

POSTDOCTORAL POSITION: Chemical  
Biology/Genetics of Plant Stomatal Development

**Keiko Torii Lab;**  
**Institute of Transformative Bio-Molecules (ITbM),**  
**Nagoya University, Japan**

A postdoctoral position is available immediately to study the mechanisms of stomatal development by chemical genetics and chemical biology approaches.



This is an ongoing collaboration project of Keiko Torii Lab (Co-PI Associate Prof. Dr. Naoyuki Uchida; and Assistant Prof. Dr. Soon-Ki Han) with a Group of synthetic chemistry (Dr. Kei Murakami) and proteomics/molecular structural analysis (Dr. Keiko Kuwata) to identify novel pathways and mechanisms controlling stomatal patterning and differentiation. We have performed a large-scale chemical screen and identified arrays of chemical compounds with potent activity to modify stomatal development. The successful candidate will characterize the effects of candidate compounds using genetic and cell biological (live imaging) approaches, screen for resistant mutants for the compounds, perform label-free proteomics to identify candidate drug targets, and/or take molecular, biochemical, and/or structural biological approaches to characterize the compound and its target. For some of our related work, see Ziadi et al. 2017 Chem Comm; Uchida et al. 2018 Nature Chem Biol; Hagihara et al. 2019 Curr Opin Plant Biol. The candidates will actively collaborate with synthetic organic chemists, structural chemists, and theoretical chemists in the ITbM to achieve the goal.

**Institute of Transformative Bio-Molecules (WPI-ITbM)** is a newly founded research institute as a part of the **World Premier International Research Center Initiative (WPI)** by the Japanese government to revolutionize and internationalize Japanese research environment. English will be used as a standard language in ITbM.

For ITbM see: <http://www.itbm.nagoya-u.ac.jp>

For WPI see: <http://www.jsps.go.jp/english/e-toplevel/>

About the PI see: <https://www.hhmi.org/scientists/keiko-u-torii>

**WPI-ITbM welcomes motivated scientists from all different backgrounds, gender, ethnicity or nationality.**

A candidate must have a strong research publication record as exemplified by the first-authored manuscripts. He/She must be proficient in basic biochemistry, cell biology, genetics and molecular biology. Solid backgrounds in plant biology, chemical biology and/or structural biology are highly desirable.

Due to highly interdisciplinary nature of the institute, we value those candidates with excellent communication skills, strong motivation, and willingness to take challenges to work with scientists from different fields.

The successful candidate will work in the lab with a mixture of biologists and chemist under Dr. Keiko Torii (PI), who will be in Nagoya University occasionally as Oversea Investigator. The candidates will be closely supervised by Dr. Naoyuki Uchida (Co-PI), who is a full-time

faculty at the ITbM. Torii will join the weekly web conference based lab meetings. The opportunity exists to collaborate/work jointly with the Torii group in the United States.

**Employment condition:**

**Job title:** Research Fellow

**Place of work:** ITbM Building, Nagoya University, Higashiyama campus  
(Furo-cho, Chikusa, Nagoya)

**Requirements:** Candidates should have a Ph.D. degree and skills/experiences to perform the approaches mentioned above.

**Salary:** JPN 4.2 M (approx..US\$ 43k) per year. Tax and insurance premium included.

**Term:** Annually renewed based on the performance; up to March 31, 2023. Employment shall be terminated by March 31 of the year you reach the age of 65.

**Start date:** Immediately or negotiable (it may take a few months to obtain “Certificate of Eligibility” to reside in Japan as a researcher)

**Insurance:** Enrolled in National Public Officers Mutual Aid Association (Health Insurance) and Welfare Pension Insurance, Workers’ compensation insurance and Employment insurance. Nagoya University Rules shall be applied to other conditions.

The successful candidate will be encouraged to apply for independent fellowships to gain independent programs for his/her future career path.

Nagoya is the third largest metropolitan area in Japan and a hub for the Central Japan, with easy access to Japan’s major cities (Tokyo, Kyoto, and Osaka) by high-speed bullet train. Nagoya is rich in history and culture. The Nagoya University campus is situated in a beautiful protected forest region (Higashiyama area).  
For information about City of Nagoya see: <http://en.wikipedia.org/wiki/Nagoya>

Send a cover letter (1-2 pages) outlining your research interest, proposed research and career goal, current curriculum vitae, and a name and e-mail address of three-four referees to:

**Prof. Keiko Torii**

Oversea Principal Investigator  
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**Selection procedures**

The applicant will be selected based on;

- 1) Primary paper screening
- 2) Interview (at Nagoya or via Skype according to circumstances)

**Application deadline**

Application documents should be submitted by June 30, 2019 or until the position is filled.  
The application will be closed if a suitable applicant is found.

**Notes**

Submitted application documents shall not be returned. All personal information is handled in strict confidentiality and is not utilized for any other purpose or disclosed to any third party. Nagoya University and WPI-ITbM value and promote diversity and equity.