

EDUCATIONAL LEADERSHIP FOR THE HEALTH OF THE PUBLIC

Progress Summary Reports
For the Period Ending June 30, 2008

Case-Based Integration to Promote a Public Health Curriculum for Medical Students

Principal Investigator: David Bolender, PhD, Department of Cell Biology, Neurobiology and Anatomy

Collaborator(s): Joseph Barbieri, PhD, Department of Microbiology and Molecular Genetics; Alan Bloom, PhD, Department of Pharmacology and Toxicology; Diane Braza, MD, Department of Physical Medicine and Rehabilitation; Bruce Campbell, MD, FACS, Department of Otolaryngology and Communication Sciences; William Choi, MD, Department of Medicine; Cecilia Hillard, PhD, Department of Pharmacology and Toxicology; Jean-Francois Liard, MD, PhD, Department of Physiology; MCW Society of Teaching Scholars; Medical Scientist Training Program and faculty from the departments of Biochemistry, Cell Biology, Neurobiology and Anatomy, Medicine, Physical Medicine and Rehabilitation, and Neurosurgery

Competitive Education Fund: \$130,000 (2006-2009)

Focus Area(s): MCW Curriculum Development, Faculty Development

This unique program uses Integrated Grand Rounds (IGR) to present case-based clinical problems emphasizing public health concepts developed by clinicians and basic scientists. The participation of patients at IGR sessions that are experiencing the clinical problem being discussed gives students additional patient contact and builds communication skills.

PROGRESS: Four Grand Rounds sessions were integrated during the past year. The topics included preimplantation genetic diagnosis, gunshot wounds, chronic liver disease, and stroke. Presenters included representatives from several departments and Medical Scientist Training Program students. Sessions were centered on a clinical condition or problem common to residents of Wisconsin, and each involved presentation of a patient with the appropriate clinical condition. The patients talked about their experiences with the medical condition and interacted with the students in the audience. All IGR sessions were very well-received by the students and faculty who attended. IGR sessions have been incorporated into the MCW academic calendar, and IGR concept was part of the presentations given during student orientation.

During their orientation to the medical curriculum, first year medical students are encouraged to integrate their thinking as they encounter the material in their basic science and clinical courses. IGR sessions provide a practical example of how this integrative thinking works. In addition, planning and presenting these sessions increase the collaboration between basic science and clinical faculty thereby enhancing their development as scholars and educators.

Four sessions are planned for the 2008-2009 academic year. The topics include abuse of steroids in athletics, HIV/AIDS, epilepsy, and arthritis. Archived versions of the IGR session will be available on the Medical College iTunes University website.

Collaborative Approach to Integrating Longitudinal Themes throughout the Educational Curriculum

Principal Investigator: Kathryn Denson, MD, Department of Medicine-Geriatrics/Gerontology

Collaborator(s): Diane Brown, Office of Academic Affairs

Competitive Education Fund: \$150,000 (2007-2010)

Focus Area(s): MCW Curriculum Development

This project pilots an innovative approach to develop longitudinal integration of basic science courses and clinical clerkships by creating linkages between basic and clinical sciences around geriatric curricula, thereby changing students' perceptions of compartmentalization of these courses and topics.

PROGRESS: At the end of the first year, this project saw significant integration of geriatrics curricula throughout the basic and clinical sciences. This was achieved through course collaboration wherein current curriculum was reviewed and opportunities for integration discussed. Needs assessments identified educational materials that were then piloted in a number of courses. Basic science courses as well as clinical clerkships were targeted for integration

using methods that include on-line modules and interactive learning sessions. New modules are in development, and subsequent reassessment and learner feedback will inform ongoing curriculum development and may serve as a model for future MCW curriculum structure campus wide.

A working conference developed minimum geriatric competencies for graduating medical students. The resulting document was accepted for publication in *Academic Medicine* and disseminated to all Internal Medicine and Family Medicine Geriatrics divisions involved in its creation. Facilitated by a Conference Advisory Committee, the conference included faculty on the Geriatrics Competencies Steering Committee as well as faculty from almost half (44%) of U.S. medical schools and representatives of several major medical education organizations.

This project will ultimately improve the health of the people of Wisconsin by incorporating geriatrics education throughout all four years of medical school, subsequently training medical students to provide excellent care to elderly patients of Wisconsin.

Collaborative Curriculum on Chronic Obesity (CoCO)

Principal Investigator: Jeff Morzinski, PhD, Department of Family and Community Medicine

Collaborators: Doug Bower, MD, Department of Family and Community Medicine; Ann Maguire, MD, MPH, Department of Medicine; Paola Palma Sisto, MD, Department of Pediatrics

Competitive Education Fund: \$149,964 (2006-2009)

Focus Area(s): MCW Curriculum Development

The CoCO project trains students in a set of evidence-based skills for treating obese patients and their families. Specific aims include: increasing the competence of medical students in the knowledge and care of obese patients, improving coordination of third-year ambulatory clerkships to foster a continuum of obesity education, and raising volunteer preceptors' knowledge about obesity care and patient education.

PROGRESS: The second year of the project emphasized shared lecture-discussions and a Continuing Medical Education Obesity Conference for faculty preceptors from three primary care clerkships including Pediatrics, General Internal Medicine, and Family and Community Medicine, during which an innovative "obesity toolkit" was introduced.

Each clerkship director identified several tools that were developed and applied at preceptor sites. Preliminary evaluation showed that students gained knowledge about obesity epidemiology, co-morbidities and treatment options. Additional feedback showed that some essential introductory features of the curriculum would be better presented face-to-face in order to address obesity attitudes and beliefs. Therefore, the 2007 course utilized more in-person instructional time with an audience-response system to collect and discuss student attitudes and beliefs about obesity.

In addition, the steering committee identified objectives and instructional methods to improve 3rd year medical student education by clustering specific elements of obesity education in a unique way within each clerkship (e.g., motivational interviewing, exercise prescriptions and metabolic syndrome), while overlapping in other areas (e.g., assessment of the obese patient). These unique clusters were refined and incorporated into the three primary care clerkships.

A shared, core and interactive obesity module was developed, implemented and evaluated for the transition to the clerkship course. Obesity Toolkits were developed and distributed to faculty preceptors who attended the November 2007 Obesity Conference, and preceptors were encouraged to identify additional tools to include. The toolkit, comprised primarily of documents placed into a toolkit binder, consists of 17 tools including BMI Charts, change readiness ruler, tools for setting goals related to diet and physical activity, and portion size guidelines. Tools and revised toolkits have been adopted into the curricula by all three primary care clerkships and are in use for both student and patient education purposes.

In the third project year, students are implementing obesity-focused service learning activities with Wisconsin families with or at-risk for obesity. Family medicine clerkship students are demonstrating their ability to assess

behavior change techniques in their clinic practices and employ these techniques effectively. Through CME and contact with their students, current 3rd year student preceptors are gaining exposure to evidence-based approaches to more effectively treat obese patients in their practices.

Community of Scientific Innovators (COSI): Biological Science and Translational Medicine Program (BSTM)

Principal Investigator: Sally Twining, PhD, Department of Biochemistry

Collaborators: William Grossman, MD, PhD, Department of Pediatrics; Karen Marcdante, MD, Department of Pediatrics; Rahul Nanchal, MD, Department of Medicine; and several faculty from the departments of Biochemistry, Biophysics, Cell Biology, Medicine, Microbiology and Molecular Genetics, Neurobiology and Anatomy, Neuroscience, Pharmacology and Toxicology, Pediatrics, Physiology, and the Interdisciplinary Program in Biomedical Sciences

Competitive Education Fund: \$135,000 (2006-2009)

Focus Area(s): MCW Curriculum Development, Faculty Development

The MCW Community of Scientific Innovators (COSI) seeks to change the culture of graduate science education by creating a collaborative learning environment to complement core knowledge, developing the competencies needed to address pressing medical problems and encouraging successful innovation in translational research. This project develops and implements a new PhD program: Basic Science and Translational Medicine (BSTM).

PROGRESS: Problem Solving in Pediatrics was developed into a course for graduate credit and will be submitted to the Graduate Studies Committee for approval in August 2008. This course represents the integration of graduate students into the M4 Selective, Problem Solving in Pediatrics, and utilizes patients in the Pediatric Intensive Care Unit as the focus for understanding the basic and clinical science applicable to a given case. In December 2007, a second pilot student went through the course, emphasizing that the presence and input of a graduate student in the course enhances discussions, and demonstrates the importance of interactions of the graduate student with peers in medical school education.

Interactions with the Graduate Studies Council and the Dean of the Graduate School revealed the need for changes in the original plans for this program. To streamline the curriculum, several one credit courses have been developed including a biostatistics course and two courses entitled: 1) Boundaries of Science and Medical Practice and 2) Introduction to Translational Medicine. A fourth course, yet to be implemented, will focus on translational research design and clinical applications aimed at providing a hands-on clinical experience directed toward the specific student's dissertation research area.

The BSTM Program and course proposals for the Introduction to Biostatistics, Applied Basic Science in Pediatrics and Translational Research Design and Clinical Applications to the Graduate Studies Committee will soon be completed and submitted for approval. Areas of research for students were defined and clinician-scientist co-mentors identified. This program will generate researchers who will be prepared to push bench results towards the bedside.

Cultural Competency in Emergency Medicine: Latino Culture

Principal Investigator: Edward Callahan, MD, MS, Department of Emergency Medicine

Collaborator(s): Dawn Bragg, PhD, Office of Student Affairs/Diversity

Competitive Education Fund: \$126,025 (2007-2009)

Focus Area(s): MCW Curriculum Development, Faculty Development

This project aims to improve emergency health care for Latino patients by incorporating cultural competency education modules with an emphasis on Latino culture into a two-year curriculum for Emergency Medicine residents.

PROGRESS: The first session of the curriculum was dedicated to helping medical providers understand their own biases, values, and beliefs, and demonstrating how those beliefs might affect their personal practice. An ANGEL* course was developed for Emergency Medicine residents and faculty to help them learn about their conscious and

unconscious values. Learners were given a pre-curriculum survey on Exposure to Latino Cultural Issues in Medicine. This tool, adapted with the help of expert consultant Dr. Teresa Ramos from the National Hispanic Medical Association, helped define the issues that would be key throughout the curriculum.

Survey results indicated that most residents and faculty did not understand the relationship between health, medicine and Latino culture, that they were not familiar with literature on Latino health, and did not feel that they could teach this topic to other residents or students. The survey tool was followed with a case presentation that allowed learners to write about experiences they have had with health care and biases. Residents and faculty shared descriptions of events and thoughtful responses to questions about barriers to healthcare, Latino cultural values, folk illnesses, use of interpreters, Latino health issues, and the role of Emergency Physicians in caring for a diverse patient population.

Content analysis identified a gap between what residents had witnessed in caring for minorities, and their understanding of the underlying causes. Learners had seen examples of overtreatment, over-ordering, harm, and increased cost. They felt that language and cultural beliefs were the biggest barriers to providing appropriate care to Latino patients. The majority of residents felt that healthcare workers who care for Hispanic patients should learn to speak Spanish.

The final component of session 1 was an online activity to demonstrate unconscious biases present within our society. Residents took the Implicit Association Test (IAT) that helped learners identify their own biases. Results and findings from session 1 were disseminated in poster format. Two poster presentations, one at the MCW Research Forum and the other at the Accreditation Council for Graduate Medical Education Annual Educational Conference, highlighted project outcomes to date.

Other sessions offered opportunities to understand the unique role that emergency medicine plays in the care of minorities, specifically Latinos, and to recognize common health conditions and patterns of health care found in the Latino population such as lack of adequate insurance coverage, lack of primary care access, and susceptibility to chronic medical conditions.

* *ANGEL- MCW's e-learning platform*

Developing a Technology and Internet-Based Infrastructure/Program for MCW Continuing Medical Education

Principal Investigator: Carlyle Chan, MD, Department of Psychiatry and Behavioral Medicine

Collaborator(s): Lee Biblo, MD, Department of Medicine; Diane Book, MD, Department of Neurology; Arthur Derse, MD, JD, Department of Population Health; Bruce Krueger, Medical Society of Milwaukee County; Jane Kivlin, MD, Director, of Office of Continuing Medical Education; Philip Redlich, MD, Department of Surgery

Competitive Education Fund: \$150,000 (2007-2010)

Focus Area(s): Educational Outreach via Internet-based Continuing Medical Education

This project aims to increase accessibility of Continuing Medical Education (CME) offerings for health professionals through distance-learning methods. Archived CME offerings from a number of MCW departments and divisions will be made available to physicians across Wisconsin through new technology and web-based platforms.

PROGRESS: To date, 60 Grand Rounds presentations from Internal Medicine, Surgery, Psychiatry, Neurology and Bioethics were made available via the web. The departments of Otolaryngology, Pediatric Gastroenterology and the Center for Aids Intervention Research have joined the project.

Project investigators used an online tool for registration, administering tests and tracking CME credits. Apple Computer's iTunes University was used to place content in a password protected portion of their website.

MCW faculty provide almost 3,000 hours of Continuing Medical Education teaching each year. Most of these presentations are not preserved. By capturing and saving this educational content and making it available to the medical community for later viewing, MCW will be providing up-to-date, evidence-based information for physicians to use in the care of their patients.

Development of a Curriculum Practice-Based Learning and Improvement (PBLI) For Residents: A “Train the Trainer” Approach

Principal Investigator: Geoffrey Lamb, MD, Department of Medicine

Collaborators: Barbara Connelly, RN, MJ, Office of Graduate Medical Education; John Weigelt, MD, DVM, Department of Surgery

Competitive Education Fund: \$149,882 (2007-2010)

Focus Area(s): MCW Curriculum Development, Faculty Development

This project will develop a new curriculum to teach residents from multiple specialties essential skills for lifelong Practice-Based Learning and Improvement (PBLI). PBLI is one of the six core competencies mandated by the Accreditation Council for Graduate Medical Education (ACGME). The project also aims to train faculty to use the curriculum and accompanying tools to disseminate these skills.

PROGRESS: With the project just entering its second year, investigators developed a structure for a web-based curriculum consisting of eight modules that can stand alone as an on-line program or be combined with face-to-face instruction. The first six modules were completed.

Junior faculty for the initial pilot testing were identified. They will pilot test the online curriculum, receive instruction in bedside and small group teaching, develop relevant teaching cases in Medicine and Surgery and roll out the curriculum with small groups of residents and students beginning in September 2008. A unique aspect of this project is the focus on identification of practice issues at the bedside and translating them to action. Four sessions have been scheduled addressing bedside teaching and small group teaching incorporating the basics of practice based learning and improvement and quality principles.

As this project matures it is anticipated that there will be a cadre of trained faculty well versed in patient safety and quality improvement skills that can facilitate the dissemination of this knowledge among residents and provide for ongoing faculty development. It is expected that graduating residents will bring these principles with them as they begin to practice around the state, thus bringing health improvement processes into the community.

Educational Scholars: Building Educational Capacity through Faculty Development

Principal Investigator: Deborah Simpson, PhD, Office of Academic Affairs

Collaborator(s): Karen Marcante, MD, Department of Pediatrics; James Sebastian, MD, Department of Medicine

Research and Education Initiative Fund: \$450,000 (2007-2010)

Focus Area(s): Faculty Development, Clinical Skills and Learning Center, MCW Curriculum Development

This project aims to build and sustain the capacity of MCW faculty as educators through a structured, modular-based faculty development program known as the Docere Faculty Development Program for Educators. The Docere program will focus on evidence-based practices to design, implement, and evaluate instruction methodologies and learners' experiences. The program is explicitly designed to prepare faculty as educators who will design, deliver and evaluate capstone projects targeted to defined needs and trainees. Once implemented, these projects through the actions of the trainees, will improve the health of Wisconsin's citizens. Capstone projects will be disseminated in local and national peer reviewed forums.

PROGRESS: The first year of the project was associated with start-up related activities and the design, implementation, and evaluation of the monthly training sessions. Initial activities included IRB application and approval for exempt status, program announcements and web-site development, recruitment and selection of fellows, and training session development. The emphasis then shifted to implementation of the training sessions and utilization of MCW's e-learning platform (ANGEL) as a portal for all Docere-related resources and session materials.

Docere Fellowship Program recruitment began in July and August of 2007. Twenty-eight completed applications were received and reviewed by members of the Society of Teaching Scholars. Based on reviewers' ratings, 20 faculty members ranging from assistant to full professors were chosen, representing 12 departments. Attendance at the Docere sessions was high, suggesting the fellows' strong commitment to improving their effectiveness as educators. Pre-Post Self Assessments provided data regarding impact as evidence educators.

During the first year, each of the 20 fellows developed capstone projects. The piloting of their specific change projects began during the summer with implementation beginning in Fall 2008 – Winter/Spring 2009. Although the Docere program is in its first year, two fellows have presented at the Society of Educators in Anesthesia (SEA) meeting in June 2008, and one fellow will present at the national pediatric neurology resident committee meeting in September 2008. This last presentation is particularly timely as the revised exam for PGY-3 residents is needed to meet the new American Board of Neurology and Psychiatry (ABPN) requirements for credentialing in child neurology.

Development and Evaluation of a Student-Centered Self-Directed OSCE* Program and an ACGME Competency-Driven OSCE for Development and Evaluation of Residents' Achievement of ACGME Competency Objectives (Complete)**

Principal Investigator: Dario Torre, MD, MPH, Department of Medicine

Collaborators: Susan Davids, MD, MPH, Julie Mitchell, MD, MS, Kurt Pfeifer, MD, and James Sebastian, MD, Department of Medicine

Research and Education Initiative Fund: \$300,000 (2004-2007)

Focus Area(s): Clinical Skills and Learning, Patient Education and Library Services, MCW Curriculum Development

This program provides clinical skills training to better prepare medical students for patient care through the integration of new technology into curricula that will ultimately improve the overall health of the residents of Wisconsin.

PROGRESS: This project established a novel approach for students to select, observe and grade one of their standardized patient encounters. Through this process, students gain knowledge and experience that will enhance their performance, create opportunities for self-assessment and facilitate the acquisition of knowledge relevant to the core clinical competencies and training priorities identified in the AHW Five-Year Plan.

In its third and final year of implementation, ninety-two percent of the 203 students who participated over the last academic year stated that the overall quality of the PRE-OSCE program was Excellent (35%) or Good (57%).

Significant progress has been made in improving student proficiency in performing important elements of the clinical exam, interpreting and documenting findings, and communicating results via oral and written formats, as well as enhancement of self-assessment skills and fostering students' ability to develop the necessary skills to become self-directed, life-long learners. These objectives are met through the process of structured encounters with standardized patients, student self-assessments, video review of performance, and direct and individual simulator interaction. The program has also assisted in the evaluation of residents' achievement of ACGME competencies.

Three Ventrilosopes were purchased to create a more realistic physical exam component in the examination of standardized patients. It is intended not only to use these scopes during future exams, but also to allow other departments to have access to them for their own exams in the STAR Center. Overall, this project fosters collaborations in all areas of medical education by providing dedicated resources for groups to work together to provide the most well-rounded and practice-based education possible for medical students, residents, and other health care providers.

* OSCE = Objective Structured Clinical Examination. OSCE is a timed examination in which medical students interact with a series of simulated patients in stations that may involve history-taking, physical examination, counseling or patient management.

**ACGME = The Accreditation Council for Graduate Medical Education. ACGME is responsible for the accreditation of post-MD medical training programs within the U.S.

Development of a PhD in Public and Community Health Program

Principal Investigator: Jane Kotchen, PhD, Department of Population Health

Collaborators: Several faculty from MCW departments and divisions including Bioethics, Biostatistics, Epidemiology, Family and Community Medicine, Pediatrics, Population Health, and Psychiatry and Behavioral Medicine

Research and Education Initiative Fund: \$4,778,113 (2006-2011) and \$40,000 (2005-2006)

Focus Area(s): Population Health, MCW Curriculum Development

The PhD in Public and Community Health enhances the breadth and depth of research expertise in public and community health with an emphasis on training the next generation of research scientists in population health. The program will provide advanced training for the public health workforce with the goal of assuring healthy communities. The curriculum and research opportunities will focus on community health improvement and effecting sustained improvements.

Progress: The PhD in Public and Community Health admitted its first cohort of students in Fall 2008 and successfully recruited Elaine, Drew, PhD, a social and behavioral health scientist, to the faculty. The program also advanced three new courses to the Graduate Studies Council for approval, expanded its faculty appointments in teaching and research, formed a Faculty Advisory Committee representing four departments, and received MCW accreditation by the Higher Learning Commission of the North Central Association of Colleges and Schools.

In addition, the program strengthened its marketing through the development of a new website and conducted outreach to professional organizations, national and regional conferences, universities and colleges, and the media. Student recruitment efforts successfully yielded a significant number of inquiries and applications that resulted in high-quality candidates for its inaugural class.

The addition of the PhD Program will provide advanced public health training and create opportunities for original, independent research focusing on important public health issues. Having the program situated at MCW will strengthen collaboration between medicine, other health professions, public health and communities, which is consistent with the Advancing a Healthier Wisconsin Plan and many of its stewardship components.

Health Outreach, Partnering, and Education (HOPE) Initiative (Complete)

Principal Investigator: Laura Roberts, MD, Department of Psychiatry and Behavioral Medicine

Collaborators: Carlyle Chan, MD, Michelle Cornette, PhD, Mitzi Dearborn, PhD, Joseph Layde, MD, JD, Joseph O'Grady, MD, David Seal, PhD, Department of Psychiatry and Behavioral Medicine; Columbia St. Mary's Hospital-Department of Psychotherapies; MCW Continuing Medical and Professional Education; Froedtert Memorial Lutheran Hospital; University of Wisconsin-Milwaukee School of Nursing; West Allis Department of Public Health; Zablocki Veterans Administration Medical Center

Research and Education Initiative Fund: \$242,566 (2004-2007)

Focus Area(s): Public Health Professional Leadership, Patient Education and Library Services

The Health Outreach, Partnering and Education (HOPE) Initiative provides mental health education resources to health professionals and the public through an innovative, multidisciplinary approach that targets Wisconsin rural and urban populations. In accordance with the AHW Five-Year Plan, this project works closely with the Continuing Medical Education (CME) program to increase the impact of educational offerings in clinical topics using new distance learning technology.

PROGRESS: The HOPE Initiative continues to strengthen community connections through its extensive partnering efforts. Diverse partnerships with key stakeholders such as the state prison system, the Milwaukee County Mental Health Association, the Disaster Mental Health Task Force, and Phoenix Care Systems, Inc. enhance the state's capacity for responding to the impact of mental illness. The collaboration with Southeastern Wisconsin area colleges' Student Mental Health Services provide both in-service training and clinical services through the Center for Psychotherapies at Columbia St. Mary's Hospital.

The summer of 2008 marked the 23rd edition of the Door County Summer Institute with eight separate continuing education sessions that attracted more than 250 mental health professionals, including 180 participants from Wisconsin. The Department provides full and partial tuition scholarships to not-for-profit community agencies both in Milwaukee and Door County.

CME Grand Rounds are held weekly for three weeks a month. Between 80 and 130 multidisciplinary professionals, students and lay persons regularly attend this series. The HOPE Initiative continues dissemination of the Continuing Education Grand Rounds through web-based resources. In collaboration with Froedtert Memorial Lutheran Hospital & Community Health, Inc., community education lectures are presented at various venues in the Milwaukee area on such topics as positive mental health, depression, and seasonal affective disorder.

The ongoing association with the Charles Kubly Foundation has resulted in an endowed chair for Psychiatry, as well as supplemental funding for several two-day conferences. The next conference, to be held at MCW in April 2009, will feature Donald Meichenbaum, PhD, one of the founders of Cognitive Behavioral Therapy, who was voted one of the ten most influential psychotherapists of the 20th century. He has been working with the military on ways to implement stress inoculation therapy, which he developed, and on ways to bolster resilience in soldiers and their family members.

Healthy Wisconsin Leadership Institute

Principal Investigator: Peter Layde, MD, MSc, Department of Population Health

Collaborators: Jeff Morzinski, PhD, Department of Family and Community Medicine; Pat Remington, MD, University of Wisconsin School of Medicine and Public Health

Research and Education Initiative Fund: \$100,000 (2004 Planning), \$556,000 (2005-2008 Implementation)

Focus Area(s): Public Health Professional Leadership

The Healthy Wisconsin Leadership Institute provides continuing education and training for those working to protect and promote the health of the public. It is supported jointly by MCW and the University of Wisconsin School of Medicine and Public Health (UW).

PROGRESS: The Community Teams Program is midway through its second year with five new teams representing the Fox Cities, the Coulee Region, Washington County, Milwaukee and a statewide initiative. Teams have begun to put into action aspects of their community health priority projects – efforts focusing on increasing access to mental health care and cancer care, and improving physical activity and nutrition among community members.

The 2008–2009 Community Teams are comprised of a total of seven teams, with 44 members. The teams represent the Milwaukee County Nutrition and Physical Activity Coalition, Milwaukee Latino Health Coalition, Fond du Lac Drug Free Communities Task Force, Healthy Beginnings Dane County, Healthy People Lincoln County, Healthy People Wood County, and Oneida County Mental Health Inter-Agency Council.

Winter/spring health policy programming included the workshop, *Public Health Policy: Media, Messaging and Motivation*, held in conjunction with the Fourth Street Forum in Milwaukee's policy broadcast on *Guns, Our Health and Public Policy*. Programs are being scheduled now and include the annual Fourth Street Forum session and four additional sessions throughout the State. Leadership Institute programs are made available for asynchronous viewing through podcasts and webinars at www.hwli.org.

The Health Policy Program and Lifelong Learning and Mentoring Program are being combined to become Individual Learning Opportunities. In order to strengthen the partnership with UW, Institute staff will focus more closely on the Individual Learning Opportunities over the next year.

In support of Wisconsin's Department of Public Health initiative, *Eliminating Racial and Ethnic Disparities in Birth Outcomes*, the HWLI developed a partnership with the Racine Infant Mortality Coalition to provide collaborative leadership resources and training. The first training session was completed in April 2008 and additional sessions are being planned. The program also worked closely with Wisconsin Public Health Association (WPHA) and UW

School of Nursing to initiate a planning process for the coordination of statewide mentoring activities currently under development.

Faculty and staff at UW and MCW continue to build Leadership Institute partnerships through such mechanisms as quarterly meetings with a diverse Advisory Committee; workgroups to provide input to program development; participation in Division of Public Health workforce development efforts; participating in the National Public Health Leadership Development Network and the National Network of Public Health Institutes; and active involvement in WPHA activities.

The overall HWLI evaluation plan was reviewed and approved by the Institute Advisory Committee. In addition to the collection of ongoing data on program activity for program improvement and sharing of information with key stakeholders, this new comprehensive plan will allow the HWLI to assess its intermediate and longer-term impact on participant's knowledge, attitudes and practices as well as related community outcomes.

An abstract was presented at the 2008 APHA Annual Conference entitled, *Border Crossings: Transformational Partnerships for Community Health Improvement*, as well as presentations for the WPHA Annual Conference and the National Public Health Leadership Development Network Annual Conference.

The Healthy Wisconsin Leadership Institute is providing continuing education for public health professionals, many of whom have little formal training in public health. The Institute's initiatives support the expanded MPH program at MCW, and support efforts to alleviate public health disparities in Milwaukee and throughout the state. These programs train individuals with varied skill sets to be successful public health practitioners.

Increasing Identification of Vulnerable Elderly in the Community Utilizing the Electronic Health Record

Principal Investigator: David Lillich, MD, Department of Family and Community Medicine

Collaborator(s): Mary Parish Gavinski, MD, Community Care for the Elderly

Competitive Education Fund: \$150,000 (2007-2009)

Focus Area(s): MCW Curriculum Development, Faculty Development

This project will develop and evaluate an Electronic Health Record (EHR) template that prompts Family and Community Medicine residents to identify geriatric conditions that put patients over 65 years of age at risk for functional decline and death.

PROGRESS: Investigators of this project sought to identify appropriate screening and assessment tools for older adults in the primary care setting. A template was developed, which incorporated these tools by using the Assessing Care of Vulnerable Elders (ACOVE-2) project to assist in the assessment and care of patients identified with memory loss. The Master Geriatric Screening Tool gathers information on the following 10 topics: memory, falls and balance, mood, ability to care for self, vision, hearing, incontinence, driving, weight loss, and advance directives, and living wills. If the patient responds positively to the memory screening question, then the provider is linked to a template for a focused dementia evaluation and management visit.

The template has educational links to various resources such as the Alzheimer's Association as well as to local community resources such as the Memory Loss Clinic at Alexian Village, Community Care for the Elderly, and various other local and national support groups for memory loss. The template was initially piloted with several faculty from the geriatric and internal medicine residency programs, and they provided feedback regarding its usability. The template was implemented at both residency programs in January 2008.

The investigator team then defined the medical record indicators that would be collected both retrospectively and prospectively to assess the effectiveness of the template in the care of elderly patients. These include dementia and geriatric screening template ICD-9 codes as well as the ACOVE-3 quality indicators for the care of dementia. These indicators from the EHR will help assess the effectiveness of the template from an educational and patient care perspective. The results of the medical record review will assist in making changes to the EHR templates to make them more effective. The EHR template has been developed and implemented to improve the educational

experience and the patient care outcomes of the St. Joseph and Columbia St. Mary's Family Practice residency programs.

Integrated Curriculum in Health Policy and Population Health

Principal Investigator: Linda Meurer, MD, MPH, Department of Family and Community Medicine

Collaborator(s): Douglas Bower, MD, Department of Family and Community Medicine; Keri Frisch, MS, Injury Research Center; Stephen Hargarten, MD, MPH, Department of Emergency Medicine/Injury Research Center; Peter Layde, MD, MSc, Department of Population Health; John Meurer, MD, MBA, Department of Pediatrics; Deborah Simpson, PhD, Office of Academic Affairs; Staci Young, MS, Department of Family and Community Medicine

Competitive Education Fund: \$149,911 (2007-2010)

Focus Area(s): MCW Curriculum Development, Library Services

This project aims to develop a coordinated longitudinal medical student curriculum in population health and health policy. The curriculum will address key areas in public health and community medicine and include community-based service-learning opportunities for medical students building from opportunities provided through the Healthier Wisconsin Partnership Program.

PROGRESS: Investigators conducted a needs assessment beginning with a review of the literature related to population health and policy, including similar medical school curricula. This review informed the initial development of core competencies for an integrated curriculum. A multidisciplinary advisory board of key experts and stakeholders, representing multiple departments and disciplines including public health and the social sciences, was then identified to inform the development of core competencies and program planning.

Based on feedback from key stakeholders, a conceptual model was developed to provide an overall context for key objectives. This *Population-based Model for Patient-Centered Care* was presented to M1-M2 course directors and to the Curriculum Evaluation Committee (CEC) for input on how objectives can be incorporated into existing curricula. The model has been integrated into new curricular pilots such as health policy and evidence-based medicine lectures, courses, and summer research programs.

In addition, investigators are currently completing a review of MCW library holdings in population health and will coordinate efforts with the Department of Populations Health's new PhD program in Public and Community Health in making recommendations for additional acquisitions and potentially dedicating a special section of the library over the next 6 months.

This project will strengthen the health workforce by preparing population health oriented physician leaders and advocates with skills and attitudes necessary to influence health policy, promote community health and eliminate health disparities. This project recognizes the influence of lifestyle, social determinants and environmental hazards on morbidity and mortality, particularly for Wisconsin residents.

Interdepartmental Collaboration for Competency-Based Education

Principal Investigator: Kurt Pfeifer, MD, Department of Medicine

Collaborators: Lisa Marr, MD, Department of Medicine-Palliative Care Center; Wendy Peltier, MD, Department of Neurology; faculty from the departments of Anesthesiology, Obstetrics and Gynecology, Physical Medicine and Rehabilitation, and Surgery

Competitive Education Fund: \$150,000 (2006-2009)

Focus Area(s): MCW Curriculum Development, Clinical Skills and Learning, Faculty Development

Developed through a multi-departmental collaboration, this program aims to establish a core curriculum to provide ACGME* competency-based education for residents, promote faculty leadership, curriculum development and educational scholarship by serving as a venue for piloting new teaching methods and testing their effectiveness.

PROGRESS: Results from multiple-choice examinations, simulator testing, objective structured clinical examinations (OSCEs) and resident and faculty feedback indicate continued improvement in resident proficiency

with skills, knowledge and attitudes identified as critical to early training. Collaborating departments performed a comprehensive needs and resource assessment to determine what skills and knowledge are critical to their residents and what means they currently have for providing this education. Information from all departments was pooled to generate a curriculum with prioritized, general educational objectives.

The curriculum was divided into three phases based on the level of training at which the objectives were most applicable – Phase I for PGY-1 residents, Phase II for PGY-2 residents and Phase III for PGY-3 or higher residents. Each phase was run several times over the past two academic years, and more than 200 residents participated. Programs relieved participating residents of all other clinical duties so they could focus on education during the course.

A number of educational modules planned for the Core Skills Program are either new or involve new teaching techniques. Several faculty have used the results of their teaching interventions in this program to enhance other educational experiences with students and residents and to augment their clinician educator portfolios. Participating faculty have generated abstracts describing the results of two modules.

**ACGME = The Accreditation Council for Graduate Medical Education. ACGME is responsible for the accreditation of post-MD medical training programs within the U.S.*

Masters of Public Health Distance Learning

Principal Investigator: Peter Layde, MD, MSc, Department of Population Health

Collaborator: Jane Kotchen, MD, MPH, Department of Population Health

Research and Education Initiative Fund: \$2,761,897 (2006-2011)

Focus Area(s): Masters of Public Health Degree Program, Population Health

This award supports the expansion of the Masters of Public Health (MPH) Degree Program. The audience has been expanded to include health professionals other than physicians who work in local public health and community agencies. The new program uses modern distance-learning technologies.

PROGRESS: During the past year, a revised mission statement, goals, values and objectives were adopted for the MPH program. The student body was expanded to include individuals with undergraduate degrees and an interest in the public health field and a Graduate Certificate in Public Health was approved. An Advisory Committee was established to guide enhancement for the MPH program. Four new faculty were appointed, and new courses developed. In addition, Dr. Jane Kotchen accepted the position of permanent Program Director in January 2008.

Seven out of eight new courses that were submitted to the Curriculum and Programs Committee and subsequently to the Graduate Studies Council were approved. One course is being revised and will be resubmitted. The program has two areas of concentration that include Public and Community Health and Occupational Health and Medicine. Two Educational Specialists with expertise in adult education and online learning will assist faculty with improving the instructional design of existing courses and providing recommendations for those courses being developed.

The MPH Program curriculum is designed to provide students with core public health knowledge and practical training that can be applied toward achieving the goal of assuring healthy communities. With the expansion of the program to include the broader public health workforce and increased recruitment efforts in Wisconsin, the student body consists of more individuals who reside in the state. Skills and competencies gained from participation in the program will enhance their ability to provide leadership in addressing significant public and community health issues.

Medical College of Wisconsin Humanities Program (Complete)

Principal Investigator: Arthur Derse, MD, JD, Department of Population Health

Collaborators: Julia Uihlein, MA, Department of Population Health

Research and Education Initiative Fund: \$150,000 (2006-2007)

Focus Area(s): MCW Curriculum Development, Faculty Development

This project develops a new program at MCW that incorporates medical humanities into the formal curriculum for medical students as well as increases faculty interest and competence.

PROGRESS: This project continues to expand the Medical Humanities Program at MCW through medical student education and faculty development with increasing class sizes and expanded offerings to current humanities electives including the M-4 Art of Medicine through the Humanities; the M-2 Medical Ethics and Palliative Care; the M-1 Anatomy Class; the M-1 Humanities Track; and extracurriculars such as The Healer's Art Elective, and the Student Humanities Interest Group. Ongoing activities for MCW students and faculty include humanities symposia, the faculty humanities interest group, and awards/support for faculty for medical humanities initiatives.

The MCW Medical Humanities Program is dedicated to professionalism, communication, empathy, reflection upon the duties of physicians and the characteristics of the professional, the meaning of illness and suffering, and the importance of listening to and caring for patients. The implementation of these goals through faculty development and student education enhances the doctor-patient relationship, improving the health and quality of life of the citizens of Wisconsin.

The Nutritional Disorders Telehealth Network

Principal Investigator: Alan Silverman, PhD, Department of Pediatrics

Collaborator(s): Rachel Greenley, PhD, Department of Pediatrics; Children's Hospital of Wisconsin; Milwaukee Area Health Education Center

Competitive Education Fund: \$150,000 (2008-2011)

Focus Area(s): Clinical Skills and Learning Center, Faculty Development, Educational Outreach via CME

The goal of the project is to increase the expertise of primary care physicians and other health care providers regarding childhood nutritional disorders and develop their skills with telehealth communication. An anticipated goal is that increased provider expertise will translate into increased access to care for those children having nutritional disorders in rural and underserved communities. The proposed telemedicine training sites will provide training in assessment and treatment of nutritional disorders as well as consultation and referral services.

Progress: As this project began after March 2008, progress on this project's activities will be provided in future reporting periods of the Advancing a Healthier Wisconsin Annual Report.

Objective Structured Clinical Exam (OSCE) to Assess Community Health Competencies (Complete)

Principal Investigator: Marie Wolff, PhD, Department of Family and Community Medicine

Collaborators: Syed Ahmed, MD, DrPH, Barbra Beck, PhD, Douglas Bower, MD, Melissa Holmquist, MS, Staci Young, MS, Department of Family and Community Medicine; Deborah Simpson, PhD, Office of Academic Affairs; and Sr. Lucina Halbur, S.E.T. Ministry, Inc.

Competitive Education Fund: \$120,000 (2006-2008)

Focus Area(s): MCW Curriculum Development, Clinical Skills and Learning

This community-academic partnership develops an Objective Structured Clinical Exam (OSCE) to assess Family and Community Medicine clerkship students' ability to provide community responsive care with a focus on the impact of cultural beliefs and values, socioeconomic status and health literacy on the patient encounter and health status.

PROGRESS: The grant funds have been utilized to develop a list of competencies related to community health in general, and competencies related to the impact of socioeconomic status, cultural competency, and inadequate health literacy in particular. These competencies guided the development of three OSCE cases. The cases were enhanced by the participation of community health nurses familiar with working with patients of low socioeconomic status, differing cultural beliefs and poor health literacy. The OSCE cases were then administered to 30 third year Family Medicine clerkship students and revised based on our experience. The OSCE cases have now been institutionalized as a core component of the end of month evaluation of the Family and Community Medicine 3rd year clerkship students. Scores on the OSCEs count for 10% of the student's grade for the clerkship.

Patient-Centered Communication Skills Training for Obstetrics and Gynecology

Principal Investigator: Raj Narayan, MD, FRCOG, Department of Obstetrics and Gynecology

Collaborator(s): Paul Lemen, MD, Department of Obstetrics and Gynecology; Mary Beth Phelan, MD, Department of Emergency Medicine

Competitive Education Fund: \$150,000 (2007-2010)

Focus Area(s): Clinical Skills and Learning, Faculty Development, MCW Curriculum Development

This project improves resident education in physician-patient communication using simulated patient encounters. Good physician-patient communication results in better patient participation in medical-decision making, improved patient compliance with treatment and higher patient satisfaction.

PROGRESS: Twenty-seven residents in the OB/GYN residency program participated in simulated patient encounters which were videotaped and evaluated by an independent evaluator, the principal investigator, and the standardized patient. Residents completed a self evaluation. Patient satisfaction survey data is collected before the intervention and again in the coming months to evaluate the effect of videotaping and feedback on resident performance. On completion of one cycle of intervention and evaluation, data will be analyzed to determine effectiveness of the intervention.

This project improves the interpersonal and communication skills of residents training to become obstetricians and gynecologists. Case scenarios were specifically developed to include patients with varying cultural, emotional and educational needs, and to test interaction in difficult situations such as breaking bad news to an anxious patient. The feedback provided to the residents addresses the need for modification of technique depending on the circumstances. Residents will be evaluated again in the next academic year for improvement in performance. First year data analysis will be submitted for publication/presentation at the Annual Meeting of the Association of Professors of Gynecology and Obstetrics in March 2009.

Quality Rounds Initiative

Principal Investigator: Weisgerber, Michael, MD, Department of Pediatrics

Collaborator(s): Heather Toth, MD, Department of Medicine; Dawn Bragg, PhD, Department of Educational Services

Competitive Education Fund: \$149,299 (2008-2011)

Focus Area(s): MCW Curriculum Development, Clinical Skills and Learning Center, Faculty Development

This proposal will use teaching rounds as a tool to develop senior residents' competency as clinical teachers and leaders through internal medicine and pediatric services with the goal of producing learning materials that will help senior residents develop their teaching and leadership skills.

PROGRESS: Since this project began in July 2008, progress will be provided in future reporting periods of the Advancing a Healthier Wisconsin Annual Report.

Start Up for the STAR Center: Standardized Teaching Assessment Resource Center

Principal Investigators: Kenneth Simons, MD, Office of Academic Affairs and Deborah Simpson, PhD, Office of Academic Affairs

Collaborators: Erin Dalcourt, Office of Academic Affairs; Dawn Bragg, PhD, Office of Student Affairs/Diversity

Research and Education Initiative Fund: \$250,000 (2005-2008)

Focus Area(s): Clinical Skills and Learning, MCW Curriculum Development

The Standardized Teaching, Assessment and Resource (STAR) Center provides a controlled, simulated clinical environment in which to train health care providers. The facilities permit medical students, physicians-in-training, and physicians-in-practice to obtain the skills necessary to perform outstanding clinical care and to be assessed for clinical competency according to standardized assessment models and criteria. The monitoring and communication systems allow learners to gain immediate, real-time feedback on their performance from multiple observers, who can identify deficiencies and individualize specific training needs to improve performance.

PROGRESS: Usage of this innovative facility continues to rise significantly. During this reporting period, there has been a 28% increase in hours logged by users of the STAR Center, a 3% increase in the number of users, and a 29% increase in the number of events. As of June 2008, 8,578 users from multiple disciplines and departments have used the STAR Center in support of 679 separate events.

The STAR Center promotes internal and community awareness to increase the use of the facility, with tours and presentations conducted to familiarize stakeholders and potential users with the Center's array of innovative capabilities. The STAR Center and its simulators have been featured in the in-house publications of the 2007 Annual Report and Honor Roll, Alumni 2007 Honor Roll, and the Commitment to Excellence Strategic Plan 2007-2012. In its mission to improve patient care and prevent disease in Wisconsin, STAR Center activities and curriculum have been developed to align with the key health issues outlined in the AHW Five-Year Plan and the State Health Plan.

Students as Facilitators for Consumer/Patient Access to Quality Internet Health Information

Principal Investigator: Dawn Bragg, PhD, Office of Student Affairs/Diversity

Collaborators: MCW Apprenticeship in Medicine (AIM) Program; MCW Todd Wehr Library, and Milwaukee Public Libraries

Competitive Education Fund: \$105,000 (2006-2008)

Focus Area(s): Patient Education and Library Services

Using web-based resources, this project educates the public on identifying quality health care information, assists the public in health care decision-making by increasing their access to and knowledge of health information, and augments the knowledge of medical students in using quality consumer health care resources.

PROGRESS: The MCWCHARTS website was created to help the public/health care consumers find quality health information on the web. It contains evaluation criteria to help users choose reliable, accurate websites for health information. The About this Website page includes the list of the State Health Plan's top health priorities. Since the completion of the project, MCWCHARTS was revised to fit in with MCW's new website design. A Health Web Sites in Spanish page was added, and additional links were added to the Selected Health Web Sites and Community Health Resources pages.

In addition, two online tutorials were developed and are linked from MCWCHARTS. The [Finding Reliable Health Information Online](#) tutorial is linked from the MCWCHARTS homepage, and explains how to evaluate websites and how to use MCWCHARTS for accessing health information. The [MedlinePlus tutorial](#) is linked from the [Selected Health Web Sites](#) page and explains how to use the MedlinePlus website, which is sponsored by the National Library of Medicine. These continuous updates and improvements ensure that MCWCHARTS will remain current.

An MCW librarian taught community classes at several libraries, community senior centers, and a health fair at Washington Park Senior Center in Milwaukee. Four of these centers are located in medically underserved areas in the city. Another class took place at Lapham Park Wellness Center, also located in Milwaukee's Central City. These sessions, entitled "Finding Health Information on the Internet," focused on the search and evaluation of health websites using links from MCWCHARTS. Study results were presented at a conference of the American Association of Medical Colleges, and the Family Medicine Research Forum.

Projects completed prior to reporting period of July 1, 2007-June 30, 2008

Development of the Wisconsin Public Health Leadership Institute

Principal Investigator: Peter Layde, MD, MSc, Department of Population Health

Health Outreach, Partnering, and Education (HOPE) Initiative

Principal Investigator: Laura Roberts, MD, Department of Psychiatry and Behavioral Medicine

Healthy Wisconsin Leadership Institute

Principal Investigator: Peter Layde, MD, MSc, Department of Population Health

Improving Education in Obstetrics and Gynecology

Principal Investigator: Michael Lund, MD, Department of Obstetrics and Gynecology