

2014 Young Investigator Award Recipients

Dr. Edoardo Airoidi, Harvard University

Proposal Title: Measuring and understanding information and behavioral patterns for planning and executing

Dr. Sonia Chernova, Worcester Polytechnic Institute

Proposal Title: Multi-Representational Learning from Demonstration through Sequential User Study Development

Dr. Laura L. Colgin, University of Texas at Austin

Proposal Title: Do Separate Slow and Fast Variants of Gamma Oscillations Differentially Affect Neural Computation?

Dr. Andreas Fahlman, Texas A&M University-Corpus Christi

Proposal Title: Lung Mechanics in Marine Mammals

Dr. Yun Raymond Fu, Northeastern University

Proposal Title: Deep Structures Boosted Self-Organized Behavior Pattern Learning for Anomaly Detection

Dr. Jin-Oh Hahn, University of Maryland

Proposal Title: Control Algorithms and Test Beds for Automated Critical Care System

Dr. Clifton R Haider, Mayo Clinic

Proposal Title: In Vitro Optical Characterization of Blood Gas Kinetics in Diving: Towards a Real-Time, Quantitative Dive Monitoring System

Dr. Neal Hall, University of Texas at Austin

Proposal Title: Femto-Photonics: Towards Micromachined Underwater Acoustic Vector Sensors with Optoelectronic Readout

Dr. Antonios Kotsos, Drexel University

Proposal Title: Identification of Fatigue Precursors for Multi-scale NDE & Prognostics

Dr. Michael Kudenov, North Carolina State University

Proposal Title: Passive Standoff Super Resolution Imaging using Spatial-Spectral Multiplexing

Dr. Javad Lavaei, Columbia University

Proposal Title: Graph-Theoretic Algorithm for Solving Polynomial Optimization with Applications to Energy Systems and Distributed Control Systems

Dr. Adrian KC Lee, University of Washington

Proposal Title: Capturing Neural Biomarkers of Auditory Attention

Dr. Chunlei Liang, George Washington University

Proposal Title: High-Fidelity Simulations of Fluid-Structure Interaction for Leatherback Sea Turtle Inspired Propulsion

Dr. Kevin Maki, University of Michigan

Proposal Title: Extreme Operation Modeling for the Design of Naval Platforms

Dr. Abhay Pasupathy, Columbia University

Proposal Title: Electronics from One-dimensional Nanostructures of Two-Dimensional Materials

Dr. Mina Rais-Zadeh, University of Michigan, Ann Arbor

Proposal Title: Acoustic Phonons and Their Interactions with Electrons in Gallium Nitride Ultra-fast Ultra-scaled Resonators

Dr. Michael Sangid, Purdue University

Proposal Title: Relationships between the Galvanic Driving Force and Strain Energy Density Accumulation

Dr. Georg Seelig, University of Washington

Proposal Title: Self-Patterning DNA Materials

Dr. Jeffrey Tabor, Rice University

Proposal Title: Engineering Probiotics that Improve Warfighter Performance by Maintaining Lean Body Mass and Inhibiting Anxiety

Dr. Stephanie TerMaath, University of Tennessee

Proposal Title: Probabilistic Multi-Scale Damage Tolerance of Composite Patches for Naval Aluminum Alloys

Dr. Jason Valentine, Vanderbilt University

Proposal Title: Dielectric Based Optical Metamaterials

Dr. Michail Zavlanos, Duke University

Proposal Title: Distributed Real-Time Optimization of Mobile Wireless Networks

Dr. Roseanna Zia, Cornell University

Proposal Title: Structure, Dynamics, and Nonlinear Mechanical Response of Kinetically Arrested Particle Suspensions

Dr. Xuanhe Zhao, Duke University

Proposal Title: Harnessing Extraordinary Surface and Bulk Properties of Graphene-Polymer Nanocomposite for Advanced Naval Coating