Introduction

The 2010 Annual Sex and Gender Research Forum at Drexel University and Drexel University College of Medicine: An Institute for Women’s Health and Leadership Initiative

Owen Montgomery, MD; Michele Follen, MD, PhD; and Sandra Urdaneta-Hartmann, MD, PhD, MBA

Department of Obstetrics and Gynecology, Drexel University College of Medicine, Philadelphia, Pennsylvania

This event marks the 2010 Sex and Gender Forum at Drexel University College of Medicine and Drexel University. This forum is among the research events that combine both the College of Medicine and the University. There are other research forums that are separate at each entity: Discovery Day at the College of Medicine and Research Day at the University. Additionally, each school and college of the University, each clinical department at the College of Medicine, and each basic science department and research institute at the College of Medicine hold their own research forums once or several times per year. An advantage and challenge of this forum has been to reach out to both entities to summarize the work performed that addresses Sex and Gender Research across all of Drexel.

We believe the forum has had an impact on the U.S. News & World Report rankings at Drexel. Overall, Drexel University was ranked 2nd in the country for “up and coming” universities, 16th in Women’s Health, 86th as a university, and 88th as a college of medicine. The history of Drexel University and Drexel University College of Medicine further explains these rankings.

Drexel University, a private university located in Philadelphia, Pennsylvania, was founded December 17, 1891, by Anthony J. Drexel. At that time it was known as the Drexel Institute of Art, Science, and Industry. Mr. Drexel's intent was noted to be revolutionary by former President Dr. Constantine Papadakis, in his dedication for the 110th anniversary of Drexel, which he gave for the Newcomen Society on December 6, 2001. “In the 19th century only 1% of the nation’s youth were college educated and the mission of most private and land-grant colleges was preparing young men from upper class families for careers in the ministry, law, medicine, or business. . . Mr. Drexel had a different purpose in mind: He hoped to empower young urban working class men and women to improve their station in life. . . The Drexel Institute was located close to city rail and streetcar lines and had unprecedented features such as low tuition, night classes, and free public lectures and concerts. Above all it provided instruction in practical subjects that would help students find better jobs. . .” Dr. Papadakis truly understood the spirit of Mr. Drexel and admired his intention to serve all men and women.

Acknowledgements: NIH NCI CA82710-09, Lynn Yeakel and the IWHL staff, Katherine Sherif, and Ana Nunez.

doi:10.1016/j.genm.2011.08.004

© 2012 Elsevier HS Journals, Inc. All rights reserved.
Drexel University has expanded to include 13 educational entities, including the College of Arts and Sciences, Bennett S. LeBow College of Business, School of Education (Goodwin College), College of Engineering, Pennoni Honors College, College of Information Science and Technology, Earle Mack School of Law, Antoinette Westphal College of Media Arts & Design, School of Technology and Professional Studies (Goodwin College), and 4 institutions of health studies: Drexel University College of Medicine, College of Nursing and Health Professions, School of Biomedical Engineering and Health Systems, and School of Public Health.

Bachelor’s, master’s, and doctoral degree programs exist throughout Drexel University. Mr. Drexel’s personal concept of “making the university practical” exists today as the “co-op” requirement in which students work in industry for academic credit as part of their educational process. Each school and college has kept this “experience in the real world” as a priority in the education of students in their discipline. This is the link between what Drexel was historically and is now in the present.

The College of Medicine became part of Drexel University under the enlightened leadership of Dr. Papadakis in 2002. For the purpose of this review focusing on women’s health, Drexel University College of Medicine (DUCOM) existed prior to 2002 as 2 major institutions. Founded in 1848 and 1850, respectively, the Homeopathic College of Pennsylvania (which became Hahnemann Medical College in 1869) and the Woman’s Medical College of Pennsylvania (WMCP) were unique and significant Philadelphia institutions. From 1848 to the latter half of the 20th century, WMCP and Hahnemann Medical College served promising women and minorities who faced discrimination and social barriers in medical education at other institutions. Today, DUCOM continues that tradition of excellence and diversity in medical education created by its predecessor institutions.

When WMCP was created in 1850, it was the first medical school in the world to provide medical education exclusively for women. In its early days, it faced serious opposition from the male medical establishment. Prevailing notions held that women were too feeble-minded to succeed in the demanding arena of academic medicine and too delicate to endure the physical requirements of clinical practice. In 1866, Ann Preston, MD, a member of the College’s first graduating class, became the first woman ever to hold the position of Dean at a medical school. The Medical College of Pennsylvania merged with Hahnemann University in 1993. This same year, the College became the first medical school in the country to completely integrate women’s health issues into its curriculum instead of offering just an occasional lecture or optional elective. Today, women are disproportionately represented at DUCOM, outnumbering male peers by ~10%. Minorities and people of color are also well represented, outnumbering Caucasians by >20%.

DUCOM is made up of numerous academic departments, offices, and institutes that apply for and are awarded funding. The academic departments are Anesthesiology, Biochemistry, Clinical Skills, Emergency Medicine, Family Medicine, Information Medical Sciences, Medicine (subdepartments: the Cancer Center, Cardiology, Gastroenterology, General Internal Medicine, Heart Failure, HIV, Infectious Disease, Nephrology, Pulmonary, Rheumatology, and the Women’s Health Education Program), Microbiology and Immunology, Neurobiology and Anatomy, Neurology, Obstetrics and Gynecology, Ophthalmology, Orthopedic Surgery, Pathology, Pediatrics, Pharmacology and Physiology, Psychiatry, Surgery, and the Dean’s Office. There are 3 Institutes at DUCOM: the Institute for Molecular Medicine and Infectious Disease, the Institute for Women’s Health and Leadership, and Drexel Institute for Biotechnology and Virology Research.

The basic sciences at DUCOM are represented at 12 cross-disciplinary research centers of excellence: Molecular and Functional Genomics, Immunology and Vaccine Science, Molecular Parasitology, Bacterial Pathogenesis and Biodefense, Clinical and Translational Research, Scientific Administration and Training, Virology and Therapeutics, Cancer Biology, Immunogenetics and Inflammatory Disease, Neuroimmunology and Central Nervous System Therapeutics, Molecular
The Institute for Women's Health and Leadership (IWHL) was founded in 1993 and is structured as an organizational unit that initiates, sponsors, administers, and coordinates a wide range of programs and services that advance both women’s health and leadership. IWHL was designated as a vanguard “National Center of Excellence in Women’s Health” in 1996 by the National Institutes of Health.

The core programs currently supported by the Institute are (1) Vision 2020: The Unfinished Business of Women’s Equality; (2) International Center for Executive Leadership in Academics (formerly the Executive Leadership Program in Academic Medicine); (3) Legacy Center: Archives and Special Collections; (4) Woman One Award and Scholarship Fund; (5) Conversations about Women’s Health Research; and (6) the Center for Research. There are related center activities: GEM (Gender and Ethnic Medicine) Program, Philly Girls Play Chess, Marion Spencer Fay Award (an annual award given to a prominent woman scientist or scholar); and the annual Sex and Gender Research Forum. Affiliated programs within the Department of Medicine at DUCOM are the Center for Women’s Health and the Women’s Health Education Program (WHEP).

The IWHL has a long history of focused effort and success. The leadership of Lynn Yeakel, MSM, is outstanding and permeates the atmosphere at DUCOM and Drexel University. Coming from the nontraditional background of government service, Yeakel served in the US Department of Health and Human Services and ran in a senate race against incumbent Arlen Spector. Her strategic thinking, organizational skills, and communication skills have launched projects like Vision 2020, which encompasses the success of women in all domains of American Society. Her plan is to impact women internationally. Yeakel recently published her memoirs in a book entitled *A Will and a Way*. Yeakel has convened many events, which include successful women from all domains of society. She has made the medical school famous and, undoubtedly, the ranking of 16th in Women’s Health is partially from her influence.

Vision 2020, although not limited to health in scope, is attracting national and international attention with its “Conversation about Equality” and outstanding exhibit on women’s history at the National Constitution Center in Philadelphia. The exhibit resides next to the “Founders of the American Constitution” exhibit, likely the most popular one in the National Constitution Center. Visitors to the exhibit of the founders can sign the constitution as part of the exhibit. Next door, at the IWHL’s Vision 2020 Women’s History exhibit, visitors can vote for the Equal Rights Amendment.

The International Center for Executive Leadership in Academics (formerly Executive Leadership Program in Academic Medicine), run by Dr. Diane M. Magrane, was recently awarded the prestigious Association of American Medical Colleges Women in Medicine Leadership Development Award. This type of national recognition would impress deans present at the national meeting of this critically important organization that facilitates many administrative aspects of medical school function, nationally and internationally. The Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) Program for women is the nation’s only in-depth program focused on preparing senior women faculty at schools of medicine, dentistry, and public health for institutional leadership positions in which they can effect positive change. ELAM’s year-long program develops the professional and personal skills required to lead and manage in today’s complex health care environment, with special attention given to the unique challenges facing women in leadership positions. Nearly 700 senior women leaders have participated in the program since 1995. ELAM alumnæ make up 25% of the executive positions in academic medicine and dentistry that are held by women. Very recently, the program has expanded to accept engineering faculty, and a National Science Foundation Award Application was submit-
ted to support this effort. Two Drexel Engineering faculty members have been in the program to date. Dr. Magrane commented that the barriers in engineering are more similar to those in medicine, dentistry, and public health than they are different. This finding affirms that the program can have a broad impact across many disciplines for women in academia. Additionally, Page Morahan, PhD, founder of ELAM, has been awarded National Institutes of Health funding to study factors that influence women’s careers in science in conjunction with investigators at the University of New Mexico. Dr. Morahan is engaging in analyzing years of meticulously collected data from participants and will be using cluster analysis statistical methodology in future analyses.

The Legacy Center, which contains archives and collections on the history of women in medicine, is an outstanding and unique resource of the IWHL. Leaders within the archive center have preserved internationally compelling photographs and artifacts that chronicle more than a century and a half of inspiring stories of women in medicine and other important histories of Hahnemann as a naturopathic hospital. The collections are being made accessible digitally and focus on women in medicine, women’s health, medical education, and homeopathy from the mid–19th century to the present. Fellowships support international and national scholars to study these artifacts that explore the history of medicine.

Woman One is a highly successful recognition program that honors women who have demonstrated exceptional leadership ability and that raises scholarship funds for under-represented minority women studying medicine. We hope to chronicle these efforts in a future publication. A brief survey of existing data shows that many of the scholars serve in underserved areas when they practice medicine after training.

Conversations is a novel program of outreach to several diverse communities to deliver information on women’s health. Led by Lynn Yeakel, the program has been presented to large communities of elderly patients, under-represented minorities in church and community settings, and even children through school-organized events. “Candid in its style and clear in its content, the conversations take the mystery out of medicine through open forums that are interactive dialogues among health care experts, Lynn as facilitator, and women and men of all generations. No lectures, no power points... just information about one’s health and how to improve it.”

The Institute supports and helps sponsor the Center for Women’s Health, a multidisciplinary model for clinical care led by Katherine Sherif, MD. Dr. Sherif is an internist with a large practice and research interest in polycystic ovarian disease, one of the most compelling and complicated diseases affecting women; this disease affects the ovary leading to infertility, but is related to insulin insensitivity and diabetes. Dr. Sherif currently leads community health events and hosts a seminar series that includes practitioners from all disciplines in women’s health, both inside internal medicine and across the general medical community. She plans clinical research in the center in the future in collaboration with the Center for Research at the IWHL. This center also contributes to the ranking of Drexel as 16th in Women’s Health Research.

Ana Nuñez, MD, the director of the Women’s Health Education Program, is the recipient of 6 awards from the National Institutes of Health and several foundations for her work on women’s health in the community, and this funding, undoubtedly, makes Drexel very competitive in this area. Dr. Nuñez leads not only the medical student education but also the community outreach project “Philadelphia Ujima.”

WHEP is responsible for providing lectures on women’s health topics for first- through fourth-year medical students. Topics covered in the lectures include Orientation to Women’s Health; Introduction to Women’s Health and Sex and Gender Medicine; Personal Attitudes Towards Reproductive Options; Domestic Violence; Cultural Diversity; Diagnosis and Management of Victims of Assault; Eating Disorders; Role of Culture in Medical Education and Clinical Care; Women’s Health and Prevention; and Lesbian Health. WHEP also leads the Women’s Health Seminar Series, a weekly series offered between October and Febru-
ary that focuses on the interests of first- and second-year medical students (but is open to all students).

The Philadelphia Ujima: Mind-Spirit-Body Health (MSBH) Collaborative is a collaborative model that uses community participatory research, ecological, and chronic disease model approaches. Specifically, the initiative is designed to decrease health disparities among Philadelphia’s most vulnerable and underserved populations in order to reach targeted Healthy People 2010 objectives. Ujima is holistic, and gender informed in promoting health and behavior change. It employs individual change (“ground up”) and traditional social networks for reinforcing behavior. MSBH delivers and reinforces health messages where people live and congregate, so the Collaborative members include faith- and community-based organizations. Ujima originates from a Kwanzaa principle, meaning “collective work and responsibility.”

According to the Ujima 2009 annual report.

Philadelphia Ujima has completed its second year. Data we collected reveal some remarkable statistics. These numbers tell a story about motivated organizations and community groups where individuals seek to improve their own health and the health of their friends and family. The statistics also reveal how Philadelphia Ujima has moved from a very good idea to full implementation. We approach our mission by providing innovative health education and bringing the skills and talents of our collaborators to shape a vision of a healthier community. The past years were full of many accomplishments. We have encountered hundreds of people that share our belief in the power of many to make change. Philadelphia Ujima has fostered collaborations with many academic, religious, and social service agencies to provide not only health education, but to also serve as a catalyst by connecting individuals to medical, behavioral and other support services. In October 2009, we trained 28 individuals from our community site partners as Lay Health Workers. Since then, our program has expanded to teachers and youth workers and first and second year medical students at Drexel College of Medicine. To date, Philadelphia Ujima has reached over 1500 people with health education programming. As you read this annual report, you will see that this reflects the hard work and determination of our many partners and stakeholders to fulfill our mission, which is to improve health outcomes, promote health advocacy, and support system level change. As Philadelphia Ujima enters its third year, our focus will be on completing our plans for the future so that we can continue to work with our partners to help reduce health disparities and improve the quality of life for all.

Ujima hosts many events. Three examples of event topics are nutrition, heart disease, and community involvement. The topic of discussion on April 29, 2010 was Using the Food Label to Make Wiser Food Choices. Participants learned how to use nutrition labels to make quick, informed food choices that contribute to a healthy diet and prevention of many chronic diseases. They also learned how to select foods based on the percentage of total fat per serving, calories, sodium, and cholesterol. Dr. Nuñez has found many creative ways to get across nutritional health information and make it accessible in relevant languages in the communities served.

Another session, held on May 27, 2010 was called 5 Heart Disease Prevention Strategies that Everyone Needs to Know. This event hoped to give participants a solid understanding of how to maintain a healthy heart throughout their lifespan. They were told that heart disease is the leading cause of death for both women and men, but that there are several heart disease prevention steps that everyone can take. Attendees learned how to avoid heart problems in the future by adopting a healthy lifestyle today. This type of event is an opportunity to learn about heart disease risk and how to do something about the risk factors that can be controlled.

The University community was invited to the second and third annual Family, Fun, Fitness and Health Day on May 15, 2010 and February 10, 2011. These events provided an opportunity for Philadelphia Ujima’s partners, collaborators, pro-
gram participants, and the Drexel community to come together for a day of fun and interactive workshops about health, nutrition, fitness, stress, and building healthy relationships. There were activities for the whole family to enjoy, including free food, giveaways, fitness demonstrations, and resource tables.

In addition, Dr. Nuñez hosts medical student education research projects as part of her commitment to research in this area of community health. Ujima hosts several interactive Web sites that contain video information and also maintains a Facebook site.

The IWHL also collaborates with the Office of Government and Community Relations, which serves as a liaison between the University and the community at large.

The office of the Chancellor Emeritus, Dr. D. Walter Cohen, DDS, resides within the IWHL. A distinguished leader in dentistry and oral medicine nationally and internationally, Dr. Cohen is known to Drexel as the “father of Women’s Health and Leadership.” His visionary and continued leadership has been critical to fundraising for both the ELAM program and for the Betty A. Cohen Chair in Women’s Health. He has also been instrumental in helping to develop the Legacy Center, helping to make a permanent home for these collections of historical significance.

The Department of Obstetrics and Gynecology is the recipient of a Program Project: Optical Technologies and Molecular Imaging in Cervical Neoplasia, a disease of impoverished women in the United States, Canada, and Nigeria. The focus of this research is the development of optical technologies that can make a “real-time” diagnosis of cervical cancer. Projects run the gamut of technology assessment, including biological plausibility, technical efficacy, clinical effectiveness, patient and provider satisfaction, and cost-effectiveness. The program project is supported by 4 core areas: Administration, Biostatistics, Instrumentation, and Pathology.

In this issue of Gender Medicine we have presented efforts on quantifying the research infrastructure that exists at DUCOM and Drexel in the specific area of Sex and Gender Research. We present abstracts submitted for presentation at the forum, as well as manuscripts by investigators associated with the event. Next year, we plan to include a broad selection of original research by presenters, attendees, and leaders in the field of sex and gender research from within and outside of the Drexel community. As the Sex and Gender Research Forum grows, we look forward to bringing together multidisciplinary groups of investigators every year.

Address correspondence to: Brian T. Crain, 245 N. 15th Street, MS 495, Philadelphia, PA 19102. E-mail: brian.crain@drexelmed.edu.