BREAKTHROUGH SERIES: DIABETES

The new Breakthrough Series, an educational partnership of the Office of Clinical Research and LifeScience Alley, continued with its second offering on October 29. The day-long event focused on research into diabetes, including targeting glucose metabolism to improve treatment, continuous glucose monitoring, islet cell xenotransplantation, and use of embryonic and pancreatic stem cells. University presenters included Elizabeth Seaquist, M.D., Alex Lange, Ph.D., Ronald Siegel, Sc.D., Arthur Erdman, Ph.D., Stephen Parente, Ph.D., Jeffrey Kahn, Ph.D., Meri Firpo, Ph.D., Jonathan Slack, Ph.D., and Scott Crow, M.D. Participants represented both industry and academia, including faculty and staff from a number of AHC departments and centers.

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DIRECTOR’S UPDATE

by Jasjit S. Ahluwalia, M.D., M.P.H., M.S.
Executive Director

A critical goal of the Office of Clinical Research is to secure one of the National Institutes of Health’s Institutional Clinical and Translational Science Awards (CTSA). These awards are part of the NIH’s Roadmap initiative to speed translation of discoveries into treatments that improve health. So far, 24 grants have been given to institutions across the nation.

This month, we are re-submitting our $72 million grant application to become part of this group of elite research institutions. Our proposed Institute for Clinical and Translational Research (ICTR) is guided by the following vision and goals:

ICTR Vision

The Institute for Clinical and Translational Research is a leader in transformative, collaborative research and education – integrating and accelerating innovative solutions to advance human health across the state of Minnesota and beyond. ICTR is an incubator for people and for ideas:
• Our faculty and students are leaders of multidisciplinary research.
• Our innovative methods accelerate the process of translating discovery into care.
• Our community partnerships are a national model for the integration of research and health care.

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**Director’s Update, continued.**

**ICTR Goals:**
- Leverage existing networks and collaborations to introduce new research and educational opportunities across Minnesota communities and the Upper Midwest.
- Increase the speed of translating research discoveries into prevention, treatment, and cures.
- Integrate our research resources into an easy-to-navigate, seamless infrastructure that fosters connections across disciplines, institutions, and communities.
- Train and mentor clinical and translational research leaders who value and conduct team science.

The NIH is scheduled to announce award recipients in spring 2008. For more information, please go to: [www.ncrr.nih.gov/clinical_research_resources/clinical_and_translational_science_awards/](http://www.ncrr.nih.gov/clinical_research_resources/clinical_and_translational_science_awards/)

In the meantime, we are forging ahead with improvements to our research enterprise, such as integrating the Research Services Organization and General Clinical Research Center.

**News**

The **Association for the Accreditation of Human Research Protection Programs (AAHRPP)** announced that it will renew accreditation to the University of Minnesota. AAHRPP is a nonprofit organization that offers accreditation to institutions engaged in research involving human participants. The accreditation demonstrates that the University meets AAHRPP standards by protecting all research participants, and goes beyond the federal minimum. For more information, go to [http://www.research.umn.edu/irb/](http://www.research.umn.edu/irb/).

**“Write, Time, and Space” Faculty Writing Opportunity**

Writing can sometimes be challenging when you don’t have a quiet space in which to do so. Offices are often replete with other distractions, and writing from home is often not much better.

A collaborative pilot project among the Office for the Vice President for Research, the Office of the Vice Provost for Faculty and Academic Affairs, the Center for Writing, the Office of Clinical Research, and the Center for Teaching and Learning offers small spaces for faculty to get away and focus on one of the most important aspects of faculty work – writing!

These spaces will be just that – quiet space to which one can get away for focused writing time. To see the schedule of writing times and spaces and to sign up, go to [www.research.umn.edu/collaborate/](http://www.research.umn.edu/collaborate/). For more information, contact Laura Crosslin, cross033@umn.edu. Space is limited.

**Breakthrough Series, continued.**

The purpose of the series is to spotlight University research and effectively connect the University with the medical technology industry and healthcare. We have a unique opportunity to link world-class research with world-class medical technology by highlighting breakthroughs in both health and collaboration.

The Office of Clinical Research offered AHC student scholarships for this event. We encourage anyone interested in this ongoing series to watch for updates on the OCR website, where most series presentations will also be posted. The next offerings are scheduled for June and October 2008 and planners are busy selecting topics. Your suggestions are most welcome at ahcocr@umn.edu.
Spotlight

Reducing Recreational Tobacco Use in the Urban American Indian Community

In May 2007, the Office of Clinical Research and the Medical School Program in Health Disparities Research awarded five community-University partnerships with Planning Grants in Health Disparities Research. One partnership, led by Jean Forster, Ph.D., M.P.H., School of Public Health professor of Epidemiology and Community Health, and John Poupart, M.P.A, president of the American Indian Policy Center in St. Paul, is addressing the complex public health issue of recreational tobacco use in the Twin Cities American Indian community. Current research shows that cigarette smoking rates are as high as 70% in portions of the urban community, and four of the five leading causes of death among American Indians in Minnesota are related to tobacco misuse: cancer, coronary heart disease, diabetes, and chronic lung disease.

Because of its vast and disparate negative impact on health, tobacco misuse is a key focus of the partnership through the American Indian Community Tobacco Project (AICTP). AICTP is a community-based participatory research project examining cigarette smoking rates and habits in the Twin Cities American Indian community. The AICTP study was designed by a steering council made up of community leaders. “The council formulated the research questions and determined data collection methods,” explains Forster. Using funding from the University’s planning grant, Forster and Poupart are now presenting the AICTP data to both community and academic audiences and engaging members of the community in designing a plan to curb cigarette smoking rates among American Indians. They are gathering feedback on potential intervention strategies through focus groups, surveys, and traditional talking circles.

As president of the policy center and a member of the American Indian community, Poupart wants to assure that, “community-based participatory research is applied to the communities from which the data is gathered.” This project fulfills Poupart’s expectation and vision for community-based research. “The research plan began in the community, and the relationship is the outcome of the research,” he says. “The American Indian community and the University have an authentic partnership that shares a desire for usable outcomes.”

Forster and Poupart both point out that it is important to acknowledge the distinction between ceremonial or traditional tobacco use, and recreational tobacco use or cigarette smoking. This distinction is clear in their presentation of AICTP data and in their conversations with the American Indian community. “We found that American Indians who use spiritual tobacco are less likely to smoke cigarettes,” says Forster. Poupart explains that while many urban American Indians have taken on Western customs and culture, they “yearn for a connection to tradition.” These traditions are vital to the goal of reducing health disparities due to cigarette smoking. He continues, “We will set the tone in the community by using traditional Indian values – we cannot achieve the ‘good life’ by misusing tobacco. The negative impact on our quality of life is too great.”

Through their partnership, Poupart and Forster hope to discover what inspires and motivates the community to participate in efforts to reduce recreational tobacco use. Finally, Poupart adds, “The American Indian community has lived through many difficult periods. We overcome our obstacles by returning to traditional values.”
CAPS Profile: Ken Kunisaki, M.D.

CAPS scholar Ken Kunisaki hopes to improve the quality of life for those with chronic obstructive pulmonary disease. COPD is a common, prevalent disease—it is the fourth leading cause of worldwide mortality—with associated exacerbations that often result in emergency room visits or hospitalizations. Unfortunately, there are few clinical options for patients: treatment is largely limited to smoking cessation and a few classes of inhalers.

One area that may provide new treatment is micronutrients—vitamins and minerals the body needs in small amounts. Micronutrients have been found to play critical roles in the regulation and function of multiple, different immune system cells and might protect against infections. “Current data suggest that among the more elderly or ill patients, of whom most patients with COPD would be included, micronutrients could play an important role in protection from infection,” says Kunisaki, assistant professor in the Medical School’s Division of Pulmonary, Allergy, Critical Care, and Sleep Medicine. “This is of particular importance in COPD,” he adds, “as up to 80% of COPD exacerbations are attributed to respiratory infections.”

Kunisaki is currently conducting an observational study at the Minneapolis VA Medical Center, where he has a joint appointment. During the study, he will examine participants’ diets, test for micronutrient blood levels, and observe COPD exacerbation rates. Previous studies have demonstrated that COPD patients have micronutrient deficiencies, but nothing is known about the relationship of these deficiencies and their risk of infections and exacerbations. “This study will provide preliminary data necessary to establish, or refute, the rationale for a clinical trial,” he says.

The CAPS program, which provides 75% protected time, will be instrumental in developing his research and career. “It’s difficult to find funding mechanisms for preliminary studies, especially for those early in their career. This program supports preliminary work and provides an opportunity to develop skills on how to conduct clinical research,” he says.

“The CAPS emphasis on multidisciplinary research is also exciting to me,” he says. While his previous research was narrowly focused on pulmonary medicine, Kunisaki will now extend his work into the broad field of nutritional research. “I am learning how to assess and analyze dietary intakes and how to evaluate micronutrient status of individuals. Also, I am learning how to communicate among disciplines.” Kunisaki’s mentoring team is multidisciplinary: Dennis Niewoehner, M.D., professor and chief of pulmonary medicine at the Minneapolis VA Medical Center; John Connett, Ph.D., professor and division head of biostatistics; and Allen Levine, Ph.D., professor and dean of the College of Food, Agriculture, and Natural Resource Sciences.

Ultimately, Kunisaki hopes this research will clarify the relationship between micronutrients and clinical outcomes of this devastating disease.