

## **KI-Japan joint seminar “Malaria research: innovations and global malaria eradication”**

*– 150 years of diplomatic relations between Sweden and Japan will be celebrated through a seminar on malaria research collaboration.*

**Date: 13<sup>th</sup> of November 2018**

**Time: 9.00 – 17.00 Mingle 17.00 - 19.00**

**Venue: Nobel Forum, Karolinska Institutet, Stockholm**

### Background:

In the year 2018, Japan and Sweden will celebrate 150 years of diplomatic relations. In this momentum we will jointly hold the Sweden-Japan joint seminar “Malaria research: innovations and global malaria eradication”, following the first Sweden-Japan joint seminar “Malaria research: diversity and control” a decade ago in 11 June 2008 at Nobel Forum, Karolinska Institutet, Stockholm [Acta Tropica. 2010;114:129-177].

Following a concerted campaign to increase malaria intervention coverage to unprecedented levels, *Plasmodium falciparum* infection prevalence in endemic Africa has been halved and the incidence of clinical disease fell by 40% between 2000 and 2015 [Bhatt *et al.* 2015]. Nevertheless, there were an estimated 191 million new cases and 394,000 deaths due to malaria in Africa in 2015. About 74% of all malaria death in African occurred in children before their fifth birthday [World Malaria Report 2016]. Regarding the great progress made under the Millennium Development Goals, it is now important to build on this success and “end malaria for good” under the Sustainable Development Goals (SDGs). In the era of SDGs, there is a significant shift in focus from controlling diseases to achieving universal health coverage to ensure healthy lives and promote well-being for all the people. Successful malaria elimination relieves the economic burden associated with costs of malaria treatment and loss of human capital and productivity that trap households, communities and government in poverty. With the vision of a malaria free world, the Global Technical Strategy (GTS) for malaria 2016–2030 [WHO 2017] sets ambitious, but attainable goals for the next 14 years. Unlike the 1953 Global Malaria Eradication Program, which relied solely on all of the tools available (DDT and chloroquine) at the time, the GTS instead declares that innovations will play an important role in achieving key milestones towards malaria eradication [WHO 2017]. These innovations include development of new and improved tools, optimized the use of currently available ones and rapid uptake of emerging tools, interventions and strategies.

In this context this seminar addresses innovations and the feasibility of malaria elimination in tropical Africa, which will be the last obstacle towards global malaria eradication, through the renovated Sweden-Japan research collaboration.

You are most welcome!

Akira Kaneko, MD, PhD  
Professor  
Karolinska Institutet  
[akira.kaneko@ki.se](mailto:akira.kaneko@ki.se)

## PROGRAM

KI-Japan joint seminar “Malaria research: innovations and global malaria eradication”

13 NOVEMBER 2018, NOBEL FORUM, KAROLINSKA INSTITUTET

9:00                    Opening

**Prorektor Karin Dahlman-Wright, KI**

9:15 Session 1: Innovation I (20 minutes x 4 speakers) [Chair: M. Wahlgren]

**Mats Wahlgren, KI**

*Sevuparin: a novel therapeutic agent to treat severe Plasmodium falciparum malaria*

**Masahiro Hiratsuka, Tohoku University**

*Pharmacogenomics of antimalarial drugs*

**Eizo Takashima, Ehime University**

*Strategies to identify novel malaria vaccine candidates with wheat germ cell-free system*

**Toshihiro Horii, Osaka University**

*Pathway for BK-SE36 malaria vaccine development*

10:35                    Coffee break

11:00                    JSPS presentation

**Takao Yoshihara, JSPS Stockholm Office**

11:10    Session 2: Innovation II (20 minutes x 5 speakers) [Chair: K. Kita]

**Toshihiro Mita, Juntendo University**

*Emergence of artemisinin-resistant malaria outside Greater Mekong Subregion*

**Pedro Ferreira, Portugal (JSPS alumni)**

*Piperaquine resistance in malaria parasites*

**Tohru Tanaka, Neopharma Japan & SBI Pharma**

*5-aminolevulinic acid. The roots of energy.*

**Kiyoshi Kita, Nagasaki University**

*5-aminolevulinic acid as an anti-malarial medicine*

**Chiaki Takeuchi, Sysmex Corporation**

*Introduction of Novel Technology toward Malaria detection*

12:50 Lunch

14:10 Session 3: Malaria elimination I (20 minutes x 4 speakers) [Chair: N. Minakawa]

**Noboru Minakawa, Nagasaki University**

*Malaria vector control using long lasting insecticide-treated nets*

**S. Noushin Emami, Stockholm University**

*Novel strategies for control of vector-borne diseases*

**Wataru Kagaya, Osaka City University**

*Malaria elimination and resurgence after mass drug administration on an island of the Lake Victoria basin, Kenya*

**Ulrika Morris, KI**

*Effectiveness, feasibility and safety of mass drug administration for reducing seasonal malaria transmission in Zanzibar*

15:30 Coffee

15:55 Session 4: Malaria elimination II (20 minutes x 3 speakers) [Chair: A. Björkman]

**Akira Kaneko, KI**

*Sustainable malaria elimination on islands in Vanuatu*

**Koji Lum, Binghamton University, USA (JSPS alumni)**

*Health Transition: From Malaria Elimination to Chronic Disease (2007-2018)*

**Anders Björkman, KI**

*Malaria elimination in Zanzibar - what's the problem?*

16:55 Closing

17:00 Mingle

Toast! H.E. Ambassador Shigeyuki Hiroki, the Embassy of Japan in Sweden

*A calligraphic performance, Hiroko Kimura*

19:00 End

**14 NOVEMBER 2018, BIOMEDICUM C0912, KAROLINSKA INSTITUTET**

10:00 – 13:00

Small group meetings on Sweden-Japan malaria research collaboration. If you want to meet any specific person, please contact Akira. You are most welcome!

## Speakers:

### **Anders Björkman, MD, PhD**

Professor  
Department of Microbiology, Tumor and  
Cell Biology (MTC)  
Karolinska Institutet  
Stockholm, Sweden  
anders.bjorkman@ki.se

### **S. Noushin Emami, MSc, PhD**

Group Leader  
Department of Molecular Biosciences,  
The Wenner- Gren Institute  
Stockholm University  
Stockholm, Sweden  
noushin.emami@su.se

### **Pedro Ferreira, BSc, Eng, PhD**

Principal Investigator  
Life and Health Sciences Research  
Institute, School of Medicine  
University of Minho  
Braga, Portugal  
pedroferreira@med.uminho.pt

### **Masahiro Hiratsuka, PhD**

Associate Professor  
Graduate School of Pharmaceutical  
Sciences  
Tohoku University  
Sendai, Japan  
mhira@m.tohoku.ac.jp

### **Toshihiro Horii, PhD**

Professor  
Department of Molecular Parasitology  
Osaka University  
Osaka, Japan  
horii@biken.osaka-u.ac.jp

### **Wataru Kagaya, MD, PhD**

Clinical Lecturer  
Department of Parasitology  
Graduate School of Medicine  
Osaka City University  
Osaka, Japan  
kagaya.wataru@med.osaka-cu.ac.jp

### **Akira Kaneko, MD, PhD**

Professor  
Department of Microbiology, Tumor and  
Cell Biology (MTC)  
Karolinska Institutet  
Stockholm, Sweden  
akira.kaneko@ki.se

Department of Parasitology  
Graduate School of Medicine  
Osaka City University  
Osaka, Japan

### **Kiyoshi Kita, PhD**

Professor, Dean  
School of Tropical Medicine and Global  
Health  
Nagasaki University  
Nagasaki, Japan  
kitak@nagasaki-u.ac.jp

Professor Emeritus  
The University of Tokyo  
Tokyo, Japan  
kitak@m.u-tokyo.ac.jp

### **J. Koji Lum, PhD**

Professor of Anthropology and Biological  
Sciences

Department of Anthropology  
Director, Laboratory of Evolutionary  
Anthropology and Health  
Binghamton University  
Binghamton, New York, USA  
klum@binghamton.edu

**Toshihiro Mita, MD, PhD**

Professor  
Department of Tropical Medicine and  
Parasitology,  
Juntendo University, Faculty of Medicine  
Tokyo, Japan  
tmita@juntendo.ac.jp

**Noboru Minakawa, PhD**

Professor  
Institute of Tropical Medicine  
Nagasaki University  
Nagasaki, Japan  
minakawa@nagasaki-u.ac.jp

**Ulrika Morris, PhD**

Postdoc  
Department of Microbiology, Tumor and  
Cell Biology (MTC)  
Karolinska Institutet  
Stockholm, Sweden  
ulrika.morris@ki.se

**Eizo Takashima, PhD**

Associate Professor  
Division of Malaria Research  
Proteo-Science Center, Ehime University

Ehime, Japan  
takasima.eizo.mz@ehime-u.ac.jp

**Chiaki Takeuchi**

Manager  
Hematology Business Development  
Division  
Sysmex Corporation  
Kobe, Japan  
Takeuchi.Chiaki@sysmex.co.jp

**Tohru Tanaka, PhD**

Director & CTO  
SBI Pharmaceuticals Co., Ltd.  
Research Fellow  
Neopharma Japan Co., Ltd.  
Tokyo, Japan  
tortanaka@sbigroup.co.jp

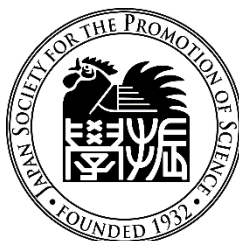
**Mats Wahlgren, MD, PhD**

Professor  
Department of Microbiology, Tumor and  
Cell Biology (MTC)  
Karolinska Institutet  
Stockholm, Sweden  
Mats.Wahlgren@ki.se

**Takao Yoshihara**

Deputy Director  
The Japan Society for the Promotion of  
Science (JSPS) Stockholm Office  
Stockholm, Sweden  
jsps-sto@jsps-sto.com

*Supported by the Japan Society for the Promotion of Science (JSPS) Stockholm Office, the Swedish Foundation for International Cooperation in Research and Higher Education (STINT) and Karolinska Institutet*



**150 år av diplomatiska relationer mellan Japan och Sverige**