



UNIVERSITY OF
COPENHAGEN



PhD Summer Course (5 ECTS points):

RNA - from sequencing and computational analysis to RNA drugs

When: August 20-24, 2012

Where: University of Copenhagen, Department of Biology, Section for Bioinformatics

Instructors: Anders Krogh, Jeppe Vinther, Jacob Skou Pedersen, Morten Lindow, Albin Sandelin, Jan Gorodkin, Chris Workman, Jakob H Havgaard, Stefan Seemann and several other international lecturers

Course objectives: This course provides a one-week hands-on introduction to the analysis of sequencing data, RNA structure prediction, and microRNA target analysis.

Major topics covered: parallel sequencing technologies, microRNA Biology and -targeting, protein-RNA interactions, RNA structure and antisense oligonucleotide drugs.

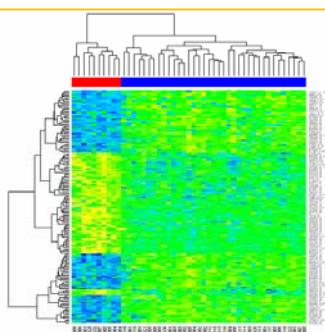
Requirements: PhD students and postdocs in molecular biology research with an interest to learn about bioinformatics, should apply. All hands-on exercises are designed to give researchers without prior programming experience or bioinformatics training, to do fairly advanced analysis of the different kinds of data using existing and freely available online tools.

Course format: The topics will be introduced in lectures and mixed with presentations of frontline research.

Importantly, the course program includes hands-on computational exercises that will provide the skills and tools necessary for the participants to analyse sequencing data, including RNA-seq, PAR-CLIP-seq, CAGE and small RNA sequencing, plus do RNA Bioinformatics including RNA structure prediction and microRNA target analysis. The course will finish by a symposium entitled 'The Transcriptome' with on-topic presentations from distinguished international lecturers.

Programme: The final course programme will be announced [here](#)

Evaluation: Participants who have participated actively in all parts of the course and completed all exercises satisfactorily will be awarded a certificate of completion at the end of the course. The work load corresponds to 5 ECTS points. Note that this workload includes one week of preparation (1-2 articles/notes for each lecture, that should be read in advance).



Course fee: 3000 DKK that includes lunch and refreshments during the course and a social dinner on day 2 of the course. The course is free for PhD students at Danish Universities.

To sign up: fill in this [form](#) and send it to hhu@bio.ku.dk. Your final registration depends on availability of seats.

This summer PhD course is sponsored by Centre for Computational and Applied Transcriptomics (COAT) and by Center for non-coding RNA in technology and health (RTH). COAT and RTH are international research centres that were realised in 2010-2011 by 5-year 30-35 mDKK grants from the Danish Strategic Research Council.