

Ryan M Harrison

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Education

University of Oxford (Oxford, UK)
DPhil in Biological Physics

Expected 2014

- Molecular simulation
 - Coarse-grained DNA modeling, including various rare event methods.
 - Simulation software in **C++**; analysis suite in **Python**. Testing taskmaster.
- Single-molecule fluorescence
 - TIRF-FRET studies of the RecQ DNA helicase.
 - Image processing and time series analysis with **MATLAB**.
 - Extensive wetlab experience, spanning culture, purification and QC.

Johns Hopkins University (Baltimore, MD) December 2009
Bachelor of Science in Biomedical Engineering; Minor in Economics. GPA: 3.26/4.00

Danish Institute for Study Abroad (Copenhagen, Denmark) Fall 2009
International Business & Economics Program

Software

NaturalMotion (Oxford, UK)

Summer 2013

- R&D for the Morpheme procedural animation engine.
- Agile development in **C++** with Microsoft toolchain.

Ginkgo BioWorks (Boston, MA)

Jan – May 2010

- Developed **Django** and **Rails** apps for prototyping engineered biological systems.
- Collaborated with lab to quickly iterate builds and do hardware integration.

Ion Torrent Systems (Guilford, CT)

Summer 2009

- System optimization and benchmarking on a next generation DNA sequencer.
- Wrote desktop **Pyjamas/PyQT** app to analyse quality and track improvement.

Computational Proteomics Research Asst (Baltimore, MD)

2003 – 2007

- **C++** developer for Rosetta protein structure suite. Analysis tools with **Perl** and **R**.
- Mentored high school student with interest in protein structure prediction.

Policy

Maryland General Assembly (Annapolis, MD)

Spring 2009

- Prepared testimony, policy memos, and statements for a Baltimore City Delegate.
- Coordinated with stakeholders to amend legislation brought before committee.

Baltimore City Health Department (Baltimore, MD)

Fall 2007

- Analyst for the 2008 Baltimore City Health Status Report.
- Aided flu monitoring (quantitative) and anti-smoking campaign (public relations).

Training

University of Oxford Student Consultancy

Winter 2013

Saïd Business School Building a Business Course

2012/2013

Mid-Atlantic Biotech Conference (Volunteer)

Sept 2012

Mid-Atlantic Venture Association Capital Connection (Volunteer)

May 2012

NIH Science Policy Group

2011/2012

Honors

NIH Graduate Student Research Award (Travel Award)

2011

National Science Foundation Graduate Research Fellow (3 year, \$120k)

2010

Inductee, National Gallery for America's Young Inventors (\$5k)

2006

5th Place, Intel Science Talent Search (\$25k)

2005

Hobby

bow ties / allotment gardening / light design / technical theater