



Reins hjørne

Dear all MBLers,

Time is flying and it is nearly summer again. Exams and grant applications are high on the agenda these days, many master students are preparing for their final exams and two of our PhD students will defend their theses later this month. I wish you all the very best.

The next step in implementing the Research Programs is also well in progress and the "Areal group" has just delivered their report. As everyone else, I'm very eager to see what they have come up with. I intend to take time for a quick round of hearing to get additional viewpoints before we make our decisions [read more in this issue].

It is not only in MBI that things are changing. We can now congratulate our Dean, [Dag Rune Olsen](#), who will take over as UiB's Rector in August. I wish him and his team all the best. There is a lot to do. In fact, one of the first things I thought he should do, would be to recruit our new Dean. To our astonishment, however, outgoing Rector Grømo has decided to perform an ultrafast recruitment just in time for the last UiB Board Meeting on June 20th. My fellow department leaders and I and many others have [strongly criticised](#) this hasty process and urged Grømo to leave this task to the new Rector or, at least, involve him properly.

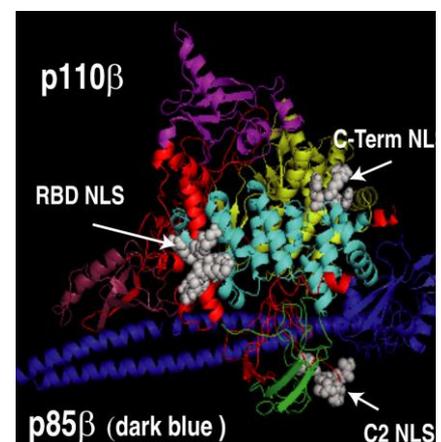
Despite Bergen acting up with a powerfull thundershower Wednesday afternoon, we had a very nice "Blåtur", criss-crossing the city in hunt for sculptures and learning interesting stuff about life in Bergen's distant past. Thanks to the organisers and everyone who participated.



Molecule of the month - p110 β : The nuclear affair of PI3K signaling

by Thomas Karlsson (PhD student in Aurélie Lewis' group)

p110 β ([uniprot:P42338](#)) belongs to the phosphoinositide 3-kinase (PI3K) family which produces the important signaling molecule phosphatidylinositol (3,4,5)-trisphosphate (PIP₃). PIP₃ levels are generally low or undetectable in resting cells, but increase upon stimuli and have been shown to be involved in cell cycle progression, DNA repair, apoptosis and glucose metabolism. In addition to p110 β , the α , δ and γ -isoforms of p110 also produce PIP₃, but only p110 β and p110 α are ubiquitously expressed. Although the α -isoform has been the most studied, the β -isoform has received attention as it is emerging as potential therapeutic target in cancer. While the α -isoform can be rendered oncogenic by mutation of asparagine 345 to lysine, the wild-type β -isoform has a lysine in this position. This may explain why p110 β can contribute to oncogenesis by overexpression, in particular in cells lacking PTEN, an enzyme that reduces PIP₃ levels. Although p110 β contains several candidate nuclear localisation signals, it is unable to translocate to the nucleus without interacting with a regulatory p85 β subunit. Once in the nucleus, p110 β regulates cell viability via DNA replication and repair.



Computational model of the p85 β /p110 β complex, with three potential NLSs indicated by arrows. Site-directed mutations revealed the functional NLS to be located in the C2 domain. This NLS is not found in the α -isoform. (From Kumar et al., Mol. Cell. Biol. 31:2122 (2011))



Thomas Karlsson at the bench

Since I have found elevated levels of nuclear PIP₃ in endometrial cancer cell lines, I'm currently investigating whether this is caused by p110β. This enzyme is also studied by PhD student Rhian Morgan and master student Marianne Goris, who are working with nuclear phosphoinositide signaling during adipocyte differentiation and insulin stimulation.

PhD Defenses

Ganka Dineva

Friday June 14th, Ganka Konstantinova Dineva will defend her PhD-thesis entitled: *Comparative genome and expression studies of Six3/6 genes in zebrafish* Ganka has been a PhD-fellow at MBI. She was supervised by Hee-Chan Seo's group, and co-supervised by Anders Fjose and Jon Vidar Helvik.

The disputation will be held in Stort auditorium, Datablokken at 10:15am. You can read more about her thesis in the [press release](#).



Chiara Sinigaglia

Monday June 17th, Chiara Sinigaglia will defend her PhD-thesis entitled: *The "anterior pole" of Metazoa: insights from the oral-aboral axis and the apical organ of the sea anemone Nematostella vectensis* Chiara has been a PhD-fellow at the Sars international centre for marine molecular biology, and has been supervised by Fabian Rentzsch, and co-supervised by Rein Aasland.

The disputation will be held in Stort auditorium, Datablokken at 10:15am.

Guest lectures

Thursday June 13th (at N-terminalen)

14:15, professor Francesca Pignoni, Department of Biochemistry and Molecular Biology, Upstate Medical University (SUNY), NY (USA): *Stem Cell self-renewal in the Drosophila germline: regulation of Dpp(BMP2/4) signaling by a putative Lipocalin receptor*

15:15, professor Dan Larhammer, Dept of Neuroscience, Unit of Pharmacology, Uppsala University, SWEDEN: *The impact of genome doublings on vertebrate evolution. Focus on visual, neuronal and endocrine gene families.*

Mastergradseksamener

Navn	Hovedrettleiar	Intern sensor	Ekstern sensor	Dato	Kl.
Stuart, Helene	Bjørn-Einar Grøsvik	Rune Male	Ketil Hylland	12.06.	11:00
Holmedal, Marianne Kristvik	Rein Aasland	Øyvind Halskau	Eva Skjøttem	13.06.	11:30
Holte, Christopher Florian	Kari E. Fladmark	Øyvind Halskau	Ingvild Mikkola	18.06.	09:15
Mostafavi, Sepideh	Kari E. Fladmark	Rune Male	Ingvild Mikkola	18.06.	12:00
Datsomor, Alex Kojo	Jørn Sagen	Rune Male	Thomas Sæther	20.06.	12:00
Sandnes, Helene Heitmann	Øyvind Halskau	Dag E. Helland	Tor-Erik Rusten	20.06.	09:15
Solheim, Marie Holm	Lise Bj. Gundersen	Aurelia Lewis	Thomas Sæther	21.06.	12:00
Tolås, Ingvill	Rune Male	Dag E. Helland	Bjørn Einar Grøsvik	25.06.	10:15
Ree, Rasmus Moen	Thomas Arnesen	Aurelia Lewis	Mie Haarr	26.06.	10:15
Goris, Marianne	Aurelia Lewis	TBA	Geir Bjørkøy	27.06.	12:15
Berg, Mari Katrine	Anders Goksøyr	Rune Male	Sonnic Meier	02.07.	11:00

Alle eksamener finn stad i N-terminalen

Nyansatte

Line Merethe Myklebust er tilsatt i ny 2-årig forskerstilling i Thomas Arnesens gruppe fra 1. juli. Stillingen er finansiert av Bergen forskningsstiftelse.



Line M. Myklebust

Research Programs News

The Department has allocated two open PhD positions to the two Research Programs, and they will be advertised very soon.

Report from the Areal group

As the next step in the implementation of the research programs, an "Areal group" was appointed to consider how we could physically organise ourselves better on the 5th floor to the best for the Research Programs and the whole Department.

The group has consisted of Wenche Telle (leader), Vandana Ardawatia, Aurélie Lewis, Renate Hvidsten Skoge, Mathias Ziegler, and Andrea Grimnes (secretary). The group delivered their report on June 6th. After discussion in the department's leader team, Rein has decided to open for a quick round of "hearing" to gather viewpoints and comments before we decide on how to proceed. The Areal Report [in norwegian] can be read [here](#) and deadline for comments to me is Friday June 14th.

New publications

N-Terminal Acetylation by NatC Is Not a General Determinant for Substrate Subcellular Localization in *Saccharomyces cerevisiae*. Aksnes H, Osberg C, Arnesen T. (2013) PLOS ONE 8(4): [e61012](#).

VACCINATION of Atlantic salmon leads to long-lasting higher levels of serum immunoglobulin and possible skewed ratios of two distinct IgM isotypes. Kamil, A. , Fjelldal, P. , Hansen, T. , Raae, A. , Koppang, E. and Hordvik, I. (2013) [Advances in Bioscience and Biotechnology](#), 4, 85-90. doi: 10.4236/abb.2013.44A012.

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

Blåtur June 5th



Kari, Ranveig, Gunhild, Grethe, Bernt, Elisabeth and Arne trying to pull Olav Kyrre down from his horse...



Kneeling seems to be the proper thing to do when visiting a former prime minister



Rhian and Signe got caught by the rain



Puja, Svein, Mirko, Øyvind and Olav (Kyrre)



It can't be denied that this year's Blåtur involved it's fair share of walking...



Last stop at the statue of Shetlands-Larsen. Is there any food and drinks in sight?