

POSTDOCTORAL POSITIONS IN PLANT
SYNTHETIC BIOLOGY/Manipulating plant growth and
development via engineered receptor signal
transduction

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



One postdoctoral position is available on or after June 1, 2017 to study the mechanisms of plant development using synthetic ligand-receptor systems.

The laboratory of Keiko Torii and Naoyuki Uchida is engineering plant receptors with novel recognition properties and activity to understand the intricacy of signaling pathways and to further manipulate plant growth, development, and productivity. For our recent successful engineering plant peptide hormones with novel activities, see **Hirakawa et al., 2017 Nature Communications, 14318.**

Other recent work from our group at Nagoya ITbM includes:

Tameshige et al., 2016 Curr Biol
Ikematsu et al., 2017 New Phytologist
Nemhauser and Torii 2016 Nature Plants

Other recent work from the Torii group includes:

Han and Torii 2016 Development
Horst et al., 2015 PLOS Genetics
Lee et al., 2015 Nature
Meng et al., 2015 Curr Biol

The successful candidates will take biochemical and small molecule approaches to design and create hormone analogs and corresponding receptors including receptor kinases and F-box proteins, then further characterize their effects in plants using molecular, genetic, cell biological, and morphological approaches. 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 (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/>

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, biochemistry and molecular biology. Solid backgrounds in basic molecular biology and/or plant biology are highly desirable.

Due to highly interdisciplinary nature of the institute, we value those candidates with strong communication skills, be highly active and interactive while being independent, and willing 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.

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: JPY 4.2 M per year. Salary includes commuting allowance, retirement benefit, etc. Tax and insurance premium included.

Term: The employment contract may be renewed depending on annual performance evaluations. 3 years maximum from the first employment (This does not apply to recipients of independent fellowships). Employment shall be terminated by March 31 of the year you reach the age of 65.

Start date: June 2017 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.

Others: Travel allowances for new posting shall be paid in accordance with Nagoya University's rules at the time of employment. However, upon retirement, any travel allowance for leaving Japan shall not be covered.

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

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Institute of Transformative Bio-Molecules (ITbM)
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Prof. Naoyuki Uchida

Co-Principal Investigator
Associate Professor
Institute of Transformative Bio-Molecules (ITbM)
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E-mail: uchiano@itbm.nagoya-u.ac.jp

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 May 31, 2017. 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.