

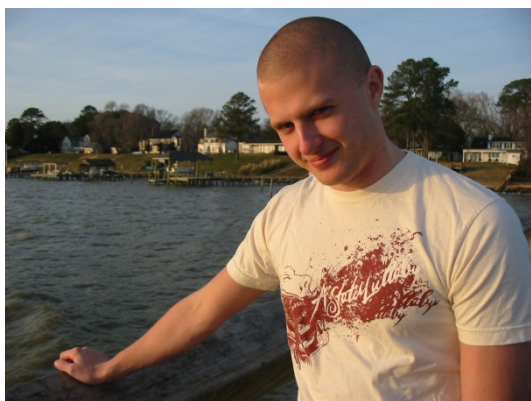
**AAAS**  
**Undergraduate Poster Session**  
***Research Interns Supported by***  
***the Office of Science***

**Student Biographies**

**February 17, 2007**



## Participants in the 2007 AAAS Annual Meeting



**Craig Bookwalter**

**Research Experience:** SULI Program at J-Lab

**Paper Title:** Suitability of a New Calorimeter for Identifying Exotic Meson Candidates

**Hometown:** Warrenton, VA

**Undergraduate Institution:** Christopher Newport University (Newport News, VA)

**Undergraduate Major:** Applied physics and computer science

**Graduate Institution:** Florida State University (Tallahassee, FL)

**Area of Graduate Study:** Nuclear Physics

**Professional Societies:** American Physical Society

**Hobbies/Interests:** Surfing, soccer, martial arts, and music



**Latasha Garrett**

**Research Experience:** SULI Program at Oak Ridge National Lab

**Paper Title:** The Effects of Surface Chemistry on the Properties of Proteins Confined in Nano-porous Materials

**Description of Research:** Surface chemistry of proteins in nanoporous materials

**Hometown:** Chattanooga, TN

**Undergraduate Institution:** University of Tennessee (Knoxville, TN)

**Undergraduate Major:** Chemistry

**Graduate Institution:** University of Tennessee (Knoxville, TN)

**Area of Graduate Study:** Organic Chemistry

**Hobbies/Interests:** Movies, shopping, dancing, and singing



**Marlene Hahn**

**Research Experience:** PST Program at Fermilab

**Paper Title:** Climate Change Effects on Decomposition Mediated by Species Composition Versus Plant Litter Quality

**Description of Research:** Comparison of the common wood-nymph population in differently treated habitats

**Hometown:** Wheaton, IL

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

**Undergraduate Major:** Microbiology

**Graduate Institution:** Loyola University Chicago (Chicago, IL)

**Area of Graduate Study:** MS Education - Curriculum and Instruction



**Jeff Head**

**Research Experience:** SULI Program at National Renewable Energy Lab

**Paper Title:** Analysis of the Water-Splitting Capabilities of Gallium Indium Phosphide Nitride (GaInPN)

**Description of Research:** Photoelectrochemical Water-Splitting

**Hometown:** Littleton, CO

**Undergraduate Institution:** Colorado State University (Fort Collins, CO)

**Undergraduate Major:** Chemistry

**Graduate Institution:** University of Arizona (Tucson, AZ)

**Area of Graduate Study:** Analytical Chemistry

**Professional Societies:** Alpha Chi Sigma - Society of Professional Chemists

**Hobbies/Interests:** Hiking, reading, skiing, and snowboarding



**Ian Howley**

**Research Experience:** SULI Program at J-Lab

**Paper Title:** Study of Beam Spin Asymmetry in Exclusive  $\pi^0$  Production

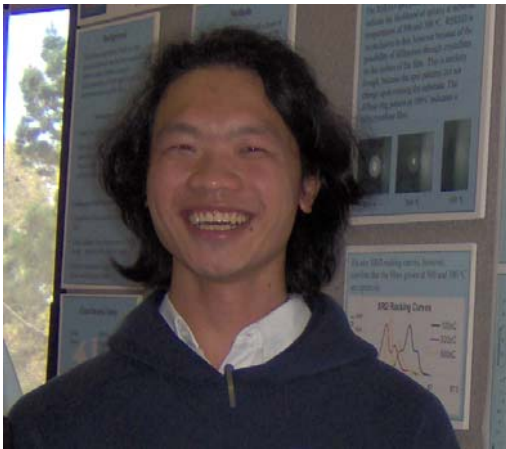
**Hometown:** Fairfax, VA

**Undergraduate Institution:** The College of William and Mary (Williamsburg, VA)  
Currently studying aboard at Edinburgh University

**Undergraduate Major:** Physics and Music

**Current Area of Interest:** Atomic Physics

**Hobbies/Interests:** Soccer and music



**Zhou Huang**

**Research Experience:** SULI Program at Lawrence Berkeley National Lab

**Paper Title:** Thermophoresis and its Thermal Parameters for Aerosol Collection

**Description of Research:** Worked on an environmental airborne particle sampler using simulation and spectrometry

**Hometown:** Tai Shan, China

**Undergraduate Institution:** California State University, Sacramento (Sacramento, CA)

**Undergraduate Major:** Physics

**Professional Societies:** Society of Physics Students and Sigma Pi Sigma Physics Honor Society

**Hobbies/Interests:** Playing frisbee, basketball, and soccer. Biking, Hiking, and listening to music



**Tigisti (Tig) Kesete**

**Research Experience:** FaST Program at Brookhaven National Lab

**Paper Title:** Solvent Purification and Fluor Selection for Gadolinium-loaded Liquid Scintillator

**Hometown:** Columbus, OH

**Undergraduate Institution:** Central State University (Wilberforce, OH)

**Undergraduate Major:** Chemistry

**Hobbies/Interests:** Reading/listening to music



**David LaBissoniere**

**Research Experience:** SULI Program at Oak Ridge National Lab

**Paper Title:** Adaptively Improving Long Distance Network Transfers with Logistics

**Hometown:** Jacksboro, TN

**Undergraduate Institution:** East Tennessee State University (Johnson City, TN)

**Undergraduate Major:** Computer Science

**Professional Societies:** Association of Computing Machinery, Upsilon Pi Epsilon

**Hobbies/Interests:** Traveling and Reading



**Leah Liu**

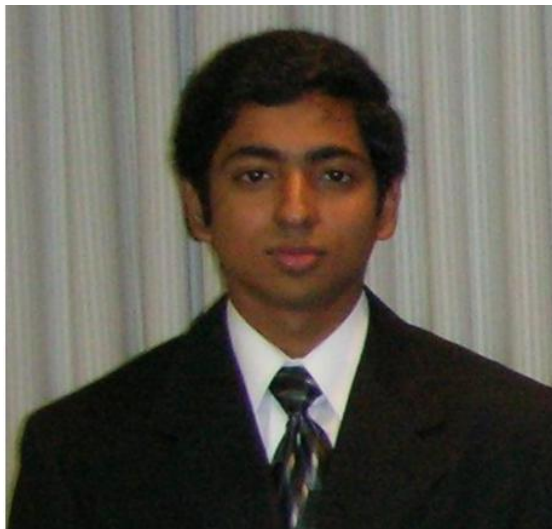
**Research Experience:** SULI Program at Oak Ridge National Lab

**Paper Title:** Characterizing the Role of the Nell1 Gene in Cardiovascular Development

**Hometown:** Port Matilda, PA

**Undergraduate Institution:** Pennsylvania State University (University Park, PA)

**Undergraduate Major:** Biochemistry and Molecular Biology - Developmental Biology



**Jacob Pachikara**

**Research Experience:** SULI Program at Lawrence Berkeley National Lab

**Paper Title:** A New GUI for Global Orbit Correction at the ALS Using MATLAB

**Description of Research:** Developed new GUI for global orbit correction of the electron beams using Matlab at the ALS

**Hometown:** Irving, TX

**Undergraduate Institution:** University of Texas, Arlington (Arlington, TX)

**Undergraduate Major:** Electrical Engineering

**Professional Societies:** Tau Beta Pi, Eta Kappa Nu

**Hobbies/Interests:** Sports and Movies



## **Mariano Padilla**

**Research Experience:** CCI Program at Oak Ridge National Lab

**Paper Title:** Development of Emittance Analysis Software for Ion Beam Characterization

**Hometown:** Diamond Bar, CA

**Undergraduate Institution:** Fullerton College (Fullerton, CA)

**Undergraduate Major:** Physics

**Professional Societies:** American Physical Society, Orange County Engineering Council

**Hobbies/Interests:** Off-road Motorcycle Riding, Reading, Movies, and barbecues



## **Charlie Pye**

**Research Experience:** SULI Program at Ames Lab

**Paper Title:** Novel Coarsening of Pb Nanostructures on Si(111) 7 X 7

**Description of Research:** Surface Nanostructure Analysis

**Hometown:** Lawrence, KS

**Undergraduate Institution:** University of Kansas (Lawrence, KS)

**Undergraduate Major:** Physics

**Professional Societies:** American Physical Society

**Hobbies/Interests:** Music and Drawing



## **Cody Ray**

**Research Experience:** SULI Program at Pacific Northwest National Laboratory  
**Paper Title:** Power Grid Dynamics: Enhancing Power System Operation through Prony Analysis  
**Hometown:** Milton-Freewater, OR  
**Undergraduate Institution:** University of Montana (Missoula, MT)  
**Undergraduate Major:** Applied Mathematics  
**Graduate Institution:** Oregon State University (Corvallis, OR)  
**Area of Study:** Mechanical Engineering  
**Professional Societies:** Society for Industrial and Applied Mathematics, Mathematics Association of America, PME  
**Hobbies/Interests:** Hiking, Camping, and Mathematical Art



## **Alessondra (Sondy)**

### **Springmann**

**Research Experience:** SULI Program at Stanford Linear Accelerator Center  
**Paper Title:** Host Galaxies of X-Shaped Radio Sources  
**Description of Research:** Analyzed host galaxy shapes of X-shaped radio sources  
**Hometown:** Point Reyes Station, CA  
**Undergraduate Institution:** Wellesley College (Wellesley, MA)  
**Undergraduate Major:** Astrophysics  
**Professional Studies:** American Astronomical Society, Society of Physics Students  
**Hobbies/Interests:** Photography, cooking, sailing, aikido, fire poi, frisbee, hiking





**Amanda Storm**

**Research Experience:** FaST Program at Brookhaven National Lab

**Paper Title:** Solvent Purification and Fluor Selection for Gadolinium-loaded Liquid Scintillator

**Hometown:** Zanesfield, OH

**Undergraduate Institution:** Central State University (Wilbersforce, OH)

**Undergraduate Major:** Chemistry

**Hobbies/Interests:** Playing piano, hiking, and church activities



**Doug Swanson**

**Research Experience:** SULI Program at Princeton Plasma Physics Lab

**Paper Title:** Calculation of Particle Bounce and Transit Times on General Geometry Flux Surfaces

**Description of Research:** Calculation of plasma particle orbit times

**Hometown:** Ridgewood, NJ

**Undergraduate Institution:** Yale University (New Haven, CT)

**Undergraduate Major:** Physics

**Professional Societies:** American Physical Society

**Hobbies/Interests:** Music (violin and guitars), ultimate frisbee, and computer security



## **Marlene Tyner**

**Research Experience:** SULI Program at Oak Ridge National Lab

**Paper Title:** Comparison of the Populations of Common Wood-Nymph Butterflies in Burned Prairie, Unburned Prairie, and Old Field Grasses

**Description of Research:** Climate change effects on decomposition are mediated by species composition

**Hometown:** Royal Oak, MI

**Undergraduate Institution:** University of Michigan (Ann Arbor, MI)

**Undergraduate Major:** Ecology and Evolutionary Biology

**Professional Societies:** Society of Biological Students

**Hobbies/Interests:** Hiking, reading, music, movies, mushrooms, China, shoes



## **Chad Weldy**

**Research Experience:** SULI Program at Pacific Northwest National Lab

**Paper Title:** Lipid Production by *Dunaliella salina* in Batch Culture: Effects of Nitrogen Limitation and Light Intensity

**Description of Research:** Lipid Production by microalgae for the purpose of biodiesel fuel

**Hometown:** Bainbridge Island, WA

**Undergraduate Institution:** Western Washington University (Bellingham, WA)

**Undergraduate Major:** Environmental Sciences

**Graduate Institution:** Washington University (Bellingham, WA)

**Area of Study:** Environmental Toxicology

**Professional Societies:** Air and Waste Management Association, Society of Environmental Toxicology and Chemistry

**Hobbies/Interests:** Competitive ultimate frisbee, backcountry hiking, climber, and snowboarding



**Kristin Whitlow**

**Research Experience:** SULI Program at J-Lab

**Paper Title:** GEANT Simulations of the Preshower Calorimeter for CLAS12 Upgrade of the Forward Electromagnetic Calorimeter

**Hometown:** Fort Walton Beach, FL

**Undergraduate Institution:** University of Florida (Gainesville, FL)

**Undergraduate Major:** Nuclear Engineering

**Professional Societies:** American Nuclear Society, Society of Women Engineers

**Hobbies/Interests:** Traveling, soccer, and reading



**Christy Wisnewski**

**Research Experience:** SULI Program at Lawrence Berkeley National Lab

**Paper Title:** A Comparison of DNA Damage Probes in Human Mammary Epithelial Cells with 150 kVp X-Rays

**Description of Research:** X-irradiation of two HME cell lines for analysis of DNA damage response

**Hometown:** San Ramon, CA

**Undergraduate Institution:** University of California, Davis (Davis, CA)

**Undergraduate Major:** Biological Science - neurobiology, physiology, and behavior

**Professional Societies:** American Association for the Advancement of Science

**Hobbies/Interests:** Hiking, traveling, and attending concerts