

*Research in Nagoya & Freiburg*

Joint Lecture

# Innovative Cancer Therapies

**Asst. Prof. Kazuhide SATO**

Nagoya University, Japan

**Dr. med. Simon SPOHN**

University of Freiburg, Germany

On the occasion of celebrating 10 years since the establishment of Nagoya University European Center (NUEC) at the University of Freiburg, a joint lecture will be held, highlighting innovative research projects at both universities in the field of cancer therapy.

The webinar, co-organized by NUEC and the International Office of the University of Freiburg, will feature two guest lectures by Assistant Professor *Dr. Kazuhide Sato* of the Institute for Advanced Research at Nagoya University and *Dr. Simon Spohn* of the Department of Radiation Oncology in the Medical Center at the University of Freiburg. Dr. Sato and Dr. Spohn are both working on novel and highly promising therapies for lung and prostate cancer, respectively. The event will close with a joint discussion on the societal impact of cancer and differences in medical approaches between Japan and Germany.

**Date:** 16 March 2022  
**Time:** 10:00 – 12:00 CET  
18:00 – 20:00 JST  
**Venue:** online via Zoom

Nagoya University European Center (NUEC) organizes this joint lecture. The host is NUEC academic specialist Dr. Roland Berkemeier, in cooperation with the International Office of the University of Freiburg, Nagoya University Institute for Advanced Research and the Japan Academic Network in Europe (JANET).



Register and pre-submit your questions here:  
[nagoya-u.eu/event-news/upcoming-events](https://nagoya-u.eu/event-news/upcoming-events)

NAGOYA UNIVERSITY  
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## Development of a new cancer modality: Shining “light” on cancers will be a “light” of hope for cancer patients

Near-infrared photoimmunotherapy (NIR-PIT) is an emerging cancer modality, where a photoabsorber (IR700) is bound to an antibody, and near-infrared-light irradiation specifically destroys the targeted cancer cells. An international phase III clinical trial (LUZERA-301) is now being conducted. In September 2020, with the good result of the phase IIa clinical study, the Japanese agency PMDA conditionally approved NIR-PIT for recurrent untreatable head and neck squamous cell cancer (HNSCC), ahead of the rest of the world.

We have revealed that NIR-PIT is a new concept of “photo-necrosis” cell death. This new concept makes NIR-PIT as a new cancer modality different from others. Moreover, we have investigated NIR-PIT to develop new applications, devices and therapeutic concepts.

We hope that NIR-PIT will be a “light” for cancer patients in the near future.



**Asst. Prof.  
Kazuhide Sato**

Dr. Sato is a clinician scientist affiliated with Nagoya University’s Institute for Advanced Research (IAR) and the Dept. of Respiratory Medicine at Nagoya University Hospital.

A Designated Assistant Professor in the Young Leaders Cultivation (YLC) Program, Dr. Sato holds numerous research and innovation awards; his research interests include respiratory medicine, oncology and in particular lung cancer.

More information on:

[profs.provost.nagoya-u.ac.jp/html/100009795\\_en](https://profs.provost.nagoya-u.ac.jp/html/100009795_en)

## Towards personalized medicine in radiotherapy of prostate cancer

Prostate cancer is the most commonly diagnosed malignancy in men and Radiotherapy is a main curative treatment option.

Advances in diagnostics and treatment delivery over the past decade have strongly influenced personalized treatment approaches. The Freiburg Prostate Cancer group of the Department of Radiation Oncology focuses on the implementation of molecular imaging such as prostate-specific membrane antigen positron emission tomography (PSMA-PET) into radiotherapy practice.

In addition to thus improve treatment outcomes, translational research activities include identification of predictive biomarkers to improve risk stratification and guide a personalized, shared-decision making process to find optimal treatments for prostate cancer patients.



**Dr. med.  
Simon Spohn**

Dr. Spohn is a clinician scientist in the renowned Berta-Ottenstein-Program of the medical faculty of the University of Freiburg and a member of the prostate cancer research group in the Dept. of Radiation Oncology at the University Medical Center.

His research activities include the analysis of radiomic features targeting the prostate-specific membrane antigen (PSMA-PET/CT), finding novel biomarkers for outcome prediction of recurrent and primary prostate cancer patients, and implementation of digital health apps.

More information on:

[uniklinik-freiburg.de/strahlenklinik-en](https://uniklinik-freiburg.de/strahlenklinik-en)