

Curriculum Vitae, Daniel R. Marendt, PhD

Current position: **Assistant Professor**
Address: Department of Biology
Drexel University
Philadelphia, PA 19104

Citizenship: United States of America
home address: 4730 Sheldon Street, Philadelphia, PA, 19127

1) Education/Academic Employment

2008-present Assistant Professor, Dept. of Biology, Drexel University
2009-present Assistant Professor, Dept. of Neurobiology and Anatomy, Drexel University
College of Medicine
2006-2008 Assistant Professor, Dept. of Biological Sciences, University of the Sciences in
Philadelphia
2003-2006 Post-doctoral Fellow, Dept. of Cell Biology, Emory University School of
Medicine
Advisor: Dr. Kevin Moses
1998-2003 Ph.D. Biological Sciences, Dept. of Biology, Syracuse University
Advisor: Dr. Andrew K. Dingwall
1997-1998 Research Assistant, Dept. of Ophthalmology, University of Iowa College of
Medicine
Advisor: Dr. Edwin M. Stone
1992-1996 B.S. Biology with Classical Civilization minor, Loyola University Chicago

2) Honors/Awards:

GSA 52nd Annual Drosophila Research Conference Platform presentation 2011
Cover Article for *Human Molecular Genetics* 2010
Drexel University Human Cognitive Enhancement Program Award 2010
Pennsylvania Dept. of Health, CURE Award 2009
Article featured "In this issue" section of *Development* 2006
NIH Ruth L. Kirschstein National Research Service Award (NRSA) 2005-2006
Syracuse University Research and Creative Project Grant 2003
Certificate of College Science Teaching, Syracuse University 2003
Syracuse University Fellowship 2003
Syracuse University Travel Grant 2003
GSA 44th Annual Drosophila Research Conference Platform presentation 2003
Marilyn Albelow Summer Scholarship 1999-2003
Syracuse University Teaching Associate 1999-2002
Syracuse University Outstanding Teaching Assistant Award Nomination 2001

3) Research Support

Ongoing Support

1) **“Characterization of a novel Drosophila disease model for CHARGE Syndrome.”**

Source: NIH/NCRR 1R21RR026074-01A1

Total Costs: \$422,898

Role: PI (25% effort)

Starting: 6/1/10

Ending: 3/31/12

2) **“Identification and Characterization of APP Processing Regulators”**

Source: NIH/NINDS, R01NS057295

Total Costs: \$1,611,956

Role: Co-I (12.5% effort, Saunders PI)

Starting: 8/1/08

Ending: 7/31/13

Completed Support

1) **“Characterization and drug screening of a novel Drosophila model for Late Onset Alzheimer’s Disease”**

Source: Drexel University Human Cognition Enhancement Program

Direct Costs: \$14,500

Role: PI

Starting Date: 4/15/2010

Ending Date: 4/14/2011

2) **“Retina: Lilliputian and the control of retinal neurogenesis”**

Source: NIH/NEI, R15EY018431

Total Costs: \$224,823

Role: PI (8% effort)

Starting: 4/1/2008

Ending: 3/31/2011

3) **“Characterization and application of a novel Drosophila model for CHARGE Syndrome.”**

Source: Pennsylvania Department of Public Health, Commonwealth of PA

Total Costs: \$105,159

Role: PI (10% effort)

Starting: 1/1/09

Ending: 12/31/09

4) **“Cancer: MAPK phosphorylation and nuclear translocation”**

National Service Research Award, F32 GM073608

NIH: National Institute of General Medical Sciences, National Cancer Institute 2005-2006

4) **Publications (Chronological Order)**

1) Howell N, Bogolin C, Jamieson R, **Marenda DR**, and Mackey DA (1998) mtDNA mutations that cause Optic Neuropathy: How do we know? *American Journal of Human Genetics* **62**: 196-202

2) **Marenda DR**, Zraly CB, Feng Y, Egan S, and Dingwall AK (2003) The *Drosophila* SNR1 (SNF5/INI1) subunit directs essential developmental functions of the Brahma chromatin remodeling complex. *Molecular and Cellular Biology* **23**: 289-305

3) Zraly CB, **Marenda DR**, Nanchal R, Cavalli G, Muchardt C, and Dingwall AK (2003) SNR1 is an essential component in a subset of *Drosophila* Brm complexes, targeting specific functions during development. *Developmental Biology* **253**: 291-308

4) **Marenda DR**, Zraly CB, and Dingwall AK (2004) The *Drosophila* Brahma (SWI/SNF) chromatin remodeling complex exhibits cell-type specific activation and repression functions. *Developmental Biology* **267**: 279-293

5) Zraly CB, **Marenda DR**, and Dingwall AK (2004) SNR1 (INI1/SNF5) directs essential cell cycle functions of the Brahma chromatin remodeling complex. *Genetics* **168**: 199-214

6) **Marenda DR**, Vrailas AD, Rodrigues AB, Cook S, Powers MA, Lorenzen JA, Perkins LA, and Moses K. (2006) MAP kinase subcellular localization controls both pattern and proliferation in the developing *Drosophila* wing. *Development* **133**: 43-51

^ Highlighted "In this issue" in *Development* **133**: 102e

^ Noted in Faculty of 1000 Biology

<http://www.facultyof1000.com/article/16308331/evaluation>

7) Vrailas AD, **Marenda DR**, Cook S, Powers MA, Lorenzen JA, Perkins LA, and Moses K (2006) *smoothened* and *thickveins* regulate Moleskin/Importin-7 mediated MAP Kinase signaling in the developing *Drosophila* eye. *Development* **133**: 1485-1494

8) Vrailas-Mortimer AD, Majumdar N, Middleton G, Cooke EM, and **Marenda DR** (2007) Delta and Egfr expression are regulated by Importin-7/Moleskin in *Drosophila* wing development. *Developmental Biology* **308**: 534-546

9) Melicharek D, Shah A, DiStefano G, Gangemi AJ, Orapallo A, Vrailas-Mortimer AD, and **Marenda DR** (2008) Identification of novel regulators of *atonal* expression in the developing *Drosophila* retina. *Genetics* **180**: 2095-2110

10) Majumdar N, Paez GL, Inamdar SM, D'Rozario M, and **Marenda DR**. (2010) MAP Kinase phosphorylation is dispensable for cell division, but required for cell growth in *Drosophila*. *Fly* **4:3** 204-212

11) Melicharek D, Ramirez LC, Singh S, Thompson R, and **Marenda DR**. (2010)

Kismet/CHD7 regulates axon morphology, memory, and locomotion in a *Drosophila* model of CHARGE Syndrome. *Human Molecular Genetics* **19(21)**: 4253-4264

^Cover Article.

12) Curtis BJ, Zraly CB, **Marenda DR**, Dingwall AK. (2011). Histone lysine demethylases function as co-repressors of SWI/SNF remodeling activities during *Drosophila* wing development. *Developmental Biology* **350**: 534-547

13) Chakraborty R, Vepuri V, Mhatre SD, Paddock BE, Miller S, Michelson SJ, Delvadia R, Desai A, Vinokur M, Melicharek DJ, Utraga S, Khandelwal P, Ansaloni S, Goldstein LE, Moir RD, Lee JC, Tabb LP, Saunders AJ, and **Marenda DR**. (2011) Characterization of a *Drosophila* Alzheimer's Disease Model: Pharmacological Rescue of Cognitive Defects, *PLoS ONE* 6(6): e20799. PMID: 21673973

14) DiStefano G, Gangemi AJ, Melicharek DJ, Khandelwal PJ, Saunders AJ, and **Marenda DR**. *Drosophila* lilliputian is required for proneural gene expression in retinal development. *Developmental Dynamics* (In Revision)

5) Professional Service

Funding Review

- 2011 1. NIH Study section, ZRG1, Biology and Diseases of the Posterior Eye (BDPE)
2. Medical Review Council (UK) Review
3. Alzheimer's Association grant review
- 2009 1. NSF Electronic Proposal Review, Developmental Systems & Evo-Devo Integrative Organismal Systems, BIO Directorate
2. NSF Electronic Proposal Review, Major Research Instrumentation Program Review
- 2006 1. NSF Postal *ad hoc* review, Developmental Systems Cluster

Publication Review

PLoS Genetics, Fly, Genetics, The International Journal of Developmental Biology, Developmental Biology

Foundations

2009-Present CHARGE Syndrome Foundation Medical/Research Committee

Professional Societies

- 2003-present -Genetics Society of America
2006-present -AAAS (The American Association for the Advancement of Science)
2006-present -Society for Developmental Biology
2007-present -Mid-Atlantic Pharmacology Society
2010-present -Society for Neuroscience
2009-present -Congressional Liaison Committee (CLC), of The Coalition for the Life Sciences (CLS)

University and Departmental Service

Drexel University

- 2011 - Scientific Advisor for Drexel University Human Cognitive Enhancement Program
- Department of Biology Search Committee
- Committee member, DUCOM Neuroscience retreat
-Co-director, Department of Biology Cell Imaging Center
- Pre-Health Profession Committee

- 2010 - Scientific Advisor for Drexel University Human Cognitive Enhancement Program
 - Department of Biology Search Committee
 - Pre-Health Profession Committee
 - Co-director, Department of Biology Cell Imaging Center
- 2009 -Director of the faculty and student exchange program with Nankai University, People's Republic of China
 - Drexel Green Academic Committee
 - Pre-Health Professional University Committee
 - Undergraduate Curriculum Committee
 - Co-director, Department of Biology Cell Imaging Center
 - Chair: ad hoc* Undergraduate Curriculum Committee
- 2008 -Drexel Green Academic Committee
 - Undergraduate Curriculum Committee

The University of the Sciences in Philadelphia

- 2008 -Committee member and reviewer for University funded internal French/Gano/Kilmer/Pollard Pre-doctoral Research Fellowships (USP)
- 2006 -Initiated and coordinated the USP Department of Biological Sciences Seminar Series
 - Member of the Service Learning Committee
 - Member USP Transfer Committee for the Department of Biological Sciences

Emory University

- 2004 -Panelist, Georgia Tech, "How to get a post-doc" presentation
- 2003 -Panelist, Emory University Office of Post-doctoral affairs "How to get a post-doc" seminar series

6) Outside presentations

Invited Research Talks:

- 2011 -Genetics Society of America 52nd Annual Drosophila Research Conference, San Diego
 - Genetic, Epigenetic, and functional aspects of complex diseases (GEF symposium), University of Eastern Finland, Department of Neurology, Kuopio, Finland
- 2009 -Drexel University College of Medicine, Dept. of Neurobiology and Anatomy
 - Nankai University, Department of Biology, People's Republic of China
- 2008 -Loyola University Chicago Medical School, Dept. of Cell Biology, Neurobiology and Anatomy
 - Drexel University College of Medicine, Dept. of Biochemistry, Molecular Biology, and Genetics
- 2007 -University of Pennsylvania Medical School, Department of Neurology
- 2006 -Drexel University, Department of Biosciences and Biotechnology
 - Marquette University, Department of Biology
 - University of Toledo, Department of Biology
 - Baylor University, Department of Biology
 - Yeshiva University, Department of Biology
- 2003 -Genetics Society of America 44th Annual Drosophila Research Conference
- 2002 -Syracuse University, Frontiers of Science Lecture

Conference Presentations:

- 2011 - Genetics Society of America 52nd Annual Drosophila Research Conference, San Diego, CA. Invited Platform talk.
- Genetics Society of America 52nd Annual Drosophila Research Conference, San Diego, CA. 2 posters presented.
- CHARGE Syndrome Foundation 10th International Conference, Orlando, FL. Invited Platform talk.
- 2010 - International Conference on Alzheimer's Disease (ICAD), Honolulu, Hawaii. Invited Poster Presentation.
- Genetics Society of America 51st Annual Drosophila Research Conference, Washington, D.C. Invited Poster Presentation.
- Genetics Society of America Genetics 2010: Model organisms to human biology. Boston, Mass. Invited Poster Presentation.
- 2009 - Genetics Society of America 50th Ann. Drosophila Research Conference, Chicago, IL. poster presented
- 2008 - International Conference on Alzheimer's Disease. Chicago, IL. Poster
- Genetics Society of America 49th Ann. Drosophila Research Conference, San Diego, 3 posters presented
- 2007 - Genetics Society of America 48th Ann. Drosophila Research Conference, Philadelphia, 2 posters presented
- 2006 - Genetics Society of America 47th Ann. Drosophila Research Conference, Houston, poster
- 2005 - Genetics Society of America 46th Ann. Drosophila Research Conference, San Diego, poster
- 2004 - Genetics Society of America 45th Ann. Drosophila Research Conference, Washington D.C. abstract
- 2004 - Emory University Dept. of Cell Biology retreat, Brasstown, GA poster
- 2003 - Genetics Society of America 44th Ann. Drosophila Research Conference, Chicago talk
- 2002 - Frontiers of Science Lecture Series, Syracuse University, Syracuse talk
- 2002 - Genetics Society of America 42nd Ann. Drosophila Research Conference, Washington poster
- 2001 - Syracuse University Biology Dept. Midnight Lecture Series, Syracuse talk
- 2001 - Syracuse University Thornfield Conference, Syracuse poster
- 2000 - Syracuse University Thornfield Conference, Syracuse talk

7) Teaching

Drexel University

Assistant Professor: August 2008-present

Taught:

BIO 214: Principles of Cell Biology

BIO 462: Biology of Neuron Function

Developed:

BIO 480/680: Graduate Seminar in Signal Transduction

University of the Sciences in Philadelphia

Assistant Professor: August 2006-2008

Taught:

BIO 767: Cell Biology Methods Lab

BIO 763: Cell Biology Methods Lecture

Developed:

BIO 860: Special Topics in Cancer Biology

Syracuse University

Teaching Associate*: August 1999-December 2002.

BIO 435: Genetics Lab (Fall 2002).

BIO 465/665: Molecular Biology Lab (Spring 2002).

BIO 121: General Biology I (Fall 2001, Fall 2000). Advisor:

*BIO 200: Human Genetics (Spring 2001, Spring 2000).

Independently designed and taught.

BIO 475/675: Biochemistry Lab (Fall 1999).

Teaching Assistant: August 1998-August 1999.

BIO 123, General Biology II (Spring 1999).

BIO 121, General Biology I (Fall 1998).

University College at Syracuse University:

Instructor: Summers 1999, 2000, 2001

BIO 123 Lab: General Biology II

8) Training

Past Post-doctoral Fellows

Gerardo Paez, PhD: Teaching Post-doctoral Fellow

Current Position: Assistant Professor, University of Michigan, Flint

Current Post-doctoral Fellow

Brie Paddock: Post-doctoral Fellow

Past Graduate Students

Neena Majumdar: USP Masters Student

Current Position: PhD student, Illinois Institute of Technology, Chicago, IL

Shivangi Inamdar: USP Masters Student

Current Position: PhD student, The University of Iowa, Iowa City, IA

Vidya Vepurri: USP Masters Student

Current Position: Managing Director at Zodhita, Inc.

Current Graduate Students

Ginnene DiStefano: PhD student, Drexel University

Siddhita Mhatre: PhD student, Drexel University

Mitchell D'Rozario: PhD student, Drexel University

Shanthi Sonia Bradley: MS student, DUCOM

Current Undergraduate students

Laura Ramirez: Drexel Senior.
Sukhdeep Singh: Drexel Senior BS/MD.
Shyam Patel: Drexel Senior BS/MD.
Jinny Lu: Drexel Senior BS/MD.
Sarah Michelson: Drexel Junior.
Radha Delvadia: Drexel Sophomore BS/MD.
Priyanka Kadaba: Drexel Sophomore.
Kapila Marepalli: Drexel Sophomore.
Anitha Chandran: Drexel sophomore.
Varun Padmanaban: Drexel freshman.
Ioannis Anastopoulos: Drexel freshman.

Past Undergraduate students

Andrew J. Gangemi: USP Undergraduate Student
Current Position: medical student, Drexel University College of Medicine
David Melicharek: USP Undergraduate Student
Current Position: Research Technician, Drexel University, PA
Andrew Orapallo: Deptford County High School Student
Current Position: Cornell University Undergraduate Student, NY
Arpit Shah: USP Undergraduate Student
Current Position: Pharmacy Student, Thomas Jefferson University, PA
Evan Cooke: USP Undergraduate Student
John Falcone: Drexel Undergraduate student
Current Position: Researcher at DUCOM
Helayna Brown: Drexel Undergraduate student
Current Position: Medical student at DUCOM
Malika Mukhamedova: Drexel Undergraduate student
Current Position: Research Technician
Rhea Thompson: Drexel Undergraduate student
Nathan Marzonie: University of Michigan Flint Undergraduate student. Obtained funds from the University of Michigan Flint to study in my lab over the summer.