IEM News

Bakken Medical Devices Center Hosts Virtual Reunion of Innovation Fellows Alumni

The Bakken Medical Devices Center (BMDC) has been home to the Innovation Fellows since 2008. Every year, this small group of creative clinicians, engineers, and scientists learn how to identify and invent solutions for significant medical needs. Mentored by Program Director Danny Sachs, MD, the Innovation Fellows work with faculty from the College of Science and Engineering and the Medical School to develop prototypes, conduct feasibility studies, file IP, and develop commercialization plans.

This month, BMDC held a virtual Zoom gathering to reconnect with Innovation Fellows alumni from around the world. 50 attendees rotated through a sequence of small breakout rooms, scrambling periodically to facilitate mingling. The attendees enjoyed learning about their current work in digital health, consumer health, start-ups, strategies, design firms, big pharma, and academic medicine. BMDC Director Art Erdman closed with an update on new activities at the Center.

Medical Devices Center Innovation Fellows Program

IEM Announces 2020 IEM Junior Investigator Pilot Project Awardees

The awardees of the 2020 IEM Junior Investigator Pilot Project have been announced. This program was instituted at this year’s IEM Annual Conference. The purpose of this new format is to seed new connections across IEM that bring faculty labs together in unexpected ways and to empower Junior Investigators to generate ideas and form teams to pursue them.

The four awardees are as follows:

Neeta Adhikari, Ph.D., Lillehei Heart Institute

Ariel Alperstein, Ph.D., Department of Chemistry

Elizabeth Crist, Ph.D. candidate, Department of Biomedical Engineering

Iuliia Polina, Ph.D., Senior Scientist and Researcher, Department of Medicine - Cardiology Division

News on IEM Member COVID-19 Efforts

Theresa Reineke and Renee Frontiera coauthor study on delivery of DNA-based therapies

Researchers discover new way to deliver DNA-based therapies for diseases
**Article on research partially funded by IEM, Co-Authored by Alessandro Bartolomucci and Robert Sapolsky, published in Biological Psychiatry**

Psychosocial risk factors, non-communicable diseases and animal models for COVID-19

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**IEM COVID-19 RESPONSE**

Click here for more information

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**IEM Member Highlights**

Sang-Hyun Oh is senior author of research on light-matter ultrastrong coupling

*Ultrastrong plasmon–phonon coupling via epsilon-near-zero nanocavities*

Wei Shen is corresponding author on study showing development of functional skeletal muscle cells from human non-muscle cells

*Functional skeletal muscle constructs from transdifferentiated human fibroblasts*

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**Announcements**

**Registration Open for MILI 6589 next semester - Medical Technology Evaluation and Research, a 2-credit online course**

Innovations in medical technologies are one of the leading areas of economic growth in the world. Whether new technologies take the form of pharmaceutical, medical device, biotechnology, information technology, or some combination of these innovations, the opportunities for both private enterprise and social welfare are substantial. However, these innovations are not without cost and require reimbursement from either a privately or publicly financed healthcare delivery system. Thus, the demand for the evaluation of new medical technologies continues to grow as new treatments are developed and healthcare costs continue to rise. This course aims to provide knowledge of the skills, data, and methodology required to critically evaluate new medical technologies in order to meet financial investment as well as regulatory compliance objectives. [Click here to learn more.](#)

**Empowering Women in Science Newsletter available via email**

*Empowering Women in Science (EWIS)* is an organization of working professionals, including post-doctoral fellows and graduate scientists at the University of Minnesota. EWIS organizes events focused on diversity, equity, and inclusion (DEI) during the school year to educate and engage women, underrepresented minority groups, and allies working in STEM. The **EWIS Newsletter** was created with the goals of 1) giving a voice to and empowering individuals working to improve the culture at the University of Minnesota, and 2) providing resources to increase EWIS members’ and collaborators’ knowledge of and engagement with DEI topics and issues. In the Newsletter, readers can find a schedule of DEI events for the month, reading materials, outreach opportunities, and a section that celebrates achievements of EWIS members and collaborators. Readers can [sign up](#) for the EWIS mailing list to receive **The EWIS Newsletter** directly in their inbox and are welcomed to collaborate on materials found in any of the sections of the Newsletter. [Click here to learn more.](#)