MedEd DULUTH CAMPUS June 2008

26 Native American Students Participate in CAIMH Summer Programs

26 American Indian Students are participating in the Center of American Indian and Minority Health's three summer science and academic programs. The programs are part of CAIMH's Indian Health Pathway which starts working with Native American students as early as grade school to interest them in science and math and eventually in healthcare careers. In addition to High School Superstars and Native Americans into Medicine, this year CAIMH introduced a unique program, the Journey Garden Program which teaches students science through gardening.

Journey Garden: Eight American Indian 9th and 10th grade students are learning about science and medicine by gardening. Taught by American Indian medical student Melvina Bissonette, incoming medical student Nick Austin, alumnus Shannon Wesley, M.D. and Francois Medion, The Journey Garden Program teaches the students how to plant and care for a garden and integrates health related topics such as nutrition and food science, American Indian medicinal plants, and careers in the health professions. Students also will conduct an experiment with earthworms. The class is being held at the Fond du Lac Ojibwe School in Cloquet.

High School Superstars: Sixteen American Indian 11th and 12th grade students are participating in CAIMH'S High School Superstar program, an enriched curriculum for academic and pre-professional development for the health professions. Activities are designed to help students define their goals for the health professions and sharpen their academic skills. Hands-on learning activities give participants the opportunity to apply research techniques to gain a better understanding of health problems. Using medical case studies, students experience how a doctor assesses a patient's symptoms and makes diagnoses. One of the new sessions this year is mind mapping, a technique that helps students analyze and problem solve and learn and remember information.

Native Americans into Medicine: Two Native American college students are participating in CAIMH's Native Americans into Medicine (NAM) program. NAM participants explore and prepare for careers in the health professions. Hands-on activities, tours, and discussions include topics on traditional medicine, American Indian case studies, and health disparities in Native American populations. Students participate in physical diagnosis workshops and receive assistance with academic planning and MCAT preparation. This year participants spend their first two weeks on the medical school's Duluth campus and the remaining four weeks involve online assignments and discussions.

Luanne Petcoff to Coordinate UMD's Heart Walk Team

LuAnne Petcoff, Dr. Jim Boulger's assistant in Alumni Affairs, has added UMD Heart Walk team coordinator to her responsibilities. Petcoff takes over from Marge Erickson in

UMD's Continuing Education department who coordinated the UMD campus event for 6 years.

Petcoff will be recruiting team leaders throughout the campus and helping them identify team members. She will also manage the logistics related to collections, shirts, and reporting to the AHA support staff in Minneapolis. Last year from UMD 24 teams composed of more than 300 walkers raised $17,112 and came in third among all of the teams from Duluth.

The 2008 Heart Walk in Duluth will be on September 27.

Heart Walk is the signature fundraising event for the American Heart Association. According to the AHA, Heart Walk promotes physical activity and heart-healthy living in a fun family environment, and this year over 1 million walkers are expected to participate in more than 500 events, raising funds to save lives from this country's No. 1 and No. 3 killers — heart disease and stroke. Over the years, Duluth medical school researchers who have received grant support from the AHA, include Lester Drewes, Mustafa al'Absi, Kent Froberg, George Trachte, Jean Regal, Dave Mohrman and Lois Heller.

Events:

Honoring the winners of the University of Minnesota Medical Alumni Society's Harold S. Diehl Award for Lifetime Achievement and Early Distinguished Career Award, Dr. John Thomas and Dr. Arne Vainio, respectively. http://www.med.umn.edu/duluth/Events/MMF_Alumni_Honorees.html

Date: August 5, 2008
Time: 5pm — 7pm
Location: University of Minnesota Medical School – Duluth Campus in the courtyard or atrium
RSVP: 218.726.6876

Portuguese Research Scientists on Campus

Drs. Ken Wallace and John Holy are currently hosting six research scientists and students from Portugal to work in their laboratory this summer.

This international exchange relationship between the University of Minnesota Medical School—Duluth Campus and the University of Coimbra began in 1992 when Carlos Manuel Marques Palmeira, Ph.D., Associate Professor, who was a Ph.D. student at the time, approached Dr. Wallace at a scientific meeting in Bari, Italy to inquire about a doing a postdoc in Dr. Wallace's lab in Duluth. Dr. Palmeira has since completed his postdoctoral training and promoted from Assistant Professor to Associate Professor at the University of Coimbra. Dr. Palmeira has visited Dr. Wallace's lab every year since 1993, including an academic year sabbatical in 2004-2005.

A total of 12 students, postdocs, and faculty from Portugal have visited Duluth and trained in Dr. Wallace's lab since Dr. Palmeira's first visit.

Paulo Jorge Gouveia Simões da Silva Oliveira, Ph.D., Assistant Scientist, Center for Neurosciences and Cellular Biology, will be pursuing a collaborative research project

investigating the effects of cell signaling pathways on mitochondrial structure and function.

Vilma Marisa Arrojado Soares Sardão, Ph.D., Post doctoral fellow, Center for Neurosciences and Cellular Biology, will be pursuing a collaborative research project looking at the ability of cytokines to induce tumor cell death in a mouse model of breast cancer.

João Paulo Soeiro Terra Teodoro, graduate student of the Faculty of Science and Technology of the University of Coimbra, will be assisting on a project investigating the biochemical and molecular mechanisms by which diabetes induces mitochondrial proliferation in cardiac and liver tissue.

Gonçalo de Castro Pereira, graduate student in the Center for Neurosciences and Cellular Biology of the University of Coimbra, will be exploring molecular and protein targets of doxorubicin toxicity, with a focus on mitochondrial compartments.

Teresa Serafim, graduate student, University of Coimbra, will be working on a project that deals with novel compounds that appear to specifically disrupt mitochondrial structure and function in cancer cells.

Ana Filipa Roque Branco is a Ph.D. candidate in a cardiovascular disease program and will be working in Dr. Holy's lab this summer.

Published:

Anika Hartz, Ph.D., of the Department of Biochemistry and Molecular Biology published, "Coordinated nuclear receptor regulation of the efflux transporter, Mrp2, and the phase-II metabolizing enzyme, GSTpi, at the blood-brain barrier" in this month's edition of the *Journal of Cerebral Blood Flow and Metabolism* (28(6):1222-1234). This study indicates for the first time that, as in hepatocytes, brain capillaries possess a regulatory network consisting of nuclear receptors, metabolizing enzymes, and efflux transporters, which modulate blood-brain barrier function.

Presented:

Professor George Trachte, Associate Dean for Research and Director of the Integrated Biosciences Ph.D. program, with Postdoctoral Associates, Anne Gingery of the Department of Physiology and Pharmacology and Andrew Skildum of the Department of Biochemistry and Molecular Biology presented posters at this year's national Institutional Research and Academic Career Development Awards (IRACDA). This conference was held June 8-11 at the University of North Carolina, Chapel Hill.