Matthew K. Daddysman, Ph.D.

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EDUCATION

University of North Carolina (Chapel Hill, NC): *Ph.D. Physical Chemistry* December 2013

- Thesis: Fluorescent microscopy in the nucleus: Investigating protein diffusion and binding in live cells

Alderson Broaddus University (Philippi, WV): *B.S. Chemistry & Biology* May 2009

- Graduated s*umma cum laude* with an honors thesis
- Minored in international studies with a semester of study in Salzburg, Austria

RESEARCH AND PROJECT MANAGEMENT EXPERIENCE

Institute for Biophysical Dynamics, University of Chicago (Chicago, IL) December 2013 – Present

Post-doctoral Scholar, Prof. Norbert Scherer

- Oversees a group confocal microscope, hardware and software configuration, and training
  - Publications in *Nature Microbiology* & *Review of Scientific Instruments*
- Developed snapshot microscopy imaging technologies combining improved 3D field of view and super-resolution
- Supervised three undergraduate research assistants

Department of Chemistry, University of North Carolina August 2009 – December 2013

Research & Teaching Assistant, Prof. Christopher Fecko

- Maintained home-built two-photon laser scanning microscope
- Image processing and modeling of live-cell microscopy images
- Published three peer-reviewed articles *(Journal of Physical Chemistry, Biophysics Journal)* & one book chapter
- Instructor of record for one semester lab course; teaching assistant for four semesters
- Supervised one undergraduate research assistant
- Tutored undergraduate chemistry students

Division of Natural Science, Alderson Broaddus University May 2007 – August 2007

Research Assistant, Prof. Yi Charlie Chen January 2008 – August 2008

- Coauthored two peer-reviewed articles *(Nutrition and Cancer, Cancer Cell International)*
- Linear modeling of biological data using SPSS software

TECHNICAL SKILLS

- Microscopy techniques: Laser scanning (two-photon & confocal), spinning disk confocal, multifocal, interferometric super-resolution, live-cell imaging
- Microscopy software: ImageJ, Micromanager, Slidebook, Huygens
- Programming languages: Matlab, R, Labview, C, C++
- Statistical analysis using SPSS & R
- Biomedical techniques: Immunostaining, PCR, Western blot, cell transfection, tissue culture
- Microsoft Office: Word, Excel, Powerpoint

HONORS & AWARDS

- Yen post-doctoral fellowship, University of Chicago
- Albert R. Ledoux teaching award, University of North Carolina
- Student government president, Alderson Broaddus University