

Amy Marshall-Colón, Assistant Professor, University of Illinois

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EDUCATION

2003-2009	Ph. D. School of Agriculture	Purdue University	Mentors: Natalia Dudareva and David Rhodes Topic: Biochemistry & Metabolomics
2001-2002	M.S. School of Agriculture	University of Florida	Mentor: Raymond N. Gallaher Topic: Sustainable Crop Production
1997-2000	B.S. in Biology	Lipscomb University	Major: Environmental Science

APPOINTMENTS

2014 – present	Assistant Professor	University of Illinois	
2015 - present	Institute for Sustainability, Energy, and Environment Faculty Affiliate	University of Illinois	0% appointment
2015 - present	National Center for Supercomputing Applications Faculty Affiliate	University of Illinois	0% appointment
2015 – present	Institute for Genomic Biology Faculty Affiliate, Genomic Ecology of Global Change theme	University of Illinois	0% appointment
2015 – present	Computational Science and Engineering Affiliate	University of Illinois	0% appointment
2015 – present	Illinois Informatics Institute Affiliate	University of Illinois	0% appointment
2009 – 2014	NIH-NRSA Post-Doctoral Fellow	New York University	Mentor: Gloria Coruzzi Topic: Genomics & Systems Biology
2005 – 2009	Graduate Research Assistant	Purdue University	Department: Horticulture
2003 – 2006	Certified Crop Advisors	Purdue University	Department: Agronomy
2003 – 2005	Graduate Research Assistant	Purdue University	Department: Agronomy
2001 – 2003	Graduate Research Assistant	University of Florida	Department: Agronomy

FELLOWSHIPS AND AWARDS

- List of Teachers Ranked as Excellent by Their Students, spring 2019
- Teaching Tools in Plant Biology Competition winner, 09/2016
- Joseph B. Hawkes Research Award, University of Illinois, \$10,000 (2015 – 2016)
- National Center for Supercomputing Applications (NCSA) Faculty Fellowship, University of Illinois, \$25,000 (2015 – 2016)
- NIH Ruth L. Kirschstein National Research Service Award (NRSA) for Individual Postdoctoral Fellows [PA09-210] (2010-2013)
- Graduate Student Government Competitive Travel Grant, Purdue University (2007)
- Andrews Fellowship, Purdue University. For the recruitment of outstanding students to graduate programs (2003)
- C.O. Dean Award, University of Florida. Awarded to the best thesis overall in the Agronomy Department (2003)
- Agronomy Department Award for Best Master's Thesis, University of Florida (2003)
- Paul Robin Harris Award, University of Florida. High quality research reflective of global environmental concerns (2001 & 2002)
- Presidential Award for University of Florida Outstanding Students (2002)

EDITORSHIPS

- Founding editor *in silico* Plants journal (Oxford Academic), 06/2018 - present
- Review editor for Plant Metabolism and Chemodiversity, *Frontiers in Plant Science*, 09/2017 - present

GRANTS

- **EMSL User Proposal 51011**, Exploratory study for single cell-type RNA-sequencing of the Sorghum bicolor stem. AMC PI, 08/01/2019 – 08/31/2019, valued at \$15,000.
- **Foundation for Food and Agriculture Research (FFAR) 602757**, Increasing crop production by connecting models from micro to macro scales. (\$5M) AMC PI, Jan 1, 2019 – Dec 31, 2022.
- **DPI International Travel Grant**, Office of the Vice President for Economic Development and Innovation. “Improving crop productivity under extreme conditions: a collaboration between UIUC and Ben-Gurion University of the Negev,” \$3000, Feb 2018. AMC PI.
- **DOE CABBI**. AMC co-PI.
- **Foundation for Food and Agriculture Research (FFAR)**. Crops in silico 1.0. (\$200k) AMC PI.
- **NSF-IOS 1645875**. Systems genetics of symbiotic quality in legume-rhizobium mutualism. AMC co-PI.
- **Olga G. Nalbandov Lecture Funds**, Office of the Vice Chancellor for Research, University of Illinois, “Plants In Silico: Towards Realizing the Opportunity”, \$20,000, September 8, 2015. AMC co-PI.
- **Institute for Sustainability, Energy, and Environment**, “Plants in silico: A multi-scale modeling platform”, \$350,000, September 1, 2015 – August 31, 2018. AMC co-PI.

MANUSCRIPTS: †corresponding author; *first author

Current Research | University of Illinois | Assistant Professor | 2014 – Present

- Heerah, S., Katari, M., Penjor, R., Coruzzi, G, **Marshall-Colon, A.**†. WRKY1 mediates transcriptional regulation of light and nitrogen signaling pathways in *Arabidopsis thaliana*. *Plant Physiology*. <https://doi.org/10.1104/pp.19.00685>
- Marshall-Colon, A.**, Kliebenstein, D. Plant networks as traits and hypotheses; moving beyond description. *Trends in Plant Science* (Invited review). <https://doi.org/10.1016/j.tplants.2019.06.003>.
- Kannan, K, Wang, Y, Challa, GS, Lang, MM, Srinivasan, V, Long, SP, **Marshall-Colon, A.**†. Combining gene network, metabolic, and leaf-level models show means to future-proof soybean photosynthesis under rising CO₂. in *silico* *Plants*. Volume 1, Issue 1, 2019, diz008. DOI: 10.1093/insilicoplants/diz008
- Assmann, Sarah, Cris Argueso, Kenneth Birnbaum, Sixue Chen, Jose Dinneny, Colleen Doherty, Andrea Eveland, Joanna Friesner, Vanessa Greenlee, Julie Law, **Amy Marshall-Colon**, Grace Mason, Ruby O'Lexy, Scott Peck, Robert Schmitz, Liang Song, David Stern, Marguerite Varagona, Justin Walley, and Cranos Williams. 2019. Directions for Research and Training in Plant Omics: Big Questions and Big Data. *Plant Direct Journal*. <https://doi.org/10.1002/pld3.133>
- Challa, G, **Marshall-Colon, A.**†. 2019. in *silico* crops and multi-omic approaches to meet agricultural challenges. *CAB Reviews*, DOI: 10.1079/PAVSNR201914005; CABI Wallingford UK
- Safi, A, Medici, A, Szponarski, W, **Marshall-Colon, A.**, Ruffel, S, Gaymard, F, Coruzzi, G, and Lacombe, B, Krouk, G. 2018. HRS1/HHOs GARP transcription factors and reactive oxygen species are regulators of Arabidopsis nitrogen starvation response. *Pre-print: https://www.biorxiv.org/content/early/2018/02/05/164277*
- Varala, K., Williams, M., **Marshall-Colon, A.**†*. (Oct 17, 2018). A Bioinformatics Pipeline to Explore Transcriptional Regulation in Plants. *Teaching Tools in Plant Biology: Lecture Notes. The Plant Cell* (online). doi.org/10.1105/tpc.118.tt0918
- Varala K.*, **A. Marshall-Colon***, J. Cirrone*, M. Brooks, A.V. Pasquino, S. Leran, S. Mittal, T. Rock, M.B. Edwards, G.J. Kim, S. Ruffel, W.R. McCombie, D. Shasha, and G.M. Coruzzi. 2018. The temporal transcriptional logic of dynamic regulatory networks underlying nitrogen signaling and use in plants. *PNAS*. <https://doi.org/10.1073/pnas.1721487115>
- Christensen, A.J., Srinivasan, V., Hart, J., **Marshall-Colon, A.***† 2017. Computational modeling combined with advanced visualization can direct strategies for crop ideotype design to address future food security issues. *Nutrition Reviews*. doi:10.1093/nutrit/nux076 (Invited Review)
- Singh, V., Perraki, A., Kim, S.Y., Shrivastava, S., Lee, J.H., Zhao, Y., Schwessinger, B., Oh, M.-H., **Marshall-Colon, A.**, Zipfel, C., Huber, S.C. 2017. Tyrosine-610 in the receptor kinase BAK1 does not play a major role in brassinosteroid signaling or innate immunity. *Frontiers in Plant Science*. 8:1273. doi: 10.3389/fpls.2017.01273
- Marshall-Colon, A.**†, Long Stephen P., Allen Douglas K., Allen Gabrielle, Beard Daniel A., Benes Bedrich, von Caemmerer Susanne, Christensen A. J., Cox Donna J., Hart John C., Hirst Peter M., Kannan Kavya, Katz Daniel S., Lynch Jonathan P., Millar Andrew J., Panneerselvam Balaji, Price Nathan D., Prusinkiewicz Przemyslaw, Raila David, Shekar Rachel G., Shrivastava Stuti, Shukla Diwakar, Srinivasan Venkatraman, Stitt Mark, Turk Matthew J., Voit Eberhard O., Wang Yu, Yin Xinyou, Zhu Xin-Guang. Crops in silico: Generating virtual crops using an integrative and multi-scale modeling platform. 2017. *Frontiers in Plant Systems and Synthetic Biology*. 8: 786. doi: 10.3389/fpls.2017.00786
- Long, S.P., **Marshall-Colon, A.**, and Zhu, X.-G. Meeting the global food demand of the future by engineering crop photosynthesis and yield potential. *Cell* (2015) 161(1): 56-66. <http://dx.doi.org/10.1016/j.cell.2015.03.019>
- Varala, K, Li, Y, **Marshall-Colon, A.**, Para, A, and Coruzzi, G. 2015. “Hit-and-Run” leaves its mark: Catalyst transcription factors and chromatin modification. *BioEssays* 37(8): 851-856. Doi: 10.1002/bies.201400205
- Anna Medici, **Amy Marshall-Colon**, Elsa Ronzier, Wojciech Szponarski, Rongchen Wang, Alain Gojon, Nigel M. Crawford, Sandrine Ruffel, Gloria M. Coruzzi & Gabriel Krouk. 2015. AtNIGT1/HRS1 integrates nitrate and phosphate signals at the Arabidopsis root tip. *Nature Communications*. 6: 6274. DOI: 10.1038/ncomms7274

Post-doctoral Research | New York University | Mentor: Gloria Coruzzi | 2009 – 2014

The research presented in these manuscripts focus on understanding genome-wide regulatory interactions in transcriptional networks, using high-throughput technologies and bioinformatic tools to interpret the resulting large-scale datasets.

- Alessia Para*, Ying Li*, **Amy Marshall-Colón***, Kranthi Varala*, Nancy J. Francoeur, Tara M. Moran, Molly B. Edwards, Christopher Hackley, Bastiaan O. R. Bargmann, Kenneth D. Birnbaum, W. Richard McCombie, Gabriel Krouk, and Gloria M. Coruzzi. Hit-and-run transcriptional control by bZIP1 mediates rapid nutrient signaling in Arabidopsis *PNAS* 2014 111 (28) 10371-10376; published ahead of print June 23, 2014,doi:10.1073/pnas.1404657111.
- Krouk, G, Lingeman, J, **Marshall-Colon, A.**, Coruzzi, G, and Shasha, D. 2013. Gene regulatory networks in plants: Learning causality from time and perturbation. *Genome Biology*, 14: 123.
- Bargmann, B., **Marshall-Colon, A.**, Efroni, I., Ruffel, S., Birnbaum, K., Coruzzi, G., and Krouk, G. 2013. TARGET, a transient transformation system for genome-wide transcription factor target discovery. *Molecular Plant*, 6:978-980.

Doctoral Thesis Work | Purdue University | Mentors: Natalia Dudareva and David Rhodes | 2005 – 2009

The central focus of these studies was to discover key enzymes involved in the biosynthesis of floral scent through the use of biochemical and metabolomic approaches.

- Marshall-Colón, A.**, Sengupta, N., Rhodes, D., Dudareva, N., and Morgan, J.A. 2010. A kinetic model describes metabolic response to perturbations and distribution of flux control in the benzenoid network of *Petunia hybrida*. *Plant Journal* 62: 64-76.
- Orlova, I.*, **Marshall-Colón, A.***, Schnepf, J., Wood, B., Varbanova, M., Fridman, E., Blakeslee, J., Peer, W.A., Murphy, A., Rhodes, D., Pichersky, E., Dudareva, N. 2006. Reduced synthesis of benzylbenzoate in petunia flowers increases contribution from the non-β-oxidative pathway to benzenoid compounds. *Plant Cell* 18(12): 3458-3475.

Master's Thesis Work | University of Florida | Mentor: Raymond Gallaher | 2001 – 2003

The manuscripts below report extensive findings about the usefulness of the tropical legume "sunn hemp" as an alternative, organic nitrogen source for horticultural crops and an effective suppressant of root-knot nematode in north central Florida soils.

- Wang, K.-H., R. McSorley, **A.J. Marshall**, R.N. Gallaher. 2006. Influence of organic *Crotalaria juncea* hay and ammonium nitrate fertilizers on soil nematode communities. *Applied Soil Ecology* 31(3): 186-198.
- Gallaher, R.N., Gallaher, K, **Marshall, A.J.**, Marshall, A.C. 2006. Mineral analysis of ten types of commercially available tea. *J. Food Composition and Analysis* 19: S53-S57.
- Wang, K.-H., R. McSorley, R.N. Gallaher, **A.J. Marshall**. 2004. Nematode community changes associated with decomposition of *Crotalaria juncea* L. amendment in litterbags. *Applied Soil Ecology* 27(1): 31-45.
- Marshall, A.J.**, R.N. Gallaher, K-H Wang, R. McSorley. 2003. Organic and inorganic nitrogen management of seven vegetables. *Proc. Soil and Crop Sci. Soc. Florida* 62:95
- Marshall, A.J.**, R.N. Gallaher, K-H. Wang, R. McSorley. 2002. Organic and inorganic management of seven vegetables. *Research Report AY-02-01*. Agronomy Dept., Inst. Food and Agric. Sci., Univ. of Florida, Gainesville, FL.
- Marshall, A.J.**, R.N. Gallaher, R.S. Tubbs, and A. Higuera. 2001. Dry matter and nutrient content of tropical sunn hemp (*Crotalaria juncea* L.) at five plant populations. *Research Report A-01-03*. Agronomy Department, Inst., Food & Agr. Sci., Univ. of Florida, Gainesville, FL.

BOOK CHAPTERS

- Shrivastava, S., **Marshall-Colon, A.**†, 2019. Big Data in Agriculture and Their Analyses. In: Ferranti, P., Berry, E.M., Anderson, J.R. (Eds.), *Encyclopedia of Food Security and Sustainability*, vol. 1, pp. 233–237. Elsevier. ISBN: 9780128126875
- Marshall-Colón, A.**, Sengupta, N., Rhodes, D. and Morgan, J.A. 2014. Simulating labeling to estimate kinetic parameters for flux control analysis. In *"Plant Metabolic Flux Analysis,"* A. Alonso and M. Duide-Noubani Eds. Springer, NY. Pp 211-222.
- Marshall-Colón, A.J.**, Morgan, J.A., Dudareva, N., and Rhodes, D. Application of Dynamic Flux Analysis in Plant Metabolic Networks. In *"Plant Metabolic Networks,"* J. Schwender Ed. Springer, NY, 2009, pp. 285-305.

PRESENTATIONS

- Invited: 2020 Plant Molecular Biology Gordon Research Conference: "Space & Time: The Final Frontiers." June 14-19, 2020, Holderness, NH.
- Invited: Department of Biological Sciences at Auburn University, April 16, 2020.
- Invited: iCROP 2020 Conference; Keynote Speaker; Montpellier, France, February 2-5, 2020
- Invited: AeroFarms Café weekly seminar series; Newark, NJ (video conference), October 25, 2019.
- Invited: BIOE Seminar, UIUC Dept. of Bioengineering; "Integrative modeling and visualization for the Development of *in silico* crops." September 25, 2019.
- Invited: Society for Experimental Biology (SEB), Plant Biology Section, *in silico* Plants Symposium, July 2-5, 2019, Seville, Spain
- Invited: FFAR Precision Indoor Plants Executive Committee Meeting, presenter. June 19, 2019, New York, NY.
- Invited: OMICAS (Multiscale In-Silico Optimization of Sustainable Agricultural Crops), Plenary, Pontificia Universidad Javeriana in Cali, Colombia (video conference); May 22, 2019.
- Invited: Institute of Biological Chemistry Seminar, Washington State University, Pullman, WA, April 18, 2019
- Invited: Seminar Series Donald Danforth Plant Science Center, St. Louis, MO, April 10, 2019
- Invited: Plant Breeding and Plant Genetics (PBPG) Seminar, University of Wisconsin, Madison, WI, March 08, 2019
- Invited: British Council Synergy Symposium: Plant adaptations to a stressful world: Computational analysis of big data to uncover novel gene and metabolite networks for stress-tolerant crops of the future, Midreshet Ben-Gurion, Israel, Sept. 3-4, 2018.
- Invited: Plant Biology 2018, ASPB, Major Symposium, Montreal, Canada, July 14-18, 2018
- Invited: Interdisciplinary Plant Group (IPG) 2018, University of Missouri, Columbia, MO, May 30-June 1, 2018
- Invited: Purdue University Horticulture Department Seminar Series, April 12, 2018
- Invited: Crop Engineering Consortium: A vision of crops *in silico*, from gene function to a growing plant, London, England 10/23/16
- Speaker: Grand Challenges Annual Meeting: Research Discussion – Crops *in silico*, London, England, October 26, 2016
- Invited: GODAN Summit, September 15-16, 2016
- Speaker: ASPB Plant Biology Conference, Concurrent Symposium 9: Signaling, July 8-13, 2016
- Speaker/Organizer: Plants *in silico* symposium, May 20, 2016
- Speaker: NCSA Faculty Fellows Final Presentation, May 10, 2016
- Invited: Department of Plant Biology Colloquium, UIUC, February 12, 2015
- Invited: IGB Seminar, University of Illinois, February 02, 2016
- Invited: CSE Seminar, University of Illinois, November 18, 2015
- Invited: CompGen Seminar, University of Illinois, October 16, 2015
- Invited: Mars, Inc. Plant Science Group, Mars Lecture Series, July 10, 2015
- Invited: Mathematical Biology Seminar, UIUC Math Department, April 16, 2015
- Invited: Department of Plant Biology Colloquium, UIUC, February 13, 2015
- Invited: Department of Plant Biology Colloquium, UIUC, November 7, 2015

- Speaker: Plant Metabolic Engineering Gordon Research Seminar, Waterville Valley, NH (2013)
- Invited: Plant Volatile Gordon Conference, Les Diablerets, Switzerland (2007)
- Speaker: Plant Metabolic Engineering Gordon Research Conference, Tilton School, NH (2007)
- Speaker: Eighth World Petunia Days, Jacksonville Beach, FL (2006)
- Speaker: 62nd Annual Meeting of the Soil and Crop Science Society of Florida, Clearwater Beach, FL (2002)
- Speaker: 61st Annual Meeting of the Soil and Crop Science Society of Florida, Hutchinson Island, FL (2001)
- Poster: Plant Metabolic Engineering Gordon Research Conference, Waterville Valley, NH (2015)
- Poster: Plant Metabolic Engineering Gordon Research Conference, Waterville Valley, NH (2013)
- Poster: 23rd International Conference on Arabidopsis Research (ICAR), Vienna, Austria (2012)
- Poster: Plant Metabolic Engineering Gordon Research Conference, Waterville Valley, NH (2011)
- Poster: Plant Metabolic Engineering Gordon Research Conference, Waterville Valley, NH (2009)
- Poster: 2003 Annual Meeting of the American Society of Agronomy, Denver, CO (2003)
- Poster: 2002 Annual Meeting of the American Society of Agronomy, Indianapolis, IN (2002)

PROFESSIONAL DEVELOPMENT AND OUTREACH ACTIVITIES

- Invited participant: Inaugurating Workshop on Plant Cell Atlas, Carnegie Institution for Science, Stanford, CA, March 28-30, 2020
- Invited participant: DOE BER Workshop, Breaking the bottleneck of genomes: Understanding Gene Function Across Taxa, Nov 1-2, 2018
- Panelist and/or ad hoc reviewer: NSF ABI; NSF IOS
- Invited participant: North American Arabidopsis Steering Committee (NAASC) Arabidopsis Research and Training for the 21st century (ART-21) workshop, February 24-26, 2017 in Santa Fe, New Mexico
- Invited participant: Grand Challenges Meeting and Science Leadership and Management Training, October 27-29, 2016
- Panelist: IGB Postdoctoral Association on “Developing Research Statements,” September 1, 2016
- Chair: Signaling Symposium, ASPB Plant Biology Conference, July 10, 2016
- Speaker: Pollen Power, science summer camp for middle school girls; June 28, 2016; July 10, 2017; July 27, 2018.
- Organizer: Parkland to Illinois bioinformatics internship for minority community college students, June 13 - August 4, 2016
- Journal peer reviewer for: eLife; Frontiers; *in silico* Plants; Integrative and Comparative Biology; Journal of Experimental Botany; Molecular Plant; Nature Communications; npj Systems Biology and Applications; The Plant Cell; Plant, Cell, and Environment; Plant and Cell Physiology; Plant Science; Planta; Plants, People, Planet; PLOS One.
- Co-organizer: Plants in silico Symposium and Workshop, May 18-20, 2016
- Speaker: “The Art of Science 6.0,” April 28, 2016
- Scientific Communication Workshop, New York University (03/2013-04/2013)
- Sustainability Advocate, New York University (2012-2014)
- Responsible Conduct of Research Training, New York University (2011)
- Co-chair: Gordon Research Seminar on Plant Metabolic Engineering (2006-2007)
- Graduate representative: Agronomy Graduate Student Association, Purdue University (2003 – 2004)

MEDIA

- ScienceNode feature: <https://sciencenode.org/feature/The%20future%20of%20farming.php>, 10/21/2019
- Appearance on the WCIA Morning Show to discuss the Crops in silico project, aired 03/26/19, <https://www.wcia.com/the-morning-show/u-of-i-grant-studying-plants-virtually/1878491488>
- News Gazette featured the FFAR award for Crops in silico, “UI earns \$5 million federal grant to expand project combining ag, tech,” published 03/16/19 (top of front page), <http://www.news-gazette.com/news/local/2019-03-16/ui-earns-5-million-federal-grant-expand-project-combining-ag-tech.html>
- Interviewed by WCIA News for progress on the DOE CABBI project, segment “Progress made on big research project,” aired 02/12/19. https://www.wcia.com/video/cabbi-update_20190213013341/1776956234
- Guest on Science in Real Life (ScienceIRL) YouTube Series: 2,814 views as of 03/26/2019, https://youtu.be/XSig4PR_CXs
- Scientific American featured the Crops *in silico* project, “Growing virtual plants could help farmers boost their crops.” By Leslie Nemo on August 18, 2017. Scientific American, SCIENTIFIC AMERICAN, a Division of Springer Nature America, Inc. Retrieved October 17, 2019 from <https://www.scientificamerican.com/article/growing-virtual-plants-could-help-farmers-boost-their-crops/>
- Science Daily featured our Cell article: University of Illinois at Urbana-Champaign. (2015, March 26). Photosynthesis hack is needed to feed the world by 2050. ScienceDaily. Retrieved October 16, 2019 from www.sciencedaily.com/releases/2015/03/150326130829.htm

TEACHING

- Guest Lecture: BIOE 310, Computational Tools for Biological Data, April 25, 2019
- Instructor IB 512 Plant Metabolomics, UIUC, every other spring (2019 - present)
- Instructor PMPB Seminar Series, CPSC 598/IB 513, spring 2018 & 2020
- Guest Presenter: INFO 500, September 29, 2016; October 26, 2017

- Instructor IB 502 Biological Networks, UIUC, every other spring (2016 - present)
- Instructor IB 204 Genetics, UIUC, every fall (2015 - present)
- LAS Teaching Academy: Workshop in active learning, UIUC, Spring 2015
- LAS Teaching Academy: Workshop in online education, UIUC, Fall 2014
- Guest lecturer – Proteomics and Metabolomics (IB 474), UIUC, Fall 2014
- Certificate of Completion – Fundamentals of Teaching Course (BMSC-GA-4431), NYU Langone Medical Center, Fall 2012
- Teaching Assistant – Plant Physiology, Purdue University, Fall 2006
- Graduate Teacher Certificate – Purdue University Center for Instructional Excellence, Spring 2004
- Teaching Assistant – Introduction to Crop Production, Purdue University, Fall 2003 – Fall 2006

UNIVERSITY SERVICE

- SIB Undergraduate Distinction Committee, UIUC, Fall 2019 - present
- Plant Biology Graduate Admissions Committee, UIUC, Fall 2018 - present
- Judge 2018 Undergraduate Research Symposium, 04/19/2018
- IGB Retreat Advisory Committee, Spring 2017
- Plant Biology Advisory Committee, Fall 2016 – Fall 2017
- Research Scientist Search Committee, Fall 2016
- CSE Steering Committee Representative for SIB
- CSE undergraduate student award committee, June 13, 2016
- Judge for the 18th Annual GEEB Graduate Student Symposium, February 13, 2016
- Plant Biology Graduate Admissions Committee, UIUC, Fall 2014 - Fall 2016
- NCSA Bio & Health Postdoc Search Committee, Spring 2016
- Visiting Research Specialist Search Committee, Chair, Fall 2015
- Crop Sciences Search Committee: Breeding and Genomics of Horticulture Crops, Fall 2015-Spring 2016
- Plant Biology Search Committee: Reengineering Photosynthesis, Fall 2014-Spring 2015

SOCIETIES

- Society for Experimental Biology; 2019 – present
- ASPB Committee Member for the Summer Undergraduate Research Fellowships, 2018 - present
- American Association for the Advancement of Science, member (2015 – present)
- American Society of Plant Biologists Midwestern Section, member (2015 – present)
- American Society of Plant Biologists, member (2012-present)
- New York Academy of Sciences, member (2010-2014)
- American Society of Agronomy. Graduate Student Member (2002 – 2008)
- Gamma Sigma Delta Honor Society of Agriculture. Top 15% of College of Agriculture (2002 – 2009)
- Soil and Crop Science Society of Florida, student member (2001 – 2003)

TRAINEES

Post-doctoral trainees

Ghana Challa (07/2018 – present), Madara Hetti-Arachchilage (08/2018 – present); Hanna Lindgren (09/2018-05/2019; co-mentor with K. Heath); Megan L. Matthews (08/2019 – present; co-mentor with S. Long)

PhD Students Mentored

Sachin Heerah, Kavya Kannan, Stuti Shrivastava

Masters Students Mentored

Alex Riley (co-mentor with K. Heath)

Undergraduate Students Mentored

UIUC students: Clayton Dilks (Graesser and Davis awardee, 2015); Chandresh Nandani (SIB); Ranish Shreestha (SIB); Zachary Belida (SIB); Quan Vo (SIB); Dominique Sanders (SIB); Goda Orentaite (SIB); Laura Janousek (SIB honors; ASPB SURF awardee); Tong Tong (FAFU exchange student); Jay Howard (Crop Science); Christine Chan (Informatics intern); Josefina Figueroa (Crop Science); Arjuna Lal (Mechanical Engineering); Alexander Riley (SIB, Plant Bio, ASPB awards); Tianyu (Mike) Du (FAFU exchange student); Caroline Friedmann (SIB); You Jin Song (MCB); Beata Dlugopolski (SIB); Catherine Steegmueller (Informatics intern); Allison Wuller (SIB); Veronica Bokla (SIB); Salvador Luna-Guardado (SIB; Camp Family Summer Research Scholarship); Amritha Anand (Informatics intern)

Parkland College students: Alethea McNeil; Amie Bott; Shoeb Ahmed; Tyranny Davis; Prisca Kigalu Lumbu; Muhammad Kishta; Victoria Hardwick; Shelby Nunamaker; Fabiola Padron

Visiting Scholars

Nick Duppen, Ben-Gurion University of the Negev, Israel (04/2019-06/2019)

Rizwan Riaz, Lahore University of Management Sciences (LUMS), Pakistan (09/2018-03/2019)

Zhenyang Liao, FAFU, China (08/2018-08/2019)

Mentoring Experience as a Postdoc

PhD Students: Ramin Rahni (NYU); Christopher Hackly (NYU); Anna-Lena Schinke (NYU)

Master's Students: Nancy Francoeur (NYU) – PhD student, Icahn School of Medicine at Mount Sinai

Undergraduate Students: Nadege Assassi, Amy Chen, Rebecca Grinberg, Sachin Heerah, Nicholas Rich; Melissa Ingram (PhD student, Max Planck Institute of Molecular Plant Physiology, Potsdam, Germany); Casey Griffin (PhD student, Stony Brook University School of Marine and Atmospheric Sciences, NY, USA)

High School Students: Angela Fan – Undergraduate, Harvard University, Cambridge, Massachusetts, USA; Intel Finalist, 2012