

Michael G. Kearse

Curriculum Vitae

Lehigh University
Department of Biological Sciences
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Bethlehem, PA 18015

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Education/Training:

Ph.D. Candidate, Molecular Biology
Lehigh University, Bethlehem, PA
Advisor: Vassie C. Ware, Ph.D.
Function and Regulation of Duplicated Ribosomal Proteins in Drosophila melanogaster

Phage Genomics and Bioinformatics Training
Howard Hughes Medical Institute – Janelia Farm Research Campus, Ashburn, VA
Science Education Alliance
June 26-29 and December 14-19, 2009

B.S. with *Distinction*, Biotechnology (major) and Microbiology (minor), 2007
The Pennsylvania State University, University Park, PA

Experience:

Lehigh University, Bethlehem, PA
Department of Biological Sciences
Graduate Research/Teaching Assistant
August 2007 – Present

GlaxoSmithKline, King of Prussia, PA
Cardiovascular and Urogenital Center of Excellence in Drug Discovery
Vascular Biology and Thrombosis Department
Undergraduate Cooperative Education Research Assistant
Advisor: Douglas G. Johns, Ph.D.
January 2007 – June 2007
Drug discovery for novel targets of hypertension, atherosclerosis and thrombosis.

McNeil Consumer and Specialty Pharmaceuticals, Fort Washington, PA
Department of Research and Development
Undergraduate Cooperative Education Research Assistant
Advisor: Shun Por Li, Ph.D.
June 2005 – January 2006
Analytical material science of tablet coatings for drug delivery.

The Pennsylvania State University – Berks Campus, Reading, PA
Department of Biology
Undergraduate Research Assistant
Advisor: Tami Mysliwiec, Ph.D.
August 2003 – May 2004
Fetal alcohol syndrome using chicks as a model.

Honors/ Scholarships/Fellowships:

Lehigh University

Marjorie Nemes Fellowship, Fall 2010

College of Arts & Sciences Summer Research Fellowship, 2009

The Pennsylvania State University

Degree with *Distinction*, 2007

Eberly College of Science Cooperative Education Student of the Year Nominee, 2007

Eisenhower Memorial Award Scholarship, 2006-2007

Kappa Theta Epsilon Honor Society, 2005-2007

Golden Key International Honor Society, 2004-2007

The President's Freshman Award, 2003

Eberly College of Science Academic Achievement Award, 2002-2007

Professional Societies:

American Association for the Advancement of Science (2008-Present)

American Society for Cell Biology (2008-Present)

RNA Society (2009-Present)

Sigma Xi (2008-Present)

Grants/Funding:

Sigma Xi Grants-In-Aid of Research (GIAR) — “Exploring Roles of Paralogous Genes in *Drosophila melanogaster*: *In vivo* Knockdown of the L22e Ribosomal Protein Family in the Male Germline”

Grant ID: G20100315152292, \$805

Funded: April 19, 2010

GenBank Submissions:

Accession Number GU339467.1 – Mycobacteriophage RedRock, complete genome

Accession Number HM756190.1 – *Drosophila melanogaster* RpL22-like short isoform mRNA, complete coding sequence, alternatively spliced

Accession Number HQ190956.1 – *Drosophila melanogaster* ribosomal protein L22-like protein mRNA, complete coding sequence

Publications:

3. **Kearse MG** and Ware VC. Differential localization of the ribosomal protein L22e family in the male germline of *Drosophila melanogaster*. *In Preparation*
2. **Kearse MG**, Chen AS, Ware VC. (2010) Expression of ribosomal protein L22e family members in *Drosophila melanogaster*: *rpL22-like* is differentially expressed and alternatively spliced. *Nucleic Acid Res.* [Epub ahead of print]
1. Gatto GJ Jr, Ao Z, **Kearse MG**, Zhou M, Morales CR, Daniels E, Bradley BT, Goserud MT, Goodman KB, Douglas SA, Harpel MR, Johns DG. (2010) Mechanistic description of newly-reported inhibitors of NADPH oxidase. *Submitted, In Review*

Conference Abstracts:

8. **Michael G. Kearse**, Alex S. Chen, Vassie C. Ware. "Differential Expression and Localization of Eukaryotic-Specific Ribosomal Protein L22e Paralogues in *Drosophila melanogaster*." *50th Annual Meeting of the American Society for Cell Biology*. December 2010. Philadelphia, PA, USA.
7. **Michael G. Kearse** and Vassie C. Ware. "Differential Expression and Localization of Ribosomal Protein L22e Family Paralogues in *Drosophila melanogaster*." *15th Annual Meeting of the RNA Society*. June 2010. Seattle, WA, USA.
6. **Michael G. Kearse** and Vassie C. Ware. "Tissue-specific Expression of the Putative Ribosomal Protein L22-like in *Drosophila melanogaster*: A Mechanism for Generating Ribosome Diversity?" *8th International Conference on Ribosome Synthesis*. August 2009. Regensburg, Bavaria, Germany.
5. Gregory J. Gatto, Jr., Zhaohui Ao, **Michael G. Kearse**, Mei Zhou, Cyndi R. Morales, Erin Daniels, Benjamin T. Bradley, Matthew T. Goserud, Krista B. Goodman, Stephen A. Douglas, Mark R. Harpel, Douglas G. Johns. "Pharmacological Inhibitors of NADPH Oxidase: Characterization of Newly-Described Tools." *2009 Basic Cardiovascular Sciences Annual Conference of the American Heart Association*. July 2009. Las Vegas, NV, USA.
4. **Michael G. Kearse** and Vassie C. Ware. "Novel Splicing Generates Unique mRNA Isoforms from Ribosomal Protein L22-like Gene in *Drosophila melanogaster*." *14th Annual Meeting of the RNA Society*. May 2009. Madison, WI, USA.
3. Vassie C. Ware and **Michael G. Kearse**. "Analysis of Yeast Chimeric rRNAs Harboring *Drosophila* D7a Expansion Segments within the Binding Site for Ribosomal Protein L25." *48th Annual Meeting of the American Society for Cell Biology*. December 2008. San Francisco, CA, USA.

2. Diane Husic, Michael Kuchka, Yi Li, **Michael Kears**. "The D-Lactate Dehydrogenase in *Chlamydomonas reinhardtii*: a Bioinformatics and Gene Expression Study." *2008 Annual Meeting of American Society of Plant Biologists*. June 2008. Mérida, Yucatán, Mexico.
1. Daniel Garcia*, **Michael Kears***, Tami Mysliwec, Ike Shibley. "Analysis of the Expression of Acetaldehyde Dehydrogenase in Normal and Chronic Ethanol Exposed Chicken Embryos." *80th Annual Meeting of the Pennsylvania Academy of Science*. March 2004. Monroeville, PA, USA.
*Denotes equal contribution to work