

The Evolution of Interdisciplinarity at Duke: A Brief Historical Excursion through the Lens of Strategic Planning

Edward Balleisen, Vice Provost for Interdisciplinary Studies
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Duke has invested in interdisciplinary inquiry and education almost from the moment that James B. Duke’s 1924 gift transformed Trinity College into a major research university. Its current roster of interdisciplinary units includes several founded at least fifty years ago, and a few with histories that reach back nearly a century. Before World War II, the university established [Duke Forest](#) (1931) and the [Duke Marine Lab](#) (1938). During the Eisenhower Administration, faculty members created the Duke Center for Demographic Studies (1955; now known as the [Duke Population Research Institute](#), housed within the Social Science Research Institute) and the [Center for the Study of Aging and Human Development](#) (1957; now located in the School of Medicine). Duke created its Primate Center (now the [Lemur Center](#)) in 1966, the Institute for Policy Sciences and Public Affairs in 1971 (which became the Sanford School of Public Policy in 2009) and the department of biomedical engineering in 1972, the first undergraduate major in that field to receive accreditation. All of these units remain essential contributors to Duke’s interdisciplinary research, teaching, and public engagement.

Over the last half-century, however, interdisciplinarity has steadily become a more important focal point at Duke, a trend powerfully illustrated by the university’s periodic exercises in strategic planning (Figure 1). The major strategic plans developed over that period have repeatedly articulated interdisciplinarity as a compelling aspiration, and eventually as a notable advantage. Those plans further document a steady increase in the scale and scope of strategic investment in interdisciplinary endeavors, as well as a growing commitment to facilitate those undertakings through cross-school mechanisms of coordination, overseen by the Provost’s Office. In addition, Duke’s planning documents have consistently manifested a commitment to flexibility, experimentalism, and adaptability with interdisciplinary efforts. At every phase in the university’s more recent history, its leaders have stressed the need to choose carefully on the basis of the most compelling new scholarly junctures bubbling up from the faculty and in sync with external funding channels, to evaluate the success of these interdisciplinary investments regularly, and to shift investments as circumstances warrant. On occasion, these cautions have included specific recommendations about criteria for assessment and mechanisms for review. Attentive implementation of those review mechanisms, however, has proved more elusive.

Strategic Plan	Year	President	Provost
Summary Report of the University Planning Committee	1972	Terry Sanford	John Blackburn
Planning for the Eighties	1978	Terry Sanford	Frederic Cleaveland
Crossing Boundaries: Interdisciplinary Planning for the 1990s	1988	Keith Brodie	Phillip Griffiths
Shaping Our Future: A Young University Faces a New Century	1994	Nannerl Keohane	John Strohbehne
Building on Excellence: The University Plan	2001	Nannerl Keohane	Peter Lange
Making a Difference: The Strategic Plan for Duke University	2006	Richard Brodhead	Peter Lange
Together Duke: Advancing Excellence through Community	2017	Richard Brodhead	Sally Kornbluth

Figure 1: Strategic Plans at Duke since 1970.¹

I am grateful to Cathy Davidson, Hallie Knuffman, Peter Lange, Susan Roth, and Jim Roberts for their incisive input on earlier drafts.

¹ I have omitted discussion of an additional plan, [Directions for Progress](#) (1980), since it focused on an analysis of existing degree programs and schools, rather than interdisciplinary connections within and across them.

The Enduring Case for, and Challenges to, Interdisciplinarity at Duke

Up through 2006, Duke's strategic plans all took pains to highlight interdisciplinarity as a priority across American higher education, and as a pivotal avenue through which Duke could improve its standing. The 1972 [Summary Report](#), for example, observed that universities across the globe had experienced "a blurring of boundaries of disciplines as new issues arise to confront the modern world. There are numerous practical concerns and problems of academic and theoretical interest which cannot be adequately treated with the methodologies and approaches of any single discipline" (p. 53). Duke's post-1970 strategic blueprints also made similar arguments about the rationales for Duke to invest in a wide range of interdisciplinary collaborations.

The university-wide plans stressed that as a moderate-sized research university, Duke would struggle to attain preeminence in particular disciplines, but might stand out by attracting and keeping faculty open to the intellectual opportunities emerging at the linkages among fields. The 1988 [Crossing Boundaries](#) self-study reached for "a pugilistic analogy" to make this point. "Duke can usually not stand toe-to-toe with the heavyweights and slug it out," the report observed. "Rather, the University has often been successful by being light on its feet. Interdisciplinary approaches have been a major reason for this success" (p. 170). Duke's planning documents similarly highlighted a consistent set of distinctive advantages in developing interdisciplinary communities. One was the compactness of West Campus, which meant that most Arts & Sciences departments, the schools of Medicine, Nursing and Engineering, and the other professional schools were all within walking distance. Two others were Duke's relative youth and location in a fast-growing part of the country, which went hand in hand with openness to scholarly innovation and administrative experimentation. By the 1980s, strategic plans further referenced an organizational culture encouraged by previous interdisciplinary efforts. As more faculty and senior leaders demonstrated a commitment to cooperate around the challenges of identifying and supporting interdisciplinary efforts, the accumulation of faculty interest and administrative experience with related problem-solving emerged in these documents as a further comparative advantage.²

University administrators also remained attuned to the enduring challenges of fostering interdisciplinary research and teaching. The planning documents have returned again and again to the same major obstacles. Since faculty hiring resided in schools and departments, the definition of faculty searches has tended to reflect narrower priorities. Professors who wished to explore interdisciplinary questions have worried about how their home departments and schools will evaluate them for tenure and/or promotion; those who have wanted to develop interdisciplinary courses or programming have often encountered objections from chairs or deans about the need to cover disciplinary requirements and furnish service to their tenure home. Moreover, faculty with an interdisciplinary bent have expressed frustration about the difficulties of identifying potential collaborators, the tendency of disciplinary-minded colleagues to view their research as lightweight or second class, and the pressures on PhD students to hew to disciplinary channels. One further concern, expressed more commonly before the mid-1990s, involved the impediments that interdisciplinary units faced as they sought to obtain space.³

² Interdisciplinarity, of course, became a watchword at many other universities in this period. Duke leaders increasingly framed the university as particularly committed to it and particularly good at it.

³ These same issues surfaced in the discussions informing the development of a 2010 Strategic Plan for Interdisciplinary Studies at Duke. Susan Roth, *Interdisciplinary Studies at Duke University: Strategic Plan, 2010* (2010), 9, available at: <https://sites.duke.edu/interdisciplinary/files/2016/03/interdisciplinary-studies-strategic-plan-2010.pdf>.

The Growth of Interdisciplinarity at Duke, 1968 to 2021

Before the 1970s, most interdisciplinary units at Duke depended entirely on external funding. By 1972, senior administrators saw enough value in the range of interdisciplinary centers and sufficient faculty demand to increase their number to identify a set of core principles for establishing and conducting new units. These requirements included expectations that any interdisciplinary unit would: “strengthen the academic standing of the University” through research and training activities; have a clear faculty champion with appropriate expertise; possess some form of faculty advisory committee, composed of individuals from relevant disciplines; and depend primarily on external funding, though with the potential for a “small core of University support” (p. 54).

Reconsideration of the undergraduate curriculum, which went through its first major overhaul since the 1920s in 1968, heightened awareness of interdisciplinary possibilities. The [Krueger Report](#), which laid the groundwork for that overhaul, emphasized the importance of interactive pedagogy, independent study and research, and the empowerment of students to construct intellectual pathways that crossed departmental boundaries and incorporated opportunities for what we would now call experiential learning, both on campus and beyond it. In addition to establishing Program II, which allowed students to design their own “interdepartmental” curriculum, the Krueger Report advocated the “development of “inter-disciplinary courses in the humanities, social sciences, and sciences” that would tackle compelling problems from multiple perspectives.⁴

Expanding interdisciplinary activities also sharpened appreciation for the logistical difficulties faced by faculty. The 1978 report, [Planning for the Eighties](#), pointed to departmental obligations for teaching and service as one major barrier, and a culture of disciplinary evaluation for tenure and promotion as another. To address the sometimes “parochial” viewpoints of departments, the report called for hiring committees and deans to assess “the potential that each new appointee has for interdisciplinary involvement in the major issues likely to require investigation in the immediate future” (p. 34).

Planning for the Eighties mostly focused on the imperative of university-wide financial retrenchment, as Duke faced significant headwinds resulting from wider macro-economic stagnation.⁵ A significantly improved financial picture enabled substantial investments in a wide variety of interdisciplinary configurations during the 1980s. Amid the push to move Duke into the ranks of the country’s foremost universities, President Terry Sanford and Provost Phillip Griffiths viewed interdisciplinarity as sufficiently important to Duke’s future that they chose to focus the university’s 1987 accreditation self-study on that topic. This decision led to an eighteen-month process involving three major committees, major surveys of faculty and students (mailed to recipients and coded by hand), and in-depth interviews of faculty directing interdisciplinary units. The resulting report, *Crossing Boundaries*, represented an important inflection point for Duke.

Overseen by Professor of Radiology Leonard Spicer, whose own investigations of cancer exemplified interdisciplinary medical research, *Crossing Boundaries* inventoried a vast array of programs and units and created a typology of interdisciplinary activities and structures. It also detailed the benefits of

⁴ Robert Krueger, “The New Curriculum,” *Duke Alumni Register* (November 1968): 1-9, available at: <https://archive.org/details/dukealumniregist541968/page/n173/mode/2up> (accessed Feb. 27, 2021).

⁵ Indeed, the 1980 strategic plan, *Directions for Progress*, focused resolutely on the need to prune academic departments and programs, including recommendations to shutter the Department of Education and the undergraduate nursing degree.

interdisciplinary engagement for faculty, students, and the university as a whole, refined analysis of the problems that such engagement confronted, and formulated an extensive set of recommendations for how to embed interdisciplinarity more deeply into Duke. The latter included the expansion of provostial investment in emerging interdisciplinary ideas, driven by the most compelling faculty proposals, increases in the number of faculty joint appointments, mechanisms to ensure appropriate evaluation of interdisciplinary research in the tenure process, and provision of more space to interdisciplinary programs. An additional recommendation called for the establishment of a university-wide administrative structure focused on interdisciplinary issues, headed by a vice provost whose portfolio would include interdisciplinary affairs. In addition to consulting with faculty or school leaders around emerging interdisciplinary directions, this vice provost would assist faculty leaders of interdisciplinary units as they hit roadblocks, whether concerning access to space, assistance with grants, arrangements with home units to allow interested professors to engage with interdisciplinary communities, or development of innovative curricular offerings. Finally, the committee called for the establishment of a companion faculty executive committee to work closely with the new vice provost.

Duke's senior leaders took some time to digest the findings of the report, as Keith Brodie took over as President soon after the 1988 publication of the self-study. Reflecting its aspirations, the university created the School of Environment in 1991 by merging the School of Forestry and Environmental Studies with the Duke Marine Lab and the geologists and ocean scientists formerly in Art & Sciences. (The pledge of a major gift in 1995 led to renaming the unit as the Nicholas School of the Environment). Phillip Griffith also oversaw the planning and construction of the Levine Science Research Center during the early 1990s, which dramatically expanded space for interdisciplinary scientific collaborations in diverse fields ranging from environmental studies to biomedical engineering to cancer biology. In 1993, Griffith's successor as Provost, Tommy Langford, created a vice provostship for interdisciplinary activities, initially taken on by the Dean of the Graduate School. A year later, Langford established a dedicated provostial fund to support new interdisciplinary ventures, a step made possible by Griffith's reconfiguration of Duke's approach to academic finance, which freed up funds for deployment by the Provost's Office. A subsequent strategic planning process, which culminated in the 1994 report, [Shaping Our Future](#), highlighted the launch of a more structured approach to providing "seed money for interdisciplinary activity" (p. 6), and celebrated the then still recent creation of a school of the environment as a testament to Duke's "interdisciplinary and collaborative nature" (p. ii). It also called for increased reliance on joint appointments for faculty, and facilitation of joint degree programs for graduate and professional students.

Taking office in 1993, President Nan Keohane and her team played a key role in catalyzing interdisciplinary investments in the humanities and interpretive social sciences. In 1997, Keohane took advantage of a strong relationship with the Kenan Trust to bring about the creation of Duke's [Kenan Institute for Ethics](#). The next year, Provost John Strohbehn took the key step of creating a separate, full-time Vice Provostship for Interdisciplinary Studies (VPIS), the first position of its kind in the country. Strohbehn appointed English Professor Cathy Davidson to the role, a leader who exemplified more than a decade's worth of strategic faculty hiring in the humanities and interpretive social sciences, which put Duke at the forefront of several cross-cutting fields, including gender studies, African-American studies, critical theory, and cultural studies. In 1999, as a means of consolidating these emerging strengths, Duke created the [John Hope Franklin Center for Interdisciplinary and International Studies](#), which a few years later spun out the [Franklin Humanities Institute](#).

Once Provost Peter Lange became Keohane's chief lieutenant in 1999, the tempo of university-investment in interdisciplinary units accelerated, a process facilitated by the financial acumen of

Executive Vice President Tallman Trask, whom Keohane had hired in 1995. In this period, Duke made interdisciplinary research, teaching, and public engagement signature elements of overall university strategy, linked explicitly to a theme of civic engagement. The 2001 plan, *Building on Excellence*, then made financial and administrative support for cross-school interdisciplinary initiatives a core university priority, and identified an ambitious set of twelve focal areas that included neuroscience, genomics, information, climate change, racial equity, and ecology, as well as four additional initiatives (in bioengineering, innovation and entrepreneurship, end-of-life care, and toxicology). To support those ambitions, the Board of Trustees approved the allocation of several hundred million dollars to strategic investments in these areas. As Lange [noted](#) in 2005, “Prior to *Building on Excellence* and the availability of central strategic funds, we had very little capacity to move the university quickly into areas we thought were important.”⁶ Figure 2 shows how priority areas for interdisciplinary investment at Duke have evolved over the past five decades.

Strategic Plan	Year	Priority Areas for Investment in Interdisciplinarity
<i>Summary Report</i>	1972	Aging & Human Development; Demography; Environmental Studies; Policy Sciences & Public Affairs; History of Thought in the Social Sciences; Southern Studies; Social Systems; Medieval & Renaissance Studies; Comparative Literature; Genetics; Black Studies
<i>Crossing Boundaries</i>	1988	Chaos Theory; Materials Science; Gender and the Life Course; Critical Theory; Law & Economics; Ecology; Information Revolution
<i>Building on Excellence</i>	2001	Child Health & Policy; Environmental Solutions; Franklin Humanities Institute; Genome Sciences; Global Change; Information Science & Information Studies; Arts Integration; Materials; Micro-Incentives; Neural Activity; Photonics; Bioengineering; Innovation & Entrepreneurship; Toxicology
<i>Making a Difference</i>	2006	Global Health; Brain, Mind, Genes, & Behavior
<i>Together Duke</i>	2017	Global-Local Connections: Population Health; Race, Religion & Citizenship; Energy & Water Resources

Figure 2: Areas for Interdisciplinary Focus in Those Post-1970 Duke Strategic Plans That Identified Priorities

As outcomes of the 2001 plan, the university founded three additional university-wide institutes, often pulling existing centers into a new administrative orbit: the [Social Science Research Institute](#), which absorbed a constellation of centers (2003); the Institute for Genome Sciences & Policy, also comprising a set of core centers (2003); and the [Nicholas Institute for Environmental Policy Solutions](#) (2005). Each of these institutes received significant core funding from the Provost, and the growing cluster of university-wide institutes collectively embraced a more outward-facing posture, seeking to build close relationships with community organizations (Kenan) or policy-makers (Genome Sciences & Policy, Nicholas). The university also completed a major new science and engineering building in 2004, designed to bring faculty from many fields into regular contact (the Center for Interdisciplinary Engineering, Medicine & Applied Sciences, or CIEMAS), built the Nasher Museum of Art as an interdisciplinary visual arts space in 2005, and renovated Smith Warehouse, which would eventually house the Franklin Humanities Institute and a number of digital humanities and art projects. Cathy Davidson also worked several years to persuade schools to overhaul their tenure and promotion processes, allowing faculty members to ask for representation of other disciplines on tenure and promotion committees and in the selection of external peer assessors.

⁶ “Putting Some SIP into Strategic Planning,” *Duke Today*, Aug. 12, 2005, available at: <https://today.duke.edu/2005/08/sip.html>, accessed Feb. 27, 2021.

The subsequent 2006 strategic plan, [Making a Difference](#), viewed the growing set of university-wide institutes as a crucial platform for attracting faculty talent and excellent students. In addition to calling for the creation of two more institutes, one in Global Health, and one in Brain, Mind, Genes, and Behavior, the plan recommended that the Sanford Institute of Public Policy become a full-fledged school. *Making a Difference* also laid out a framework for joint faculty hires between schools and institutes, called for the exploration of new interdisciplinary certificate programs at the undergraduate and graduate levels, and explicitly identified “knowledge in the service of society” as a key element of Duke’s mission.

Dean of Social Sciences and Psychology Professor Susan Roth became VPIS in 2006, and oversaw the launch of the [Duke Global Health Institute](#) and [Duke Institute for Brain Sciences](#), as well as the implementation of a joint faculty hiring program that brought seventeen faculty to Duke over the following decade, each appointed half-time in a school and half-time in an institute. Furthermore, the Provost’s Office established new rules for the distribution of indirect costs associated with interdisciplinary external grants, to reduce any inclination of department chairs or school deans to ask faculty to shy away from interdisciplinary collaborations.

In the realm of interdisciplinary education, Roth led a process to make it possible for interdisciplinary units to host degree programs. This step paved the way for the adoption of PhD admitting programs in Ecology, Cognitive Neuroscience, and Computational Media, Arts & Culture, Master’s programs in Global Health, Bioethics & Science Policy, and eventually Interdisciplinary Data Sciences, the undergraduate Neuroscience major and Global Health co-major, and a number of interdisciplinary certificates. She also spearheaded efforts to expand opportunities for students across all of Duke’s schools to take part in vertically integrated, inquiry-based, interdisciplinary research teams, which eventually led to the creation of the [Bass Connections](#) program in 2013. Through a \$100 million [fundraising campaign](#), Duke was able to endow the key elements of this program, as well as an additional twelve Bass Connections faculty chairs, awarded across multiple schools to current faculty with strong interdisciplinary research and teaching interests.

During this same period, President Brodhead and Provost Lange forged ahead with four new interdisciplinary initiatives, framed around the topics of [Energy, Innovation & Entrepreneurship](#), [Big Data](#), and [Science & Society](#), in some cases responding to philanthropic opportunities. Relatedly, Lange and Roth oversaw planning for the renovation of Gross Hall, which became an interdisciplinary hub, eventually housing the Social Science Research Institute, the Information and Energy Initiatives, and an outpost for the Innovation & Entrepreneurship Initiative. Between 2006 and 2021, university-wide institutes, initiatives, and centers (UICs) assisted in the recruitment of more than forty additional faculty members with interdisciplinary inclinations through funding for start-up packages and provision of readily identifiable communities. (An addendum provides a roster of the faculty brought to Duke through the Joint-Faculty Hiring Program, or through major financial assistance with recruitment.) All of this interdisciplinary activity depended on both the use of Strategic Investment Funds at the disposal of the Provost and the generation of major new philanthropic gifts, facilitated by the creation in 2006 of a small, dedicated fundraising unit in Duke Development.

The policies and investments that flowed out of *Making a Difference* reinforced one another, having a collective impact that exceeded their individual implications. This strategy, as Susan Roth describes it, represented an “attempt to drive interdisciplinary research, teaching and outreach deeper into the

personality of the University in a *particular* way, that was thoughtfully considered over many years.”⁷ Ideally, that ethos would become sufficiently embedded throughout the campus that it would become reinforcing, shaping faculty hiring practices, the nature of intellectual community, the flavor of education, and so the types of students attracted to Durham.

Reflecting the impact of earlier investments, the most recent and still current strategic plan, [Together Duke](#) (2017), views interdisciplinarity at Duke as a well-established and crucial feature of the Duke intellectual landscape. This blueprint accordingly focuses on strategies for deepening intellectual communities and modes of collaboration and problem-solving in disciplinary as well as interdisciplinary contexts. Important prongs of the plan harken back to earlier modes of using provostial funds to spark faculty ideas for new intellectual configurations. Thus the [Intellectual Community Planning Grants](#) program has seeded dozens of small-scale faculty collaborations around teaching, research, and civic engagement, while the [Collaboratory](#) grants have facilitated the work of ten interdisciplinary faculty research teams, each tackling an applied problem in an area that accentuates the interdependence of global analysis and local decision-making.

Together Duke further supported the expansion of several signature interdisciplinary educational programs. Bass Connections received additional funds to include faculty proposals for research teams that did not fit comfortably in one of the programs established thematic areas ([Global Health](#), [Energy & Environment](#), [Information, Society & Culture](#), [Education & Human Development](#), and [Brain & Society](#)). Resources allocated to the current strategic plan also expanded the reach of the summer [Data+](#) program, through which mini-teams of undergraduates tackle applied data analysis projects, and launched the companion summer [Story+](#) program, which gives similar mini-teams the opportunity to pursue public facing humanities projects.

In addition, *Together Duke* has devoted new resources to interdisciplinary PhD education. The [Graduate Academy](#) provides short-courses around skills like public speaking, science communication, interdisciplinary project management, and digital humanities. The [Graduate Student Training Enhancement Grants](#) program has given ten to twelve PhD students each year the chance to undertake internships with external organizations that amplify and extend their research interests. And the development of [group coaching and peer mentoring](#) programs have connected PhD students from across disciplines to share their common experiences and challenges.

Under President Vincent Price and Provost Sally Kornbluth, moreover, Duke has continued to seize new opportunities to galvanize cross-school, interdisciplinary research, education, and public engagement. These efforts have included support for the growth of a new major university-wide center, the [Margolis Center for Health Policy](#) (created toward the end of the Brodhead presidency), and the launching of robust partnerships between two schools, such as a joint [Materials Science](#) undertaking between Arts & Sciences and Pratt. At the same time, interdisciplinary perspectives and approaches have become more deeply embedded in each of Duke’s schools, among faculty and students alike. This development has created an even greater imperative to ensure that central university investments in interdisciplinarity complement, leverage, and amplify the evolving strengths within schools. Such an adaptive approach depends on regular, effective assessment of existing commitments, as well as the willingness and capacity to redirect resources to emerging priorities.

⁷ Personal communication to the author, March 1, 2021.

The Issue of Review for Interdisciplinary Units

As noted above, before the 1970s, most interdisciplinary units at Duke remained highly dependent on external funding either from foundations or an agency of the United States Government. As a consequence, individual centers and programs often did not last beyond the terms of grants. Those units with more longevity typically had a strong faculty champion who could make the case for bridge funding between grants or more durable university financial support. In many cases, however, the departure of that faculty champion, whether due to acceptance of a position at another university, retirement, or death, meant the demise of the unit.

After 1970, as interdisciplinary investment occurred with more intentionality and amounted to a larger fraction of central university expenditures, senior leaders gave more thought to review processes. One consistent impulse was to insist on the importance of strong mechanisms of accountability, so that Duke would only support interdisciplinary undertakings that were achieving the university’s key missions, and would possess the capacity to redirect resources to promising new interdisciplinary domains. “Interdisciplinary units,” *Crossing Boundaries* suggested, “can and should change even more rapidly than traditional academic departments. Even their existence may change over relatively brief periods of time. Interdisciplinary units therefore can serve as an effective mechanism for testing new areas, sometimes growing and sometimes disappearing” (p. 243-44). Post-1970s strategic plans, however, often said more about the need for regular review and the standards for evaluating interdisciplinary units than about anticipated mechanisms of review. And some plans said little or nothing about these key issues. Figure 3 provides an overview of the key provisions about review and assessment.

Strategic Plan	Year	Review Expectations for Interdisciplinary Units	Review Mechanisms
<i>Summary Report</i>	1972	<ul style="list-style-type: none"> • Any funding commitment for a limited term (e.g. 5 years), with careful review before extension 	
<i>Planning for the Eighties</i>	1978	<ul style="list-style-type: none"> • Need for review of all units, disciplinary and interdisciplinary • Criteria for sunseting programs: <ul style="list-style-type: none"> ○ Relevance to university mission ○ Complementarity to other programs ○ Quality and costs ○ Student demand ○ Existence of substitutes in NC 	
<i>Crossing Boundaries</i>	1988	<ul style="list-style-type: none"> • Call for reviews of new units after 3-5 years • Attention to: capacity to build on university’s strengths; likely potential for enduring importance; and opportunities for outside funding 	<ul style="list-style-type: none"> • Overseen by proposed standing faculty Interdisciplinary Executive Committee • Reliance on external review team • Willingness to discontinue programs as key
<i>Building on Excellence</i>	2001	<ul style="list-style-type: none"> • Regular review essential • Key metrics: <ul style="list-style-type: none"> ○ Value to existing programs ○ External funding secured 	

		<ul style="list-style-type: none"> ○ Synergism with other programs ○ Role in attracting, retaining, and supporting best faculty and students ○ Engagement with areas of strategic importance 	
<i>Making a Difference</i>	2006	<ul style="list-style-type: none"> ● Commentary aimed at both disciplinary and interdisciplinary units ● Metrics linked to interdisciplinarity: <ul style="list-style-type: none"> ○ Increased support for interdisciplinary research ○ # of interdisciplinary opportunities for students ○ Improved visibility of interdisciplinary structures, scholarship, teaching, and translation 	<ul style="list-style-type: none"> ● Expectation of six-year cycle for external reviews of university-wide institutes

Figure 3: Provisions in Duke Strategic Plans about Review of Interdisciplinary Units

For all the emphasis on the centrality of tough-minded review, Figure 4 indicates a lack of granularity in the development of metrics for quality assessment, as well as thin attention to the shape of review processes. Implementation of interdisciplinary reviews has also proved spotty at best. The 1988 self-study, for example, observed that despite the call in the 1972 *Summary Report* for periodic reviews of interdisciplinary units, there was little evidence that they had occurred. The similar recommendation in 1988 for external reviews of larger interdisciplinary units, supervised by a proposed Faculty Executive Committee, also apparently had no immediate impact on practice.

Shortly after becoming VPIS in 1998, Cathy Davidson did oversee a wide-ranging review of centers across campus, assessing the degree to which they created robust intellectual communities, galvanized new areas of research, and enriched student experiences. As a result of this evaluation, the university consolidated and re-homed a number of units by 2002, and also shuttered twenty-five centers that no longer had much activity. Davidson also committed to a similar review every five years.⁸

More recently, the external reviews of signature interdisciplinary institutes called for in *Making a Difference* did occur, beginning in 2013 and concluding in 2018 (see Figure 4). These inquiries followed the longstanding procedures of Duke’s departmental reviews, with the production of an extensive unit self-study; a two-day visit by a group of visiting experts, who interviewed a large number of stakeholders; an assessment report by the review committee, which included recommendations; and a subsequent discussion of the review report and a unit response at Duke’s Academic Programs Committee. This process did generate important policy adaptations. In the aftermath of one review – that of the Institute for Genome Sciences & Policy – senior administrators [concluded](#) that genomics had so permeated the university that the unit had served its purpose, leading to its dissolution, with several component pieces spun out. In the case of other reviews, reports offered recommendations that have shaped significant adjustments in focus and strategy for particular UICs.

⁸ Kevin Lees, “University Raises Bar for Centers,” *Duke Chronicle*, April 24, 2002, available at: <https://www.dukechronicle.com/article/2002/04/university-raises-bar-centers>, accessed Feb. 27, 2021.

Institute	Review Timeframe
Brain Sciences Institute	May 2014 — Nov 2014
Genome Sciences & Policy Institute	Feb 2013 — May 2014
Global Health Institute	Dec 2013 — Jun 2014
Kenan Institute for Ethics	Apr 2014 — Dec 2014
Nicholas Institute for Environmental Policy Solutions	Sep 2013 — Feb 2014
Social Science Research Institute	Apr 2017 — Mar 2018
John Hope Franklin Humanities Institute	Oct 2017 — May 2018

Figure 4: Initial Cycle of External Reviews for Duke’s Signature University-Wide Institutes, 2013-18

The external review process, however, proved to have important limitations. Some reviews were delayed by changes in institute leadership. Review teams consistently noted that the distinctive characteristics of Duke’s interdisciplinary institutes made comparisons to analogous organizations at peer universities difficult. And this approach offered little insight about how the benefits and costs of the reviewed units compared to those of other Duke institutes, or to other mechanisms of fostering valuable interdisciplinary activity. These limitations persuaded Provost Sally Kornbluth to initiate an overarching review of all Duke university-wide institutes and initiatives by the University Priorities Committee in 2017-18. That inquiry made several recommendations about oversight of university-wide interdisciplinary units:

- In general, tighter budgetary constraints, with an overall cut of about 10% in provostial allocations;
- Close analysis of which administrative support functions, like grants management or human resources, might be more effectively delivered centrally;
- Reexamination of governance structures within institutes and initiatives, to ensure appropriate faculty input; and
- Updating of review mechanisms, with an emphasis on internal review and unit comparisons, rather than separate external reviews.

Those recommendations have guided several policy changes with respect to Duke’s university-wide interdisciplinary units, and also shaped the contours of the 2020-21 Interdisciplinary Priorities Committee (IPC). Provost Kornbluth convened the IPC to guide budgetary realignment for investment in interdisciplinary activities in light of Duke’s wider financial challenges. She also charged the committee with identifying the kinds of interdisciplinary public goods most deserving of support from the central administration, and ways to update Duke’s modes of coordinating and orchestrating cross-school interdisciplinary activity across campus.

The convening of the IPC reflects Duke’s decades-long commitment to a vibrant, evolving culture of interdisciplinarity that remains in step with the most compelling societal problems. As this history illustrates, such a culture depends on ongoing attention to lowering the structural barriers that obstruct cross-disciplinary and cross-school research and education, as well as key partnerships with organizations beyond Duke. It also depends on maintaining two types of balance – one between investments in interdisciplinary connections and those in disciplinary community; and one between support for current interdisciplinary configurations and that for emerging interdisciplinary challenges.⁹

⁹ IPC submitted its report of recommendation to Provost Kornbluth in March 2021, with an earlier version of this historical essay among the IPC report appendices.

Addendum: Faculty Recruited to Duke through UIC-School Partnerships, 2006-2021 (N=65)

The following table lists faculty appointed in a school that were brought to Duke through one of three channels: the Provost's School-UIC Joint Hiring Program, which ran from 2008 to 2016; the hiring of an outside founding director of a university-wide institute; or the provision of significant financial support by a UIC to a recruited faculty member's start-up package. The table is organized by school.

Shaded orange (17)	Hired through Provost's School-UIC Joint Hiring Program 2008-2016
Shaded yellow (2)	Hired as founding director of an Institute
All others (46)	Hired with minimum \$75K starting support from Institute/Initiative (& most with much more)

	Dept or Div	Faculty Name	Hire Date	Rank at Hire	Current Rank	Institute/ Initiative	Langford Award	Bass Fellow	Award
A&S: Hum	Philosophy	Wayne Norman	2008	Professor	Professor	KIE			
		Walter Sinnott-Armstrong	2010	Professor	Professor	KIE			
		Felipe De Brigard	2013	Assistant	Associate	DIBS	Yes	Yes	
A&S: Natural Sciences	Biology	Pelin Volkan	2009	Assistant	Associate	DIBS			
		Nick Buchler joint w/Physics	2009-2018	Assistant	<i>(now Assoc at NCSU)</i>	IGSP			
		Vikas Bhandawat	2010-2019	Assistant	<i>(now Assoc at Drexel Univ)</i>	DIBS			
	Computer Science	Cynthia Rudin joint w/ECE	2016	Associate	Professor	iiD	Yes		
	Evolutionary Anthropology	Brian Hare	2008	Assistant	Professor	DIBS	Yes		
		Jenny Tung	2012	Assistant	Associate	SSRI & IGSP	Yes		
		Charlie Nunn	2013	Professor	Professor	DGHI	Yes		2020 UG Teaching
	Mathematics	Gregory Herschlag	2018	Assistant Res	Assistant Res	iiD			
	Psychology & Neuroscience	Avshalom Caspi joint w/Psychiatry	2007	Professor	Professor	IGSP	Yes		
		Terrie Moffitt joint w/Psychiatry	2007	Professor	Professor	IGSP	Yes		
		Gary Bennett	2009	Associate	Professor	DGHI	Yes		
		Tobias Egner	2009	Assistant	Professor	DIBS			
		Ahmad Hariri	2009	Professor	Professor	IGSP			
		Lasana Harris	2010-2014	Assistant	<i>(now Sr Lecturer at Univ College London)</i>	DIBS			
		Eve Puffer	2012	Assistant	Assistant	DGHI			
		Minna Ng	2015	Asst PoP in DIBS	Asst PoP in P&N	DIBS			
	Statistical Science	Katherine Heller	2012	Assistant	Assistant	DIBS			
A&S: Social Sciences	African & African-American Studies	Charmaine Royal primary IGSP, then tenure track in A&S	2013	Associate Res	Professor	IGSP	Yes		
	Cultural Anthropology	Harris Solomon	2011	Assistant	Associate	DGHI			2016 UG Teaching
	Economics	Duncan Thomas	2007	Professor	Professor	DGHI			
		Erica Field	2011	Associate	Professor	DGHI			
	Sociology	Jen'nan Read	2008	Associate	Professor	DGHI		Yes	2020 UG Teaching
		Kieran Healy	2009	Associate	Professor	KIE			
Chris Bail		2017	Associate	Professor	iiD	Yes			

Dept or Div	Faculty Name	Hire Date	Rank at Hire	Current Rank	Institute/ Initiative	Langford Award	Bass Fellow	Award	
Medicine	Biostatistics & Bioinformatics	Barbara Engelhardt	2011-2014	Assistant	<i>(now Assoc at Princeton)</i>	IGSP			2021 Mid-Career
		John Pearson	2015	Asst Res Prof in DIBS	Asst Prof in B&B	DIBS			
		Liz Turner	2012	Assistant	Associate	DGHI			
	General Medicine	Mike Merson DGHI founding director	2006	Professor	Professor	DGHI			2017 Dist. Faculty
	Inf. Diseases	Wendy O'Meara	2010	Assistant	Associate	DGHI			
	Molecular Genetics & Microbiology	David Goldstein	2005-2014	Professor	<i>(now at Columbia)</i>	IGSP	Yes		
		Beth Sullivan	2006	Assistant	Professor	IGSP			
		Debra Silver	2010	Assistant	Associate	DIBS			
	Neurobiology	Jeremy Kay joint w/Ophthalmology	2012	Assistant	Associate	DIBS			2014 Early Career (2)
		Jeffrey Beck	2015	Assistant	Assistant	DIBS			
	Pediatrics	Rushina Cholera	2021	Assistant	Assistant	MCHP			
	Pop Health Sciences	Marc Ryser	2018	Assistant	Assistant	DGHI & iiD			
		Brystana Kaufman	2020	Assistant	Assistant	MCHP			
Psychiatry	Geri Dawson	2013	Professor	Professor	DIBS				
	Asia Maselko	2009-2016	Assistant	<i>(now Assoc at UNC Gillings)</i>	DGHI				
Surgery	Catherine Staton	2011	Assistant	Associate	DGHI				
Nicholas	Environment Science & Policy	Brian Murray	2006	Area Director	Research Prof NSOE appt 2007	NIEPS Now EI Dir			
		Jennifer Wernegreen	2010	Associate	Associate	IGSP		Yes	
		Jay Golden primary NI staff, then NSOE RR	2010-2017	Area Dir, then Assoc PoP	<i>(most recently, Wichita State President)</i>	NIEPS			
		William (Bill) Pan	2011	Assistant	Associate	DGHI			
		Junfeng (Jim) Zhang	2013	Professor	Professor	DGHI			
Nursing	Clinical Health Systems and Analytics	Dori Steinberg primary DGHI, then DUSON tenure track	2017	Assistant Res	Associate	DGHI			
Pratt	Biomedical Engineering	Marc Sommer	2010	Associate	Associate	DIBS		Yes	2017 Advising
	Electric & Computer Engineering	Mary ("Missy") Cummings	2013	Associate	Professor	DIBS	Yes		
		Kyle Bradbury primary EI, then ECE RR	2016	NRR, then Assistant Res	Assistant Res	EI			

Law	Nita Farahany	2012	Professor	Professor	IGSP			
	Steve Roady	2016	PoP	PoP	NIEPS			
Sanford	Tim Profeta primary NI staff, then Sanford RR	2005	Director	Associate PoP Sanford appt 2012	NIEPS Founding Dir			
	M. Giovanna Merli	2008	Associate	Professor	DGHI			
	Manoj Mohanan primary DGHI, then Sanford tenure track	2009	Assistant Res	Associate	DGHI			
	Marc Jeuland	2010	Assistant	Associate	DGHI			
	William (Billy) Pizer	2011	Associate	Professor	NIEPS			
	Candice Odgers	2012-2016	Associate	(now Prof at UC Irvine)	SSRI	Yes		
	Steve Sexton	2014	Assistant	Assistant	EI			
	Matthew Harding	2014-2016	Associate	(now Prof at UC Irvine)	EI			
	Robyn Meeks	2017	Assistant	Assistant	EI			
	Matt Perault	2019	Associate PoP	Associate PoP	S&S			
	Kate Bundorf	2020	Professor	Professor	MCHP & SSPP			
Totals					65	13	4	7