



Patents to Patients®



What's Brewing in Milwaukee? A First Look Forum Event

Hosted jointly by the UWM Research Foundation,
The Medical College of Wisconsin Office of Technology Development,
and Concordia University.

University Club of Milwaukee, 2nd Floor, Banquet Hall, April 27th, 4:00 PM

Agenda:

- 4:15 Welcome; Opening remarks by UWMRF Board Chair, Christina Fiasca, and MCW Senior Associate Dean for Research, Anne Nattinger, M.D., M.P.H., M.A.C.P.
- 4:30 – 6:00 Presentations and Panel Discussion
- 6:00 - 7:00 Reception and Networking

Presentations:

John D. Imig, Ph.D., Professor of Pharmacology & Toxicology, Director, Drug Discovery Center, Medical College of Wisconsin

William B. Campbell, Ph.D., Professor and Chair of Pharmacology and Toxicology, Medical College of Wisconsin

John Falck, Ph.D., Professor of Pharmacology, Professor of Biochemistry & Pharmacology, Robert A. Welch Distinguished Chair in Chemistry, UT Southwestern Medical Center

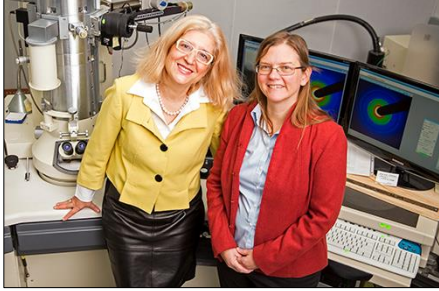


“EET Therapeutic to Combat Kidney & Cardiovascular Diseases”

Drs. Imig, Campbell, and Falck are an interdisciplinary inventor team that has developed a therapeutic that combats kidney and cardiovascular diseases. Kidney disease afflicts 33 million in the US and Medicare costs exceed \$65B per year. Likewise, cardiovascular diseases are major causes of death and 65 million people in the U.S. have cardiovascular conditions that are associated with \$370B in medical costs annually. Accordingly, there is a critical medical need to develop kidney and cardiovascular therapies with unique mechanisms of action. We have developed an epoxyeicosatrienoic acid (EET) therapeutic that possesses anti-hypertensive, anti-platelet, anti-inflammatory, anti-fibrotic, and anti-apoptotic actions. Thus, this EET therapeutic has unique mechanisms of actions that will be particularly beneficial for combating kidney and cardiovascular diseases.

First Look Forum

University Club, April 27th, 4:00 p.m.



Marija Gajdardziska-Josifovska, Ph.D., Professor of Physics and Dean of the UWM Graduate School, University of Wisconsin-Milwaukee

Carol Hirschmugl, Ph.D., Professor of Physics, University of Wisconsin-Milwaukee

“SafeLi: Advanced Battery Anodes for Li Ion Batteries”

Lithium ion batteries are used increasingly as a power source for devices that consumers depend upon, such as mobile phones, power tools, and electric vehicles. Typical consumers of these devices want safer batteries with longer lifetime and more power. UWM Physics Professors Carol Hirschmugl and Marija Gajdardziska-Josifovska, founders of SafeLi, LLC, are experts in understanding and generating nanomaterials, as well as in surface modifications that affect how such materials interact with their environments. This presentation will focus on a new class of materials discovered in their laboratories that improve the performance of Lithium ion battery anodes. SafeLi’s vision is to provide the best solution for safe and low-cost battery electrodes for energy storage. Key advantages over current market anode materials include: higher energy capacity, faster recharging capability, potential to mitigate safety hazards, non-toxic naturally abundant starting materials.

Christian Albano, Ph.D., MBA, MPH. Associate Professor of Pharmacy Administration, Concordia University, Co-Founder/COO MedSync-Rx

Sharon Chappy, Ph.D., R.N., CNOR. Dean of the School of Nursing, Concordia University

“MedSync-Rx: Effective and Efficient Medication Tracking for Patients”



Fifty percent of Americans take two or more prescription medications. Over half of people with chronic diseases do not take their prescribed medications correctly. Medication adherence is complicated by cumbersome multiple daily dosing, refill dates that are not synchronized, misunderstanding how medications act, unexpected drug side effects, and cost. The easy-to-use Medsync-Rx mobile application is a commercially viable medication synchronization and management technology to improve medication management, adherence, and compliance. The company’s plan is to sell Medsync-Rx application licenses to independent community pharmacies and small health care organizations that lack financial and technological resources for large scale medication synchronization systems. The company’s global mission is to especially target the elderly and vulnerable populations, including veterans, who have high medication use related to complex health needs.



Joseph Carroll, Ph.D., Richard O. Schultz, MD/Ruth Works Professor in Ophthalmology, Medical College of Wisconsin

“High-Resolution, Non-Invasive Biomarkers for Retinal Disease”

Eye disease costs the U.S. economy over \$145 billion dollars per year, and a recent study projects that this will increase to \$717 billion by 2050. Advances in non-invasive imaging of the living retina could provide not only vital understanding of the structural basis for these diseases, but also help identify patients who might benefit most from a specific therapy as well as assess treatment response. Recent years have seen exciting developments in restorative and regenerative vision therapies, including retinal implants, gene

First Look Forum

University Club, April 27th, 4:00 p.m.

replacement therapy, pharmacological advances, optogenetics, and stem cell transplantation. As such, there is an urgent need for sensitive, noninvasive, high-resolution techniques to assess the human retina. The Advanced Ocular Imaging Program is focused on addressing this need, by providing a one-of-a-kind infrastructure to promote the development and use of translational ocular imaging tools to improve detection, diagnosis, and management of eye disease.



Lindsey Roddy, RN, BSN, Ph.D., Candidate, School of Nursing, University of Wisconsin-Milwaukee

“A New Way to Organize Medical Tubing”

In hospital units worldwide, there is a need for a better means of organizing lines, tubes, and cords. In the most critically ill patients it is not uncommon to be running over 12 different medications at one time intravenously, many of which are incompatible with each other and could harm or kill the patient if they are mixed. In addition, there may be as many as 20 other cords and tubes connected to the patient simultaneously that are constantly becoming tangled. If lines become dislodged during patient mobilization much harm can come to the patient, and significant time is spent managing and monitoring medical lines during patient activities. Hundreds of cord management devices for other uses are available online, begging the question, why isn't there a line and cord management device that has effectively come to the bedside where a mistake could cost a life? Our device is a customizable solution for keeping lines, tubes, and cords organized at the bedside promoting safety, efficiency, and time savings for staff. This product is more versatile, modifiable, and is made to accommodate patient mobility while holding more lines and cords than any other competitor.

Konstantin Sobolev, Ph.D., Professor and Department Chair of Civil & Environmental Engineering, University of Wisconsin-Milwaukee

Marina Kozhukhova, Ph.D., Candidate, Department of Civil Engineering, University of Wisconsin-Milwaukee

Justin Bohler, P.E., M.B.A., Owner, Property ReVision, LLC

Andrea Breen, Technical Services Engineer at Lafarge North America Cement

“Super-Concrete”

The inventors have developed low surface energy Superhydrophobic Coatings for Composite/Concrete SC3, which also can be used on a variety of materials including ceramics, wood, polymers, metals, alloys and composites. Earlier research work demonstrated the feasibility of using the proposed coatings for concrete and fiber reinforced composites, for which the hydrophilic nature of the materials was converted to superhydrophobic. The developed superhydrophobic coatings for concrete render it water repellent and ice-phobic, reducing ice adhesion. The resulting concrete is extremely water resistant, where a droplet of water sits beaded-up on the treated surface as a sphere or almost a sphere. Therefore, these treatments improve the concrete's resilience and durability by making it less permeable to water and waterborne compounds that can compromise the longevity and strength of a structure, and as a result reduce the cost for repair and maintenance.



First Look Forum

University Club, April 27th, 4:00 p.m.



Johnathan Ebben, Ph.D., Medical Student, Medical College of Wisconsin

Andreas Beyer, Ph.D., Assistant Professor, Medicine and Physiology, Medical College of Wisconsin

“Restoring Mitochondrial Health through a Novel Mechanism: A New Approach to Off-Target Chemotherapy Toxicity and Cardiovascular Disease”

Millions around the world receive cancer therapy with anthracyclines every year, however, heart failure is a frequent consequence that limits how much therapy patients can get. Paradigm-shifting work has shown that mitochondrial localized telomerase is a key component of cardiovascular physiology that can prevent cardiovascular damage. Targeting a new understanding of the role of telomerase in cardiovascular disease, we have designed a novel class of therapeutics that protects mitochondria from reactive oxygen species by changing the localization of telomerase within the cell. Our approach decreases nuclear localization of telomerase (with potential anti-cancer effects) while increasing mitochondrial localization of the enzyme. Using human blood vessels and mouse models, we have shown that this approach improves vascular health and prevents cancer chemotherapy-associated damage.

Key Advantages:

- Protects the cardiovascular system from toxic chemotherapies
- Restores function of blood vessels damaged by coronary artery disease, potentially preventing myocardial infarction
- Decreases reactive oxygen species through a novel mechanism, with potential applicability to a broad array of diseases including cardiovascular disease and neurodegenerative disease.
- In vivo and ex vivo proof-of-concept using human tissues

First Look Forum

University Club, April 27th, 4:00 p.m.

Responder Panel:



MODERATOR: Tom Still. Tom Still is president of the Wisconsin Technology Council. The Tech Council is the non-profit, bipartisan science and technology policy advisory board to the governor and the Legislature. Its programs include the Wisconsin Angel Network, the Wisconsin Innovation Network, the Governor's Business Plan Contest and regular events that connect entrepreneurs, investors, researchers and others with a stake in the tech-based economy. Still serves on the Governor's Council on Workforce Investment, the Marshfield Clinic Information Services board of directors and advisory boards for the UW-Madison College of Engineering, the WiSys Technology Foundation and the Waisman Center Biomufacturing Center, among other civic and business groups.

He is the former associate editor of the Wisconsin State Journal in Madison. Still writes a syndicated column that appears regularly in more than two-dozen publications.

Still moderated the Wisconsin Economic Summits (2000-2003) and helped write the Wisconsin Prosperity Strategy in 2010. Still is the co-author of "Hands-On Environmentalism," published by Encounter Books, New York. He was a 2008 winner of Madison Magazine's "Best of Madison Business" award and was named to InBusiness magazine's 2010 Executive Hall of Fame. Still was named "Communicator of the Year" by the Public Relations Society of America/Wisconsin in 2012.



Toni Sikes. Toni is a successful entrepreneur with 30 years of operational, fundraising and investment banking experience. She is the founder of three art companies, and currently serves as the co-founder and CEO of CODAworx, the global leader in commissioned art, serving as a professional network for a wide variety of artists, design professionals, and industry resources. The CODAworx website showcases outstanding design + art projects through its sponsorship of several major awards programs and monthly digital magazine. It serves a worldwide community of creative professionals and facilitates transactions with a variety of tools and services.

Sikes has spent her 30-year career connecting artists to their best markets. As the founder of The Guild, a pioneer ecommerce company that brought the work of artists directly to consumers, Sikes raised over \$52 million from leading venture capital firms including Benchmark Capital and Technology Crossover Ventures in Silicon Valley, Dolphin Equity Partners in New York, and ePartners (Rupert Murdoch's venture firm) based in London. Today, The Guild markets artist-created home furnishings under the consumer brand of Artful Home, which is the largest retailer of artist-made work in the U.S. Sikes has authored several books, and is a recognized expert in the area of online marketing of luxury products to consumers.

Sikes is also General Partner in Calumet Venture Fund. Previously she was a Senior Advisor at Gruppo, Levey & Co., a New York investment bank, where she led their technology practice focused on helping technology companies in their financing and M&A strategies. Sikes serves on the boards and advisory board of several technology companies. She is active in Wisconsin and national economic development organizations. She is Chair of the Wisconsin Technology Council, the Advisory Board of MERLIN Mentors, the Board of Advisors of the UW Weinert Center for Entrepreneurship, and the Board of Directors of Healthy Minds Innovations.

She holds a B.S. in Mathematics from the University of Alabama and an M.S. in Market Research from the University of Wisconsin-Madison.

First Look Forum

University Club, April 27th, 4:00 p.m.



Greg Lynch. Greg is a partner with Michael Best who works with high growth emerging technology companies and investors on a variety of corporate matters including incorporation, financing, mergers & acquisitions, securities and corporate governance.

Lynch has negotiated numerous license agreements and equity arrangements with spin-offs from major research institutions. Lynch was previously a member of the firm's Management Committee, Chair of the firm's Transactional Practice Group and the co-founder of the firm's Venture Best emerging company practice.



Jonathan Fritz. Jonathan Fritz has a cross-disciplinary background in business, law, software and life sciences, and currently serves as the Chief Strategy Officer and Director of New Ventures of Symphony Corporation. Jonathan began his technology career working in-house for Unisys Corporation as a member of the technology law group, where he experienced large deal flow between the world's mainframe computing leaders. While a practicing patent attorney and start-up attorney, Jonathan worked on ground breaking biomedical IT technologies including clinical decision support systems, radiation treatment planning systems, and medical data management software. Jonathan was a partner in a large Midwestern law firm, where he was a member of the Venture Capital, Biotechnology, and Health Law practice groups. In his capacity, as outside counsel to technology start-up companies he assisted in, among other things, their strategic growth and complex deal negotiations. This led to Jonathan being the co-founder and COO of a health and fitness software start-up.

Jonathan is passionate about technology and serves on the Wisconsin Technology Council Board of Directors. The Council advises the Governor and Legislature on business and technology, and includes many of Wisconsin's influential business leaders. Jonathan also serves as a TEDMED Innovation Research Scholar, on the investment committee of Brightstar, a prolific start-up investment fund, and the Board of HighFive Health, a Madison based healthtech start-up.

Jonathan received his Bachelor's degree in Biology from Marquette University, his Juris Doctor, with honors, from Hamline University School of Law, and Master's degree in Bioinformatics jointly from Marquette University and the Medical College of Wisconsin. Jonathan also serves on the Board of the Madison Symphony Orchestra.