

# Cell Biological Science WORKSHOP

(FCCS/FCS WORKSHOP)

HOKKAIDO SUMMER INSTITUTE 2022

Sapporo, JAPAN

HOKKAIDO  
SUMMER  
INSTITUTE

Life science special lecture II (G020, G021)  
生命科学特別講義 III (2022年8月29(月)~9月3日(土))

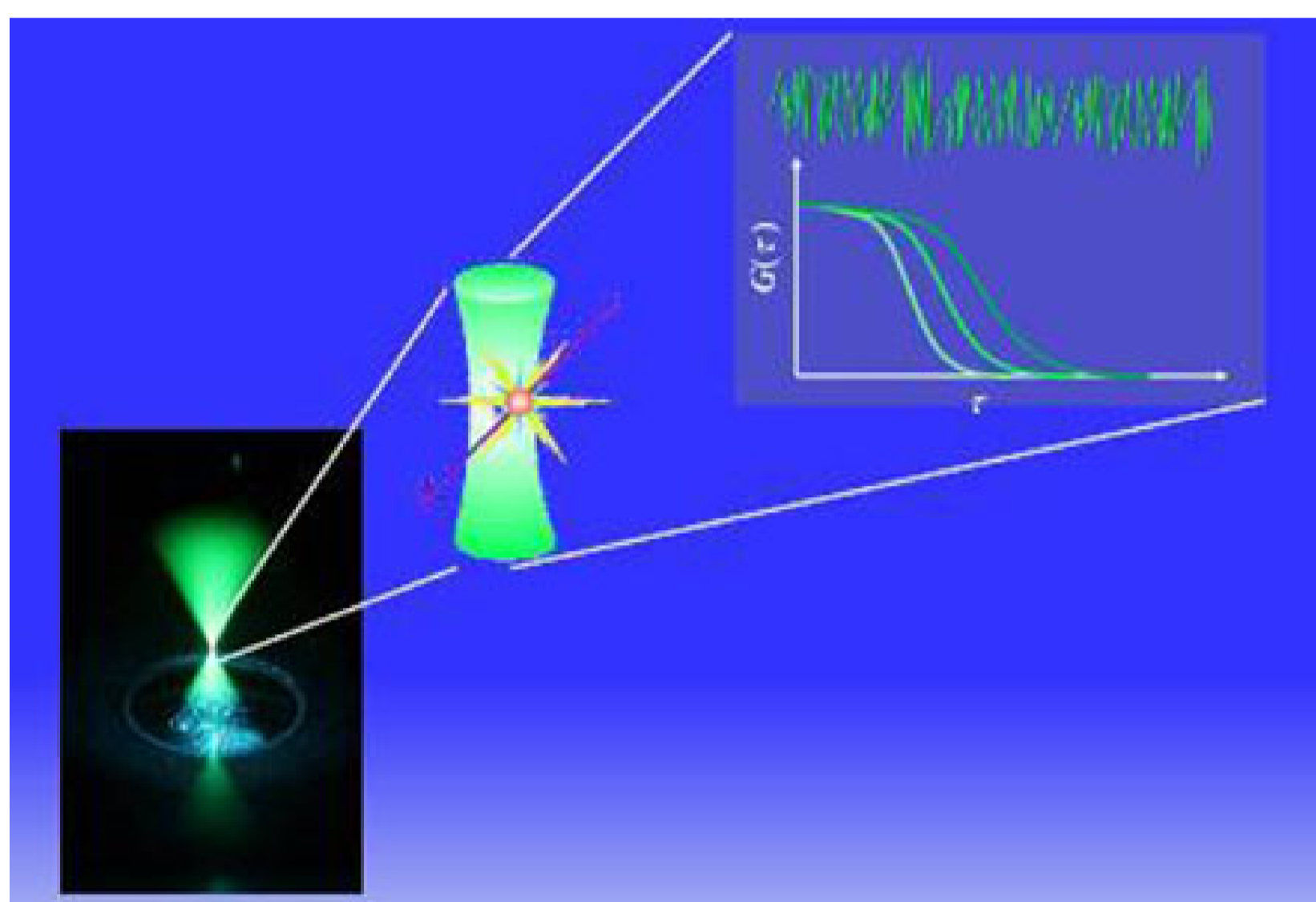
## (1) Advanced Fluorescence Microscopy in Life Science Research (先端的光学顕微鏡による生命科学研究)

This course is on advanced fluorescence microscopy imaging and spectroscopy techniques for quantitative study of molecular transport and interactions in live cells by using Fluorescence Correlation Spectroscopy and Fluorescence Cross Correlation Spectroscopy.

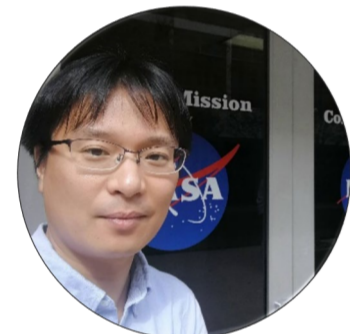
## (2) Practical bioimaging workshop for life sciences

(生命科学分野の実践的バイオイメージングワークショップ)

The course is on mainly laboratory sessions, discussion sessions and a project work for understanding basic and advance techniques of FCS and FCCS. Participants are encouraged to have lecture session of advanced microscopy course.



### Lecturers



**Akira Kitamura**

Hokkaido University, Graduate School of Life Science



**Vladana Vukojevic**

Karolinska Institutet

**Thorsten Wohland**

National University of Singapore

**Sho Oasa**

Karolinska Institutet

**Johtaro Yamamoto**

Hokkaido University, Graduate School of Life Science

**Masataka Kinjo**

Hokkaido University, Graduate School of Life Science

**Tokuko Haraguchi**

Osaka University, Graduate School of Frontier Biosciences

**Yasushi Hiraoka**

Osaka University, Graduate School of Frontier Biosciences

**Yasuhiro Hirano**

Osaka University, Graduate School of Frontier Biosciences

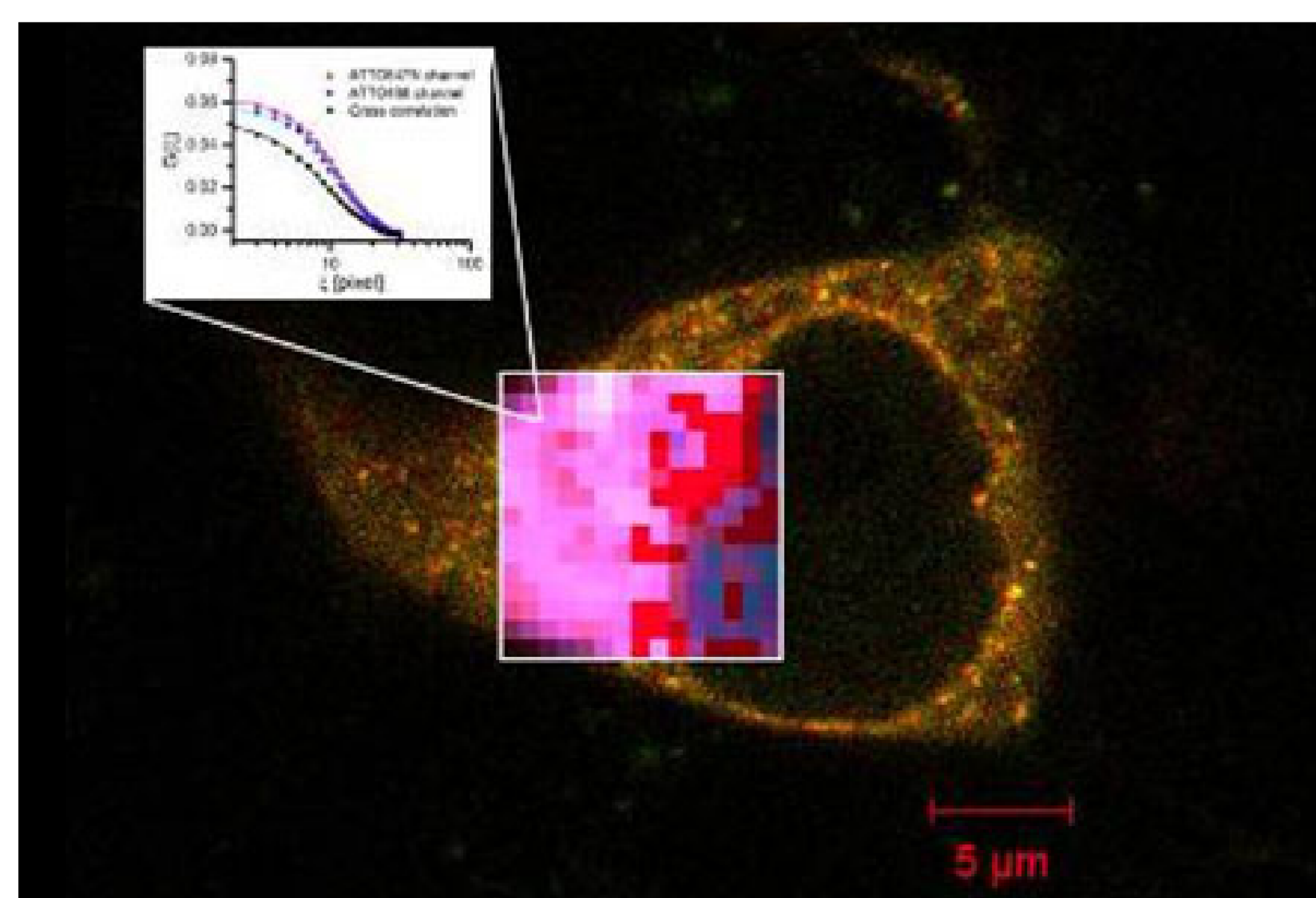
**Ikuo Wada**

Fukushima Medical University

Integrated Materials and Life Science (G019)  
統合物質生命科学特論 (2022年9月1(金)~3日(土))

## (3) Imaging Live-Cell Dynamics I and II (細胞分子動態科学 I, II)

This course is on advanced Fluorescence Correlation Spectroscopy and Fluorescence Cross Correlation Spectroscopy to analyze the dynamic property from live cell imaging. Main techniques are RICS, ICS and 2D imaging.



### Lecturers

**Akira Kitamura**

Hokkaido University, Graduate School of Life Science

**Vladana Vukojevic**

Karolinska Institutet



**Thorsten Wohland**

National University of Singapore

HSI HP

<https://hokkaidosummerinstitute.oia.hokudai.ac.jp/>

# Cell Biological Science WORKSHOP

(FCCS/FCS WORKSHOP)

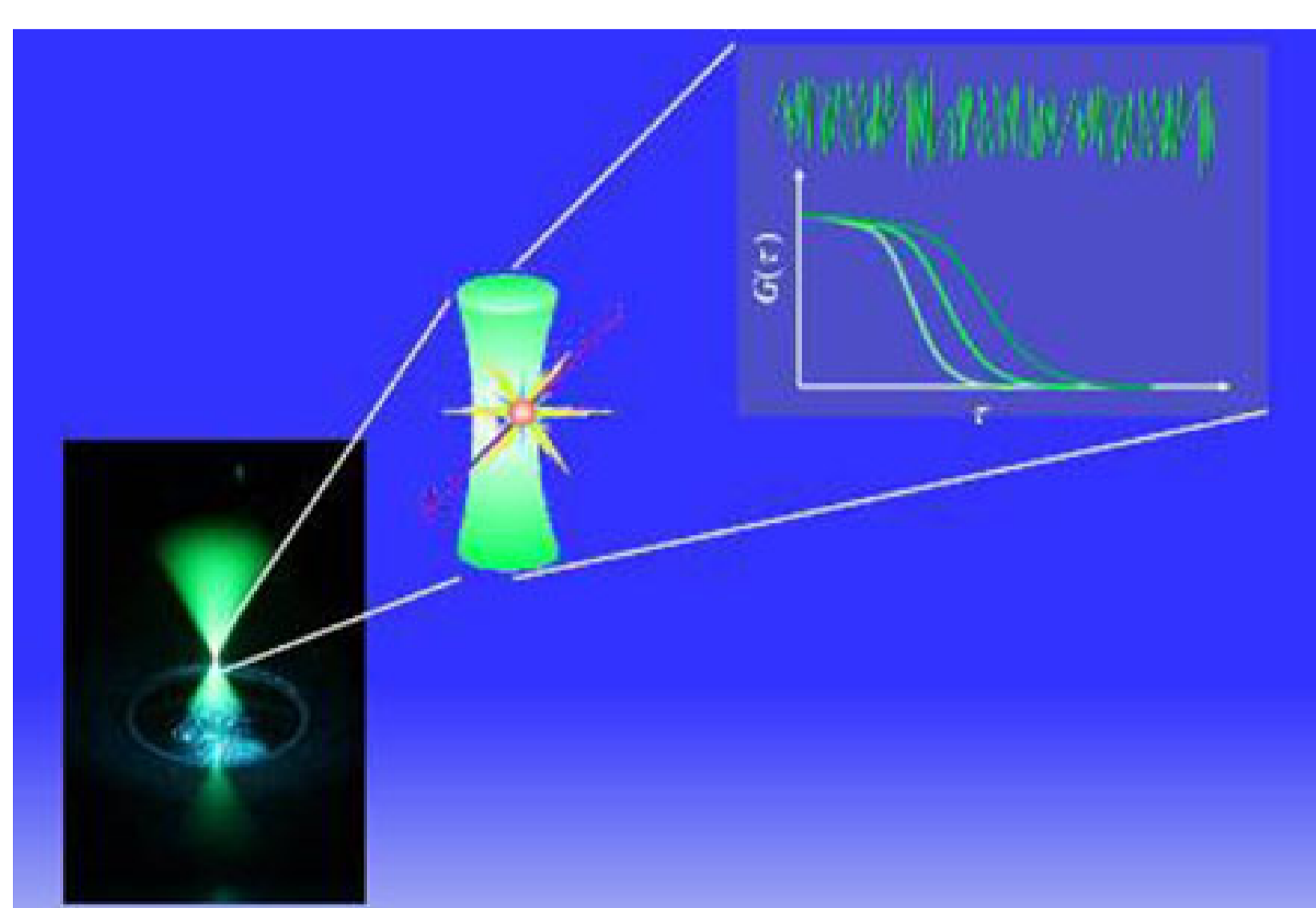
HOKKAIDO SUMMER INSTITUTE 2022

Sapporo, JAPAN

HOKKAIDO  
SUMMER  
INSTITUTE

Life science special lecture II (G020, G021)

29/Aug/2022 – 3/Sep/2019



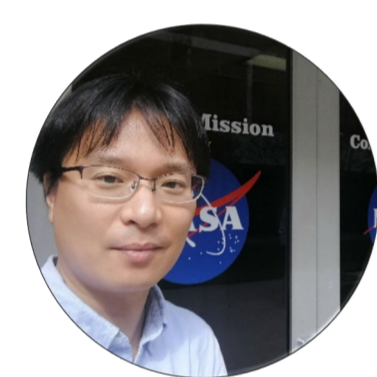
## (1) Advanced Fluorescence Microscopy in Life Science Research

This course is on advanced fluorescence microscopy imaging and spectroscopy techniques for quantitative study of molecular transport and interactions in live cells by using Fluorescence Correlation Spectroscopy and Fluorescence Cross Correlation Spectroscopy.

## (2) Practical bioimaging workshop for life sciences

The course is on mainly laboratory sessions, discussion sessions and a project work for understanding basic and advance techniques of FCS and FCCS. Participants are encouraged to have lecture session of advanced microscopy course.

### Lecturers



**Akira Kitamura**

Hokkaido University, Graduate School of Life Science



**Vladana Vukojevic**

Karolinska Institutet

**Thorsten Wohland**

National University of Singapore

**Sho Oasa**

Karolinska Institutet

**Johtaro Yamamoto**

Hokkaido University, Graduate School of Life Science

**Masataka Kinjo**

Hokkaido University, Graduate School of Life Science

**Tokuko Haraguchi**

Osaka University, Graduate School of Frontier Biosciences

**Yasushi Hiraoka**

Osaka University, Graduate School of Frontier Biosciences

**Yasuhiro Hirano**

Osaka University, Graduate School of Frontier Biosciences

**Ikuo Wada**

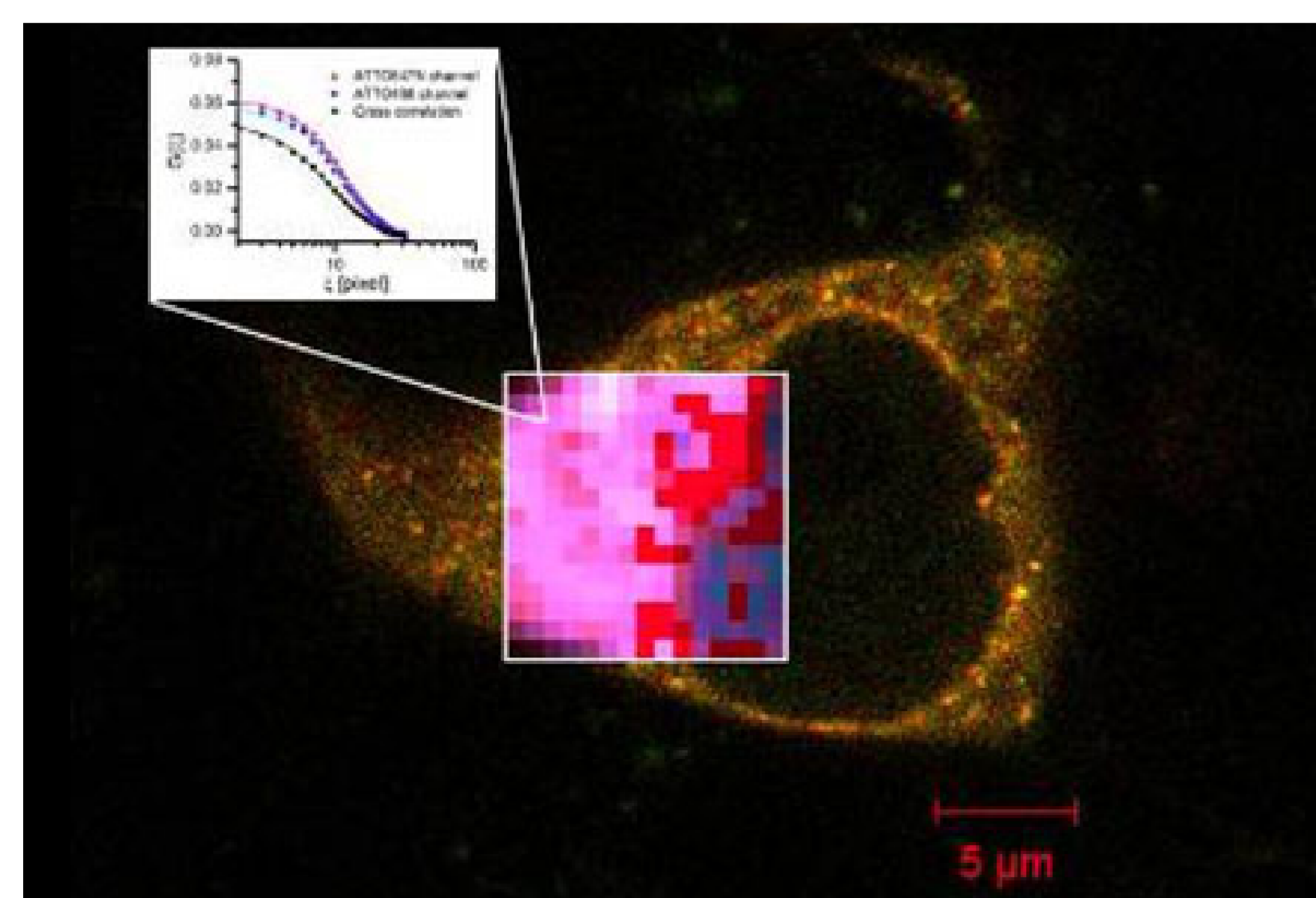
Fukushima Medical University

Integrated Materials and Life Science (G111)

1/Sep/2022– 3/Sep/2022

## (3) Imaging Live-Cell Dynamics I and II

This course is on advanced Fluorescence Correlation Spectroscopy and Fluorescence Cross Correlation Spectroscopy to analyze the dynamic property from live cell imaging. Main techniques are RICS, ICS and 2D imaging.



### Lecturers



**Akira Kitamura**

Hokkaido University, Graduate School of Life Science

**Vladana Vukojevic**

Karolinska Institutet

**Thorsten Wohland**

National University of Singapore

HSI HP

<https://hokkaidosummerinstitute.oia.hokudai.ac.jp/>