

The ETH Zurich as one of the world's leading universities for technology and natural sciences offers a unique postgraduate program in Radiopharmacy.

This comprehensive training enables natural scientists to assume responsibility for both the production and quality control of radiopharmaceuticals.

## Partners

The program is held in cooperation with the universities of Ljubljana (Slovenia) and Leipzig (Germany) and provides essential knowledge in the following fields:

- radiopharmaceutical chemistry
- drug legislation
- quality control
- pharmaceutical technology
- pharmacology
- nuclear medicine

Graduates will achieve the ETH degree "Certificate of Advanced Studies in Radiopharmaceutical Chemistry/ Radiopharmacy" which is recognised by the European Association of Nuclear Medicine (EANM).



# CAS RADIOPHARMACY

Radiopharmaceutical Chemistry

**European Training Program 2013/2014**  
Recognised by European Association of  
Nuclear Medicine (EANM)

### Contact and application

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Institute of Pharmaceutical Sciences  
Postgraduate Studies

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Program recognised by

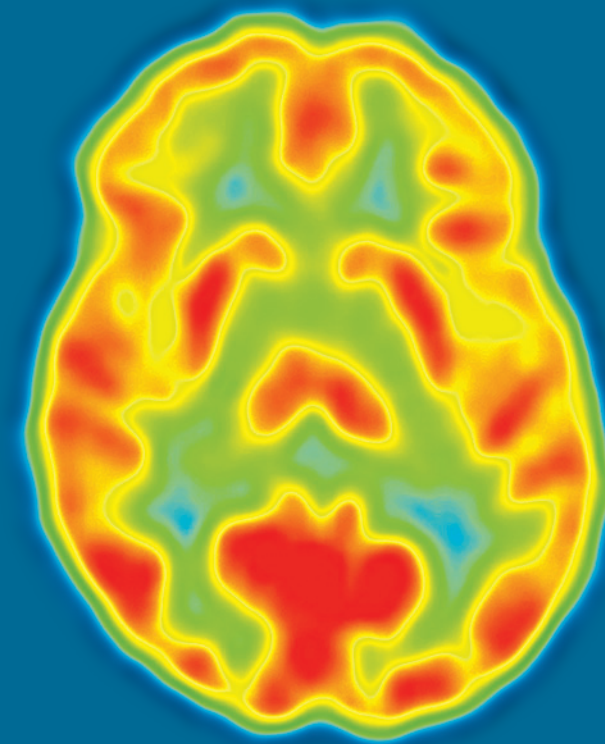


Univerza v Ljubljani



In cooperation with

UNIVERSITÄT LEIPZIG



**ETH**

Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

## Who should attend

Chemists, pharmacists and other natural scientists involved in the production, quality control and R&D of radiopharmaceuticals

## What to expect

The program provides participants with the fundamental pharmaceutical and radiochemical state of the art knowledge to assume responsibility in production and quality control of radiopharmaceuticals. The course contents follow the guidelines of the European Association of Nuclear Medicine EANM and the courses are held in English.



Dr. Barbara Szot Marczewski  
Postdoctoral fellow researcher  
Albert Einstein Jewish Hospital  
Sao Paulo, Brasil

**“It’s great to see that this course was more than the usual concepts, and indeed led me into many learning and practical experiences. The course presented a respected team of teachers able to create an extremely energetic environment. I would like to thank for all information that I could transfer to my current research here in Brazil. It exceeded my expectations and was a very enlightening, well conducted and well managed course.”**

## Module I

26.8.2013-6.9.2013

Drug Legislation, Quality Control, Pharmaceutical Technology  
University of Ljubljana, Slovenia

- plant visit to pharmaceutical company (sterile production)
- visit to hospital pharmacy
- workshop on pharmacopeia and SOP

## Module II

27.1.2014-7.2.2014

Radiopharmaceutical Chemistry  
ETH Zurich, Switzerland

- practical sessions in Tc generators and kits
- <sup>18</sup>F – and <sup>11</sup>C-radiolabelling
- radiolabelling of antibodies
- characterization of radiopharmaceuticals

## Module III

September 2014

Pharmacology, Nuclear Medicine, Statistical Quality Control  
University of Leipzig, Germany

- visit to commercial precursor manufacturer
- practical sessions in drug development and genetic engineering
- workshop in statistics



Dr. Tom C. H. Adamsen  
Chief Radiochemist  
Haukeland University Hospital  
Bergen, Norway

**“The postgraduate course gave me as a chemist valuable knowledge in the pharmaceutical aspects of my field. In addition it expanded my professional network.”**

## Admission requirements

University MSc in natural sciences or pharmaceutical sciences

## Certificate

A Certificate of Advanced Studies (CAS) is issued by the ETH Zurich to candidates on successful completion of all three modules and their respective written exams. Furthermore, candidates have to prove two years of working experience in a related field and the attendance of a nationally recognised radiation protection course.

## Costs

CHF 2500.- per module

Including:

- tuition and practical sessions
- plant visits, course documents
- lunch and refreshments

