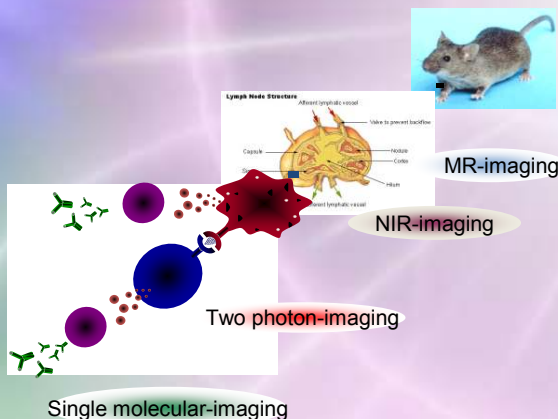


International Symposium organized by **JST** & **IFReC**  
**“Frontier Immuno-Imaging”**

**Date:** May 11<sup>th</sup>, 2009

**Venue:** Seminar room, 3<sup>rd</sup> fl. of Nano-biology building,  
 Graduate School of Frontier Bioscience, Osaka University.

- **NK cell tolerance** in normal and autoimmune conditions.
- **Proton transport** across biological membranes: the protonation kinetics of fluorescent pH-sensitive probe.



- ◆ **Single molecular imaging** by using a total internal reflection fluorescent microscope.
- ◆ **Non-invasive *in vivo* visualization** of immune system in small animals and human by **MRI**.
- ◆ **Development of various quantum dots** that are non-toxic and biocompatible, Multimodal near infrared for bio-imaging.

Time	Speaker	Title
10:00 - 10:10	Yutaka Komai (IFReC)	Opening Remarks
10:10 - 10:40	Masaru Ishii (IFReC)	“Dynamic visualization of osteoclast precursor migration in live bones using intravital two-photon microscopy”
10:40 - 11:10	Masataka Kinjo (Hokkaido Univ.)	“Membrane-binding proteins analyzed by multipoint total internal reflection fluorescence correlation spectroscopy”
11:10 - 11:40	Jerker Widengren (KTH, Sweden)	“Ultrasensitive fluorescence spectroscopy for fundamental biomolecular studies and towards clinical diagnostics”
11:40 - 14:10		Lunch & Break
14:10 - 14:40	Masahito Morita (IFReC)	“MRI and MRS for visualization of immune responses”
14:40 - 15:00	Dhermendra K. Tiwari (IFReC)	“Synthesis of Herceptin conjugated quantum dots and application for breast cancer imaging”
15:00 - 15:30	Fumihiko Fujii (IFReC)	“Development of highly-fluorescent compact quantum dots from visible to near-infrared region for immune imaging”
15:30 - 15:50		Break
15:50 - 16:20	Petter Höglund (Karolinska Institutet, Sweden)	“Probing natural killer receptor biology using FCS”
16:20 - 16:50	Kohsuke Gonda (Tohoku Univ.)	“In vivo imaging of cancer metastasis with quantum dots”
16:50 - 17:20	Tomonobu Watanabe (IFReC)	“Dynamics of Filopodia protrusion marked by GFP-miosinX”
17:20 - 17:30	Toshio Yanagida (IFReC)	Closing Remarks

**Secretariat:** S. Hayashi (shayashi2138@ams.odn.ne.jp)



戦略的国際科学技術協力推進事業  
 Strategic Japanese-Swedish Cooperative Program on “Multidisciplinary BIO”

