New Watson Research Awards 2013-2104 (YTD)

Bioengineering:

- Dr. Guy German, *Unrestricted Research Support*, Unilever Trumbull Research Services Incorporated.
- Dr. Guy German, *The Effects of Polymer and Surfactant Treatment on Human Stratum Corneum Drying and Barrier Damage*, Schick Manufacturing Incorporated.
- Dr. Gretchen Mahler (Co-PI), Dr. Pong-Yu (Peter) Huang (Co-PI), *Effects of Environmental Factors on Eqigenetic Regulation of Surfactant Proteins in the Lung*, Health Science Center Foundation at Syracuse.
- Dr. David Schaffer, *2012 Collaboration Fund: A Dementia Diagnostic Test Based Upon Speech*, Multiple Sponsors.
- Dr. Kaiming Ye, *NSF IPA for Kaiming Ye*, National Science Foundation.
- Dr. Kaiming Ye (PI) and Dr. Sha Jin (co-PI), *HA Surface Presented Yeast Flu Vaccine and Its Enhancement By CD154 Coidisplay*, National Institute of Allergy & Infectious Disease.

Computer Science:

- Dr. Kartik Gopalan (PI) and Dr. Ping Yang (co-PI), *CSR: Small: Towards High-Performance, Robust, and Secure Live Migration of Virtual Machines*, National Science Foundation.
• Dr. Timothy Miller, CAREER: Sustaining Moores Law Through Introspective Computing: A Comprehensive System For Reliability and Energy Optimization in Modern Computing Devices, National Science Foundation.

Electrical & Computer Engineering:
• Dr. James Constable, Investigation of Alternate Designs for Miniaturization and Improvement of Components for Surveillance Projectile Program, Imperial Machine and Tool Company.
• Dr. David Klotzkin, Thin Film Deposition & Structuring, Osram Sylvania Lighting Research Center.
• Dr. Zhanpeng Jin, Dr. Sarah Laszlo, A Novel Mobile Human-Computer Interaction Approach Based on Wearable Eye-Controlled Glasses for Assisted Living and Health Care, 2013 Health Science Transdisciplinary Area of Excellence.
• Dr. Zhanpeng Jin, Smart-Mobile Cloud Platform to Deliver Personalized Healthcare, Xerox Corporation.
• Dr. Alok Rastogi, PFI:BIC-Building Innovation Capacity through Partnerships in Innovation in Electrochemical Energy Storage Devices, National Science Foundation.
• Dr. Victor Skormin, Research Support for Bolashak Program, JSC Center for International Programs.
• Dr. Eva Wu, A Cost-Effective Solution to Maintaining a Highly Reliable Evolving Grid, NYS Energy Research and Development Authority.
• Dr. Eva Wu, Cost Share to Award 64973 – New York State Research and Development Authority, SUNY Cost Share.
• Dr. Ning Zhou, Algorithm Development for Dynamic State Estimation Contracted Word Completed - SUNY Binghamton, NY USA, Pacific Northwest National Laboratory.

Mechanical Engineering:
• Dr. Junghyun Cho, High Power Density and High Power Dissipation Packages/WLCSP for Automotive Applications – Agreement Number 14020573, Analog Devices.
• Dr. Guangwen Zhou, Dr. Jiye Fang, and Dr. Louis Piper, Development of Ultrahigh Capacity Lithium-Ion Battery Anode Materials, 2013 Smart Energy Transdisciplinary Area of Excellence.
• Dr. Pong-Yu (Peter) Huang, Contact Dynamics and Flow Blockage Inhibition of Armored Bubbles Inside Confining Flow Conduits, American Chemical Society.
• Dr. Pong-Yu (Peter) Huang (Co-PI), Dr. Gretchen Mahler (Co-PI) Effects of Environmental Factors on Eqigenetic Regulation of Surfactant Proteins in the Lung, Health Science Center Foundation at Syracuse.
• Dr. Pong-Yu (Peter) Huang, Dr. Tomonari Nishikawa Hidden Images: Revealing the Three-Dimensionality of Film Emulsion, 2013 Material and Visual Worlds Transdisciplinary Area of Excellence.
• Dr. Ronald Miles, *Receiver Electroacoustic and Vibration Model: Testing and Simulation*, Knowles Electronics LLC.
• Dr. Seungbae Park, *MEMS Oscillator Packaging*, Sand 9 Incorporated.
• Dr. Seungbae Park, *TSV MEMS Die/Package Reliability Assessment*, Analog Devices.
• Dr. James Pitarresi (PI) and Dr. Quang Su (co-PI), *Advanced Electronics Manufacturing Issues SUNY ME Funding for Vibration and FEA - Agreement 13072572*, Universal Instruments Corporation.
• Dr. James Pitarresi (PI) and Dr. Quang Su (co-PI), *Electronics Vibration Reliability Testing and Finite Element Modeling*, Universal Instruments Corporation.
• Dr. James Pitarresi (PI) and Dr. Quang Su (co-PI), *Further Development of Vibration Testing Method and FE Analysis for Solder Joint Reliability*, Universal Instruments Corporation.
• Dr. Quang Su (PI), Dr. Seungbae Park (co-PI) and Dr. James Pitarresi (co-PI), *Electronic Assembly Vibration Testing, Interconnect Failure Detection, and Finite Element Modeling*, Universal Instruments Corporation.
• Dr. Hao Wang, *In-Situ Neutron Activation Mapping of Li-Containing Batteries*, Samsung Electronics Co Ltd.
• Dr. Guangwen Zhou, *Collaborative Research: situ Characterization of Methanol Oxidation Catalyzed By Copper-Based Materials*, National Science Foundation.

**Systems Science and Industrial Engineering:**

• Dr. Peter Borgesen, *SUNY SSIE Funding for Lead-Free and Student Support for Staff Advanced Electronics Manufacturing Issues Agreement 13062313*, Universal Instruments Corporation.
• Dr. Peter Borgesen, *Electronics Manufacturing Research*, Universal Instruments Corporation.
• Dr. Peter Borgesen, *Electronics Manufacturing Research*, Universal Instruments Corporation.
• Dr. Peter Borgesen, *Electronics Manufacturing Research*, Universal Instruments Corporation.
• Dr. Chun-An Chou (PI), *2013 Collaboration Grant: Developing Novel Optimization Based Learning Systems for Detection and Interpretation of Brain Aneurysm Rupture*, Multiple Sponsors.
• Dr. Mark Poliks, *CAMM Testing Services*, LG Display.
• Dr. Krishnaswami Srihari, *Research in the Assembly of Complex Surface Mount Devices*, Smart Modular Technologies.
• Dr. Krishnaswami Srihari (PI), Dr. Chun-An Chou (co-PI), Dr. Mohammad Khasawneh (co-PI), *Healthcare Systems Engineering and Analytics Research*, United Health Services.
• Dr. Krishnaswami Srihari (PI) and Dr. Mohammad Khasawneh (co-PI), *A Comprehensive Simulation Study of a DMV: A Focus on Customer Service*, NYS Department of Motor Vehicles.

• Dr. Krishnaswami Srihari (PI) and Dr. Mohammad Khasawneh (co-PI), *Business Process Engineering Support for Network Care Management System*, Montefiore Hospital and Medical Center.

• Dr. Krishnaswami Srihari (PI) and Dr. Mohammad Khasawneh (co-PI), *Improving the Efficiency and Effectiveness of Healthcare Delivery*, Montefiore Hospital and Medical Center.

• Dr. Krishnaswami Srihari (PI) and Dr. Sarah Lam (co-PI), *Business Intelligence and Modeling for Server Manufacturing*, IBM Corporation.

• Dr. Krishnaswami Srihari (PI), Dr. Sarah Lam (Co-PI) and Dr. Sangwon Yoon (co-PI), *Enhancement of Contact Center Operations using mathematical modeling and simulation-Based optimization*, Xerox Corporation.

• Dr. Krishnaswami Srihari (PI) and Dr. Nagendra Nagarur (co-PI), *Quality Control of Complex Surface Mount Device Assemblies*, Smart Modular Technologies, Inc.

• Dr. Krishnaswami Srihari (PI) and Dr. Nagendra Nagarur (co-PI), *Development of a Statistical Process Control Tool at ADGT, Phillipines*, Analog Devices General Trias Incorporated.

• Dr. Krishnaswami Srihari (PI) and Dr. Daryl Santos (Co-PI), *Evaluation and Characterization of Various Electronic Packages (Part A) - Agreement No. 14020576*, Analog Devices.

• Dr. Krishnaswami Srihari (PI) and Dr. Daryl Santos (Co-PI), *Evaluation and Characterization of Various Electronic Packages (Part B) - Agreement No. 14020577*, Analog Devices.

• Dr. Krishnaswami Srihari (PI) and Dr. Sangwon Yoon (co-PI), *A Comprehensive Simulation Study of Warehouse Management and Operations*, Raymond Corporation.

• Dr. Krishnaswami Srihari (PI) and Dr. Sangwon Yoon (co-PI), *Improvement of Electronics Assembly/Manufacturing Processes*, Sanmina-SCI Corporation.

• Dr. Krishnaswami Srihari (PI) and Dr. Sangwon Yoon (co-PI), *Pharmacy Automation System Modeling and Reliability Analysis*, Innovation Associates.

• Dr. Krishnaswami Srihari (PI) and Dr. Sangwon Yoon (co-PI), *Enhancement of Electronics Manufacturing and Assembly Processes*, Sanmina-SCI Corporation.

• Dr. Sangwon Yoon, *An Optimized Study of the Multi-Station SMT Machines in a PCB Assembly Production*, Samsung Techwin Company Limited.

**Watson Deans’ Office**

• Dr. Ronald Miles, *FY 2013 NIST Summer Undergraduate Research Fellowship*, National Institutes of Standards and Technology.

• Dr. Mark Poliks, *Roll to Roll Fabrication of Electronic Corning Willow Glass Surface*, Corning Incorporated.

• Dr. Bahgat Sammakia, *Thermal Analysis for Tent Liner System*, Johnson Outdoors Incorporated.
• Dr. Daryl Santos, *ADI Support of a Graduate Student Dedicated to ADI Projects*, Analog Devices.
• Dr. Daryl Santos, *Tear-Down Project*, Prismark Partners, LLC.
• Dr. James Turner, *Unrestricted Research Support for James Turner*, Multiple Sponsors.