

## FOSTERING THE NEXT GENERATION

# The John Mung Program

## Opportunities to Explore Global Frontiers

Kyoto University launched the John Mung Program in 2012, as a project to support mid- and long-term research by junior faculty members at leading academic institutions overseas.

### **MED** Imperial College National Health Trust, England

*Learning how the Antimicrobial Stewardship Program has been implemented there.*



Antimicrobial resistance is an important patient safety and public health issue. Controlling antimicrobial resistance requires a multifaceted approach. The Antimicrobial Stewardship Program (ASP) seeks to improve antimicrobial prescribing and control antimicrobial resistance. In England, an active ASP has been implemented for a considerable time, and reduction of nosocomial infections has been achieved through stringent and effective infection control practices. The aim of my visit was to learn how the ASP has been implemented at the Imperial College National Health Trust, and to establish a research network with one of the leading research teams in Europe. I am confident that the human network, knowledge, and skills I gained will be beneficial in my future research.



**Dr. Miki Nagao** MD,PhD, *Kyoto University Graduate School of Medicine*  
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### **MATH** Bielefeld University, Germany

*Studying the analysis and geometry of Laplacian on closed Riemannian manifolds.*



During my stay at Bielefeld University, I studied the analysis and geometry of Laplacian on closed Riemannian manifolds. I visited Prof. Alexander Grygor'yan's office several times to discuss my above studies. During the visit, I also had opportunities to communicate with researchers from different areas of mathematics. My diverse discussions with them brought great surprises and gave me much inspiration for my research. I believe that these experiences will be invaluable throughout my research life.

**Dr. Kei Funano** *Graduate school of Science*  
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## The John Mung Advanced Program



Kyoto University launched the John Mung Program (Kyoto University Young Scholars Overseas Visit Program) in 2012, as a project to support mid- and long-term research by junior faculty at overseas organizations. The objective of the program is to encourage young scholars to develop academic networks and promote collaborative research projects. This in turn will build a foundation to advance academic exchange, internationalize research activities, and facilitate the

expansion of external funding opportunities.

The program supports young scholars in two different ways. The Young Scholars Overseas Visit Program supports individual scholars by providing funds for their travel, living, and research expenses. The Program for Scholars' Home Laboratories provides funding to departments, laboratories, and other academic units to compensate for the absence of young scholars who are stationed abroad for over six months. Grants can be used to cover personnel and operational expenses incurred during the period of their absence.

In 2013, the program was revised as the John Mung



**MICRO-ENG** **Stanford University, USA**

*Working on microsystems for on-chip chemical analysis.*



I joined Professor Santiago's group at Stanford University. The group is actively working on the development of microsystems for on-chip chemical analysis, drug delivery, and sample preparation methods. My current research project is the extraction of ribonucleic acid (RNA) and deoxyribonucleic acid (DNA) from a single cell using electric cell lysis and isotachopheresis. I have been working with excellent colleagues in a fulfilling research environment. I would like to express my sincere gratitude to all those involved for providing me with this opportunity to do research at Stanford University.



**Dr. Hirofumi Shintaku**

*Visiting Scholar, Department of Mechanical Engineering, Stanford University / Assistant Professor, Graduate School of Engineering, Kyoto University*  
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**POLY-CHEM** **University of Washington, USA**

*Studying cAFM and pcAFM.*

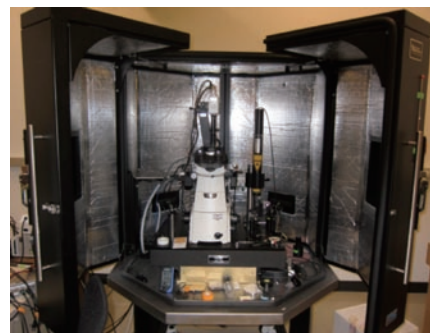
Thanks to the John Mung Program, I had the opportunity to study conductive atomic force microscopy (cAFM) and photoconductive atomic force microscopy (pcAFM) as applied to polymer-based organic solar cells at the University of Washington in the United States. The AFM techniques are state-of-the-art and powerful tools which enable us to discuss the mechanism of photovoltaics at the molecular level. I was engaged in full-time research under the guidance of Prof. David S. Ginger, and worked as a postdoctoral research fellow in his laboratory. During my stay, I enjoyed mastering the skills of AFM techniques and discussing my



research findings there with students, postdocs, and Prof. Ginger. Our collaborative research is continuing even since I returned to Japan. I believe this valuable experience will develop my research much further.

**Dr. Hiroaki Benten** *Graduate School of Engineering*

[www.photo.polym.kyoto-u.ac.jp](http://www.photo.polym.kyoto-u.ac.jp)



pcAFM

Advanced Program. The advanced program offers opportunities for overseas experience to a wider range of faculty members by expanding its scope of eligibility and offering more varied funding schemes. The advanced program allows scholars to apply as a team, in collaboration with other young scholars or students. This enables applicants to expand the scale of their projects. Through this program Kyoto University aims to cultivate an increased number of internationally-minded, leading scholars.

**WEB** [www.kyoto-u.ac.jp/ja/research/young/support/john\\_man/](http://www.kyoto-u.ac.jp/ja/research/young/support/john_man/)

	John Mung Program	John Mung Advanced Program
Category	Faculty Member	Faculty Member Non-tenure track scholar
Age	Under 40	Under 50
Period	3-12 months	3-24 months (1-3 months possible depending on a reason)
Unit	Individual	Individual, Team (Students can be included in a team)
Program for Scholar's Home Laboratories	Approx. \$2,000/month/person	Approx. \$3,000/month/person