RIKEN
YOKOHAMA INSTITUTE

EVENTS

2012

2012 Genomic Sciences Research Complex (GSC) Tanabata Meeting

The 2012 GSC Tanabata Meeting will be held on July 6, 2012 at RIKEN Yokohama Institute.

The GSC Tanabata Meeting was proposed by Dr. Akiyoshi Wada to search out and support promising young life science researchers with sparkling ideas. The GSC Tanabata Meeting Committee has screened applicants and selected 20 people to present speeches and poster sessions at the 2012 session.

The general public is welcome to attend GSC Tanabata, and everyone is encouraged to take part in the post-meeting social gathering (see below for a schedule and more details).

Leaflet (PDF、2.26M)

Message from the GSC Chair

Without a doubt, anything and everything in our world can be about science. But focusing on the day-to-day does not translate into international competitiveness.

In Japan, it is often the case that researchers will build their work in a cookie-cutter fashion over many years, and let their seniority do the talking for evaluations. Needless to say, this approach is not an international standard. As many universities in Japan have chosen this easy path to advancing research and education, I therefore have a sense of crisis.

Publishing papers is not about numbers, and the spirit of the GSC Tanabata Meeting is based on valuing unique ideas and methods, even when there are only a few. I believe that this mindset is central being competitive internationally, and I hope you will approach the GSC Tanabata gathering from this perspective.

Event Details

Date:	Friday, July 6, 2012 10:30-17:00
Access:	Yokohama Institute, Main Office Building Lecture Hall (1F)
Location:	http://www.yokohama.riken.go.jp/english/outline/access/index.html
Host:	RIKEN Genomic Sciences Research Complex (GSC Complex)
Grant Support:	The Tokyo Club
Cost:	Free (however, there is a small cost for the post-meeting social gathering, and advance application is required)

Timetable

10:30-	Opening remarks by Dr. Akiyoshi Wada (Director, GSC)
10:45-	Lectures ■ "Towards establishing Experimental Human Genetics" by Dr. Taro Muto (participant in the 2nd Tanabata Meeting) ■ "Can single-headed, non-processive Myosin 1b form a membrane tubule in a reconstituted minimal system?" by Dr. Ayako Yamada (participant in the 2nd Tanabata Meeting)
11:45-	Lunch
12:00-	Yokohama Institute Luncheon Seminar Presenter: Kazuhiro Takemoto (One of the poster presenters)
12:45-	**Two-minute speech by poster presenters**
13:45-	Group Photo
13:50-	**Poster Sessions**
16:00-	Lecture "Application of iPS cells in Retinal Diseases" by Dr. Masayo Takahashi (Team Leader, RIKEN Center for Developmental Biology)
16:30-	Closing remarks by Dr. Yoshihide Hayashizaki (Director, RIKEN Omics Science Center)
17:00-	Social gathering (advance application and participation fee required)

To apply for the post-meeting social gathering, send an e-mail with your name, affiliation and title to tanabata-office■riken.jp by Friday, June 29. You do not need to register if you plan to attend only the GSC Tanabata Meeting.（Please change ■ into @.）

Presenters

Each of the selected 20 presenters will give a two-minute presentation and a poster presentation. All presentations are in English.

Name	Affiliation	Title
Naoki Irie	RIKEN Center for Developmental Biology	Re-formulating the relationship between evolution and development
Kazuhiro Takemoto	Japan Science and Technology Agency	Understanding formation and adaptation of metabolic system from a network perspective
Tan Ming Wan (Guest)	Institute of High Performance Computing, Singapore	Modelling of Patent Ductus Arteriosus

Takeshi Sunami	Japan Science and Technology Agency	Directed evolution of a self-encoding system using giant liposome
Taruho Kuroda	Dana-Farber Cancer Inst./Harvard Med. Sch./Howard Hughes Medical Inst.	Genome-wide RNAi screen for polyploid-specific lethality: Potential strategy for novel cancer therapy
Yohichi Suzuki	University of California San Diego, USA	Single-Molecule Rupture Dynamics on Multidimensional Landscape
Sayaka Higuchi	RIKEN Quantitative Biology Center	Efficacy of soft substrate in establishment of iPS cells
Shuji Kawaguchi	RIKEN Bioinfomatics And Systems Engineering Division	Positional correlation analysis of transcriptomes toward multidiscipline analysis of cell activities
Keigo Arai	Massachusetts Institute of Technology	Development of nanoscale magnetometer and super-resolution optical imager using nitrogen-vacancy centers in diamond
Yu-ki Matsuno	National Institute of Advanced Industrial Science and Technology	Supported Molecular Matrix Electrophoresis: A New Concept of Membrane Electrophoresis
Jay Shin	RIKEN Omics Science Center	A novel method to study transcriptional regulation involved in direct cell reprogramming
Hiroaki Machiyama	National University of Singapore	Quick replacement of phophorylated p130Cas at focal adhesions involves cell migration
Jieting Wang (Guest)	Graduate University of Chinese Academy of Sciences	Zinc oxide nanoparticles induces apoptosis in the primary cultured glia cells
Keisuke Ueno	Hokkaido University	Computational Model Reveals Humoral Immune Responses against Influenza Virus
Misako Yamazaki	University of Lausanne	Development and polarity in plants focused on Casparian strips in the endodermis
Satoru Ide	Institute of Human Genetics	Toward understanding the biology of the non-coding genome
Hiroshi Wanatabe	University of Heidelberg	Patterning of animal body axes at early evolutionary phase
Akiko Minoda	Lawrence Berkeley National Laboratory, CA, USA	Comprehensive analysis of the chromatin landscape in Drosophila melanogaster
Yuki Nagata	Max Planck Institute for Polymer Research	Sum-frequency generation spectra of water at the hydrophilic and superhydrophilic interfaces: A molecular dynamics simulation study
Shigeyoshi Matsumura	Institut de Science et d'Ingénierie Supramoléculaires, Université de Strasbourg, Strasbourg, France	Why is the life a cell? : Building an “RNA world” model protocell based on droplet-based microfluidics

Inquiries

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The objective of the GSC Tanabata Meeting --- Akiyoshi Wada, Director, RIKEN GSC

The GSC Tanabata Meeting is intended to provide young scientists (under 35 years old) who have not yet made substantial research achievements, but who have came up with marvelous, sparkling ideas, with an opportunity to present their research results. Before going into details, I would like to explain the background and basic idea behind this event.

1. **Historical background Dissolution of GSCenter and establishment of GSComplex**
   The RIKEN Genomic Sciences Center (GSC) evolved out of my research work, and I served as the first GSC director. The center grew over time but was finally closed in March 2008. Over the decade of its existence GSC attracted considerable attention within the international scientific community, as can be seen by the many articles related to GSC that appeared in Nature (http://www.nature.com/nature/index.html). If you search the journal for Genomic Sciences Center, you will see more than 150 news items, evaluations and original papers). In order to preserve GSC's highly evaluated and well-known international name, Professor Ryoji Noyori, RIKEN's president, decided to rename and redevelop GSC using the same acronym. This is how the virtual organization RIKEN Genomic Sciences Research Complex (GSC) came to be established in April 2008, and I am currently serving as the Director of the new GSComplex.
2. **The Aim of the GSC Tanabata Meeting . A Gateway to Success for Young Scientists**
   GSComplex was set up without any specific fixed budget, but I have a longstanding policy of using my head when there is no money, and I thought of the GSC Tanabata Meeting as a novel way to gather worldwide attention. Still, our budget and staff are very limited, and while the former GSC was certainly highly regarded internationally, it did exist for only 10 years. What we can do is limited so we must be sharply focused. And this is how I got the idea for an interactive session to encourage the young scientists who will carry forward the next generation of the life sciences. The theme for this year's program is: Young Scientists and the Next Generation of the Life Sciences.
      1. In principle, no older than age 35
      2. Without substantial research achievements, but with marvelous and sparkling ideas
      3. Have a unique and brilliant idea with great potential
      4. Discovered or invented a methodology or model relevant to the life sciences
      5. Produced research results that will contribute to the future of the life sciences, made a discovery, or invented a methodology or model

   Our aim is that many young scientists will consider it an honor to be asked to make a presentation at the GSC Tanabata Meeting, and that they will perceive the event as an important gateway to success.
   In addition, I wanted to attract brilliant young Japanese scientists abroad who are researching in other countries and provide them an opportunity to give a presentation here in Japan.
   I hope many young scientists will be encouraged and motivated if they can win recognition for even just one unique idea. The GSC Tanabata meeting is not a forum to pass out awards but to encourage young

researchers and help them to become known in the scientific community.

3. **A GSComplex Forum for the Future**
   Even though the research objective of GSC was genomics, the underlying innovative ideology was to use cutting-edge physics and chemistry methodologies to tackle diverse life science issues. In particular our challenge was to apply successful data-driven and instrument-driven paradigms from other sciences to the life sciences. The result was the creation of an internationally recognized state-of-the-art research center.
   The field of genomics is extensive, however, and if we deal only with genomics we will quickly be buried beneath the international achievements that are being made in the rest of the world. As I have already pointed out, this is why we must be sharply focused. I believe the GSC Tanabata Meeting's purpose of providing a forum for the unexpected and outstanding ideas of young scientists is a unique focus that should gather worldwide attention.
   This first year, for reasons of both time and money, we have restricted our target to scientists (of any nationality) working in Japanese research institutions and to Japanese scientists who are now overseas. As the idea for this project takes hold, however, and we have the good fortune to be able to expand the event on a global scale, I believe we will be making a giant step toward internationalizing the life sciences of Japan.

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