

Gregory Ian Lang

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Research Interests:

My research employs a combination of experiment, theory, and computation to study the molecular basis of evolution. In particular, my work has focused on understanding the mechanisms that set mutation rate, the degree to which mutation rate varies, and how mutation rate influences the rate of adaptation. Other interests include evolutionary trajectories (the sequence of mutational events during adaptation), the role of mutator alleles in evolution, and the evolution of the genetic code.

Education:

Harvard University, Cambridge, MA (2002 – present)
Ph.D. Molecular Biology (expected 2007)
Thesis: Mutation rate variation in the yeast, *Saccharomyces cerevisiae*
Advisor: Andrew Murray
Thesis Committee: Erin O'Shea (chair), Dan Hartl, Roy Kishony, Matt Michael

Millersville University of Pennsylvania, Millersville, PA (1997 – 2001)
B.S. Molecular Biology
Minors: Physics, Biochemistry
GPA: 3.90, Magna cum laude

Publications:

Lang GI, Murray AW. Mutation rate along yeast Chromosome VI is correlated with replication timing. (in preparation, expected 2007)

Lang GI, Murray AW. Estimating the per-base-pair mutation rate in the yeast, *Saccharomyces cerevisiae*. (ready for submission to *Genetics*, expected 2007)

Hepfer CE, Arnold-Croop S, Fogell H, Steudel KG, Moon M, Roff A, Zaikoski S, Rickman A, Komsisky K, Harbaugh DL, Lang GI, Keil RL. 2005. *DEG1*, encoding the tRNA:pseudouridine synthase Pus3p, impacts *HOT1*-stimulated recombination in *Saccharomyces cerevisiae*. *Mol Genet Genomics*. Dec;274(5):528-38.

Teaching experience:

Teaching Fellow, A Systems Approach to Biology. (Spring 2005).
Lecturers: Marc Kirschner, Lewis Cantley, Walter Fontana, and Jeremy Gunawardena

Curriculum-Development Committee, A Systems Approach to Biology. (Fall 2004 – Spring 2005)

Teaching Fellow. MCB/HHMI Outreach, Fly learning and memory (March 2004)

Teaching Fellow. Introduction to Genetics and Genomics. (Fall 2003).
Lecturer: William Gelbart

Professional conferences:

Gordon Research Conference on Mutagenesis. (6 – 11 August, 2006)
Salve Regina University, Newport, RI
Poster: Lang GI, Murray AW. Mutation rate across *Saccharomyces cerevisiae* Chromosome VI is correlated with replication timing.

6th International Conference on Systems Biology. (19 – 24 October, 2005)
Harvard Medical School, Boston, MA
Poster: Lang GI, Murray AW. Variation in mutation rate along yeast Chromosome VI.