

Robert G. Halgren, Ph.D.

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Education:

Ph.D. : Tumor Cell Biology and Carcinogenesis, January, 1998. Northwestern University Medical School, Chicago, IL.

Dissertation: Mechanisms of 8Cl-cAMP Mediated Cytotoxicity in Multiple Myeloma

B.S. : Biochemistry (Honors College), June 1992 - Michigan State University, East Lansing, MI.

Academic Experience:

Courses Taught:

- At LCC: Biol120 (Env. Science), Biol121 (Biol. Foundations for Physiology), Biol127 (Cell Biol.), Biol128 (Organismal Biol.), Biol145 (Anatomy and Physiology)
- At MSU: ANS425, BMB960, BMB961

Adjunct Professor: Lansing Community College, June 2008 to Present.

Research Assistant Professor: Center for Animal Functional Genomics, Michigan State University, December 2004-January 2008.

- Associate Director of Center, responsible for supervision of bioinformatics, databases, and laboratory robotics.
- Supervised several graduate students and member of two doctoral guidance committees.
- Research interests in gene annotation, microarray analysis and data presentation, and genome-wide functional analysis of transcription factor binding.

Bioinformatics Specialist: Genomics Technology Support Facility, Michigan State University, April 2001-December 2004.

- Supported several large scale (genomic and EST) sequencing projects, including sequence annotation, data mining, and web-based interfaces to annotation data.
- Developed expertise in analysis and presentation of complicated data sets including proteomics and microarray data.
- Provided a wide range of bioinformatics support services for researchers at Michigan State University, statewide, and internationally.
- Created several lecture series to instruct graduate and post-graduate researchers in bioinformatics and PERL programming.

Visiting Research Associate: Michigan State University, October 1998-March 2001.

- Studied the effects of developmental exposure to environmental endocrine disruptors (EEDs) on the testis in mouse. Methods included long term toxicology assays in mice, in vitro fertilization, immunohistochemistry, and cell culture.
- Used bioinformatics techniques to select clones for cDNA microarray construction representing all transcripts known to be expressed in testis, and performed quality control assays on cDNA probes.
- Designed software to assist in the interpretation of cDNA microarray data.
- Supervised Michigan State University Affymetrix DNA-Chip facility.

Predocctoral Student: Northwestern University, August 1992-October 1998.

- Examined signal transduction and steroid hormone resistance in multiple myeloma and breast cancer cell lines.
- Discovered two chemotherapeutic agents and examined their mechanism of action. One agent has entered Phase I clinical trials.

Laboratory Technician: Barros Research Institute, May 1990-August 1992.

- Assisted with cell culture, animal experiments, and drug discovery efforts.

Science Olympiad:

Michigan Science Olympiad Site Coordinator: December 2015 to present

- Direct planning and execution of state Science Olympiad tournament, including finance, scheduling, and recruitment of volunteer staff and event supervisors
- Supervise a large team of student employees
- Coordinate annual state coaches workshop
- Arbitrate event disputes
- Supervise and arbitrate at regional tournaments

Member, Michigan Science Olympiad Executive Board: 2013 to present

State event supervisor, Cell Biology: 2015

State event supervisor, Anatomy and Physiology: 2010-2014

Non-academic Experience:

Owner: Littlefrog Farm, Holt, MI. Jan 2001-present

- Provide a wide range of laboratory services for plant propagation, including both asexual and sexual reproduction of orchid species and hybrids
- Offer a diverse selection of orchids and other tropical plants to the retail public and specialize in premium customer care and service.
- Develop and present educational programs and seminars about orchid growing throughout the USA.
- Fully accredited American Orchid Society judge and member of the AOS Research Committee, President of the Greater Lansing Orchid Society.