



Reins hjørne

Dear all MBIsers,

In the February meeting of Instituttrådet, the plan for establishment of the new research programs was endorsed. Hence I'm very pleased to announce that our department now has two new research programs; *Signalling and metabolism* and *Long-range gene regulation in the nucleus*, to be lead by Mathias Ziegler and Aurélia Lewis, respectively. So now, the programs can start their activities, with professors and PIs, technical staff, post.docs, PhD- and master students. This is a major milestone for the department and I'm very much looking forward to seeing how the programs will thrive and develop as we can now start invest in the program structure. At this point, I would like to point out that the programs will develop new research activities built and based on our competence areas: *protein structure and function*, *signalling and regulation*, and *computational biology*. We shall of course continue to develop these competences in the time to come.

Read more about the programs inside this issue of MBInytt.



Molecule of the month

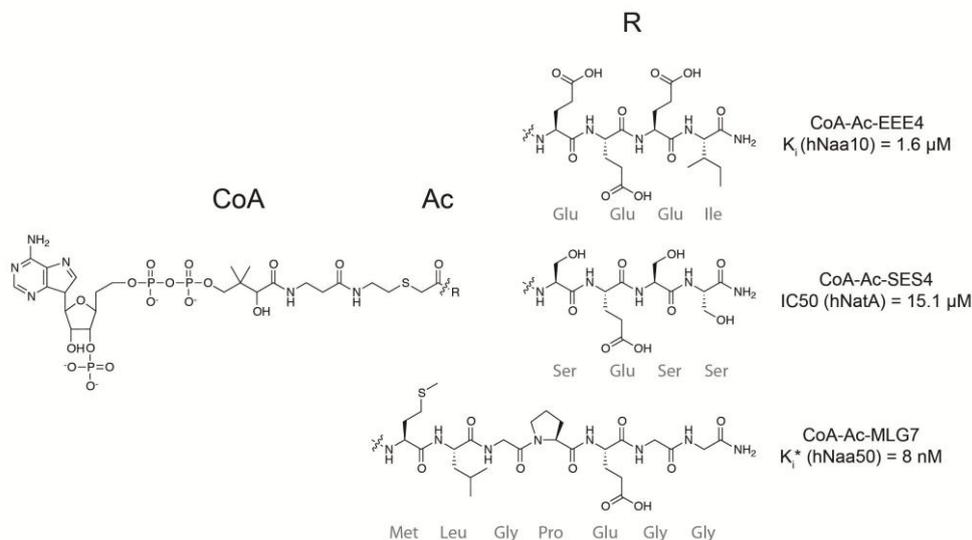
Bisubstrate analogs as inhibitors for NATs



By Håvard Foyen

Over the past years, one of our group's (Arnesen, earlier Lillehaug/Varhaug) goal has been to develop small molecular inhibitors of the N-terminal acetyltransferases (NATs). This is both based on their therapeutic potential as NatA have been shown to be important in cancer growth and survival, but also to enable further *in vivo* interrogation of their function. The inhibitors are synthesized as bisubstrate analogues and are composed of Acetyl-coenzyme A covalently linked to the N-terminus of short peptides that matches each NATs substrate specificity. This enables the inhibitors to potently and selectively target each NAT. The project was initiated by Thomas Arnesen, Johan Lillehaug, Jan Erik Varhaug and Rune Evjenth. A collaboration was established with Paul R. Thompson at the Scripps research institute in Florida who has vast experience in inhibitor development and synthesis. I was therefore fortunate to be able to visit his lab for 8 months last year and was able to synthesize these inhibitors. In addition Rashmi Narawane worked on the project on her master thesis.

The inhibitors have just been published: Foyen H, Jones JE, Lewallen D, Narawane R, Varhaug JE, Thompson PR, Arnesen T. Design, Synthesis, and Kinetic Characterization of Protein N-Terminal Acetyltransferase Inhibitors. [ACS Chem Biol. Apr 4. 2013.](#)



The research program process

Under this heading, MBI-nytt will bring news from the MBI Research Programs. This time, we have invited the program leaders to provide a brief description of the programs goals:

Program: Signalling and Metabolism

This program will investigate the structural, molecular and (patho)physiological aspects of protein modifications and signalling by key metabolites. Many protein modifications are mediated by important metabolites, for examples, acetylation by acetyl CoA, phosphorylation by ATP, and ADP-ribosylation by NAD. Besides regulation of their target proteins, these modifications also directly influence metabolism, as they affect important pools of these molecules. Based on existing expertise, this program will primarily focus on protein acetylation, its subcellular distribution, regulation, functional consequences and medical implications. The use of bioinformatics and molecular modelling tools will also enable studies of structural alterations and facilitate identification of novel target proteins.



Program leader:
 Professor
Mathias Ziegler

Program: Long range gene regulation in the nucleus

Enhancers are regulatory DNA sequences that act at distance and permit the expression of a specific repertoire of genes. Enhancers are thought to interact with promoters, while the intervening DNA is looped out. Little is known, however, about the mechanisms that render an enhancer/promoter pair fully active. The NucReg program aims to explore these mechanism in several ways, including the identification of known and new components in active enhancer/promoter chromatin, including enzymes, cofactors and other biomolecules, such as nuclear phospholipids, that are emerging as key regulators in chromatin and transcription. The program will establish regulated model systems that allows for isolation of enhancer/promoter chromatin. By exploring the mechanisms of enhancer/promoter communication, the program will further our understanding of how cells establish differential gene expression programs.



Program leader:
 Assoc.prof.
Aurélie E. Lewis

Studierelatert informasjon

Molekylærbiologisk dag 2013

14 Marc was Molecular Biology Day, and about 70 pupils from high schools visited MBI. Staff and students of MBI made a tremendous job in making this a big success. As you can see on the pictures to the right, both guests and hosts seemed to enjoy themselves. (Photos by Wenche Telle)

Gjestestudenter

Lab 5 ved henholdsvis Renate Skoge og Christsian Dölle har to gjestestudenter fra Tyskland på besøk, **Marco Frensch** og **Sabina Kanton**. Begge skal være ved laben i 3 måneder. Marco startet like før påske, Sabina kom uken etter påske.

Nathalie Reuter har en gjestestudent fra Frankrike på, **Thibault Tubiana**. Han kom i begynnelsen av mars og skal i første omgang være her i 3 måneder.



NOKUT visit at the University of Bergen

NOKUT: The Norwegian Agency for Quality Assurance in Education - the authority that controls and accredits all higher education in Norway -, has announced that they will come to Bergen this autumn to evaluate **UiB's System for Quality Assurance of our education**[#]. They were here last time in 2006 and then found our system acceptable (after some corrections). NOKUT looks at our **System** for Quality Assurance they evaluate, not the quality of the actual education. Hence, the System is comprised of all the procedures and the processes we have for dealing with quality in the education we provide, consisting of the recurring cycles of planning, implementing, evaluating and reviewing/changing quality measures. It deals with our systems and procedures for recruitment and reception of new students, studies abroad, assessment, the learning environment and evaluation of courses and programs, etc., and involves: academic staff, the program board, administrative staff at the department, faculty and UiB, as well as students.

Most of this will be well known to you, but you may not know that it is part of The System. Now, as NOKUT comes, it is a good opportunity to check out our roles each of us have in the assurance of the quality of the education we provide. Yet, it is not all quite trivial, and a well-known university failed their last evaluation.

[#]A good overview of UiB's System is provided in the [Handbook for Quality Assurance of Higher Education](#) (UiB; 2010, [pdf](#) in english) [Handbok for kvalitetssikring av universitetsstudia](#) (UiB; 2010, [pdf](#) på norsk), and see also UiB's [web pages for Studiekvalitet](#) ([english](#) & [norwegian](#)).

Forskning og forskningsfinansiering

Ny publisasjon

Design, Synthesis, and Kinetic Characterization of Protein N-Terminal Acetyltransferase Inhibitors. Håvard Foyn, Justin E. Jones, Dan Lewallen, Rashmi Narawane, Jan Erik Varhaug, Paul R. Thompson, and Thomas Arnesen, ACS Chem Biol, in press

Two lectures by Nathalie Reuter Thursday April 11th

BFS-fellow Nathalie Reuter will give the following two lectures for professor tenure on Thursday April 11, MBI Seminar Room ("N-terminalen", Bioblokken).

10:00 - 10:45 *Challenges in Modern Drug Discovery (given topic).*

11:00 - 11:45 *Transient and specific binding of proteins to membrane lipids: what computational biology can teach us (chosen topic).*



BFS-Fellow and
Group leader
Nathalie Reuter

Tildelinger fra Meltzers høyskolefond og Bergen universitetsfond

Tre av instituttets stipendiater er tildelt Meltzer-fondets prosjektstipend: **Rhian G. Morgan** 41.000, **Linda Veka Hjørnevik** 20.000 og **Sylvia Varland** 41.000. **Kari Fladmark** og **Christian Dölle** har begge mottatt Meltzer-fondets reisestipend.

Bergen Universitetsfond tildelte 40.000 i støtte til NAT-symposiet til **Thomas Arnesens** forskningsgruppe.

New faces - students



Marco Frensch,
gjestestudent lab 5.



Sabina Kanton,
gjestestudent, lab 5
Foto: Ole Horvli

Information meeting: Scholarships and practicalities for research visits abroad

Time: **17.4.2013** 16.00 - 18.30

Location: The student centre

Contact: [Signe Knappskog](#)

For program and registration, see [this webpage](#)

NFF-stipender for å skrive sakprosa – popularisere naturvitenskap

Vil du skrive sakprosa? Da kan du søke NFFs ekstraordinære stipender, med frist 2. mai. Nytt av året er stipendet til å popularisere naturvitenskap, real- og teknologifag. Du kan også søke stipend til å skrive sakprosa for barn og unge, og vi lyser ut debutant- og innvandrerstipend. Potten er på til sammen 3,7 millioner kroner, og det kan bl.a. søkes stipend til å popularisere naturvitenskap, real- og teknologifag.

Se detaljert informasjon om stipendene, veiledning og retningslinjer på våre nettsider www.nffo.no *Illustrasjon: Ung mann skriver av Joos van Craesbaack*

UiB Global to Award Scholarships for the Development of Project Applications

A new call for applications offers an opportunity to prospective post-doctoral researchers who plan to develop a project within the field of global and development-related studies in the spring of 2013. The **deadline** is 15 April.

Funder finder March 2013

Newsletter from the Division of research administration on research finding opportunities with a special emphasis on EU-funding. Click [here](#) to see the newsletter.

Personallytt

Sergiy Kostenko started as a post doc with Mathias Ziegler, lab 5 March 1st. He has a fellowship for 3-years, ending February 29 2016.

Ferieavvikling 2013/Registration of holidays in 2013

Husk fristen 22. april for registrering av planlagt ferie i PAGA / Remember the deadline April 22 for registering Your holidays (summer holidays) in PAGA

Viser til mer informasjon i e-post sendt dere 2. april/More information in the e-mail sent you April 2 ([lenke til e-post/e-mail](#)).

New faces – employees



Sergiy Kostenko, post doc lab 5 (Ziegler).

Foto: Ole Horvli

Nyheter og generell informasjon

Institutttrådsmøte 15. mars 2013

Saker behandlet i møtet:

Sak 03/13 [Etablering av Forskningsprogram ved MBI](#)

Sak 04/13 [Regnskap 2012](#)

Sak 05/13 [Budsjett 2013 – for bevilgningsfinansiert virksomhet](#)

Sak 06/13 [Utdannings-, forskerutdannings- og forskingsmelding for 2012 MBI](#)

Sak 07/13 [Retningslinjer for professor emeriti ved Molekylærbiologisk institutt](#)

Protokollen fra møtet er lagt ut på institutttrådetts nettside: <http://www.uib.no/mbi/om-instituttet/ledelse-og-organisering/institutttraad>

Horizon-lecture Lawrence M. Krauss - A universe from nothing

Professor and international bestselling author of "A universe from nothing - Why is there something rather than nothing?"

[Horizon lecture](#) in **Egget, 3pm, April 10th**



Write to Change the World - OpEd-workshop for women on writing opinion editorials in Bergen May 6th & 7th, 2013

The Geophysical Institute is, in collaboration with the Earth Science Women's network (ESWN), organizing an OpEd course on writing opinion editorials, specifically targeted at women May 6th & 7th, 2013. The goal of this workshop at the University of Bergen is to promote female scientists within the scientific community, on an individual basis, and within the global community of public discourse.

Please find more information:

<http://eswnonline.org/op-ed-workshop/>

If you have questions, contact:

mirjam.glessmer@gfi.uib.no or rose.kontak@brown.edu

Rektorvalget – valgdebatt



Minner om [valgdebatt for rektorkandidatene](#) i morgen, 10. april, i Egget fra klokken 12.00 til 14.00.

Frank Aarebrot vil lede debatten.

Vel møtt!

Vennlig hilsen,
Marianne Seim
Sekretær for Det sentrale valgstyret

