

DOB: May 31st, 1978

CURRENT AFFILIATIONS

01/18 – present, Associate Professor, Department of Biology, Stanford University

PREVIOUS AFFILIATIONS

07/11 – 12/17, Staff Member, Carnegie Institution for Science, Department of Plant Biology

05/08 – 10/11, Principal Investigator, Temasek Lifesciences Laboratory, Singapore

05/08 – 2013, Assistant Professor, Department of Biological Sciences, National University of Singapore

EDUCATION AND TRAINING

10/05 - 05/08, Post-doctoral Fellow, Duke University

09/00 - 09/05, PhD, University of California, San Diego

09/96 - 05/00, BS, Highest Honors, University of California, Berkeley

PUBLICATIONS- preprints, currently in review

Brophy JAN, Magallon K, Kniazev K, **Dinneny JR** (2022) Synthetic genetic circuits enable reprogramming of plant roots. *bioRxiv* preprint doi: 10.1101/2022.02.02.478917

LaRue T, Lindner H, Srinivas A, Exposito-Alonso M, Lobet G, **Dinneny JR** (2021) Uncovering natural variation in root system architecture and growth dynamics using a robotics-assisted phenomics platform. *bioRxiv* preprint doi: 10.1101/2021.11.13.468476

Vilarrasa-Blasi J, Velloso T, Jinkerson RE, Fauser F, Xiang T, Minkoff BB, Wang L, Kniazev K, Guzman M, Osaki J, Sussman MR, Jonikas MC, **Dinneny JR** (2021) Identification of green lineage osmotic stress pathways *bioRxiv* preprint doi: 10.1101/2021.07.19.453009

PUBLICATIONS- highlighted research, all peer-reviewed

Sun Y, Oh DH, Duan L, Ramachandran P, Ramirez A, Bartlett A, Dassanayake M, **Dinneny JR** (2022) Divergence in a stress-associated gene regulatory network underlies differential growth control. *Nature Plants*. *bioRxiv* preprint doi: <https://doi.org/10.1101/2020.11.18.349449>

Vilarrasa-Blasi J, Fauser F, Onishi M, Ramundo S, Patena W, Millican M, Osaki J, Philp C, Nemeth M, Salomé PA, Li X, Wakao S, Kim RG, Kaye Y, Grossman AR, Niyogi KK, Merchant S, Cutler S, Walter P, **Dinneny JR***, Jonikas MC*, Jinkerson RE* (2022) Systematic characterization of gene function in a photosynthetic organism. *Nature Genetics*

*Co-corresponding authors

Dickinson AJ, Zhang J, Luciano M, Wachsman G, Schnermann M, **Dinneny JR**, Benfey PN (2021) A plant lipocalin is required for retinal-mediated oscillatory lateral root initiation. *Science* Sep 24;373(6562):1532-1536. doi: 10.1126/science.abf7461.

Cuevas-Velazquez CL, Velloso T, Guadalupe K, Schmidt BH, Yu F, Moses D, Brophy JAN, Cosio-Acosta D, Das A, Wang L, Jones AM, Covarrubias AA, Sukenik S, **Dinneny JR** (2021) Intrinsically disordered protein biosensor tracks the physical-chemical effects of osmotic stress on cells. *Nature Communications* Sep 14;12(1):5438. doi: 10.1038/s41467-021-25736-8.

Velloso T*, **Dinneny JR***, Somerville CR*, Ehrhardt DW* (2021) TRANVIA (TVA) facilitates cellulose synthase trafficking and delivery to the plasma membrane. *Proc. Natl. Acad. Sci. U. S. A.* Jul 118(30):e2021790118. doi: 10.1073/pnas.2021790118.

*Co-corresponding authors

Friesner J, Colon-Carmona A, Schnoes AM, Stepanova AN, Mason GA, MacIntosh GC, Ullah H, Baxter IR, Callis J, Sierra-Cajas K, Elliott K, Haswell ES, Zavala ME, Wildermuth M, Williams ME, Ayalew MB, Henkhaus NA, Prunet N, Lemaux PG, Yadegari R, Amasino RM, Hangarter RP, Innes RW, Brady SM, Long T, Woodford-Thomas T, May V, Sun Y, **Dinneny JR** (2021) Broadening the impact of plant science through innovative, integrative and inclusive outreach. *Plant Direct* Apr 14;5(4):e00316. doi: 10.1002/pld3.316.

Duan L, Pérez-Ruiz JM, Cejudo FJ, **Dinneny JR** (2020) Characterization of *CYCLOPHILLIN38* shows that a photosynthesis-derived systemic signal controls lateral root emergence. *Plant Physiology* Mar 15;185(2):503-518. doi: 10.1093/plphys/kiia032

Orosa-Puente B, Leftley N, von Wangenheim D, Banda J, Srivastava AK, Hill K, Truskina J, Bhosale R, Morris E, Srivastava M, Kümpers B, Goh T, Fukaki H, Vermeer JEM, Vernoux T, **Dinneny JR**, French AF, Bishopp A, Sadanandom A, Bennett MJ (2018) Roots branch towards water by post-translational modification of transcription factor ARF7. *Science*. Dec 21;362(6421):1407-1410. doi: 10.1126/science.aau3956. **

**Highlighted in front matter

Wu R, Duan L, Pruneda-Paz JL, Oh DH, Pound M, Kay S, **Dinneny JR** (2018) The *6xABRE* synthetic promoter enables the spatiotemporal analysis of ABA-mediated transcriptional regulation. *Plant Physiology* Aug 177(4):1650-1665. doi: 10.1104/pp.18.00401. **

**Highlighted in front matter

Feng W, Kita D, Peaucelle A, Cartwright HN, Doah V, Duan Q, Liu MC, Maman J, Steinhorst L, Schmitz-Thom I, Yvon R, Kudla J, Wu HM, Cheung AY, and **Dinneny JR** (2018) The FERONIA receptor kinase maintains cell wall integrity during salt stress through Ca²⁺ signaling. *Current Biology* Mar 5;28(5):666-675.e5. doi: 10.1016/j.cub.2018.01.023. **

**Dispatch by Verger and Hamant, *Curr Biol.* 2018 Mar 5;28(5):R215-R217 and F1000 Prime

Robbins NE and **Dinneny JR** (2018) Growth Is Required for Perception of Water Availability to Pattern Plant Root Branches. *Proc. Natl. Acad. Sci. U. S. A.* Jan 23;115(4):E822-E831. doi: 10.1073/pnas.1710709115. **

**Recommended by F1000 Prime

Sebastian J, Yee MC, Viana WG, Rellán-Álvarez R, Feldman M, Priest H, Trontin C, Lee T, Jiang H, Baxter I, Mockler TC, Hochholdinger F, Brutnell TP and **Dinneny JR** (2016) Grasses suppress shoot-borne roots to conserve water during drought. *Proc. Natl. Acad. Sci. U. S. A.* Aug 2;113(31):8861-6. doi: 10.1073/pnas.1604021113. **

**Highlighted by the BBC, Recommended by F1000 Prime

Fahlgren N, Bart R, Herrera-Estrella L, Rellán-Álvarez R, Chitwood DH, **Dinneny JR** (2016) Plant scientists: GM technology is safe. *Science* Feb 19;351(6275):824. doi: 10.1126/science.351.6275.824-a.

Rellán-Álvarez R, Lobet G, Lindner H, Pradier P-L, Sebastian J, Yee MC, Geng Y, Trontin C, LaRue T, Schragger A, Haney C, Nieu R, Maloof J, Vogel JP, **Dinneny JR** (2015) GLO-Roots: an imaging platform enabling multidimensional characterization of soil-grown root systems. *eLife* 2015;10.7554/eLife.07597 doi: 10.7554/eLife.07597.**

**Highlighted in Nature Methods, SF Gate

Bao Y, Aggarwal P, Robbins II NE, Sturrock CJ, Thompson, MC, Tan HQ, Tham C, Rodriguez PL, Vernoux T, Mooney SJ, Bennett MJ, **Dinneny JR** (2014) Plant roots employ a patterning mechanism to position lateral root branches towards available water. *Proc. Natl. Acad. Sci. U. S. A.* Jun 24;111(25):9319-24. doi: 10.1073/pnas.1400966111.**

**Recommended F1000 Prime

Geng Y, Wu R, Wee CW, Xie F, Wei X, Chan PMY, Tham C, Duan L, **Dinneny JR** (2013) A Spatio-Temporal Understanding of Growth Regulation during the Salt Stress Response in Arabidopsis. *The Plant Cell* Jun;25(6):2132-54. doi: 10.1105/tpc.113.112896.**

**'Spotlight' in *Trends in Plant Science*, 10.1016/j.tplants.2013.08.009

Duan L, Dietrich D, Ng CH, Chan PMY, Bhalerao R, Bennett MJ, **Dinneny JR** (2013) Endodermal ABA signaling promotes lateral root quiescence during salt stress in Arabidopsis seedlings. *The Plant Cell* Jan;25(1):324-41. doi: 10.1105/tpc.112.107227.**

**'Spotlight' in *Trends in Plant Science*, 10.1016/j.tplants.2013.08.009

Dinneny JR, Long TA, Wang JY, Mace D, Pointer S, Barron C, Brady SM, Schiefelbein, JS, Benfey PN (2008) Cell identity mediates the response of Arabidopsis roots to abiotic stress. *Science* May 16;320(5878):942-5. doi: 10.1126/science.1153795.**

**'Perspectives' in *Science* 16;320:880-1, 'Research Highlights' in *Nature Genetics* 9, 414

Dinneny JR, Yadegari R, Fischer RL, Yanofsky MF, Weigel D (2004) The role of *JAGGED* in shaping lateral organs. *Development* 131, 1101-1110. doi: 10.1242/dev.00949.**

**'Previews' in *Developmental Cell* 6(3), 318-319

PUBLICATIONS- other primary research, all peer reviewed

Singhvi A, Ma B, Scharwies JD, **Dinneny JR**, Khuri-Yakub BT, Arbabian A (2019) Non-Contact Thermoacoustic Sensing and Characterization of Plant Root Traits, IEEE International Ultrasonics Symposium (IUS), 1992-1995. doi: 10.1109/ULTSYM.2019.8925944

Dickinson AJ, Lehner K, Mi J, Jia KP, Mijar M, **Dinneny J**, Al-Babili S, Benfey PN. (2019) Beta-Cyclocitral is a conserved root growth regulator. *Proc. Natl. Acad. Sci. U. S. A.* 116(21):10563-10567. doi: 10.1073/pnas.1821445116.

Waidmann S, Ruiz Rosquete M, Schöllner M, Sarkel E, Lindner H, LaRue T, Petřík I, Dünser K, Martopawiro S, Sasidharan R, Novak O, Wabnik K, **Dinneny JR**, Kleine-Vehn J. (2019) Cytokinin functions as an asymmetric and anti-gravitropic signal in lateral roots. *Nature Communications*. 2019 Aug 6;10(1):3540. doi: 10.1038/s41467-019-11483-4.

Sechet J, Htwe S, Urbanowicz B, Agyeman A, Feng W, Ishikawa T, Colomes M, Kumar KS, Kawai-Yamada M, **Dinneny JR**, O'Neill MA, Mortimer JC (2018) Suppression of Arabidopsis GGLT1 affects growth by reducing the L-galactose content and borate cross-linking of rhamnogalacturonan-II. *The Plant Journal*. doi: 10.1111/tpj.14088

Feldman MJ, Paul RE, Banan D, Barrett JF, Sebastian J, Yee MC, Jiang H, Lipka AE, Brutnell TP, **Dinneny JR**, Leakey ADB, Baxter I. (2017) Time dependent genetic analysis links field and controlled environment phenotypes in the model C4 grass *Setaria*. *PLoS Genetics*. 2017 Jun 23;13(6):e1006841. doi: 10.1371/journal.pgen.1006841.

Pruitt RN, Joe A, Zhang W, Feng W, Stewart V, Schwessinger B, **Dinneny JR**, Ronald PC. (2017) A microbially derived tyrosine-sulfated peptide mimics a plant peptide hormone. *New Phytologist*. 2017 Jul;215(2):725-736. doi: 10.1111/nph.14609.

Dietrich D, Pang L, Kobayashi A, Fozard JA, Boudolf V, Bhosale R, Antoni R, Nguyen T, Hiratsuka S, Fujii N, Miyazawa Y, Bae TW, Wells DM, Owen MR, Band LR, Dyson RJ, Jensen OE, King JR, Tracy SR, Sturrock CJ, Mooney SJ, Roberts JA, Bhalerao RP, **Dinneny JR**, Rodriguez PL, Nagatani A, Hosokawa Y, Baskin TI, Pridmore TP, De Veylder L, Takahashi H, Bennett MJ (2017) Root hydrotropism is controlled via a cortex-specific growth mechanism. *Nature Plants*. 2017 May 8;3:17057. doi: 10.1038/nplants.2017.57.

Robbins II NE and **Dinneny J**. (2016). A Method to Analyze Local and Systemic Effects of Environmental Stimuli on Root Development in Plants. *Bio-protocol* 6(17): e1923. doi: 10.21769/BioProtoc.1923<http://www.bio-protocol.org/e1923>

Sebastian J, Wong MK, Tang E, **Dinneny JR**. (2014) Methods to Promote Germination of Dormant *Setaria viridis* seeds. *PLoS One* 18;9(4):e95109. doi: 10.1371/journal.pone.0095109.

Wang PL, Bao Y, Yee MC, Barrett SP, Hogan GJ, Olsen MN, **Dinneny JR**, Brown PO, Salzman J. (2014) Circular RNA is expressed across the eukaryotic tree of life. *PLoS One*. 7;9(3):e90859. doi: 10.1371/journal.pone.0090859.

Emami, S, Yee MC, **Dinneny JR** (2013) A robust family of Golden Gate Agrobacterium vectors for plant synthetic biology. *Frontiers in Plant Science*. 2;4:339. doi: 10.3389/fpls.2013.00339.

Orlando DA, Brady SM, Koch JD, **Dinneny JR**, Benfey PN (2009) Manipulating large-scale Arabidopsis microarray expression data: identifying dominant expression patterns and biological process enrichment. *Methods in Molecular Biology* 553:57-77. doi: 10.1007/978-1-60327-563-7_4.

Filiault D, Wessinger C, **Dinneny JR**, Lutes J, Borevitz J, Weigel D, Chory J, and Maloof JN (2008) Amino acid polymorphisms in Arabidopsis Phytochrome B causes differential response to light. *Proc. Natl. Acad. Sci. U. S. A.* Feb 26;105(8):3157-62. doi: 10.1073/pnas.0712174105.

Brady SM, Orlando D, Lee JY, Wang JY, Koch J, **Dinneny JR**, Mace D, Ohler U, Benfey PN (2007) A high-resolution root spatiotemporal map reveals dominant expression patterns. *Science* Nov 2;318(5851):801-6. doi: 10.1126/science.1146265.

Dinneny JR, Weigel D, Yanofsky MF (2006) *NUBBIN* and *JAGGED* define stamen and carpel shape in Arabidopsis. *Development* 133, 1645-1655. doi: 10.1242/dev.02335.**

**Cover issue

Dinneny JR, Weigel D, Yanofsky MF (2005) A genetic framework for fruit patterning in Arabidopsis thaliana. *Development* 132, 4687-4696. doi: 10.1242/dev.02062.**

**Cover issue

Wu X, **Dinneny JR**, Crawford KM, Rhee Y, Citovsky V, Zambryski PC, Weigel D (2003) Modes of intercellular transcription factor movement in the *Arabidopsis* apex. *Development* 130, 3735-3745. doi: 10.1242/dev.00577.

Kiyosue T, Ohad N, Yadegari R, Hannon M, **Dinneny J**, Wells D, Katz A, Margossian L, Harada J, Goldberg R, Fischer RL (1999) Control of fertilization-independent endosperm development by the *MEDEA* polycomb gene in *Arabidopsis*. *Proc. Natl. Acad. Sci. U. S. A.* 96, 4186-4191. doi: 10.1073/pnas.96.7.4186.

PUBLICATIONS- White papers, policy statements, reviews and book chapters (peer reviewed articles indicated with *)

*Viana W, Scharwies JD, **Dinneny JD** (2022) Deconstructing the root system of grasses through an exploration of development, anatomy and function. *Plant Cell Environ.* 2022 Mar;45(3):602-619. doi: 10.1111/pce.14270.

Dinneny JR. (2020) Mechanobiology: Plant Cells Face Pressure from Neighbors. *Curr Biol.* 2020 Apr 20;30(8):R344-R346. doi: 10.1016/j.cub.2020.02.025.

*Rui Y, **Dinneny JR.** (2020) A wall with integrity: surveillance and maintenance of the plant cell wall under stress. *New Phytologist* 2020;225(4):1428–1439. doi:10.1111/nph.16166

***Dinneny JR.** (2019) Developmental Responses to Water and Salinity in Root Systems. *Annu Rev Cell Dev Biol.* 2019 Aug 5. doi: 10.1146/annurev-cellbio-100617-062949.

*Argueso CT, Assmann SM, Birnbaum KD, Chen S, **Dinneny JR**, Doherty CJ, Eveland AL, Friesner J, Greenlee VR, Law JA, Marshall-Colón A, Mason GA, O'Leary R, Peck SC, Schmitz RJ, Song L, Stern D, Varagona MJ, Walley JW, Williams CM. (2019) Directions for research and training in plant omics: Big Questions and Big Data. *Plant Direct.* 2019 Apr 23;3(4):e00133. doi: 10.1002/pld3.133.

*Zengler K, Hofmockel K, Baliga NS, Behie SW, Bernstein HC, Brown JB, **Dinneny JR**, Flöge SA, Forry SP, Hess M, Jackson SA, Jansson C, Lindemann SR, Pett-Ridge J, Maranas C, Venturelli OS, Wallenstein MD, Shank EA, Northen TR. (2019) EcoFABs: advancing microbiome science through standardized fabricated ecosystems. *Nature Methods.* 2019 Jul;16(7):567-571. doi: 10.1038/s41592-019-0465-0.

Magallon KJ, **Dinneny JR** (2019) Environmental Stress: Salinity Ruins a Plant's Day In the Sun. *Current Biology* 2019 May 20;29(10):R360-R362. doi:10.1016/j.cub.2019.04.006.

*Scharwies JD, **Dinneny JR** (2019) Water transport, perception, and response in plants. *Journal of Plant Research.* doi: 10.1007/s10265-019-01089-8.

Dinneny JR (2018) Getting it right on GMOs. *Science* 360 (6396), 1407. doi: 10.1126/science.aat8772

*Sun Y, **Dinneny JR** (2018) Q&A: How do gene regulatory networks control environmental responses in plants? *BMC Biology.* 2018 Apr 11;16(1):38. doi: 10.1186/s12915-018-0506-7.

*Cuevas-Velazquez C, **Dinneny JR** (2018) Organization out of disorder: liquid-liquid phase separation in plants. *Current Opinion in Plant Biology* May 30;45(Pt A):68-74. doi: 10.1016/j.pbi.2018.05.005.

*Friesner J, Assmann SM, Bastow R, Bailey-Serres J, Beynon J, Brendel V, Buell CR, Bucksch A, Busch W, Demura T, **Dinneny JR**, Doherty CJ, Eveland AL, Falter-Braun P, Gehan MA, Gonzales M, Grotewold E, Gutierrez R, Kramer U, Krouk G, Ma S, Markelz RJC, Megraw M, Meyers BC, Murray JAH, Provart NJ, Rhee S, Smith R, Spalding EP, Taylor C, Teal TK, Torii

KU, Town C, Vaughn M, Vierstra R, Ware D, Wilkins O, Williams C, Brady SM (2017) The next generation of training for Arabidopsis researchers: bioinformatics and quantitative biology. *Plant Physiology*. 2017 Dec;175(4):1499-1509. doi: 10.1104/pp.17.01490.

*Brophy JAN, LaRue T, **Dinneny JR** (2018) Understanding and engineering plant form. *Seminars in Cell and Developmental Biology* S1084-9521(17)30382-8. doi: 10.1016/j.semcdb.2017.08.051.

Sebastian J and **Dinneny JR** (2016) *Setaria viridis*: a Genetic Model System for Panicoideae Grass Root Systems. *Genetics and Genomics of Setaria*, 19:177-193 Springer International Publishing. ISBN: 3319451057, 9783319451053

*Feng W, Lindner H, Robbins II N, **Dinneny JR** (2016) Growing Out of Stress: The Role of Cell- and Organ-scale Growth Control in Plant Water-stress Responses. *The Plant Cell* Aug;28(8):1769-82. doi: 10.1105/tpc.16.00182.

*Rellán-Álvarez R, Lobet G, **Dinneny JR** (2016) Environmental Control of Root System Biology. *Annual Review of Plant Biology* Vol. 67: 619-642. doi: 10.1146/annurev-arplant-043015-111848.

***Dinneny JR** (2015) A developmental biologist's journey to rediscover the Zen of plant physiology. *F1000Research*. 4(F1000 Faculty Rev):264 doi: 10.12688/f1000research.6167.1.

*Robbins NE 2nd, **Dinneny JR** (2015) The divining root: moisture-driven responses of roots at the micro- and macro-scale. *Journal of Experimental Botany*. Apr;66(8):2145-54. doi: 10.1093/jxb/eru496.

***Dinneny JR** (2015) Traversing organizational scales in plant salt-stress responses. *Current Opinion in Plant Biology*. Feb;23:70-5. doi: 10.1016/j.pbi.2014.10.009.

Sebastian, J, Duan, L, **Dinneny JR** (2015) Salt-stress regulation of root system growth and architecture in Arabidopsis seedlings. *Methods Molecular Biology*. 1242:105-22. doi: 10.1007/978-1-4939-1902-4_10.

Velasquez SM, **Dinneny JR**, Estevez JM. Live imaging of root hairs. *Methods Molecular Biology*. 2015;1242:59-66. doi: 10.1007/978-1-4939-1902-4_5.

*Robbins, NR 2nd, Trontin C, Duan L, **Dinneny JR** (2014) Beyond the barrier: communication in the root through the endodermis. *Plant Physiology*. 166(2), 551-559. doi: 10.1104/pp.114.244871.

***Dinneny JR** (2014) A gateway with a guard: how the endodermis regulates growth through hormone signaling. *Plant Science*. 214, 14-19. doi: 10.1016/j.plantsci.2013.09.009.

Dinneny JR (2013) Cell-type resolution analysis of root development and environmental responses. *Roots and their soil interactions: What we can learn from genomics* Chapter 4: 63-78 Wiley Publishing. ISBN: 978-0-470-96043-1

*Wee CW and **Dinneny JR** (2010) Tools for high-spatial and temporal-resolution analysis of environmental responses in plants. *Biotechnology Letters*. 32(10), 1361-1371. doi: 10.1007/s10529-010-0307-8.

***Dinneny JR** (2010) Analysis of the salt-stress response at cell-type resolution. *Plant Cell & Environment* 1;33(4):543-51. doi: 10.1111/j.1365-3040.2009.02055.x.

Dinneny JR, Benfey PN (2009) Studying root development using a genomic approach. *Annual Plant Reviews, Volume 37, Root Development* Chapter 12: 325-351 Blackwell Publishing. ISBN: 978-1-405-16150-3

Dinneny JR and Benfey PN (2008) Plant stem cell niches: standing the test of time. *Cell* Feb 22;132(4):553-7. doi: 10.1016/j.cell.2008.02.001.

Dinneny JR and Benfey PN, (2005) Stem cell research goes underground: the *RETINOBLASTOMA-RELATED* gene in root development. *Cell* 123, 1180-1182. doi: 10.1016/j.cell.2005.12.005.

***Dinneny JR** and Yanofsky MF (2005) Drawing lines and borders: how the dehiscent fruit of *Arabidopsis* is patterned. *Bioessays* 27, 42-49. doi: 10.1002/bies.20165.

Dinneny JR and Yanofsky MF (2004) Floral Development: An ABC Gene Chips in Downstream. *Current Biology*. 14, R840-R841. doi: 10.1016/j.cub.2004.09.037.

Dinneny JR and Yanofsky MF (2004) Vascular Patterning: Xylem or Phloem? *Current Biology*. 14, R112-R114. doi: 10.1016/j.cub.2004.01.017

CURRENT FUNDING

Chan Zuckerberg Biohub Investigator, 2022-2027

U.S. Department of Energy, DE-SC0020358: Discovering innovations in stress tolerance through comparative gene regulatory network analysis and cell-type specific expression maps, Awarded September 2019

U.S. Department of Energy, DE-SC0018277: Using systems approaches to improve photosynthesis and water use efficiency in sorghum, Awarded September, 2017

National Institutes of Health, Cellular Signaling and Response Systems Program, Signaling in Cell Expansion and Morphogenesis, Awarded March, 2017

U.S. Department of Energy, ARPA-e, 1565-1555: Thermoacoustic Root Imaging, Biomass Analysis, and Characterization, Awarded December, 2016

PAST FUNDING

Howard Hughes Medical Institute, Simons Foundation, HHMI-Simons Faculty Scholar, Awarded September, 2016

Stanford Precourt Energy Institute, Seed Grant: Enhancing Cellulose Digestion and Bioethanol Production through a New Genetic and Molecular Engineering Strategy in Plants and Microbes. PI Lynette Cegeski, Co-PI, José Dinneny, Awarded June, 2018

National Science Foundation, Molecular and Cellular Biology, 1157895: Collaborative Research: Salt-stress regulation of spatiotemporal gene expression patterns in the *Arabidopsis* root, Awarded May, 2012

U.S. Department of Energy, DE-SC0008769: A Systems-level analysis of drought and density response in the model C4 grass *Setaria viridis*, Awarded September, 2012

National Science Foundation, Integrated Organismal Systems, 1238202: Natural Variation and Drought Responses in Developing Maize Inflorescences, Awarded April, 2013

ADVISEE RESEARCH FELLOWSHIPS

NSF Graduate Research Fellowship: Therese LaRue, Lauren Pope

Life Sciences Research Fellowship: Josep Vilarrasa-Blasi, Yue Rui
EMBO Fellowship: Josep Vilarrasa-Blasi
Burroughs Welcome Fund CASI: Jennifer Brophy
TomKat Fellowship in Sustainable Energy: Christopher Dundas
Pew Latin America Fellowship: Cesar Cuevas-Velazquez
Deutsche Forschungsgemeinschaft (DFG) Fellowship: Heike Lindner

AWARDS

Chan Zuckerberg Biohub Investigator Award (2022)
AAAS Fellow (2022)
Stanford Biosciences Excellence in Mentoring and Service Award (2021)
2018, Stanford Woods Institute Leaders in Interdisciplinary Collaboration (LINC) Fellow (2018)
Science News magazine's 2017 SN 10: Scientists to Watch list (2017)
HHMI-Simons Faculty Scholar (2016)
National Research Foundation Fellowship, Singapore (2008)
Ruth L. Kirschstein National Research Service Award (NIH, 2005)
UCSD Biology Division teaching award (2002)
Babcock Prize, College of Natural Resources, UCB (2000)
Phi Beta Kappa member (2000)
Howard Hughes Medical Institute Predoctoral Fellowship (2000)

TEACHING

Teaching Experience

Autumn/Winter/Spring 2020 – present	BIO 305: Managing Your PhD
Autumn 2019 - present	BIO 155/255 Plant Cell and Developmental Biology
Summer 2018, 2019	Coordinator for 3-week course on Frontiers and Techniques in Plant Science, Cold Spring Harbor Laboratory, NY
Winter 2018 - present	BIO 84, Physiology, Stanford University
Winter 2017	BIOS 252, Understanding Plant-Environmental Responses, Stanford University
Summer 2016	Frontiers and Techniques in Plant Science, CSHL
Summer 2009/10	BL5221, Graduate module in Plant Biology, 1-2 lectures, TLL
Spring 2005	BICD 123 Plant Biology Lab, UCSD

Winter 2004

BICD 100 Genetics, UCSD

Spring 2002

BICD 101 Eukaryotic Genetics Lab, UCSD

PhD students advised (current position):

National University of Singapore: Lina Duan (Biotech), Yu Geng (post-doc), Rui Wu (post-doc), Bao Yun (Staff Scientist)

Stanford University: Neil Robbins II (ASU Data Analyst), Ying Sun (Salk Institute, postdoc), Therese LaRue (Hippo Harvest)

Post-doctoral fellows trained (current position):

Jennifer Brophy, Assistant Professor, Stanford University, Alexandra “Jazz” Dickenson, Assistant Professor, UCSD, Cesar Cuevas Velazquez, Assistant Professor, UNAM, Mexico City, Heike Lindner, Principal Investigator, University of Bern, Jose Sebastian, Assistant Professor, Indian Institute of Science Education and Research, Berhampur, India and Ramalingaswami Re-entry Fellow, Rubén Rellán-Álvarez, Assistant Professor NCSU, Charlotte Trontin, MBA program at Collège des Ingénieurs, Pooja Aggarwal, Consultant, Biotech Connection Singapore, Choon Wei “Jeffrey” Wee, Agilent, Chong Han Ng, Post-doc, Lecturer, Melaka Multimedia University

SERVICE

Editorial work

2018 - 2019

Associate Editor, Plant Physiology

2013 – 2017

Managing Editor, Plant Physiology

2015

Guest Editor, PLoS Genetics

2011 – 2015

Associate Editor, Frontiers in Plant Physiology

Committee Involvement

2021-2024

Committee on Graduate Studies (C-GS), Stanford University

2019-2024

Chair of Graduate Studies Committee, Biology Dept. Stanford Univ.

2018-2019

Graduate Admission Committee, Stanford University

2018-present

Adaptive Expertise Assessment Committee, Stanford University

2018-2020

Chair of the Membership Committee, ASPB

2015-2020

Treasurer and Elected member, North American Arabidopsis Steering Committee (NAASC)

2014-2018

ASPB Science Policy Committee

2011-2017

Seminar Committee, Carnegie DPB

Grant Panel Participation

NSF (MCB, IOS), NIH (CSRS), European Union (F7), DOE (BER)

Advisory Board participation

MiCROP Consortium, University of Wageningen, 2020-present

Environmental Molecular Science Laboratory (EMSL) Review for DOE, 2021

Conference and workshop organization

GRC: Salt and Water Stress, Les Diableretes, Switzerland, 2020 (postponed to 2022)

Frontiers and Techniques in Plant Science Summer Course, CSHL, 2018, 2019, 2020 (postponed to 2022)

International Conference on Arabidopsis Research, Seattle, Washington, 2021

GRC: Salt and Water Stress, Waterville, NH, 2020, Vice Co-Chair

“Seeds of Change: using plants to broaden the impact of science in society”, NSF-funded 3-day workshop, Nov 7-9, 2018, Lead organizer

GRC: Salt and Water Stress, Waterville, NH, 2018, Vice Co-Chair

Carnegie Institution for Science and Stanford Plant Biology Retreat, Asilomar, CA, 2017

International Conference on Arabidopsis Research, St Louis, Missouri, 2017

Carnegie Institution for Science and Stanford Plant Biology Retreat, Stanford, CA, 2014

PROFESSIONAL SOCIETY MEMBERSHIP

AAAS, SACNAS, ASPB, SDB, CSC

INVITED SEMINARS (2018-2021)

2nd International Biodesign Research Conference, 2021

University of Utah, 2021

University of Georgia, Athens, 2021

Oak Ridge National Lab, 2021

Iowa State University, 2021

University of Arizona, 2021

University of Illinois, Urbana-Champaign, 2020

Oregon State University, 2020

Mechanobiology Conference, WashU, Missouri, 2019

CNRS Montpellier, France, 2019

Max Planck Institute, Cologne, Germany, 2019

ASPB Plant Biology Annual Meeting, San Jose, CA 2019
FASEB Plant Development, New York, 2019
UC Merced, CA 2019
Nature Conferences: Plants of the Future, NYU, 2019
UC Berkeley Plant Engineering Symposium, Berkeley, CA, 2019
UT Austin, 2019
University of Massachusetts, Boston, 2019
UC Davis Plant Sciences Symposium, 2019
“Seeds of Change” Minisymposium, UC Davis, 2018
ARPA-e awardees workshop, South San Francisco, 2018
GRC: Plant Molecular Biology, Holderness, NH, 2018
GRC: Salt and Water Stress, Waterville, NH, 2018
California State University Northridge, 2018
University of California, Davis, 2018
Michigan State University, 2018
DOE-BER Genome Sciences meeting, VA, 2018