CURRICULUM VITAE

Scott Cheng-Hsin Yang

BE 4-25 Department of Engineering, University of Cambridge
Trumpington Street, Cambridge
CB2 1PZ, United Kingdoms
07453-771-925
schy2@cam.ac.uk

WORK EXPERIENCE

Post-doctoral research associate (2012 – present)
Computational and Biological Learning Lab, University of Cambridge, Cambridge, United Kingdom
Advisor: Prof. Daniel Wolpert
Project: *Bayesian active sensing in sensorimotor control*

EDUCATION

Ph.D. in Biophysics (June 2012)
Department of Physics, Simon Fraser University, Burnaby, BC, Canada
Supervisor: Prof. John Bechhoefer
Thesis: *Modelling the DNA replication program in eukaryotes*

B.Sc. in Physics, honours program (May 2006)
Department of Physics and Astronomy, University of British Columbia, Vancouver, BC, Canada
Supervisor: Dr. Jörg Rottler
Thesis: *Molecular dynamics simulation of force-extension relation in simple models of semi-flexible bio-polymers*

PUBLICATIONS

Bayesian Active Sensing in the Categorization of Visual Patterns
Scott Cheng-Hsin Yang, Máté Lengyel and Daniel Wolpert
In preparation (2014)

Inferring where and when replication initiates from genome-wide replication timing data
Antoine Baker, Benjamin Audit, Scott Cheng-Hsin Yang, John Bechhoefer and Alain Arneodo
Phyiscal Review Letter **108**: 268101 (2012)

Modeling genome-wide replication kinetics reveals a mechanism for regulation of replication timing
Scott Cheng-Hsin Yang, Nicholas Rhind and John Bechhoefer
Molecular Systems Biology **6**: 404 (2010)
Rated by *Faculty of 1000 Biology* as MUST READ

Reconciling stochastic origin firing with defined replication timing
Nicholas Rhind, Scott Cheng-Hsin Yang and John Bechhoefer
Chromosome Research **18**: 35 (2010)

Computational methods to study kinetics of DNA replication
Scott Cheng-Hsin Yang, Michel Gauthier and John Bechhoefer
Methods in Molecular Biology **521**: 555-573 (2009)

How *Xenopus laevis* embryos replicate reliably: Investigating the random-completion problem
Scott Cheng-Hsin Yang and John Bechhoefer
Physical Review E **78**, 041917 (2008)
Selected for a Viewpoint article: *Physics* **1**: 32 (2008)

SCIENTIFIC MEETINGS

Computational and Systems Neuroscience, Salt Lake City, UT
Selected oral presentation (February 2014)

United Kingdom Sensorimotor Meeting, Cambridge, UK
Oral presentation (December 2013)

Summer School in Computational Sensory-Motor Neuroscience, Evanston, IL
Selected participant (August 2012)

Center for Molecular Medicine and Therapeutics TGIF Seminar series, Vancouver, BC
Invited talk (December 2010)

SFU Biophysics Seminar, Burnaby, BC
Invited talk (March 2010)

American Physical Society Annual Meeting, Portland, OR
Oral presentation and session chair (March 2010)

CSHL meeting: Eukaryotic DNA replication & Genome Maintenance, Cold Spring Harbor, NY
Poster presentation (September 2009)

International Conference on Mathematical Biology, Vancouver, BC
Poster presentation (July 2009)

Biophysical Society Annual Meeting, Boston, MA
Selected oral presentation (March 2009)

American Physical Society Annual Meeting, New Orleans, LA
Oral presentation (March 2008)

Frontiers of Biophysics, Vancouver, BC
Oral presentation (January 2008)

EXPERIENCES

Lab demonstrator, University of Cambridge, Cambridge, UK (2012 – present)
For Module 3G3: Introduction to Neuroscience

Journal referee (2011 – present)
For *Phys. Rev. Lett.* and *Phys. Rev. E*

Visiting researcher, UMass Medical School, Worcester, MA, USA (2008 summer)
DNA-combing experiments with Dr. Nicholas Rhind, Department of Biochemistry and Molecular Pharmacology

Biophysics webmaster, Simon Fraser University, Burnaby, BC (2007 – 2009)

Teaching assistant, Simon Fraser University, Burnaby, BC (2006 – 2007)
PHYS102, PHYS100, PHYS126

Research assistant, Academia Sinica, Taipei, Taiwan (2006 summer)
Dilution-refrigerator experiments with Dr. Yang-Yuan Chen, Institute of Physics

AWARDS & SCHOLARSHIPS

NSERC Canadian Graduate Scholarships—Doctoral (2009 – 2012)

Graduate Fellowship at Simon Fraser University (2009)

Simon Fraser University Physics Department poster competition, First-prize award (2007)

Undergraduate Scholar Program at University of British Columbia (2003 – 2004)

BC Government Scholarship at University of British Columbia (2002 – 2003)