



*Stony Brook University Chapter of
The National Academy of Inventors*

*Young Academic Inventor's
Award Symposium*

Tuesday, September 12, 2017

*Charles B Wang Center
Stony Brook University*





Stony Brook
University



SBU Chapter of the National Academy of Inventors

Young Academic Inventor's Award Symposium Tuesday, September 12, 2017

- 1:00 - 1:10 pm** **Opening Remarks**
Moderator: Peter Donnelly, M.B.A., Executive Director, NAI-SBU Chapter
Iwao Ojima, Ph.D., President, NAI-SBU Chapter
- 1:10 - 1:50 pm** **Keynote Lecture**
Benjamin Hsiao Ph.D., NAI-SBU Chapter Board, Fellow of the National Academy of Inventors
"New Ideas for Global Water Challenges"
- 1:50 - 2:10 pm** Amirhossein Goldan, Research Assistant Professor, Department of Radiology, SOM
"Avalanche Selenium Detectors for Medical Imaging"
- 2:10 - 2:30 pm** Dmytro Gudkov, Research Scientist, Department of Electrical Engineering
"Integrated Microfluidic Platform for Detection, Isolation and Molecular analysis of CTCs"
- 2:30 - 2:50 pm** Oren Rotman, Postdoctoral Research Associate, Department of Biomedical Engineering
"From Macro to Nano-Scale: Developments in Cardiovascular Intervention"
- 2:50 - 3:10 pm** **Coffee Break**
- 3:10 - 3:50 pm** Luisa Escobar-Hoyos, Assistant Professor, Department of Pathology
"Keratin 17 a Functional Biomarker and Therapeutic Target for Aggressive Tumors"
- 3:50 - 4:30 pm** Dr. Joseph Marino, Postdoctoral Research Associate, Department of Computer Science;
Chief Technology Officer, Zortag, Inc.
"Visualization for Medical Diagnosis".
- 4:30 - 5:10pm** Martin Kaczocha, Assistant Professor, Departments of Anesthesiology, Biochemistry and Cell Biology
"FABP5: Novel Target for the Development of Analgesic and Anti-inflammatory Drugs"
- 5:10pm** **Closing Remarks**
Peter Donnelly, M.B.A., Executive Director, NAI-SBU Chapter
- 5:15 - 7:00 pm** **Reception**

Speakers



Dr. Benjamin S. Hsiao received his B.S. degree from National Taiwan University, Ph.D. from the University of Connecticut, and post-doctorate training at the University of Massachusetts. He joined the DuPont Company as a staff scientist and spent 8 years in R&D before coming to Stony Brook University. He is a SUNY Distinguished Professor and served as Chair of the Chemistry Department, as well as

Vice President for Research at Stony Brook University. Currently, Hsiao is a Founding Co-Director of Innovative Global Energy Solutions Center, He is also the Director of Center for Advanced Technology in Integrated Electric Energy Systems. Hsiao's research interests are mainly focused on the development of sustainable nanostructured materials for energy and water purification applications. He is an elected Fellow of American Association for the Advancement of Science, American Chemical Society, The American Physical Society, Materials Research Society, and National Academy of Inventors.



Dr. Amirhossein Goldan is a Research Assistant Professor of Radiology at Stony Brook University School of Medicine. Dr. Goldan is working on the development and fabrication of medical imaging detectors for positron emission tomography (PET) and digital mammography. He received his B.A.S.(2005) and M.A.S.(2007) degrees in electrical engineering from Simon Fraser University, Vancouver, BC,

Canada, Ph.D. (2011) in electrical and computer engineering from the University of Waterloo, Canada.



Dr. Oren M. Rotman is a Postdoctoral Research Associate under the mentorship of Dr. Danny Bluestein in the Department of Biomedical Engineering at Stony Brook University. He received his B.Sc. (2008), M.Sc. (2009), and PhD (2015) degrees in biomedical engineering from Tel-Aviv University, Israel. He is currently working on development and testing of a novel prosthetic polymer aortic valve for minimally-invasive

procedures, and developing a novel nano-technology for targeted delivery of anti-thrombotic drugs.



Dr. Dmytro Gudkov is a Research Scientist in the Department of Electrical Engineering at Stony Brook University. He received his B.S. (2004) in electrical engineering from the Kharkov National University of Radio Electronics in Kharkov, Ukraine, M.S. (2011) and Ph.D. (2013) in electrical engineering from Stony Brook University. Dr. Gudkov developed a novel circuit for detecting single photons with high

efficiency. His innovative design and development concerns with the development of ultra-sensitive single and multi-channel fluorescent detectors for application in the field of life sciences.



Dr. Luisa Escobar-Hoyos is an Assistant Professor in the Department of Pathology, Stony Brook University, School of Medicine. She received her B.Sc. (2007) in biology from Pontificia Universidad Javeriana, Bogota, Colombia and M.Sc. (2010) in biomedical sciences from Universidad del Valle, Cali, Colombia and Ph.D. (2015), in Molecular and Cellular Pharmacology from Stony Brook University. She

performed postdoctoral research at Memorial Sloan-Kettering Cancer Center. Dr. Escobar-Hoyos received the Stony Brook University President's Award for Distinguished Doctoral Student. She was named the 2017 recipient of the Pancreatic Cancer Action Network AACR Pathway to Leadership Award. The National Academy of Inventors, Stony Brook University Chapter awarded her the Young Academic Inventor's Award for her discovery and inventions on "*Keratin 17 as a Prognostic and Predictive Marker of Cancer and Cancer Treatment*".



Dr. Joseph Marino is a Postdoctoral Research Associate under the mentorship of Dr. Arie Kaufman in the Department of Computer Science at Stony Brook University. He is also the Chief Technology Officer of Zortag, Inc. in Great Neck, New York. He received his B.Sc. (2006) in computer sciences and applied mathematics and statistics (with honors) and Ph.D. (2012) in computer sciences from Stony Brook University. Dr. Marino is the Long Island

Technology Hall of Fame Patent Award Winner of 2016. The National Academy of Inventors, Stony Brook University Chapter awarded him the Young Academic Inventor's Award for his inventions on "*System and Method for Improving Diagnostics Medical Imaging Applications Through the Use of Novel and Enhanced Visualization Techniques*".



Dr. Martin Kaczocha is an Assistant Professor in the Departments of Anesthesiology; Biochemistry and Cell Biology at Stony Brook University School of Medicine. He received his B.Sc. (2004) in pharmacology (with honors) and Ph.D. (2009) in biochemistry and molecular biology from Stony Brook University. He performed postdoctoral research in Biochemistry at Stony Brook University. He is currently the

recipient of two principal investigator awards from The National Institute of Drug Abuse. (2013-2018 and 2014-2018). The National Academy of Inventors, Stony Brook University Chapter awarded him the Young Academic Inventor's Award for his discovery and inventions on "*Fatty Acid Binding Proteins as Drug Targets for Pain Control Through Modulation of endocannabinoid metabolism*".

We thank the following sponsors who contributed funds for this event



Stony Brook University Office of the Vice-President for Research

Stony Brook University School of Medicine

Stony Brook University School of Dental Medicine

Stony Brook Cancer Center

Stony Brook University Department of Pathology

Stony Brook University Department of Medicine

Stony Brook University Oral Biology and Pathology

Stony Brook University Department of Chemistry

Stony Brook University Office of Economic Development

Stony Brook University College of Engineering and Applied Sciences
