Bioactivity Screening
11 June 2016, 10:00 - 16:00
VU University, de Boelelaan 1083, Amsterdam

Content

During this one day course the potential of modern analytical and biological screening techniques used in bioactivity screening of proteins will be discussed. The emphasis will be on finding bioactive proteins in complex biological samples by LC-MS in combination with post-column bioassays. Protein identification strategies using bottom-up proteomics approaches will also be shortly briefly discussed too. Snake venoms will be discussed as one possible source of biopharmaceuticals.

Target audience

The course is taught in the framework of the MSc+ program for talents in Master education (University). Therefore, the course is well fit for employees at that level.

Topics

Sample-treatment and advanced sample-preparation techniques will play an important part in this course, as will LC-MS and bioassays. Database searches on the proteomics data obtained will be discussed.

Participants will perform practical work with snake venoms, which will be nano-fractionated and analyzed with mass spectrometry for identification. Separated toxins will be directed to high-density microtiter plates for a selected bioassay using the nano-fractionation approach.

Lecturers

Dr. Jeroen Kool
Assistant professor in BioMolecular Analysis.

Jeroen Kool received his PhD in Molecular Toxicology from the VU University (Amsterdam). His research focused on the integration of chemical (e.g. mass spectrometric, MS) detection with biochemical detection after separation methodologies. Following his doctorate he joined Kiadis Pharma, where he was responsible for target evaluation, hit screening and identification, and lead optimization processes. His work mainly involved high-resolution screening technologies in combination with MS identification and the mammalian cellular-screening portfolio. Jeroen Kool continued his academic career as a postdoctoral fellow in the Biomolecular Mass Spectrometry group at Utrecht University. There he worked on proteomics (biomarker discovery) focusing on complex regional-pain syndrome. In 2007, Jeroen Kool was appointed assistant professor at the Division of Biomolecular Analysis at the VU University, where he is responsible for the research line Bioactivity-Screening Methodologies.
At the end of the course

You will have an idea on how to find biologically active proteins in complex mixtures (such as snake venom) and know how to identify these proteins by their (partial) amino-acid sequence.

Course duration and time investment

Course duration: 1 day from 10:00 till 16:00
Company time: 0 hours (as this course is on a Saturday)
Participant’s investment: 1 day + optional self-study

Extra Information

This course is part of the Saturday’s program of MSc+ and is taught every two years.

Course fees:
• €800 (ex. BTW/VAT) per day
• COAST members pay a reduced fee of €400 per day (ex. BTW/VAT) or use a wildcard
• ASTP / MSc+ students: Free

Special fees can be offered to PhD students and companies registering for three or more persons.

For up-to-date information about the course program visit our website at www.ti-coast.com/L3.

Please contact us for more information.

Registration

To register fill out, sign and email the form attached to lifelonglearning@ti-coast.com.
Registration Form

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Name
Organization
Address

Billing address
(if different from above)

Educational background
Email address
Phone number

Payment

☐ I will pay the full course fee of €800 per day (ex. BTW/VAT)
☐ I qualify for 50% discount, because my employer is a COAST participant, and will pay €400 per day (ex. BTW/VAT)
☐ I am a PhD student and will pay €400 per day (ex. BTW/VAT)
☐ I am a PhD student from a group participating in COAST and will pay €200 (ex. BTW/VAT) per day
☐ I have received a wildcard from: ........................................ Therefore, I will follow this course for free (note: this person must receive a copy of your registration mail, to indicate approval)

Date:    Place:    Signature:

To register, please email the duly signed registration form to lifelonglearning@ti-coast.com