



NATIONAL ACADEMY OF INVENTORS



Stony Brook University

Chapter of the National Academy of Inventors

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

# Inauguration Gala

*NAI Member Induction Ceremony,  
Reception and Dinner*

**Monday, April 11, 2016**

*Student Activity Center  
Stony Brook University*



Stony Brook University

The State University of New York



STONY BROOK UNIVERSITY CHAPTER  
of  
THE NATIONAL ACADEMY OF INVENTORS



*Imagination is more important than knowledge, for imagination embraces the world.* – Albert Einstein

In universities across the nation and around the world, great scientists, scholars and educators are teaching the next generation of researchers and inventors.

The **National Academy of Inventors** (NAI) was founded at the University of South Florida to recognize and encourage inventors who have a patent issued from the U.S. Patent and Trademark Office (USPTO); enhance the visibility of university technology and academic innovation; encourage the disclosure of intellectual property; educate and mentor innovative students; and translate the inventions of its members to benefit society.

A researcher's contribution reaches the benchmark of inventorship as recognized by the USPTO because its discovery had no significant prior art, was not obvious to someone else skilled in the field, and had a specific use. Although every invention and every inventor is unique, some things are common to all. It takes imagination and ingenuity to be an inventor.

Without inventors we would not have our iPads, smart phones, automobiles or new sources of energy. As a society, we are eager in anticipation of the cure for cancer, HIV, diabetes, and neurological disorders such as Alzheimer's or Parkinson's disease. An inventor feels a sense of pride when the years of hard work come to fruition with either a miraculous discovery in medicine or the next generation of information technology.

Inventors truly should be recognized for their imagination and accomplishments, and called upon to share their special translational talents within the university and the wider community.

Therefore, the **Stony Brook University Chapter of the National Academy of Inventors** has been established to recognize the contributions of scientist-inventors across all disciplines in our university community.

The Stony Brook University Chapter of the National Academy of Inventors (NAI-SBU Chapter) is open to all members of the university community, including faculty, staff, alumni and affiliates, who have received an issued patent from the USPTO. An annual meeting and recognition ceremony will be held during the academic year and a list of members will be published, in order to enhance networking, recognition, and the opportunity to share your experiences.

Membership in the NAI is available through local university chapters only. Chapter members are automatically enrolled as members of the NAI, with all rights and privileges thereof.

The NAI-SBU Chapter is looking forward to working with the campus community and affiliated institutions for encouraging and bolstering academic inventions and entrepreneurship, as well as educations cultivating the next-generation academic inventors.

Sincerely yours,

Iwao Ojima, Ph.D., Chapter President, NAI-SBU Chapter, NAI Fellow

Peter Donnelly, Ph.D., Executive Director, NAI-SBU Chapter

Benjamin Chu, Ph.D., NAI-SBU Chapter Board Member, NAI Fellow

Benjamin Hsiao, Ph.D., NAI-SBU Chapter Board Member, NAI Fellow

Esther Takeuchi, Ph.D., NAI-SBU Chapter Board Member, NAI Fellow,  
NAI Hall of Fame

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### NAI-SBU Chapter

Iwao Ojima, Ph.D., *Chapter President, NAI Fellow*; Peter Donnelly, M.B.A., *Executive Director*  
*Chapter Board*: Benjamin Chu, Ph.D., NAI Fellow; Benjamin Hsiao, Ph.D., NAI Fellow;  
Jahangir Rastegar, Ph.D, NAI Fellow; Ester Takeuchi, Ph.D., NAI Fellow  
Roxanne Brockner, *Administrator*; Linda Galvin, *Treasurer*; Maureen Case, *Secretary*



Stony Brook  
University



SBU Chapter of the National Academy of Inventors

## Induction Ceremony Monday, April 11, 2016

**6:00 - 6:40 pm**  
**7:00 - 9:00 pm**

**Reception**  
**Dinner**

**6:30 – 6:40 pm**

**Photo Session:** All Inductees, NAI-SBU Officials, President Stanley, VPR Conover, Dr. Burg.

**6:40 - 6:50 pm**

**Opening Remarks**

*Moderator:* Peter Donnelly, M.B.A., Executive Director, NAI-SBU Chapter  
Iwao Ojima, Ph.D., President, NAI-SBU Chapter  
Samuel Stanley, M.D., President, Stony Brook University

**6:50 – 7:30 pm**

**Induction Ceremony**

*Moderator:* Peter Donnelly, M.B.A., Executive Director, NAI-SBU Chapter  
*Presenter:* Iwao Ojima, Ph.D., President, NAI-SBU Chapter

**7:30 – 9:00 pm**

**Greetings**

*Moderator:* Peter Donnelly, M.B.A., Executive Director, NAI-SBU Chapter  
Karen J. L. Burg, Ph.D., National Academy of Inventors, Board of Directors, The University of Georgia  
David Conover, Ph.D., Vice-President for Research, Stony Brook University

**Special Recognition** “Flame of Appreciation”

*Moderator:* Iwao Ojima, President, NAI-SBU Chapter  
Benjamin Chu, Ph.D., NAI-SBU Chapter Board, Fellow of the National Academy of Inventors

**Keynote Lecture**

*Moderator:* Iwao Ojima, President, NAI-SBU Chapter  
Benjamin Hsiao, Ph.D., NAI-SBU Chapter Board, Fellow of the National Academy of Inventors

**Closing Remarks**

Peter Donnelly, M.B.A., Executive Director, NAI-SBU Chapter

## NAI Fellows

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**Dr. Iwao Ojima** received his B.S., M.S., and Ph.D. (1973) degrees from the University of Tokyo, Japan. He joined the Sagami Institute of Chemical Research and held a position of Senior Research Fellow until 1983. He joined the faculty at the Department of Chemistry, State University of New York at Stony Brook first as Associate Professor (1983), was promoted to Professor (1984), Leading Professor (1991), and then to Distinguished

Professor (1995). He served as the Department Chairman from 1997 to 2003. He has been serving as the founding Director for the Institute of Chemical Biology and Drug Discovery (ICB&DD) from 2003. He has a wide range of research interests in synthetic organic and medicinal chemistry as well as chemical biology, including discovery and development of anticancer agents and antimicrobials, targeted drug delivery, catalytic methodologies and asymmetric synthesis. His awards and honors include Arthur C. Cope Scholar Award (1994), E. B. Hershberg Award for Important Discoveries of Medicinally Active Substances (2001), the Medicinal Chemistry Hall of Fame (2006), ACS Award for Creative Work in Fluorine Chemistry (2013) from the American Chemical Society; the Chemical Society of Japan Award (1999); Outstanding Inventor Award (2002) from the Research Foundation of the State University of New York; Elected Fellow of J. S. Guggenheim Memorial Foundation, the American Association for the Advancement of Science, the New York Academy of Sciences, the American Chemical Society and the National Academy of Inventors.



**Dr. Esther Takeuchi** Dr. Esther S. Takeuchi received her B.S. from the University of Pennsylvania in Chemistry and History and completed her Ph.D. in Chemistry at Ohio State University. She completed her post-doctoral research at the University of North Carolina and the State University of New York at Buffalo. Upon completing her post-doctoral research, Dr. Takeuchi was employed at Greatbatch, Inc. in Clarence, NY where she conducted research on batteries for unique environments, including implantable applications. She led the battery research team and was involved in the development of several battery systems including the lithium/silver vanadium oxide (Li/SVO) battery, which powers the majority of implantable cardiac defibrillators (ICDs). Dr. Takeuchi began her academic career at SUNY Buffalo where she held joint appointments in the Department of Chemical and Biological Engineering and the Department of Electrical Engineering. Dr. Takeuchi was awarded the National Medal of Technology and Innovation by President Obama (2009). She was inducted into the National Inventors Hall of Fame (2011), elected as a Charter Member of the National Academy of Innovation (2013), received the E. V. Murphree Award and the Astellas Award from the American Chemical Society and the Battery Division Technology Award from the Electrochemical Society. She is a Fellow of the Electrochemical Society (ECS) and the American Institute of Medical and Biological Engineering and a member of the National Academy of Engineering. A prolific inventor, Dr. Takeuchi holds over 150 patents.



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

Brook University. Currently, Hsiao is a Founding Co-Director of Innovative Global Energy Solutions Center, aiming to prototype 'sustainability for off-grid communities of tomorrow', using the Turkana Basin Institute in northern Kenya as a living laboratory. He is also the Director of Center for Advanced Technology in Integrated Electric Energy Systems, with the mission to enhance the development and integration of advanced technologies into electric energy systems on multiple scales. Hsiao has a distinguished reputation in polymer science, and his research interests are mainly focused on the development of sustainable nanostructured materials for energy and water purification applications. He was elected as Fellow of American Association for the Advancement of Science, Fellow of American Chemical Society, Fellow of American Physical Society, Fellow of Materials Research Society, Fellow of National Academy of Inventors, and received SUNY Distinguished Professor, Honorary Professor from University of Queensland in Australia, Chang-Jiang Scholar from Education Ministry of China, Co-operative Research Award from Division of Polymeric Materials Science and Engineering of American Chemical Society, NSF Special Creativity Award and DuPont Young Faculty Award.



**Dr. Bejamin Chu** received his B.S. degree, magna cum laude from St. Norbert College (1955) and his Ph.D., from Cornell University (1959). At the University of Kansas, he served as Assistant Professor of Chemistry (1962-1965) and Associate Professor of Chemistry (1965-1968). At the State University of New York at Stony Brook, he served as Chairman of the Department of Chemistry (1978-1985),

Professor of Chemistry (1968-1988), Professor of Materials Science and Engineering (1982-Present), Leading Professor of Chemistry (1988-Present) and Distinguished Professor (1992-Present). Dr. Chu has been awarded the Alfred P. Sloan Research Fellow (1966-1968), John Simon Guggenheim Fellow (1968-1969), Humboldt Award for Senior U.S. Scientists (1976-1977, 1992-1993), American Physical Society Fellow, American Institute of Chemists Fellow, High Polymer Physics Prize of the American Physical Society (1993), Langmuir Distinguished Lecturer Award, Division of Colloid and Surface Chemistry of the American Chemical Society (1994), Award for Distinguished Service in Advancement of Polymer Science by the Society of Polymer Science, Japan (1997), Gutenberg Lecture Award, Johannes Gutenberg University (2007), and National Academy of Inventors Fellow (2013). He is an Honorary Member of the Society of Polymer Science, Japan (2008). Dr. Chu has 650 publications, 41 patents/patent applications and written 6 books. His is focused on environmental problems, especially those related to water and air.

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NAI New Members

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**Dr. Marie Badalamente**  
Professor  
Department of Orthopedics



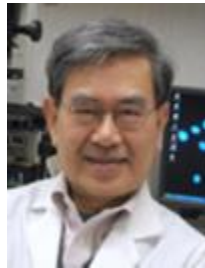
**Dr. Lorne Golub**  
Distinguished Professor  
Department of Oral Biology and Pathology



**Dr. Peter Brink**  
Professor  
Department of Physiology and Biophysics



**Dr. Vera Gorfinkel**  
Associate Professor  
Department of Electrical and Computer Engineering



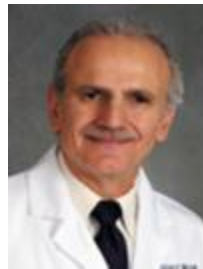
**Dr. Wen-Tien Chen**  
Research Professor  
Department of Obstetrics, Gynecology and Reproductive Medicine



**Dr. Pelagia-Irene Gouma**  
Professor  
Department of Materials Science and Engineering



**Dr. Richard Clark**  
Professor  
Department of Dermatology



**Dr. Yusuf Hannun**  
Professor  
Department of Biochemistry and Cell Biology  
Director  
Stony Brook Cancer Center



**Dr. Ira Cohen**  
Leading Professor  
Department of Physiology And Biophysics



**Dr. Harbans Dhadwal**  
Associate Professor  
Department of Electrical and Computer Engineering

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## NAI New Members

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**Dr. Herbert Herman**

Professor

Department of Materials Science  
and Engineering



**Dr. Jon Longtin**

Professor

Department of Mechanical  
Engineering



**Dr. Francis Johnson**

Professor

Department of Pharmacological  
Sciences, and  
Department of Chemistry



**Dr. Benjamin Luft**

Professor

Department of Medicine



**Dr. Arie Kaufman**

Distinguished Professor  
and Chairman

Department of Computer Science



**Dr. Serge Luryi**

Distinguished Professor  
and Chairman

Department of Electrical and  
Computer Engineering



**Dr. Kenneth Kaushansky**

Dean  
School of Medicine

Senior Vice President of Health  
Sciences



**Dr. Lucy Palmer**

Professor

Department of Medicine



**Dr. Israel Kleinberg**

Distinguished Professor

Department of Oral Biology  
and Pathology



**Dr. Kathlyn Parker**

Professor

Department of Chemistry

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## NAI New Members

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**Dr. Miriam Rafailovich**

Professor

Department of Materials Science  
and Engineering



**Dr. Simon Sanford**

Professor

Departments of Biochemistry  
and Cell Biology  
Department of Pathology



**Dr. Jahangir Rasteger**

Associate Professor

Department of Mechanical  
Engineering



**Dr. Sanjay Sampath**

Distinguished Professor

Department of Material and  
Science Engineering



**Dr. Clinton Rubin**

Distinguished Professor  
and Chairman

Department of Biomedical  
Engineering



**Dr. Steven Skiena**

Distinguished  
Teaching Professor

Department of Computer  
Science



**Dr. Maria Ryan**

Professor  
and Chair

Department of Oral Biology and  
Pathology



**Dr. Gegard Smaldone**

Professor

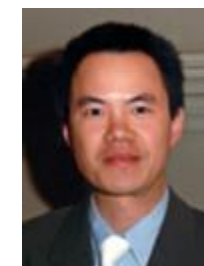
Department of Medicine



**Dr. Nicole Sampson**

Professor  
and Chair

Department of Chemistry



**Dr. Stanley Wong**

Professor

Department of Chemistry

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*We thank the following sponsors who contributed funds for this event*



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