

Jason A. Bubier

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RELATED WORK EXPERIENCE:

The Jackson Laboratory, Bar Harbor, Maine Nov 2010-Current

Associate Research Scientist in lab of Elissa J. Chesler.

Mouse Genome Informatics, Bar Harbor, Maine Nov 2009-Nov 2010

Scientific curator in alleles and phenotypes department for Janan Eppig.

EDUCATION:

The Jackson Laboratory, Bar Harbor, Maine. 2004-Nov 2009

Post-Doctoral Researcher, Lab of Dr. Derry Roopenian, liason Dr. John Sundberg

Marquette University, Milwaukee, Wisconsin. 1997-2004

Department of Biological Sciences Ph.D Advisor: Dr. Michael Schläppi

Dissertation: Characterization of the regulation of EARLI1 in *Arabidopsis thaliana*

Preparing Future Faculty Certification

University of Maine at Farmington, Farmington, Maine 1994-1997

BA Biology. Minors: Chemistry and Mathematics, honors program pin recipient

PROFESSIONAL TEACHING EXPERIENCE

University of Maine at Augusta.

Adjunct Faculty teaching Bio 321: Microbiology Course, Each Fall 2009-13

Marquette University, Milwaukee, Wisconsin

Tutor for Introductory Biology and Introductory Chemistry for the Educational Opportunities Program, Fall 2002

Marquette University, Milwaukee, Wisconsin

Guest Lecturer Spring 2002, Fall 2002 in Introductory Biology Courses

Marquette University, Milwaukee, Wisconsin.

Graduate Teaching Assistant. August 1997-May 2000

I have experience teaching Experimental Genetics, Experimental Cell Biology,

Molecular Basis of Life, Introductory Biology and Principles of Biological Investigation.

University of Maine at Farmington, Farmington, Maine

Undergraduate Calculus Tutor September 1995-May 1997

I tutored Calculus I and Calculus II under the direction of Drs. Gail Lange and Elizabeth Joseph.

CONSULTING

Bar Harbor Biotechnology, Trenton, ME May 2008-December 2008

Worked in the department of Bioinformatics as Scientific Consultant

MENTORING

The Jackson Laboratory Bar Harbor ME 04609 summers 2006, 2007, 2008, 2009

Served as Scientific Advisor for three undergraduate students and one high school student.

Milwaukee School of Engineering Center for BioMolecular Modeling, Milwaukee WI 2004-2005

Served as scientific mentor for SMART Team based in West Allis WI. High School.

Marquette University, Milwaukee, Wisconsin.

Served as Scientific Advisor for undergraduate student summer 2003

Marquette University, Milwaukee, Wisconsin.

Graduate Student Mentor for 20 students in an NSF funded Summer Research Program for

Undergraduates. June 3-August 9, 2002

PROFESSIONAL RESEARCH TRAINING:

The Baltic States Summer School, University of Kiel, Kiel Germany

Inflammation Practical Course September 17-21, 2007

Cold Spring Harbor Laboratory, Cold Spring Harbor, New York

Eukaryotic Gene Expression Course, July 24-August 13, 2001

PROFESSIONAL RESEARCH EXPERIENCE

Post-doctoral research fellow, The Jackson Laboratory, Bar Harbor ME 04609 2004-2009

Advisor: Dr. Derry Roopenian and Liason: Dr. John Sundberg

Graduate Student, Marquette University, Milwaukee, WI Dec 1997-2004

Advisor: Dr. Michael Schläppi Dissertation: "Characterization of the regulation of EARLI1 in *Arabidopsis thaliana*"

Summer Student The Jackson Laboratory, Bar Harbor, Maine

Internship in microchemistry lab of Kevin Johnson, M.S. May 1997- July 1997.

ACADEMIC AND RESEARCH HONORS AND AWARDS

Peter Mills Internship Fellowship. 1996-1997

Selection based upon nomination from Natural Science Department

Marquette University Research Fellowship. 2000-2001, 2001-2002

Selection based on quality of a written research proposal.

Charles O'Hare Fellowship. 2000-2001

Selection based upon department nomination

Cold Spring Harbor Course Scholarship 2001

Plant Physiology Travel Grant 2002

American Society of Plant Biology Travel Grant 2002

Arthur J. Schmitt Fellowship. 2002-2003

Selection based on teaching skills, leadership and academic performance.

NIH R32 Training Grant 2004-2006

Arthritis Foundation Post-Doctoral Fellowship 2006-2009

Arthritis Foundation Travel Grant 2007

Baltic States Summer School Marie Curie Conferences and Training Courses Fellowship 2008

Society for Investigative Dermatology Travel Award 2008

PROFESSIONAL MEMBERSHIPS

Beta, Beta, Beta (Undergraduate Biology Honor Society)

American Association for the Advancement of Science

International Mammalian Genome Society

Sigma Xi

INVITED SEMINARS

The University of Maine at Farmington, March 2012

Delivered a talk as part of the Senior Seminar Series

The University of Maine at Farmington April 2005

Delivered a talk as part of the Senior Seminar Series

Carroll College, Waukesha, Wisconsin 2003

Delivered a talk as part of the College's Senior Capstone Experience

PRESENTATIONS

Maine Neuroscience Conference, November 2013

Invited to present my abstract as a 15 minute talk

Short Course on Addiction Genetics, August 2012

Gave a presentation on Integrative Functional Genomics

Maine Neuroscience Conference, April 2012

Invited to present my abstract as a 15 minute talk

34th Maine Biological and Medical Sciences Symposium April 27-28, 2007

Invited to present my abstract as a 15 minute talk

5th International Congress on Autoimmunity, Sorrento, Italy Nov 29-Dec 3 2006

Invited to present my Abstract as 10 minute talk

PUBLICATIONS

- Bubier JA**, Schlappi MR. 2004. Cold induction of EARLI1, a putative Arabidopsis lipid transfer protein, is light and calcium dependent. *Plant Cell and Environment* 27(7):929-936. PMID: Pre-requirement
- Bubier JA**, Bennet SM, Sproule TJ, Lyon BL, Olland S, Young DA, Roopenian DC. 2007. Treatment of BXS^B-Yaa Mice with IL-21R-Fc Fusion Protein Minimally Attenuates Systemic Lupus Erythematosus. *NY Acad Sci Sept* :1110:590-601. PMID: Not NIH Funded
- Ghim S, Jenson AB, **Bubier JA**, Silva KA, Smith RS, Sundberg JP. 2008. Cataracts in transgenic mice caused by a human papillomavirus type 18 E7 oncogene driven by KRT1-14. *Exp Mol Pathol* 85(2):77-82. PMID: PMC2650106
- Bubier JA**, Sproule TJ, Foreman O, Spolski R, Shaffer DJ, Morse HC 3rd, Leonard WJ, Roopenian DC. 2009. A critical role for IL-21 receptor signaling in the pathogenesis of systemic lupus erythematosus in BXS^B-Yaa mice.. *Proc Natl Acad Sci U S A* 106(5):1518-23. PMID: PMC263581
- Bubier JA**, Sproule TJ, Alley LM, Webb CM, Fine JD, Roopenian DC, Sundberg JP. 2010. A mouse model of generalized non-Herlitz junctional epidermolysis bullosa. *J Invest Dermatol* 130(7):1819-1828. PMID: PMC3010368
- Derbyshire K, Addey C, Coe D, Stuckey DW, Muezzin H, **Bubier JA**, Shaffer DJ, Roopenian DC, Chai JG, Scott DM. 2011. Molecular mechanisms of induction of antigen-specific allograft tolerance by intranasal peptide administration. *J Immunol* May 15;186(10):5719-28. PMID:
- McPhee CG, Sproule TJ, Shin DM, **Bubier JA**, Schott WH, Steinbuck MP, Avenesyan L, Morse HC 3rd, Roopenian DC. 2011. MHC class I family proteins retard systemic lupus erythematosus autoimmunity and B cell lymphomagenesis. *J Immunol* 187(9):4695-4704. PMID: PMC3381364
- Baker EJ, Jay JJ, **Bubier JA**, Langston MA, Chesler EJ. 2012. GeneWeaver: a web-based system for integrative functional genomics. *Nucleic Acids Res* 40(Database):D1067-1076. PMID: PMC3245070
- Bubier JA**, Chesler EJ. 2012. Accelerating discovery for complex neurological and behavioral disorders through systems genetics and integrative genomics in the laboratory mouse. *Neurotherapeutics* 9(2):338-348. PMID: PMC3325414
- Chesler EJ, Plitt A, Fisher D, Hurd B, Lederle L, **Bubier JA**, Kiselycznyk C, Holmes A. 2012. Quantitative trait loci for sensitivity to ethanol intoxication in a C57BL/6J×129S1/SvImJ inbred mouse cross. *Mamm Genome* 23(5-6):305-321. PMID: PMC3357470
- Taylor DK, **Bubier JA**, Silva KA, Sundberg JP. 2012. Development, structure, and keratin expression in C57BL/6J mouse eccrine glands. *Vet Pathol* 49(1):146-154. PMID: PMC3253413
- Logan RW, Robledo RF, Recla JM, Philip VM, **Bubier JA**, Jay JJ, Harwood C, Wilcox T, Gatti DM, Bult CJ, Churchill GA, Chesler EJ. 2013. High-precision genetic mapping of behavioral traits in the diversity outbred mouse population. *Genes Brain Behav* feb(21). PMID: PMC3709837
- McPhee CG, **Bubier JA**, Sproule TJ, Park G, Steinbuck MP, Schott WH, Christianson GJ, Morse HC 3rd, Roopenian DC. 2013. IL-21 is a double-edged sword in the systemic lupus erythematosus-like disease of BXS^B.Yaa mice. *J Immunol* 191(9):4581-8. PMID: PMC3807747
- Sproule TJ, **Bubier JA**, Grandi FC, Sun VZ, Philip VM, McPhee CG, Adkins EB, Sundberg JP, Roopenian DC. 2014. Molecular identification of collagen 17a1 as a major genetic modifier of laminin gamma 2 mutation-induced junctional epidermolysis bullosa in mice. *PLoS Genetics* 10(2). PMID:PMC3923665
- Bubier JA**, Jay JJ, Baker CL, Bergeson SE, Ohno H, Metten P, Crabbe JC, Chesler EJ. 2014. Identification of a QTL in *Mus Musculus* for alcohol preference, withdrawal and Ap3m2 expression using integrative functional genomics and precision genetics. *Genetics* 197(4):1377-1393 PMID: PMC4125407

COURSES AND CONFERENCES

45th Annual Short Course in Medical and Experimental Mammalian Genetics

July 19-30, 2004-The Jackson Laboratory

4th International Workshop on Antigen Processing and Presentation

Sept 16-19 2004-The Jackson Laboratory

The Laboratory Mouse in Vision Research

Oct 13-16 2004-The Jackson Laboratory

Discovery Strategies Conference on Improving the Predictive Value of Mouse Models in Drug Discovery

May 16-18, 2005-The Jackson Laboratory
FASEB Summer Conference-Autoimmunity
June 11-15, 2005 Vermont Academy Saxtons River Vermont
14th Annual Short Course on Experimental Genetics of the Laboratory Mouse in Cancer Research
Aug. 21-Sept 1, 2005-The Jackson Laboratory
2005 Short Course on Complex Trait Analysis
Oct. 5-11, 2005-The Jackson Laboratory
Colony Management: Principles and Practices
April 2-6, 2006- The Jackson Laboratory
American Association of Immunologists Advanced Immunology Course
July 15-21, 2006 Stanford University, Palo Alto, CA
The Baltic States Summer School Inflammation Theoretical Course
September 2nd-13th 2007 University of Lund, Lund Sweden

INTERNATIONAL MEETINGS (Poster Presentations)

9th International Conference on Arabidopsis Research
June 24-28, 1998 Madison, WI
11th International Conference on Arabidopsis Research
June 24-28, 2000 Madison WI
12th International Conference on Arabidopsis Research
June 23-27, 2001 Madison WI
14th Annual Penn State Symposium in Plant Physiology, Plant Reproduction
May 16-18, 2002 College Station, PA
Plant Biology 2002
August 3-7, 2002 Denver, CO
Plant Biology 2003
July 25-30, 2003 Honolulu, HI
Complex Trait Consortium
June 26-29, 2004 Bar Harbor, ME
American Association of Immunologists Annual Meeting
May 12-16, 2006 Boston, MA
Arthritis Foundation Research Conference
April 20-22, 2007 Stone Mountain, GA
American Association of Immunologists Annual Meeting
May 18-22, 2007 Miami, FL
American Association of Immunologists Annual Meeting
April 5-9, 2008 San Diego, FL
International Investigative Dermatology 2008
May 14-17 Kyoto, Japan
American Association of Immunologists Annual Meeting
May 7-14, 2009 Seattle, WA
10th Annual Meeting of Complex Trait Community
June 22-26, 2011 Washington, DC
11th Annual Meeting of Complex Trait Community
June 12-15, 2012 Paris, France
15th Annual Meeting Genes, Brain & Behavior
May 20-24, 2013 in Leuven, Belgium
12th Annual Meeting of Complex Trait Community
May 29-31, 2013 Madison, WI
37th Annual RSA Scientific Meeting
June 21-25, 2014 Bellevue, WA
28th International Mammalian Genome Conference
Oct 26-29 2014, Bar Harbor, ME