

Two Postdoctoral Positions

Laboratory of Kenichiro Itami at the Institute of Transformative Bio-Molecules (ITbM), Nagoya University

We are seeking highly motivated postdoctoral researchers who are willing to work in the group of **Kenichiro Itami** at the Institute of Transformative Bio-Molecules (ITbM), Nagoya University. We welcome researchers with strong background in **Chemical Biology** and/or **Synthesis of Complex Bio-Molecules**.

Employment Conditions:

- (1) **Salary:** An annual salary of 4,200,000 JPY (350,000 JPY per month). Tax and insurance premium are all included.
- (2) **Term:** Annually renewed, up to three years.

Documents for Application:

- (1) CV (including current address, phone number, e-mail)
- (2) A two-page summary of previous research contributions
- (3) A personal statement of your interest in this Institute
- (4) A list of academic works
- (5) Reprints of publications (up to three)
- (6) Names and contact information of two academic persons from whom references can be obtained.

All the materials should be prepared in English and sent by e-mail to itami.kenichiro@a.mbox.nagoya-u.ac.jp.

Closing date for applications is **30 April 2013**. Short-listed applicants will be invited to an on-line interview in May.

Contact:

Prof. Kenichiro Itami (Director of ITbM)

Institute of Transformative Bio-Molecules and Graduate School of Science, Nagoya University
Chikusa, Nagoya 464-8602, Japan.

E-mail: itami.kenichiro@a.mbox.nagoya-u.ac.jp

Phone/Fax: +81-52-788-6098

URL (Lab): <http://synth.chem.nagoya-u.ac.jp>

URL (ITbM): <http://www.itbm.nagoya-u.ac.jp>

WPI Institute of Transformative Bio-Molecules (ITbM) Nagoya University

What is WPI?



The World Premier International Research Center Initiative (WPI) provides priority support for projects aimed at creating top world-level research centers staffed at their core with the world's most leading researchers. WPI program was established in 2007, and six WPI institutes were selected and established; The University of Tokyo (Math/Physics/Universe), Kyoto University (Cell/Materials), Osaka University (Immunology), Tohoku University (Materials), National Institute for Materials Science (Nanotechnology), and Kyushu University (Energy). In the fall of 2012, the WPI program was expanded by three center projects, and Nagoya's ITbM (Synthetic Chemistry/Plant-Animal Biology) was selected together with Tokyo Institute of Technology (Earth-Life Science) and Tsukuba University (Sleep Medicine).

Website of WPI: <http://www.jsps.go.jp/english/e-toplevel/index.html>

Institute of Transformative Bio-Molecules (ITbM)



The goal of ITbM is to develop innovative functional molecules that make a marked change in the form and nature of biological science and technology (**transformative bio-molecules**) by taking full advantage of the cutting-edge molecular synthesis expertise of our chemistry PIs and intense interactions with our leading plant/animal biology PIs. Through this interaction, which is fundamental to the Institute, transformative bio-molecules will be synthesized that can (1) **enhance biotic productivity and quality** and (2) **realize innovative bio-imaging**. To ensure the advancement of these projects, we will (3) **develop catalysts that enable incredibly efficient synthesis and molecule activation on demand**.

Our unique approach is to apply our cutting-edge synthesis (**molecule-activation chemistry**), with the support of computational chemistry, to synthesize key molecules to explore **advanced systems biology in plants and animals**. We hope that our ten-year campaign will culminate in a wealth of synthetic bio-molecules that will be key to solving urgent problems at the interface of chemistry and biology. The innovation in food/biomass production, optical technologies, and generation of new bio-energy can be imagined as our dream.

Our team of PIs is an innovative mix of chemists and biologists from Japan and abroad. With the average age of the PIs at 43, there is no doubt we have assembled an ambitious and committed team of researchers, who will be highly active throughout the duration of the project and well beyond the 10 year funding envelope.

Website of ITbM: <http://www.itbm.nagoya-u.ac.jp>



Institute of Transformative Bio-Molecules (ITbM)

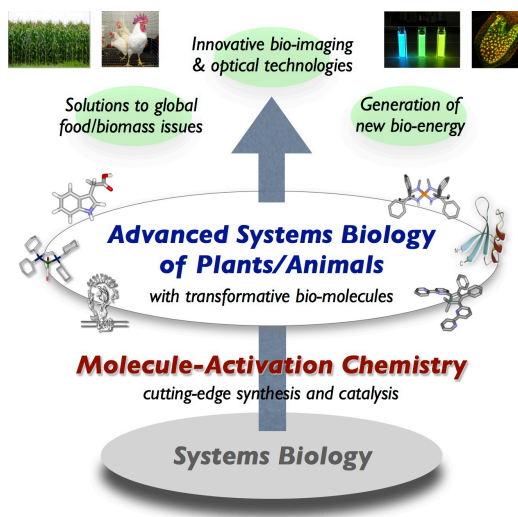


OUR GOAL is to develop “**transformative bio-molecules**”, innovative functional molecules that make a marked change in the form and nature of biological science and technology.

OUR UNIQUE APPROACH is to apply our **cutting-edge synthesis** (molecule-activation chemistry), with the support of computational chemistry, to synthesize key molecules to explore **advanced systems biology in plants and animals**.

THE IDENTITY of the Institute is its capability to **synthesize** completely new bio-functional molecules with carefully **designed** functions.

EXPECTED OUTCOME: Our campaign will culminate in a wealth of **synthetic bio-molecules** that will be key to solving urgent problems at the interface of chemistry and biology. The innovation in food/biomass production, optical technologies, and generation of new bio-energy can be imagined as our dream.



Director

Kenichiro Itami

Nagoya Univ

Synthetic chemistry, Catalysis

<http://synth.chem.nagoya-u.ac.jp/wordpress/?lang=en>

Vice-Director

Tetsuya Higashiyama

Nagoya Univ

Plant biology, Live cell imaging

<http://www.liveholonics.com/en/>

Other Principal Investigators

Jeffrey W. Bode

ETH Zürich (Switzerland)

Peptide, Molecular catalysis

<http://www.bode.ethz.ch>

Cathleen M. Crudden

Queen's Univ (Canada)

Organometallic/organoelement catalysis

<http://www.cruddengroup.com>

Stephan Irle

Nagoya Univ

Computational chemistry

<http://qc.chem.nagoya-u.ac.jp/index.html>

Toshinori Kinoshita

Nagoya Univ

Plant growth, Molecular physiology

<http://www.bio.nagoya-u.ac.jp/~plant4/en/index.html>

Takashi Ooi

Nagoya Univ

Non-metal catalysis, Synthesis

<http://www.apchem.nagoya-u.ac.jp/06-II-3/ooiken/e-Home.html>

Keiko Torii

Univ Washington (USA)

Plant growth and differentiation

<http://faculty.washington.edu/ktorii/>

Shigehiro Yamaguchi

Nagoya Univ

Fluorescent molecule design

<http://orgreact.chem.nagoya-u.ac.jp/en/Home.html>

Takashi Yoshimura

Nagoya Univ

Animal reproduction, Hormone

<http://www.agr.nagoya-u.ac.jp/~aphysiol/e-index.html>