

# Course: Bioinformatics for Proteomics

Proteomics Unit at the University of Bergen, Norway

April 21<sup>st</sup> – 24<sup>th</sup> 2015

We are thrilled to invite you to our "Bioinformatics for Proteomics"-course to be held in beautiful Bergen April 21<sup>st</sup> – 24<sup>th</sup> at the Proteomics Unit at the University of Bergen (PROBE). For more information about the location and the course please visit: [www.probe.uib.no](http://www.probe.uib.no).

The course will include lectures and practicals on open access software for the analysis of mass spectrometry generated proteomics data. Among the tools covering both protein identification and quantification are: SearchGUI, PeptideShaker, MaxQuant, Perseus and Skyline.

**Topics Covered:** *Why is the experimental design important? What is a protein database? How to convert raw mass spectrometry data to the required formats? What is a proteomics search engine and how do they work? What is protein inference and why is it important? How to interpret and validate proteomics results? What is functional analysis of proteomics data? How to share and reprocess proteomics data? How to quantify proteins?*

**Invited Talk:** *"Introduction to mass spectrometry based proteomics"*

by Prof. Lennart Martens, Ghent University and VIB, Ghent, Belgium.

**Invited Talk:** *"Analysis of large proteomics datasets: pitfalls, challenges and solutions"*

by Prof. Juergen Cox, Max Planck Institute of Biochemistry, Munich, Germany.



Photo: Bergen Tourist Board - Willy Haraldsen



Photo: Department of Biomedicine, UoB

**Registration:** Applications should include a short CV with information about the applicants background in proteomics and why they would like to attend the course. The participants have to arrange their own travelling and accommodation, and should bring their own PC (not Mac) to the course with the relevant software pre-installed. A list of software and links for downloading will be provided to the participants before the course. Course fee: NOK 5000, including all lunches and the course dinner. Maximum number of participants: 20. Applications should be sent to [frode.berven@biomed.uib.no](mailto:frode.berven@biomed.uib.no) no later than March 1<sup>st</sup> 2015.