CURRICULUM VITAE

Tatsuya Nobori

Group Leader, The Sainsbury Laboratory

Norwich Research Park, Norwich NR4 7UH, United Kingdom · Tatsuya.Nobori@tsl.ac.uk · noborilab.org

Google Scholar · Bluesky @tatsuyanobori · X @nobolly · TSL group page · Profile in The Scientist

Appointments

Aug 2024–Present	**Group Leader**, The Sainsbury Laboratory, Norwich, UK
May 2019–Jul 2024	**Postdoctoral Fellow**, Salk Institute, La Jolla, California, USA Supervisor: Prof. Joseph R. Ecker

Education

Apr 2015–Apr 2019	**Ph.D.**, Max-Planck Institute for Plant Breeding Research, Cologne, Germany Summa cum laude · Supervisor: Dr. Kenichi Tsuda
Apr 2012–Mar 2015	**M.S.**, University of Tokyo, Tokyo, Japan
Oct 2013–Jul 2014	**Research Student**, CEA Cadarache, Saint-Paul-lès-Durance, France
Apr 2009–Mar 2013	**B.S.**, University of Tokyo, Tokyo, Japan

Awards & Honors

2026	JSPP Young Investigator Award
2025	Biochemical Society Early Career Research Award
2023	Best Trainee Talk, Salk Science at the Seaside
2022	Poster Prize, Gordon Research Conference Plant Molecular Biology
2020–2023	HFSP Long-Term Fellow
2019	PhD summa cum laude, MPI / University of Cologne
2016	Best Paper Award for Young Researchers, Japan Radioisotope Association
2015–2019	Nakajima Foundation Scholarship
2013–2014	French Government Scholarship

Editorial Activities

2025–present	Senior Editor, Molecular Plant-Microbe Interactions
2024–present	Editor, Plant & Cell Physiology
2024–present	Editor, Journal of General Plant Pathology
Jan 2021–Dec 2022	Assistant Features Editor, The Plant Cell
2020–2021	Plantae Fellow

Publications

* Co-first or co-corresponding authors, as noted.

PREPRINTS (1)

2026	Lee, T.A., …, **Nobori, T.**, …, Ecker, J.R. Transient cell states encode positional information to direct asymmetric growth. *bioRxiv*.

RESEARCH ARTICLES (21)

2026 Creff, A., et al. incl. **Nobori, T.** An embryo-derived peptide signal directs endosperm polarity in Arabidopsis. *Science*.

2025 Illouz-Eliaz, N., ..., **Nobori, T.**, ..., Ecker, J.R. Drought recovery in plants triggers a cell-state-specific immune activation. *Nature Communications*.

Lee, T.A.*, Illouz-Eliaz, N.*, **Nobori, T.***, et al. A single-cell, spatial transcriptomic atlas of the Arabidopsis life cycle. *Nature Plants*. (*Co-first)

Nobori, T., Monell, A., Lee, T.A., et al. A rare PRIMER cell state in plant immunity. *Nature*.
Highlighted in: Zhou and Wang (2025), Molecular Cell; Zheng et al. (2025), Molecular Plant; Thingujam et al. (2025), Trends in Plant Science

2024 Denyer, T., ..., **Nobori, T.**, ..., Timmermans, M.C. Streamlined spatial and environmental expression signatures characterize the minimalist duckweed Wolffia australiana. *Genome Research*.

Cao, M., ..., **Nobori, T.**, ..., Busch, W. Spatial IMA1 regulation restricts root iron acquisition on MAMP perception. *Nature*.

2023 **Nobori, T.***, Oliva, M., Lister, R. and Ecker, J.R.* Multiplexed single-cell 3D spatial gene expression analysis in plant tissue using PHYTOMap. *Nature Plants*. (*Co-corresponding)
Highlighted in: Kirschner and Somssich (2022), preLights; Research Briefing, Nature Plants; Media: The Scientist, CBS8, GenomeWeb, Spectrum News

2022 **Nobori, T.**, Cao, Y., et al. Dissecting the co-transcriptome landscape of plants and microbiota. *EMBO Reports*.

2021 Takemura, C., ..., **Nobori, T.**, ..., Hikichi, Y. PhcQ mainly contributes to the regulation of quorum sensing-dependent genes, in which PhcR is partly involved, in Ralstonia pseudosolanacearum strain OE1-1. *Molecular Plant Pathology*.

2020 **Nobori, T.***, Wang, Y.*, et al. Multidimensional gene regulatory landscape of a bacterial pathogen in plants. *Nature Plants*.

2019 Wang, Y., ..., **Nobori, T.**, ..., Tsuda, K. Site-specific cleavage of bacterial MucD by secreted proteases mediates antibacterial resistance in Arabidopsis. *Nature Communications*.

Berens, M.L., ..., **Nobori, T.**, ..., Tsuda, K. Balancing trade-offs between biotic and abiotic stress responses through leaf age-dependent variation in stress hormone cross-talk. *PNAS*.

2018 **Nobori, T.** and Tsuda, K. In planta transcriptome analysis of Pseudomonas syringae. *Bio-protocol*.

Nobori, T., Velásquez, A.C., et al. Transcriptome Landscape of a Bacterial Pathogen under Plant Immunity. *PNAS*.
Highlighted in: Cohen et al. (2018), Trends in Plant Science

2017 Mine, A., ..., **Nobori, T.**, ..., Tsuda, K. Pathogen exploitation of an abscisic acid- and jasmonate-inducible MAPK phosphatase and its interception by Arabidopsis immunity. *PNAS*.

Mine, A., **Nobori, T.**, et al. An incoherent feed-forward loop mediates robustness and tunability in a plant immune network. *EMBO Reports*.

2016 **Nobori, T.**, et al. Alteration in caesium behavior in rice caused by the potassium, phosphorous, and nitrogen deficiency. *J Radioanalytical Nuclear Chemistry*.

Kobayashi, N.I., ..., **Nobori, T.**, et al. Tracer experiment using 42K+ and 137Cs+ revealed the different transport rates of potassium and caesium within rice roots. *Functional Plant Biology*.

Tanoi, K., ..., **Nobori, T.**, et al. Investigation of radiocesium distribution in organs of wild boar grown in Iitate, Fukushima after the nuclear power plant accident. *J Radioanalytical Nuclear Chemistry*.

2015 Ii, I., ..., **Nobori, T.**, et al. Radioactive Caesium Concentration of Lowland Rice Grown in the Decontaminated Paddy Fields in Iitate-Village in Fukushima. *RADIOISOTOPES*.

2014 **Nobori, T.**, et al. Effects of potassium in reducing the radiocesium translocation to grain in rice. *Soil Science and Plant Nutrition*.

REVIEWS, PERSPECTIVES AND COMMENTARIES (16)

2026 Jhu, M.-Y., ..., **Nobori, T.**, ..., Sugimoto, K. Unlocking the full potential of spatial omics in plants: practical challenges, solutions, and a path forward. *The Plant Cell*.

Song, S., Pai, H., Uchida, K., and **Nobori, T.** Nutrients as signals that spatially organize plant–microbe interactions. *Curr Opin Plant Biol*.

Nobori, T. Stomata — guarding the gates against bacterial invasion. *Nature Reviews Genetics*.

2025 **Nobori, T.** Immune cell states: critical building blocks of the plant immune system. *Cell Host & Microbe*.

Nobori, T. Scientific mobility in microbiology – 6. *Trends in Microbiology*.

Nobori, T. Exploring the untapped potential of single-cell and spatial omics in plant biology. *New Phytologist*. (Tansley Review)

2023 **Nobori, T.*** and Ecker, J.R.* Yet uninfected? Resolving cell states of plants under pathogen attack. *Cell Reports Methods*.

2022 **Nobori, T.** From the archives: Calcium signaling and PIN polarity. *The Plant Cell*.

Nobori, T. A qWRKY regulator of ROS. *The Plant Cell*.

Nobori, T. Closing the gap: A plasma membrane H+-ATPase regulates stomatal closure. *The Plant Cell*.

2021 **Nobori, T.** Know your appetite: Phosphate-sensing proteins regulate AM symbiosis. *The Plant Cell*.

Cole, B., Bergmann, D., ..., **Nobori, T.**, ..., Dickel, D. Plant single-cell solutions for energy and the environment. *Communications Biology*.

Nobori, T. Similar yet different fighting styles: Evolution of the gene expression landscape in plant immune responses. *The Plant Cell*.

Nobori, T. Single-cell genomics goes greener. *The Plant Cell*.

2019 **Nobori, T.** and Tsuda, K. The plant immune system in heterogeneous environments. *Curr Opin Plant Biol*.

2018 **Nobori, T.**, Mine, A., and Tsuda, K. Molecular networks in plant-pathogen holobiont. *FEBS Letters*.

Selected Invited Talks

2027 Keystone Symposia, Receptor Kinase Signaling: Fueling Plant Resilience and Development, Vancouver (May 2027)

2026 ICBPI 2026 (Plenary speaker), Nanjing, China (October 2026)

Max Planck Institute for Molecular Plant Physiology, Golm (September 2026), Host: Caroline Gutjahr

Scandinavian Plant Physiology Society (SPPS) conference 2026 (Plenary speaker), Helsinki (August 2026)

Gatsby Plant Science Network Meeting 2026, Oxford (August 2026)

Norwich Single-Cell and Spatial Symposium 2026 (Keynote speaker), Norwich (July 2026)

ICAR 2026 (Plenary speaker), Singapore (June 2026)

Centre for Research in Agricultural Genomics (CRAG), Barcelona (April 2026), Host: Ignacio Rubio Somoza

Department of Plant and Microbial Biology (IPMB), University of Zurich, Zurich (April 2026) (Postdoc-nominated seminar)

2025	Cold Spring Harbor Laboratory meeting, Plant Genomes Systems Biology and Engineering (December 2025)
	Crop Science Centre, Cambridge University (November 2025), Host: Uta Paszkowski
	Department seminar, Department of Biology, Oxford University (October 2025), Host: Mark Fricker
	FASEB 2025 Mechanisms in Plant Development, Southbridge, Massachusetts (August 2025)
	Gordon Research Conference for Single-Cell Approaches in Plant Biology, University of Southern Maine (August 2025)
	Plant Biology 2025 (Plenary speaker), Milwaukee (July 2025)
	14th Conference of the European Foundation for Plant Pathology (Plenary speaker), Uppsala, Sweden (June 2025)
	VIB-UGent Center for Plant Systems Biology, Ghent (March 2025), Host: Hilde Nelissen
	Revolutionizing Next-Generation Sequencing 6th edition, Antwerp (March 2025)
	Department seminar, DBMV, University of Lausanne (February 2025), Host: Sebastian Soyk
2024	ENS Lyon (December 2024), Host: Teva Vernoux
	IBENS Paris (December 2024), Host: Lionel Navarro
	Distinguished Speaker Seminar Series (DSSS), Max-Planck Institute for Biology, Tübingen (November 2024)
	EPS Summer School, Utrecht University (August 2024)
	Plant Biology 2024, American Society of Plant Biologists, Hawaii (June 2024)
	Department seminar, Department of Biochemistry, University of Nebraska-Lincoln (April 2024)
	Department seminar, Department of Plant Pathology, University of California, Davis (April 2024)
	RIKEN Center for Sustainable Resource Science, Yokohama, Japan (March 2024), Host: Keiko Sugimoto
	SEE departmental seminar, Louisiana State University (January 2024), Host: Jordan Dowell
	INPLANTOMICS symposium, “Rhizosphere Metagenomics and Plant Microbe Interactions” (January 2024)
2023	Departmental seminar, Department of Cell & Systems Biology, University of Toronto (November 2023), Host: Darrell Desveaux
	Sainsbury Laboratory Cambridge University (October 2023), Host: Sebastian Schornack & Alan Wanke
	EMSL User Meeting (Keynote Speaker), Pacific Northwest National Laboratory (September 2023)
	Center for Digital Green-innovation special seminar, Nara Institute of Science and Technology (September 2023)
	International Society for Molecular Plant-Microbe Interactions (IS-MPMI) Congress 2023 (July 2023)
	The 33rd International Conference on Arabidopsis Research (ICAR2023) (June 2023)
	Plants3D Seminar, UC Riverside (April 2023), Host: Julia Bailey-Serres
	EMBL-EBI Webinar (March 2023)
	Plant & Animal Genome Conference: PAG 30, San Diego (January 2023), Host: Guido Van den Ackerveken
	Plant & Animal Genome Conference: PAG 30, San Diego (January 2023), Host: Stefania Giacomello
	Plant & Animal Genome Conference: PAG 30, San Diego (January 2023), Host: Hao-Xun Chang
2022	The Plant Cell Atlas (PCA) symposium 2022 (December 2022), Host: The Plant Cell Atlas initiative

	Leiden University, Plant Stress Biology Seminar (November 2022), Host: Pingtao Ding
	The Sainsbury Laboratory, Norwich, UK (September 2022), Host: Sophien Kamoun
	Max-Planck Institute for Plant Breeding Research, Cologne, Germany (September 2022), Host: Paul Schulze-Lefert
	International Symposium for Plant Biotic Interactions, Huazhong Agricultural University, Wuhan, China (July 2022), Host: Kenichi Tsuda
	RIKEN Center for Sustainable Resource Science, Yokohama, Japan (June 2022), Host: Ken Shirasu
2018	13th European Nitrogen Fixation Conference, Stockholm, Sweden (August 2018), Host: Simona Radutoiu and Phillip Pool

Ad Hoc Reviewer

Grants	ERC Advanced, ERC Consolidator, BBSRC, ANR, SPS, NSF, Swiss National Science Foundation
Journals	Cell, Cell Host & Microbe, Current Opinion in Plant Biology, Developmental Cell, eLife, ISME, MPMI, Nature, Nature Comms, Nature Methods, Nature Microbiology, Nature Plants, New Phytologist, Plant Physiology, PNAS, PCP, Plos Pathogens, Trends in Plant Science, The Plant Cell, The Plant Journal, Science

Research Group

	CURRENT MEMBERS
Postdocs	Vangeli Geshkovski, Akari Maeda, Siyu Song, Nanne Taks, Benjamin Tremblay, Tokuji Tsuchiya
Research Assistants	Phon Green, Hsuan Pai
Horticultural Technician	Fernanda Aguad
Predoctoral Intern	Ketil Krabbe
	FORMER MEMBERS
2026	Revocatus Byanyuma-Bahitwa, Rotation (now PhD student, John Innes Centre)
2026	Amritha Raghavan, Rotation (now PhD student, John Innes Centre)
2025–2026	Karen Uchida, Predoc (now PhD student, ETH Zurich)
2025–2026	Ru Zhang, Visiting Scientist (now Assistant Professor, Kyoto University)
2024–2026	Shania Keh, Predoc
2025	Hazel Surtees, Rotation (now PhD student, John Innes Centre)
2024–2025	Vidyashree Shivakumaraswamy, Predoc