CURRICULUM VITAE

NAME Joshua Martin Gendron, Ph.D.

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BORN November 6, 1977
Concord, California

MARITAL STATUS Partner: Shirin Bahmanyar, Ph.D.
2 Children

EDUCATION

2001-2008 Ph.D., Department of Biological Sciences
Stanford University, Stanford, CA

1996-2000 B.S., General Biology
University of California, San Diego, La Jolla, CA

WORK EXPERIENCE

2014-Present Assistant Professor
Yale University – Molecular, Cellular and Developmental Biology

2013 Research Scientist
Yale University – Molecular, Cellular and Developmental Biology

2008-2013 Postdoctoral Research Associate
University of California, San Diego - Division of Biological Sciences
Advisor - Steve Kay Ph.D.

2001-2008 Predoctoral Research Student
Stanford University – Department of Biological Sciences and Carnegie Institution for Science
Advisor - Zhi-Yong Wang, Ph.D.

2000-2001 Research Aide
Salk Institute for Biological Studies - Department of Plant Biology
Advisor - Joanne Chory, Ph.D.

2000-2001 Research Aide
Salk Institute for Biological Studies - Department of Plant Biology
Advisor - Detlef Weigel, Ph.D.

2000 Research Aide
UCSD, Scripps Institution of Oceanography – Department of Biological Oceanography
Advisor - David Checkley, Ph.D.

HONORS AND AWARDS

2016-2017	Recipient of Forest B. H. and Elizabeth D. W. Brown Fund Endowed Fellowship
2015	Yale nominee for Searle Scholars Award
2015-2016	Recipient of Rudolph J. Anderson Endowed Fellowship
2014-2015	Recipient of Forest B. H. and Elizabeth D. W. Brown Fund Endowed Fellowship
2014	Young faculty travel award from the North American Arabidopsis Steering Committee for the 25th Annual International Conference on Arabidopsis Research
2012	Center for Chronobiology Annual Meeting Poster Prize, First Place
2008	Nominee for the Harold M. Weintraub National Graduate Student Award
2007	Travel award from the North American Arabidopsis Steering Committee for the 18th Annual International Conference on Arabidopsis Research
2007	Western Section of the American Society of Plant Biologists Annual Meeting Poster Prize, First Place
2002	National Institute of Health Cellular and Molecular Biology Training Grant

MEMBERSHIPS/AFFILIATIONS

2016-present	Society for Research on Biological Rhythms
2014-present	Northeastern Section of the American Society for Plant Biology
2002-present	American Society for Plant Biology
2002-2008	Western Section of the American Society for Plant Biology
2002-2008	American Association for the Advancement of Science
2003-2006	American Society for Cell Biology

SUPPLEMENTAL TRAINING

2016	Junior faculty workshop participant at the Annual Society for Research on Biological Rhythms Conference
2015	National Science Foundation Day at Cold Spring Harbor Laboratory
2014-present	Individual leadership training with Conflict Resolution Manager, Kirk Hooks
2014-present	Participant in MCDB junior faculty workshop meeting
2014	National Academies Fellow awarded for participation in National Academies Summer Institute on Undergraduate Education at Yale
2014	Junior faculty workshop participant at the Annual International Conference for Arabidopsis Research

TEACHING EXPERIENCE

Undergraduate Teaching:

Yale

2017	Lecturer: MCDB 105 An Issues Approach to Biology
2017	Lecturer: MCDB 202 Genetics

2017 Lecturer: MCDB 380/MCDB 680 Advances in Plant Molecular Biology
2016 Lecturer: MCDB 105 An Issues Approach to Biology
2015 Lecturer: MCDB 105 An Issues Approach to Biology
2015 Lecturer: MCDB 202 Genetics
2014 Lecturer: MCDB 105 An Issues Approach to Biology
2014 Lecturer: MCDB 202 Genetics

Non-Yale

2004 Lecturer: Bio41: Principles of Biology: Genetics, Biochemistry, and Molecular Biology, Stanford University
2003 Lecturer: Bio41: Principles of Biology: Genetics, Biochemistry, and Molecular Biology, Stanford University
2002 Teaching assistant: Bio41: Principles of Biology: Genetics, Biochemistry, and Molecular Biology, Stanford University, Dr. David Muir, Course Director
2001 Teaching assistant: Bio42: Cell Biology and Animal Physiology, Stanford University, Dr. David Muir, Course Director

SERVICE

University

2017 Director for the PMB Track
2017 Director of Graduate Admissions for the PMB Track
2016 Director of Graduate Admissions for the PMB Track
2016 Co-founder Plant Molecular Biology (PMB) Track within the BBS
2016 Organizer Annual Team building event for PMB Track
2016 Designer of PMB outreach materials in collaboration with Denise George
2016 PMB Graduate Admissions Committee
2016 Member of the YSB Building Committee
2016 "Plant circadian clocks" Presentation for BASF through Yale Office of Development
2015-present Trainer NIH Genetics Training Grant
2015 Yale Certificate of College Teaching Preparation: Erin Heim (MCDB105), Ashley Bauer (MCDB105), Natalya Shylo (MCDB202), Christine Roden (MCDB202), Rachel Zwick (MCDB105)
2015 Panel member, Academic job search panel, Yale Office of Career Strategy
2015 "Plant circadian rhythms", Presentation for TATA Corporation through Yale Office of Development
2014-present Participant in Grad interview and recruitment weekends for MCGD/BBS
2014-present Member of plant biology YSB building committee
2014 Graduate Admissions Committee
2014 Doctoral Dissertation Committee Member:
- William Chezem, Clay lab, MCDB, (Chair)
- Joshua Coomey, Hazen lab, UMass Amherst
- Xinyue Luo, Acar lab, MCDB, (Chair)

- Gregory Elison, Acar lab, MCDB, (Chair)
- Lauren Penfield, Bahmanyar, MCDB
- Adrian Mehrtash, Hochstrasser, MCDB, (Chair)
- Julie Gerdes, Cooley, Genetics, Reading committee only

2014-present Academic advisor for Berkeley College freshmen (9 students)
2014-present Academic advisor for additional Yale undergraduates by request (4 students)
2014 "Research at Marsh Botanical Garden", Presentation for Yale Office of Development
2014 Academic job search panel member, Yale Office of Career Strategy

Department

2016 Senior thesis advisor, Nathaniel Adams, MCDB
2016 Co-organizer MCDB Departmental Retreat at Woods Hole
2015 MCDB Senior Thesis Advisor: MCDB951, Milan Sandhu
2015 Co-organizer MCDB Departmental Retreat at Woods Hole
2014 MCDB Senior Thesis Advisor: MCDB 950, Elton Zhou
2014-present Founder and coordinator of the Green Café at Marsh Botanical Garden
2014-present Academic advisor for MCDB major undergraduates (16 students)

Scientific Community

2016-2017 President Northeast Section of the American Society for Plant Biology (NEASPB)
2017 Host/Organizer NEASPB conference at Yale University
2016 Grant Panelist NSF IOS Development and EvoDevo (Full proposal stage)
2016 Grant Panelist NSF IOS Development and EvoDevo (Preproposal stage)
2015-present Board of directors NEASPB
2015 Auditor, Hazen lab retreat symposium, UMass Amherst
2015 Grant Panelist NSF IOS Development and EvoDevo (Preproposal stage)
2014-present Grant reviewer BBSRC, RGC of Hong Kong
2014-present Journal reviewer: Science, Nature, Nature Plants, Plant Cell, Plant Physiology, Current Biology, Frontiers in Plant Science, PNAS, The Plant Journal, Molecular and Cellular Proteomics, Current Opinion in Plant Biology

Broader Impacts

2014-present Founder and coordinator of the Green Café in the Schools:
- 2016 Christopher Adamchek student presentation at Celentano School
- 2016 Stacey Lawrence student presentation at Celentano School
- 2016 Joshua Gendron lecture at Celentano Health and Biotechnology Magnet School
- 2015 Joshua Gendron lecture at Cedarhurst School for Autistic or OHI students
- 2014 Joshua Gendron Green Café presentation on unique plant timing mechanisms
- 2014 Catherine Chamberlin student presentation at Cedarhurst School

2014-present Advisor for Passages work placement program for students with autism and OHI

Trainees: Skylar McDermott- currently in EMT training
Edward Schildnecht- currently student at Virginia Military Institute
Elijah Neveski- currently at University of Iowa
Grant Madden- current trainee in lab

2014-present Trainer for Summer Science Research Institute
Trainees: Mairead Brennan, Sung-Mi Johnson, Arianna McDaniels, Maneva Tanembelo, Max Behrendt, Saimanasa

2002-2003 Mentor: Expanded Advising Program for Freshmen in Life Sciences, Stanford University

LABORATORY ADVISING AND MENTORING

Graduate Student Advising:

2014 Ann Feke, Pre-doctoral candidate, Yale University MCDB
Funded by: Gruber Fellow years 1-2
NIH Genetics Training Grant year 3
NSF GRFP years 4-6
Invited speaker: 2016 NEASPB Conference

Postdoctoral Associate Training:

2016 Dr. Man-Wah Li
Finalist-Croucher Foundation Award

2015 Dr. Wei Liu
Funded by NSF Eager

2014 Dr. Chin-mei Lee
Funded by Brown and Anderson Postdoctoral Fellowships
Invited speaker: 2016 ICAR
Poster award: 2016 NEASPB Conference

Postgraduate Researcher Advising:

2015 Christopher Adamchek, Post-graduate researcher MCDB and docent for Green Café

2014 Catherine Chamberlin, Post-graduate researcher MCDB
Current position: PhD candidate, Duke University

Rotation Students Advising:

2016 Emma Corcoran, MCGD
2016 Altamash Memon, MCGD
2015 Jaymin Patel, MCGD
2015 Taylor Sells, BBSB
2014 Michael Grome, MCGD
2014 Ann Feke, MCGD

Undergraduate Training in Laboratory Research Projects:

2014 Research mentor:
Elton Zhou, Yale College 2014
Brandon Williams, Yale College 2015
Milan Sandhu, Yale College 2016
Mohammed Malik, Yale College 2018

2010 Undergraduate mentor (Kay Lab):
Earl Kang UCSD 2013
Elan Sherazee UCSD 2013

2001 Undergraduate mentor (Wang Lab):
Nathan Gendron
Asif Haque
Timothy Chang

Visiting Scholars:

2017 Host: Charles Copeland, PhD candidate, University of British Columbia
2016 Advisor: Jing Hong CSC PhD candidate, South China University of Technology
2015 Host: Zhiping Deng, Zhejiang Academy of Agricultural Sciences

Research Mentor - High School Students:

2016 Maya Geradi, Pathways to Science student
2014 Annie Jin, Joseph A. Foran High School, Milford, CT
2003 Carnegie Summer Student Program, Carnegie Institution: Catherine Qing Sun (Semifinalist of the Intel Science Talent Search)

TOTAL PUBLICATIONS: 18: H-Index: 11

1. Wang ZY, Nakano T*, **Gendron JM***, He J, Chen M, Vafeados D, Yang Y, Fujioka S, Yoshida S, Asami T, Chory J. (2002) Nuclear-localized BZR1 mediates brassinosteroid-induced growth and feedback suppression of brassinosteroid biosynthesis. ***Developmental Cell*****.** 2(4):505-13. PMID:11970900 (*these authors contributed equally)

2. He JX, **Gendron JM**, Yang Y, Li J, Wang ZY. (2002) The GSK3-like kinase BIN2 phosphorylates and destabilizes BZR1, a positive regulator of the brassinosteroid signaling pathway in Arabidopsis. ***PNAS.*** 99(15):10185-90. PMCID:PMC126645

3. He JX*, **Gendron JM***, Sun Y, Gampala SS, Gendron N, Sun CQ, Wang ZY. (2005) BZR1 is a transcriptional repressor with dual roles in brassinosteroid homeostasis and growth responses. ***Science*****.** 307(5715):1634-8. PMCID:PMC2925132 (*these authors contributed equally)

4. **Gendron JM**, Wang ZY. (2007) Multiple mechanisms modulate brassinosteroid signaling. ***Curr. Opin. Plant Biol*****.** 10(5):436-41. PMCID:PMC2093957

5. Deng Z, Zhang X, Tang W, Oses-Prieto JA, Suzuki N, **Gendron JM**, Chen H, Guan S, Chalkley RJ, Peterman KT, Burlingame AL, Wang ZY. (2007) A proteomic study of brassinosteroid response in Arabidopsis. ***Mol Cell Proteomics*****.** 6:2058-71. PMCID:PMC2966871

6. Gampala SS, Kim TW, He JX, Tang W, Deng Z, Bai MY, Guan S, Lalonde S, Sun Y, **Gendron JM**, Chen H, Shibagaki N, Ferl RJ, Ehrhardt D, Chong K, Burlingame AL, Wang ZY. (2007) An essential role for 14-3-3 proteins in brassinosteroid signal transduction in arabidopsis. ***Developmental Cell*****.** 13(2):177-89. PMCID:PMC2000337

7. **Gendron JM**, Haque A, Gendron N, Chang T, Wang ZY. (2008) Chemical genetic dissection of brassinosteroid ethylene interaction. ***Molecular Plant*****.** 1(2):368-79. PMCID:PMC2975526

8. Hazen SP, Naef F, Quisel T, **Gendron JM**, Chen H, Ecker JR, Borevitz JO, Kay SA. (2009) Exploring the transcriptional landscape of plant circadian rhythms using genome tiling arrays. ***Genome Biology***. 10(2):R17. PMCID:PMC2688271

9. Tang W, Yuan M, Wang R, Yang Y, Wang C, Oses-Prieto JA, Kim TW, Zhou HW, Deng Z, Gampala SS, **Gendron JM**, Jonassen EM, Lillo C, DeLong A, Burlingame AL, Sun Y, Wang ZY. (2011) PP2A activates brassinosteroid-responsive gene expression and plant growth by dephosphorylating BZR1. ***Nature Cell Biology*****.** 13(2):124-31. PMCID:PMC3077550

10. **Gendron JM***, Liu J-S*, Fan M, Bai M-Y, Wenkel S, Springer PS, Barton MK, Wang ZY. (2012) Brassinosteroids regulate organ boundary formation in the shoot apical meristem of Arabidopsis. ***PNAS.*** 109(51):21152-7. PMCID:PMC23213257 (*these authors contributed equally)

11. **Gendron JM**, Pruneda-Paz JL, Doherty CJ, Gross AM, Kang SE, Kay SA. (2012) Arabidopsis clock protein, TOC1, is a DNA-binding transcription factor. ***PNAS.*** 109(8):3167-72. PMCID:PMC3286946

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12. Higgins R*, **Gendron JM***, Rising L, Mak R, Webb K, Kaiser SE, Zuzow N, Riviere P, Yang B, Fenech E, Tang X, Lindsay SA, Christianson JC, Hampton RY, Wasserman SA, Bennett EJ. (2015) The unfolded protein response triggers site-specific regulatory ubiquitylation of 40S ribosomal proteins. ***Molecular Cell*****.** 59(1):35-49. PMCID:PMC4491043 (*these authors contributed equally)

13. **Gendron JM**, Webb K, Yang B, Rising L, Zuzow N, Bennett EJ. (2016) Using the ubiquitin modified proteome to monitor distinct and spatially restricted protein homeostasis dysfunction. ***Molecular & Cellular Proteomics***. 15(8):2576-93 PMCID: PMC4974337

14. Lee CM, Adamchek C, Feke A, Nusinow DA, **Gendron JM**. (2017) Mapping protein–protein interactions using affinity purification and mass spectrometry. ***Plant Genomics***. *In press*

15. Lee C-M*, Feke A*, Adamchek C, Webb K, Pruneda-Paz J, Bennett EJ, Kay SA, **Gendron JM**. (2017) Decoys reveal the genetic and biochemical roles of redundant plant E3 ubiquitin ligases. BioRxiv 115071 [**Preprint**]. March 11' 2017 [Cited 2017 July 1]. Available from: https://doi.org/10.1101/11507 (*these authors contributed equally)

16. Feke AM, Hong J, Lee CM, Adamchek C, **Gendron JM**. (2017) The MAC3 U-box regulates splicing of clock genes. *In preparation for submission in 2017*

17. Lee CM, Adamchek C, Feke AM, Liu W, Li M, Memon A, **Gendron JM**. (2017) F-box decoys reveal post-translational connections between the circadian clock and clock outputs. *In preparation for submission in 2017*

18. Lee CM, Feke AM, Liu W, Li M, **Gendron JM**. (2017) Light regulated deubiquitylation sharpens the dusk tracking mechanism of plants. *In preparation for submission in 2017*

19. Liu W, Lee CM, Li M, Feke AM, Adamchek A, **Gendron JM**. (2017) Phloem proteins regulate circadian clock function in the vasculature. *In preparation for submission in 2017*

INVITED LECTURES

Seminar Invitations

2017:

- Fairfield University, “Protein degradation mechanisms controlling the circadian clock”
- Rensselaer Polytechnic Institute, “Protein degradation mechanisms controlling the circadian clock”
- Oklahoma State University, “Protein degradation mechanisms controlling the circadian clock”

2016:

- University of Copenhagen, “Protein degradation mechanisms controlling the circadian clock”
- University of Barcelona, “Protein degradation mechanisms controlling the circadian clock”

2015:

- Shanghai Jiao Tong University, “How the Circadian Clock Controls Rhythmic Protein Degradation”
- Zhejiang University, “How the Circadian Clock Controls Rhythmic Protein Degradation”
- Zhejiang Academy of Agricultural Sciences, “How the Circadian Clock Controls Rhythmic Protein Degradation”

- South China University of Technology, “How the Circadian Clock Controls Rhythmic Protein Degradation”
- South China Agricultural University, “How the Circadian Clock Controls Rhythmic Protein Degradation”
- Sun Yat Sen University, “How the Circadian Clock Controls Rhythmic Protein Degradation”
- The Chinese University of Hong Kong, “How the Circadian Clock Controls Rhythmic Protein Degradation”
- University of Pennsylvania Plant Science Seminar Series, “Inverting E3 ligase function to study rhythmic protein degradation”

2014
- Northeastern Biology Department Seminar Series, “Comprehensive Analysis of Circadian Clock Regulated Protein Degradation Using a Decoy F-box Strategy”
- Southern Connecticut State University Biology Department Seminar Series, “Inverting protein degradation mechanisms to study the circadian clock”
- UMass Amherst Plant Biology Graduate Program Spring Seminar Series, “Protein Turnover and Plant Circadian Rhythms”

Invited Speaker at National and International Conferences

2016

International Conference on Arabidopsis Research, “Disentangling Protein Degradation Networks of the Plant Circadian Clock”

2015
- Gordon Research Conference, Posttranslational Modification Networks, “Inverting E3 Ligase Function in the Circadian Clock Using a Decoy Strategy”

2014
- 25th International Conference on Arabidopsis Research, “Inverting E3 Ligase Function in the Circadian Clock Using a Decoy Strategy”
- NEASPB Northwest Regional Meeting “Comprehensive Analysis of Circadian Clock Regulated Protein Degradation Using a Decoy F-box Strategy”

2012
- Center for Circadian Biology Fall Workshop, "The Core Circadian Clock Protein, TOC1, is a DNA-Binding Transcriptional Repressor"
- La Jolla Mesa Plant Biology Talk Series, "The Core Circadian Clock Protein, TOC1, is a DNA-Binding Transcriptional Repressor"

2007
- 18th International Conference on Arabidopsis Research, “Brassinosteroids Regulate Organ Boundary Formation and Organ Separation in Arabidopsis”

2005

- Stanford Cell and Molecular Biology Research Symposium, “Genetic and Physiological Analysis of the Brassinosteroid Transcriptional Regulator, BZR1”

2003

- Annual Meeting of the Western Section of the American Society for Plant Biology, “Genetic Screen for Suppressors of the Dominant Gain-of-Function Mutant *bzr1-1D*”

COLLABORATIONS:

Dr. Joanne Chory, Salk Institute for Biologicl Studies- Endogenous Decoys
Dr. Xin Li, University of British Columbia- E3 ligases in clock and defense
Dr. Julian Schroeder, UCSD- F-box proteins in abiotic stress
Dr. Brian Zoltowski, SMU- Structure of ZTL
Dr. Stephan Wenkel, University of Copenhagen- Microproteins
Dr. Mar Alba, University of Pompeu Fabra- Micorproteins
Dr. Doris Wagner, University of Pennsylvania- Circadian regulation of development
Dr. Ming Yang, Oklahoma State University- F-box proteins in meiosis
Dr. Brian Thines, University of Puget Sound- F-box proteins in stress
Dr. David Somers, The Ohio State University- Clock degradation mechanisms
Dr. Lucia Strader, Washington University- Protein degradation

LABORATORY WEBSITES AND SOCIAL MEDIA:

http://gendronlab.yale.edu/
http://greencafe.yale.edu
@Gendronlab
@greencafe14