

PRELIMINARY VERISION, Oct. 15<sup>th</sup>

## 2nd Stockholm-Tokyo Workshop

# Multidisciplinary collaboration for sustainable development

Tokyo, 28<sup>th</sup>-30<sup>th</sup> October, 2018, Hongo Campus

### Sunday 28 October: 18:00-20:30 Welcome Reception

Venue : Hotel Niwa Tokyo

### Monday 29 October: Plenary symposium, The Ito Hall

#### 9:00-9:10 Opening session

- President **Makoto Gonokami** of The University of Tokyo (tentative)
- Prof. **Peter Gudmundson** and video messages from the presidents of KI, KTH and SU.

#### 9:10-10:25 **Healthy ageing (1): Biological mechanisms regulating healthy and maladaptive ageing**

**Chairs:** Prof. **Haruhiko Bito** (MED), Prof. **Erik Lindahl** (KTH, SU)

**UTokyo:**

- Dean, Prof. **Kohei Miyazono** (MED)  
*Possible Roles of TGF- $\beta$  Family Signaling in Ageing*
- Prof. **Makoto Murakami** (MED)  
*Phospholipid metabolism in healthy and maladaptive aging*

**Stockholm:**

- Prof. **Maria Lindskog** (KI)  
*Increasing resilience with a balanced neuron-astrocyte interaction*

#### Coffee break

#### 10:45-12:00 **Healthy ageing (2): Prevention and well-being**

**Chairs:** Director, Prof. **Junichiro Okata** (IOG), Prof. **Laura Fratiglioni** (KI)

**UTokyo:**

- Prof. **Katsuya Iijima** (IOG)  
*To achieve healthy aging and well-being: Multi-faceted action research of "Frailty prevention"*

**Stockholm:**

- Prof. **Miia Kivipelto** (KI)  
*Multidomain interventions to prevent cognitive impairment and dementia: From FINGER to World-Wide FINGERS*
- Prof. **Joakim Gustafsson** (KTH)  
*Social robots for the elderly - companionship with a purpose*

**12:00-13:20 Lunch**

**13:20-13:30 Group Photo**

**13:30-14:45 Sustainable materials**

**Chairs:** Prof. Junichiro Shiomi (ENG), Prof. Anders Karlhede (SU)

**UTokyo:**

-Prof. **Akira Isogai**(AG)

*TEMPO-oxidized cellulose nanofibers and nanocrystals:*

*New bio-based nanomaterials for establishment of a sustainable society*

**Stockholm:**

-Prof. **Lennart Bergström** (SU)

*Nanocellulose-based hybrid foams and films: from single-fibril properties to assembly of high-performance materials*

-Prof. **Daniel Söderberg** (KTH)

*Developing processes for fabrication of high-performance bio-based materials*

**Coffee break**

**15:00-16:40 Bridging materials and life science by electron microscopy**

**Chairs:** Prof. Naoya Shibata (ENG), Prof. Lennart Nilsson (KI)

**UTokyo:**

-Prof. **Yuichi Ikuhara** (ENG) (Material)

*Grain Boundary and Surface Dynamics of Diffusion and Fracture in Materials*

-Prof. **Masahide Kikkawa** (MED)(Life Science)

*Combination of cryo-electron microscopy and genetics for studying eukaryotic cellular structures*

**Stockholm:**

-Prof. **Xiaodong Zou** (SU)

*Electron microscopy as an important tool for developing new materials for sustainable society*

-Prof. **Björn Högberg** (KI)

*3D DNA Origami Polyhedral Meshes for Cell Signaling Studies*

**16:40-17:40 Tour of the campus and electron microscope centers**

**18:00- Dinner**

## **Tuesday 30 October: 9:00-16:00 Satellite workshops**

Time table and venue to be decided by each satellite coordinator

### **(1) Biological mechanisms regulating healthy and maladaptive ageing**

UTokyo coordinator: Prof. **Haruhiko Bito** (MED)

Stockholm coordinator: Prof. **Maria Lindskog** (KI)

### **(2) Healthy ageing and well-being: From social science aspects**

UTokyo coordinator: Prof. **Katsuya Iijima** (IOG), Prof. **Yuto Kitamura** (EDU)

Stockholm coordinator: Prof. **Malgosia Malec** (SU), Prof. **Laura Fratiglioni** (KI)

### **(3) New technologies: Electron microscopy**

UTokyo coordinator: Prof. **Naoya Shibata** (ENG)

Stockholm coordinator: Prof. **Xiaodong Zou** (SU), Prof. **Jonas Weissenrieder** (KTH)

### **(4) Sustainable materials**

UTokyo coordinator: Prof. **Akira Isogai** (AG)

Stockholm coordinator: Prof. **Lennart Bergstrom** (SU), and Prof. **Lars Wågberg** (KTH)

### **(5) Ageing societies: Sustainability and resilience challenges in the urban century**

UTokyo coordinator: Prof. **Kensuke Fukushi** (IR3S)

Stockholm coordinator: Prof. **Thomas Elmqvist** (SU)

### **(6) New technologies: Multiscale computation**

UTokyo coordinator: Prof. **Junichiro Shiomi** (ENG)

Stockholm coordinator: Prof. **Erik Lindahl** (KTH, SU)

### **(7) Nano-biomaterials**

UTokyo coordinator: Prof. **Yuji Teramura** (ENG)

Stockholm coordinator: Prof. **Agneta Richter-Dahlfors** (KI)

### **(8) Arctic**

UTokyo coordinator: Prof. **Hideaki Murayama** (Frontier)

Stockholm: Prof. **Magnus Burman** (KTH)

### **16:00-17:00 Gather and summarize, The Yayoi-Ichijyo Hall**

Prof. **Shu Takagi** (ENG)

### **18:00 Dinner with the satellite group (Optional)**