PATHWAYS 2024

Accelerating Discoveries | Fostering Discoverers



NEXTGEN PRECISION HEALTH

March 22

State Historical Society of Missouri

605 Elm Street, Columbia, MO

precisionhealth.missouri.edu

Agenda

7:30-8:30 Registration—coffee & continental breakfast

8:30-8:45 Welcome & announcements

8:45-10:00 Faculty Talks - Session A

Brett Froeliger, Ph.D. | University of Missouri-Columbia
Julie Semon, Ph.D. | Missouri University of Science & Technology
Michael Nichols, Ph.D. | University of Missouri-St. Louis
Smita Saxena, Ph.D. | University of Missouri-Columbia
John Spertus, M.D. | University of Missouri-Kansas City

10:00-10:30 Break - refreshments available

10:30-11:45 Faculty Talks - Session B

Xing Song, Ph.D. | University of Missouri-Columbia
Maria Spletter, Ph.D. | University of Missouri-Kansas City
John Grinstead, Ph.D. | Siemens Healthineers
Robert Paul, PhD. | University of Missouri-St. Louis
Mark Towler, Ph.D. | Missouri University of Science & Technology

11:45-12:30 Lunch & networking

12:30-1:30 Poster Session A

1:30-2:00 Break - dessert & refreshments available

2:00-2:45 Keynote speaker

Thomas Holm Pedersen, Ph.D. | NMD Pharma

3:00-4:00 Poster Session B



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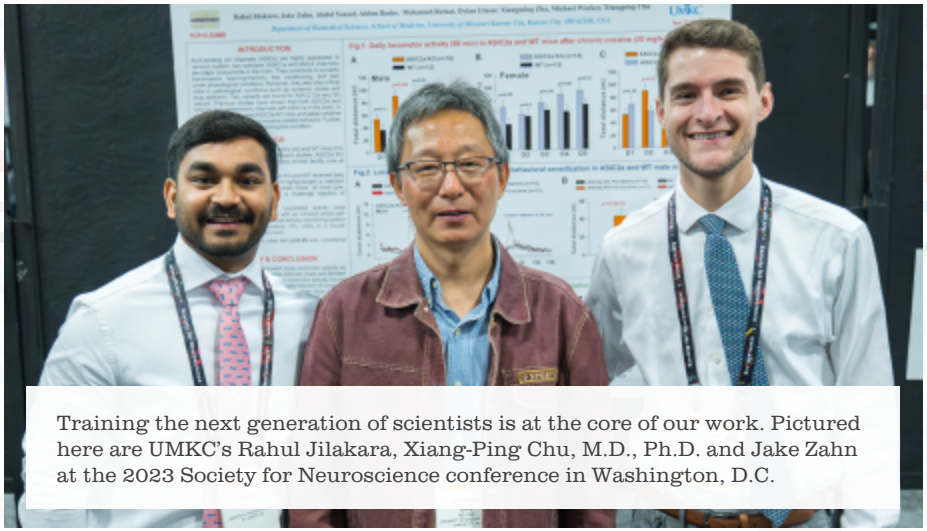
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NextGen Precision Health | PATHWAYS 2024

NextGen Precision Health's inaugural PATHWAYS symposium draws on pathbreaking work from across the University of Missouri System to celebrate research collaborations with the potential to impact global health.

The agenda promotes a dual mission: accelerating discoveries and fostering discoverers. That means providing networking opportunities for experts across our four universities and giving young researchers a pragmatic approach for connecting to other fields and the translation process. By making each of our contributions accessible and relevant across domains, we can leverage our strengths and ultimately impact quality of life around the world.



Training the next generation of scientists is at the core of our work. Pictured here are UMKC's Rahul Jilakara, Xiang-Ping Chu, M.D., Ph.D. and Jake Zahn at the 2023 Society for Neuroscience conference in Washington, D.C.

On average in the U.S., it takes **14 years** for a new treatment to make it from the discovery phase to a clinical patient. We believe we can accelerate that time frame if all segments of the translational science pipeline are engaged from the beginning. At the PATHWAYS symposium, research faculty, postdoctoral researchers, and graduate students from a broad range of disciplines will build understanding to lower research barriers and jump start new projects.

KEYNOTE

Thomas Holm Pedersen, Ph.D.



Thomas co-founded NMD Pharma and has been CEO of the Company since its inception in 2015. During this time, NMD Pharma has transitioned from early a discovery-stage to clinical-stage company. He has led various financing rounds of the Company including raising one of the largest Series A investments in the sector in Europe in 2018.

The scientific basis of NMD Pharma - utilizing ClC-1 as a novel target for restoring muscle function in neuromuscular disease - comes from the academic work conducted at Aarhus University by Thomas and colleagues.

MASTER OF CEREMONIES

David Lile



David is the former host of the Columbia Morning program on Columbia's talk radio station KFRU. Retired now, he enjoys and appreciates opportunities to stay involved in the community.

Faculty Talks | Session A

8:45 a.m. - 10:00 a.m.



Brett Froeliger, Ph.D.

Professor, Psychological Sciences
University of Missouri College of Arts and Science

"Translating Addiction Neuroscience Research"



Julia Semon, Ph.D.

Associate Professor, Biological Sciences
Missouri University of Science and Technology College of Arts, Sciences, and Education

"Mesenchymal Stem Cells: PATHWAYS to the Clinic"



Michael Nichols, Ph.D.

Professor, Biochemistry
University of Missouri-St. Louis College of Arts and Sciences

"Choosing the Target in Alzheimer's Disease Therapeutics"



Smita Saxena, Ph.D.

Professor, Physical Medicine and Rehabilitation
University of Missouri School of Medicine

"Demystifying Neurodegenerative Patterns: From ALS to Dementia"



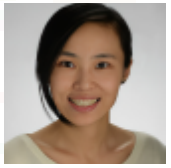
John Spertus, M.D.

Professor, Biomedical and Health Informatics & Internal Medicine
University of Missouri-Kansas City School of Medicine

"Addressing the Final Gap in Translational Research"

Faculty Talks | Session B

10:30 a.m. - 11:45 a.m.



Xing Song, Ph.D.

Assistant Professor - Biomedical Informatics, Biostatistics and Medical Epidemiology
University of Missouri School of Medicine

"Towards Better Understanding of ALS using a Multi-Marker Discovery Approach from a Multi-Modal Database (ALS4M)"



Maria Spletter, Ph.D.

Assistant Professor - Science and Engineering
University of Missouri-Kansas City School of Science and Engineering

"Little Fly, Big Impact: Drosophila as a Model to Understand RNA Regulation in Muscle Development and Disease"



John Grinstead, Ph.D.

Scientific Engagement Director, NextGen Precision Health
Senior Key Expert in Magnetic Resonance Ultra-High Field Imaging, Siemens Healthineers

"The Alliance for Precision Health: Research Collaboration"



Robert Paul, Ph.D.

Professor, Psychological Sciences
University of Missouri-St. Louis College of Arts and Sciences

"Machine Learning Discovery of Actionable Biological Mechanisms for Precision Medicine"



Mark Towler, Ph.D.

Professor - Chemical and Biochemical Engineering
Missouri University of Science and Technology College of Engineering and Computing

"A Novel Approach to Hemostasis"