



**Office of
Science**

U.S. DEPARTMENT OF ENERGY

AAAS

Undergraduate Poster Session

***Research Interns Supported by
the Office of Science***

Student Biographies

2008

Participants in the 2008 AAAS Annual Meeting



Marcus Allegood

Research Experience: SULI Program at Oak Ridge National Laboratory

Paper Title: Determining the Optical Properties of Biological Tissue Samples

Hometown: Lavonia, GA

Undergraduate Institution: North Georgia State College & University (Dahlonega, GA)

Undergraduate Major: Physics

Graduate Institution: Clemson University (Clemson, SC)

Area of Graduate Study: Biophysics

Hobbies/Interests: Kayak, hiking, college football, collecting books



Janilee Benitez

Research Experience: SULI Program at Lawrence Berkeley National Laboratory

Paper Title: Analysis of Bremsstrahlung Emitted by the VENUS Ion Source

Hometown: Los Angeles, CA

Undergraduate Institution: California State University, East Bay (Hayward, CA)

Undergraduate Major: Physics and Anthropology

Area of Graduate Study: Physics

Professional Societies: American Physical Society

Hobbies/Interests: Reading and hiking



Blaine Carter

Research Experience: SULI Program at Pacific Northwest National Laboratory

Paper Title: Hydrogen Production by Cyanobacterium *Plectonema boryanum*

Hometown: Sammamish, WA

Undergraduate Institution: Northwest Nazarene University (Nampa, ID)

Undergraduate Major: Chemistry

Area of Graduate Study: Physical Chemistry

Professional Societies: American Chemical Society

Hobbies/Interests: Outdoors, basketball, and racquetball



Rebecca Christopf

Research Experience: SULI Program at Stanford Linear Accelerator Center

Paper Title: Characterization of Surface Layers of Nitinol using X-ray Photoelectron Spectroscopy

Hometown: Seattle, WA

Undergraduate Institution: Western Washington University (Bellingham, WA)

Undergraduate Major: Physics

Area of Graduate Study: Physics

Hobbies/Interests: Music, cooking, and eating



Robert Citron

Research Experience: SULI Program at Argonne National Laboratory

Paper Title: X-ray absorption spectroscopy of ytterbium doped optical fibers

Hometown: Seminole, FL

Undergraduate Institution: University of Chicago (Chicago, IL)

Undergraduate Major: Physics and Math

Area of Graduate Study: Physics and Math

Professional Societies: National Space Society, Planetary Society, Mars Society

Hobbies/Interests: Science fiction, mountain biking, Krav Maga, and gaming



Shanika Collins

Research Experience: FAST Program at Brookhaven National Laboratory

Paper Title: Synthesis of 6-Fluoroacetamido-1-hexanoic anilide for the Positron Emission Tomography Imaging of Histone Deacetylases in the Brain

Hometown: Brooklyn, NY

Undergraduate Institution: Medgar Evers College (Brooklyn, NY)

Undergraduate Major: Biology

Area of Graduate Study: Biology

Hobbies/Interests: Dance ministry and choir at Bethany Deliverance Church of God in Christ



Ying Yi Dang

Research Experience: SULI Program at Oak Ridge National Laboratory

Paper Title: Zirconium Oxide Nanostructures Prepared by Anodic Oxidation (potential for fuel cells)

Hometown: New York, NY

Undergraduate Institution: Columbia University (New York, NY)

Undergraduate Major: Applied Physics

Area of Graduate Study: Materials Science/Chemical Science/Materials Chemistry

Hobbies/Interests: Reading about latest technology, reading science fiction and fantasy novels, New York Times, listening to good music, exploring libraries and bookstores, doing community service



Siva Darbha

Research Experience: SULI Program at Stanford Linear Accelerator Center

Paper Title: Neutron background simulations for the ILC silicon-vertex detector

Hometown: Toronto, Ontario, Canada

Undergraduate Institution: University of Toronto (Toronto, Ontario, Canada)

Undergraduate Major: Engineering Science

Area of Graduate Study: Electrical Engineering

Hobbies/Interests: World history, film, and satirical literature



Pearl Donohoo

Research Experience: SULI Program at National Renewable Energy Laboratory

Paper Title: Wind Turbine Blade Testing Modeling and Design

Hometown: Cuyahoga Falls, OH

Undergraduate Institution: Olin College of Engineering (Needham, MA)

Undergraduate Major: Mechanical Engineering

Graduate Institution: Massachusetts Institute of Technology (Cambridge, MA)

Area of Graduate Study: Technology and Policy

Hobbies/Interests: Hiking, baking, gardening, and travelling



Amy Gao

Research Experience: SULI Program at Pacific Northwest National Laboratory

Paper Title: Large-scale Production, Purification, and ^{65}Cu Nuclear Magnetic Resonance of Azurin

Hometown: Richland, WA

Undergraduate Institution: Olin College of Engineering (Needham, MA)

Undergraduate Major: Mechanical Engineering

Area of Graduate Study: Mechanical Engineering

Professional Societies: Society of Women Engineers

Hobbies/Interests: Photo editing, spontaneous adventuring and projects, skiing, drawing, traveling, and running



Michael Hvasta

Research Experience: SULI Program at Princeton Plasma Physics Laboratory

Paper Title: Ultraviolet Induced Motion of a Fluorescent Dust Cloud in an Argon DC Glow Discharge Plasma

Hometown: Lawrenceville, NJ

Undergraduate Institution: The College of New Jersey (TCNJ) (Ewing, NJ)

Undergraduate Major: Physics

Area of Graduate Study: Physics

Hobbies/Interests: Racquetball, public speaking, and Johnny Cash



Elissa Knoff

Research Experience: PST Program at Fermilab

Paper Title: Plateauing of Cosmic-ray detectors for use in high schools

Hometown: Algonquin, IL

Undergraduate Institution: Northwestern University (Evanston, IL)

Undergraduate Major: Physics

Area of Graduate Study: Physics



Andrea Montgomery

Research Experience: SULI Program at Lawrence Berkeley National Laboratory

Paper Title: Study of a free electron laser driven by plasma wakefield accelerator

Hometown: Omaha, NE

Undergraduate Institution: Butler University (Indianapolis, IN)

Undergraduate Major: Physics

Graduate Institution: University of Wisconsin (Madison, WI)

Area of Graduate Study: Engineering Physics - Plasma Physics

Hobbies/Interests: Singing, piano, biking, and cooking



Robert Pasquarelli

Research Experience: SULI Program at National Renewable Energy Laboratory

Paper Title: Inkjet Printing of Metallizations for Solar Cell Contacts

Hometown: Pittsburgh, PA

Undergraduate Institution: Rochester Institute of Technology (Rochester, NY)

Undergraduate Major: Chemistry

Graduate Institution: Colorado School of Mines (Golden, CO)

Area of Graduate Study: Material Science - Fuel Cells and Photovoltaics

Hobbies/Interests: Hiking, climbing, biking, graphic design, renewable energy



Alexander Patananan

Research Experience: SULI Program at Pacific Northwest National Laboratory

Paper Title: Analyzed the kinetics of surface-mediated protein unfolding and mathematically modelled the derived data to predict the potential unfolding rates of other proteins

Hometown: Palmdale, CA

Undergraduate Institution: University of California, Los Angeles (Los Angeles, CA)

Undergraduate Major: Microbiology, Immunology, and Molecular Genetics

Area of Graduate Study: Molecular Genetics and Biophysics

Professional Societies: Journal of Young Investigators

Hobbies/Interests: Track and Field, cross country, mountaineering and backpacking, medicine, and research



Stephanie Patterson

Research Experience: FAST Program at Lawrence Berkeley National Laboratory

Paper Title: Expression, purification, and initial characterization of archaeal DNA-related proteins

Hometown: Corpus Christi, TX

Undergraduate Institution: Del Mar College (Corpus Christi, TX)

Undergraduate Major: Physics and Math

Area of Graduate Study: Physics, Biochemistry

Hobbies/Interests: Growing strong and the notion of one human race



Guilhem Ribeill

Research Experience: SULI Program at J-Lab

Paper Title: Roughness analysis of niobium for superconducting particle accelerators

Hometown: Raleigh, NC

Undergraduate Institution: North Carolina State University (Raleigh, NC)

Undergraduate Major: Physics and Chemistry

Area of Graduate Study: Nuclear Physics and Condensed Matter Physics

Professional Societies: Phi Beta Kappa, Society of Physics Students (SPS)

Hobbies/Interests: Improv, movies, skiing



Idaykis Rodriguez

Research Experience: SULI Program at J-Lab

Paper Title: Upgrading the eP Device which measures beam energy by elastic scattering

Hometown: Miami, FL

Undergraduate Institution: Florida International University (Miami, FL)

Undergraduate Major: Physics

Area of Graduate Study: Nuclear Physics and Physics Education Research

Hobbies/Interests: Reading, knitting, lounging at the beach when there's time, and dancing



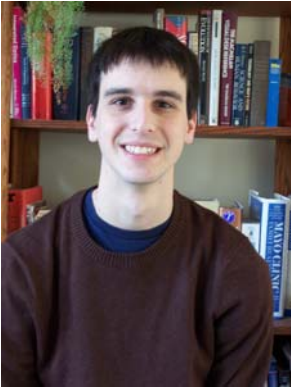
Matthew Seidman

Research Experience: SULI Program at National Renewable Energy Laboratory
Paper Title: Plug-in Hybrid Electric Vehicle and Hybrid Electric Vehicle Emissions under FTP and US06 Cycles at High, Ambient, and Low Temperatures
Hometown: Santa Fe Springs, CA
Undergraduate Institution: California State Polytechnic University, Pomona (Pomona, CA)
Undergraduate Major: Mechanical Engineering
Professional Societies: Pi Tau Sigma (Mechanical Eng Honor Society) and American Society of Mechanical Engineers (ASME)
Hobbies/Interests: Cross Country Mountain Biking



Jesse St. Charles

Research Experience: SULI Program at Oak Ridge National Laboratory
Paper Title: Flocking-based document clustering on the graphics processing unit
Hometown: Signal Mountain, TN
Undergraduate Institution: University of Tennessee, Chattanooga (Chattanooga, TN)
Undergraduate Major: Computer Science
Area of Graduate Study: Scientific Applications and Software Systems
Professional Societies: IEEE - Computer Society and Association for Computing Machinery
Hobbies/Interests: Gadgets, World News, PC Hardware and Systems building, family, role-playing, and video games



Michael Wiczer

Research Experience: SULI Program at Stanford Linear Accelerator Center

Paper Title: Measurements of High-Field THz Induced Photocurrents in Semiconductors

Hometown: Buffalo Grove, IL

Undergraduate Institution: University of Illinois, Urbana-Champaign (Urbana, IL)

Undergraduate Major: Engineering Physics

Area of Graduate Study: Physics

Professional Societies: American Physical Society

Hobbies/Interests: Movies and playing the clarinet



Kelsey Winsor

Research Experience: SULI Program at Pacific Northwest National Laboratory

Paper Title: Creating a lithofacies map and overlying contamination concentrations to determine contaminant migration in groundwater

Hometown: West Greenwich, RI

Undergraduate Institution: Smith College (Northampton, MA)

Undergraduate Major: Geology

Area of Graduate Study: Geology - Paleoclimate

Professional Societies: American Geophysical Union, Geological Society of America, and the American Society of Limnology and Oceanography

Hobbies/Interests: Backpacking, hiking, music, and martial arts