science in the Construction and Erosion of Medical Dominance,” *Journal of Health Politics, Policy and Law* 29, no. 4-5 (August, 2004): 643-660.

their larger predecessors, act on the counsel of trusted advisors? This work takes up these questions in the context of three foundations that are smaller and more locally focused than the foundations studied in existing literature.

4. *How do medical research foundations organize their work and make funding choices?*

All foundations, regardless of size or purpose, engage in one essential task: they decide how to allocate financial resources. These decisions are not made in sterile conditions. In addition to internal factors, like operational policies and grantmaking philosophy, foundation choices are subtly and not so subtly swayed by a variety of factors including the foundation's giving philosophy, its organizational culture, and external factors that cross the transom and enter the decision process.²⁵ Additionally, powerful external influences exert power on decision making, particularly the "complex interactions between and among people," including both the personal relationships of individuals engaged in the decision-making process and the institutional relationships between the foundation and other entities.²⁶ In medical research funding, the most critical relationships exist between the foundation and the relatively limited number of actual and potential recipients working in the area of research preferred by the funder.

Relationships between foundations and other organizations are not one way, running only from the funder to the recipient.²⁷ Rather, foundations are engaged in a

²⁵ Bernholz, "The Future of Foundation History," 359-375.

²⁶ William Bloomfield, "Grantmaking Foundations in America: Analyzing the Process and Practice of Philanthropic Decision-Making," (Ph.D. diss., Brandeis University, 2002), 130. See also McKersie, "Local Philanthropy Matters," 340-342, on local foundations and organizational interdependency.

²⁷ Lester M. Salamon, Alan J. Abramson, and Nonprofit Sector Project, *The Federal Budget and the Nonprofit Sector* (Washington, D.C.: Urban Institute Press, 1982); Peter Dobkin Hall, "Abandoning the Rhetoric of Independence: Reflections on the Nonprofit

relationship of exchange, what Susan Ostrander and Paul Schervish labeled the “social relation of giving and getting.”²⁸ The benefits to the recipient are obvious. When foundations make grants, recipients receive needed direct financial support as well as increased prestige resulting from the external validation of their work. Validation from external sources is particularly valued in medical science. Other individuals and organizations in the general community obtain indirect benefits from these gifts, such as the potential for improved health care and, particularly in the context of medical research grants, the opportunity for economic development.²⁹ This exchange creates “multifaceted and complex” interdependent relationships between the foundation and others beyond the recipient.³⁰

Foundation literature contains a growing list of works that have explored questions of mutual influence and sector and organizational dependence and

Sector in the Post-Liberal Era,” in *Shifting the Debate: Public/Private Sector Relations in the Modern Welfare State*, ed. Susan A. Ostrander, Stuart Langton, and Jon Van Til (New York: Transaction Publishers, 1987), 11-28; Jon Van Til, *Critical Issues in American Philanthropy: Strengthening Theory and Practice* (New York: Jossey-Bass Inc., 1990); Bernholz, “Private Philanthropy and Public Schools.”

²⁸ Susan Ostrander and Paul A. Schervish, “Giving and Getting: Philanthropy as a social relation,” in *Critical issues in American Philanthropy*, ed. John Van Til (San Francisco: Jossey-Bass, 1990): 67-98.

²⁹ A recent report prepared for BioCrossroads, a biomedical industry group in Indiana reported that from 2005 to 2010, the Indiana Economic Development Corporation (IEDC) identified an estimated 14,500 new life sciences jobs and nearly \$1.8 billion in projected capital investment from life sciences companies. Walter Plosila, *Indiana Life Sciences Industry 2002-2010: Tracking Progress and Charting a Course for Continued Success* (Indianapolis: BioCrossroads, 2010) available at: <https://www.ibrc.indiana.edu/studies/Indiana-Life-Sciences-Industry-Report-2002-2010.pdf>.

³⁰ William McKersie, “Strategic Philanthropy and Local Public Policy: Lessons from Chicago School Reform, 1987-1993” (Ph.D. diss. University of Chicago, 1998), 35.

interdependence in foundation decision making in particular contexts.³¹ Lucy Bernholz and William McKersie, who both examined foundations that supported education reform efforts in single cities, provide insights into questions of influence and interdependence in a similar context to the one in this study. Both authors examined the nature of the relationships between foundations and nonprofit agencies working on reform projects in public schools. These researchers found high levels of organizational interdependence. Beyond the expected flow of money from donor to recipient, McKersie, for example, found extensive interaction between professionals and a consistent flow of ideas between foundation and agency.³² These were two-way, interactive exchanges rather than top-down flows from funder to recipient. McKersie's conception of sectorial relations built on work by Peter Dobkin Hall who explored three types of links between sectors: fiscal ties, overlapping career patterns, and substantive connections.³³

This study applies those findings in the context of a highly technical field. Foundations commonly rely on expert information to understand funding options and to evaluate work. Large foundations are able to bring this expertise inside the organization, perhaps by hiring experts or bringing them into board roles. Smaller foundations may have neither the revenue nor the clout to do this. How do such foundations cope with this

³¹ Bernholz, "Private Philanthropy and Public Schools" (education reform); William McKersie, "Local Philanthropy Matters" (education reform); William A. Diaz, "The Behavior of Foundations in an Organizational Frame: A Case Study," *Nonprofit and Voluntary Sector Quarterly* 25, no. 4 (December 1, 1996): 453 -469 (social services). John R. Thelin and Richard W. Trolinger, *Philanthropy and American Higher Education* (New York: Palgrave Macmillan, 2014) (higher education).

³² William S. McKersie, "Strategic Philanthropy and Local Public Policy"; Bernholz, "Private Philanthropy and Public Schools."

³³ Peter Dobkin Hall, *Inventing the Nonprofit Sector and Other Essays on Philanthropy, Voluntarism, and Nonprofit Organizations* (Baltimore: Johns Hopkins University Press, 1992), 100-104.

deficit? One option is to attempt to find independent advisors to help sort and process technical information. Another option is to lean on actual and prospective donors for information. Potential recipients may even be expected to prescreen and select the best candidates for funding. Of course, an organization may use all three of these strategies or develop others. Small foundations that lack the expertise needed to work effectively in an area may develop a heightened form of dependence on other organizations and this fact may shape and alter their work in significant ways. For example, organizations that become dependent on their recipients are more likely to become tightly tethered to the institutions' strategic agenda rather than forming and advancing their own.

Another way to assess how organizations manage external influences is to examine the formal decision-making structures that organizations develop, follow, and revise. In the context of a grantmaking, decision processes include both the mechanism that the organization puts in place to solicit grants and the process it uses to select recipients and evaluate their work. The nature of the decision-making processes that an organization follows reveals important information about the organization. Several thoughtful works have introduced theories of organizational sociology and political science as lenses for examining these processes.³⁴ This work uses an historical approach to examine these same questions because historical examination includes consideration not just of the structure of decision processes or the outcome of particular choices, but also of the broad context leading to and surrounding the development of ways of

³⁴ For example, see Bernholz, "Private Philanthropy and Public Schools"; William McKersie, "Strategic Philanthropy and Local Public Policy"; William A. Diaz, "The Behavior of Foundations in an Organizational Frame: A Case Study," *Nonprofit and Voluntary Sector Quarterly*, 25, no. 4 (December 1, 1996): 453-69. <https://doi.org/10.1177/0899764096254004>.

working. History is an ideal lens for evaluating the ways that social relationships shape and challenge internal organizational processes.

Decision processes can act as gatekeepers by controlling who may influence a decision and directing the points in the process when they can be heard. A process can also reveal how receptive, even encouraging, foundations are to outside influence, including from actual or prospective recipients, external consultants, community members, and other grant makers. For example, applications can be reviewed using a blind or double-blind process similar to those often used by academic journals. Alternately, organizations take a completely opposite approach and invite potential recipients to make their case for support personally. This work will explore the processes created and used by two midsized and one small foundation as a means for examining the manner in which these organizations respond to influence.

5. What value can foundations, particularly smaller ones, bring to the medical research endeavor?

Little academic literature explores the contributions of small foundations working in a particular area. This dissertation examines the actions of one small community of foundations and serves as a study of ways that smaller organizations contribute to medical research. Cataloguing the type and form of support that foundations have provided sheds light on the question of how these foundations provide unique support or duplicate the contributions of others.

The most frequently identified role for philanthropic funders is their willingness to support innovation, test new ideas, develop new methods of working, or support

untested concepts.³⁵ In the context of medical research, funding new and untested researchers or projects is necessary.³⁶ Indeed, many scholars and practitioners consider the willingness to provide venture support the most valuable role that foundations play.³⁷ The other two primary sources of medical research funding, government and private industry, are not likely to fund the early or start-up phase of science. Constituent pressures, whether from voters or shareholders, push government and private industry funders toward funding with an eye on return on investment.

Early stage work is naturally speculative. Government and industry are inclined to fund proven concepts, which are typically closer to a practical and commercial payoff. Thus, innovative but unproven concepts—as well as innovative but unproven researchers—struggle to find funding. This work provides an opportunity to evaluate the extent to which the subject foundations stepped into roles like the innovator, risk-taker, and gap-filler. It also explores the possibility that these foundations may mimic the work of their forefathers, the large foundations of the early twentieth century, in that their essential value is the contributions they make to building and sustaining the infrastructure needed to perform research.

³⁵ Barry Karl, “Funding Science: An Adventure in Public History,” *Reviews in American History* 23, no. 3 (September 1, 1995): 496-501; also, Anheier and Hammack, *American Foundations*; Peter Frumkin, *On Being Nonprofit: A Conceptual and Policy Primer* (Boston: Harvard University Press, 2002).

³⁶ Robert I. Field et al., “Toward A Policy Agenda on Medical Research Funding: Results of A Symposium,” *Health Affairs*, 22, no. 3 (May 1, 2003): 224 -230; K.R. Matherlee, “The Outlook for Clinical Research: Impacts of Federal Funding Restraint and Private Sector Reconfiguration,” *Academic Medicine: Journal of the Association of American Medical Colleges* 70, no. 12 (December 1995): 1065-72; B L

³⁷ Moses, “The Anatomy of Medical Research”, 1339.

6. *Research design.*

This work explores a small community of medical research foundations and focuses on three foundations. Original documents from the three organizations provide a meaningful look into the creation and the operation of these foundations. This study allows us to learn more about questions relevant not just to the foundations discussed in the study, but also to many other grantmaking funds across the country. For example, this work considers the factors that motivated the individuals who started these foundations to fund medical research over other options. That information can enhance our understanding of other foundation founders and other grantmaking foundations and guide efforts to frame new questions for future research. This work also tells us how these individual organizations created and recreated ways of working with and relating to other organizations in their community. This study necessarily involves a look at the work and choices of other actors in the community, particularly the institutions and individuals engaged in medical research, in one place, Central Indiana over a fifty-year period.

Because this work focuses on foundations located in a single city working in the same period of time, often with the same recipient institutions, the subjects experienced many of the same environmental pressures. Consequently, it is possible to compare organizational strategies followed by these foundations without the need to consider significant differences in the ambient environment. Analyzing a community of foundations creates a more complex picture than a snapshot of a single foundation. It is possible to diagram lines of influence between funders, as well as those between donors and recipients, and to ask questions such as whether these foundations chose to compete

or cooperate. Foundations act within communities and their efforts naturally have consequences for others in the community, including those who are supported by the foundation. This study creates the opportunity to examine not just what the granting organizations funded, but also how these funds, and even the potential for funds, caused the recipient organizations to behave.

7. Dissertation structure and content.

This study is organized into five chapters. Chapter One has provided an overview of the project, including a discussion of the questions that animated this work, the reasons such examination is needed, the methods employed, and the contributions this study can make to our understanding of both smaller foundations and medical research support organizations.

Chapter Two provides a broad, general overview of the history of foundation support for medical research in America since 1865. At the core of this section is the story of the emergence and growth of America as a medical research powerhouse. Among other things, the chapter sets out the roles that nonprofit foundations have played over time as instigators, reformers, advocates, and funders. This section also includes a brief discussion of the ways that medical research is financed today to inform consideration of how foundations can engage in the system now.

Chapters Three and Four are the heart of this work. They examine the creation and evolution of three Indianapolis foundations that focused exclusively on medical research support: the Regenstrief Foundation, the Ralph W. and Grace M. Showalter Research Trust (hereafter, the Showalter Trust), and the Walther Cancer Foundation, Inc. (hereafter the Walther Foundation). These three foundations were created in Indianapolis

within ears of one another and each dedicated its giving exclusively to medical and scientific research. They operated in Central Indiana and worked in the same city at the same time and provided a lens to compare the choices and activities of multiple organizations doing similar work. The organizing themes of this study—motivation, method of work, organizational relationships, and purpose—weave through these chapters. They are organized to cover two brief, but significant, periods in the lives of these organizations. Two of these organizations are classified as midsized, Regenstrief and Walther, while Showalter is a small foundation. Chapter Three looks at the creation and early growth of each foundation. This period provides insight into motivations for selecting medical research and the influence of external relationships on foundation choice and direction.

Chapter Four examines the work of the foundations as mature entities. During these years the maturing and mature organizations were forced to react to significant internal and external challenges. Founding donors and original donors left the organization. Relationships with external partners, including grant recipients, evolved and changed. The stock market drove great growth and ultimately significant decline in the value of foundation assets. Political and healthcare leaders in Central Indiana, as in many communities in the country, looked to emerging research disciplines like genetics, biomedical engineering, and informatics as engines of local economic growth adding new external pressure to the complexities of medical innovation. Chapter Four will examine how the organizations in my study responded to these challenges.

Chapter Five will set out conclusions from the study, reflect on their meaning, and suggest areas for future research.

CHAPTER TWO

A Brief History of Philanthropic Support of Medical Research in the United States since 1865

Philanthropic support is only a relatively small part of current funding for medical research in the United States. American universities and colleges spent over \$71 billion on scientific research and development in 2016. Indiana universities received nearly \$1.4 billion that year, up from approximately \$1 billion 10 years earlier.³⁸ University research budgets rely on three extramural sources: federal and state government, private industry, and philanthropy. The federal government dominates the research funding landscape. The National Institutes of Health alone provided over \$53.3 billion in research support in 2016, or 75% of the \$71 billion spent on medical research that year, making it the largest single research funder in the world.³⁹ For comparison, the United States government allocated almost \$60 billion toward other non-defense research and development in 2016.⁴⁰

Though the public budget is large, it supports only a part of America's ongoing research effort at universities, colleges, hospitals, and research institutes. Private industry and investors interested in the potential financial rewards from successful commercial ventures fund significant medical research that occurs both in industry laboratories and in

³⁸ These totals identify the cost of all organized research projects covered by the institutions with separately accountable funds. Katherine Hale, Ronda Britt and Michael Gibbons, "Higher Education R&D Spending: Spending and Funding Sources Differ by State, NSF 19-202" accessed March 7, 2019, <https://www.nsf.gov/statistics/2019/nsf19303/>

³⁹ Roderik F. Viergever and Thom C.C. Hendriks, "The 10 largest public and philanthropic funders of health research in the world: what they fund and how they distribute their funds," *Health Research Policy and Systems* 14, no. 12 (2016).

⁴⁰ "Trends in Federal R&D, FY 1976-2018," accessed April 30, 2019, <https://www.aaas.org/programs/r-d-budget-and-policy/historical-trends-federal-rd>.

universities and hospitals. Higher education institutions also allocate resources to this work.

The contribution from philanthropy contributes the smallest amount to the research endeavor, but as this study will show it plays a role in research support that exceeds the proportion of funds it provides. In 2016, nonprofit organizations contributed \$4.6 billion toward research and development at higher education institutions or 6.1% of the total research and development expenditures that fiscal year.⁴¹ This total combines all nonprofit organizations, including public charities, particularly voluntary health organizations (like the American Heart Association), medical research organizations (like the Howard Hughes Medical Institute), and private foundations of all types. “Private foundations and public charities, though small, play an essential role in filling [a] gap, especially for the most speculative undertakings or where commercial incentives are insufficient.”⁴²

According to Foundation Center data, over 9,000 grantmaking foundations identified medical research support as a priority in their grantmaking in 2016. Only 4% (390) of these foundations managed assets in exceeding \$100 million. Although nonprofits’ share of the overall funding total is small, these dollars are increasingly valuable to researchers and scholars because they fill important gaps left by other funders. Specifically, philanthropic funders are willing to fund early and highly

⁴¹ Katherine Hale, Ronda Britt, and Michael Gibbons, “Higher Education R&D Spending: Spending and Funding Sources Differ by State,” *National Science Foundation InfoBriefs*, NSF 19-303, March 7, 2019.

⁴² Moses, “The anatomy of medical research,” 1339.

speculative work, including supporting the needs of young scientists and unproven work.⁴³

To understand how private philanthropy has come to this role in funding in the United States, it is necessary to review some of the major historical changes in medicine and how research is done in such institutions as hospitals, medical schools, and research universities. This chapter outlines the history of medical research in the United States since the 1800s as well as the structure of and challenges facing contemporary medical research, including funding and the role that the nonprofit sector plays in that ecosystem.

1. *Strengthening the “withered arm of science”: The roots of the American medical revolution, 1865 to 1900.*

Prior to the American Civil War, the United States lagged well behind Europe in scientific research productivity. America generally lacked capacity to staff and support the institutions needed for meaningful scientific research. Like much else in the post-war years, this situation would begin to change. The practice of medicine as it is known today emerged during the second half of the 1800s, and this and other developments laid the foundations for an evolution in both higher and medical education and a resulting explosion of research in America.

During the 1800s, the practice of medicine began to transition from a trade to a profession. Organized medical schools gradually replaced apprenticeships as the way to educate doctors. The earliest medical schools in America were formed by medical

⁴³ Moses, “The Anatomy of Medical Research,” 1339; also, “U.S. Funding of Health Research Stalls as Other Nations Rev Up, National Public Radio,” January 13, 2015, 1:00 p.m., accessed August 12, 2015 at <http://www.npr.org/sections/health-shots/2015/01/13/376801357/u-s-funding-of-health-research-stalls-as-other-nations-rev-up>.

societies and run in association with existing universities.⁴⁴ Most universities, however, were primarily concerned with training clergy and took only limited interest in the study of science; existing medical schools were occupied with training doctors in the work, but not necessarily the science, of medicine. During thirty-five years between the end of the war and the beginning of the twentieth century, a number of changes essential to the transformation of medical care as well as education and training took place.

The first change involved growth in the number of hospitals. Before 1865 hospitals were few and far between and the quality of care was low.⁴⁵ Treatments for serious illnesses and injuries were lacking or crude, and sound sanitary practices were often unknown and absent resulting in high mortality rates in most hospitals. In most communities, individual providers took care of patients at home. In the decades following the end of the Civil War, hospitals were built to meet growing needs, particularly in urban areas. The number of hospitals increased from one hundred in 1870 to over 6,000 in 1920.⁴⁶

A second development necessary for advancement of medicine was the unification around a standard approach to care. For much of the 1800s, the profession was bedeviled by conflicts between mainline providers, often called “regulars,” and practitioners in medical sects, or “irregulars,” organized around a defined set of therapeutic concepts. Irregular sects included hydrotherapy (internal or external application of water), Thomsonianism (botanical medicine), homeopathy (treatment of

⁴⁴ James H. Cassedy, *Medicine in America: A Short History*, (Baltimore: Johns Hopkins University Press, 1991): 26.

⁴⁵ *Ibid.*, 67.

⁴⁶ *Ibid.*, 73.

disease with drugs eliciting similar symptoms), and eclecticism (crafted from the most preferred aspects of other therapeutic sects). Squabbling between these sects occupied many physicians' time. By the post-war years, most of this open conflict subsided, the regulars prevailed as the dominant philosophy, and doctors were able to turn their attention to the more urgent matters of improving medical education and fostering scientific research. Footnote?

As late as 1865, physician-owners of proprietary medical schools taught most aspiring doctors. The more rapacious of these owners operated degree mills that handed medical credentials to any tuition-paying white male. Most medical education remained dismal and lacked meaningful grounding in science. Outright quackery was common. Relatively few universities took an interest in teaching of medicine, with even the faculty who practiced and taught science regarding medical research with disdain, calling it “the withered arm of science.”⁴⁷ Ambitious and financially able students who completed degrees at the better American medical schools often traveled to Europe, particularly France and Germany, for more advanced training. After their education, they returned to the United States with new ideas about science and medical education, ideas they shared in academic and medical circles.

As the turn of the century neared, increasing numbers of colleges and universities established or associated with medical schools, thus elevating the quality of their programs by building laboratories, increasing admission and graduation standards, and requiring faculty to teach full-time rather than maintain outside medical practices.

⁴⁷ Richard H. Shryock, *American Medical Research Past and Present* (New York: The Commonwealth Fund, 1947): 7.

Simultaneously, organized medical schools gradually replaced apprenticeship and proprietary schools as the primary means of medical education. The American medical school of the late 1800s began to look more like the schools of Europe, where faculty and deans often had trained.⁴⁸ This shift toward a scientifically grounded medical education had implications for higher education and hospitals, and, eventually, research.

Universities, for example, needed to hire faculty, develop curriculum and build laboratory space to accommodate work in the sciences. To accomplish these goals universities turned to private philanthropy.⁴⁹ The link between higher education and philanthropy was already strong. American private universities depended on philanthropic support, particularly from large donors.⁵⁰ Private support helped turn these schools into premier research institutions. For example, John D. Rockefeller's substantial pledge of \$600,000 allowed the rejuvenation of the University of Chicago in 1890, an institution that had been near closure. His subsequent financial support gave the school the ability to make the sustained financial commitments required to become a leading research institution.⁵¹

While Americans were opening the door to scientific and medical education, researchers in European laboratories were making critical discoveries. Europe remained

⁴⁸ More extensive coverage of medical education in the United States can be found in comprehensive works including Kenneth M. Ludmerer, *Learning to Heal: The Development of American Medical Education* (Baltimore: Johns Hopkins University Press, 1985) and Cassedy, *Medicine in America*.

⁴⁹ Daniel J. Kevles, "Foundations, Universities, and Trends in Support for the Physical and Biological Sciences, 1900-1992," *Daedalus*, 121 No. no. 4 (Fall 1992): 195-235

⁵⁰ Duke (1838); Cornell (1865); Vanderbilt (1873); Johns Hopkins (1876); Stanford (1885); and Carnegie Mellon (1900) universities, for example, were all founded after large gifts from donors. See also, Hammack and Anheier, *A Versatile Institution*, 50.

⁵¹ John Boyer, "The University of Chicago's 125-year History," accessed February 27, 2019 at https://www.uchicago.edu/features/historian_illuminates_uchicagos_125_years/.

a vital research hub until the first of two world wars ravaged the continent resulting in both the loss and the immigration of many of Europe's most productive scientists and the destruction of its research institutions. In the late 1800s, however, Europe remained the center of the scientific world and American students training there were introduced to exciting discoveries and technologies.

Some of the most significant of these discoveries involved the invention of diagnostic tools. The stethoscope (1819), ophthalmoscope (1851), and the X-ray (1895), for example, were revolutionary. In the 1870s, Joseph Lister pioneered the use of antiseptic surgical procedures to combat bacterial infections following surgery, enabling the growth of surgery as a therapeutic tool, but requiring hospitals for its practice, just like the new diagnostic equipment and procedures. Louis Pasteur, Robert Koch, and others ushered in the age of bacteriology when they demonstrated the link between bacteria, known as "little animals," and disease. Recognition of the connection led to a new focus on hygiene to prevent disease, a period known as the "great sanitary awakening," when governments and reformers in Europe and the U.S. began to organize efforts to protect the public health through a variety of sanitary measures.⁵²

Pharmacologic research led to profitable commodities developed by an emerging pharmaceutical industry. Firms like E.R. Squibb (1885), Eli Lilly Company (1876), Merck & Company (1891), and Burroughs Wellcome and Company (1894) combined new manufacturing technologies with laboratory discoveries to mass produce and market tablets and capsules. As one scholar has noted: "Drugs and research became inseparably

⁵² Institute of Medicine (US) Committee for the Study of the Future of Public Health, "*A History of the Public Health System*," accessed January 13, 2019, <https://www.ncbi.nlm.nih.gov/books/NBK218224/>

linked.”⁵³ By the end of the century, scientists were able to identify many diseases and, in some cases, provide a prophylactic or a cure. Health care advanced on the back of science, with a push from industrial manufacturing, and the general public watched eagerly for each new development.

Since the Scientific Revolution of the seventeenth century, most science was either self-financed or supported by wealthy or, in some cases, royal patrons.⁵⁴ This was true even in Europe where government support of research was already common. The scientific society provided another avenue for funding. Many societies collected contributions from members and used this money to provide financial support to researchers.⁵⁵ The Royal Society (England) and the Academy of Science (France), for example, grew out of regular meetings of those interested in scientific topics.⁵⁶ Gatherings also served as a formal and public avenue for the peer review of science. Scholarly societies formed in the United States, as well. Benjamin Franklin founded one of the most prominent, the American Philosophical Society, in 1743, though it did not begin a grant program until the 1930s.⁵⁷

⁵³ Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W.W. Norton, 1997); 448.

⁵⁴ For example, Johannes Kepler and Galileo Galilei were both supported by patrons. Robert Smith, “Early History Space Astronomy: Issues of Patronage, Management and Control.” *Experimental Astronomy*, 26, No 1-3 (2009): 149-161.

⁵⁵ See the extensive catalogue maintained by the Scholarly Societies Project, University of Waterloo Library, accessed July 29, 2016 at <http://www.scholarly-societies.org>. In 1851, the Society received a grant of £1000 from the British government and distributed the funds to support individual researchers. The distribution of Parliamentary-funded research grants became and remains one of the Society’s central purposes. “History of the Royal Society,” accessed August 1, 2016, <https://royalsociety.org/about-us/history/>

⁵⁶ In 1665, the Royal Society first published the *Philosophical Transactions of the Royal Society*, which remains in active publication.

⁵⁷ American Philosophical Society “About,” accessed August 1, 2016, <https://www.amphilsoc.org/about/>.

Individual donors also contributed to the first medical research institute in the world, the Institut Pasteur in Paris in 1887. In 1880, Pasteur had developed a vaccine to treat rabies. He skillfully parlayed his successes into an international reputation and fundraising campaign. Donations that “flooded in” after the successful administration of the rabies vaccine became public helped fund construction.⁵⁸ The French government provided the remainder of the funds. Pasteur also developed the model for future research institutes when he brought together scientists from different specialties to conduct research to advance basic science and medicine. Americans following developments in Europe learned about more than medical discovery; they learned how to organize and fund their own research efforts.

2. *Educators, reformers, and philanthropist in the United States, 1900 to 1945.*

Modern America emerged during the first half of the twentieth century. This period was marked at home and abroad by innovation, industrialization, and expansion; there was the accumulation of great wealth as well as financial instability, developing social and economic disparity, and engagement in two world wars. In medical research, biology, and particularly bacteriology, continued their reign as a dominant area of inquiry. There were many discoveries resulting in successes that dramatically altered the ability to successfully fight infection and disease. Industrialists eager to turn discoveries into marketable products began to fund work by others in addition to conducting their own developmental research.

⁵⁸ Porter, *The Greatest Benefit to Mankind*, 435. The French government also supported the Institut.

Progressive reformers, meanwhile, challenged established order and pushed for change on many fronts. In the areas of health and medicine, reformers tackled many issues related to public health and sanitation. Often, these initiatives resulted in extended government oversight and regulation aimed at protecting human health and safety. The federal government, in particular, expanded its capacities to conduct scientific research in areas of public health and increased its financial commitment to support research done in America's universities on problems in medicine and other sciences.

One target of reform, driven principally by insiders, was medical education. This initiative, like many in medical and health research in the first half of the century, was funded by private philanthropy. Large foundations created by successful industrialists, particularly Rockefeller, shaped the American scientific research agenda and accelerated its work. Average citizens, too, contributed to the war on disease through their financial support to build local hospitals and campaigns against diseases like polio, tuberculosis, and cancer.

Hospital construction continued throughout most of the first half of the twentieth century. Some hospitals built during the period were public hospitals funded by the government. Most, however, were a product of philanthropy. Denominations and other philanthropic organizations funded, and in numerous cases ran, new hospitals.⁵⁹ These three sources—government, religious organizations, and other philanthropy—had supported hospital construction and development since ancient times and would continue to do so into the twentieth century.

⁵⁹ Cassedy, *Medicine in America*, 74; Hammack and Anheier, *A Versatile Institution*, 30.

Hospitals built in the United States after the turn of the century also followed another established practice: these hospitals served as the location for training physicians and conducting medical research. Hospitals as the primary site for medical care, and not a catch-all charitable refuge for anyone needing assistance, had taken root in Paris in the early 1800s. In this environment, physicians pioneered significant developments including the practice of routine clinical examination. Surgery became more common and patients were segregated according to their condition or need. Information and new technologies, like Lannec's stethoscope, could be tested and disseminated.⁶⁰

In addition to the general construction of hospitals, including new buildings in smaller towns across the country, specialized hospitals developed in many larger cities. In Boston, for example, the Peter Brent Brigham Hospital opened in 1914 to treat patients with arthritis and severe joint diseases. In Indianapolis, the James Whitcomb Riley Hospital for Children opened in 1924. These specialty hospitals resulted from and supported a trend toward physician specialization. They also permitted a concentration of patients of a particular type. The development of providers concentrating on the care of women or children, for example, focused research questions in those fields.

Medical education also evolved in the early twentieth century. The displacement of proprietary medical schools by those affiliated with colleges and universities was largely complete by the 1920s. At the same time, higher education institutions elevated the quality of their medical programs by building laboratories, increasing admissions and graduation requirements, and requiring faculty to work for the university full-time. The

⁶⁰ Lindsay Granshaw and Roy Porter, *The Hospital in History* (New York: Routledge, 1989); Dora B. Weiner and Michael J. Sauter, "The City of Paris and the Rise of Clinical Medicine." *Osiris* 18 (2003): 23-42.

American medical school of the late 1800s became more rigorous and more scientifically oriented.⁶¹

Teaching hospitals were also part of these reforms, but aspiring physicians were not the only students in medical training hospitals in the early 1900s. The first nursing programs were located in hospitals where trainees' curriculum centered on the hospitals service needs. In 1909, the University of Minnesota opened the first university-based nursing programs; Indiana University's nurse training began in 1914 at its new university hospital; and Yale University created the first autonomous nursing school on its campus in 1923. The presence of well-trained nursing staff further improved the outcomes for hospitalized patients.

Public health departments took an increasingly visible role in efforts to manage the health of communities. Public health agencies grew out of the sanitation movements of the 1800s and focused on efforts to identify and address problems and hazards affecting the health of the general citizenry rather than of individual patients. In crowded cities, public health officials often focused on controlling communicable disease and abating hazards such as those associated with substandard housing and contamination of food. Officials working in city and state public health departments worked alongside other progressive reformers to extend the reach and authority of public officials and agencies authority over "sanitation, immunization, regulation, health education, and

⁶¹ Steven C. Wheatley, *The Politics of Philanthropy: Abraham Flexner and Medical Education* (Madison: University of Wisconsin Press, 1988) provides a complete discussion of philanthropy's role in the reform of American Medical Education.

personal health care.”⁶² Though the individuals charged with enforcing public health regulations were often doctors, their function as public health officers was distinct from the work of providing medical care. The authority of state and local public health organizations to enact interventions and impose regulations designed to protect the public expanded throughout the early twentieth century.⁶³ At the federal level, in 1912, the Marine Hospital Service was renamed the U.S. Public Health Service. The National Institutes of Health were created in 1930 and, over the next three decades, became a major research center.

While medical and nursing schools grew and reformed, programs for public health officers were slower to be established. Wickliffe Rose, who designed and led the Rockefeller Sanitary Commission, enlisted Abraham Flexner to create an education program for public health officials, first at Johns Hopkins University School of Hygiene and Public Health, which opened during the influenza epidemic of 1918, and then at Harvard’s public health school which soon followed thanks to Rockefeller support. Consistent with reforms in physician education, the curriculum in these early programs focused on scientific and laboratory innovations. Public health officials at all levels engaged in research and designed demonstration projects throughout the country. Important to this work is the fact that all of these reforms were largely underwritten by private philanthropy. Another important aspect of the turn toward public health was its

⁶² Institute of Medicine (US) Committee for the Study of the Future of Public Health. “The Future of Public Health.” (Washington, D.C.: National Academies Press, 1988); 3 in *A History of the Public Health System* at www.ncbi.nlm.nih.gov/books/NBK218224/.

⁶³ “Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century. 2003, national academy of sciences” Chap. 2 <https://www.ncbi.nlm.nih.gov/books/NBK221176/>

role in creating a sense among individuals that they could participate in the work of protecting health and fighting disease. This awareness of the value of individual participation in efforts to maintain health and prevent disease certainly bolstered the logic of making financial contributions toward the same end.

Between 1870 and 1900, rapid urbanization and industrialization contributed to the accumulation of extraordinary wealth in the hands of a small number of financiers and industrialists set up grants. As the century ended, some of America's most wealthy and influential business leaders aligned with a belief that Andrew Carnegie outlined in his 1889 *North American Review* article titled, "Wealth," and often referred to as his "Gospel of Wealth," that the wealthy were obligated to support social improvement through philanthropic investments made during their lifetimes.⁶⁴ Toward this end, Carnegie and others created private foundations and used these to manage their philanthropic efforts and maintain control over their wealth. During the first half of the twentieth century, foundations would help reform medical education and research.

Education, particularly higher education, attracted the attention of many influential philanthropists.⁶⁵ This is unsurprising given a common preference that philanthropy be used "to provide part of the means by which those who desire to improve may do so."⁶⁶ In this way, Carnegie and those who subscribed to his view saw their philanthropy as an investment, one that should be made in a manner to maximize return.

⁶⁴ Andrew Carnegie, "Wealth," *North American Review*, 266 no.3 (Sept. 1881): 60-64. <https://www.swarthmore.edu/SocSci/rbannis1/AIH19th/Carnegie.html>.

⁶⁵ American private universities have long depended on philanthropic support, particularly from large donors. See Daniel A. Wren, "American Business Philanthropy and Higher Education in the Nineteenth Century," *Business History Review* 57 no.3 (1983): 321-46.

⁶⁶ Carnegie, "Wealth," 62.

Carnegie specifically preferred the dedication of “great sums” to support “public purposes” creating “lasting advantage” over making “scattered” gifts in “trifling amounts.”⁶⁷ Among his most important efforts were his support for public library construction, a teacher pension fund, the Carnegie Institute in Pittsburgh, and the Carnegie Institution for Scientific Research in Washington, D.C.

Carnegie and John D. Rockefeller found both purpose and advantage in supporting research universities and medicine. Rockefeller’s interest in medicine was sparked by Reverend Frederick Gates, a pastor and principal philanthropic advisor, who harnessed the assets of expanded universities graduating trained scientists and improved medical schools graduating scientifically trained doctors. Gates believed that “disease” was the “main source of almost all other human ills: poverty, crime, ignorance, vice, inefficiency, hereditary taint, and many other evils.”⁶⁸ He reasoned that by tacking disease directly other social problems could be eliminated. Gates persuaded Rockefeller to support work in the sciences, in particular the medical sciences. Rockefeller’s investments were transformational.

Gates understood that, as a result of “the peculiar commercial organization of medical colleges,” including the need for faculty to see patients and teach students, medical research had received little attention and less philanthropic support.⁶⁹ He persuaded Rockefeller to fund the creation of a dedicated medical research institute similar to the Institut Pasteur, where medical researchers could work spared of

⁶⁷ Carnegie, “Wealth,” 62.

⁶⁸ William H. Schneider, “The Difficult Art of Giving,” *Nature*, 497 no. 331 (May 2013): 331.

⁶⁹ Shryock, *American Medical Research*, 90; R. M. Hughes, “Research in American Universities and Colleges,” *Research: A National Resource*, I, 180.

distractions. Rockefeller agreed to provide \$20,000 in exploratory funds to determine whether sufficient interest and talent could be found to sustain a research institute. The trial succeeded and in 1902, Rockefeller committed \$1,000,000 (over \$29 million in 2018 dollars), and the nation's first dedicated medical research institute, the Rockefeller Institute for Medical Research (now Rockefeller University), opened in 1907 in New York City. The Institute's success spawned similar organizations in Cleveland, Philadelphia, and San Francisco.

Carnegie also concentrated his focus on medical education. He, too, was influenced toward this work by an advisor. Henry Pritchett was the head of another of Carnegie's institutions, the Foundation for the Advancement of Teaching, and he took an interest in the training of physicians.⁷⁰ He recruited Abraham Flexner, author of a critique of higher education, to conduct a Carnegie-sponsored study of the state of medical education.⁷¹ Flexner visited medical schools across the country and catalogued substantial deficiencies. He also used his 1910 report to extol the virtues of the teaching methods used at Johns Hopkins Medical School, with its emphasis on the scientific training of medical students. The report received attention from funders, educators, and policy makers.

⁷⁰ A. McGehee Harvey, M.D., and Susan L. Abrams examined the role of foundation executives as critical advisors to donors in their profile of the Commonwealth Fund. They concluded that large medical and educational foundations of the early twentieth century shared one characteristic: "the presence of strong administrators" who led their patrons toward the support of medical research. A. McGehee Harvey and Susan L. Abrams, *For the Welfare of Mankind: The Commonwealth Fund and American Medicine* (Baltimore: The Johns Hopkins University Press, 1986), 2.

⁷¹ Flexner, a graduate of Johns Hopkins, had recently published *The American College: A Criticism*, (New York: The Century Company, 1908), a book sharply critical of American higher education.

The Rockefeller Foundation followed Carnegie's lead and took up the cause of advancing medical education generally and not just through the work of the Rockefeller Institute. Rockefeller's General Education Board extended financial assistance to universities and hospitals to create or improve medical schools that emphasized scientific training.⁷² Over the next 30 years, the support and influence of philanthropic patrons, particularly Carnegie and Rockefeller, led to the wholesale reform of medical education. Sectarian and commercial schools, which lacked the facilities and staff to teach science and conduct research in addition to providing clinical training, largely disappeared leaving university-based medical education as the dominant model.

Ten years after the Institute opened, Rockefeller made his most significant and dynamic gift, a permanent, charitable foundation designed to provide direct research support across a variety of fields, particularly medicine and public health. In 1913, the largest Rockefeller charitable fund, the Rockefeller Foundation, was incorporated with holdings of \$100 million. This Foundation was structured to operate in a fundamentally different manner from both Rockefeller's prior approach to donations and the funding methods common in other foundations.

In the years before the stock market crash of 1929, the Rockefeller Foundation made large grants directly to a small group of educational institutions.⁷³ Much has been written about the Foundation's extensive and substantial contributions to the development

⁷² Steven C. Wheatley, *The Politics of Philanthropy: Abraham Flexner and Medical Education* (Madison: University of Wisconsin Press, 1988).

⁷³ Howard S. Berliner, *A System of Scientific Medicine: Philanthropic Foundations in the Flexner Era*. (New York: Routledge, Kagen and Paul, 1985). See also, William H. Schneider, "The Origin of the Medical Research Grant in the United States: The Rockefeller Foundation and the NIH Extramural Funding Program," *Journal of the History of Medicine and Allied Sciences* 70 no, 2 (April, 2015): 279-311.

of these institutions.⁷⁴ Fixed-amount awards allowed university officials to allocate the funds among schools to support projects that best advanced the respective school's own needs and priorities. The Foundation referred to these as "fluid" grants; they were easy for the Foundation to administer. Recipients appreciated the flexibility the block grants gave to both universities and the researchers who were not required to convince anyone outside their own institution of the value of their work. Rockefeller preferred supporting proven researchers and programs, so grants went to schools and departments with demonstrated expertise and prior success. Grants were intended to enhance existing strengths, not to develop new fields or experts.

Shortly after the market crash of 1929, the Foundation's Board directed foundation officers to abandon the use of block grants in favor of providing "aid to individuals, groups and departments in relation to research" consistent with the Foundation's mission, the "advancement of knowledge."⁷⁵ The structure that arose from this directive was the fixed-term research project grant. This choice was practical given the realities of the Great Depression. Smaller grants provide a foundation with the ability to control costs and remain flexible, untethered from the risks of long-term and expensive obligations, particularly to projects that proved unsuccessful.⁷⁶ Grant officers had more flexibility to explore and support emerging areas and to foster promising initiatives

⁷⁴ The creation, evolution, and work of the Rockefeller Foundation have been well studied. See for example: Raymond B. Fosdick, *The Story of the Rockefeller Foundation* (New Brunswick, NJ: Transaction Publishers, 1952); E. Richard Brown, *Rockefeller Medicine Men* (Berkeley: University of California Press, 1979); John Farley, *To Cast Out Disease* (New York: Oxford University Press, 2004); Gerald Jones, *The Circuit Riders: Rockefeller Money and the Rise of Modern Science* (New York: Norton, 1983).

⁷⁵ Schneider, "The Difficult Art of Giving," 312.

⁷⁶ Robert Kohler, "The Management of Science: The Experience of Warren Weaver and the Rockefeller Foundation Program in Molecular Biology." *Minerva* 14 (1976): 293-94

without the challenge of negotiating these terms with the grantee institutions. The model of term-limited grant awards to support predefined work remains the prevailing funding approach used by private and public funders, including the National Institutes of Health.⁷⁷

At the time of this transition, some inside the Foundation worried about problems that research funders, including small funders, wrestle with today. Some worried that the short-term grant program discouraged bold science and fostered a type of dependence.⁷⁸ Term grants seemed to perversely encourage extended projects as recipients often returned requesting additional or extended awards to complete or continue work.⁷⁹ The new system created concerns about the influence that a funder or program officer could have over the selection of scientific winners and losers. A grant officer's decision effectively determined the direction of the scientific endeavor, particularly given the limited funding alternatives.

At the same time that a few large foundations were building and funding a research infrastructure, another style of health philanthropist emerged—the smaller individual donor. These donors were activated through the efforts of a new type of voluntary organization. In the early 1900s, nationally-coordinated, community-based groups like the National Association for Infantile Paralysis and the American Cancer Society were founded to combat afflictions such as polio and cancer respectively. These

⁷⁷ Schneider, “The Origin of the Medical Research Grant,” 312-314.

⁷⁸ Schneider, “*The Men Who Followed Flexner: Richard Pearce, Alan Gregg, and the Rockefeller Foundation Medical Divisions, 1919-1951*” in *Rockefeller Philanthropy and Modern Biomedicine*, 7-60.

⁷⁹ Gregg, “Memorandum: RF [Rockefeller Foundation] Policy 1941,” dated November 12, 1940, as quoted in Schneider, “The Men Who Followed Flexner,” 13.

groups organized around a single disease with initial goals of educating the public and subsidizing care and treatment.⁸⁰

Over time, voluntary health organizations helped form “new and remarkable alliances” between organized medicine, laboratory researchers, and the public.⁸¹ These organizations raised money and eventually made grants to support research. They also became powerful advocates for increased public funding of medical research. In her work, Angela Creager found that these groups “played a key role in channeling political sentiments towards large-scale federal patronage of laboratory research in the name of conquering disease.”⁸²

Voluntary health organizations used annual fund drives as their primary means of fundraising. Two examples include the National Tuberculosis Association (now the American Lung Association), which conducted the well-known Christmas Seals campaigns beginning in 1907, and the National Society for Crippled Children that ran its first Easter Seals campaign in 1934. Other disease-related fundraising drives included efforts associated with tuberculosis and venereal disease (1880s) and cancer (1910). Drives like these depended on local volunteers. An organizational structure built on active, local chapters gave the campaigns an immediate, community feel. Drives were often enormously successful. The National Foundation for Infantile Paralysis (now known as the March of Dimes) raised \$12 million during its annual fund drive in 1944.

⁸⁰ Angela Creager, “Mobilizing Biomedicine: Virus Research Between Lay Health Organizations and the U.S. Federal Government, 1935-1955,” in *Biomedicine in the Twentieth Century: Practices, Policies, and Politics*, edited by Caroline Hannaway (Amsterdam: IOS Press, 2008).

⁸¹ Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W.W. Norton, 1999) 693.

⁸² Creager, “Mobilizing Biomedicine,” 172.

Rather than decreasing in the face of wartime austerity, the campaign raised \$19 million the next year.⁸³ Other organizations mimicked this successful technique.

National voluntary disease associations reached large segments of the population and gave average citizens the sense that through small contributions they, too, were engaged in battling diseases like polio, tuberculosis, and cancer. These organizations also created a sense of personal connection to scientists' fight against disease. Illnesses were no longer something that needed to be accepted. Through the work of science, supported by even small individual contributions, disease could be defeated. Medical fundraisers continue to ply this message today.

As philanthropists developed new methods to fund medical research, capitalists developed ways to profit from discovery. Pharmaceutical companies in Europe and the United States learned to capture and scale advances made in the laboratory. Aspirin and salvarsan were developed in Germany, and the Institute Pasteur developed vaccines for production. Commercial vitamins were developed in 1920 at the University of Wisconsin and, in 1923, scientists at Eli Lilly and Company, located in Indianapolis, introduced Iletin, the world's first manufactured insulin product. Corporate investments in research and development would continue to grow and contribute to the financing of scientific discovery.⁸⁴

⁸³ *Ibid.*, 178

⁸⁴ Eli Ginzberg and Anna B. Dutka, *The Financing of Biomedical Research* (Baltimore: The Johns Hopkins University Press, 1989), 9-36; Michael Bliss. *The Discovery of Insulin*. (Chicago: University of Chicago Press, 1984).

3. *The golden age of medicine, post-1945*

As remarkable as were the changes in medicine in the first half of the twentieth century, the development of drugs after 1945 to treat or prevent a variety of serious conditions—including streptomycin for tuberculosis, the Salk vaccine for polio, and penicillin for a variety of illnesses—created the optimistic belief that cures for every ill, every discomfort, were just around the corner. Historians often label this “sharp rise in confidence in both physicians and the public in the efficacy of medical science,” as “the golden age of medicine.”⁸⁵

During the Second World War, science itself was recognized as a valuable soldier in the fight to protect America’s security and well-being. Before the war ended, policy makers began to examine how best to enlist wartime research capacity to maintain national and economic security during peacetime. This transition required significant public investment in research, including medical science. The important expansion of federal grant funds pushed many large foundation funders away from medical research support and toward other work. Gradually however, new philanthropists, many smaller funds, took on medical research as a focus for their support.

The post-war period provided a challenge for American physicians and researchers to incorporate discoveries made during the war into peacetime practices and extend many of the discoveries that occurred during the war years, including dramatic developments in surgical techniques, the use of antibiotics and other chemotherapeutics, and the application of new materials and technologies for medical purposes. These

⁸⁵ Allan M. Brandt and Martha Gardner, "The Golden Age of Medicine?" in *Medicine in the Twentieth Century*, Roger Cooter and John Pickstone (eds.) (Netherlands: Harwood Academic Publishing, 2000), 21-22.

successes, however, required dramatic increases in resources. Prestige and confidence in the power of science to produce more miraculous gains enticed students to science and medical training, including women and minorities who had been generally excluded before. The G.I. bill increased opportunities for returning service members to pursue education in health care and health sciences. Medical schools were encouraged to accept larger classes of students. Research funding from external sources increased, creating additional capacity to conduct research at universities and medical schools. This growth required building and equipping increasingly advanced facilities and recruiting and retaining more specialists. Beginning in the years leading up to and increasing during the Second World War, American medicine and science had benefitted tremendously from the influx of scientists who escaped Europe, often with the help of philanthropic refugee organizations.

As the American medical system grew, so did the challenges of access to care. In 1946, two members of the United States Senate drafted legislation to respond to President Truman's post-war pledge to build hospitals and clinics to serve the growing and demilitarizing population. In 1946, Congress passed the Hospital Survey and Construction Act, commonly known as Hill-Burton after its Senate sponsors Lister Hill (D-Alabama) and Harold Burton (R-Ohio).⁸⁶ The law gave hospitals, nursing homes, and other health facilities grants and loans for construction and modernization. In return, the facilities agreed to provide certain services to persons unable to pay. Facilities were also

⁸⁶ Lister Hill's father, a surgeon, named his son after Joseph Lister, a pioneer of antiseptic surgery. John Henning "Shuman, A Bygone Era: When Bipartisanship Led to Healthcare Transformation" (2016), accessed February 23, 2019 at <https://www.npr.org/sections/health-shots/2016/10/02/495775518/a-bygone-era-when-bipartisanship-led-to-health-care-transformation>.

required to make their services available to “all persons” residing in the facility’s service area, a significant step toward the desegregation of care.⁸⁷ Between 1947 and 1971, the federal government invested over \$3.7 billion to modernize care facilities across the country.⁸⁸ Many of these investments benefitted hospitals engaged in research and medical training.

Access to care was one policy debate related to healthcare; the other concerned payment for care. Since Roosevelt’s depression-era reforms, policy makers and health providers had battled long and hard over whether and how to pay for care. After John F. Kennedy’s election campaign and shocking assassination, Lyndon B. Johnson secured passage of Medicare and Medicaid in 1965, which helped provide medical care for the elderly, poor, and some chronically ill. But the new programs enabled dramatic growth of the overall health care system, adding the number of available care beds and specialty facilities in the country.⁸⁹ These facilities needed to be staffed, leading to increased demand for physicians and ancillary care providers.

In addition to the well-known breakthrough in production of penicillin and other medicines, wartime discoveries advanced medical knowledge in the fields of surgery as well as techniques to improve recovery and rehabilitation. Improvements to peacetime care also resulted from the adaptation of wartime developments in medical practice from

⁸⁷ Hill-Burton Free and Reduced-Cost Healthcare, Health Resources and Services Administration, at <https://www.hrsa.gov/get-health-care/affordable/hill-burton/index.html>

⁸⁸ Lawrence J. Clark, Marilyn J. Field, Theodore L. Koontz and Virginia L. Koontz, “The Impact of Hill-Burton: An Analysis of Hospital Bed and Physician Distribution in the United States, 1950-1970,” *Medical Care*, 18, No. 5 (May, 1980), 532.

⁸⁹ A helpful history of the impact of public policy and funding on hospital development is: Rosemary Stevens. *In Sickness and in Wealth: American Hospitals in the Twentieth Century*, Baltimore: Johns Hopkins Press, 1999.

the use of anesthesia and blood transfusion to new techniques of kidney dialysis and heart surgery. Technology, including machines that isolated and magnified smaller biological and chemical units, played a critical role in transitioning the locus of cutting-edge science from biology to microbiology and genetics. Watson and Crick's discovery of the chemical structure of DNA in 1953 and the subsequent sequencing of the human genome in 2003 opened the door to new and potentially challenging opportunities.

The federal research agenda before 1941 had focused generally on public health concerns such as communicable diseases like cholera and tuberculosis.⁹⁰ Scientific research during the Second World War, however, created an opportunity for advocates to make the case for continuing and increasing public support for science generally and biomedical research in particular. Vannevar Bush, who led the U.S. Office of Scientific Research and Development, effectively made the case that a vigorous, publicly funded and coordinated post-war research program was a key to American security and prosperity.

⁹⁰ Throughout the first four decades of the twentieth century the federal government supported medical research through the Public Health Service. The PHS's rather limited research agenda focused on diseases that posed a direct threat to public health such as cholera and tuberculosis as well as health issues relevant to the military. In 1918, the Public Health Service made grants to twenty-five research institutions for the study of venereal disease, one of the first organized efforts by the federal government to enlist the work of scientists outside government employ. <https://www.nih.gov/about-nih/what-we-do/nih-almanac/chronology-events> (last accessed July 1, 2016). A 1930 Act of Congress reorganized the PHS's Hygienic Laboratory as the National Institute of Health, which has grown into today's National Institutes of Health (NIH), a collection of 25 institutes and centers with a combined budget that exceeded \$30 billion in fiscal year 2015. <https://www.nih.gov/about-nih/what-we-do/nih-almanac/appropriations-section-1> The creation of the NIH represented a growing recognition of the need for government funded medical research. <https://www.nih.gov/about-nih/what-we-do/nih-almanac/chronology-events>, last accessed July 1, 2016.

Bush understood the need to capture the imagination of political leaders as well as the general public, as demonstrated in a 1945 report to the President titled “Science – The Endless Frontier.” A version of his report designed for the general public was published in *The Atlantic Monthly*.⁹¹ Bush sought to harness the drive and ambition of wartime scientific effort and sustain that energy to tackle challenges in peacetime. He argued for a program of sustained federal support for basic scientific research to benefit national security and the general welfare, a program that demanded coordination and financial resources that could only be provided by the federal government. Private philanthropy was no longer sufficient.

Even before the establishment of the National Science Foundation in 1950, Congress created the Research Grants Office within the NIH in 1946 that was charged with creating and administering a program of extramural medical research grants and fellowships to scientists working in universities and hospitals across the country. The expansion of extramural funding had both practical and political consequences. The flow of resources to research institutions at universities around the country, along with the educational benefits of the GI Bill, led a cadre of new scientists to find work in laboratories and medical research centers across the country. The program also spread research dollars to universities across the country and, thereby, created new champions of federal research support in more congressional districts. There was little or no public objection to this expansion of the federal budget to support medical research. The grants

⁹¹ “Science the Endless Frontier: A Report to the President by Vannevar Bush, Director of the Office of Scientific Research and Development.” National Science Foundation, July 1945. www.nsf.gov/about/history/vbush1945.htm (retrieved June 22, 2016); “As We May Think,” *The Atlantic* 176 no. 1 (July, 1945): 101-108. www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/.

program budget of approximately \$4 million in 1947 grew to over \$100 million by 1957.⁹²

The NIH, like private philanthropic foundations before, needed to establish grantmaking procedures to guide the difficult work of deciding which projects to fund. One option was to use research contracts that identified specific objectives and outcomes for the funded work, including grant end dates. The contract also “shifted the main responsibility of management and conduct of research to the university or private business.”⁹³ Government determined what it wanted to receive and the research organization decided how to deliver the project. The research contract left the government squarely in the position of directing the development of the national research agenda.

Warren Weaver, director of the Natural Sciences Division of the Rockefeller Foundation, urged the government to instead identify “some way to assure that scientific inquiry remain[ed] free from bureaucratic control, free in fact from any control.”⁹⁴ Notably, the Rockefeller Foundation, which had been one of the most influential and effective supporters of medical research, exercised a similar type of control over the direction of science through its own funding practices, a fact that seemed not to have bothered Weaver. Eventually, the NIH developed a process that used external expert panels or “study committees” to review grants and make funding recommendations back

⁹² “A Short History of the NIH: WWII Research and the Grants Program,” at https://history.nih.gov/exhibits/history/docs/page_06.html, last accessed July 1, 2016.

⁹³ Schneider, “The Origin of the Medical Research Grant,” 17.

⁹⁴ Gregg to A.J. Goldfarb, May 14, 1943, quoted in Schneider, “The Origin of the Medical Research Grant,” 33.

to the Institute.⁹⁵ The Rockefeller Foundation occasionally used external subject experts, but mostly relied on a “cadre of long serving programme officers” to identify, select, and evaluate grants.⁹⁶ These officers learned their program areas and developed significant expertise.

Congress annually increased allocations for research conducted in government laboratories by federal researchers and for work done in university labs around the country.⁹⁷ The pharmaceutical industry also poured more money into research and development aimed at the next big drug.⁹⁸ Meanwhile, large foundations, including Rockefeller, moved quietly toward work in other areas. In some cases, foundations did not wander far from medical science. Hammack and Anheier observed that “[t]he most

⁹⁵ The NIH grant process remains similar today: Grant proposals are submitted to the NIH and then referred to Scientific Review Groups. These peer review panels made up of scientists with current and relevant expertise rank the proposals against one another using pre-established criteria relevant to the scientific and technical merit of the proposal. Proposals, along with the scores they received from the SRG panel, are then reviewed by National Advisory Boards made up of a mix of scientists and public representatives with expertise in the subject area. The Advisory Board then makes recommendations concerning which of the proposals best fit the granting institute or centers funding goals. The director of the institute or center making the grant has the final funding decision-making authority. See, National Institutes of Health, Peer Review Process at <https://www.nichd.nih.gov/grants-funding/grants-process/processoverview/peerreviewprocess/Pages/default.aspx> last accessed July 3.

⁹⁶ Schneider, “The Difficult Art of Giving, 312. In another piece, Schneider considers the “indirect influence” that Rockefeller had over the development of the NIH research grant process. “The Origin of the Medical Research Grant in the United States: The Rockefeller Foundation and the NIH Extramural Funding Program.” *Journal of the History of Medicine and Allied Sciences*, <http://jhmas.oxfordjournals.org> (2014): 297-311. He observed that among other similarities between the grant programs developed by the Foundation and then the NIH was the fact that “neither of them established their research grants after full and lengthy discussions and debate.”

⁹⁷ Buhm Soon Park, “The Development of the Intramural Research Program at the National Institutes of Health after World War II,” *Perspectives in Biology and Medicine*, 46, No. 3 (Summer 2003): 383-402.

⁹⁸ “A Short History of the NIH,” https://history.nih.gov/exhibits/history/docs/page_06.html, last accessed July 1, 2016.

notable foundation research initiatives of the postwar decades” involved support for “applied topics to which government research agencies gave low priority,” and which sometimes generated debates, including Rockefeller Foundation’s support for plant biology and green revolution initiatives, as well as studies on population, reproduction, child development, and behavioral science.⁹⁹ Other foundations moved from funding research itself to supporting the construction of additional research institutions and capacity in California, Texas, and the Pacific Northwest.¹⁰⁰

The ability of even the wealthiest foundations to direct the course of medical research was limited by the size and cost of the work. As early as the 1930s, some inside the Rockefeller Foundation understood that the medical enterprise as a whole was already so large that foundations could have only marginal affect, and in 1945, Raymond Fosdick, then head of the Rockefeller Foundation, predicted that large-scale government funding of medical research soon would lead the Foundation to allocate its own funds to other areas.¹⁰¹ Allen Gregg, Vice-President of the Rockefeller Foundation and former head of the Medical Sciences Division, urged Rockefeller trustees to identify unoccupied space and provide funding for work in “new fields.”¹⁰² Gregg suggested that transitioning to different work would allow Rockefeller to avoid comparison to a “far

⁹⁹ Hammack and Anheier, *A Versatile Institution*, 89.

¹⁰⁰ Hammack and Anheier, *A Versatile Institution*, 84-87; Alfred L. Castle, *A Century of Philanthropy: A History of the Samuel N. and Mary Castle Foundation* (Honolulu: Hawaiian Historical Society, 1992).

¹⁰¹ Hammack and Anheier, *A Versatile Institution*, 53

¹⁰² Schneider, “Origin of the Medical Research Grant,” citing, Gregg, “A Program in the Medical Sciences.” At https://profiles.nlm.nih.gov/FS/B/B/M/R/_/fsbbmr.pdf, last accessed July 6.

more powerful competitor.”¹⁰³ By 1950, federal support for medical research out-paced all private funding sources combined.¹⁰⁴

Some foundations followed Gregg’s advice and remained active in medical research, concentrating on opportunities to complement government support, for example, by demonstrating the value of new ideas or fields of inquiry.¹⁰⁵ These funders acted as “angel-investors” supporting the earliest period of project development, typically for a period of time long enough to allow a researcher or team to obtain preliminary evidence needed to support the viability and promise of the idea. This proof-of-concept data allows researcher to develop a more competitive application for additional extramural funding, particularly federal grants. Other foundations, like the Albert and Mary Lasker Foundation, chose to devote resources to lobbying the federal government for even greater state support for research efforts.¹⁰⁶ A few funders elected a completely independent path. The most notable of these was Howard Hughes who built the Howard Hughes Institute, America’s largest self-funded research institute¹⁰⁷

The result in the post-1945 period is that most of the large funds that had shaped American research before the Second World War were working in other areas. But the influence of their work is evident in at least two ways. First, philanthropic foundations

¹⁰³ Schneider, “Origin of the Medical Research Grant,” 33.

¹⁰⁴ Hammack and Anheier, *A Versatile Institution*, 57

¹⁰⁵ *Ibid.*, *A Versatile Institution*, 72

¹⁰⁶ *Ibid.*, 57.

¹⁰⁷ The Howard Hughes Institute operates a medical research facility and through its distinguished fellows program provides long-term support for the work of hundreds of medical research scientists working in a variety of fields. The Howard Hughes Institute also maintains the largest privately funding science education program in the country. The Institute held assets in excess of \$18 billion in 2014. Over a span of twenty years, the Institute provided over \$8.3 billion to science support, training, and education. www.hhmi.org/about/ last accessed June 28.

helped make early and important discovery possible and they shaped the methods of work that contemporary funders, both public and private, follow today. Second and paradoxically, as large foundations moved on to other types of work, new grantmaking entities moved in to replace them. The number of independent, private foundations jumped from 10,000 in 1969 to 25,000 in 1990, with individuals and families endowing most of these new funds.¹⁰⁸ Some of these new foundations supported medical research occasionally but not exclusively. To understand the role these new philanthropies have come to play, it is useful to summarize the state of contemporary medical research funding in the United States.

In 2016, nonprofit organizations contributed \$4.6 billion to higher education research and development or 6.1% of the total national research and development expenditures during the fiscal year. This total is for all nonprofit organizations, including public charities, voluntary health organizations (such as the American Heart Association), medical research organizations (like the Howard Hughes Medical Institute), and private foundations of all types. Donations from individual gifts are omitted from this total. Nonprofit organizations' contributions to research funding increased from \$2.6 billion in 1994 to \$4.6 billion in 2016.¹⁰⁹ Although nonprofit organizations' share of the overall

¹⁰⁸ National Center for Charitable Statistics, Foundations by Age, at <https://nccs.urban.org/publication/registered-501c3-private-foundations-age>. Also, Elizabeth Boris, "Creation and Growth: A Survey of Private Foundations," in *America's Wealthy and the Future of Foundations*, Teresa Odendahl, ed. (Washington D.C., The Foundation Center, 1987): 69

¹⁰⁹ Katherine Hale, Ronda Britt, and Michael Gibbons, "Higher Education R&D Spending: Spending and Funding Sources Differ by State," National Science Foundation InfoBriefs, NSF 19-303, March 7, 2019.

research expenditure is small, these dollars are increasingly valuable to researchers and scholars as the availability of funding from other sources decreases.¹¹⁰

Foundations, which provide the lion's share of philanthropic research support, are the focus of this project. According to the Foundation Center, over 86,192 private grantmaking foundations were registered in the United States in 2012. These foundations made \$52 billion in grants that year. A subset of that total, 6,922 U.S. foundations, made 7,794 grants worth approximately \$3 billion to researchers and medical research institutions in 2012.¹¹¹

4. *Summary.*

Philanthropy from individuals and foundations contributed significantly to the development and growth of the American medical research enterprise. The sources and form of research support varied over time. Before 1900, philanthropic contributions typically came in the form of individual gifts made directly to existing or emerging universities or hospitals. These gifts helped build the institutions' capacity to educate and support physicians and scientists. Unlike European governments, prior to the turn of the century, the federal government in the U.S. devoted little money to support research with the significant exception of support for land-grant colleges and nascent investments in

¹¹⁰ Moses, "The Anatomy of Medical Research," also, U.S. Funding of Health Research Stalls as Other Nations Rev Up, National Public Radio, January 13, 2015 1:00 PM at <http://www.npr.org/sections/health-shots/2015/01/13/376801357/u-s-funding-of-health-research-stalls-as-other-nations-rev-up> accessed August 12, 2015.

¹¹¹ Moses, "The Anatomy of Medical Research."

public health research. State and local governments contributed to colleges and universities, public health efforts, and the construction of hospitals.

By the early 1900s, interest in and support for medical research grew as individuals, institutions, governments, and industry sought to build on the promise of late-nineteenth century discoveries including germ theory, the viability of vaccines to prevent and treat some illnesses, and the development of diagnostic devices and laboratories. The period immediately following the turn of the twentieth century can be considered the age of the foundation in medical research. During the first forty years of the twentieth century a small number of large funds, particularly the Rockefeller Foundation, played a critical role advancing the research capacity of institutions and supporting the research projects directly. Foundations directed gifts and grants to universities for capital projects and they provided funding in the form of block and term grants to support research projects at associated hospitals and research institutes. In addition to pioneering the use of the term project grant, Rockefeller developed the model of support for research institutes used today by many funders including the National Institutes of Health and the National Science Foundation. Medical schools underwent significant reform, transitioning from proprietary to university-based, scientifically-grounded programs. Hospitals, which served as sites for care, teaching, and research, grew in number and sophistication, staffed by graduates from these schools. Foundations spurred and funded many of these changes.

Large foundations were most visible, but a new form of philanthropy came to prominence: the small donor who contributed to fund drives organized by large, voluntary health organizations. These voluntary societies often focused on particular

health and medical concerns that created an empowering opportunity for the average donor to feel engaged in the fight against disease. Even small donors could be warriors in the war against cancer, tuberculosis, or polio. Individual donors also continued to provide support to the construction and expansion of local care facilities like hospitals.

By the end of the Second World War, philanthropy, at least the major foundations, had turned its attention to other matters. The federal government assumed priority status as the largest funder of all types of research and development work occurring at American universities and medical research institutes. Healthcare was recognized as a matter of national concern as well as individual well-being. The number of drug and device companies grew and so did their budgets for research and development. Philanthropy continued to contribute to research through both individual gifts and the contributions of voluntary health organization. By the end of the 1960s, new, often smaller, foundations existed and some of these foundations chose to follow the path that a few important funders had taken 100 years earlier by funding medical research.

From the late 1800s through the Second World War, private foundations provided funding and leadership to build the institutions of a national research infrastructure, including hospitals and university-based research programs. These same foundations also pushed the wholesale reform of medical education, thereby helping to complete the transition of medical practice from an apprenticed trade to a scientific profession. Along the way, foundations changed their grantmaking processes and, in some cases, their philosophies to better align with the realities of the rapidly evolving medical environment, an evolution they helped finance. By the end of this period, as a result of

the federal government's growing dominance over research funding and its resulting ability to control the research agenda, many institutional donors retreated and identified new areas of focus. Some foundations, however, persisted in the work of research support.

The following two chapters of this work trace the creation, development, and efforts of three foundations in Indianapolis, Indiana, that participated in this new wave of smaller foundations that support research. Their work is primarily local and their contributions, like their predecessors, were often focused on building institutions and improving communities, rather than curing a particular disease.

CHAPTER THREE

The Beginnings of Medical Research Philanthropy in Indiana

Although the story of philanthropy's contribution to medical research is typically viewed through an American national lens, a variation of this tale played out in Indiana. This chapter begins with an overview of the development of health philanthropy in the state, beginning with an introduction to the early donors who modeled ways to give. The remainder is devoted to exploring the creation and early organization of three foundations dedicated to funding research: the Regenstrief Foundation, the Showalter Trust, and the Walther Cancer Foundation. This chapter explores the choices made by the foundations' donors and early advisors, particularly regarding the decision to create a foundation and then to dedicate these funds exclusively to support medical research.

1. The emergence and growth of health philanthropy in Indiana before 1945.

Health philanthropy emerged in Indiana, as it had elsewhere in the country, in the decades following the Civil War. There is little clear evidence that these first Hoosier philanthropists set out to mimic Carnegie's or Rockefeller's efforts to foster academic research. Instead, most early gifts in Indiana were dedicated to a more immediate and practical purpose: the construction of buildings to provide patient care and educate medical students. Health philanthropy was a local matter. Examples of several early health philanthropists are identified in Table 2, below. The donors' goals concerned civic and not just intellectual gain. The fact that these facilities also created necessary spaces for medical research was an indirect and happy consequence.

Table 2: Examples of early Indianapolis health philanthropists.

One-time donors	Year begun	Support for:
Reid	1905	Hospital in Richmond
Long	1911	Teaching hospital for IUSM
Coleman	1927	Maternity hospital for IUSM
Ongoing donors		
Riley Memorial Foundation	1921	Establishment and continuing support for children's hospital
Ball Foundation	1926	Hospital in Muncie, nursing residence at IUSM, and other occasional health related projects

Indiana, like most of the rest of the country, experienced a hospital construction boom between 1880 and 1920 as the stigma surrounding hospitals abated thanks to advances including the introduction of anesthesia, asepsis, and miracle technologies like the X-ray. Some hospitals were proprietary and privately-funded by the doctors who provided services there. State and local governments funded construction of other facilities. Some hospitals were built substantially, and in some cases entirely, through the charity of donors.

Religion motivated many donors. Methodist Hospital, for example, opened in 1908 financed by charitable contributions raised primarily from members of the Methodist denomination. Other religious orders established hospitals as well, including Sisters of St. Vincent de Paul (St. Vincent's Hospital, Indianapolis, 1881) and the Protestant Deaconess Association (Deaconess Hospital, Evansville, 1899).¹¹² Though

¹¹² Gail Gráinne Whitchurch, "St. Vincent's Infirmary," *Discover Indiana*, accessed March 9, 2017, <http://indyhist.iupui.edu/items/show/15>. Thurman B. Rice, "The Catholic

originally constructed to fulfill parochial obligations to care for the needy, faith-based hospitals came to serve those who could pay as well as the poor.

Other hospitals around the state were built with large, one-time gifts from wealthy individuals. Daniel Reid, an industrialist who owned the American Tin Plate Company and the American Can Company, gave \$130,000 in land and cash to support the construction of Reid Memorial Hospital in his hometown of Richmond, Indiana, in memory of his deceased wife and son. Reid made the largest gift to the effort, but several of his former business associates from the city contributed as well.¹¹³

Long Hospital in Indianapolis was another notable example of this type of philanthropy. In 1908, existing proprietary medical schools in Indianapolis became part of the Indiana University medical school. In 1911, Robert W. Long, a physician and real estate investor, made a gift of land to benefit the new school. Long's gift, valued then at \$200,000, allowed the school to secure additional funds from the state legislature and construct the hospital on the west side of the city where the medical school and its associated hospital complex remain to this day.¹¹⁴ Long's gift opened the door for others to make similar philanthropic commitments.

Donations to support the construction of other hospitals near the medical school followed, including contributions to build the Riley Hospital for Children. In 1916,

Hospitals," in *One Hundred Years of Medicine: Indianapolis, 1820-1920* (1949). "St. Vincent Hospital and Health Services" (PDG what is this?). Indiana History, Indiana Historical Society. 2016-06-23; "Deaconess: About Us/Our History," accessed January 3, 2019. [http:// www.deaconess.com/About-Us/Our-History](http://www.deaconess.com/About-Us/Our-History).

¹¹³ "About Reid Health: Our History," accessed May 5, 2019. <https://www.reidhealth.org/about/our-history>.

¹¹⁴ William H. Schneider. *The Indiana University School of Medicine: A History*. With Elizabeth van Allen, Angela Potter, and Kevin Grau (Bloomington: Indiana University Press, in press).

shortly after the death of Indiana poet James Whitcomb Riley, a group of his friends formed a charitable association and solicited contributions to build a pediatric hospital to be named in his honor.¹¹⁵ Formally chartered in 1921, the James Whitcomb Riley Memorial Association collected funds from individuals and organizations around the community, including the Kiwanis Club of Indianapolis, a service club that has supported the hospital and Memorial Association ever since.¹¹⁶ Riley Hospital for Children opened in 1924. The creation of hospitals dedicated to a narrow population, in this case, children, was part of an emerging national trend toward medical specialization. This trend continued through the twentieth century, shaping both the nature and quality of medical care as well as the researchers and institutions that advanced medical knowledge.¹¹⁷ A community's ability to support a specialty hospital to complement general care facilities also highlighted a city's size and wealth.

Another specialty hospital, the William H. Coleman Hospital for Women, opened in 1927 next to Riley Hospital. Coleman and his wife donated approximately \$350,000 to honor their only daughter, Suemma, who died from pregnancy-related complications. The hospital was the first women's hospital in the state and only the twelfth in the country. Designed as a teaching hospital, it included private rooms for wealthy women and general wards to serve low-income women. Coleman Hospital gained renown for

¹¹⁵ Elizabeth J. Van Allen, et al., eds., *Keeping the Dream, 1921-1996: Commemorating 75 Years of Caring for Indiana's Children* (Indianapolis, IN: James Whitcomb Riley Memorial Association, 1996), 12.

¹¹⁶ "Kiwanis and Riley Hospital for Children: A history of Service." *Kiwanis Magazine* 100 No. 4 (June/July 2015): 19.

¹¹⁷ Schneider, *Indiana University School of Medicine*, Chap. 8; Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry* (New York: Basic Books, 1984)

research, including early work on the safe and effective use of anesthesia during childbirth.¹¹⁸

Coleman and Long each made a single large gift to build an institution. For others, donations to support medical facilities were one part of a pattern of giving. Some donors made multiple contributions that benefitted medical care within a community in different ways. Ball Memorial Hospital opened in Muncie, Indiana, in 1929.¹¹⁹ The Ball Brothers Foundation provided significant funding for construction of the original hospital building and for subsequent additions and improvements to the facility.¹²⁰ The five brothers who owned the Ball Corporation, a manufacturer of popular home canning jars, formed the Ball Brothers Foundation in 1926.

The Balls' commitment to medicine and to the medical school aligned with the Balls' interests. Lucius, the oldest Ball brother, practiced medicine in Muncie.¹²¹ George Ball, who served as both president of the corporation and chairman of its board, was named a trustee of Indiana University in 1919 and served in that role until 1938. He joined the IU Trustees shortly before the Ball Brothers Foundation contributed to support the construction of Ball Hall, the dormitory for nursing students at the medical school

¹¹⁸ Madge Dishman, "Coleman Hospital: A Monument to Indiana Medicine," *Indiana Medicine* August 1984: 623 in Coleman Hall Clipping File, Ruth Lilly Special Collections and Archives, Indiana University Purdue University Indianapolis. Rima D. Apple, *Women, Health, and Medicine in America: A Historical Handbook*, (New York: Garland Publishing, Inc., 1990): 201-3.

¹¹⁹ Also, in 1929, sociologists, Robert and Helen Lynd published, *Middletown: A Study in Contemporary American Culture* (New York: Harcourt, Brace and Co., 1929), the first in of a series of extensive studies of the community. The Rockefeller Institute of Social and Religious Research funded the study.

¹²⁰ *Ball Memorial Hospital: A legacy of caring, 1929-1989* (Muncie, IN: Ball Memorial Hospital, 1989).

¹²¹ "Ball: History and Timeline," accessed January 15, 2019.

<https://www.ball.com/na/about-ball/overview/history-timeline#the-ball-family>.

that opened in 1928.¹²² Beyond aligning with the personal interests of at least two of the brothers, a modern hospital also benefitted the brothers' economic interests and community reputation.

A healthy community meant healthy workers. Employers directly benefit when workers and their families could obtain the types of restorative and preventative care that a hospital can provide. Equally, a modern hospital symbolized a community's wealth and sophistication. The existence of a modern hospital telegraphed to others, including distant investors and members of the growing professional class, the fact that Muncie, Indiana, was a successful, desirable place that deserved a look. The willingness to use foundation assets to develop and enhance an entire community was further demonstrated by the other charitable priorities of the Foundation and of the individual brothers, including substantial support provided for the creation and development of Ball State University and numerous other civic assets.¹²³

The philanthropic investments made to construct Long, Coleman, Riley, and Ball hospitals exemplify the emergence of a new form of medical philanthropy in Indiana between 1880 and 1945. Hoosiers had always engaged in the practice of health-related charity, or providing for the care and comfort of neighbors suffering from illness or injury. An important transition occurred as individuals, and particularly those accumulating excess wealth, turned to the support of institutions that provided that care.

¹²² Indiana University Trustees at <https://trustees.iu.edu/the-trustees/former-trustees.html> (accessed, January 15, 2019).

¹²³ Ball Foundation Milestones at <https://www.ballfdn.org/about-bbf/bbf-milestones> (accessed, January 12, 2019).

Hospitals became an intermediary, a substitute for direct personal charity to the ill and infirm.

Growing private financial support for hospitals also coincided with increased public confidence in medicine generally and in hospitals specifically. Hospitals had previously been little respected. In the decades after 1900, hospitals came to be recognized as acceptable and safe as well as a desirable community asset and an economic engine for a community. Hospitals were not the only beneficiaries of health philanthropy. As discussed on the following pages, organizations created in response to particular diseases and conditions began work in Indiana. Additionally, donations to support the education of doctors and nurses also grew as training for health providers professionalized and moved from *ad hoc* apprenticeships to scientifically-based education.

The type of donor to health and medical philanthropy also diversified. Historically, religious orders built hospitals or physicians developed them as business ventures.¹²⁴ Local and state government units also funded construction of hospitals. During the first half of the twentieth century, individuals in Indiana engaged in health philanthropy through gifts to institutions—hospitals, medical schools, and disease organizations. As happened nationally, the most noted gifts were single, large amounts from very wealthy individuals, as was the case with Coleman, Long, and Reid. Donors of more modest means, however, also began to engage in health philanthropy in larger numbers.

¹²⁴ The former Welborn Hospital in Evansville began as a joint venture between several physicians. “Historic Evansville: Welborn Clinic” accessed May 13, 2018, <http://historicevansville.com/site.php?id=welborn>; about Welborn Clinic.

Voluntary health associations, like those created to combat polio and tuberculosis, grew in number and popularity during this period. Hoosiers engaged in the work of these associations as volunteers, boosters, and donors. Christmas seals purchased at the local post office raised awareness of and money for the anti-tuberculosis efforts of National Association for the Study and Prevention of Tuberculosis.¹²⁵ Others went door-to-door collecting change for the “war on cancer,” waged by the American Society for the Control of Cancer.¹²⁶ Smaller donors also donated to construct and support hospitals as part of larger community campaigns. This approach, which was taken to raise funds to build Riley Hospital for Children, would become more common in the second half of the century. For example, in the 1950s, residents of Indianapolis’ East Side conducted a fund drive to raise money for the construction of a new community hospital.¹²⁷

Another development that would grow more common after 1945 was the use of the private foundation as a source for medical philanthropy. The Ball Family and Riley Memorial foundations each foreshadowed the ways that Indiana foundations would be used to support health philanthropy. The Riley Memorial Foundation was chartered in 1921 to raise funds to construct a hospital. After the building was finished, the Foundation refocused its work and took on the role of raising money from the community to benefit the hospital and the work that occurs there. In addition to supporting facility

¹²⁵ Kelly Gascoine “Saving Children from the White Plague: The Marion County Tuberculosis Association’s Crusade Against Tuberculosis, 1911-1936” (M.A. Thesis, Indiana University, Indianapolis, 2010); <http://scholarworks.iupui.edu/handle/1805/2188>.

¹²⁶ "American Cancer Society: History". *Working to Give: Philanthropies & Philanthropic Work*. Archived from the original on 2013-10-17. I don't understand cite

¹²⁷ Beth DeHoff “Community Hospitals” in *The Encyclopedia of Indianapolis*, eds. David J. Bodenhamer and Robert G. Barrows (Bloomington: Indiana University Press, 1994); 467. A philanthropic gift also funded construction of the Coleman Women’s Hospital in 1927.

improvements and access to patient care, the Riley Memorial Foundation also provided significant support to medical research.

The Ball Brothers Foundation, on the other hand, was designed as a general-purpose fund. It gave the family a way to protect assets from the brothers' estates from taxes and to use the funds to support causes of their choosing. The brothers' foundation gave to health-related causes as only one among a variety of types of recipients. The Ball brothers were also unlike Long and Coleman who both made a single large gift to support construction of a facility. The Ball Brothers Foundation made multiple gifts over time to support both health and medical education. Yet, the Foundation did not provide a consistent stream of support to any recipients. Additionally, the Foundation made other large gifts to create a university in their hometown, support local schools, enrich arts organizations, and enhance municipal spaces like parks. The Ball Brothers Foundation is an example of another type of medical philanthropist, the donor who supports medicine occasionally as part of broader interests and commitments. Its donations to medicine were episodic and only part of a larger and more diverse portfolio of gifts.

When viewed collectively, the grants made by the Ball Brothers appear motivated, at least in part, by something beyond curing the body or improving medical knowledge. Building and supporting hospitals, universities, and other public assets can be understood as a deliberate strategy to benefit and bolster the local community. It can be reasonably inferred that Ball brothers supported the construction of institutions essential to the practice and advancement of modern medicine not simply to benefit patients, but to enhance the growth and economic welfare of the town and state where their personal and business interests were located. If doing so was not the intention, it

certainly was the effect. The strategic use of donations to medicine, as a tool to advance additional if not entirely different goals, would continue in the years after the war.

2. *Hoosier foundations supporting medical research after 1945.*

In the years following the Second World War, the federal government dramatically increased public funding for medical research.¹²⁸ Prior to 1945, the main beneficiaries of medical philanthropy in Indiana were institutions, specifically hospitals and medical education providers. Although philanthropic support for both types of these institutions continued, gifts for the direct support of research accelerated.

At the same time, more individuals and families across the country were creating private foundations as they sought to shield their post-war wealth from income taxes and to establish permanent control over wealth.¹²⁹ Those in Indiana were no different. The remainder of this chapter first will introduce several Indiana private foundations, including those in Table 3, below, that chose to donate to research occasionally as part of a larger portfolio of giving that included priorities and opportunities outside medicine and health and then focus on three foundations highlighted in the following section elected to dedicate resources exclusively to funding medical research. Examining organizations in each category—the occasional and the dedicated donors—provides the opportunity to consider whether dedication to a single cause makes a difference in an organization’s behavior or in its impact.

¹²⁸ For more information on this transition, see Chapter Two.

¹²⁹ The growth in the number and value of private foundations was a central issue leading to the Tax Reform Act of 1969 that placed new limitations and regulations on private foundations. See Robert H. Bremner, *American Philanthropy*, 2nd ed. (Chicago: The University of Chicago Press, 1988): 180-183, also, Peter Frumkin, *Strategic Giving* (Chicago: University of Chicago Press, 2006), 100-105 and 110 – 111.

Table 3: Major Indianapolis foundations supporting medical research after the 1950s.

General purpose	Year created	Supported
Lilly Endowment	1937	Genomics, physician and scientist recruitment
Krannert Trust	1953	Cardiac research
Fairbanks Foundation	1986	Health care, aging research, and public health
Medical research only		
Regenstrief Foundation	1969	Research on health care delivery
Showalter Research Trust	1973	IUSM and Purdue
Walther Cancer Foundation	1985	Cancer research

The foundations examined in this chapter must be considered in the context of the growth of the medical and medical education community they supported. The post-war years in Indiana, like the rest of the United States, were a period of exciting developments and ambitious expansion in health care ignited by demographic changes and the acceleration of medical and surgical knowledge. Both the government and civic leaders jumped in to capitalize on the opportunity these advances created.

In 1946, the U.S. Congress passed legislation that came to be known as the Hill-Burton Act (mentioned in Chapter Two). The Act extended grants and loans to health care facilities for construction and modernization in exchange for a commitment by the facilities to expand their service area and to accept more charity care patients.¹³⁰ In Indianapolis, the demand for hospital beds led a group of local business leaders to form the Indianapolis Hospital Development Association in 1951 with the goal of raising \$12

¹³⁰ Hill-Burton Hospital Survey and Construction Act, Public Law 79-725 (1946).

million to support the addition of 825 hospital beds in the city by 1975.¹³¹ Many hospitals added beds as a result, and several entirely new facilities were created: Community Hospital East (1956), Community South (1963), Westview Hospital (1961), and Winona Memorial Hospital (1965). The passage of the federal Medicare Act in 1965 only added to the demand for hospital-based care. The Hill-Burton Act and the creation of Medicare drew attention to the ways that health care and health facilities had come to be seen as public goods that the state and the civic sector had a role in providing.¹³²

Indiana University, which remained the only medical school in the state, responded to pressure to prepare more doctors to meet the state's growing need by admitting larger classes.¹³³ Many of these physicians decided to pursue one of the growing numbers of medical specialties and subspecialties rather than enter general practice.¹³⁴ Expansion and specialization proceeded along with growth in the number and power of departments within the medical school. During the 1950s, the medical school added departments of anesthesiology, obstetrics and gynecology, and radiology. In the 1960s, dermatology, orthopedic surgery, and medical genetics were created. Large departments, specifically medicine and surgery, began designating discrete divisions within their units, such as nephrology (1967) and rheumatology (1975) in the Department of Medicine and transplant surgery (1974) within the Department of Surgery. The

¹³¹ Katherine Mandusic McDonell, "Hospitals" in *The Encyclopedia of Indianapolis*, David J. Bodenhamer and Robert G. Barrows (eds.) Indiana University Press, p. 713.

¹³² Rosemary Stevens. *In Sickness and in Wealth: American Hospitals in the Twentieth Century*. Baltimore: Johns Hopkins Press, 1999, also Paul Starr, *The Social Transformation of American Medicine* (New York: Basic Books, 1982).

¹³³ See Schneider, *Indiana University School of Medicine*, Chap. 8.

¹³⁴ See generally, Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry* (New York: Basic Books, 1984).

dominance of specialization over general practice was demonstrated by the creation of a new Department of Family Medicine in 1974, a formal recognition that even general practice medicine was now a distinct specialty. The growth of specialties had implications for the design and operation of hospitals. Facilities needed more space to carve out designated units and special treatment areas. The need added to pressure to raise money for capital investment, for staff, and for research. The administrators at Indiana University's School of Medicine felt all of these needs keenly.

The medical school operated in the middle of a health campus that the university trustees had designated a "medical center" in the 1930s.¹³⁵ Long Hospital, its teaching hospital, was favorably located next door to Indianapolis' public hospital, then called City Hospital, as well as hospitals for children (Riley), women (Coleman), and mental health (LaRue Carter). The state's primary hospital for veterans, the Richard A. Roudebush VA Medical Center, opened on property adjoining the medical campus in 1952.¹³⁶ Medical students trained in all of these facilities and the diversity of patients seen in the wards provided ample opportunities for learning and research. As medical specialization increased, so did the need for research that advanced narrowly-defined fields of knowledge.

For the School of Medicine, the need to accelerate research efforts was particularly acute. After the war, medical schools around the country took advantage of increased funding from the National Institutes of Health and other agencies and advanced their research capacity. The School, however, was focused on increasing enrollment and

¹³⁵ Schneider, *Indiana University School of Medicine*. Chapter?

¹³⁶ Richard A. Roudebush VA Medical Center, <https://www.va.gov/directory/guide/facility.asp?id=62> (accessed February 10, 2019).

clinical care issues. As other schools received grants and propelled their research programs ahead, the School of Medicine fell further behind. State and philanthropic support provided the funds needed to jump-start this work. The construction of a new medical research building in 1958 served as concrete evidence of this commitment to research. That same year, a private foundation donated the funds to open the first designated research institute at the medical center.

In 1963, Marion County General Hospital received a gift expressly designed to support the creation of a cardiac research institute from Herman and Ellnora Krannert.¹³⁷ The Krannert Institute quickly grew into a world-class cardiac research facility under the direction of Dr. Charles Fisch, a pioneer in the study of electrophysiology. One of the first physicians recruited to work at the center was Dr. Harvey Feigenbaum, who developed the use of electrocardiography for the diagnosis and treatment of heart disease. The Krannert Institute became an important venue for focused scientific inquiry.¹³⁸

Herman Krannert was the founder and chief executive of Inland Container Corporation, the world's largest manufacturer of corrugated shipping containers. His wife, Ellnora, was an active volunteer and support of arts and educational initiatives. The Krannerts gave to a variety of community institutions through personal funds, a family foundation created in 1953, and a subsequent charitable trust created in 1964.¹³⁹ The

¹³⁷ The public hospital serving Indianapolis operated under several names including City Hospital, General Hospital, Wishard Memorial Hospital, and, most recently, Eskenazi Hospital in honor of its benefactors, Syd and Lois Eskenazi. For a more complete review, see Kathi Badertscher, "A New Wishard is on the Way" *Indiana Magazine of History*, 108 no. 4 (December, 2012): 345-382.

¹³⁸ See Schneider, *Indiana University School of Medicine*. Chap. 7.

¹³⁹ Krannert IUPUI University Library, Ruth Lilly Special Collections and Archives, Foundation Center Historical Info File

couple had no children and directed their assets to a trust and then stipulated that the trust fund must be spent down within 15 years after their deaths. The Krannert Institute received capital and operating support from the Krannerts during their lifetimes and their foundation until its termination in 1987.¹⁴⁰

The couple valued research and donated regularly to the Purdue University Research Foundation as well as to the University of Illinois, Herman Krannert's alma mater. They also made significant gifts to support the arts and higher education. The legal documents creating the Krannerts' foundation suggest that the couple adopted a model used by Rockefeller many years earlier of giving consistently and in large amounts to centers of excellence in education, medicine, youth services, and the arts.¹⁴¹ The Krannert Foundation favored large donations until its termination.

The majority of the donations made by the Krannerts personally and through their foundation supported capital projects. For example, in 1969, the Trust made \$2.2 million in grants with more than \$1.7 million dedicated to construction projects at five different performing arts and museum buildings. In 1979, the Trust made \$11 million in grants with \$10 million going to capital projects at multiple educational, arts and community

¹⁴⁰ The Trust terminated in 1987 and most records of the Foundation and Trust were likely transferred or destroyed when the Inland Corporation moved its headquarters out of the city. The limited Krannert records maintained by the Payton Philanthropic Library THIS IS Different from RLSC, no? show that the Institute continued to receive operating funds of approximately \$200,000 per year until the Trust dissolved. Ruth Lilly Special Collections and Archives, Foundation Center Historical Information Files, Krannert Charitable Trust – Indiana Folder.

¹⁴¹ See Foundation Center Annual Questionnaires, 1964 – 1985. Foundation Center Historical Information Files, Krannert Charitable Trust –Indiana, boxes 44 and 112. IUPUI University Library, Ruth Lilly Special Collections & Archives. Indianapolis, Indiana.

centers.¹⁴² Gifts were generally restricted to Indiana organizations and specifically to the Indianapolis area.¹⁴³ The Krannerts' primary philanthropic intent focused on building the knowledge and cultural assets of the community by building physical spaces. This preference for capital construction, for building the places where work occurred rather than funding the work itself, connects the Krannerts to another occasional donor to medical research, Richard M. Fairbanks.

The Fairbanks Foundation is another notable example of a private foundation in Central Indiana that made significant occasional, but important contributions to support medical research. Richard M. Fairbanks, Jr. built a successful media network between 1950 and 1980; he developed a reputation as a shrewd businessman. Born into a privileged family, Fairbanks was the son of a prominent lawyer and grandson of Theodore Roosevelt's vice president, Charles Warren Fairbanks. His family owned and published the *Indianapolis News*, the city's evening newspaper. After Fairbanks graduated from Yale and finished a stint in the Naval Reserve, he took a seat on the board of directors of his family's newspaper in 1946.

In an effort to bolster the paper against the type of losses it experienced during the Depression, Fairbanks invested in a small radio station in 1947, the first in a series of media investments.¹⁴⁴ At the height of his career, Fairbanks owned over twenty radio and television stations across the country, as well as the Indianapolis Motor Speedway

¹⁴² Krannert Charitable Trust, Form 990-PF (1983) (KT).

¹⁴³. Foundation Library Center Questionnaire, Herman Charles and Ellnora Decker Kranert Foundation, dated April 10, 1958, (KF).

¹⁴³ Wendy Ford, *Richard M. Fairbanks, A Life in Broadcasting* (Indianapolis: Richard M. Fairbanks Foundation, 2008): 20.

¹⁴⁴ Wendy Ford, *Richard M. Fairbanks, A Life in Broadcasting* (Indianapolis: Richard M. Fairbanks Foundation, 2008): 20.

radio network. He invested successfully in real estate and cable television, and owned part of the Indiana Pacers, the city's professional basketball team, as well as a share in Carnegie Hall.¹⁴⁵

As his fortune grew, Fairbanks began to think about the disposition of his wealth. He was particularly eager to avoid taxes and had little appetite for passing all of his estate to his children and grandchildren. In the mid-1980s, Warren Buffet, an influential financier, published an article in *Fortune* magazine warning against the dangers of inherited wealth. In the article, Buffet said that he planned to give his money to a charitable foundation rather than to his children.¹⁴⁶ Fairbanks liked that option, and he asked his corporate lawyer, Leonard Betley, to create a foundation.

Betley formed a private foundation in 1986, and Fairbanks funded the new organization with a place-holding deposit of \$5,000. Fairbanks, his wife, Virginia, and Betley served as the Foundation's first directors. Fairbanks chose to focus on the city where he gained success, and he provided a clear statement of this intent. The foundation's Articles of Incorporation required that future directors of the foundation have a close connection to Indianapolis.¹⁴⁷ Projects to benefit the city were strongly preferred, but the type of project or the ideal beneficiaries were undefined save a preference that Fairbanks shared with the Krannerts for capital projects. Fairbanks died in 2000. At the close of his estate, \$132 million were deposited into the Foundation. Betley was named CEO of the new foundation, a position he held for 15 more years.

¹⁴⁵ Ford, *Richard M. Fairbanks*, 149 & 236.

¹⁴⁶ *Ibid.*, 235.

¹⁴⁷ Richard M. Fairbanks Foundation, Articles of Incorporation, dated October 27, 1986 (FFOF).

Fairbanks' decisions about where to give were driven less by a dedication to a particular cause or organization than by his goals to honor his family and enhance Indianapolis. Unlike the Krannerts, who rarely made grants of less than \$50,000, many of the Fairbanks Foundation's gifts were small amounts, \$5,000 or less, given to organizations his family supported.¹⁴⁸ In 1997, for example, the Foundation made twenty-seven small gifts, including ten to health care providers and disease organizations.¹⁴⁹

During the Foundation's first two decades, it followed a pattern of providing small grants to a laundry list of mostly local organizations along with a few large, often multi-year grants to support capital projects or new program initiatives undertaken by organizations the fund already supported. Major gifts supported construction at schools, including Butler University, and at cultural institutions, including the Indianapolis Museum of Art and the Indianapolis Zoo. During Fairbanks' lifetime, these large gifts were less numerous than smaller gifts to support organizations.

Fairbanks did, however, specifically identify an interest in health and medicine. The Foundation's Articles of Incorporation directed special consideration for projects that were "health care related" and designated several of the city's largest hospitals as intended beneficiaries.¹⁵⁰ The resulting gifts were generally directed toward institutional growth in the form of new buildings and equipment or patient access to care, rather than

¹⁴⁸ Fairbanks also provided consistent financial support to the Fairbanks Hospital, a facility dedicated to the treatment of substance addiction. Fairbanks' grandmother was an early funder of the facility and it is named in her honor. Fairbanks' support for this organization typically took the form of operating grants.

¹⁴⁹ Richard M. Fairbanks, Minutes of the Board of Directors, July 18, 1999 (FFOF).

¹⁵⁰ Richard M. Fairbanks, Minutes of the Board of Directors, September 29, 1999 (FFOF).

research facilities or efforts. Typical of Fairbanks' work was a 1999 commitment of \$2.5 million over 3 years to support the creation of a burn center at Wishard Hospital that would bear the Fairbanks name. As with many facility gifts, however, a treatment facility, particularly at a hospital staffed by medical school faculty and students, also provided a venue for research. That same year, Fairbanks awarded grants to twenty-six other arts and social service organizations as well as to three other local hospitals. Medical philanthropy was, in sum, a part of a larger whole.

Fairbanks' biographer, Wendy Woodruff Ford, suggests that his interest in medical research arose only late in his life as a reaction to the health challenges that he and other family members faced. She offers no specific evidence of this transition. What can be seen from the Fairbanks Foundation's records and grantmaking is that deliberations of each gift were more overtly strategic and specific about a goal other than health or medicine *per se*. Minutes from a 1998 board meeting, for example, capture the factors relevant to considering a gift to the medical school. The Board minutes specifically identify the school's importance as an "economic driver for Indianapolis."¹⁵¹

Beyond adding to the body of medical knowledge or even improving health care, Fairbanks and his board also saw that donations could offer indirect benefits such as building the prominence of the medical school and its reputation as a leader in a distinct field of research. In 1997, for example, the Foundation granted a proposal to provide \$1.5 million to support a "leadership position (Fellow, Professor or Chair)" at the Indiana University Center on Aging Research, a new interdisciplinary research center created to

¹⁵¹ Ford, *Richard M. Fairbanks*, 241.

investigate issues related to aging and care of the aging patient.¹⁵² An endowed research position was a helpful tool in the effort to attract an accomplished researcher with a developed reputation in the discipline. A high-profile researcher would enhance the reputation of the new center, a fact that could be leveraged in the quest to secure federal grants in the emerging field of geriatrics.¹⁵³ Again, we see recognition of Rockefeller's philosophy of rewarding and enhancing institutions with proven success in a field of research. By enhancing an institution's reputation, Fairbanks' gift could generate multiple benefits.

The Fairbanks Foundation continued its pattern of occasional engagement in health, most recently with a focus on public health. In 2010, the Foundation committed \$20 million "to support the creation of the Fairbanks School of Public Health on the IUPUI campus." This gift is another example of leveraging philanthropic gifts to support economic development as well as health, a fact recognized by IU President, Michael McRobbie who said that the new school would "enable Indiana University to compete for federal and foundation funding that is available only to schools of public health" and "contribute to economic development."¹⁵⁴

Medical school deans and administrators came to appreciate that philanthropy, whether from dedicated supporters or those who give to medical research occasionally, could be used strategically to act as seed or startup funding to nudge an initiative or

¹⁵² Richard M. Fairbanks Foundation, Minutes of the Board of Directors, September 10, 1998, 2, (FFOF).

¹⁵³ National Institute on Aging, NIA Timeline, <https://www.nia.nih.gov/about/nia-timeline>.

¹⁵⁴ School of Public Health at IUPUI named for Fairbanks in honor of Foundation's \$20 million gift," at <http://newscenter.iupui.edu/archived-releases/index.php-id=5794.html>

research agenda into motion. Fairbanks' \$20 million gift, for example, opened the door to new federal funding opportunities not previously available. Such a grant provided an appealing, high reward opportunity to the donor.

The Lilly Endowment is another example of an important Indianapolis donor that supported a diverse number of initiatives and organizations in the community, including making grants to support medicine and health. This foundation was comprised of the gifts from both the Eli Lilly and Company pharmaceutical firm and members of the Lilly family. The Endowment, one of the largest private foundations in the country, is located in Indianapolis. Since 2000, the Endowment has given over \$240 million in three different grants to the Indiana University School of Medicine to support research in human genetics as well as to support the recruiting and retention of high caliber research scientists to the medical school.¹⁵⁵ Although the Endowment is orders of magnitude larger than the foundations in this study and will eventually warrant a more detailed examination, these gifts demonstrate that even the largest foundations are willing to provide research support that is designed to increase capacity of research organizations broadly and that can catalyze future, but undefined work.

3. Hoosier foundations and medical research: A dedicated focus.

While Krannert and Fairbanks made occasional gifts to medical research institutions, three foundations in Indianapolis adopted scientific and medical research as their sole philanthropic focus. Grants from these dedicated funders contributed directly and significantly to medical advances, including the invention of surgical mesh, the

¹⁵⁵ <http://medicine.iu.edu/news/2017/07/25-million-lilly-endowment-grant-attract-leading-scientists-iu-school-medicine/>

development of infant cord-blood banking, and the creation of the electronic medical records system. Foundation support helped to build the physical spaces needed to conduct research as well as professional capacity and expertise to do the work. These contributions generated benefits beyond individual researchers and their projects. Philanthropic grantmaking advanced entire institutions, the universities and hospitals where these researchers worked, and the general community.

Every foundation has an origin story, a reason or set of factors that motivated the creation of a private charitable fund as well as the choice to devote the proceeds from that organization to the work of medical research. Organizations then make choices regarding how they will organize and conduct the work of grantmaking as well as about what they will fund and what they will decline. Comparing the choices that one founder made against the decisions of another provides a basis to begin identifying points of similarity and divergence in the work of smaller and more local foundations that are rarely studied. Naturally, there are obvious points of consideration regarding the individuals who started these foundations, including their backgrounds, professional careers, and family situations. Characteristics of the organizations they created also provide meaningful opportunities for comparative analysis. These factors include: how the foundations first structured their work and selected recipients, the level of complexity built into the structures and operational process, and the roles that outside advisors played in early operations. The choices the foundations made concerning their work and structure reveals a great deal about the foundations in the study and provides a basis for asking more refined questions about the operation of these foundations and others working in other communities or supporting other efforts.

Another important characteristic in this study concerns the ways that these dedicated foundations working at the same time and in the same community shared knowledge across organizational boundaries with each other and with their potential and actual recipients. This study affords a view of the communication and information sharing practices adopted by these three foundations. In particular, this study focuses on the way these foundations used information to craft complementary grants that advanced a strategic initiative undertaken by the medical school with the goal of magnifying the impact of each gift. For example, the Fairbanks Foundation provided the funds to hire a senior researcher at the Center for Aging Research. This Center was housed in the Regenstrief Institute, an organization created and funded by another nonprofit, the Regenstrief Foundation.¹⁵⁶ Leonard Betley, Fairbanks' lawyer, worked with both foundations. This practice of organizational cross-pollination was made possible by the relationships and communication between a small group of academic and civic leaders who worked regularly together—something possibly distinctive of social networks in a midsized city. The linked nature of the foundations in the community will be explored in the remainder of this work.

Since 1969 the Regenstrief Foundation, the Showalter Trust, and the Walther Cancer Foundation have collectively given over \$500 million to support medical research. This total represents thousands of grants to universities, hospitals, and laboratories located primarily in Indianapolis. The remainder of this chapter introduces

¹⁵⁶ Richard M. Fairbanks Foundation, Minutes of the Board of Directors, February 27, 2002 (FFOF).

these three organizations with a focus on the factors that motivated their creation and on the early operation of these dedicated funds.

A. The Regenstrief Foundation

In 1967, Sam Regenstrief was wrestling with two related problems. He owned 82% of Design & Manufacturing Corporation (D&M), then the largest manufacturer of residential dishwashers in the world. Sam and his wife, Myrtie, had no direct heirs. They did not want to leave their entire fortune to distant relatives. Instead, Sam wanted to provide for his employees and the community where they lived by ensuring that D&M would continue operating in the hands of his employees after his death. A lawyer suggested that creating a philanthropic foundation would allow him to meet both goals.

In this case, an extensive set of available records provides the opportunity to examine the operation of the Regenstrief Foundation as those operations were recorded in minutes and other records. Regenstrief the donor, however, was a private and modest man who left no personal papers or interviews that give insight into his decisions. Consequently, conclusions about the motivations for action are based on inference from the written records of the organization.

Sam Regenstrief migrated from Vienna to Indianapolis as a child in 1914. In 1929, he became a “time study man” evaluating worker productivity at the Real Silk Hosiery factory. Regenstrief’s early introduction to the science of efficiency shaped his career and his eventual philanthropic endeavors. In 1958, he purchased a shuttered Jeep manufacturing plant in Connersville, Indiana, and opened D&M. Within months, the plant was producing the first affordable, front-loading dishwashers for a post-war

consumer market eager for luxury. By the 1970s, the company produced over a million units a year, or three of every four dishwashers sold in the world.¹⁵⁷

Sam and his wife, Myrtie, were dedicated to Connersville, where they lived most of their lives in a modest home. The couple had no children but Sam, by all accounts, was deeply devoted to his employees. It was not surprising that he was eager to find a way to keep the company operating in town and in the hands of those he knew and trusted after his death. In 1966, Leonard Betley, a young tax lawyer working with D&M, suggested that a foundation could help him accomplish his goals. Betley would later suggest this same strategy to two other Indiana businessmen, Richard Fairbanks and Joseph Walther.

Under Betley's proposal, controlling ownership in D&M would pass from the Regenstriefs' estate to the new foundation.¹⁵⁸ The foundation board could operate the company as an asset of the foundation in perpetuity. Choosing the foundation as a legal vehicle, however, meant that the foundation would need to make regular philanthropic gifts.

Regenstrief wanted a fund that would have a single focus rather than a general-purpose. Selecting one focus reduced the administrative burden on the foundation's board of directors, a fact that Regenstrief would have found important as his foundation board overlapped with his corporate board. Throughout his life, the welfare of the company remained his primary focus. Regenstrief wanted the foundation to operate as a support organization that would benefit a single organization, even though his Foundation

¹⁵⁷ Wendy Ford, *Regenstrief: Legacy of the Dishwasher King*, (Indianapolis: The Regenstrief Foundation, 1999); 41.

¹⁵⁸ Ford, *Regenstrief*, 60

was not legally organized to operate as a support organization. Indeed, he wanted to make a single annual gift to a single recipient. Initially, Sam leaned toward supporting the engineering school at Purdue, but Dr. Harvey Feigenbaum had a different idea.

Feigenbaum, a young cardiologist at the Krannert Institute, was married to Regenstrief's niece. During family gatherings, Regenstrief and Feigenbaum often discussed health care and lamented inefficiencies that burdened the system.¹⁵⁹

Feigenbaum suspected that Regenstrief, who sat on the board of the local hospital, might consider funding work at the medical school. Feigenbaum enlisted the help of John Hickam, the Chairman of the Department of Medicine at Indiana University School of Medicine.¹⁶⁰ Hickam was known nationally for his work in pulmonary medicine, as well as his efforts to enhance health care access and improve both care delivery and medical education. He had served as a member of the Advisory Committee to the Surgeon General of the United States that issued its report on Smoking and Health in 1964.¹⁶¹ Hickam helped persuade Regenstrief to settle on a focus. Sam would devote the charitable efforts of his foundation to support efforts to identify and nurture improvements and efficiencies in the way that care was delivered.

Sam and several of his advisors met with representatives of the Indiana University School of Medicine over the winter of 1966 to 1967 to help Regenstrief and his team assess “the worth of programs in the field of health care which the Foundation might

¹⁵⁹ Betley, transcript, interview 1; Harvey Feigenbaum, M.D., transcript, interview 1. Regenstrief Oral Histories Project, (n.d.) transcripts maintained by the Regenstrief Foundation (RF).

¹⁶⁰ Harvey Feigenbaum, M.D., transcript, interview 1 (n.d.), (RF).

¹⁶¹ Ford, *Regenstrief*, 54.

consider undertaking.”¹⁶² To respond to Regenstrief’s request, the school proposed creating an "advisory council" to guide the new Foundation on how to “best to use University resources” to carry out the Foundation’s goals.¹⁶³ The proposed group included the dean and associate dean of the medical school, faculty members, including Hickam and Feigenbaum, and five external medical professionals, including Eugene Stead, Dean of the Duke University School of Medicine and John Hickam's mentor. Finally, the medical school offered the services of Dr. Raymond Murray, a member of the medical faculty, to serve as a part-time director to oversee operational work that the Foundation would finance.

Following formal incorporation on April 7, 1967, the Regenstrief Foundation Board of Trustees appointed Hickam to the board. Sam, his wife, and several of Sam’s closest business advisors rounded out the Foundation board’s membership.¹⁶⁴ Hickam was directed to constitute an advisory board that would identify and recommend potential projects for foundation support.¹⁶⁵ A few months later, Hickam’s advisory group made its first recommendation. The suggested recipient was a community-based diagnostic program run by the Department of Medicine, the department that Hickam led. In

¹⁶² Regenstrief Foundation, Memo to Sam Regenstrief, Notes for April 24, 1967, (RF).

¹⁶³ Regenstrief Foundation Memo to Sam Regenstrief, Notes for April 24, 1967, (RF).

¹⁶⁴ Initial board members included: Merle Miller, D&M's chief corporate lawyer; Frank McKinney, a representative from the company’s bank; and Logan Johnson, and the president of the D&M board as well as CEO of Armco Steel, Regenstrief’s lead supplier. Later, the board would be expanded to include financiers from Goldman Sachs, and the vice-president of Sears & Roebuck, the D&M’s largest client. Regenstrief Foundation, Regenstrief Board Minutes, April 24, 1967 (RF).

¹⁶⁵ Minutes of the Meeting of the Board of Directors, April, 24, 1967. (RF).

essence, Regenstrief created a foundation and handed effective control over to the chair of the School of Medicine's largest department.

Later that summer, Regenstrief's Foundation Board began to add shape to its philanthropic goal. Regenstrief asked Hickam and his Advisory Council members to investigate and propose how the Foundation could "best devote resources . . . to the solution, over a 20-year period, of problems existing in [the] present health care delivery system."¹⁶⁶ Clearly, the goal was ambitious. Yet, in the same meeting, Regenstrief went on to specify that the effort to make change should be focused in one area. It is reasonable to assume that Regenstrief's preference for philanthropic engagement mirrored his approach to manufacturing: do one thing efficiently. At the same time, there may have been a very practical motive to Regenstrief's desire to keep a focus on the corporate side of his work. With the Regenstrief's priorities and personal style in mind, Hickam's Advisory Committee suggested an ambitious proposal, an idea that provided important benefits to the school as well.

Hickam proposed creating a research institute with a working clinic and a laboratory to test improvements to the care system.¹⁶⁷ The proposed institute would be "a separate entity with its own board of directors composed of representatives from Regenstrief Foundation, the School of Medicine and General Hospital," one of the medical school's training hospitals.¹⁶⁸ Its work would focus on improving the system of

¹⁶⁶ Regenstrief Foundation, Minutes of the Meeting of the Board of Directors, August 27, 1967, p. 2 (RF).

¹⁶⁷ Regenstrief Foundation, "Development of a Model for Health Care Research at the Marion County General Hospital," submitted to Sam Regenstrief, October 28, 1968 10/28/68, p 1. (RF)

¹⁶⁸ Regenstrief Foundation, Minutes of the Meeting of the Board of Directors, October 28, 1968 (RF).

health care rather than on the type of basic and applied scientific work most common in medical research.

The research institute concept met the needs of the donor, researchers, and the medical school needs, at least initially. An institute could pursue multiple research initiatives simultaneously; yet, Regenstrief would make only a single allocation every year eliminating the need for the consideration of multiple projects. Additionally, a research institute could follow a flexible staffing model by offering short-term contracts to researchers working on a single project rather than hiring and managing a stable of full-time researchers. With few full-time employees, an institute could be more flexible and carry less overhead cost.

Institute researchers could also work as medical school faculty, teaching students while staffing the hospital wards and clinics, thereby benefiting the medical school and its partner hospitals. An independent institute also offered academic cachet that could entice ambitious medical researchers not otherwise inclined to take a job with a poor county hospital. Hickam persuaded Regenstrief of the value of the institute approach and the Regenstrief Institute for Health Care was born, at least in concept.

The Board motion creating the new institute was silent on several important particulars, including the extent and form of the Regenstrief's financial support.¹⁶⁹ Negotiating the particulars was left to Regenstrief's representative, Leonard Betley. The Foundation and the medical school agreed to share the cost of employees working for both the Institute and the Medical School, including any full-time faculty and

¹⁶⁹ Regenstrief Foundation, Minutes of the Meeting of the Board of Directors, October 28, 1968 (RF).

administrative staff.¹⁷⁰ Regenstrief would make annual block grants to Indiana University, which then paid all of the Institute's operating costs. A new governing board including appointees from the Foundation, the medical school, and Marion County General Hospital would direct the Institute.¹⁷¹

Progress at the Institute threatened to stall in 1970 after John Hickam passed away unexpectedly at the age of 55. Eugene Stead, Hickam's mentor from North Carolina and a member of the Regenstrief Advisory Council, temporarily stepped into the gap and lent his significant reputation to the effort, particularly the effort to recruit top-notch researchers to the Institute. Stead also sought to maximize the opportunity that Regenstrief's support created to benefit a team of young and creative faculty and to advance a cause Stead was personally dedicated to: increasing access to care in underserved urban and rural communities.

Under Stead's leadership, the Institute opened and ran new multi-specialty clinics around the state, including in small communities like Paoli, New Harmony, and Connersville, Regenstrief's hometown. The clinics combined services of general and specialty physicians with those of nurse practitioners, then a novel type of care provider.¹⁷² The School of Medicine created a new academic unit, the Department of Community Health Sciences (hereafter, the DCHS), to partner with the Regenstrief Institute. Ray Murray, the Institute's director, envisioned a relationship in which it would

¹⁷⁰ Regenstrief Foundation, Charter of the Regenstrief Institute for Health Care, dated October 12, 1968 (RF).

¹⁷¹ *Ibid.*, Section 1.

¹⁷² Regenstrief Foundation, Joanne Fox, interview 1, July 12, 2010, Regenstrief Oral History Project. Fox was the long-serving office manager for the Foundation and the Institute (RF).

collect and analyze data and the DCHS would share the lessons learned from these efforts.¹⁷³

The Regenstrief Institute was not like other research institutes within the medical school. The Krannert Institute, which Regenstrief was initially modeled after, was a more typical model of an academic, medical research institute. Krannert was an institute of the medical school established along with a \$2.8 million donation for a new pavilion at University Hospital. It focused on a particular type of work related to a type of disease or set of conditions. The Krannert Institute included scientists and physicians working on issues related to understanding and improving cardiac care. Physicians working in the Krannert Institute treated patients and therefore worked regularly in the hospital as well as in the clinic. Regenstrief was located near the medical school and hospital, and some medical school faculty associated with Regenstrief's regularly treated patients in the hospital and clinic, but much of the research undertaken by Regenstrief researchers did depend on this proximity. Additionally, research institutes are typically a part of a medical school or hospital's organizational structure and are housed within a department or division of the larger organization. The Regenstrief Institute, however, was operated as a unit of Marion County Health and Hospital Corporation, the quasi-governmental unit that also ran Marion County General Hospital, rather than by the medical school or hospital.

At the same time that the Regenstrief Institute was building clinics around the state, the Foundation was also funding construction of a six-story building that would

¹⁷³ Fred D. Cavinder, "Streamlining Your Health Care: Research by the Regenstrief Institute may Revolutionized Just What the Doctor Orders." News clipping, 1972. Ford, Regenstrief, 119.

house General Hospital's outpatient clinics. The Institute and its research activities would occupy the third floor of the building. In addition to Foundation support for the building, Health and Hospital Corporation floated a \$6 million bond, and the medical school contributed \$1 million. Sam Regenstrief also gave \$2 million from his personal accounts beyond the Foundation's contributions to fund the construction project.

Sam Regenstrief's plate was full, and he and his board grew concerned over the increasing range and cost of these projects. By the spring of 1974, tensions peaked between Stead and his supporters, who were eager to build a far-reaching care system with nodes across the state, and those who preferred the Institute to focus on local projects and the urban population that the new Regenstrief Health Center would serve. Sam Regenstrief dedicated the Foundation's annual meeting to discussing the Foundation's future direction.¹⁷⁴

Stead took a clear stand. In his mind, there were mutually exclusive paths for the Institute. The first involved an external focus, essentially staying the course and maintaining multiple projects at a variety of sites around the state. The second path concentrated all of the Institute's resources and work inside the new Regenstrief Health Center. Sam Regenstrief preferred a local focus, which he believed allowed him to better concentrate and manage his resources. The Foundation Board agreed.

By 1975, the Institute was detached from the Medical School's community clinic project entirely. Stead returned to North Carolina and Murray resigned his position as Institute Director. Meanwhile, Dr. Clem McDonald, a doctor with a master's degree in

¹⁷⁴ Regenstrief Foundation, Minutes of the Regenstrief Foundation Board of Directors, May 13, 1974 (RF).

biomedical engineering and a facility with computers, was hard at work on the third floor of the new Regenstrief Health Center on a project to eliminate paper medical records. His project would prove transformational for both the Institute and the practice of medicine.

B. *The Showalter Trust*

In 1958, Grace Showalter, a devoted art collector, gave Indiana University a fountain portraying the birth of Venus. Installed on university's main campus in Bloomington outside the school's fine arts center, its largest auditorium, and the Lilly Library, the fountain became a hub of student activities including student protests. Groups advocating for civil rights and those supporting and opposing the Vietnam War frequently gathered at the fountain. In the fall of 1967, demonstrations coinciding with the visits of Secretary of State Dean Rusk and corporate recruiters from Dow Chemical Company, a manufacturer of napalm, became violent as several hundred opponents of the war clashed with approximately 1,500 heckling supporters of the military and the Johnson Administration.¹⁷⁵

By 1968, turmoil on the Indiana University campus had become so intense that it led to two significant changes—one highly public and another very private. Elvis Stahr, Indiana University President and a former Secretary of the Army announced his resignation to a surprised Board of Trustees. The school also lost the support of at least

¹⁷⁵ Mary Ann Wynkoop. *Dissent in the Heartland: The Sixties and Indiana University* (Bloomington: Indiana University Press, 2002), 54-57.

one conservative donor. Showalter was shocked at both the students' conduct and the school's response. She decided to look for a new beneficiary.¹⁷⁶

Grace Showalter's husband, Ralph Showalter, had died in 1959 and left his estate to her. Ralph Showalter had worked at Eli Lilly and Company after earning his degree in chemistry from Purdue University. He retired from the company in 1948 as a vice president. Like the Regenstriefs, the Showalters had no children and chose not to leave their estate to more distant relatives. Grace supported and engaged in a variety of civic activities, particularly those associated with the arts. She gave generously to build the Showalter Pavilion at the Indianapolis Museum of Art, for example. She was known to be formidable and opinionated. She was the first woman to serve on the Indiana University Foundation Board of Trustees, where she had a twenty-three-year tenure. Indiana University awarded an honorary doctor of humanities to her in 1967, just one year before she decided to amend her will.¹⁷⁷

Working through her personal attorney, Robert Claycombe, Showalter contacted Fred Hovde, then President of Purdue University, and Glenn Irwin, Dean of the Indiana University School of Medicine, in 1968. She asked Claycombe to investigate how she

¹⁷⁶ Information about the founding and operation of the Showalter Trust appears in an unpublished study commissioned by the Showalter Trust in anticipation of its thirtieth anniversary. William H. Schneider and Suzann Weber Lupton, J.D., "To Benefit Mankind and Encourage Medical and Scientific Research': The Ralph W. and Grace M. Showalter Research Trust, 1973-2007," July 2, 2009. This report will be archived with the Ruth Lilly Special Collections and Archives, Indiana University, Purdue University/Indianapolis along with the other papers from the Trust.

¹⁷⁷ Toward the end of her life, Showalter's attitude toward the University softened, and she honored a pledge of \$1.2 million that was used to construct Showalter House, the physical home of the IU Foundation. She determined, however, that the Bloomington campus would not receive the bulk of her estate. Instead, she selected new recipients.

could best support research at their institutions.¹⁷⁸ Showalter specified that she did not want to support construction of buildings or student scholarships—she was interested in funding research itself. In this way, her ideas about what to do with the proceeds of her Foundation had more shape than did Regenstrief’s at the time that he started exploring a foundation as an option. Regenstrief was motivated by a business goal and was led to research by an advisor. Showalter chose research particularly, though her reason for this choice is unknown.

Showalter did not go so far, however, as to indicate either a particular area or type of research or to indicate the amount or form of her proposed support. She gave Claycombe no other restrictions. Irwin and Hovde were in the enviable position of pitching their best ideas, largely without limit. Irwin first offered the somewhat unimaginative suggestion of establishing an endowed chair at the School of Medicine. In a letter written to Showalter immediately after his meeting with Claycombe, Irwin noted that a gift that produced income of \$100,000 per year would permit the school to recruit and support a “top-rate researcher.” He also tried to build in flexibility by asking Showalter to allow the school to divert funds to support “unexpected” and “urgent” needs arising from ongoing research projects. Showalter accepted Irwin’s request for funding, but indicated that she preferred something beyond the limited role of funding faculty chairs.

¹⁷⁸ Although no evidence exists to explain her decision, it is likely that Showalter distinguished between Indiana University, with its principle campus in Bloomington, Indiana, and the University’s School of Medicine, which is located on the Indiana University Purdue University campus in Indianapolis.

Even before hearing from Hovde about a Purdue proposal, Showalter sent a letter to five men she wanted to serve as the grant “selection committee” for a charitable trust that she determined to establish upon her death.¹⁷⁹ It is unknown why Showalter chose the title “selection committee,” rather than “board of trustees,” which was the real role these advisors assumed. Grace Showalter was sufficiently familiar with sophisticated nonprofit governance through her prior civic roles, including a long tenure with the IU Foundation Board of Trustees. Perhaps she simply preferred the term. Possibly she had not wanted to confine the group in some manner. Regardless, she turned to individuals who already managed her financial affairs, including two bank officers, her personal lawyer, Robert Claycombe, and a dermatologist in private practice who was married to a close friend. Showalter asked Hovde to join the committee as well. The Selection Committee functioned as the sole governing body for the organization. Showalter herself was not a member.

In her letter of appointment, which Claycombe drafted, Showalter also gave “suggestions and instructions” concerning her intentions as regards each university. The allocation to Purdue would support a “Showalter Professorship of Bioengineering,” as a tribute to her husband. The Selection Committee could distribute funds beyond the amount needed for the named chair to support other initiatives at Purdue. Specifically, a “substantial portion of income [could] be spent in the area of air and water pollution control.” She went on, however, to state that “preferential consideration,” should be given to projects in the area of biochemistry and bioengineering, including “control and

¹⁷⁹ Showalter Trust, Letter from Grace M. Showalter to Claycombe, Fulwider, Kealing, Jenkins and Hovde, December 12, 1968, (SF).

prevention of disease, development of new technologies in food production,” and “use of the modern computer in the measurement of biological processes.”¹⁸⁰

In the same letter, she set out terms for the School of Medicine grants. Money would first be used to support a professor in either biochemistry or pharmacology, as Irwin suggested. The dean of the school, it appears, retained discretion to identify the faculty member and area. The remainder of the school’s allocation would support research projects “most likely to permanently benefit mankind.” Showalter added one additional instruction relevant to the funding of any other projects. Support for these projects “should be undertaken only after careful consideration and with the expectation that support from my trust fund will continue to support such programs to completion.”¹⁸¹ She expressed no other preferences or priorities in this letter.

Showalter signed a new will in 1970, which modified some of the terms of the letters but not the basic intent. This was the first of several changes that Showalter would make. The will provided for the creation of the Ralph W. and Grace M. Showalter Trust Fund, a trust “to benefit mankind and encourage medical and scientific research.” The terms of the will describing the Trust conformed to the directions that Showalter set out in her December 1968 letter to the five-member selection committee, although the document contained even fewer specifics. For example, the will designated that one-half of the income generated from the Trust corpus to go to IU School of Medicine and one half to Purdue. She had described that same division in her December 1968 letter, but the

¹⁸⁰ Showalter Trust, Letter from Grace M. Showalter to Claycombe, Fulwider, Kealing, Jenkins and Hovde, December 12, 1968 (SF).

¹⁸¹ Showalter Trust, Letter from Grace M. Showalter to Claycombe, Fulwider, Kealing, Jenkins and Hovde, December 12, 1968 (SF).

will contains virtually no directions concerning how the schools were to use the money. Nor was there any mention of the creation of endowed chairs at either school. The will did, however, include one new instruction that did not appear in the 1968 letter: no Showalter grant money could be used to support research in “psychiatry, sociology or social studies.”¹⁸²

In 1971, two years before her death, Showalter made one final change by expanding the trust to include financial support for the Indianapolis Center for Advanced Research (ICFAR). Established in 1970 as a partnership between Indiana University, Purdue University, the City of Indianapolis, and the Indiana Chamber of Commerce, the center was to be an economic development incubator for the city and for Indiana University or Purdue researchers working on the newly created IUPUI campus. Showalter directed the Committee to allocate (up to) one-third of the annual income from the Trust to the Center and recommended establishment of the “Grace M. and Ralph W. Showalter Chair” for the Director of the Center. She specified that up to \$50,000 per year go to support that position.

Later that same year, Showalter created a second, separate testamentary trust that the Selection Committee would also manage. The Methodist Cardiac Trust was restricted to cardiac care and research at Methodist Hospital. Grace Showalter had a personal connection to the cardiac unit as a result of her own heart illness, although there is no document confirming that her gift was intended as a form of gratitude or recognition for her own care. The value of the Methodist trust at the time of its creation was \$2,000,000.

¹⁸² Showalter Trust, Grace M. Showalter, Last Will and Trust, dated June 1, 1970 (SF).

Grace Showalter died on July 23, 1972, with no direct heirs. At the close of probate, the Trust corpus was valued at approximately \$15 million. The Showalter Selection Committee met for the first time as a grantmaking body on July 10, 1973, just a year after her death. The group began its work by immediately ignoring Showalter's directions regarding the method of disbursing trust proceeds.

Fred Hovde, the only member of the committee to work at a research institution, led the discussions about a grant selection process.¹⁸³ The discussion centered on the timing and nature of submissions. The Committee ignored Showalter's instructions to simply divide the money evenly between the two schools as block grants. Instead, the Committee took it upon itself to be more active in the selection process by requiring schools to submit funding requests.

The rationale for this decision was not set out in the minutes from the meeting. It is possible that the process of submitting proposals for review simply seemed familiar, almost required, to Hovde. Notably, the committee did not impose any of the other requirements common to research grant proposals, such as required information or submission schedules. Perhaps, instead, the members of Showalter's committee felt a sense of obligation to continue assessing and advising on her behalf. After all, three members of the committee had served as her financial and personal advisors for years. Two final explanations are less flattering. Hovde might have seized the opportunity to set up a more competitive process in hopes that his institution could prevail for more funds. It was reasonable to predict that the other members of the committee needed to

¹⁸³ Showalter Trust, Showalter Trust, Selection Committee Minutes, July 10, 1973, 2 (SF).

rely on the academic representative to identify the most appropriate processes and select the worthiest applicants. Alternately, the Selection Committee may simply have discounted Showalter's wishes because she was a woman who had no corporate business experience.

At this first meeting, the Selection Committee awarded several grants. An allocation of \$34,100 was made to the IU School of Medicine to support the first Showalter Professor of Biochemistry. ICFAR received a grant of \$50,000 to establish the Showalter Chair for the Director of ICFAR, a position that Showalter had specifically called for. The Committee rejected ICFAR's request for \$30,000 to support a symposium on energy, because "this was not an area in which Mrs. Showalter expressed an interest."¹⁸⁴ In reaching this conclusion, the Committee again appears to either have ignored Showalter's stated desire to support projects to address pollution or it concluded that a symposium about energy was not relevant to pollution.¹⁸⁵

Purdue had requested \$150,000 to support the recruitment of the Showalter Professor of Bioengineering, including hiring a secretary, research assistants, and laboratory equipment. Due to the timing of this hire, Purdue's grant was paid early. Bioengineering was an emerging field, and few schools had developed freestanding departments. For Purdue, the grant was an opportunity to move to the forefront of this field. The Committee's response to Purdue's request was restrained; it allocated only \$50,000 toward a recruitment package designated for a professor's salary and deferred action on the remainder of the request.

¹⁸⁴ Showalter Trust, Showalter Selection Committee Minutes, July 10, 1973 (SF).

¹⁸⁵ Showalter trust, Grace Showalter letter to Robert Claycombe, July 2, 1968 (SF)

Purdue felt strongly enough about the investment that it found an additional \$100,000—half of the bioengineering school’s entire research budget in 1974—to bring Leslie (Les) Geddes from Baylor University. As part of the deal, Purdue also hired Geddes' top two research assistants and secured jobs for each of the men’s spouses. This proved a shrewd investment. Within 5 years of his hire, Geddes brought in over \$5 million in project grants. The bioengineering department that Geddes created continues to generate millions of dollars a year in licensing fees from Geddes’ work improving electrodes used in medical devices, such as cardiac monitors, and for developing a material to accelerate tissue regeneration.¹⁸⁶ Despite providing only a portion of the funds needed to complete the project, Showalter’s contribution allowed the effort to move forward, one that might have stalled otherwise.

C. The Walther Cancer Foundation

Mary Margaret Walther died of colon cancer in the summer of 1983. This event pushed her grieving husband, Joe, to action. A surgeon, decorated veteran, and business entrepreneur, Walther mustered his financial resources, personal network, and strong self-confidence to create an organization dedicated to the "eradication of cancer."¹⁸⁷ Since its inception in 1985, the Walther Cancer Foundation has provided over \$110 million to research scientists, physicians, and nurses working on initiatives aimed at the prevention and treatment of cancer.

¹⁸⁶ Max Valentinuzzi, “Honoring Leslie A. Geddes – Farewell,” *Biomedical Engineering Online*, 9:1 (2010). Not in bibliography

¹⁸⁷ Joseph E. Walther, *A Life Like None Other* (Indianapolis: Walther Cancer Foundation 2003): 122.

Although focused on a single disease, Walther adopted a wide and ambitious mission for his foundation. In short order, Walther formed a medical research organization, a specialized form of nonprofit organization and four related legal entities. Beyond scientific research, the Foundation initiated efforts to improve nursing care and the quality of the in-hospital experience for patients and family members. Walther also created a public charity to raise money from the general public to support these efforts, though this proved to be unsuccessful. The sprawling organizational chart filled with interlocked organizations and directors, as well the potpourri of actual and proposed projects, confounded many, including Walther's closest supporters. Despite the challenges that this cluttered structure created, Walther showed good judgment in his early funding choices. In many ways, the first decade of the Walther Foundation mirrored the personality of its founding donor.

Joseph E. Walther (Joe) was born on November 24, 1912, in Rushville, Indiana. His father was a physician, and Joe often accompanied him on house calls. Ambitious, confident, and eager for adventure, Walther earned his M.D. in 1936 and then took a job as a physician to provide care for the personnel of the Transpacific Cable Company and Pan Am Airways. The job took him to Midway Island, and enamored by the Pacific, he next headed to Kauai, Hawaii, where he was physician to thousands of employees on sugar and pineapple plantations. After the outbreak of the Second World War, Walther served with distinction as a flight surgeon. Walther returned to Indianapolis, married his hometown sweetheart, Mary Margaret and set up a medical practice. By the mid-1950s,

his practice was thriving and he turned to new interests—developing new business ventures.¹⁸⁸

Like many Indianapolis doctors, Walther struggled to find hospital beds for his patients. He spotted an opportunity. He and several partners opened a new hospital, Memorial Clinic Hospital, in February 1956 on the city's Near-North Side. Although proprietary hospitals had been common in the first half of the century, private hospitals had grown rare by the 1950s due in large part to the expense of constructing more modern hospitals and the availability of federal funds to incentivize the construction and modernization of hospitals, particularly those willing to provide indigent care.¹⁸⁹ Walther served as President and CEO of the hospital. Within 10 years, the hospital expanded to a 200-bed general hospital renamed Winona Memorial Hospital after his mother. Walther also built and managed a professional office building on the site and he created a foundation associated with the hospital, the Winona Memorial Foundation.

In 1983, Mary Margaret was diagnosed with colon cancer. She died within months. Devastated by her death, and suffering from his own serious vision problems, Walther decided to retire from the practice of medicine and dedicate himself to what he described in his autobiography as the “eliminat[ion of] cancer as a cause of death and suffering.”¹⁹⁰ On September 13, 1983, only two months after his wife's death, Walther

¹⁸⁸ In 1956, Walther created his first philanthropic institution, the Winona Memorial Foundation, to provide scholarships for medical and engineering students interested in medical matters.

¹⁸⁹ The Hospital Survey and Construction Act (1946), commonly known as the Hill-Burton Act is one example. The Act provided grants and guaranteed loans to entities that agreed to provide services to those who could not pay.

¹⁹⁰ Walther, *A Life Like None Other*, 316.

and eight of his closest associates held a formal meeting to discuss the creation of a cancer institute at Winona Hospital.

Walther, like Showalter, was not influenced by an advisor to support medical research but instead reached that decision on his own. He envisioned the development of a comprehensive care facility to “provide for the total treatment, rehabilitation, and education of cancer patients.”¹⁹¹ A common presumption that people who make significant philanthropic investments in medical research are either grateful patients or they are acting out a desire to prevent a form of physical suffering that touched them or someone close to them. Walther is the only of the three foundations studied here to be motivated to engage in medical research support because of a personal encounter with disease.

Walther’s ambitions, and his confidence, were extensive. At his first meeting, he laid out a plan to become the referral hospital to manage all cancer care in the city. Walther believed that while “an adequate number of oncologists” practiced in Indianapolis, area hospitals showed only “a limited commitment” to cancer care.¹⁹² He proposed turning Winona Hospital into a centralized cancer care hospital. Under his scheme, oncologists across the city would maintain their existing affiliations with other hospitals, but they would admit their cancer patients to his cancer center. The meeting minutes do not demonstrate that the board members considered the perplexing question of why local hospitals would welcome the opportunity to surrender an increasingly lucrative set of patients to a competitor. There was also no conversation about the steps

¹⁹¹ Walther Institute, Board Meeting Minutes of September 13, 1983, 1 (WF).

¹⁹² *Ibid.*

that the group would need to take to begin such an ambitious venture. Instead, the group spent the remainder of the meeting sketching a development and marketing plan for the proposed institute.¹⁹³

Walther created a small cabinet of advisors called the Oncology Development Committee (ODC). This working committee was ostensibly part of the larger sixteen-member Winona Memorial Foundation's board of directors, the group that then operated the existing charitable arm of Winona Hospital. Membership on the ODC fluctuated only slightly over the years, and it consisted of only a handful of trusted advisors.¹⁹⁴ The group's first project included visiting well-known cancer institutes across the country seeking models to replicate.

Walther assembled a corps of local allies and expert advisors. Dr. John Durant, then the Medical Director at Fox Chase Cancer Center in Philadelphia, accepted a position as external consultant and played a key role in influencing the structure of the early organization. Locally, Walther reached out to Walter Daly, Dean of the Indiana University School of Medicine, and asked for help completing a feasibility study that would "provide evidence to the community that extensive thought had gone into development of the center and to provide the basis for research grants and/or other necessary approvals in the future."¹⁹⁵ Additionally, Walther hired a firm of medical management consultants to engage in strategic planning and to develop a fundraising plan as well as a management structure.¹⁹⁶ Although Walther was eager to line-up prestigious

¹⁹³ Walther Foundation, Board Minutes, September 13, 1983, p.2 (WF)

¹⁹⁴ Winona Memorial Foundation, Inc., Executive Committee/Board of Directors Minutes, August 19, 1985, p.2. (WF)

¹⁹⁵ Walther Oncology Development Committee Minutes, August 16, 1984, p.2, (WF).

¹⁹⁶ Walther Oncology Development Committee, December 13, 1984, (WF).

advisors, it is not certain that he was inclined to heed their advice. Indeed, it was not entirely clear what Walther was trying to create.

One person whose advice Walther did heed was Leonard Betley, the lawyer already working with both the Regenstrief and the Fairbanks foundations. Walther consulted Betley when he decided to sell Winona Hospital and transfer the hospital assets to the Winona Memorial Foundation, his existing philanthropic foundation, and then create a new cancer institute. According to Internal Revenue Service rules, however, this transfer would leave the Winona Foundation in violation of the tax laws because a foundation could not operate a going for-profit business.

Betley proposed the same solution that he had devised for Regenstrief, establishing a medical research organization. Accepting this option meant that Walther's foundation needed to actively engage in medical research. Walther, however, would no longer own a hospital where that work could take place, and the financial support of research taking place at the school of medicine alone would not be sufficient. Betley also indicated that the proposed medical research organization structure accommodated Walther's desire to work on multiple initiatives simultaneously through the type of parent-subsidary organizational model that Walther preferred.

Walther agreed to sell Winona for \$37 million to a for-profit organization in 1983. To his surprise and consternation, he ran into organized opposition to the sale. Larger local hospitals, which feared a new competitor entering the market, objected and appealed to the state Board of Health to prevent the transaction. Opponents also expressed disbelief that the proceeds from the sale would move to the foundation without washing through Walther's hands. A two-year legal battle followed.

When the sale of Winona Hospital finally closed in 1986, just under \$40 million was transferred into the Winona Foundation, which was then renamed the Walther Medical Research Institute. The Institute served as the parent organization for several separate subsidiary organizations: the Walther Oncology Center, the Mary Margaret Walther Hospice Research Center, and the Winona Memorial Foundation. The Foundation was designed to generate public support and raise money to support its work, but this effort never gained real traction.

Although his foundation was formed as a medical research organization dedicated to “eradicating cancer,” Walther and his core supporters demonstrated little appetite for directly managing research. In this way, Walther’s medical research organization operated like its model, the Regenstrief Institute. Walther built partnerships with an association of Indiana oncologists as well as with the medical school. He provided funding and they conducted research. Walther differed from Regenstrief, however, in his penchant for self-created complexity. Where Regenstrief was driven to simplify and narrow, Walther chose to expand. Over the next few years, Walther and his advisors worked at maintaining the complicated web of connected organizations and developing programs in the areas of education, facility design, and patient and family social and emotional well-being.

4. Conclusion: From creation to maturation.

It is possible to consider the creation and growth of a foundation as a long series of choices. Organizations result from many individual choices beginning with the decision to create a foundation and then one or sometimes many choices about what to fund. There are choices regarding structure and the selection of leaders. Each choice

frames or limits the next set of options. These stories, in their retelling, often focus on the wishes and choices of the founder and imply that an organization's creation and course were clean, direct and intentional. As the stories of the medical research foundations examined in this chapter reveal, the creation and trajectory of foundations often result from chance as much as choice.

For most of the foundations profiled in this chapter, the choice to create a charitable foundation was motivated primarily by individual considerations in addition to any urge toward generosity. Fairbanks sought to benefit his community, but his primary aim was to avoid spoiling his children with a large legacy. Regenstrief wanted to benefit his community as well, but he sought to do it by leaving control of his company in the trusted hands of his advisors. Grace Showalter wanted to honor her deceased husband and, perhaps, to spite an organization that had disappointed her.

All three of these founders sought to constrain the use of their wealth. Even Joe Walther, who created a foundation to combat cancer, a purpose that is certainly charitable, used his foundation to create a series of organizations that he held closely and managed directly for as long as he was able. Only the Krannerts, who like the Regenstriefs and the Showalters were childless, used the foundation as a vehicle to dispose of assets rather than retain them in perpetuity by directing a spend-down of their assets within a set time after their deaths.

There is also an intriguing similarity between the Indiana medical research foundations when it came to the reasons that they donated to medical research. None of the donors who created foundations dedicated solely to medical research support had records of extensive interest in or generosity toward medical research prior to starting a

foundation. Showalter's husband had earned most of the family fortune through his work with a pharmaceutical company, but he served primarily on the corporate side of the business. Although Showalter had a personal history of supporting Indiana University, she had no connection to medical research and had been primarily interested in the arts. Joe Walther was a physician, but his work involved running a practice and health care businesses, not scientific research. Regenstrief made dishwashers, and Krannert manufactured cardboard boxes.

The choice to form a foundation and support medical research, particularly in a dedicated way, resulted from the action of influences, specifically the recommendations of close and trusted advisors, including relatives and the lawyers, bankers, and civic leaders which the donors relied on to help them create and manage the assets that created their personal wealth. In this way, Showalter, Regenstrief, Fairbanks and even Walther were little different that Carnegie and Rockefeller, who were led to support medical research by trusted counselors.

The next chapter of this dissertation will explore the growing influence of outsiders on these foundations and their operation as they move into maturation, and particularly as they define a focus and a process for their work. The impact of these foundations on the organizations they supported is also considered. The conclusion includes additional and more detailed consideration of what can be learned from creation and early narratives of smaller and area-focused foundations.

CHAPTER FOUR

Three Indianapolis Foundations: Growth and Change

Organizations, like people, move through developmental stages from birth to maturity.¹⁹⁷ Anheier summarizes the “birth state” as the creative start-up period of an organization’s founding. This is followed by “youth,” when an organization develops a structure and mission and then “midlife,” when the organization develops formal, bureaucratic processes to ensure efficiency and enable accountability. Chapter Three tracked three foundations from birth to youth. This chapter follows those organizations through the sometimes tumultuous and experimental stage of youth to organizational maturation.

Founded within a twenty-year window, Regenstrief (1967), Showalter (1973), and Walther (1985) were shaped by similar influences and challenges. During this period, in the City of Indianapolis, where all three funds were located, the practice and institutions of medicine and the process of medical education all continued on trajectories of growth and change. Each foundation grew and changed along with the institutions and communities they served.

As they matured, each foundation altered its grantmaking processes. They refined relationships and developed new ones. Eventually, each foundation developed strong connections to a very limited number of grantee institutions all located in the state of

¹⁹⁷ Scholars use ideas of life cycle or developmental stages of to discuss and evaluate nonprofit organizations. W. Richard Scott, *Organizations and Organizing: Rational, Natural, and Open Systems*, (New York, Routledge, 2006). These theories have been applied to nonprofit as well as for-profit organizations. See e.g., Helmut K. Anheier, *Nonprofit Organizations: Theory, Management, Policy* (New York, Routledge, 2014); 284-85.

Indiana and created a niche role in an effort to ensure that the grants they made were meaningful and did not merely duplicate or supplement other funding sources. They also created mechanisms to prevent risk of becoming malleable slush funds for the recipient institutions.

One important external factor that shaped the course of each foundation was the generally positive and sustained growth in the funds' investment portfolios. As fund values increased, foundations need to distribute more money each year to comply with tax law requirements. The Internal Revenue Service rules governing nonprofit foundations require foundations to distribute 5% of their assets every year. The money must be distributed to fulfill a charitable purpose. Foundations earn revenue through contributions or investment income. The more the foundation earns, the larger its assets and, as a result, the more money it must distribute the following year. Wisely given, larger gifts could have bigger impact and foundations could do more than supplement other money going to existing efforts.

The City of Indianapolis also grew, and the civic ambitions that accompanied this growth affected the community's health care system. From 1950 to 1980, the population of Indianapolis nearly doubled. Beginning in the 1970s, a series of strong mayors and a network of engaged business and civic leaders developed and implemented strategies to spur growth and enhance the city's national reputation. Richard Lugar, mayor from 1968 to 1976, led the merger of city government with smaller municipal units scattered across the county to create a governmental structure known as "Unigov."¹⁹⁸ The resulting

¹⁹⁸ William Blomquist "Unigov, Creation of (1967-1971)," *The Encyclopedia of Indianapolis*, David J. Bodenhamer and Robert G. Barrows (eds.) (Bloomington: Indiana University Press, 1994): 1350.

stronger, more centralized city government was better able to accomplish initiatives that required broad public and private support, including the partnerships that built facilities and venues needed to turn Indianapolis into a major sports and convention destination.

A second important local effort resulted in the 1969 consolidation of several college and postgraduate programs offered by Indiana and Purdue universities into a new, single institution: Indiana University, Purdue University - Indianapolis. Billed as the “city’s university,” the campus was already emerging on land neighboring the medical and nursing schools as well as Indiana University, Wishard, and Riley Children’s hospitals, LaRue Carter Memorial Hospital, and the Veterans’ Administration Hospital.¹⁹⁹ The growth of a university around the medical school campus enhanced the medical campus and its profile as part of a larger university campus. Additionally, the municipal government’s role in creating the campus demonstrated the city’s appreciation for the value of higher education institutions to the community.

Progress and growth continued inside as well as outside the walls of the medical school and its associated hospitals. In the decades following the Second World War, advances in pharmacology, surgical techniques, genetics, diagnostic and therapeutic equipment, and information science drove dramatic improvements in prevention, treatment, and care. Each advance opened the door to new lines of inquiry. For deans and department chairs at the medical school, supporting increasingly sophisticated experiments and studies meant a persistent search for money, space, and human capital. Research productivity produced rewards in more ways than advancing knowledge.

¹⁹⁹ General Hospital, the county public hospital, had recently been renamed “Wishard Hospital. See footnote 138.

Success opened the door to new and more funding opportunities. New funds were used to expand labs and hire additional scientist and staff. For many, it was clear that investments in research created benefits beyond improved personal health. Successful research programs enhanced the health of local economies and enhanced the vitality of the communities where research institutions were located. Civic boosters took notice.

Indianapolis' civic and business leaders sought to exploit the potential economic and social energy that could result from a productive and expanding research complex on the city's west side. This chapter examines how each foundation faced and responded to these challenges and changes as they matured and identified their role.

1. *The Regenstrief Foundation: Shifting roles and relationships, 1975 to 2010.*

In 1975, Sam Regenstrief named his lawyer, Leonard Betley, Acting Secretary of the Regenstrief Foundation Board. Several years earlier, Betley had proposed creating a foundation as a way to satisfy Regenstrief's desire to distribute his personal estate and keep D&M operating without interruption after his death. Under Betley's original plan, Regenstrief could contribute his own money to the foundation and obtain a personal tax benefit. More importantly, he would move his ownership interest in the corporation to the foundation upon his death or retirement. Under this plan, a board of trusted advisors that Regenstrief chose to operate his company would also run the foundation.

Regenstrief envisioned the corporate concern as the board's central priority. In the meantime, Regenstrief, who owned most of D&M stock, was making allocations to the foundation. The foundation, in turn, supported the institute, which operated as a unit of the Marion County Health and Hospital Corporation, the organization that also operated Wishard Hospital (formerly General Hospital).

Betley's first major effort as Acting Secretary of the Foundation board was to undertake a legal and administrative reorganization of the entity. Rules enacted as part of the Tax Reform Act of 1969 had affected foundations broadly and Sam Regenstrief's efforts particularly.²⁰⁰ Among other restrictions imposed on foundations, the new rules restricted the amount of corporate stock that a foundation could hold to 25% of the shares issued by the company.²⁰¹ This limit affected Regenstrief's ability to move his personal assets into the Foundation either during his lifetime or through his estate. Regenstrief had hoped to move ownership of D&M, or 100% of D&M's corporate stock, to the foundation. According to this plan, the foundation board could then have operated the company as a going concern after Regenstrief's death. The new rule foreclosed this option.²⁰² The original plan was no longer viable, so the lawyer searched for an alternative.

Betley concluded that slipping through a door used by Howard Hughes could solve Regenstrief's problem. Hughes had built the largest private medical research institute in the country, the Howard Hughes Medical Institute. In 1969, Hughes persuaded Congress to include within the definition of a public charity any "organizations engaged in the active conduct of medical research in conjunction with hospitals," which

²⁰⁰ Led by Congressman Wright Patman (D-Texas), Congress created limits on private foundations in response to what he and others described as abuses of the foundation form including self-dealing and private inurement. Patman and others argued that private foundations had become vehicles to consolidate economic power in the hands of the wealthy and allowed them to avoid taxation. For more, see Hammack and Anheier, *A Versatile Institution*, 82-83.

²⁰¹ Bremner, *American Philanthropy*, 182-183; Hammack and Anheier, *A Versatile Institution*, 83-84.

²⁰² Hammack and Anheier, *A Versatile Institution*, 182; Frumkin, *Strategic Giving*, 101-105.

protected his institute.²⁰³ By reclassifying the Regenstrief Foundation as a “medical research organization,” rather than a private foundation, Sam Regenstrief could move all of his assets including the controlling share of the company directly into the Foundation. The Foundation could then operate D&M as a going business concern while also acting as a foundation/vary wording.

To accomplish this transition, the Foundation needed to convince the IRS that it was not simply making charitable grants to others who then acted with discretion over how the money was used. Instead, the Foundation would need to be "engaged in the active conduct of medical research."²⁰⁴ This meant moving away from the hands-off approach that the Foundation had taken up to this point. The Foundation would need to run the Institute, not just fund it. In practice, this meant that the Regenstrief Institute would no longer receive the Foundation’s financial support, but instead be an operating department of the Foundation. The Regenstrief Foundation Board of Directors would take on all the financial and administrative obligations associated with operating a research institute at the same time that it fought to ensure D&M’s survival in an increasingly competitive marketplace.

In June 1976, Betley submitted paperwork asking the IRS to change the Foundation's legal status from a private foundation to a public charity operating as a medical research organization. The IRS said no. The agency did not consider the Institute's research agenda, with its focus on improving the efficiency and efficacy of the health care system, to be medical research. The Foundation appealed. Betley and Walter

²⁰³ IRC 170(b)(1)(A)(iii)(1999) and 26 Code of Federal Register §1.170A-9 and IRC 509(a)(1)(1999).

²⁰⁴ *Ibid.*

Daly, the dean of the medical school, traveled to Washington, D.C., to convince IRS administrators that projects like the computerization of hospital records would both improve health outcomes and provide valuable information for other researchers.

Because the computerized records were searchable, researchers could mine data to inform and validate their work in more traditional medical science inquiries, such as evaluating the efficacy of certain treatments. The Foundation's case was helped by the fact that Clem McDonald's record computerization project had recently received grants from the National Institutes of Health.²⁰⁵

On January 1, 1977, after Betley and Daly's personal intervention, the IRS relented and designated the foundation a public charity on a probationary basis. The importance of this decision cannot be overstated. Without this recognition, the Foundation Board might well have followed a different course given that Regenstrief's business objectives first motivated his decision to create a foundation. In the face of a rejection by the IRS, Regenstrief could have abandoned his plans to place his assets, particularly his ownership interests, in the Foundation thereby leaving in question the long-term sustainability of the Regenstrief Institute and its work. Wedging into the Medical Research Organization classification created a new layer of administrative and organizational complication for both the donor and its recipients that shaped and restrained their relationship over subsequent decades. Navigating these complications proved trying for everyone.

The first significant consequence of this change meant many who worked for and through the institute needed to have an employment or contract agreement with the

²⁰⁵ Ford, *Regenstrief*, 147.

Regenstrief Institute rather than with the Marion County Health and Hospital Corporation, the corporate entity that ran Wishard Hospital. In early 1976, nearly 30 employees of the Health and Hospital Corporation became employees of the Institute, including systems engineers, analysts, programmers, and support staff. Similarly, medical scientists, including physicians, entered into contracts or subcontracts with the Institute. Walter Daly, a medical school faculty member and chair of Wishard's Department of Medicine, the hospital's largest department, was named director of the Regenstrief Institute, a position he held from 1976 until 1983.

Daly, who had professional obligations to three different institutions, was responsible for the smart management of the Institute, including supervising the employees, associates, interns, appointees, joint-appointees, and students who filled the Institute offices, which were located adjacent to Wishard Hospital on Indiana University's medical campus. Daly managed internal funds from the Regenstrief Foundation and, eventually, external grants which came to the Institute directly or through grants made to individual researchers. Individually funded researchers were associated with the school of medicine, Wishard Hospital, or both. Daly's role was fraught with potential conflict.

To maintain its new status, the Foundation was compelled to change how it operated, including diversifying the type of work it supported and adjusting its approach to grantmaking. The Regenstrief Foundation's early grants were block grants, or lump sums, paid directly to Indiana University, which had handled the employment and management of researchers working in the Institute. The Foundation made little effort to limit or influence the projects that Institute researchers took on. Under the new regime,

the Foundation Board needed to find a way to exercise control, but it sought to do this in a way that would not distract from the attention the company needed.

Regenstrief first chose an option that medical research funders used before him, the creation of an advisory board that would investigate and evaluate the promise and performance of projects and make recommendations about which work was most promising. The Scientific Advisory Committee (SAC) was created in 1978 to advise the board on the "medical and scientific merit" of potential projects and to recommend "new directions for both the Institute and the Foundation."²⁰⁶

External advisors can provide an unbiased view of current and prospective projects. Regenstrief named three members to the SAC. While each member was deeply knowledgeable in the field of medical research, none were external or disinterested. Harvey Feigenbaum, Sam Regenstrief's nephew, a member of the IU faculty and successful medical researcher in his own right, was named chair. Feigenbaum, a cardiologist, had begun his career with the Krannert Institute. Steven Beering, Dean of the medical school, and Walter Daly, a medical faculty member who chaired the Department of Medicine at Wishard, were the other two SAC members. Daly, who also directed the Institute, was responsible for both identifying and submitting funding requests to the Foundation and then for the administering the funds once they were distributed to the Institute. Most of Regenstrief's researchers worked in Daly's department.

It is tempting to criticize the SAC arrangement given that each member of the committee served multiple masters including the School of Medicine and Wishard

²⁰⁶ Regenstrief Foundation Board Minutes, September 5, 1975 (RF).

Hospital. What would prevent the SAC from making a decision that furthered the interests of the medical school or the hospital? Similarly, might a member seek to favor projects or researchers that also, or only, served the individual's own professional interests? These were legitimate possibilities, but they did not appear to have concerned the Regenstrief board.

Sam Regenstrief, an experienced businessman, was comfortable with the fact that advisors often have multiple agendas. Regenstrief's own corporate board included senior managers from D&M's largest materials supplier, its largest customer, and its primary investment bank. Each of these board members brought the needs of another institution to the table, yet Regenstrief trusted that their longer-term interest in maintaining D&M as a healthy corporation would negate the risk of efforts to gain short-term advantages that did not also benefit the corporation in some manner. Additionally, the SAC took steps to render its decision making more transparent to Sam Regenstrief and the board, and to assure that funding would satisfy the Foundation's goals and the Institute's purpose even if a decision also created a benefit to the other institutions.²⁰⁷

The SAC articulated two funding criteria to be used when determining what projects the Institute would support. First, funded projects needed to "in some manner improve the health delivery system." Second, Foundation contributions should serve as "seed money," to fund early stage work with the promise to attract external funding to supplement and then replace the Foundation's contribution.²⁰⁸ The funding criteria that

²⁰⁷ Whether the grantmaking process is transparent to researchers hoping for support from the fund is a different question. The issue of pressure from researchers themselves regarding how grant funds are distributed will be discussed in sections devoted to the Showalter Foundation.

²⁰⁸ Regenstrief Foundation Board Minutes, June 14, 1978 (RF).

the SAC published in its minutes is the first written mention of the use of Foundation money as start-up funding, and there is no other documentation that reveals the rationale for this limitation. It is reasonable to assume that Dean Steve Beering, then Dean of the School of Medicine, at least approved the idea if he was not the source. The more external funders willing to provide support for early-stage work, the less pressure on a dean or director to identify internal funds to support faculty researchers. Another explanation stems from the fact that this limitation provided some cover for SAC members when they failed to fund a project.

The criteria provided a basis for discontinuing projects that failed to progress toward independence and presumably would give Regenstrief the assurance that funded projects could quickly attract other funding. The SAC reviewed funding proposals for all new and renewable projects before each board meeting and then issued detailed written funding recommendations to the board. The review committee did not hesitate to use its recommendations as both a carrot and a stick. Underperforming projects risked decreased allocations while promising ideas or prolific researchers could see an increase.²⁰⁹ Committee members were quick to change course when their predictions did not bear out. In 1979, the SAC's recommendation letter contained high praise for a new project and its driving researcher who had become "an extremely important member of the Institute."²¹⁰ The Committee recommended a substantial increase from the prior year.

²⁰⁹ See, for example, Regenstrief Foundation, Scientific Advisory Committee, Letter to the Regenstrief Foundation Board, June 6, 1980 (RF).

²¹⁰ Regenstrief Foundation, Scientific Advisory Committee, Letter to the Regenstrief Foundation Board, May 31, 1979 (RF).

Only a year later, the same group urged a significant reduction to the same project.²¹¹ By 1981, there is no mention of this research in the recommendation letter.

Although created ostensibly to advise the board on funding, the SAC acted as the *de facto* manager of the Institute, both selecting the projects to fund and then managing and evaluating funded projects. In this way, nothing had changed following the Foundation's change in legal form. The SAC was empowered to approve changes to the Foundation's project budget for any grant, a fact that afforded the SAC discretion to redirect funds without consulting the Foundation Board. The minutes of board meetings include only occasional conversations and questions about the SAC's funding recommendations, and there is no record of either Sam or others on the Board challenging, much less rejecting, any SAC recommendations. The Regenstrief Foundation Board, for its part, paid only scant attention to its grantmaking work; it focused, instead, on the management of D&M.²¹²

Sam Regenstrief suffered two heart attacks and a stroke in late 1978. He turned to his board to manage the company and named Betley CEO of D&M and then the President of the board that ran both D&M and the Regenstrief Institute. Betley, who maintained a busy law practice, would soon also play a critical role in the development of two other Indianapolis charitable foundations, the Fairbanks Foundation and the Walther Cancer Foundation.

²¹¹ Scientific Advisory Committee, Letter to the Regenstrief Foundation Board June 3, 1980.

²¹² During this period, the Foundation directors include Sam and Myrtie Regenstrief, Dr. Harvey Feigenbaum, Merle Miller (D&M's counsel); Dr. Steven Beering (Dean, IU School of Medicine); Richard Goodemote (Sears, Roebuck and Co.); James Marcus (Goldman Sachs); Allen Cohn (Cohn & Sons Auto); Marvin Silbermann (D&M) and Helen Barrett (Barret Industrial Supply).

Sam Regenstrief's business continued to decline alongside his health. Competition in the home appliance industry increased, and D&M lost ground to competitors. The D&M board chose to sell the company after concluding that a sale was the best way to protect Sam's workers while preserving, perhaps even increasing, the amount that could be transferred to the Foundation. On December 5, 1987, the sale of D&M closed. Sam Regenstrief died on January 17, 1988, only 45 days after the sale. Eighty percent of the Regenstriefs' estate, or just over \$20 million, transferred to the Foundation.²¹³

As the business wound down, the Institute grew and several of its projects, particularly Clem McDonald's electronic medical records system, attracted national attention. McDonald had successfully computerized all of the pharmacy records at Wishard Hospital. He installed computer terminals in central locations throughout the hospital and in the Regenstrief outpatient clinic. Clinicians could access patient records without the difficult and sometimes dangerous delay associated with tracking down paper charts that were often found incomplete and disorganized, when they were found at all. As a result of McDonald's efforts, Wishard Hospital, a public hospital for the community's poor, became the first fully computerized hospital in the world.²¹⁴

McDonald aspired to do more than create an electronic storage system. He believed that computerized systems could improve patient outcomes by improving physician decision making. The computer, he believed, could remind and check a busy physician and could even recommend actions that the provider should take, like

²¹³ Ford, *Regenstrief*, 194; Regenstrief Foundation Board Minutes, January 30, 1991, p. 2. (RF).

²¹⁴ J. Marc Overhage, Presentation of the Morris F. Collen Award to Clement J. McDonald, MD, *Journal of the American Medical Informatics Association*, Volume 12, no. 2 (March 2005): 241–244, <https://doi.org/10.1197/jamia.M1709>.

prescribing a test or medication. One of McDonald's early efforts involved the construction of a clinical reminder system in the Wishard diabetes clinic. Physicians and nurses were prompted by a series of preventative care reminder rules that appeared on the patient's chart and were immediately visible when practitioners logged on to the system.

A randomized trial evaluating the efficacy of the system appeared as an invited paper in the *New England Journal of Medicine* in 1976.²¹⁵ McDonald next led the development of a system that connected patient care across the hospital and its outpatient clinics. Although computerized medical records seem routine now, it was remarkable at the time. Controlled trials demonstrated using the computer programs improved care and reduced cost. McDonald's original *New England Journal of Medicine* article has been cited thousands of times in subsequent peer-reviewed journals, and McDonald himself went on to author over 275 peer-reviewed articles.

McDonald's early funding came entirely from Regenstrief. Although some federal money was available for computer projects in the early 1970s, by the time McDonald developed his project to the point that it could be competitive for grants, federal funds had been diverted to other priorities. McDonald has said that the Regenstrief Medical Record System (RMRS), "could not have been developed without Institute support."²¹⁶ The ability to attract financial support for new or innovative lines of research is a significant hurdle for scientists. The more innovative the project, the more difficult the search for resources can be. Medical scientists have long appreciated the

²¹⁵ Clement J. McDonald, M.D., "Protocol-Based Computer Reminders, the Quality of Care and the Imperfectability of Man." *New England Journal of Medicine* 295 (1976): 1351-1355.

²¹⁶ Ford, *Regenstrief*, 156.

potential for philanthropy to fill the need to provide seed funding for new work. Regenstrief's willingness to take on this role served as a model that other Indiana foundations would follow.

Regenstrief's bet on McDonald paid off. Though McDonald could not secure funding during the early years of his work, both McDonald and members of his team ultimately secured millions of dollars in extramural support, including a \$1.6 million grant from the National Center for Health Research and Health Care Technology Assessment to conduct controlled trials of the effectiveness of the physician order system and a \$5 million grant from the Agency for Health Care Policy and Research along with the designation as a Patient Outcome Research Team site in 1990. The Institute earned another \$2.4 million grant four years later when it was designated a high performing medical informatics research center by the National Coordinating Office for High Performing Computing and Communication.²¹⁷

Importantly, the connected record system also did what Betley assured the IRS it would do. Data collected and maintained in the system constitutes one of the largest longitudinal repositories of actual-time patient data in the world. In 2015, the system contained over 500 million individual laboratory and clinical measurements and nearly 50 million clinical images that could be used to generate and test new medical hypothesis. The trove of health data was mined by scientists working on health systems improvement and on finding cures to a wide variety of medical issues. Because the data in the system includes patient outcome information, medical educators use the system for simulation training. Work that could connect medical research projects using RMRS data

²¹⁷ Ford, *Regenstrief*, 156-157.

with earned funding and subsequent discovery could quantify the value of Regenstrief's early and sustained financial support of McDonald's work.

Work at the Institute was not limited to informatics. In 1988, the Institute had three different research departments: Management Science Research, Computer Science Applications, and a Department of Medicine. Research sections in pediatric epidemiologic research, a vascular laboratory, and diagnostic radiology were added as well. Key staff and researchers often split time between organizations working on projects for the Institute while also conducting research or performing clinical duties for the medical school and one or more of the system hospitals. The Institute also ran a fellowship program to entice physicians to participate in research projects while staffing the county hospital. The Institute was busy.

Minutes reveal how the pull of competing, but disconnected projects generated concern. The Foundation Board repeatedly asked about the focus and direction of the Institute, particularly whether the Institute should pursue many questions simultaneously or cone down to a narrower focus. Even the basic purpose of the organization remained open to reconsideration when members discussed whether the Institute "should be a research facility or a 'change agent' for medical care delivery."²¹⁸ Questions about direction and scope surfaced repeatedly over the next few years, though no concrete action was taken to address the situation.

Board membership remained stable in the initial years. There was no organized exodus even after the sale of the company and Sam Regenstrief's death. Nonetheless,

²¹⁸ Regenstrief Foundation, Regenstrief Institute Board minutes, July 6, 1988, p.1-2 (RF).

Board membership gradually transitioned as original members retired from participation. Only twenty-four people served as board members between 1968 and 1998. The board roster typically consisted of 12 members. Trustees originally invited to serve because they represented the manufacturing company's suppliers or bankers continued to sit on the philanthropic board for years after the company's sale. Local lawyers, accountants, and current and former academic administrators associated with the medical school and Indiana and Purdue universities replaced corporate representatives. Despite changes in composition, operational norms and attitudes persisted.

By the early 1990s, both Foundation and Institute leadership expressed concerns that medical school administrators regarded the Institute as a certain and malleable source of funding available for projects that deans or program directors wanted to advance without regard to the Institute's mission.²¹⁹ Put differently, Foundation board members worried that the Medical School's growing financial demands might lead school leadership to overlook Sam Regenstrief's preferences in favor of satisfying their own short-term strategic goals. Concern over the nature of this relationship was not one-sided. The dean of the Medical School worried that the Foundation would choose to move its funding entirely from the medical school. As the Foundation's assets grew, so did the risk.

The inability to come to an agreeable resolution to these tensions became pressing as the decade wore on. Regenstrief's board members were aware that if the relationships between the Foundation and the medical school soured, it had no other dance partner. A

²¹⁹ Regenstrief Foundation, Minutes of the Regenstrief Foundation Board, January 30, 1993 (RF).

small group of foundation board members, including Betley and Feigenbaum, considered several options to ensure a sustainable and productive future for the Institute, one that continued to reflect and advance a mission that honored Sam and Myrtie Regenstrief's wishes. The group ultimately recommended that the Institute should stand on its own as an independent legal organization and not as a part of the Foundation. This meant that the Regenstrief Foundation would give up responsibility for running a medical research organization and again become a grantmaking foundation, a transition that required a change of status filing with the IRS.

The Foundation memorialized this new direction on August 10, 2001, in a document that outlined its work as a grantmaker. The Foundation established a funding strategy focused on "sustained, long-term funding of a small number of programs, with an emphasis on informatics, epidemiology, economics, and innovations in health care delivery."²²⁰ The principal performance indicator for any funded work would be its "impact on healthcare."²²¹ The Foundation's earlier preference for start-up funding was dropped, perhaps in recognition of the value of long-term engagement with work like McDonald's medical record system. Recognizing that impact can often be measured only by available proxies, the statement spelled out preferred indicators of success for its own efforts, including the quality of institutional partnerships, the number and quality of academic publications resulting from foundation-supported research, the amount of extramural funding earned by supported researchers, and the Institute's general reputation. A

²²⁰ Regenstrief Foundation, The Regenstrief Foundation Strategic Direction, Adopted August 10, 2001 p.1, (RF).

²²¹ The Regenstrief Foundation, Strategic Direction Statement, p.2. (RF).

casual reader might have overlooked a significant aspect of this statement. The Research Institute that it created would no longer be the Regenstrief Foundation's only partner.

The choice to look for new opportunities did not mark the end of the Foundation's support for the Institute. Indeed, the two remain closely connected. The Regenstrief Institute continues to receive annual block grants from the Foundation. In 2010, for example, the Institute received approximately \$4.7 million for ongoing support. In 2014, that amount was \$5.7 million. These grants comprised the majority of foundation expenditures any given year. The Foundation also considered supplemental funding for special projects, particularly in years when required payouts that exceed the planned block grants.

Another noteworthy aspect of the relationship between the Foundation and the Institute that survived was the intermingling of leadership. Members of the Foundation board were named members of the newly independent Institute's governing board. Leonard Betley, Harvey Feigenbaum, and Jack Shaw, for example, each served on both the Foundation's and the Institute's governing bodies simultaneously and each maintained those seats for many years. Representatives from the medical school, including the dean, sat as members of the Foundation's board of directors. This type of organizational boundary spanning between the Regenstrief Institute and the Regenstrief Foundation remained a standard practice. Shared staff and common and connected leadership spilled over to include other foundations funding medical research. Betley, for example, both chaired the board and served as executive director of the Walther Cancer Foundation; he directed the Fairbanks Foundation. This practice and its consequences are explored more fully in the next chapter.

In 2001, Jack Shaw, the newly-appointed chief financial officer of the Foundation, began hunting for new research partner. Shaw was charged with identifying an organization that would align with Sam Regenstrief's desire to make a "recognizable" difference in the health care system.²²² Flexibility and the willingness to collaborate with the Institute to leverage the talents of both organizations and extend the scope and scale of each organization's work was a primary criterion.

Shaw met with Martin Jischke, the President of Purdue University, in 2002.²²³ Jischke saw the potential that a partnership with Regenstrief provided to align Purdue's existing expertise in the rapidly expanding healthcare sector. In 2005, the Regenstrief Board voted to support Purdue in the creation of the Regenstrief Center for Healthcare Engineering on Purdue's West Lafayette, Indiana, campus.²²⁴ By the tenth year of the Purdue Center's operation, the Regenstrief Board began expressing concerns that the Center's research agenda was disjointed and unfocused. Nearly 50 years after its first meeting, the Regenstrief Foundation Board found itself in a familiar conversation. The Purdue relationships continues, but under close watch.

Concluding paragraph for Showalter sums up resources, donations, and priorities. Seems useful to do here—as well to remind us whether the amounts make RF small or midsized.

²²² Regenstrief Foundation, Minutes, Regenstrief Foundation Board of Directors, December 9, 2002 (RF).

²²³ *Ibid.*

²²⁴ Regenstrief Foundation, Minutes, Regenstrief Board, June 8, 2004, p. 4 (RF)

2. *Showalter Trust: Finding a purpose, 1985 to 2005.*

After Grace Showalter's death, her Trust's Selection Committee quickly developed a simple and straightforward work pattern.²²⁵ The group met annually and allocated grants to all four named beneficiaries, the Indiana University School of Medicine, Purdue University, Methodist Health Foundation, and the Indianapolis Center for Advanced Research (ICFAR).

The number of grants increased steadily as the value of the Trust corpus increased. In 1973, the Committee awarded one grant to each designated school, Purdue and Indiana University. By 1983, each school received five grants. Many years, the number of grants awarded to the schools differed, but the total amount awarded to each school was held nearly equal.²²⁶ Over this same period, the money allocated to each school increased dramatically as the fund's value increased. In 1973, for example, the School of Medicine received grants totaling \$34,000. By 1983, the total amount was \$350,000.

The Selection Committee's minutes reveal a gradual evolution during the 1980s from an almost entirely deferential posture to a more assertive role in proposal development and review. In 1978, for example, it became clear that the funds available for allocation were not sufficient to fund all the projects proposed by the School of Medicine. The Selection Committee turned to the school's dean to ask him to choose between the potential projects.

²²⁵ Information about the Showalter Trust is largely drawn from Schneider and Lupton, "To Benefit Mankind and Encourage Medical and Scientific Research."

²²⁶ In 1980, IU chose to devote a portion of its allotted funds to create an endowed chair in pharmacology. The Selection Committee supported this request, and the School of Medicine has maintained two endowed chairs since.

As the amount available for distribution grew, the Selection Committee chose to make larger awards, rather than increase the number of grants. In 1984, Purdue submitted seventeen funding proposals, including one that sought only \$5,500. Meanwhile, the Indiana University School of Medicine submitted only four proposals, but each request asked for more than \$30,000. Although the Committee granted each of Purdue's requests, it cautioned beneficiaries that it preferred fewer requests for greater support. Put differently, it wanted more substantial initiatives.²²⁷ This represents one of the few occasions that the Selection Committee provided any feedback regarding its preferences or predispositions to the schools. More typically, the Committee simply ratified the schools' selections as presented and offered few, if any, comments in the recorded minutes.

Over time, loose funding guidelines and submission preferences were developed. The Selection Committee, for example, wanted the schools to limit jargon, provide more detailed budgets, and submit fewer requests for larger grants. Most notably, by the mid-1980s, the minutes contain the first mention of what Regenstrief had briefly attempted before and has now become the main funding mission for the Showalter—support for promising researchers at the earliest stage of their work that might be unable to qualify for other grants. Unlike Regenstrief, the Showalter Trust has remained committed to this mission.

Young researchers who have not established a funded research agenda or scientists seeking to advance a novel line of work face a “chicken and egg” problem.

²²⁷ Showalter Trust, Minutes Showalter Trust Selection Committee Annual Meeting, 1978 & 1984 (ST).

Cutting-edge research is expensive. Scientists working at colleges and universities are typically given a relatively small amount of support to set up their laboratories and begin work. The burden then falls to the individual to secure external support from public or private sources, typically private venture funders and philanthropy.²²⁸

Government funders, accountable to the taxpayers, have skewed funding criteria to favor low risk investments in proven scientists or projects. Research institutions often turn to philanthropists to assume the risk of seed funding for novel work and young researchers. Philanthropists eager to demonstrate their own ability to make shrewd investments that return results are reluctant to fund speculative work. Those willing to underwrite research look for common indicators that a faculty researcher has proven successful, markers like publication in peer-reviewed journals or prior success obtaining extramural funding. At a minimum, an investigator must produce preliminary data to validate her thesis. Even generating this proof-of-concept data, however, requires funding.

In the 1980s, the Showalter trustees decided to dedicate the fund's proceeds to addressing this gap. This focus evolved gradually and with little fanfare. There was no debate over the idea, nor was there a clearly definable moment of selection that appears anywhere in the organization's documents. The Selection Committee members came to enthusiastically embrace the work of providing seed or start-up funding, going so far as to suggest in the minutes that this had been Showalter's intended focus all along.²²⁹

²²⁸ Many sources describe the challenges that young researchers face in the race for funds. Moses, "The Anatomy of Medical Research," 181.

²²⁹ The Foundation did not abandon funding established research chairs. Rather, it funded new work with the remaining proceeds.

Settling on start-up funds defined a specific role for Showalter as a research funder. A second question remained open, that of determining what criteria the committee would use to choose projects to fund. The Selection Committee was unable to turn to Grace Showalter's wishes as a guide. She specified very little and delegated much of the work of narrowing the pool of possible recipients to the schools themselves.

One of the few things that Showalter gave some guidance over was her desire to endow chairs at each school. Again, however, she did leave significant discretion to the recipient schools. She did not identify which positions to endow or set the total amount dedicated toward each position. This arrangement left the schools to determine how much of its annual allocation would go toward supporting the endowed chairs during a given year. The schools were then able to identify projects that could use the remainder of the school's available share. Proposals for the use of the remainder of the annual allocation were put forward as grant proposals. In effect, however, any real decision regarding what projects would receive funding had been made before the request went to the Committee.

On a few notable occasions, the schools brought forward funding requests that helped build new departments, rather than individual careers. Purdue, for example, used Showalter money to develop a new academic department of biomedical engineering. Showalter funds supplemented the recruiting package for new faculty and staff for the department. Typically, however, the Showalter money was not used by deans or directors directly, but was instead made available to the larger academic community through an open contest.

The Office of the Vice President for Research at Purdue adopted an egalitarian approach and invited deans and department heads from fields aligned with Showalter's

stated interests to submit proposals from their faculty. School administrators considered the grants a good opportunity for early-stage faculty and clinical researchers and encouraged their applications. Because of the dearth of funding opportunities, young faculty eagerly complied. Deans forwarded applicants to an internal university selection committee that selected a number of finalists to forward to the Showalter Selection Committee, typically a few more than the year's income allocation could support. The Purdue selection committee then ranked grant proposals according to their assessment of scientific promise. This approach benefitted young scholars, who had the opportunity to compete for rare funds and for deans who had an avenue to support young faculty without having to reach into their own budgets. The Selection Committee, for its part, did not need to do the work of sorting between disparate and complex proposals.

Like Purdue, the School of Medicine initially used Showalter as a tool for the targeted development of selected medical departments, specifically biochemistry, pharmacology, and rheumatology. Showalter funds created endowed chairs in two of the new departments and supported projects in all three. In 1986, a new Associate Dean of Research, Dr. Ting-Kai Li, urged the creation of an open competition similar to Purdue's. Li saw that Purdue was successfully using the smaller Showalter grants to attract larger funders. An award from Showalter served as a testament to the potential of a project, and endorsements often propelled projects ahead in other funding competitions, particularly for government grants. Li's familiarity with Purdue's approach likely resulted from conversations with the medical school's dean, who also was a member of the Selection

Committee.²³⁰ The School of Medicine adopted Purdue's open competition and ranking approach in 1986. That year, over forty medical researchers applied for grants.

The first mention in meeting minutes of the Selection Committee's growing interest in the needs of "young scientist[s]" also appears in 1986. The following year, the minutes contain a more specific description. "The principal purpose of the Trust" is to fund "projects on the frontier of research for which the University could not get support from its regular sources." Then in 1989, the minutes show that the Committee selected an award because it would go to "young researchers . . . not well-funded, and that this [fits] with the purposes served by the Showalter Foundation."²³¹ The Foundation has remained committed to this focus since.

In addition to the IU School of Medicine and Purdue, Showalter made provisions for two other institutions: Methodist Hospital and ICFAR. The Selection Committee's relationship with these entities differed from the relationship with the two universities, differences rooted in the nature of these beneficiaries.

Grace Showalter created the Methodist Cardiac Treatment Fund in 1981, a legally distinct \$2 million fund administered by the Selection Committee, to support "medical care and research" at Methodist Hospital. Showalter specified that initial distributions from the fund go toward the "establishment and maintenance of a Cardiac Treatment

²³⁰ The members of the Showalter Trust Selection Committee have remained relatively consistent since inception, and always include deans and other senior members of the school of medicine and Purdue faculties, as well as representatives from the bank managing the trust accounts. Showalter's lawyer, Robert Claycombe also sat on the committee until his passing in 2012.

²³¹ Showalter Trust, Minutes of the Showalter Trust Selection Committee (1989) 3 (ST).

Center."²³² The majority of Methodist's grants during the early years of the fund supported the purchase of diagnostic and therapeutic equipment such as an ambulatory arrhythmia monitor, an accelerated rhythm scanner, and Doppler flowmeters.

Before 1998, the hospital requested funding for equipment or to cover exceptional patient care, such as heart transplant surgeries. Research projects were not priorities. One important exception was a 1987 request for \$96,000 that the hospital wanted to devote to a joint research project with Purdue titled "The Use of Autogenous Small Intestine as a Vascular Graft." This request was noteworthy because Purdue's Showalter Professor of Bioengineering, Les Geddes, led the project. The funded project led to important innovations in the development of surgical mesh. The Showalter grants to Methodist became dedicated to research in 1998, after the hospital created the Methodist Research Institute to support research by its scientists. The Showalter Committee successfully petitioned the probate court to amend the terms of the will to allow income from the Cardiac Trust to be directed to the Methodist Research Institute, which then distributed the funds. Methodist received approximately \$250,000 per year to support an average of six research projects per year.

Showalter's support for ICFAR proved more problematic. ICFAR was a partnership between Indiana University, Purdue University, and the Indianapolis Chamber of Commerce designed to incubate translational projects that bridged medicine and technology. Despite its link to two research universities, ICFAR struggled to develop a respected research program. It may indeed have been ahead of its time.

²³² Showalter Trust, Last Will and Testament of Grace Montgomery Showalter, Fourth Codicil, dated July 23, 1971 (ST).

Showalter included a provision in her will that allowed the Selection Committee to give up to one-third of the income generated from the Trust to ICFAR, including covering the salary of its director. The Selection Committee expressed reservations about the Center as early as 1975, just a year after its first grant, and concerns surfaced regularly over the next 25 years. In particular, the Selection Committee doubted the medical and scientific value of the projects undertaken there. Though ICFAR identified some promising projects to fund, the entire effort failed to gain needed traction. Showalter stopped funding the program in 1999, shortly before the ICFAR ceased operations entirely.

This episode marks an important development in the maturation of the Selection Committee. Showalter, in one of her few concrete directives, specified allocations to ICFAR. After extensive and careful review, the Committee chose a course that directly contradicted Grace Showalter's direction out of an effort to preserve and more effectively use the proceeds of her trust. When making this choice, Committee members turned to Robert Claycombe, who had been Showalter's personal attorney and was one of the only members to have worked directly with her. He assured them Showalter would have made the same choice given the change in conditions.

The Showalter Trust was valued at approximately \$15 million in 1973. In 2014, it managed almost \$40 million in assets. The amount distributed has grown as well, from \$369,102 awarded to four recipients in 1974 to nearly \$1.8 million awarded to over

twenty-two recipients in 2010. Grants have supported research in fields ranging from pediatrics to climate science, and from molecular pharmacology to gene modeling.²³³

3. Walther Cancer Foundation: Defining direction, 1986 to 2010.

The legal challenges against the sale of Winona Memorial Hospital finally resolved in Joe Walther's favor in May of 1985. On June 30, the Walther Medical Research Institute (WRI or the Institute) was legally formed. When the sale of Winona Hospital closed, just under \$40 million was transferred into the Walther Institute. Joe Walther wanted the WRI to be only one part of a multi-faceted effort aimed at "eradicating cancer," so he asked Leonard Betley, the same lawyer who worked with the Regenstrief and Fairbanks foundations, to create several distinct, but related organizations. WRI would serve a "holding company" for Walther's planned subsidiary organizations that would each focus on different aspects of the war on cancer. His ambition resulted in an administrative tangle of overlapping organizations.

The first entity, the Walther Cancer Foundation (or the Foundation), would generate public support and raise money for the Walther Cancer Institute initiatives, but the WCF's efforts to fundraise accomplished little beyond hiring consultants and producing promotional materials. The second entity, the Mary Margaret Walther Hospice Research Center (HRC) would provide support, education, and care to patients and families while conducting research on best practices in these areas. Despite early innovations in patient care and scholarship, the HRC eventually withered and the research it supported was absorbed into the Indiana University School of Nursing. This

²³³ Schneider and Lupton, "To Benefit Mankind and Encourage Medical and Scientific Research."

project focused on palliative care will be discussed more fully below. The final entity, the Walther Oncology Center (WOC) was formed to conduct “basic and clinical research.” This description suggests that the WOC was intended to look and work something like the Krannert and Regenstrief research institutes, with which Walther and Betley were both familiar. From the WOC’s design, however, it was clear that the WOC was not, in fact, meant to engage in research directly.

Walther had little appetite for employing researchers or for the challenges of defining and supervising a research agenda. Instead, he hoped to create an “oncology center” that “would be neither a strictly free-standing center nor a granting agency, but would serve as a coordinating body” to develop “an overall [research] program plan and provide a funding source.”²³⁴ Despite his stated goal, however, the WOC was never centralized or coordinated and it did not develop a research plan. Rather, it acted as a funding organization that supported the work of researchers employed by the Indiana University School of Medicine and other universities.

Walther did follow Regenstrief’s model in one respect. Walther looked for stable, long-term partnerships with individual scientists. One of Walther’s first research partners was the Hoosier Oncology Group, a professional association of oncologists led by Dr. Larry Einhorn, an internationally recognized specialist and a faculty member at the School of Medicine. Hoosier Oncology Group members formed a network of physician-researchers who collaborated on research, ran clinical trials, and shared cutting-edge knowledge. The group, now called the Hoosier Cancer Research Network, has conducted

²³⁴ Walther Foundation, Walther Oncology Development Committee Minutes, December 13, 1984, p. 2 (WF).

over 200 clinical trials through a network of academic and community practitioners across the country.²³⁵ The relationship with Walther provided critical initial funding and then provided a source of steady funding, with the group receiving just over \$18 million in total support between 1986 and 2009.²³⁶ Einhorn was at the center of this relationship and he was a primary beneficiary of Walther's assistance. It does not appear that Walther had any significant or ongoing role in the selection of work funded with his money. Rather, Einhorn and his colleagues determined what Walther's money would support.

The relationship with the Hoosier Oncology Group also highlights a central fact about the power and importance of philanthropic funders like Walther. By 1985, Dr. Einhorn had earned an international reputation as the result of work he had done since the 1970s that increased the survivability of testicular cancer from 15 to 95 percent.²³⁷ In 1985, Dr. John Durant, who was consulting with Walther on the development of the Institute and its various entities, met with Einhorn to discuss a possible role leading the Institute or the Walther Oncology Center. Durant reported to the Institute's executive committee that Einhorn was "very interested in molecular genetics and would like to have a secure funding base to pursue his research efforts." Even a doctor who had already "cured cancer" found the promise of steady funding sufficiently appealing to consider taking on an additional role.²³⁸

²³⁵ Walther Foundation, Hoosier Cancer Network at <https://hoosiercancer.org/about.com> (accessed February 17, 2019) (WF).

²³⁶ Walther discontinued funding to the Hoosier Oncology Group in 2009.

²³⁷ "How Einhorn Helped Turn a Deadly Cancer into a Curable Disease". *Oncology Live*. May 28, 2014. Retrieved Nov. 10, 2018.

²³⁸ Walther Medical Research Institute Oncology Development Committee Meeting with Dr. John Durant, September 10, 1985, p. 1.

Walther's first and primary research partner, however, was IUSM more generally. Walther and his committee of close advisors, the Oncology Development Committee, looked to the Regenstrief Institute, "as a good model for the Walther Oncology Center."²³⁹ Walter Daly, Dean of the Medical School, initially proposed a partnership structure that would give Walther the sense of flexibility he desired while securing an unencumbered stream of revenue for the school. What Daly proposed and Walther agreed to eventually had little in common with the structure of the Regenstrief Institute, which consisted of a physical location and dedicated researchers and staff.

The Walther Institute would not have a physical presence on campus, but it would be led by a professor able to "connect and engage with all of the cancer research projects underway on the campus."²⁴⁰ This professor would act as the Center's director, but would remain an employee of the School of Medicine, rather than the WOC. Walther agreed to an arrangement that looked less like a research institute and more like a sponsored program.

This structure must have pleased Daly. The individual that Walther proposed putting at the head of the WOC would act as a coordinator and a conduit of information, but not a director with autonomy to set a research agenda and engage talent to pursue that work. The school employed the director and therefore retained the option to exercise significant control over the direction of the work Walther would fund.

²³⁹ Walther Foundation, Walther Oncology Development Committee, September 10, 1985, p. 2, (WF).

²⁴⁰ Walther Foundation, Walther Oncology Development Committee, March 21, 1986, p.2, (WF).

A second aspect of the WOC's operations revealed contradictions between Walther's stated funding preferences and his actual decisions. Walther and his advisors proposed a grant strategy that involved providing "seed funding" to encourage new initiatives. In this aspect, Walther followed Showalter's lead. The funding would be restricted to a limited period, 3 to 5 years, a time sufficient to allow worthy projects to advance far enough to prove the initial concept and thereby attract other extramural support. Walther was satisfied that this approach allowed him to retain entrepreneurial flexibility while still providing on-going funding to a single institution because the project would not fund a single researcher or project indefinitely.²⁴¹ Daly agreed to this arrangement.

Despite Walther's stated reluctance to act as a sustaining patron, he and the Institute often did just that. For a number of researchers, Walther became a source of steady and long-term support. In 1985, for example, the Institute gave one of its first research support grants to Dr. Hal Broxmeyer, a microbiologist and immunologist researching the use of stem cells to treat cancer. Broxmeyer proved a sure bet for the Walther Institute. Although he had been with IU for only 2 years, local grantmakers, including Showalter and Regenstrief, already considered him a hot commodity. In fact, Broxmeyer was recruited to Indiana with a hiring package that was funded, in part, through a special \$29,000 grant from the Regenstrief Foundation.²⁴² Broxmeyer, who pioneered the practice of infant cord blood banking for research and later disease

²⁴¹ *Ibid.*

²⁴² Walther Foundation, Scientific Advisory Committee Report of the Regenstrief Institute, May 26, 1983 P. 3 (WF).

treatment, had received continuous funding from the NIH since 1978, and his laboratory often maintains multiple NIH grants at one time.²⁴³

The 1985 grant was the first payment in a long series of grants to support his work. By 2007, Broxmeyer was still funded generously by Walther. For example, Walther made five grants to Broxmeyer to be used for faculty recruitment, program development, pilot projects, recruitment, and development, and basic research support. These totaled \$2,889,000, approximately 25 percent of the \$11.5 million in awards the foundation made in 2007.²⁴⁴ These grants helped Broxmeyer advance his work, though as noted above, Broxmeyer had an established record of high productivity and resulting grant performance. Walther's support was hardly seed money and, in the context of Broxmeyer's balance sheet, was likely valued but not needed. Walther proved a loyal patron to several other prominent researchers and initiatives. While this loyalty ran contrary to his proclaimed preference for short-term funding, it did demonstrate Walther's willingness to stand by successful efforts. Indeed, Walther's practice may have more closely mirrored the Rockefeller Foundation's approach of "making the peaks higher."²⁴⁵

The final organization created when the proceeds of the hospital sale were distributed in 1986 was the Mary Margaret Walther Hospice Research Center. This effort grew most directly out of Walther's personal experience. Like his other ventures,

²⁴³ Hall E. Broxmeyer, <https://medicine.iu.edu/faculty/1911/broxmeyer-hal/>

²⁴⁴ Walther Foundation, Walther Cancer Foundation, Authorized Grants, July 1, 2007 through June 30, 2008 (WF).

²⁴⁵ "Making the peaks higher" is a phrase often used to encapsulate the Rockefeller Foundation's strategy of "funding people and programs that were already strong." Schneider, "The Difficult Art of Giving," 311–312.

Walther envisioned an organization that would do all things. He explained that the Hospice Research Center would provide direct patient care; institutional and at-home hospice services; transportation services; palliative care research; post-recovery psychological services; and public education.

Walther also wanted the Center to partner with hospitals around the state to replicate the design of a patient care room he designed at Winona for his wife's care. He believed that the patient and family experiences were improved when patients were treated in a suite that included an attached room where family members could stay for the duration of treatment. Again, Walther's ambition and desire for direct engagement expanded beyond studying the efficacy of such spaces and advocating for their use. Instead, he wanted to enter into partnerships with hospitals around the state. Hospitals would build the spaces and the Mary Margaret Walther Hospice Research Center would manage them. In board meetings, he advocated for a "consortium approach" that would shift the HRCs work "from a single campus . . . to ongoing multiple programs concurrently."²⁴⁶ Walther retained an expansive view, one that quickly proved to exceed his reach.

Dorothy Weber, a doctor of nursing, was placed at the helm of the HRC. She developed a portfolio of research on palliative care issues, including pain management and holistic family care during and after illness. Weber realized that the patient care spaces that Walther wanted to see in hospitals around the state could be used as nodes for gathering data useful for her research efforts. Weber's work coincided with a growing

²⁴⁶ Walther Foundation, Walther Medical Research Institute Oncology Development Committee, February 5, 1986, p. 1, (WF).

demand for improved palliative and hospice care options in both provider and lay communities.²⁴⁷

The first patient care suite was completed at St. Elizabeth Medical Center in Lafayette in 1987. After this successful launch, Dorothy Weber's appointment book filled with requests from hospitals in other cities interested in building similar units. Expanding the project proved difficult for several reasons. Developing partnerships and overseeing work in distant facilities was time consuming and distracted Weber from her ability to conduct research. Additionally, the IRS did not consider work on end-of-life care issues to constitute medical research as contemplated under regulations. Finally, the cost of constructing and supporting family care suites made the facilities unattractive to providers interested in higher financial returns associated with more invasive interventions. The effort to build and operate care suites ceased and the Mary Margaret Walther Hospice Research Center dissolved in June 1990. Researchers in the IU School of Nursing picked up much of Weber's research portfolio, and Walther continued to fund many of these projects.

Since the creation of the Walther Cancer Institute, Joe Walther had been personally involved in the day-to-day administration of the organizations and their work. In 1986, the Walther Foundation hired James Ruckle to assist Walther. Ruckle moved from California where he had worked with large academic medical centers and managed nonprofit organizations. Much of his initial work at Walther involved efforts to bring

²⁴⁷ The American Academy of Hospice and Palliative Medicine was chartered in 1988. For a brief history of the growth of palliative care in the United States, see David Clark, *To Comfort Always: A History of Palliative Medicine since the Nineteenth Century* (New York: Oxford University Press, 2016).

discipline to a sprawling and seemingly unfocused organization by both simplify a complicated structure and to establish a process for selecting and evaluating funded work.

When Ruckle arrived, the organization consisted of four independent units, the Walther Cancer Institute, the Walther Cancer Foundation, and the Mary Margaret Walther Hospice Research Center, as well as Walther Cancer Education, a short-lived unit created in 1988 and dissolved in 1990.²⁴⁸ Each unit had its own board, with a combined total membership of thirty-five people, each with its own working committees. Members' voting rights were unclear and members often served on multiple, overlapping committees. Failure to meet quorum requirements was common and members complained openly that meetings were little more than reporting events with information repeated at multiple places.²⁴⁹ At the urging of advisors, particularly Ruckle, Walther agreed to streamline the organization. Amended bylaws reduced the number of members on each board. Walther almost immediately undercut the benefits of this reduction by creating an entirely new board, The President's Forum, which he filled with community leaders and members removed from other boards as a result of the bylaw amendments.²⁵⁰

The bylaw changes did little to foster strong board governance of the organization. That was not a concern to Walther, who openly acknowledged his belief that organizations should be managed from "the top down and not the bottom up."²⁵¹

²⁴⁸ Walther Foundation, Motion to Dissolve and Transfer Assets, Walther Cancer Education, Inc., Board of Directors, June 18, 1990 (WF).

²⁴⁹ Walther Foundation, Minutes of the Joint Board Meeting, August 10, 1988, (WF).

²⁵⁰ Walther Foundation, Minutes, Executive Committee – President's Forum, Walther Cancer Institute, Inc., December 8, 1988 (WF).

²⁵¹ Walther Foundation, Minutes, Joint Executive Committees, Boards of Directors, Walther Cancer Institute, Walther Cancer Foundation, Walther Education, September 15, 1988 (WF).

Yet, he clearly desired lengthy membership rolls, and rebuffed multiple attempts to reduce membership. He also relied on a close circle of advisors for most decisions, including funding. The Oncology Advisory Committee, the effective executive committee of the Walther Institute, approved all research funding decisions, rather than the full board of either of the two research entities, the Oncology or the Mary Margaret Walther Hospice research centers. Minutes from meetings, however, included little discussion of either funding requests or project status updates.²⁵² As a result, it is not possible to determine the actual depth or vigor of the committee's consideration of any funding proposal.

When Ruckle arrived, several funded and ongoing projects were ripe for review. He began constructing a formal peer review process to evaluate funding proposals and existing projects. Ruckle proposed a creation of a Scientific Advisory Board (SAB) comprised of external, disinterested research scientists who would meet at least twice a year to evaluate funded projects and then report to the Executive Committee. This board would also examine proposals and make recommendations regarding the potential of each project.

Ruckle promoted his proposal by arguing that an external advisory board staffed with respected scientists would "communicate a seriousness from a scientific standpoint" that the existing structure lacked.²⁵³ Ruckle understood the importance of external peer review as the gold standard in research funding. Walther and the Board approved this

²⁵² Walther Foundation, Executive Committee Minutes, April 20, 1987 (WF). At this time, the executive committee included eleven members. Four members were medical doctors and one was an R.N., Ph.D.

²⁵³ Walther Foundation, Minutes of the Walther Cancer Foundation Board of Trustees, December 12, 1989, p. 2 (WF)

idea in December 1989, and Ruckle secured the participation of the director of a prominent cancer center as the Advisory Board's chair.

Again, Walther almost immediately muddied the water when he announced that his existing Scientific Advisory Committee, which included himself and several long-term insiders, would conduct a parallel review of funded research and new proposals. Walther essentially duplicated the role of Ruckle's newly created Scientific Advisory Board.²⁵⁴ Ruckle did not disband his external board and the group met and provided input as intended. There is no record of any evaluations completed by Walther's Scientific Advisory Committee. Indeed, it may not have met at all.

Ruckle also sought to create a sense of partnership between donor and recipient. He added regular scientific presentations at board meetings to educate board members about cancer and the work the fund supported. Ruckle also asked program directors to submit regular written reports on the progress of experiments, projects, and findings. These reports were shared with board members. Ruckle's request for written reports was the first time that grantees had been asked to report on their progress or even on how they used the funds they received. This education and reporting efforts did more than establish functional accountability requirements for the recipients. Regular communication between funder and recipient personalized and, thereby, tightened the knit between institutions. Within a year, however, reporting requirements were reduced

²⁵⁴ Walther Foundation, Executive Committee Board of Directors, February 27, 1990, p.6 (WF).

after Walther announced that written reports would be accepted, but were “optional” because the scientists were "extremely busy."²⁵⁵

Ruckle’s SAB conducted its first review in 1990 and evaluated six individual researchers. The reviewers recommended continued support for all of the funded projects save one, a researcher sufficiently advanced that his work was ready to transition to other extramural support.²⁵⁶ A second important development occurred that same year.

Walther added a second university research partner. Eager to expand beyond the medical school, Walther finalized an agreement with Indiana’s other major research institution, Purdue University. Jack Dixon, a distinguished professor of biochemistry, managed Walther’s sponsored work there. When Dixon left Purdue to join the faculty at the University of Michigan several years later, Walther Institute support followed him. Walther entered a collaborative research agreement with University of Michigan. This was the first of several attempts to extend Walther’s reach to other cancer research programs.

The Foundation next agreed to support two postdoctoral researchers at Notre Dame in 1995, a commitment that laid the groundwork for a \$1.2 million grant to fund the creation of the Walther Cancer Institute Center of Excellence in Cancer Research at Notre Dame in 1996.²⁵⁷ An agreement followed with Michigan State University, focused on work to improve family interventions, was conducted through the Mary Margaret

²⁵⁵ Walther Foundation, Executive Committee Board of Directors, February 27, 1990, p.7 (WF).

²⁵⁶ Walther Foundation, Walther Foundation Board Meeting Minutes, October 26, 1990 (WF).

²⁵⁷ <http://news.nd.edu/news/3943-the-university-has-received-a-grant-to-establish-the-walther-cancer-institute-center-of-excellence/>

Walther Hospice Research Center. By 2010, Walther was funding research at Michigan State, Ohio State, University of California, San Diego, University of Michigan, and the University of Notre Dame. Managing work at multiple and distant institutions proved difficult and Walther began pulling back to focus primarily on partnerships with three Indiana research institutions—the Indiana University School of Medicine, Purdue University, and Notre Dame.²⁵⁸

Joe Walther died in 2005. Even before his death, the organization had moved into a period of significant transition. Ruckle left in 2003 to pursue another opportunity, and many of Walther’s long-time associates had rotated off the board. New trustees, including several with prior experience managing medical research and nonprofit foundations, replaced Walther’s long-time advisors, particularly Leonard Betley who joined the board in 2003. As Walther’s health began to decline in 2004, he appointed Betley as board chair. The Walther Foundation moved out of its offices near the former Winona Hospital to a building owned by Richard Fairbanks.²⁵⁹ The new address was also home to the Regenstrief and Fairbanks foundations. Under Betley’s leadership, the three foundations maintained separate offices, but began to share some administrative staff and board members.

The Walther Cancer Institute, like Regenstrief before it, also changed legal forms. In May 2004, a subcommittee of the board chose to change the organization’s legal status

²⁵⁸ Walther Foundation, Walther Foundation Funding Guidelines, Revised, October 2010. Walther Cancer Foundation Files (WF).

²⁵⁹ When the Foundation moved offices, many of the records, including board minutes and financial records, were lost or destroyed, including many from late 1999 through 2006, when Jim Ruckle returned to assume the role of Executive Vice President and then President of the Foundation.

from a medical research organization to a private grantmaking foundation. On July 1, 2007, the Walther Cancer Institute was absorbed into the Walther Cancer Foundation, and this single entity became a private foundation. In many ways, the transition was little noticed as the Institute and the Foundation had operated as a single organization since the early 1990s and looked very much like a grantmaking organization.

James Ruckle returned to the organization in 2006. One of his first major undertakings involved leading the trustees through a review and revision of the Foundation's grant criteria as a means of focusing and affirming the group's mission. In 2008, an *ad hoc* committee of the board recommended, "emphasizing investment in people and organizational infrastructure as distinguished from projects" and focusing on "translational and applied research."²⁶⁰ These guidelines were further modified in 2010 to prioritize opportunities for the Foundation to serve as a "catalyst for collaboration between or among institutions" and to "stress interdisciplinary work." The organization also identified a willingness to "consider initiatives that traditional funders viewed as high risk or unconventional."²⁶¹

While maintaining a distinct relationship with each major research institution in the state, the Foundation focused on projects that would foster cross-institutional collaboration and develop a regional cancer research infrastructure. For example, Walther provided early funding to the Center for Cancer Engineering (CCE), a collaboration between Purdue, the Indiana University Simon Cancer Center, and the Regenstrief

²⁶⁰ Walther Foundation, Annual Meeting of the Board of Directors of the Walther Cancer Institute Foundation, Inc., January 8, 2008, p. 2, (WF).

²⁶¹ Walther Foundation, Walther Cancer Foundation, funding Guidelines (Revised: October 2010), Walther files (WF).

Institute. The CCE brought together clinical, scientific, and engineering specialists to develop new treatment and prevention strategies.

The Foundation also remained committed to funding work in a field that emerged from Joe Walther's desire to improve the experience for patients and families dealing with cancer. Walther provided assistance to research on projects in palliative care, behavioral health, and nursing care. When the Foundation chose to identify its own exemplary projects for its website, it selected four initiatives, two that dealt with behavioral care: the Behavior Cooperative Oncology Group, a collaboration of universities in Indiana, Michigan, and Ohio, and a \$1.4 million grant to Notre Dame to build a psychosocial care center for cancer patients.²⁶² Since 1985, the Foundation has distributed over \$118 million to support cancer research projects at research institutions across the Midwest with the bulk of those funds dedicated to Hoosier research institutions.

4. Conclusion.

By many metrics commonly applied to foundations, Regenstrief, Showalter, and Walther are dissimilar. Regenstrief held assets of approximately \$170 million in 2014, an amount four times the total assets held by Showalter. Showalter is a small foundation by asset and staff size, while Regenstrief and Walther are midsized foundations given their assets (more than \$150 million) and the fact that they do not rely on volunteers. Two of the funds maintain a full-time staff, while Showalter depends entirely on volunteers. Regenstrief is nearly 50 years old while Walther is half as old. Despite these differences,

²⁶² Walther Cancer Foundation, "Research Highlights," accessed December 16, 2016, <http://www.walther.org/research-highlights.aspx>.

the three organizations' paths toward maturation shared a number of important similarities.

Most significantly, each organization adapted both grant focus and legal and organizational form. Each worked—and continues to work—to identify a funding role that allows the organization to contribute in a defined way, one that is consistent with its donors' intentions. Outsiders, including advisors, grant recipients, and other funders, significantly influenced the growth and transition of each organization. These connections to the funders proved essential for each organization as it created funding processes and defined purpose. The recipients' role in this work was consistent, engaged, and sometimes extensive. Indeed, recipients placed such a heavy thumb on the scale that they exercised great influence—if not control—over funders' choices and agenda.

Showalter, in particular, made no pretense about turning authority over to the recipients, and she directed the leadership of the two schools to preselect projects. With only a little information about the amount the Showalter board was likely to contribute, the schools could effectively allocate anticipated grant funds among their own internal priorities. Walther and Regenstrief also developed close working relationships with funded organizations, including seating senior representatives from recipient organizations on the foundations' governing boards and meeting regularly with them to discuss priorities.

As the foundations gained experience and knowledge, relationships with recipients did often move toward more balance as the foundations engaged in co-creation of funding options as well as larger multi-institution initiatives. Indeed, funders were aware that they were a valued resource and began to use that power more assertively. Put

differently, the foundations transitioned from patrons to partners, though the extent and nature of these partnerships differed over time and by the organizations. The foundations also developed and revised grantmaking processes, funding guidelines, and policies, and even amended their legal forms to meet their objectives.

Understanding the choices that these foundations made about both relationships and funding decisions provides an opportunity to consider more fully the roles that these foundations play in both the narrow world of medical research funding and the broader universes of institution building and economic development. The conclusion to this work provides a more detailed discussion of these relationships and choices in order to better understand how foundations like these matter the research effort.

CHAPTER FIVE

Conclusions and Proposals for Future Studies

How can smaller foundations make a meaningful contribution to modern medical research given the scale, complexity, and cost of the work as well as the dominance of the federal government? Would it be better if foundations looked to other opportunities to create a social benefit through their grantmaking? This project examined the history and effort of small and mid-sized foundations working in a single, American city in order to address these questions. Smaller foundations can, in fact, play a valuable role as strategic partners in the work of advancing medical research. Understanding how small foundations can maximize the benefit they bring to the research endeavor requires a nuanced understanding of the impact that smaller funders can have in a large and complicated system.

Medical research foundations typically frame the philanthropic motivation for their gifts in terms of curing or preventing a disease or physical ill. On balance, and with few exceptions, there is little to suggest that the three foundations at the heart of this study made critical contributions directly linked to a particular discovery. Although their support was undoubtedly appreciated and helpful, the foundations' support typically represented only a small and often early part of a much larger funding portfolio. Medical discovery, after all, is expensive, and foundation contributions happened in the earliest stages of work.

There are examples of how these foundations did play a critical role in advancing work, including Regenstrief's early, sustained, and vital support for Clem McDonald's work on electronic medical records (discussed in Chapter Four). Additionally, the

foundations in this study identified and supported scientists doing important, even groundbreaking work, including Les Geddes, Larry Einhorn, and Hal Broxmeyer. In these cases, however, the foundations were not the primary or the first sources of funds to support the scientists' work. The foundations' contributions were valued, certainly, but it is wise to maintain a measured view of their importance as one small part of a long and expensive effort.

Nonetheless, the foundations, both individually and collectively, contributed to the advancement of medical research in an important and distinctive way. These foundations served as important allies and partners to Indiana's medical and scientific research institutions as these institutions developed and pursued strategic initiatives. Indeed, the principle contribution of these foundations was not their support for research *per se*, but their flexible and sustained contributions to the local research infrastructure.

The three foundations made philanthropic investments that were individually productive in that the funds helped launch research projects and careers of individual scientists. Similarly, they funded projects that might have otherwise struggled to find other support. Foundations provided capital for needed physical space and supported recruiting efforts for highly productive faculty members. Finally, and most importantly, the foundations served as useful and flexible partners to the institutions of medical research in Indiana, a contribution that ultimately resulted in economic benefit to the general community.

Foundation grants contributed to the construction and expansion of research facilities and to successful efforts to recruit and retain highly skilled medical faculty and research scientists. Building and equipping physical spaces and bringing highly

compensated workers into a community both generated social and economic benefits. Additionally, these activities enhanced the reputation of the institutions themselves, which further increased the institutions' ability to attract personnel and grant funding. The three foundations in this study made these strategic, institution-building contributions not in spite of, but perhaps because of, their size and local focus.

This chapter summarizes the findings and conclusions from the study and is organized to correspond to the questions posed at the beginning of the dissertation. After identifying common traits and characteristics that the three foundations share with one another and with others who supported research in the same community, the question of motivation is considered, followed by a discussion of how the subject foundations operated, and, ultimately, whether and how these organizations matter. The work ends with a review of conclusions related to issues that confront contemporary medical research funders as well as offer suggestions for future studies.

1. *Characteristics of foundations in this study.*

Not surprisingly, the three foundations at the core of this study share some characteristics. These entities were created in or near Indianapolis within a 20-year period of one another. Identifying common traits and practices among organizations is a fundamental first step to a richer and broader understanding of these organizations. Placing organizations in historical context, which this study did, provides an opportunity to understand how they these organizations compare to their predecessors and whether they either continued or rejected practices and traditions common in their community or field of work.

This study included a range of philanthropists who lived and made their fortunes in Central Indiana. Among the funders individually named in Chapters Three and Four, several are known only for large, one-time capital gifts that supported the construction of buildings, including Long, Coleman, and Reid hospitals. The other named donors—Ball, Krannert, Fairbanks, Regenstrief, Showalter, and Walther—all created philanthropic foundations. Members of this latter group either created companies that generated their wealth in Indiana (Ball, Krannert, Regenstrief, and Walther) or acquired their fortunes through the management and growth of an Indiana company (Showalter). All but the Ball Brothers made most of their fortunes in the decades during and immediately following the Second World War. Krannert, Regenstrief, and Showalter had no children or other immediate heirs. Walther and Fairbanks did have children, but nonetheless elected to devote a large portion of their fortune to their charitable intentions. The Ball Brothers chose a family foundation to manage joint assets, and each brother decided how much to contribute toward their collective charitable effort.

Each of the foundation funders prioritized work done in states where they lived or made their fortunes. Krannert supported causes in Indiana and Illinois, where he had gone to college, while Fairbanks made grants in Indiana and Florida where he lived in retirement. Both men used their foundations to assist a wide variety of causes in health and medicine as well as arts, education, and community development. Their largest gifts were for construction of buildings or venues like public parks, museums, and concert halls. These foundations supported the construction of physical spaces that could be seen and used by the community.

The Ball Brothers Foundation operated similarly to Krannert and Fairbanks in that its support stayed primarily in their home community. Collectively and individually, the brothers supported the construction of a hospital and a housing residence, but they also supported a variety of other projects in higher education, community beautification, and the arts. Although Krannert, Fairbanks, and the Ball Brothers contributed toward institutions that participated in research, their support for this work was not exclusive. They gave to other causes and, therefore, it can be assumed were motivated to support medicine and research for reasons other than a commitment to advancing a particular cause.

Regenstrief, Showalter, and Walther, however, were dedicated to research exclusively and had been since their creation. They confined their support to Indiana, with a few rare exceptions. The three foundations also provided funds for capital projects, but these allocations were out of the ordinary practice. Most grants went to support researchers and research projects.

This fact raises the most interesting question about the three dedicated foundation funders: Why they would eschew other options in favor of maintaining a devotion to working in medical research given its inherent challenges? Only one of the donors, Joe Walther, had a medical background. Though he was fluent in the language of medicine, he was a long-time practitioner and hospital administrator distant from the laboratory and cutting-edge basic research. The next section explores the intriguing question of motivation.

2. *Why create a foundation that supports medical research?*

The factors that motivate making large donations, whether to a particular organization or the creation of an irrevocable charitable trust, range from the genuinely altruistic to the self-serving and all matter of combinations in between. Joel Fleishman groups motivations for starting a nonprofit foundation into two general categories.²⁶³ The first group includes donors motivated by practical concerns such as tax or business considerations, and the second group is made up of those who desire to create a social good or change. In the case of medical research support, an overlay should be added to Fleishman's social-good category. The grateful patient/grieved love-one theory suggests that individuals who encounter significant health challenges personally or through a loved one can be motivated to engage in medical research philanthropy as a response to their own experience.

Among the three donors highlighted in this study, only Walther seems to have been motivated by a personal health issue, his wife's death from cancer. Neither Regenstrief nor Showalter appear to have a health-related motivation.²⁶⁴ They do, instead, fit into Fleishman's first group of donors who were motivated by more practical concerns.

Regenstrief wanted to keep his corporation operating after his death and he took advantage of a provision in the tax code that allowed him to accomplish this goal by creating a private foundation. Regenstrief's choice of medical research as the focus of

²⁶³ Joel L. Fleishman, *The Foundation* (New York: *PublicAffairs*, 2007): 35.

²⁶⁴ Grace Showalter created separate trust to fund the Methodist cardiac care program, purportedly as a result her own treatment there. This fund is omitted from consideration here.

his foundation can reasonably be attributed to the influence of his nephew, a rising star on the medical school faculty. The Krannert Institute for Cardiology, where Feigenbaum worked, served as a model for the research institute that was created by the Regenstrief Foundation. Regenstrief's own professional interest in rationalizing and improving operational systems may also have made the improvement of health care systems an appealing option. Although Regenstrief often demonstrated curiosity about the work taking place at the institute that bore his name, his committed focus and energy remained squarely with his company. Regenstrief was motivated by practical concerns and seemed only generally interested in the particular cause.

Grace Showalter's motivations are the least clear of the three dedicated founders. Showalter did not seem to have a personal interest or engagement in science or medicine until shortly before her death and sometime after she made her intentions for the creation and use of her foundation clear. Instead, she had contributed most frequently to the visual and performing arts. She was the first woman to serve on the Indiana University Foundation Board, a fact that evidenced her financial and personal dedication to the university. There, too, her interest was primarily in the arts, not science. Showalter's husband had made his fortune as a senior executive at Eli Lilly and Company. It is unsurprising that Showalter choose to direct one half of the proceeds of her foundation annually go to Purdue University, her husband's *alma mater*. What is more interesting, however, is her decision to dedicate the other half to the IU School of Medicine and not to IU's main campus.

Showalter left no records explaining her choice, though her personal attorney, Robert Claycombe, believed that she originally turned away from the university based on

its response to student protests on campus during the Vietnam War, and that while she softened over the years, she was unwilling to relent entirely. She selected the medical school as a compromise. Part of her estate benefitted Indiana University, but the money went to the portion of the university located in Indianapolis, rather than the main campus. It is possible, even tempting to consider, that Showalter came to support medical research at least partly out of spite.

The Fairbanks Foundation, though not a dedicated research funder, provides an example of a motivation noteworthy in the context of the other funders in this study. During his lifetime and through his foundation after his death, Fairbanks made several large and important gifts to support medical institutions in Indianapolis, including a \$20 million commitment to create a school of public health on the Indianapolis campus near the medical school. This new school provided a benefit to research beyond training students in the disciplines of public health. The presence of a school of public health increased opportunities for the School of Medicine to obtain funding through some grant funders, including the National Cancer Institute.

Fairbanks personally expressed no particular interest in healthcare or medical research. His career was spent building a media empire, and he supported education programs in that field. He gave to a variety of other causes, including large capital grants and small gifts to causes his family had traditionally supported or that his wife preferred. He appeared to have no particular charitable interests of his own beyond a stated desire that his philanthropy be used to honor his family and benefit Indianapolis. While Fairbanks was the only donor to express this intention directly, all of the foundation funders, even those dedicated to medical research, sought to benefit the well-being and

vitality of their communities given their commitment of funds within the community, despite opportunities to contribute to causes outside the state.

The role of external advisors should not be overlooked in a discussion of factors influencing these donors. Just as advisors had played important roles in the creation and direction of Carnegie's and Rockefeller's foundations, personal advisors were important to the foundation donors in this study. Showalter relied on her attorney to act as her emissary with the organizations she wished to fund and with the individuals who would serve on her selection committee. Regenstrief followed the advice of his attorney, Leonard Betley, and his nephew, Harvey Feigenbaum. Betley recommended and set up the foundation and Feigenbaum supported and encouraged the choice of a medical focus. Walther did not need a nudge from an outsider toward medical research as a topic, but he did depend on an attorney—again Betley—to structure the organization initially and then to help simplify the organization's complicated structure several years later.

Betley proved a key figure not only to each of the three central foundations in this study, but also to the broader medical research community in Indiana. He worked with Walther, Regenstrief, and Fairbanks, at first as outside counsel and then as an internal decision maker and leader within the foundations. Betley served as chief executive of both the Fairbanks and Regenstrief foundations, and he served at one time on the boards of directors of all three organizations. He often held these roles simultaneously. The impact of his engagement is more fully discussed below.

Does a donor's motivation to create foundation or dedicate its proceeds in whole or in part to support medical research matter in their work or the way we understand them? Certainly, the question is one of human interest. The answer can add charm and

heart to the creation story of a nonprofit organization. More importantly, these motivations may portend some aspect of how the organization is run and how it uses its resources. Although the donors in this study present a variety of different motivations for starting a foundation and dedicating its work to medical research, the funders here share one common link: each foundation expressed a desire to support and build their local community, including its medical institutions.

3. How these foundations operated?

Medical research occurs in a highly technical, complex, and interconnected environment. The work is expensive and the federal government dominates funding. One of the questions that animated this study asked how smaller foundations could operate in such an environment. How could smaller foundations make a contribution that was unique and necessary rather than simply providing a contribution to a need filled by others? The funders in this study provide insight into the approaches and tools that smaller foundations can adopt.

Each of the dedicated foundations in this study found a niche for its work. They sought to create operating structures and processes meant to balance the donor's intent and the recipients' needs. For Walther and Regenstrief, the process took longer and involved more dramatic organizational and procedural changes over time. For Showalter, the smallest organization according to managed assets, this came more quickly, but even that organization developed and changed its operating norms over time.

As discussed earlier in this work, Grace Showalter directed her advisors to annually divide most of the proceeds of her trust equally and give one half to Purdue and the other half to the IU School of Medicine. Showalter never participated in a grant

allocation; the first one occurred after her death. At the first meeting, her Selection Committee promptly ignored her direction and began discussing how to determine which grants to fund. They did not split the proceeds evenly, as she had directed, though the committee has always honored the spirit of her direction by reaching a general approximation. Because of the initial decision to do something more than simply dividing each year's amount in half, the Selection Committee needed to develop a process to evaluate the merits of the proposals submitted by the designated recipient institutions.

The immediate dilemma that Showalter's committee faced stemmed from their lack of scientific and medical expertise. The Selection Committee was composed of Showalter's bankers, her attorney, a personal friend who was a practicing physician, and the president of Purdue University, Fred Hovde. The technical and specialized nature of the grant proposals, which represented disciplines and topics ranging from basic biology and chemistry to biomedical engineering and environmental science, were outside the professional knowledge of any of the committee's members, including Hovde. The members were unable to evaluate the quality of individual projects or compare the relative merits of one against the other. To cope with this challenge, the committee quickly turned to the recipients and asked them to screen and rank proposals before submitting them for consideration.

Engaging the schools in the decision-making process transmitted power to the deans and program chairs at each school who could determine which faculty proposals would be carried forward to the Selection Committee. Further, given the assumption that each school would receive approximately one half of the allocation, and they could learn

what that amount would be prior to the selection meeting, the schools could game their list to take advantage of every dollar. The two funded institutions developed a practice of preselecting and ranking individual project proposals. The Selection Committee chose to leave themselves little room to direct the agenda and instead deferred to the strategic decisions made by deans and department chairs at the school.

One favorable example of how this approach worked can be seen through Showalter's support of Purdue's decision to create a new department of biomedical engineering. Purdue requested, and Showalter approved, the use of much of the school's annual allocation one year toward the creation of a start-up package to hire Les Geddes, one of the first faculty members in biomedical engineering, a then-emerging field. Grants in subsequent years helped build a stable of work in Geddes' department. The department grew and attracted substantial extramural funding that generated important innovations as discussed more completely in Chapters Three and Four. Eventually, some committee members complained that the schools were gaming the system in a manner that prevented them from having any meaningful say in what was brought forward for consideration. Yet, the process continued generally unchanged and apparently to the satisfaction of the grantor and grantees.

For Walther and Regenstrief, the work of settling on a structure and working processes took longer and involved more significant transition and conflict. This was true despite the fact that both foundations were created with a developed general focus for their work—improving health care delivery (Regenstrief) and eradicating cancer (Walther). Despite a stated purpose and the fact that both foundations immediately began

and sustained funding in furtherance of these goals, settling on a structure and grantmaking process took time.

Notably, both foundations made two significant changes in their legal status, moving from being private foundations to become medical research organizations and then returning again to foundation status. These changes had critical implications for both the organizations' internal operations and their relationships with the institutions they funded. When the foundations were grantmaking foundations, they could make decisions at arm's length and then make funding available to the schools. Grantmakers can exercise some control over the amount of contact from potential and actual recipients and the type of information that comes into the grantmaking process. Managing their relationships with the institutions and individuals that they were funding grew more difficult when the organizations were medical research organizations and needed to secure the professional services of faculty at the medical schools. Regenstrief provides the most dramatic example of the challenges associated with the transitions in organizational form.

A grantmaking foundation was a means to an end for Regenstrief. The tax laws permitted him to use the legal form to meet his goal. During the Foundation's early years, distributions took the form of annual block grants. Funding became more complicated when changes in the tax law required Regenstrief's foundation to become a medical research organization. In this new model, Regenstrief needed to employ or contract directly with researchers, a requirement he fulfilled by assuming responsibility for the operation and support of the Regenstrief Institute. This greater engagement in research distracted Regenstrief from his ability to focus on his business. To reduce that

risk, Regenstrief brought representatives from the school and hospital onto the Institute's board. The Regenstrief Foundation funded the Institute and the Institute leadership spent the funds. Under this arrangement, Regenstrief increased his dependence on the institutions that benefitted from his largess. Over time, the members of the Regenstrief Foundation board occasionally chafed at the sense that the medical school seemed to see Regenstrief's support as a dependable resource that could be molded to the school dean's strategic preferences. Ultimately, this concern led to the legal separation of the Foundation and the Institute into independent nonprofit organizations. It also motivated the decision to pursue a relationship with Purdue University.

The most significant challenges in Walther's organization stemmed from the complexity of the far-reaching set of organizations designed to tackle cancer on several fronts at one time. The size of the organization, the number of partners involved in this effort, and Walther's penchant for top-down, highly engaged management challenged many inside the organization. The internal organizational challenge distracted from the fact that Walther provided consistent funding to a number of very talented, productive researchers.

Walther selected most of his recipients; although it is not clear what criteria he used to select them. Hal Broxmeyer, for example, received consistent support. As discussed in Chapter Four, Broxmeyer was a safe bet, however. He also had NIH funding from the time he arrived at IU. Many of Walther's other grantees also had strong extramural support. There is a reasonable question about whether, in cases like Broxmeyer's, Walther did more than top an already full glass. After Walther's death, the Foundation developed grantmaking procedures that were less bound by Walther's

personal preferences and loyalties. They turned to the term-limited grant, the very type developed by the Rockefeller Foundation 100 years earlier.

4. *Challenges faced by small and locally focused private foundations funding medical research and lesson from this study.*

All three of the dedicated foundations in this study provide lessons about the push-pull relationships between medical research funders, the physicians and scientists who complete the work, and the institutions that employ them. Each party to the transaction has different needs. The researcher's interests are the most straightforward. They need as much funding as possible for as long as possible. The institute that employs the funded scientist or physician also wants their researchers to be funded because this allows the institution to shift its internal resources to other purposes that align with its need and strategic goals. For the foundation funder, the goal is to advance the founding donor's intent and fund projects that are not otherwise supported or that cannot advance without the foundation's contributions.

In some ways, the foundation's task is most challenging, particularly if the funder is a small organization without access to information necessary to evaluate potential projects and assess the progress of funded ones. Typically, and as shown by the dedicated foundations examined in this dissertation, the foundations seek to overcome the knowledge deficit by turning to outside experts. But even this move can be challenging in specialized fields where there are few experts and these individuals are, in fact, typically potential competitors for available funds. Local experts are most often also grantees. The organization must build a productive partnership with experts who can provide honest and useful assessment of prospective recipients and their work. Without access to information like this as well as the institutional ability and disposition to seek

and use this information, foundations supporting research may fall short in their effort to use their funds in the most effective way.

This study demonstrates one approach to confronting that challenge. The three foundations maintained a local focus and contributed consistently and, with the exception of the Walther Cancer Foundation, exclusively to support only the School of Medicine and the two other research universities in Indiana, Purdue and Notre Dame. Additionally, the foundations met regularly with members of the leadership teams from these organizations and, in all three cases, involved representatives from the grantee institutions in some consistent and meaningful way in the grantmaking process in a manner appropriate to the foundation's own personality and preferences. To use an analogy, the foundations invited the diners into the kitchen and asked them to help plan the menu and prepare the meal.

This approach resulted in the development of close and long-term relationships between grantor and recipient organizations as well as the individuals who participated in the work. These relationships oriented both parties away from short-term thinking and toward a generally cooperative, longer-term orientation. Certainly, this did not eliminate all strife, but both donor and recipient were incentivized to see beyond immediate discussion to a longer line of future grant funding. This structure created an ongoing negotiation between the grantor and grantee that was similar to the type of relationships that developed between the Rockefeller Foundation's long-serving program officers and the schools those officers routinely funded. The Indianapolis foundations watched the development of strategic initiatives and could monitor work at the funded institutions both directly, through formal reports, as well as informally through regular and less

formal communication that occurs among friends and acquaintances that exist and work in the same community. Recipients and their work across the institution was more visible to donors.

In the case of Indianapolis, this arrangement began to emerge by chance when one man, Leonard Betley, was separately engaged to do legal work for all three foundations. Betley continued his work with the organizations, eventually moving from outside counsel to joining each organization and leading its board or internal staff. Betley, who spent several decades with these organizations, created a network of funders and recipients that engaged in loose collaborations and worked to develop and implement strategies that benefitted the foundations, the funded institutions, and the broader community.

Betley acted as a conduit carrying information between the foundations and their recipients as well as laterally across the foundations. Shared knowledge facilitated opportunities for increasing the foundations' impact through loose coordination of grants. For example, Walther funded cancer research at the School of Medicine and thus was aware that oncological departments at the school were limited in their funding success by the fact that the campus did not have a school of public health at a time when more federal and large foundation funders were interested in integration of public health efforts into cancer prevention and treatment efforts. The Fairbanks Foundation, the largest foundation in this study by total assets, made a large gift to create a public health school. While this example does not suggest that Betley single-handedly engineered the contribution for this purpose, his direct and long-term engagement with these foundations

facilitated the type of partnerships that increased the impact of the foundations' work to the benefit of the grantors, grantees, and the community.

Developing lasting collaborative relationships provides advantages to the parties included in or preferred by the decision makers inside the network. Parties to these relationships share information in a context of heightened trust that results from the existence and promise of ongoing engagement. This type of relationship is not without risks, however. The type of foundation-recipient partnership that developed between each of the three foundations and their grant recipients can give the research institution the power to effectively act as a gatekeeper dictating who is eligible to pursue funding with certain organizations. Purdue originally used this approach internally when deciding which proposed projects would be submitted for funding. For those outside these networks, closed associations can be problematic as the existing relationship can form a high or complete barrier to anyone not already on the inside. To overcome this risk, either the institution must implement, or the foundation must create or insist upon, a process that keeps the opportunity to seek funding open and flexible.

Relationships of the type that developed between the three dedicated funders and the School of Medicine, in particular, highlight a second challenge. Recipients that grow used to receiving funding from a single source over a long period can begin to treat the funds as dependable income that can be funneled toward projects that do not honor the donor's intentions or that simply supplement other funds. For foundations, this risk can be reduced if the foundation is willing and able to find another recipient as the Regenstrief Foundation did when it started funding work at Purdue in addition to grants to the medical school. The willingness to find new collaborative relationships or types of

work ensures that foundations can continue to find opportunities to use their funds in ways that are most valuable.

Each of the dedicated foundations in this study invested a substantial portion of its annual expenditure in efforts that the recipient institutions were challenged to fund in other ways. For example, the Walther Cancer Foundation the youngest foundation in this study, held assets of just over \$139 million in 2016. Since its founding in 1985, the fund has made over \$150 million in research grants to cancer research. While Walther supports basic and applied projects related to drug discovery, the most common expression of cancer research, the foundation also continues to honor one of Joe Walther's most innovative contributions, his focus on palliative and behavioral oncology. In fact, the Foundation's commitment to this work has increased over time. In 2017, Walther made a \$14 million grant to create the Walther Supportive Oncology Program at the School of Medicine. Walther is an example of two domains where even small funders are able to contribute in a meaningful way: Walther supports an area that remains underfunded and it concentrates its grants locally and thereby benefits the entire community.

The most frequently mentioned reason that the research community values nonprofit and philanthropic funders is because of their willingness to take risks by funding a novel concept or a researcher presenting a slim vita because of youth or inexperience in a field.²⁶⁵ New projects often lack clear indicators that the work is likely to succeed and will have value and, as a result, the quest for funding is far more

²⁶⁵Moses, Biomedical Research and Health Advances, *New England Journal of Medicine*, 567-571.

difficult.²⁶⁶ Philanthropic funders provide critical start up or proof-of-concept funds in these cases. Nonprofit grants can also act as an external endorsement that can be leveraged by scientists seeking other extramural funding. Foundation grants can also cover gaps in funding that occur when a project's funding is nearing exhaustion and additional extramural support has not been obtained. Assuring a continued stream of funds prevents the threat caused by interruption.²⁶⁷ They can also accelerate work by providing an infusion of needed dollars at a critical juncture, particularly given their presumed flexibility regarding funding schedules.

Foundations are also able to assist researchers working on orphan or neglected diseases as well as on health issues that plague the vulnerable and underserved. These groups are typically unable to produce the political power or economic incentive needed to place their issue at the top of the public funding agenda, and they do not promise the type of financial return to attract commercial researchers. Put differently, philanthropic funders are asked to fulfill their expected roles of aiding the vulnerable and the underserved.

The medical research philanthropist does not work free of criticism. Funders who contribute to research, particularly the individuals and organizations able to make large gifts and grants, are exerting influence over the research agenda. Setting or shaping an

²⁶⁶ Ronald J. Daniels, "A generation at risk: Young investigators and the future of the biomedical workforce," *Proceedings of the National Academy of Sciences*, January 5, 2015, <https://doi.org/10.1073/pnas.1418761112>.

²⁶⁷ Moses, "The Anatomy of Medical Research," 181. See also, Hamilton Moses, III and Joseph B. Martin, "Biomedical Research and Health Advances," *New England Journal of Medicine* 2011; 364: 567-571 and Richard R. Nelson, Kristin Buterbaugh, Marcel Perl, Anatine Gelijns, "How medical know-how progresses." *Research Policy*. 40 (2011): 1339-1344.

agenda is a form of policy making, particularly given the immediate connection between research and the promise of public wellbeing. Those who question the role of philanthropy in research are concerned by the absence of the type of transparent, multi-phase review process undertaken by the NIH when evaluating the scientific value of the research it funds.²⁶⁸ Critics also worry that funders are governed by personal interest or parochial loyalties, such as affection for an alma mater, and will direct money to serve those interests and loyalties over the broader public interest. Finally, critics note potential inequalities as some scientists, including those who have found either scientific or popular recognition, receive the lion's share of funds as others are left to do without. Complaints about uneven distribution of assets and the benefits they bring become a less powerful critique of philanthropy as the competition for NIH funding more frequently favors proven researchers, a fact that produces the same result. In addition to learning more about how local foundations engage in medical research, this examination of one group of foundation funders in one mid-sized American city provides an opportunity to examine on a micro-level whether and how the promise or perils of philanthropic funding play out.

5. *Summary and recommendations for continued study of smaller and local foundations.*

Research foundations rarely make financial contributions that take a project over the line from initial concept to practical application. The timeline is too long and the work, on the whole, too expensive for any single foundation. Instead, foundations play a

²⁶⁸ There is, of course, critique of this process, including challenges that it is neither transparent to fair. See Kathy L. Hudson, PhD, et.al, "Toward a New Era of Trust and Transparency in Clinical Trials," *Journal of the American Medical Association*, 316(13) (October 4, 2016): 1335-1354 doi:10.1001/JA/2016.14668.

role in ensuring that some research questions get into the pipeline in the first place. This work shows that foundations can and do take risks on new and unproven work at a time when other funding is not readily available to the scientist. In this way, the foundation donor serves as a bridge that can allow a researcher to qualify for the type of corporate or government funding that will carry work forward.

Foundation contributions have a second impact. They support the construction of a research infrastructure in a community. Foundations, including the funds profiled in this study, sometimes provided key funding for both literal and figurative institution building. They supported the construction of physical spaces such as classrooms, hospitals where research and teaching occur, and laboratory space. They funded faculty chairs and other hires, and either created or assisted in creating new medical departments and specialized and focused research institutes that concentrated on advancing knowledge in defined areas such as cancer, aging, palliative and behavioral care, and electronic medical information technology.

Each of these contributions resulted in tangible benefits to the research institution itself. Importantly, those institutional benefits often generated further gain for the local community in terms of economic benefits and institutional prestige. Consider, for example, the impact of creating a medical research institute like the Regenstrief Institute or the bioengineering department (now a school) at Purdue. Regenstrief and Showalter, respectively, provided all or a key part of the funding for those initiatives. Both of the new entities were productive in terms of scholarship and innovation as discussed in Chapters Three and Four of this work. Both earned prestige for their associated schools,

which, in turn, created an ability to attract talented researchers and students to the community and to the school.

Medical research institutions provide jobs and produce significant economic value in their surrounding communities. A 2010 study by the consulting firm Tripp Umbach found that Indiana University's research programs produced \$844 million in local impact and supported 6,500 jobs, many of these high-paying professional roles.²⁶⁹ Others have found same thing.²⁷⁰ Individuals working in the life sciences in 2016 earned an average of \$98,934 in wages compared to the private sector average of \$44,121.²⁷¹ It is not difficult to see why so many states have concentrated efforts on attracting life science jobs like those found in the institutions that form the backbone of the medical research enterprise in Indiana. Foundation contributions to bolstering the work of medical research organizations contributed more broadly to the general economy.

This project demonstrates the value of careful consideration of foundations typically underrepresented in scholarly literature. The findings of this study challenge conventional ideas about medical research philanthropy and about small foundations and the nature and value of their contribution. For example, my work demonstrates that the primary value of the foundations in this study was not their support for research *per se*, but their flexible and sustained contributions to the local research infrastructure, including philanthropic investments that helped launch research projects and the careers

²⁶⁹ <http://newsinfo.iu.edu/news/page/normal/21275.html>

²⁷⁰ Funding First. *Exceptional returns: the economic value of America's investment in medical research*. New York: The Lasker Foundation; 2000. The effects of medical research on health care and the economy. *Science* 283(5398) (February 1999):36-37 . DOI: [10.1126/science.283.5398.36](https://doi.org/10.1126/science.283.5398.36)

²⁷¹ John Ketzenberger, "15 years of life sciences: collaboration and results in Indiana," prepared for BioCrossroads, (2017).

of individual scientists, provided capital for needed physical space, and supported recruiting efforts to bring innovative and productive faculty members to staff new research and patient care departments. The foundations served as partners to the institutions of medical research in Indiana, and that contribution ultimately benefitted the entire community.

These findings raise potential questions for future researchers. Some questions grow out of the local focus in this matter. Are the Indianapolis organizations unusual or typical of other smaller and locally focused foundations around the country? Do other such funds work in the same way? Is it common to for smaller foundations to confine their support locally? Are the Indiana foundations models for a type of strategic networking that is similar to or different from networks found in other areas or other fields? Are there, for example, networks of smaller funders in the arts or devoted to food justice? If so, can they learn from one another?

Importantly and finally, this study encourages donors and foundation professionals to take a wider and deeper view of their role in advancing the work of medical research and to change the yardstick by which they typically measure success. This study demonstrates that the Indianapolis philanthropists made a significant and important impact on the advancement of medical research through their support of institutions where the work of discovery and care goes on in small increments every day.

Although not always thought of as research support *per se*, funding for building spaces, supporting the hiring of faculty, and providing opportunities for young researchers to get a start in the profession are all needed to sustain the broad process of discovery. Each of these activities should be valued as a meaningful outcome.

Additionally, the organizations in this study developed strong partnerships that served as a source of ongoing support and strategic input to the institutions. The knowledge that medical schools and research institutions had a dependable financial partner able to provide a fairly predictable amount of funding facilitated and, in some ways, shaped the institutions' own strategic advancement. This type of reliable engagement, too, is a meaningful contribution to the research endeavor.

This work opened by noting the challenge issued by Hammack and Anheier to further study the purpose, practice, and procedures developed by foundations of all sizes in order to foster a more meaningful appreciation of the potential and actual impact of these institutions. Such research requires going beyond the few funds that crowd the top of the largest and wealthiest lists. It means going into communities and studying the work of local organizations. Given the potential and increasingly important role that these foundations can play in both medical research and local community growth, work is needed to understand, appreciate, and effectively harness the power of smaller foundations in medical research and beyond.

NOTE ON SOURCES

Research for this dissertation involved review of the corporate records of several foundations, including Fairbanks and Krannert and the three organizations at the heart of this study—Regenstrief, Walther and Showalter. The three core foundations each gave me generous and open access to their files, records, and archives. The foundations' willingness to permit such an extensive review significantly enriched this study. The documents maintained by each organization were relatively complete and organized in each case. They are treated as working documents and are stored on site and in the foundations' corporate offices. The documents were not maintained a fashion common to those searching professionally maintained archives. In addition, and with the two exceptions noted below, the documents are not publicly available.

Each collection of documents includes documents and material related to the creation and operation of the foundations. There are some materials associated with awards or recognitions to the founders, as well as copies of obituaries and other tributes. I found no personal papers in any of the document collections.

Unless noted below, each foundation collection included most types of documents and records common in any business and organization, including: 1) legal records related to the formation, operation, and status of the organization; 2) governance documents, including board minutes and board committee minutes; 3) annual reports; 4) grantmaking records, including grant applications, requests for proposals, grant committee notes, related records and correspondence, grant reports, summaries and lists; and 5) grantmaking policies, priority statements, and strategic plans. I also reviewed organizational staff lists, board lists and staffing tables, where these were available. Each

foundation maintained different types of documents in their collection. I note below a few organization-specific limitations and collection omissions.

The Regenstrief and Fairbanks foundations maintained the most complete body of documents. Historic as well as current working documents were available in hard copy in the foundations' offices. These two foundations share some professional staff and are housed in offices within a single, multi-story building in Indianapolis, Indiana. Their record collections contained similar but not identical types of documents. Both foundations had copies of transcripts from interviews and oral histories conducted with trustees and administrators made in conjunction with organizational anniversary celebrations.

The Showalter Foundation records were also generally complete. These records had been in the hands of Showalter's personal attorney and Trust board member, Robert Claycombe until his retirement from the board at which time he gave the documents to Robert Holden, then chair of the Trust. Subsequent to the completion of this research project, the Showalter documents were placed in the Philanthropy Archives of the Ruth Lilly Special Collections Archive at the Indiana University Purdue University Library in Indianapolis. At the time of this publication, the documents were being processed into the collection and should eventually be accessible to other researchers.

Two foundations had records that were less complete, including Walther and Krannert. The Walther Cancer Foundation moved from its offices near the former Winona hospital in Indianapolis, to the office building where the Regenstrief and Fairbanks foundations are also located. During or prior to that move, some of the organization's records were lost or destroyed. Many records that would have been

produced during the early to mid-1990s could not be located, including meeting minutes and records of grants made. These gaps hampered the ability to draw comparisons between the three organizations in some respects as well as to fully explore the reasons for and nature of some organizational changes. It was not certain, for example, how many grants the organization funded in certain years.

Similarly, few documents associated with the Krannert Foundation could be located. The Foundation and Trust were both terminated in 1987, and the associated documents were most were likely destroyed when the Inland Corporation moved its headquarters out of the city. The few documents that remain are maintained in the Ruth Lilly Special Collections and Archives, Foundation Center Historical Information Files, Krannert Charitable trust – Indiana Folder.

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FFOF Fairbanks Foundation Office Files, Richard M. Fairbanks Foundation, Indianapolis Indiana.

KT Krannert Charitable Trust, Foundation Center Historical Foundation Collection, Ruth Lilly Special Collections and Archives, Indiana University, Purdue University/Indianapolis: Boxes 44 & 112.

RFOF Regenstrief Foundation Office Files, Regenstrief Foundation Indianapolis, Indiana.

ST Ralph W. and Grace M. Showalter Trust Collection, Ruth Lilly Special Collections and Archives, Indiana University, Purdue University/Indianapolis

WFOF Walther Cancer Foundation Office Files, Walther Cancer Foundation, Indianapolis. Indiana.

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Publications

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