

# Elliott Daniel SoRelle

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## QUALIFICATIONS AND EXPERIENCE

- Strong background in conducting independent original research in biological and biomedical sciences
- Created and taught an original university-level course as a Rice University undergraduate (*course material available upon request*)
- Authored winning grants and proposals for biomedical imaging research as a graduate student at Stanford University
- Extensive hands-on use and maintenance of optical and near-infrared imaging instruments (*see Technical Skills section*)
- Helped found and direct Matchbox Gallery, named as a top ten art space in Houston, TX (*Houston Press*)
- Well-developed managerial skills and organization from teaching positions and research in a new Stanford laboratory
- “Unconventional” intelligences including: linguistic ability, strong tactile sense, spatial cognition, inter- and intra-personal skills, effective communicator (both verbal and written)

## EDUCATION

Graduate Career: Stanford University, Stanford, California

Planned Graduation Year: 2017

Program: Ph.D., Biophysics

**Current GPA: 4.013**

Undergraduate Career: Rice University, Houston, Texas

Graduation Year: 2012

Degrees: B.S., Biochemistry and Cell Biology, B.A., Visual and Dramatic Arts

**GPA: 3.99**

Latin Honors: Magna cum Laude

## ACADEMIC HONORS

- Rice University, Phi Beta Kappa (Beta Chapter) 2012
- Rice University, Frederick B. Rudolph Award for Outstanding Biochemistry & Cell Biology Senior 2012
- Rice University, George J. Schroepfer, Jr. Summer Biochemistry Research Fellowship 2011
- Rice University, Department of Visual Arts Chairman’s Award 2012
- Rice University, Mavis C. Pitman Exhibition Award Recipient for Visual Arts 2012
- Rice University President’s Honor Roll 2009-2012
- Rice University Chapter, National Society of Collegiate Scholars 2009
- Rice University, Vandiver Brown Scholarship 2008-2012
- Jo Ann Reynolds Skaret Houston Area Episcopal Student Scholarship 2010-2011
- National AP Scholar with Distinction 2009

## PRESENTATIONS, PUBLICATIONS, AND RESEARCH AWARDS

- National Science Foundation Graduate Research Fellowship Honorable Mention 2014
- Stanford Nano Center Mini Seed Grant Recipient: funding used for electron microscopy training, structural characterization of synthesized gold nanoparticles 2013
- Senior Honors Thesis (Dr. John S. Olson, supervisor): “Kinetic characterization and exploration of the ligand pathways in *Bacillus anthracis* truncated globin” 2011

## EMPLOYMENT

- Stanford University: Graduate research in design and production of contrast agents for molecular imaging and applications to studying *in vivo* models of tumor angiogenesis. Principal Investigator: Dr. Adam de la Zerda. 2012-Present
- Stanford University: Teaching Assistant for Electrical Engineering 225: Biochips and Medical Imaging; wrote and edited course notes for publication of a course primer, conducted review sessions for students. 2014-Present
- Rice University: Undergraduate research under Dr. John S. Olson, Rice Department of Biochemistry and Cell Biology: kinetic study of truncated hemoglobin from *Bacillus anthracis*; designed and expressed wild type and variants for kinetic characterization using laser photolysis methods. 2010-2012
- Ethos Prep Tutoring: tutored high school students in physics, chemistry, biology, algebra, and debate. 2009-2012
- Level One, Support Services Group: ran and terminated Internet network and fiber optic cable on contract basis for Baylor University, Waco ISD, and other local businesses. 2007-2009

## LEADERSHIP

- Matchbox Art Gallery Director: curator of exhibition space for Rice University visual art students and local Houston artists. 2010-2012
- KTRU Rice Radio Board of Directors 2010-2012
- Lovett College Intramural Softball Team Captain 2009-2012
- Vanguard College Preparatory School Senior Class President 2007-2008
- National Association of Secondary School Principals' Leadership Award 2008
- Mu Alpha Theta Math Honor Society President 2006-2008

## TECHNICAL SKILLS AND SOFTWARE LITERACY

- Chemical synthesis and physical characterization of nanoparticles for molecular imaging
- Optical Coherence Tomography: imaging and quantitative analysis
- Transmission Electron Microscopy (TEM): operation of JEOL and FEI Tecnai systems
- Optical Microscopy: bright-field, dark-field, hyperspectral, and fluorescence modes
- Additional Optical Characterization Techniques: UV-Visible-NIR spectrophotometry, Dynamic Light Scattering (DLS), Electrophoretic Light Scattering (ELS)
- MATLAB: quantitative data analysis, image processing, and script writing
- Microsoft Office Suite
- Adobe Photoshop
- Programming Languages: HTML/CSS, Ruby, JavaScript

## EXTRACURRICULAR ACTIVITIES

- Guitar, Piano, Trumpet
- Golf, Softball
- Photography, Creative Writing
- Teaching

*(References available upon request)*