



CASE

CASE WESTERN RESERVE UNIVERSITY

REPORT OF THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND EXTERNAL PARTNERSHIPS

Prepared as part of the Self-Study supporting the application of
CASE WESTERN RESERVE UNIVERSITY
for continued accreditation

HIGHER LEARNING COMMISSION
NORTH CENTRAL ASSOCIATION OF COLLEGES AND SCHOOLS

October, 2004

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EXECUTIVE SUMMARY

Many outstanding interdivisional collaborations and external partnerships contribute to meeting Case's teaching, scholarship, and service missions in ways that enable us to achieve our vision of creating the world's most powerful learning environment, with a transformative impact on all who teach, learn, discover, and work here. The following report is a self-study of collaborations and partnerships at Case, with the objective of identifying the values of these relationships, and the principles and policies that would help us better realize the university's vision.

To collect information, we interviewed present and past leaders of representative collaborations and partnerships, as well as senior administrative leaders of the university. The report was compiled from the interview notes.

Values and Climate

The intellectual basis for collaborations and partnerships is not difficult to understand. By seeking to be the world's most powerful learning environment, we establish the need for flexible, permeable boundaries that will allow us to adapt our virtual size and composition to suit the nature of the projects that we undertake. We can encourage flexible internal boundaries by establishing an open environment within the university to foster collaborations between operating units. We can extend our external boundaries through partnerships with other institutions either locally, regionally, nationally, or internationally. Similarly, achieving national and global leadership roles demands a university that is actively engaged in the world.

In achieving our research/scholarship mission, collaborations and partnerships are essential to provide the critical mass and breadth of expertise needed to address leading edge, interdisciplinary research problems. These programs also offer broader dissemination of research results, and opportunities for field research, with direct participation in the research process by the end users of the knowledge.

Collaborations directly benefit Case's teaching mission by spawning new courses that bridge disciplines, with multiple faculty providing different perspectives – but

providing a common background – to students from different disciplines. In conjunction with research collaborations, educational collaborations can be the basis of entirely new disciplines arising as transformations of established disciplines. Partnerships offer a wealth of experiential learning opportunities, bringing a real-world perspective to classroom learning. Educational partnerships also provide a strong mechanism to leverage the limited resources of individual partners, enabling each to invest selectively in complementary programs while relying on the resources of the partner to offer balanced educational programs. As a result, Case can offer nationally prominent degree programs that it could not otherwise afford.

Case partners with outside institutions both locally and nationally to meet the needs of society as part of its service mission, providing opportunities for both faculty and students to apply their skills to meet real needs, while giving students real-life learning experiences. The university's recent advances in technology transfer provide a good example of how the institution can strengthen the regional economy while extending opportunities to faculty members to become actively and appropriately involved in commercializing the results of their research.

The climate for collaborations and partnerships is good and improving. Low-level (informal) collaborations are particularly easy at Case, and provide building blocks for collaborations at higher levels. New opportunities and incentives are abundant, arising from both internal and external sources. High-level, formalized collaborations and partnerships are not so easy at Case, and their existence and health is testimony to the perseverance and resourcefulness of the faculty. Successes are often achieved at a personal cost to the faculty in terms of diversion from other academic pursuits, with a negative effect on faculty perceptions. A number of policy changes, some potentially significant, would ease the burdens of leadership or participation in interdisciplinary and collaborative activities, thus facilitating faculty engagement in activities that are featured in Case's vision and priorities.

Specific Recommendations

Identifying and Assessing Value: We recommend that all formally established collaborations and partnerships issue annual reports in order to enhance and communicate the broader benefit these programs add to the university and society. These reports should be disseminated to the program participants, to the chairs of participating departments, to the deans of the associated schools, to the external partners, to the Center for Institutional Research, to the Office of Marketing and Communications, and to the provost. A version of the report should be posted on the program’s website for public access. The reports should reflect metrics tailored to particular programs, and should include a financial assessment as well as an analysis of how the program contributes to the mission and vision of the university.

The benefits of these reports should outweigh the effort required for their production. Attention to performance metrics allows the university to optimize its investment resources, pursue additional funding opportunities, reward faculty and staff leaders appropriately, better define program objectives and milestones, and continue investing in programs that are successful.

Program Leadership: Strong leadership is the key to successful programs, yet faculty have little or no formal leadership training. Faculty program leaders should have access to training, mentoring, and assistance in administration. The university should investigate creating a forum for program leaders to share experiences regularly on a peer-to-peer basis. We also suggest that re-instituting an International Task Force to bring together representatives of all units of the university that are active in other countries.

Leaders must receive appropriate recognition and rewards for contributions to the university as a whole, not just to the unit of the university in which they are based.

Investments: Most programs rely on both internal and external funding sources at all stages of their development. Most faculty are well versed in traditional external grant competitions as individual investigators, but are much less knowledgeable about competing for collaboration or partnership type grants, securing

internal funds, and raising funds from private philanthropic sources.

Case should communicate regularly and openly to faculty its internal funding policies, funding priorities, and funding opportunities.

The university should act to increase communication and strategic planning among university units. Mechanisms are required to facilitate the mutual strategic planning and appropriate sharing of program investments.

Sufficient administrative support should be given during proposal preparation to allow faculty participants to concentrate on the scholarly components of proposals.

Investments in collaborations and partnerships should include recruiting a sufficient number of strong participants to guarantee success. A strong program cannot be built by uniting weak participants. Each component must be strong in its own right in order to be an effective contributor to a collaborative effort.

The university should consider allocating specific space for exploratory interdisciplinary collaborations, which often have difficulty competing with more established or traditional activities for scarce space.

New international partnerships should be formed, with critical selection of strong partners in selected countries to maximize their effectiveness.

Successful collaborative programs should be given high priority in the development of endowment to underwrite reinvestment or expansion. Program leaders should have a communications pathway to development staff functions, and faculty should be involved in development activities when appropriate.

Innovation and Management: Collaborations and partnerships need periodic special attention from university administrators, since they generally fall at least partly outside the normal departmental, school, and university supervisory boundaries and operating procedures. A more centralized mechanism of organizing, tracking, and promoting collaborations and partnerships is needed to encourage broader advocacy, responsible management, and maximum effectiveness.

This was often expressed by program leaders as a desire to report to the provost, who has a university-wide perspective, rather than a chairman or dean, who must by necessity focus on an individual department or school.

The subcommittee identified a number of compelling reasons for better central representation, but did not explore in depth the best way to implement it. A central advocate for partnerships and collaborations would (1) provide a common interface to external partners at a high level of the university, (2) provide a common point of information for faculty about central priorities and policies, (3) provide perspective and guidance on the role of the programs in achieving the university's vision, (4) coordinate training and mentoring for program leaders, (5) play a role in strategic planning and investment among university units, (6) act as a matchmaker to link interested participants, (7) exploit the value that partnerships and collaborations add to visibility, (8) ensure that partnerships and collaborations receive appropriate attention in development, and (9) act as a policy change-agent (e.g., regarding financial relations among university units, human resources, faculty development, and non-traditional career pathways) to maximize program effectiveness.

INTRODUCTION

The objective of this report is to present the findings of a self-study of interdivisional collaborations and external partnerships at Case Western Reserve University. The North Central Association's Higher Learning Commission requested the self-study as part of the preparation for university reaccreditation. The subcommittee performing this self-study was appointed by the Steering Committee, with the charge given in Appendix A.

Case Western Reserve University, as its very name suggests, represents a partnership between two institutions of higher education that merged in 1967 to form a single institution. The process of bringing together the traditions, systems, disciplinary structures, and cultures of these two distinct institutions has provided the new university with a wonderful lesson in

both the benefits and the challenges involved in partnerships.

The university is organized into distinct, decentralized operating units structured around the individual schools and colleges. Within most of these units, there are further divisions into departments, generally defined by the scholarly and professional disciplines of its faculty. Many faculty interact on a collegial basis with faculty in other departments and divisions of the university – or with individuals in other institutions – to carry out Case's mission. For the purpose of our review of this topic, we have categorized these relationships as follows, based on the university status of the participants.

- A *partnership* is defined as a regular, predictable relationship between the university or one or more of its academic operating units and an outside entity.
- A *collaboration* is defined as a regular, predictable relationship between two or more academic operating units of the university.

Either type of relationship should involve some exchange of value (quantitative or qualitative) and/or the mutual achievement of a goal unattainable by the participants working independently. Some relationships that have not been formalized are nonetheless recognized as such.

Collaborations and partnerships differ in their scale of interaction, but provide the essential role of bringing together individuals, programs, and institutions for their mutual benefit. In some cases, the benefit is achieved by building a critical mass in a focused area, and in other cases by uniting complementary strengths to build a multi-faceted program. In either case, the university intends that these relationships will advance the university's mission in a desirable way, and is committed to encouraging their development and success.

METHODOLOGY

Our general approach to data gathering was to compile an inventory of Case's partnerships and collaborations, and interview leaders of a sample of representative

programs. We also interviewed upper level university administrators. Our report was compiled from the interviews and interview notes.

Our list of partnerships (Appendix B) and collaborations (Appendix C) was intended to cover a wide spectrum, but not to be exhaustive. We attempted to identify programs involving every school, with either short or long histories, involved in missions of education, research, and/or service, and perceived as either being successful or not successful.

We selected for study a small number of representative programs, with the same general selection criteria. We interviewed current program leaders and, when possible, founding leaders, and in the case of partnerships, the leader from the partner institution. All interviewees were assured that their responses would remain confidential within the subcommittee, since we were attempting to derive general principles rather than specific issues about individual programs. A set of guiding questions was prepared and sent to all interviewees ahead of the interviews. Interview teams consisted of two or three subcommittee members, with representatives from different schools or university divisions. Following the interview, each team prepared a summary of the responses, which were then distributed to each committee member via email.

We also interviewed the dean or acting dean of each college or school, the current provost, a former interim provost, and a former provost and interim president. The current president provided written responses to the questions. These interviews focused on the value of partnerships and collaborations to the university, and the policies affecting these programs.

To conduct business, the subcommittee met as a committee of the whole approximately once or twice a month to plan and review the interviews. Based on the discussions and the summaries, the subcommittee chair drafted a report, which was circulated to all committee members via email. Responses were collected via email, and several meetings were held to discuss and revise the draft.

ACHIEVING THE CASE MISSION AND VISION

The university's vision, reproduced below, identifies specific characteristics of how the university will fulfill its missions of research, education, and service. Partnerships and collaborations are integral components of our academic fabric at Case and are vital to achieving this vision.

Case Western Reserve University strives to be the most powerful learning environment in the world. We seek to have transformational impact on all who teach, learn, discover and work here so they are prepared and engaged to serve humanity. As a great research university, we must embrace responsible risk-taking in pursuit of bold aspirations for national and global leadership.

- We combine *experiential learning with rigorous scholarship* in our undergraduate and all educational programs to produce educated learners who are awake to new possibilities.
- We invest in the arts, humanities, and social sciences as important areas of scholarship and as an essential foundation for preparing morally and socially responsible life-long learners.
- We build on our existing strengths, including engineering, biomedical sciences and professional education, and pursue *productive partnerships* with other outstanding institutions.
- We are guided by our values at every level to promote a diverse, challenging, supportive, entrepreneurial, and interdisciplinary environment of openness, respect, accountability and academic freedom.

To illustrate the range of partnerships and collaborations at the university, and the range of missions, we have appended to this report an inventory – not complete, to be sure, but approaching completeness – of the many partnerships and collaborations we have identified.

The intellectual basis for seeking relationships such as these is not difficult to understand. By seeking to be the world's most powerful learning environment, we establish the need to be a university with flexible,

permeable boundaries that will allow us to adapt our virtual size and composition to suit the nature of the projects that we undertake. We can encourage flexible boundaries by establishing an open environment within the university and with other institutions either locally, regionally, nationally, or internationally. Similarly, achieving national and global leadership roles demands a university that is actively engaged in the world.

Interactions bring many benefits to Case. In terms of its *research mission*, collaborations and partnerships are essential to bring together the breadth of expertise needed to address leading-edge research problems. Individual university units are generally intentionally focused in a few specific areas, in order to achieve critical mass and distinction. Problems that require interdisciplinary or multidisciplinary approaches must be addressed through collaborations and partnerships. The drive to collaborate can be self-generated, to satisfy intellectual curiosity. Often, federal agencies or foundations define specific research opportunities and priorities. Similarly, companies look to universities for specific intellectual property. A productive and competitive response to these market demands can sometimes be achieved only through collaborations and partnerships.

Partnerships offer opportunities for academics to disseminate their research results more effectively and to perform field research that might be unavailable otherwise. The practical application of research results is often only possible or appropriate outside the university. Partnerships with end users facilitate good transmission of research results, and offer opportunities to gather additional data that can be used for iterative enhancement of intellectual property or the basic store of knowledge.

Case's *teaching mission* benefits from richer experiences for both students and faculty through partnerships and collaborations. Team teaching collaborations bring multiple perspectives to courses, which might not be taught otherwise, and bring together students from multiple disciplines. Collaborative teaching is particularly beneficial at providing a common background and language to help bridge

disciplines. Teaching collaborations often evolve from interdisciplinary research collaborations, and mentoring student research is another aspect of teaching. Collaborative student research teams reinforce a common language and interdisciplinary perspective. Partnerships open opportunities to provide real-world training context and perspective, an important aspect of experiential learning for our students. The reverse, teaching delivered to students associated with external partners, extends knowledge transmission beyond our campus borders.

Partnerships and collaborations attract students and faculty to Case. Both groups search for universities with excellence in specific disciplines, but they also look for relevance to their individual goals and their values. This relevance can be greatly enhanced and even defined by the university's partnerships and collaborations.

Case's statement of vision is explicit with regard to preparing and engaging individuals to be morally and socially responsible and to serve humanity. Case partners with outside institutions both locally and globally to meet the needs of society as part of its *service mission*. Service activities meet the dual need of applying the skills of students and faculty to meet real societal needs, while giving students real-life experiences that reinforce their learning in ways that prepare them for life after graduation.

Case's vision explicitly commits to investments in the arts, humanities, and social sciences. The arts offer a specific example of partnerships that are the bedrock of degree programs, in that completion of degree requirements depends upon partnerships. Through partnerships the university is able to offer top quality degree programs at a fraction of the cost (which would otherwise be prohibitive in number of faculty required and in facilities). Through these joint programs, Case and its partners leverage their individual investments to achieve national significance.

Some aspects of the importance of partnerships and collaborations apply across the research, teaching, and service missions. Case and many of its partners are relatively small institutions with limited resources. They can achieve greater success through collaboration among

small but strong programs, offering greater breadth and depth than the individual partners can hope to develop on their own. Participants in these activities also benefit from the halo effect of enhanced visibility and marketing, with the potential for greater recognition and philanthropic support. While partnerships and collaborations allow Case and its partners to pool and optimize their resources to achieve greater efficiency by limiting duplication, they also demand continuing *coordinated* investment in core program strengths.

EXAMPLES OF SPECIFIC COLLABORATIONS AND PARTNERSHIPS

The generic descriptions in the previous section do not do justice to the contributions of most collaborations and partnerships, and do not convey the excitement surrounding these programs. We have chosen to highlight, with brief summaries, four examples of partnerships and collaborations covering the education, service, and research missions of the university.

Partnerships in the Arts

Case has outstanding partnerships in the arts, including those with the Cleveland Institute of Music (CIM) and the Cleveland Play House (CPH). Both partnerships provide unique educational programs and scholarship, with the added benefit of community service through performance.

The Joint Music Program is a 35-year-old partnership between Case and CIM. Undergraduate and graduate students from both institutions study music theory and applied music at CIM, which is a professional conservatory, and study music history and music education – as well as other arts and sciences disciplines – at Case. Many performance ensembles are open to students from both schools. The music libraries at the two schools coordinate their collections to maximize the benefit to both schools. Current enrollment in the joint program is somewhat over 450 students (c.375 at CIM and just under 100 at Case).

The Joint Music Program provides a wider and more balanced set of music opportunities at each institution

than would be possible alone: Case's students can take advantage of a much higher level of applied music instruction than would otherwise be possible; CIM's students have access to a greater breadth of opportunity in music education, musicology, and early music performance than is typical for conservatory students; and overlapped degree programs such as the five-year BM/BS in performance and music education offer special opportunities for qualified students.

The mission of the eight-year-old MFA Program in Theater is to educate scholar/artist actors who will not only be able to compete professionally in today's theater but be capable of affecting the direction of theater in the future. The MFA Program also gives technical support to Case's undergraduate program in theater through lending the expertise of MFA graduate students to undergraduate productions and affording occasional opportunities for undergraduates to serve as interns at the Cleveland Play House. Beginning in 2003-2004, the MFA program moved in its entirety to the CPH (classes and productions).

In the past five years the reputation of the program has accelerated upward and it is now recognized as a major player in the world of actor training in this country. This has raised the awareness of Case as a growing force in the arts in America. This year all of Case's third-year graduate students, as part of their internship at the CPH, are performing significant roles on the Play House stages in their main stage season productions. In other programs, student interns are often relegated to small roles at best in the related professional theater.

These unique arts partnerships align well with the university's vision: experiential learning is at the heart of the programs; they place the arts in a more prominent position within the university; and the partnerships are with leading Cleveland cultural and educational institutions. As a result the programs have gained a national reputation and attract top students from around the country. In addition there is a synergy between the educational missions, the service mission of performance, and in the case of music, further service as a resource for the region's primary and secondary schools.

The Mandel Center for Nonprofit Organizations

The Mandel Center is an interdivisional collaboration of the Mandel School of Applied Social Sciences, the Weatherhead School of Management, the School of Law, and the College of Arts and Sciences. The official mission of the center is: “To enhance the effectiveness of nonprofit leaders and the organizations they serve through education, research and community service.” Founded in 1984, the Mandel Center offers the nation’s most fully developed program in nonprofit management and was one of the first university-based programs in the country focused on the education of nonprofit leaders and managers. The Mandel Center also includes service partnerships with community based non-profit organizations, offering student assistance in strategic planning, and customized training programs for organizations.

Some significant accomplishments of the Center are:

1. The very creation of the center. It was one of the first nonprofit management centers in the nation, and remains one of the few truly interdisciplinary nonprofit management centers.
2. The decision by the Nonprofit Academic Centers Council (NACC) to co-locate its national headquarters with the Mandel Center. Center faculty were involved in the creation of the Council, and serve in leadership positions.
3. National preeminence of the Masters of Nonprofit Organization (MNO) program and its faculty. The Mandel Center MNO has been consistently ranked among the top ten and several faculty members are regarded as leading scholars in nonprofit studies nationally, and
4. Leadership and location for 14 years of the *Nonprofit Management and Leadership*, the first nonprofit management journal focusing on this sector.

The Center’s program addresses the main elements of Case’s vision statement: *transformational impact; experiential learning with rigorous scholarship; invest in the arts, humanities, and social sciences; build on our existing strengths; pursue productive partnerships; guided*

by our values... In addition, the Center represents a good intellectual model for interdisciplinary collaborations.

The Healthy Smiles Sealant Program

The Healthy Smiles Sealant Program is a partnership of the Case School of Dental Medicine, the St. Luke’s Foundation, and the Cleveland Municipal School District. The primary community service mission is to reduce disparity in oral health care for minorities and the underserved, especially children. The objective is for all children to have daily oral hygiene, and dental care every six months provided by a consistent dentist that includes preventive sealants. Last year, Case provided approximately \$2.25 million in free dental care through Healthy Smiles by applying a protective sealant to the children’s first and second permanent molars.

There is also an educational mission to provide dental students, beginning in the first year, “exposure to the needs of underserved children and the communities in which they live.” There are plans for research projects related to this work.

The impact of Healthy Smiles is indicated by the following specific accomplishments:

1. The program director feels that the Sealant Program had an influence on the Dental School’s decision to offer a Doctor of Dental Medicine degree, with a focus on prevention, rather than the more traditional Doctor of Dental Surgery, which follows a surgical model.
2. The clinical experience offered to first year students through the sealant program is one of the main reasons why prospective students apply to the Dental School. Most dental schools allow no clinical time for first year students, while Case incorporates more clinical experience (>100 hours) than any other dental school.
3. Support from the St. Luke’s Foundation changed from grant status to a continuously funded initiative in 2001, reflecting very strong external endorsement of the program. Funding has expanded with grants from the Robert Wood Johnson Foundation, the Cleveland Foundation, and others. This additional funding allowed for educational components and added personnel in the program.

4. Other dental schools nationwide have requested consultation from the director about the program, which has been recognized in the *New York Times* as an exemplar of community service.

The Center's program addresses several main elements of Case's vision statement: *transformational impact; experiential learning with rigorous scholarship; build on our existing strengths; pursue productive partnerships; guided by our values.*

The Department of Biomedical Engineering

Case's BME department was established formally in 1968 as a collaboration between the School of Engineering and the School of Medicine. The department mission is to promote human health through education and research that bridge the gap between medicine and engineering.

BME is a unique department at Case. Faculty undergo the full appointment and promotion review process, hold full appointments, and have full voting privileges in both schools. In all other ways, the department is administered exclusively through the Case School of Engineering. The chairman reports to the engineering dean, and tenure resides in engineering.

BME also has strong informal research and education collaborations with other university units and partnerships with the major medical centers in Cleveland (CCF, UH, MHMC, VAMC) that are recognized by joint or adjunct faculty appointments (currently about 50 in number). Through research collaborations, associated faculty serve as research mentors for about 30% of the graduate students, and also contribute to teaching and undergraduate research mentoring.

Some significant accomplishments of this department are the following:

1. The department has been consistently ranked in the top ten undergraduate and graduate programs in the country, providing high visibility to Case and attracting a large number of highly qualified students.
2. The department has grown significantly since 1996 as a result of internal and external investment. Primary faculty size has increased by 50%, research

expenditures have grown at an average annual rate of 18%, undergraduate enrollment has almost tripled, and the undergraduate co op program has doubled each year for the last three years to the point where it has the second highest number in fall semester of 2004.

3. BME faculty are the leaders of several interdisciplinary research and training centers, involving investigators from many departments and institutions. One of these, the Cleveland FES Center, was selected as this year's recipient of the Maurice Saltzman Award from the Mt. Sinai Health Care Foundation. This award is given "in recognition of work of significance, or merit, or of national, or international importance to the health interests of our community."

The BME department's contributions to the education and research missions of the university help significantly in achieving the Case vision. The department builds on the university's strengths in engineering and medicine through productive partnerships. The department mission is guided by values that emphasize service to humanity. The undergraduate and graduate education programs are rigorous and combine classroom and experiential education. The very act of creating the department, one of the first in the country, represented responsible risk taking, as does the recent reinvestment that was highly productive in maintaining excellence. The department is an excellent example of a powerful learning environment where students and faculty are fully engaged in transforming their own lives as well as the lives of others who will benefit from the marriage of engineering and health care.

THE CURRENT CLIMATE FOR COLLABORATIONS AND PARTNERSHIPS

The number and vitality of collaborations and partnerships at Case, as described above, indicate that the climate for such programs is very good. There are several intrinsic motivating factors, as well as formalized structures that contribute to the positive side of the climate.

Opportunities and Incentives

Intellectual curiosity, coupled with dedication to education, research, and service, are strong motivations for faculty to form collaborations and partnerships, while the personal rewards of success and recognition will always be strong incentives. In addition, formalized opportunities and incentives are fueling an increase in the level of collaborations and partnerships.

In a sense, we are experiencing a new age of cooperation. At the national level, federal agencies are explicitly requesting or even mandating interdisciplinary approaches to research and training. Regionally, institutions are collaborating to build regional or national centers of excellence, and universities are collaborating with industry to transfer the results of research for the benefit of the nation. In this environment, isolated departments or institutions simply cannot compete on their own.

The new Case vision, which explicitly identifies partnerships and community integration, was introduced formally at President Hundert's inauguration in January 2003 in connection with a colloquium on *Great Universities and Their Cities*, which was co-hosted by President Hundert and Cleveland Mayor Jane Campbell. The colloquium was a highly visible statement to the city and the nation that Case is going to fulfill its promise of being a strong force for regional benefit. Case has gained significant local visibility as a result, and the region has renewed expectations that the institution will fulfill this vision.

Within the region, Case has recently forged new, formal partnerships with several strong medical institutions, including a new fifty-year agreement with University Hospitals of Cleveland, that includes joint ownership of the Case Research Institute; a new medical college in cooperation with the Cleveland Clinic; and the creation of BioEnterprise, a new business development partnership with the Cleveland Clinic and University Hospitals Health System. These partnerships, and a host of other non-medical partnerships, reflect a new regional climate of openness and cooperation, with the expectation that the individual partners will benefit as the whole region benefits, i.e., “*a rising tide lifts all boats.*”

A decentralized structure such as Case's is not by its nature conducive to initiating or maintaining such high-level, complex collaborations, but new university programs are providing financial incentives for interdisciplinary efforts. For example, last year's competition for New Vision Investments gave greater priority to programs that encouraged links within and beyond Case, and that would bring value to more than one of the university's operating units. Presidential Research Initiative Awards (\$50K each) have recently had a strict requirement for collaboration among investigators in at least two distinct operating units (schools) of the university. Larger collaborations (up to about \$500K) are supported via the Provost Opportunity Funds competition, representing an opportunity for the provost to promote collaborations or partnerships. Interdisciplinary characteristics have not been among the program's requirements in the past, and the highest priorities were for programs supported by the deans, putting interdisciplinary programs in competition with the direct interests of individual schools.

Case's business development initiatives in the medical area are part of its broader effort to strengthen technology transfer that was launched about five years ago. With increased staffing and investment, the university has succeeded in making this form of collaboration a competitive advantage for the institution and the region, overcoming an earlier deficiency.

In summary, the climate for collaborations and partnerships is good and improving, with new opportunities and incentives both internal and external to the university. The existence and health of many successful high-level collaborations and partnerships at Case are testimony to the perseverance and resourcefulness of the faculty. Successes are often achieved at a personal cost to the faculty in terms of diversion from other academic pursuits, with a negative affect on faculty perceptions, as we will describe in the section on policies. Significant administrative changes would greatly assist faculty ambitions to fulfill Case's vision in a way that would allow them to remain fully engaged in scholarly activity. Case's small size should make it easier to positively affect the climate than it

would be in a larger university. We will cover specific recommendations to enhance collaborations and partnerships in a later section.

IDENTIFYING AND ASSESSING THE VALUE OF COLLABORATIONS AND PARTNERSHIPS

Benefits of Measurements

The value of collaborations and partnerships to Case can be tied directly to the mission and vision, as described qualitatively in the first section of our findings. However, there are many benefits of supplementing qualitative assessments with quantitative measurements:

- *Investing more wisely by optimizing limited resources.*

The vision statement embraces “responsible risk taking,” which implies that investments of money and effort must be made in a way that will help the university better achieve its mission and vision. Responsibility mandates that Case be able to measure its investment costs both in terms of dollars and in terms of lost opportunities, recognizing that investing in one program will usually mean not investing in other programs because of limited resources. These measurements will allow Case to rationally invest in new programs, reinvest in successful programs to continue them or to improve outcomes, or discontinue failing programs.

- *Increasing resources through better visibility.* Both quantitative and qualitative measurements provide concrete illustrations of the value added by successful university activities. Metrics provide the seeds for news releases, news articles, stories for the university web site, brochures, recruiting pamphlets, etc.

Successful program outcomes also provide the basis on which the university can effectively pursue additional external funding opportunities, such as program development grants from agencies and foundations, or individual donations from philanthropists. All of these funding sources

want to see measurable positive outcomes, both qualitative and quantitative, from previous investments, as evidence that their future investments will be used effectively.

- *Rewarding faculty and staff who lead or participate in successful programs.* Since collaborations and partnerships fall at least partially outside the usual reporting boundaries of departments and schools, their value to the university as a whole may not be apparent to the department chairs and deans who set faculty salaries and who play a large role in faculty promotion and tenure decisions. Explicitly identifying and quantifying program value will provide a basis for appropriate recognition and rewards. It could also provide a basis on which to develop an appropriate reporting and cost/income sharing structure.
- *Forcing clear definitions of program objectives and performance milestones.* Many partnerships and collaborations start out as incomplete ideas with value-driven goals. Mandating the establishment of specific measures of qualitative and quantitative outcome as part of the formative process helps to clarify objectives, to identify primary and secondary consequences of program investments, and to establish milestones of program performance.

Recommendations for Program Assessment

We strongly recommend that partnership and collaborative programs publish annual reports. Preparing reports requires effort, but the values outlined above are so great that an annual report should be required for each formally recognized collaboration or partnership. Reports should be disseminated to the program faculty, to the chairs of participating departments, to the deans of the associated schools, to the external partners, to the Center for Institutional Research, to the Office of Marketing and Communications, and to the provost. A version of the report should be posted on the program website for public access.

All programs should report commonly expected types of information, which can be divided into the following major sections, only a few of which require further description:

- Executive Summary
- Mission, Vision, and Objectives
- Summary of Activities and Accomplishments
- Performance Metrics
- Future Plans
- Program Leaders and Members
- Financial Information

Although the report sections are generic, the content and organization within sections must be individualized.

In addition to reporting the program’s mission, vision, and objectives, the report should state how the program contributes to the mission and vision of the university.

The choice of specific performance metrics will vary according to the different programs, since they have widely varying missions and objectives. Metrics should be chosen to assess performance according to the research, education, and service missions of the university, and also how the program contributes to meeting Case’s vision. The university “Dashboard” includes 25 specific metrics to assess how well the institution is achieving its vision. Some of these would be applicable to partnerships and collaborations, but the dashboard does not specifically identify metrics for individual programs.

Typical research metrics include level of funding, number of faculty involved in research projects, and publications/patents. For collaborations and partnerships, both individual and collaborative metrics should be reported separately, since both might be affected in different ways by collaborations. Other metrics of research quality are reflected in faculty and student honors and awards, invited presentations, participation in national advisory panels, etc.

Typical education metrics include number of students (e.g., applications, acceptances, matriculations), student characteristics (e.g., standardized test scores, diversity), and program achievements (e.g., time to graduation, experiential education involvement, post-graduation

placement, and student satisfaction). For partnerships and collaborations, metrics should be designed to reflect the value added by the program, which are not captured by the standard metrics. For example, interdisciplinary education and training programs might measure the enrollment in courses taught by faculty from multiple departments or institutions, or the number of doctoral students with joint research supervision across departments or institutions.

Suggested service metrics include the number of people and/or organizations served, as well as the types and range of services provided. Service missions are closely intertwined with education or research programs, so service accomplishments will be reflected in those metrics as well.

Overall program quality is difficult to measure quantitatively, and is best measured by indirect metrics, including the metrics given above for research, education, and service. Other proxy metrics include invitations to speak about the program, website hits, attendance at program sponsored workshops or symposia, and national or international rankings. Funding is another metric that reflects the quality and effectiveness of programs, and whether programs help achieve the missions/visions defined by others. Thus the level of investment, and especially competitive reinvestment, is a proxy for overall quality. External funding (by foundations, philanthropy, agencies, recipients, etc.) of program operating costs is a strong indicator of perceived program value.

The financial information embedded in the previously described metrics gives an incomplete picture of the overall program costs. Therefore, the annual report should contain an independent assessment of income and expenses – equivalent to a formal profit and loss analysis. The intent of the analysis is to provide a realistic assessment of the expenses from all sources, and the income contributing to the program operation. Since resources and expenses are associated with multiple schools and/or institutions, this analysis might be the only overall accounting of most collaborations and partnerships.

Finally, metrics should be reported and tracked over time to assess program changes. This is especially important for assessing the effects of new initiatives, the return on investment, and the need for reinvestment for continued program success.

POLICIES TO FACILITATE FORMING AND NURTURING COLLABORATIONS

Case expects to be, and to be recognized as being, an elite institution that demands academic excellence. Faculty hiring is highly competitive, and faculty are attracted here because they see the potential for greatness, with many of the right ingredients in place. This general commitment to outstanding performance is a very valuable asset. What policies should Case pursue to make the most of this potential?

In our discussions with dozens of people involved in partnerships and collaborations, the most common reaction to the question of whether Case's existing policies with regard to these programs were appropriate was "What policies?" The fact that Case has very few policies governing partnerships and collaborations is good in the sense that few policies stand in the way of novel ideas. However, this lack of policies can also be a drawback: when everything is done on an *ad hoc* basis, people must continually reinvent the same infrastructures; people may not pursue their vision because they do not see an established pathway or because there are no visible resources; and continuing support for programs is overly dependant on personalities. Overall, there is a negative attitude among many people who have developed programs, which has created a number of negative perceptions among other faculty. We feel it is important to summarize these perceptions before talking about specific policies and recommendations that might ameliorate some of these perceptions.

Faculty Perceptions

Case attracts faculty who are ambitious and goal driven, and who often come from the top research institutions in the world. Faculty are generally entrepreneurial, choosing

to come here because they see the potential for achieving greatness by drawing on strengths of the university's programs and its regional, national, and international partners. They appreciate the ongoing high level of collaboration and partnership, and anticipate creating new collaborations and partnerships to achieve their objectives. How does this anticipation hold up over time as faculty and students get integrated into the community?

In general, low-level collaborations among faculty are extremely easy to accomplish here. In contrast to many other institutions, there are few barriers to joint research collaborations across departments, across schools, or across institutions. There is a rich history of productive and collegial relationships among small groups of faculty, and among faculty and their counterparts at other institutions. This has even been true when researchers collaborate across institutions that are perceived to be competitors at higher levels (e.g., between staff at the Cleveland Clinic and faculty at the School of Medicine, which has had very strong ties to University Hospitals of Cleveland). Sufficient policies have been in place for appropriate subcontracting and/or transmission of salaries and indirect costs that low levels of shared activity have not been a burden for most researchers. Secondary or adjunct faculty appointments allow faculty to get recognition for contributions to different departments or institutions, but are generally not even required for collaboration.

There are also many examples of high level and complex collaborations and partnerships at Case, as described above, but the climate for these is distinctly different. The general perception is that successful and valuable relationships can be established, but at a substantial cost in effort for the faculty who lead such programs. Before analyzing the underlying causes, it is important to describe the rest of these common perceptions regarding larger, more elaborate collaborations and partnerships:

- There is a general anticipation of frustration, and this anticipation is realized often enough that it serves as a disincentive for making the effort to launch a partnership or other collaborative effort.

- Faculty perceive high transaction costs associated with these efforts, with the result that a faculty member's scholarly productivity will suffer.
- The rewards for building collaborative programs are less than those associated with other types of scholarly activities, and may also bring negative political consequences if credit is not handled with care.
- Although programs are welcomed and even lauded by the administration, they may not receive adequate early investment or administrative support, and may not be identified as priorities for fundraising. Faculty members are expected to gather the essential resources from outside the university.

We feel the need to emphasize that these are just perceptions, and reflect human tendencies to dwell on difficulties at the expense of ignoring success. People spend more time and effort, and express more anxiety, on administrative obstacles that they do not want to deal with, than they do on equally challenging scholarly obstacles. However, the truth underlying these perceptions provides insight into methods to improve the climate for successful collaborations and partnerships.

Collaborations and partnerships are a two-edged sword. They are tremendously valuable for establishing strong research and teaching connections with colleagues. The opportunity to reap the benefits of such programs may even be an important reason a faculty member chooses to come to Case. In contrast, the effort involved in building up significant programs is, at the very least, not always perceived as being part of a faculty member's main mission and may not bring commensurate recognition and rewards. On this basis, the common view is that untenured faculty, and also more senior faculty who are unwilling to shoulder a significant administrative burden, should carefully balance their commitments to program participation vs. program building. The question of balance is certainly not unique to Case, but represents a particularly important issue to an institution that has embraced partnerships and collaborations as essential elements of its vision for the future.

While untenured faculty should not be discouraged from participating in beneficial ways in collaborations and partnerships, the extent of their participation should be made explicitly clear to chairs and deans involved in the promotion and tenure process.

We have categorized general principles that determine success of collaborations and partnerships into those involving *Leadership, Investment, and Management*. These principles should guide the development and implementation of new policies.

Leadership Selection, Development, and Recognition

A strong faculty leader, with a vested interest, is critical to the success of any academic program. The leader must be prepared continually to champion the program, develop and administer resources, recruit participants, and manage execution – particularly so when the program is a partnership or collaboration. Since these tasks generally fall into the service category of a faculty member's job description, they may not contribute directly to scholarly recognition – even if the program is heavily oriented to research. Furthermore, since the program's resources are generally distributed among many participants, there may only be a small direct return to the leader's own scholarly activity. Thus, it is imperative that the leader be someone with a broad vision and deep commitment to the program's objectives. It is also important to evaluate the contribution of the leader carefully and appropriately.

Faculty program leaders should have access to training, mentoring, and assistance in administration. People are not born with good administrative skills, and administration is not a normal component of graduate education. Faculty leaders of programs should receive appropriate staff support in administration and financial areas. An equally important form of support is access to formal administrative training and to mentoring by more experienced leaders. The university should investigate creating a forum for program leaders to share experiences on a regular peer-to-peer basis.

Leaders must receive appropriate recognition and rewards. Since the added value derived from a successful collaboration or partnership goes far beyond the

individual, annual compensation adjustments as well as promotion and tenure decisions must reflect the scope of this added value. A lower rate of scholarly productivity or a lower teaching load must be expected for someone who is heavily involved in building programs that benefit a large group of faculty.

An additional area of concern is worth noting here. While the university has an active and effective support function for international students, it offers little or no support or coordination for other kinds of international partnerships. The challenges facing leaders planning to initiate such programs are considerable, ranging from the need for specialized knowledge about immigration issues and multi-national protocols to the very common expectation by governments of other nations that there will be senior university officers engaged in these programs. Information gathered more than a decade ago suggests that faculty and administrators at the university have contacts and experience in more than 100 other countries. This is a valuable pool of information and expertise that could contribute importantly to the success of partnerships with universities and other entities in these countries.

We suggest that an International Task Force be reinstated to bring together representatives of all units of the university that are active in other countries. This would reinstate the kind of resource-sharing that was present at Case during the 1980s and 1990s, and would lead to much greater success in international programs.

Investment

Faculty have academic freedom to engage in scholarly activities of their own choosing, within the constraints imposed by other responsibilities. However, Case is not obliged to assist or invest in every proposed collaboration or partnership. What expectations should faculty have?

Successful programs depend on a series of investments: seed investments to incubate new ideas; startup investments to initiate programs; and continuing re-investment for program support, expansion, or renewal. In the long run, programs must become self-sufficient in the sense that the added value exceeds costs (see assessment, above). Generating income from tuition,

donations, endowment, grants and gifts, etc., is a shared responsibility of the faculty and administration, but the expected division of effort should be clear. Most programs rely on both internal and external funding sources at all stages of investment.

Case should communicate to faculty its internal funding policies, funding priorities, and funding opportunities. Since multiple individuals are involved, maintaining good communication is critical to maximize program potential and to avoid individual frustration. External funding opportunities and priorities are readily visible to anyone via multiple web-based resources and regular email list servers to which many faculty subscribe.

Internal funding priorities, opportunities, and criteria should be just as clear. Most existing collaborations and partnerships have been funded outside of any formal internal program initiation mechanism (PRI, NVI, POF, etc., as noted above), and there is no formal mechanism to submit *ad hoc* proposals for funding. This is especially true for collaborations, where the faculty leader may be required to present proposals to multiple department chairs in multiple schools. When several university operating units are involved and their decisions are made independently, it is difficult for faculty to coordinate – or perhaps even understand – the decision-making process or investment sharing. Further, inter-unit decisions appear to be given low priority in each unit. Without any formal mechanism for central coordination, the faculty members are often the only ones who are sufficiently interested to push the proposal forward. They may be in a weak position of power to do so, however, with the result that decisions are often made poorly and late.

The university should act to increase communication and strategic planning among university units. Collaborations require mutual or complementary interests and strengths in different schools. Low-level collaborations can start when faculty in different schools discover each other, a process which has been facilitated recently by Research ShowCase. Achieving critical mass usually requires investments in faculty, facilities, and operations, however, and these are done at the level of the individual departments and schools. Mechanisms are required to facilitate the mutual strategic planning and appropriate

sharing of program investments, which currently rely too much on chance and on the parochial needs of individual departments and schools. These mechanisms should be forward-looking, anticipating what will be required in the future so the university can be a leader rather than a follower.

The level of investment needed by the university will vary with different programs and with the availability of external support. If competitive external support is available, then it should be pursued. Sufficient administrative support should be given during proposal preparation to allow the faculty to concentrate on the scholarly components of proposals. Large grants to support the operations of collaborations and partnerships frequently carry a large burden of documentation, much of which can be supplied by staff members.

Successful collaborations and partnerships require a critical mass of strong faculty. A successful partnership cannot be created from a collection of weak participants. Therefore, if the group does not have critical mass, investments should include recruiting a sufficient number of strong participants to guarantee success.

Co-location of faculty can often facilitate collaborations by bringing together critical shared facilities, and by immersing people from different disciplines in a common environment where they interact continually and learn from each other. Such space need not be permanent, and perhaps the university should consider designating areas for transient interdisciplinary collaborations. Successful collaborations that grow to significant levels of activity can then be moved to permanent homes.

Valuable programs need a mechanism for ensuring long-term support. Programs have needs that cannot always be met by external funding or tuition, such as facility renewal, faculty replacement, etc. Successful collaborative programs should be given high priority in the development of endowment to bear the costs of reinvestment or expansion. Faculty are often willing to participate in development activities, and can be quite effective communicators of the significance of their programs to society. Program leaders should have a communications pathway to development, and faculty should be involved in development when appropriate.

Management

Collaborations and partnerships need periodic special attention from university administrators, since they generally fall at least partly outside the normal departmental, school, and university supervisory boundaries and operating procedures. Issues include value assessment, financial status of funding agreements, and operational relationships with collaborators and partners. Other types of attention at the appropriate administrative level are also required as endorsement of the value of partnerships to the university, and as a means of enforcing the university's value to the partner, so that Case is neither taken advantage of nor taken for granted. It would be particularly helpful if senior administrative officers would make every effort to participate in special events sponsored by partnerships.

Different university operating units and different institutions have varying financial rules and needs. Partnerships and collaborations require flexible and responsive university policies for financial transactions across units and institutions. Accounting and payments must be done in a timely and efficient manner, with a mechanism for oversight responsibility to ensure that deadlines are not missed. It would be helpful to establish visible guidelines or policies for relations among university units, so that new programs can be established quickly.

Leaders of collaborations and partnerships generally have multiple reporting responsibilities, e.g., to several chairs or deans. Multiple reporting means extra administrative effort and the possibility of lower priority for either administrator, including the possibility of administrative neglect. A more centralized reporting structure for collaborations and partnerships might improve their chances of success, reduce the administrative load, and improve the stability of partnerships and collaborations in the face of a high level of administrative turnover, as in recent years. Regular communication between partners is a requirement for the administrators as well as the program participants. Again, the university's web could be the basis for disseminating knowledge of program activities and achievements, but does not replace the need for administrative participation in activities at an appropriate level.

Collaborations and partnerships are routinely inventing new models for how things can be done, and thus require special types of employees. Human Resources should provide significant flexibility and assistance in meeting program objectives. In particular, staff and faculty roles become blended. This blending of roles and responsibilities makes it important to rate staff qualifications as importantly as the job to be done. A common perception is that only inexperienced staff can be hired at the salaries attached to the job ratings. Subsequently, new staff grow professionally in parallel with the job, but then leave because they cannot be advanced or paid competitively. HR policies and pay scales must be kept contemporary with equivalent jobs outside the university if we want to retain the high quality staff important to program success.

Of particular importance for research centers is the development of research track faculty. Nearly all Case faculty are in the tenure track and have similar duties with respect to teaching, service, and research. Case has few non-tenure track research faculty. Although such positions are described in the Faculty Handbook, the university has not taken advantage of what research faculty can add to a research-intensive institution. Progress in this area could be made if salary levels were competitive with equivalent jobs outside the university, if jobs could be guaranteed for reasonable periods in the anticipation of continued funding, and if there were opportunities for career investment and career advancement similar to those opportunities for regular faculty. The benefit to Case would be an expansion of its research capacity, to the point where it would be competitive with other universities for selection as national research centers of excellence.

As mentioned above, collaborations and partnerships can add important visibility to the university, and visibility is key to achieving the university mission and vision. Collaborations and partnerships should be strong components of the university's new public relations campaign, and the university should work with external partners to effectively market each other. In order for marketing to be effective, a centralized mechanism of organizing, tracking, and promoting centers (their

existence and accomplishments) is imperative. A particularly important aspect of visibility is the web. The linked listing of centers and institutes available on the new Case webpage is an excellent step in this direction, since it provides visibility and access independent of the university operating unit. It is essential that this list be kept up-to-date and maintained in a position of prominence on the webpage.

Two areas of visibility were singled out as needing attention. The first is international visibility. Case has few international partnerships. New international partnerships should be formed, with critical selection of strong partners to maximize their effectiveness. The second is the relatively weak reputation of Cleveland as a desirable place to live or as a center of commerce or research. Case should work with other regional institutions, the city and the region to improve our image.

SUBCOMMITTEE MEMBERS

Patrick Crago, *Chair*

Allen H. and Constance T. Ford Professor
Chair, Biomedical Engineering, Case School
of Engineering

Louise McKinney, *Vice Chair*
Professor of Law, School of Law

Daniel Anker
Associate Dean for Faculty and Institutional Affairs,
School of Medicine

Richard Baznik, *Liaison from Steering Committee*
Director of the Institute for the Study of the
University in Society

Paul DiCorleto
Chairman, Lerner Research Institute
Cleveland Clinic Foundation

Susan Eagan
Mandel Professor, Executive Director, Mandel Center
for Nonprofit Organizations

THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND EXTERNAL PARTNERSHIPS

Jean Gubbins, *Staff*

Institutional Research Associate, Center for
Institutional Research

James Lalumandier

Associate Professor, Chair, Community Dentistry,
School of Dental Medicine

Gail McCain

Sarah C. Hirsch Professor of Nursing
Associate Dean for Community Affairs, Frances Payne
Bolton School of Nursing

Mehran Mehregany

Goodrich Professor of Engineering Innovation, Chair,
Electrical Engineering and Computer Science
Case School of Engineering

Casey Porto

Associate Vice President for Technology Transfer

Quentin W. Quereau

Associate Professor of Music, College of Arts
and Sciences

J.B. Silvers

Truehaft Professor of Management, Weatherhead School
of Management

May Wykle (*Liaison from Steering Committee*)

Dean, Frances Payne Bolton School of Nursing

APPENDIX A – CHARGE TO THE SUBCOMMITTEE

Evaluate the current climate (attitudes, opportunities, incentives, needs, barriers) for interdivisional (school to school) collaborations within Case, and among Case schools and non-Case partners, for educational, research, technology transfer, and service programs.

Identify existing and desirable means to assess the value of such partnerships to Case.

Assess the contributions of selected representative partnerships to meeting the university's vision.

Perform a critical assessment of how CASE can better facilitate the formation and nurturing of such collaborations, including, as appropriate, policies (or lack of policies) on

- Research centers
- Technology transfer
- Funding initiatives
- Educational programs
- Resource allocation
- Faculty evaluation
- Etc.

THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND EXTERNAL PARTNERSHIPS

APPENDIX B – INVENTORY OF EXTERNAL PARTNERSHIPS

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Action Learning (MBA Program)	Case (Management), industry	Established (mid 1990s)	Internal (tuition)	Education, service
Adolescent Consortium	Case (Medicine), MetroHealth Medical Center [MHMC], University Hospitals of Cleveland [UHC], Cleveland Clinic Foundation [CCF], Cuyahoga County, 150+ health and human service providers	Established (late 1980s)	External	Education, training
Adopt-a-School	Case (Nursing), Sunbeam School, Cleveland Municipal School District [CMSD]	Established	None	Service
American Music Masters Conference	Case (Music), Rock 'n' Roll Hall of Fame and Museum	Established (1996)	Internal, external	Education, research, service
Art Education Program	Case (Art History and Art), Cleveland Institute of Art [CIA]	Established	Internal, external	Education
Art History Program	Case (Art History and Art), Cleveland Museum of Art [CMA]	Established (1967)	Internal, external	Education
Big Buddies Program	Case (Law), Big Brothers Big Sisters, KeyBank	Established	Internal, external	Service
Binary (3+2) Program	Case (Engineering, Astronomy, Biochemistry), 56 liberal arts colleges	Established		Education
BioEnterprise, Inc.	Case, CCF, University Hospitals Health System [UHHS]	Established (1997)	Internal, external	Technology transfer
Canada - U.S. Law Institute	Case (Law), University of Western Ontario, Government of Canada	Established (1976)	Internal, external	Education, research, service
Case Research Institute	Case, UHC	Established (2002) and developing	Internal, external	Research
Catalyst for Kids	Case (Nursing), MHMC (Pediatrics)	Established	External	Education (working as interdisciplinary team)

THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND PARTNERSHIPS

APPENDIX B – INVENTORY OF EXTERNAL PARTNERSHIPS (CONT.)

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Center for AIDS Research	Case (Medicine), UHC, MHMC, CCF, several international sites	Established (1994)	External	Research
Center for Business as an Agent of World Benefit	Case (Management), regional centers worldwide	Newly established (2002), emerging		Education, service
Center for Education and Research in Cosmology and Astrophysics (CERCA)	Case (Physics, Astronomy), Cleveland Museum of Natural History [CMNH]	Newly established (2003)		Education, research, service
Center for Global Health and Diseases	Case (Medicine), partners in Kenya, New Guinea, Uganda, Brazil	Established (1987, as Center for International Health)	Internal, external	Research, training
Center for Health Care Research and Policy	Case (Medicine), MHMC	Established (1994)	External	Research, education
Center for Law, Technology, and the Arts	Case (Law, Engineering, Arts and Sciences), CMA, other community agencies	Established (2001) and developing	Internal, external	Education, research, service
Center for Regional Economic Issues	Case (Management), industry	Established (1986)	External	Research, service
Center for Research in Family Practice and Primary Care	Case (Medicine), University of Medicine and Dentistry of New Jersey, University at Buffalo (SUNY), Lehigh Valley Hospital and Health Network	Established	External	Research
Center for Science, Health, and Society	Case (Medicine), City of Cleveland	Established (2002) and developing	Internal, external	Education, community health outreach
Center for Stem Cell and Regenerative Medicine	Case (Arts and Sciences, Engineering, Medicine), UHC, CCF, Ohio State University, Ohio Department of Development, Athersys, other research partners	Established (2003)	Internal, external	Research, technology transfer
Center on Urban Policy and Social Change	Case (MSASS), Cuyahoga County, social service and community development agencies	Established (1988)	External	Research, education, community outreach

THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND PARTNERSHIPS

APPENDIX B – INVENTORY OF EXTERNAL PARTNERSHIPS (CONT.)

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Child Policy Initiative	Case (Schubert Center), child policy agencies at local, state, federal levels	Developing	External	Service
Cleveland Center for Structural Biology	Case (Medicine), CCF, Cleveland State University	Established (1990s)	External	Research
Cleveland Clinic Lerner College of Medicine of Case Western Reserve University	Case (Medicine), CCF	Established in 2002; developing	Internal, external	Education, research
Cleveland FES (Functional Electrical Stimulation) Center	Case (Biomedical Engineering), VA Medical Center, MHMC	Established (1991)	External	Research, technology transfer
Cleveland Health Sciences Library	Case (health sciences), Cleveland Medical Library Association	Established (1966)	Internal, external	Education, research
Clinical placements for nursing students	Case (Nursing), 187 hospitals and health care agencies in Greater Cleveland	Established		Education
Community Engagement Program (Service Learning)	Case (Nursing), 22 health agencies in Greater Cleveland	Established	External funding for start-up has ended	Service, education
Cooperative Education Program	Case (Engineering, Management, natural sciences), industry, government, nonprofits	Established (1979-80)		Education
“Discover Nursing” Mentoring Program	Case (Nursing), CMSD	Established (2001)	None	Service
Education Initiative and Justice for All Program	Case (Law), Cleveland Bar Association	Established	Internal, external	Service, education
Encyclopedia of Cleveland History	Case (History), Western Reserve Historical Society	Established (1980s)	Internal, external	Research, service
Enterprise Development, Inc. (EDI)	Case (Management), Cleveland Tomorrow, client companies	Established mid-1980s; merged into JumpStart in 2004	External	Service
Edison Polymer Innovation Corporation (EPIC)	Case (Engineering), University of Akron, State of Ohio, industry	Terminated	External	Research, technology transfer

THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND PARTNERSHIPS

APPENDIX B – INVENTORY OF EXTERNAL PARTNERSHIPS (CONT.)

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Externships for dental students	Case (Dental Medicine), VAMC, MHMC	Established	External	Education
Field placements for social work students	Case (MSASS), more than 300 social service agencies	Established		Education
Fisk University Collaborative Program	Case, Fisk	Established (2002) and developing	Internal, external	Education (student, faculty exchanges)
Flight Nursing MSN Program	Case (Nursing), MHMC	Established (2002)	Internal; external pending	Education
Frederick K. Cox International Law Center	Case (Law), international human rights organizations, law and business groups	Established (1991)	Internal, external	Education, research, service
Free Access Program	Case (Student Affairs, Arts and Sciences), University Circle institutions, Rock 'n' Roll Hall of Fame and Museum, Great Lakes Science Center	Established (2003)	Internal, external	Education (free student access to institutions)
Free Clinic of Greater Cleveland	Case (health sciences), Free Clinic	Established	External	Education, service
“Frontiers of Astronomy” Lecture Series	Case (Astronomy), Cleveland Museum of Natural History, Cleveland Astronomical Society	Established		Education, service
General Clinical Research Center, Cleveland Area	Case (Medicine), UHC, MHMC	Established (1962)	External	Research
Glennan Microsystems Initiative	Case (Engineering), NorTech, NASA	Established (1998)	External	Research, education
Graduate Acting Program	Case (Theater and Dance), Cleveland Play House	Established (1996)	Internal, external	Education
Greater Cleveland Nursing Research Consortium	Case (Nursing), UHC, CCF, MHMC, VAMC, four other local hospitals, Visiting Nurse Assn	Established (1997)	External	Research
Healthy Smiles (Dental Sealant Program)	Case (Dental Medicine), CMSD, local dental societies	Established (1999)	External	Education, service
Imaging BRTT (Ohio Biomedical Research and Technology Transfer Fund)	Case (Biomedical Engineering), Ohio State University, CCF, UHC, Philips	Established	External	Research, technology transfer

THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND PARTNERSHIPS

APPENDIX B – INVENTORY OF EXTERNAL PARTNERSHIPS (CONT.)

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Indian Health Service Externships	Case (Dental Medicine), Indian Health Service	Established (1999)	External	Education, service
International MBA Program	Case (Management), Central European University, International Management Center in Budapest, Hungary	Established 1996; no admissions after 2000	Internal, external	Education
John Glenn Biomedical Engineering Consortium	Case (Engineering), CCF, UHC, NASA Glenn Research Center	Developing	External	Research, technology transfer
JASON Project	Case (Center for Math and Science Education), CMSD, other K-12 schools	Established (1998)	Internal, external	Education, service
Joint Music Program	Case (Music), Cleveland Institute of Music	Established (c. 1970)	Internal, external	Education
Joint Program in Teacher Licensure	Case (Arts and Sciences), John Carroll University	Established	Internal	Education
Judicial externships for law students	Case (Law), primarily U.S. courts/judges	Established	Internal, external	Education, service, research
Kindergarten Health Screening Program	Case (Nursing), CMSD	In planning stage	External	Service
Learn and Serve America	Tulane University, other college and university partners	Established	External	Education (service learning)
Management of Technology Program	Case (Management), technology companies	Terminated	Internal, external	Education
Milton A. Kramer Law Clinic Center	Case (Law), community agencies	Established (1970-71)	Internal, external	Education, service
Master of Public Health Program	Case (Medicine), many health-related agencies	Established (1999)	Internal	Education, research
National Center for Microgravity Research on Fluids and Combustion	Case (Engineering), NASA, Universities Space Research Association	Established (1997)	External	Research, service
NetWellness	Case (health sciences), Ohio State, University of Cincinnati	Established (1997)	External	Online consumer health education
Neural Engineering Science and Technology Center	Case (Engineering), Georgia Tech, University of Michigan, Howard University	Proposed	External (NSF STC pending)	Research, education, technology transfer, service

THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND PARTNERSHIPS

APPENDIX B – INVENTORY OF EXTERNAL PARTNERSHIPS (CONT.)

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Northeast Ohio Council on Higher Education (NOCHE) Cross-Registration Program	Case (undergraduate programs), 14 institutions in Northeast Ohio	Established		Education
Ohio Aerospace Institute (OAI)	Case (Engineering), NASA, Ohio Board of Regents, eight other universities	Established (1989)	External, internal	Graduate education, research
Office of Urban Health / Urban Area Health Education Center	Case (Medicine), 100+ community agencies, health care delivery sites	Established (1970s)	External	Education
Ohio College of Podiatric Medicine	Case (Dental Medicine), OCPM	Established		Education
Ohio Neurostimulation and Neuromodulation Partnership (BRTT)	Case (Engineering), CCF, UHC, VAMC, MHMC, NDI Medical	Established (2003)	External	Research, technology transfer
OhioLINK	Case (libraries), other Ohio college and university libraries, State Library of Ohio	Established (1992 for online catalog)	Internal, external	Education, research
Omeris (formerly Edison BioTechnology Center [EBTC])	Case (Engineering, Medicine), UHC, CCF, NorTech, State of Ohio, corporate members	Established (1986)	External	Research, technology transfer
Power Partnership for Ohio	Case (Engineering), State of Ohio, Ohio State, University of Toledo, Cleveland State, Stark State College of Technology, industry	Established (2003)	External	Research, education, service
Speech Pathology Research Collaboration	Case (Communication Sciences), Cleveland Hearing and Speech Center	Established (initial affiliation in 1945)		Education, research
Student Exchange Programs	Case (many units), many other universities	Established		Education
Substance Abuse and Mental Illness (SAMI) Coordinating Center of Excellence	Case (MSASS, Medicine), Ohio Department of Mental Health, Ohio Department of Alcohol and Drug Addiction Services	Established (2001)	External	Clinical and program consultation, training
Technology and Integrated Media Environment (TIME) Program	Case (New Media Program), CIA, CIM	Newly established		Research, education

THE SUBCOMMITTEE ON INTERDIVISIONAL COLLABORATIONS AND PARTNERSHIPS

APPENDIX B – INVENTORY OF EXTERNAL PARTNERSHIPS (CONT.)

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
University Circle, Inc.	Case and 45 other nonprofits	Established (1957)	Internal, external	Service
Western Reserve Geriatric Education Center	Case (Medicine, Nursing, Arts / Sciences), UHC, MHMC, VAMC, NEOUCOM, Ohio University, Bowling Green State University, Miami University	Established (1985)	External	Training for practitioners
World Health Organization (WHO) Collaborating Center	Case (Nursing), WHO, Pan American Health Organization	Established (1993)	Internal	Education, research

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APPENDIX C – INVENTORY OF INTERDIVISIONAL COLLABORATIONS

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Biophotonics Initiative	Arts and Sciences, Engineering, Medicine	Developing	Internal, seed	Research, education
Case Advanced Power Institute	Engineering, Arts and Sciences (Physics)	Established (2002)	Internal, external	Research, education
Center for Policy Studies	Arts and Sciences, Law, Management, MSASS, Medicine, Nursing	Established (1998) and uncertain	Internal, external	Education, research, service
Center for Professional Ethics	All schools and colleges	Established (1980)	Internal	Education, research, service
Center for the Environment	Medicine, Arts and Sciences (Biology)	Uncertain	Internal	Education, research
Department of Biomedical Engineering	Engineering, Medicine, CCF	Established (1968)	Internal, external	Education, research
Department of Cognitive Science	Arts and Sciences, Medicine	Developing	Internal	Education, research
Early Intervention Graduate Training Program	Nursing, MSASS, Arts and Sciences (Communication Sciences)	Established (2003)	External	Education
Health Systems Management Center	Management, Medicine	Established	External; self-funded initially	Executive education, research, degree support
IGERT (Integrative Graduate Education and Research Training) in Neuromechanics	Arts and Sciences (Biology), Engineering (Biomedical, EECS, Mechanical)	Established (1999)	External	Education, research
Institute for the Integration of Management and Engineering (TIIME)	Engineering, Management	Established (2000) and developing	Internal, external	Education, research
Institute for the Study of the University in Society	Arts and Sciences (History), Mandel Center, Archives, Western Reserve Historical Society	Developing (2003)	Internal, external	Education, research
Law-Medicine Center	Law, Medicine	Established (1953)	Internal, external	Education, research
Mandel Center for Nonprofit Organizations	Management, MSASS, Law, Arts and Sciences	Established (1984)	Internal, external	Research, education, training, service

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APPENDIX C – INVENTORY OF INTERDIVISIONAL COLLABORATIONS (CONT.)

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Medical Scientist Training Program (MD/PhD) / Physician Engineer Training Program	Medicine, Engineering	Established	Internal, external	Education, research
PhD Program in Biophysics and Bioengineering	Medicine, Engineering	Established	No funding	Education
PhD Program in Neurosciences and Bioengineering	Medicine, Engineering	Established	No funding	Education
Public Health (five-year degree program)	Arts and Sciences, Medicine	Developing		Education
Schubert Center for Child Development	Arts and Sciences, UHC, Medicine (Pediatrics), Nursing, Dental Medicine, MSASS	Developing	Internal, external	Education, research
Science Entrepreneurship Program	Arts and Sciences, Management	Established (2000, in Physics) and developing	Internal	Education
University Center on Aging and Health	Nursing, Medicine, Arts and Sciences, Law, Dental Medicine, MSASS, Western Reserve Geriatric Center	Established (1978)	Internal, external	Education, research
University Interdisciplinary Training Consortium Initiative (Behavioral Health)	Nursing, Medicine, Arts and Sciences, MSASS	Planning		Education
Yeager Center for Electrochemical Sciences	Engineering, Arts and Sciences	Established (1976)	External	Research, education

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APPENDIX C – INVENTORY OF INTERDIVISIONAL COLLABORATIONS (CONT.)

Partnership/Collaboration	Members	Status (Dates)	Funding	Program Mission
Dual Degree Programs ¹				
DMD / MPH Program	Medicine, Dental Medicine	Developing	Internal	Education
JD / MA Program (Bioethics)	Law, Medicine	Established	Internal	Education
JD / MA Program (Legal History)	Law, Arts and Sciences	Established	Internal	Education
JD/MA Program (Political Science)	Law, Arts and Sciences	New (2004)	Internal	Education
JD / MBA Program	Law, Management	Established	Internal	Education
JD / MD Program	Law, Medicine	Established	Internal	Education
JD / MNO Program	Law, Management, MSASS	Established	Internal	Education
JD / MPH Program	Law, Medicine	Established	Internal	Education
JD / MSSA Program	Law, MSASS	Established	Internal	Education
MBA / MD Program	Medicine, Management	Established	Internal	Education
MBA / MSSA Program	Management, MSASS	Established	Internal	Education
MNO / MSSA Program	Management, MSASS, Law, Arts and Sciences	Established	Internal	Education
MNO / MA in Music History	Management, MSASS, Law, Arts and Sciences	Established	Internal	Education
MSN / MA Program (Anthropology)	Nursing, Arts and Sciences	Established	None	Education
MSN / MA Program (Bioethics)	Nursing, Medicine	Established	None	Education
MSN / MBA Program	Nursing, Management	Established	Internal	Education
MSN / MPH Program	Nursing, Medicine	Established	Internal	Education

1. Excludes dual degree programs within a single school.