Potential Collaborations among Rutgers University-Camden, Rowan University, and the Cooper Medical School of Rowan University

Rutgers-Cooper-Rowan Integrative Biology and Genomic Medicine Institute in Camden

The Rutgers-Cooper-Rowan Integrative Biology and Genomic Medicine Institute (IBGMI) will leverage the existing strengths of four anchor research institutions in the City of Camden (Rutgers-Camden, Coriell Institute for Medical Research, Cooper Cancer Institute /Cancer Institute of New Jersey, and Cooper University Hospital/Cooper Medical School at Rowan University) and transform southern New Jersey into a hotspot for life science and biomedical research in the region and the state.

The IBGMI will be housed in a 100,000 sq. ft. building with an estimated cost of $80 million that will promote collaboration among a distinctive mix of basic researchers, mathematicians, computer scientists, and clinical investigators at a single site. The facility will be explicitly designed to provide a creative center in Camden for multidisciplinary studies including a major focus on computational modeling of biological systems and personalized genomic medicine. Such an environment is essential to fostering new collaborations not only among researchers from different institutions but also among researchers from different disciplines - a necessary ingredient to successful interdisciplinary research.

The Rutgers-Camden Center for Computational and Integrative Biology (CCIB) will give the IBGMI a collaborative theoretical and experimental understanding of the fundamental mechanisms of biological systems. The Coriell Institute will allow access to a growing database of personal genetic information and the world’s largest collection of human living cell types. As a translational research center with a mission to introduce basic science findings directly to clinical setting, the IBGMI will benefit from the proximity of numerous prospective clinical trials performed at Cooper Hospital.

Graduate education and research capacity will be provided by the Rutgers-Camden PhD program in computational and integrative biology associated with the CCIB. In the longer term, the IBGMI will become a nationally recognized center for life science and biomedical research, stimulating the biotech industry and enhancing employment opportunities. The IBGMI has the potential of putting Camden on the international map as a center for research in the fields of integrative biology and personalized medicine. Finally, the IBGMI will benefit the State of New Jersey by stimulating the biotech industry and enhancing employment opportunities for the residents of the state.

The Center for Health Care Management Research and Analytics

The Center for Health Care Management Research and Analytics will be a partnership among the Rutgers School of Nursing-Camden, the Rutgers School of Business-Camden, the Cooper Medical School of Rowan University, and the UMDNJ-School of Osteopathic Medicine to conduct research on delivering high-quality, cost-effective health care. Leveraging faculty research strengths and experience, this center will bring together researchers and clinicians of the
various schools to collaborate by sharing frameworks, developing new data-driven analytics, and analyzing patient care data and processes. The center’s multidisciplinary research programs will be well positioned to seek federal funding from agencies such as the National Institutes of Health, the National Science Foundation, and the Agency for Healthcare Research and Quality.

Collaboration among these units will offer new research-based educational programs at their intersection such as executive programs in health care management and graduate programs in nursing. These educational programs will create and disseminate new knowledge and train the next generation of leaders to provide cutting-edge health care in the region.

The Urban Health Interventions Research Center

The Urban Health Interventions Research Center will bring together Rutgers faculty with research expertise in the study of poverty and health with the faculty of the Cooper Medical School at Rowan University who have extensive clinical experience. These collaborations, in the context of a city with unique opportunities for intervention research, will result in high-quality research that holds the potential to transform public urban health; moreover, such multidisciplinary and innovative approaches can be leveraged into effective federal grant proposals. A principal focus will be the study of community interventions to serve the health needs of low-income, urban populations. For example, the success of neighborhood interventions can be evaluated by monitoring changing patterns of emergency room utilization. Similarly, the effects of natural experiments—the construction of new housing, installation of new pollution equipment, availability of new recreational spaces—on health can be assessed through analysis of health records now available as a result of the integration of records from the emergency rooms serving Camden—an achievement of Camden physician Dr. Jeff Brenner. Camden’s small size and identifiable neighborhoods make it an ideal and unique setting for this research.

The Rutgers-Cooper-Rowan Center for Urban Health Law and Policy

The Rutgers-Cooper-Rowan Center for Urban Health Law and Policy will bring together faculty in law and medicine, along with faculty in other disciplines, to support clinical and research activities. The clinical program will meet the multiple needs of low-income medical patients, including, but not limited to, qualifying for governmental services and private insurance benefits, resolution of questions of legal capacity and assistance with surrogate decision making, housing issues (landlord/tenant, mortgages), domestic and family violence, juvenile justice, and immigration. Law, medical, and perhaps other graduate students will work together under appropriate supervision to assist and serve New Jersey citizens.

The health policy program will bring together faculty at Rutgers School of Law-Camden, Rowan University, and the Cooper Medical School of Rowan University to address major issues in urban health policy. The law faculty includes two leading experts on health law and policy, including the law regarding access to, financing of, and quality of care. The center will provide research and analysis in collaboration with many other units, including the Center for Urban Research and Education and the Center for Children and Childhood Studies, both at Rutgers-
Camden. A principal focus will be the effects of neighborhood poverty on health status, a relationship that the New England Journal of Medicine and other sources have reported is crucial to community medical, economic, and social health.

The Rutgers-Cooper-Rowan Ph.D. in Health Psychology leading to Licensure in Counseling/ Clinical Psychology

One of the most rapidly growing areas of specialization in psychology focuses on health. Many of the most significant health problems in the United States have behavioral and psychological roots: diabetes, depression, aggression, and many others result from, or are exacerbated by, human action resulting from cognitive, social, and emotional processes. The Rutgers-Cooper-Rowan Ph.D. Program in Health Psychology will develop researchers to explore the links among biology, mind, and health, and prepare counseling and clinical psychologists to intervene effectively in the lives of South Jersey residents. The proposed program draws upon established strength in research on health psychology at Rutgers-Camden and the clinical expertise of faculty at Rowan, and will contribute to, and draw from, the intellectual resources at Cooper Medical School at Rowan University. These initial strengths will need to be augmented by judicious hiring at all three institutions in order for the program to succeed. Currently, there are no programs south of Princeton that prepare doctoral-level researchers and practitioners in psychology. Rutgers-New Brunswick’s Graduate School of Applied and Professional Psychology is highly selective and draws many high-performing students. Given the future of health psychology, the interest of students in obtaining clinical licensure, the needs of the region, and the current strengths of the respective units, the proposed program has a high probability of achieving regional and national success.

The Rutgers-Rowan-Stockton Program in Global Literatures and Languages

The Rutgers-Rowan Program in Global Literatures and Languages will capitalize on the strengths of the institutions in southern New Jersey to foster internationally recognized research and the most effective teaching practices in world literatures, critical reading and writing, foreign languages, digital humanities, and international study. Offering both an undergraduate major and a track in the M.A. program in English, this initiative will underline the importance of the humanities by equipping students for the twenty-first century with its emphasis on global awareness, literacy skills, and technology. The Global Literatures curriculum will be expansive, including not only Anglo-American and Anglophile literatures but also literatures in selected original languages and literatures in translation. Courses in the art of translation and translation studies will be integrated with the M.F.A. programs at Rowan and Rutgers-Camden. Electronically connected classrooms will allow students at the universities to study a range of foreign languages not possible at a single campus. An integrated International Study program will broaden global learning opportunities and provide cost-effective venues for immersion in various languages and cultures.