

Heather L. Hendrickson

H.Hendrickson@massey.ac.nz

<http://evolution.massey.ac.nz/rainey/heather.shtml>

(+64) (0) 9 414 0800 xt. 41494

New Zealand Institute for Advanced Study
Massey University,
Private Bag 102 904
North Shore Mail Centre
Auckland, New Zealand

PRESENT POSITION: Lecturer, Evolutionary Genetics, Massey University

ACADEMIC QUALIFICATIONS:

2007, Ph.D. Molecular, Cellular and Developmental Biology Program, University of Pittsburgh

2000, B.S. Biology, University of Utah

PROFESSIONAL APPOINTMENTS/ EMPLOYMENT:

2008-2011, Postdoctoral Fellow, University of Oxford, Biochemistry Department

PUBLICATIONS:

Hendrickson, H. (2012) The Lion and the Mouse: How Bacteriophages Create, Liberate and Decimate Bacterial Pathogens. In P. Hyman & S. Abedon (Eds.) *Bacteriophages in Health and Disease* (pp -). Oxford, UK: CABI.

Hendrickson, H. (2009) Order and disorder during *E. coli* divergence. *PLOS genetics* 2009; 5(1): e1000335

Hendrickson, H. (2008) DNA replication can still spring surprises. *Genome Biology*. 2008; 9(8):317.

Lawrence, J.G & Hendrickson, H. (2008) Genomes in motion: gene transfer as a catalyst for genome change. In H. Schmidt & M. Hensel (Eds.), *Advances in Molecular and Cellular Microbiology: Horizontal Gene Transfer in the Evolution of Pathogenesis* (pp 3-22). Cambridge, UK: Cambridge University Press.

Hendrickson, H. & Lawrence, J.G. (2007) Mutational bias suggests that replication termination occurs near the *dif* site, not at Ter sites. *Mol. Micro Apr*; 64(1):42-56.

Hendrickson, H. & Lawrence, J.G. (2006) Selection for chromosome architecture in bacteria. *J. Mol. Evol.* 62:615-29.

Lawrence, J.G. & Hendrickson, H. (2005) Genome evolution in bacteria: order beneath chaos. *Curr. Opin. Microbiol.* 8:572-8.

Lawrence, J.G. & Hendrickson, H. (2004) Chromosome structure and constraints on lateral gene transfer. In V. Parisi, V. De Fonzo, F. Aluffi-Pentini (Eds.), *Dynamical Genetics* (pp. 319-336). Kerala, India: Research Signpost.

Lawrence, J.G. & Hendrickson, H. (2003) Horizontal Gene Transfer: when will adolescence end? *Mol. Micro.* 50:739-49.

Hendrickson, H., Slechta, E.S., Bergthorsson, U., Andersson, D.I., Roth, J.R. (2002) Amplification-mutagenesis: evidence that "directed" adaptive mutation and general hypermutability result from growth with a selected gene amplification. *Proc. Natl. Acad. Sci., USA* 99:2164-9.

IN PREPARATION:

Hendrickson, H. & Sherratt, D.J. Replication termination in Bacteria: Fork trapping and reversal.

GRANTS AND FELLOWSHIPS:

2008-2011, Human Frontier of Science Program, Long Term Fellow, University of Oxford.

2006, Andrew Mellon Pre-doctoral Fellowship, University of Pittsburgh.

2004, Pennsylvania Space Grant Consortium Fellowship, University of Pittsburgh.

AWARDS:

2005 – 2006, Stanton C. Crawford Memorial Teaching Award

2003, Best Poster, Gordon Research Conference on Microbial Population Biology

INVITED SPEAKING:

2011, Replication Termination in Bacteria, 'It ain't over 'til it's over'. Human Frontier of Science Program Awardees Meeting, Montreal, Canada

2006, Bacterial Cell Biology Affects Gene Flow and Evolution: A Bioinformatics Approach. Duquesne University Departmental Seminar Series

PAST RESEARCH:

2002 –2007, Dissertation, Laboratory of Dr. J.G. Lawrence, University of Pittsburgh.

2000–2001, Undergraduate research, Laboratory of Dr. J. R. Roth, University of Utah.

MEMBERSHIPS:

2004 – Present, American Association for the Advancement of Science

2003 – Present, American Society for Microbiology

MEETINGS ATTENDED:

2011, Human Frontier of Science Program Awardees Meeting, Montreal, Canada
2010, American Society for Microbiology 110th General Meeting, San Diego, CA
2009, Gordon Research Conference on Chromosome Dynamics
2008, EMBO Replication & Segregation of Chromosomes
2007, Gordon Research Conference on Microbial Population Biology
2005, Gordon Research Conference on Microbial Population Biology
2004, American Society for Microbiology 104th General Meeting, New Orleans, LA
2004, Bacterial Chromosome Meeting, Keystone
2003, Gordon Research Conference on Microbial Population Biology
2003, American Society for Microbiology 103rd General Meeting, Washington, DC
2002, American Society for Microbiology 102nd General Meeting, Salt Lake City, UT
2001, Bacterial Chromosome Meeting Keystone
2000, Analytical Genetics Snowbird Ski Resort, Utah

TEACHING:

2011, Lecturer, Natural Selection and Population Genetics lectures, Evolution, University of Massey
2006, Guest lecture, "Microbial Genomics and Evolution" Microbiology, University of Pittsburgh
2006, Teaching assistant, Microbiology, University of Pittsburgh
2005, Guest lecture, "Life at the Extremes" Microbial Physiology, University of Pittsburgh
2004, Teaching assistant, Microbiology, University of Pittsburgh
2002, Guest instructor, University of Pittsburgh Teacher Outreach
2001, Teaching assistant, Genetics, University of Utah

SERVICE:

2010 – 2011, Vice Chair, Biochemistry Researchers' Organization, Oxford,
2002 – 2005, Chair, Graduate Student Seminar Speaker Invitation Committee
2003 – 2007, Member, Biosphere, Departmental Newsletter Committee