

Dear all MBlers

“Publish less, not more”, writes Erik Boye in this week’s *Morgenbladet*. Boye, professor at the Oslo University Hospital (Radiumhospitalet), brings up a contentious issue often discussed amongst scientists and those who govern science policy. The demand is on us to publish a lot in order to compete for jobs and for funding and the Universities are subject to financial incentives to publish more and more. Boye argues that promotion of high quality research requires that one must end this regime and remove the incentives that are based on counting the number of publications. *Morgenbladet* elaborates further on this topic in a four-page article in the same issue. Although Boye’s article has some exaggerations and polemic elements, I do share his point of view. Those of you who serve on our Institutttråd will have heard me explain how our publication records directly impact the department’s budget. But I always add that our duty is to publish as well as we can, not as much as possible.

Rein



Morgenbladet 19.3.2015

See also MBI-Nytt article on the proposed restructuring of norwegian universities and university colleges p 7

Molecule of the Month: EBP1 - a mystery of binding to phosphoinositides

By Olena Dobrovolska



The ErbB3 receptor - binding protein 1 (EBP1, UniProt: Q9UQ80) is involved in regulation of cell growth, proliferation, differentiation and survival, and its malfunction can lead to the development of different human cancers. EBP1 performs its functions on different levels interacting with variety of proteins, DNA and RNA molecules, in both the cytoplasm and the nucleus.

Recent studies in Aurelia Lewis’ lab have discovered EBP1 as a potential nuclear phosphoinositide-binding protein (pmid:21048195). Activities of phosphoinositides (PIs) and their phosphorylated derivatives have been implicated in plethora of cellular signaling pathways. Understanding how EBP1 is influenced by PI signaling in the nucleus is of great interest, because it may link events

in the nucleus to events in the cytoplasm. EBP1 has two Lysine-rich motifs (⁶⁵KKEKEMKK⁷² and ³⁶⁴RKTQKKKKK³⁷³) recognized by PIs as binding sites (mutagenesis and bioinformatics data). However, the specificity and the mechanism of this binding at the molecular level remain unclear. The answers to these questions lay in the structure of the protein. The crystal structure of EBP1 (pdb 2Q8K) represents a typical ‘pita-bread’ fold, composed of two antiparallel beta-sheets, forming hydrophobic cavity, flanked by a pair of alpha-helices on both sides (Figure 1). The position and proximity of this cavity to the ⁶⁵KKEKEMKK⁷² loop region is suggestive of a putative binding pocket, hosting the lipid fatty acid chains while the protein travel from the cytoplasm to the nucleus. Currently, NMR experiments are undertaken to test the possibility that EBP1 utilizes the cavity for the PI transport into the nucleus acting as a PI-carrier.

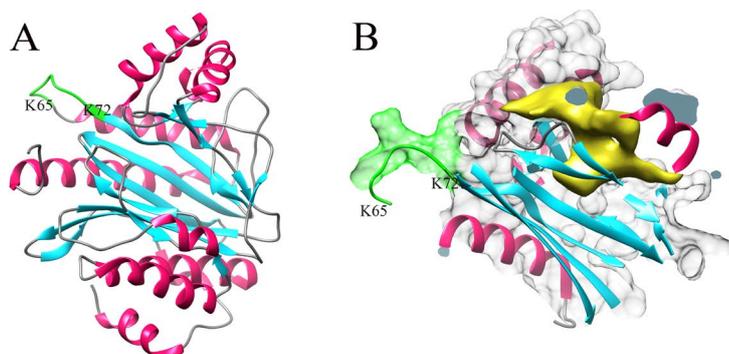


Figure 1. Crystal structure of EBP1 (pdb code: 2Q8K). Secondary structure elements are coloured in pink and cyan, for alpha-helix and beta-sheet, respectively. The PI-binding motif ⁶⁵KKEKEMKK⁷² is coloured in green. **Panel A** – Ribbon representation of the protein, top view. **Panel B** – Side view of the protein featuring a hydrophobic pocket. The volume of the cavity is assessed bioinformatically and marked in yellow.

Research training

New PhDs

We congratulate the following excellent new doctores on the successful defense of their PhD-theses:

Sandhya Premnath Tiwari who defended her thesis 9 February

Diana Cornelia Turcu who defended her thesis 20 February

Svein Isungset Støve who defended his thesis 4 March



Syed Noor Abideen, master student
NucReg (Male)

PhD course on bibliometrics

Dear PhD candidate

In April 2015 the University Library offers PhD candidates at the Faculty of Mathematics and Natural Sciences a series of courses addressing publishing issues, advanced literature searching techniques and information management.

The faculty highly recommends participation! The main part of the program is held on April 14th and will include a free lunch for the participants, so please note that your registration is binding. Sign up and find out more about the Science Library here <http://www.uib.no/ub/86877/phd-track-library-course-phd-students-science-library>



Veronika Livinskaya, guest researcher
ProtMetD (Ziegler)

Forsker Grand Prix

We wish to encourage all young researchers at MBI to consider entering the Forsker Grand Prix. The Forsker Grand Prix is part of Forskningsdagene which takes place every fall initiated by the Norwegian Research Council. There will be an info meeting on Forsker Grand Prix Thursday 9 April (sign up before 7. April), 10am at Kommunikasjonsavdelingen ved UiB, Johannes Bruns gate 12, 6. floor. The deadline for signing up for the Grand Prix event itself is 15 May. [Read more](#) about the meeting and on the event.



Olena Dobrovolska, post doc
NucReg

Research related news

New papers

Aksnes Henriette, Hole Kristine, Arnesen Thomas (2015) Molecular, Cellular, and Physiological Significance of N-Terminal Acetylation. International Review of Cell and Molecular Biology. doi: [0.1016/bs.ircmb.2015.01.001](https://doi.org/10.1016/bs.ircmb.2015.01.001)



Monica Hellesvik, project student
NucReg (Värv/Aasland)

Aksnes Henriette, Van Damme Petra, Goris Marianne, Starheim Kristian, Marie Michael, Støve Svein I, Hoel Camilla, Kalvik Thomas, Hole Kristine, Glomnes Nina, Furnes Clemens, Ljostveit Sonja, Ziegler Mathias, Niere Marc, Gevaert Kris, Arnesen Thomas (2015) An organellar N-alpha acetyltransferase Naa60 acetylates cytosolic N-termini of transmembrane proteins and maintains Golgi integrity. Cell Reports in press
<http://dx.doi.org/10.1016/j.celrep.2015.01.053>

Yang B, Pu M, Khan HM, Friedman L, Reuter N, Roberts MF, Gershenson A. Quantifying Transient Interactions between Bacillus Phosphatidylinositol-Specific Phospholipase-C and Phosphatidylcholine-Rich Vesicles. J Am Chem Soc. 2014 Dec 23. (2015) 137(1):14-17 DOI: [10.1021/ja508631n](https://doi.org/10.1021/ja508631n)

Magali R. VanLinden, Renate Hvidsten Skoge and Mathias Ziegler. Discovery, metabolism and functions of NAD and NADP. The Biochemist 37 (1) 2015, 9-13.

Nick R. Love, Nadine Pollak, Christian Dölle, Marc Niere, Yaoyao Chen, Paola Oliveri, Enrique Amaya, Sandip Patel, and Mathias Ziegler. PNAS 112 (5) 2015, 1386-1391, doi: [10.1073/pnas.1417290112](https://doi.org/10.1073/pnas.1417290112)

Medietrening for forskere

Kommunikasjonsavdelingen inviterer forskere ved UiB til medietrening. Dette kurset passer for forskere som vil formidle mer, og bedre, gjennom media. Kurset består i hovedsak av intervjutrening, men det blir også noe teori. Kurset tar blant annet for seg:

- Hvordan få media interessert i din forskningssak?
- Valg av riktig kanal for din nyhet.
- Hvordan gjennomføre et godt intervju?
- Dine rettigheter når du blir intervjuet.

Dato: 23. april, påmeldingsfrist 8. april

Mer informasjon og påmelding:

<http://www.uib.no/foransatte/87108/medietrening-forskere>

Student and teaching related news

Syv nye studenter er tatt opp på masterprogrammet i vår: Christophe Balin, Tore Andre Brodahl, Anny Gravdal, Lorentze Hope Hornnes, Sofya Romanyuk, Frida Thyri og Elise Moltzau Wanderås. Hjertelig velkommen til dere!

We still lack photos of a few of the new students in the labs: **Marina Blenski** ERASMUS student, **Nikolas Honorat** who is a new master student and **Hugrun Lind Arnardottir** who is a MOL231 project student - all in the NAT-group (Arnesen) - hopefully we will be able to present their happy faces in next issue.



Helene Søliland, project student
NucReg (Lewis)



Lena Elise Weyer, master student,
ProtMetD (Ziegler)



Benjamin Millot, guest student,
ProtMetD/CBU (Reuter).



Ulrich Moutoussamy, guest student,
ProtMetD/CBU (Reuter)

Karrieredagen for molekylærbiologer 2015:

Heliks, molekylærbiologisk fagutvalg arrangerte mandag 16.februar karrieredagen 2015. Arrangementet ble holdt i det store auditoriet på Vilvite-senteret. Ca 100 studenter møtte opp for å få med seg dagen! 8 personer kom for å presentere sitt arbeid og hverdag som molekylærbiolog i sin bedrift. Blant dei som presenterte var BerGenBio, EWOS Innovation, Norsk Biokjemisk selskap, Klinisk Institutt fra Haukeland, Helse Førde, Phd Student Rasmus Moen Ree fra MBI og Dyreavdelingen ved Haukeland. Programmet varte fra kl.10-14.00 og var delt opp i presentasjoner på 10-15 min, en mindre pause med frukt og kaker og en lengre lunsj med servering av baguetter. Med andre ord var dagen svært vellykket! Ivrige studenter stilte spørsmål og var nysjerrige for hva framtiden som molekylærbiolog kan tilby. Arrangementet har vokst veldig med rundt 100 deltakere de to siste årene. Heliks vil fortsette med å gjøre arrangementet større og bedre og gleder seg allerede til neste års karrieredag!



Noémi Lelievre, project student, ProtMetD (NAT-group/Arnesen)



Fornøyd gjeng etter en vellykka dag!



Mange ivrige studenter i molekylærbiologi møtte opp.



Siri Øfsthus Goksøyr, master student ProtMetD (NAT-group/Arnesen)

New in the job

Dr. Adrian Drazic from the Technische Universität München (TUM) has received a fellowship from the German Research Council DFG) to work as a post doc with protein N-terminal acetylation in the NAT-group. Adrian started his 2-year position at MBI in February.

Ph.D. Svein I. Støve is employed for 3 years as an engineer financed by the Norwegian Cancer Society. He will be affiliated with the NAT group, and will be working with NAT inhibitors.

Dr. Olena Dobrovolska is employed as a post doc for 4 years from February 2015 in the NucReg programme, financed by UiB. Olena is a structural biologist with an expertise in NMR spectroscopy. and will be working on several projects including chromatin and phosphoinositide binding proteins.

Diana C. Trucu has been employed in a full permanent position as an engineer (avdelingsingeniør) with the NucReg programme. The start date is not set, but she will start later this spring, possibly in May.

Veronika Livinskaya is post doc from St. Petersburg, working with Andrej Nikiforov former post doc at MBI. She is currently on a 3 month visit in the Molecular Bioenergetics and Signalling group.



Espen Bariås, master student ProtMetD (NAT-group/Arnesen)



Daniel Dondrop, Erasmus student (Cell stress group/Fladmark)

Morten Andreas Govasli Larsen has joined Pål Puntervoll's group as a PhD-fellow to work on the ETEVAC project. His employment is with Uni Research, and he will do his PhD at MBI.

Puja Gupta is engaged for six months from April 13th, in [Eivind Valen's group](#). Eivind Valen is BFS researcher at Department of informatics / CBU and will also have activity here at MBI as guests in NucReg's lab, using zebrafish as a model organism.

Sandhya Tiwari is engaged in a temporary position as researcher in the Molecular modelling of protein dynamics group (Reuter) until the end of September.

Ephrem Debebe Zegeye is engaged as a post doc at Uni Research. He will be working in Pål Puntervoll's group, on the ETEC-project.

Maxim Bril'kov is engaged in a 4 year PhD-fellowship in the Lipidstruct group (Halskau), starting 13 April.

UiB and MBI info

Administrativt utviklingsprosjekt ved MN-fakultetet

Fakultetsstyret behandlet torsdag 26.mars 2015 anbefalingene for videre fremdrift i Administrativt utviklingsprosjekt, og ga klarsignal til iverksetting av de foreslåtte tiltakene. Les mer på [prosjektets hjemmeside](#). Der finner du også sakspapirer og vedtak fra fakultetsstyrets møte.

Webnews

First of all we wish to thank the research programs and individual researchers for contributing to making our webpages at <http://www.uib.no/mbi> interesting. At present there are two scientific stories on our frontpage, one by Henriette and Lill on Henriette and her colleagues' latest paper on NatF and its association with the Golgi-apparatus, and one from Mathias and Lill on a vitamin B3 paper from Mathias' group. There has been several other similar stories circulating on our website this winter, and they really help in making the site come alive and in bringing our science out to the public.

Secondly we wish to encourage everyone to make the most of their personal page (*no: personside*). All employees at UiB have a webpage with personal info. If anyone searches for your name and UiB, this is the page that will pop up first. So it is very important that the information is up to date. As a beginning, we encourage that everyone upload a photo of yourself.

You can find info on the technical stuff here:

<https://w3docs.h.uib.no/redigere-personside#overlay-context=personsider>

If you have questions or need assistance with web issues, Knut Olav Daasvatn or Gunhild Brubakken will be happy to help and assist.



Adrian Drazic, post doc, ProtMetD (NAT-group)



Morten Andreas Govasli Larsen, PhD-fellow, Uni Research/the ETEVAC group



Puja Gupta, CBU/lab2 (Valen)



Sandhya Tiwari, ProtMetD/CBU (Reuter).

Protokoll fra siste instituttrådsmøte

Les [protokollen fra forrige instituttrådsmøte](#) der instituttets budsjett for 2015 fikk sin endelige behandling..

Local Emergency action plan in English

The local Emergency action plan has now been translated to English and is available on our webpage:

<http://www.uib.no/en/mbi/87334/local-emergency-action-plan>



Ephrem Debebe Zegeye, Uni Research, ETEVAC.

Molecular Biology Day 2015

On Thursday 5 March, MBI was visited by 60 pupils from different schools (Fana, St. Paul, Os, Elvebakken (Oslo), Sotra, Voss, Tertnes og Sogndal). During the day they learned about utvikling av nye medisiner, fluorescent rabbits, they could find their own DNA, greet zebrafish and salmon lice. Heliks made waffles which was very popular among the pupils.

The department would like to thank all students and staff who made the day exciting and eventful for both guests and MBI'ers!



UiB Alumnusdag 12. september

Årets Alumnusdag blir 12. september, så sett gjerne av datoen. Dag E. Helland takker av som medlem av Alumnirådet 31. mai etter 3 år. UiB er interesserte i kandidater til det nye Alumnirådet som skal utnevnes i løpet av våren. Ta kontakt med instituttledelsen dersom du kan tenke deg å bidra. Les [informasjon om alumniarbeidet ved UiB](#).



Excellent spirits at the Molecular Biology Day 2015

Smoking at the entrance of University buildings

På bakgrunn av nye bestemmelser i tobakkskadeloven er det nå forbudt å røyke ved inngangspartier til offentlige virksomheter. Universitetet vil derfor gå i gang med å få fjernet askebeger og sette opp skilting om røykeforbud i inngangspartier.

[Read more](#) (Norwegian only):

Due to changes in the national legislation on the adverse health effects of smoking, smoking is now prohibited at the entrance to public buildings. The University will therefore remove ashtrays and put up signs informing about the prohibition.

MBI-Nytt article

Institution fusions: The cat is out of the bag:

In a press conference last Wednesday (March 25th; see [video coverage](#) here), Røe Isaksen presented the long awaited plan for reshaping the map of norwegian Universities and University colleges (no: Høyskoler).

About a year ago, Røe Isaksen challenged the Universities and University colleges and asked them to come up with plans for strength-ening the norwegian Universities and University colleges, by merging into larger institutions. This topic has been on the table all since the committee led by Steinar Stjernø delivered their [report](#) and strengths and weaknesses in the sector in 2008. While the previous govern-ment tried to meet some of the issues raised by *Stjernø-utvalget* by asking the institutions to collaborate, concentrate and divide their tasks and responsibilities (SAK: samarbeid, arbeidsdeling og konsentrasjon), this didn't lead to much. Hence, Røe Isaksen stepped up the challenge.

Many of you have probably noticed that, as a result of this process, the University in Trondheim (NTNU) and the three University colleges in Ålesund, Gjøvik and Sør-Trøndelag, have already decided to merge and thus becoming the largest university in Norway. Now, in the new map presented by the minister, a total of fourteen Universities and University colleges will coalesce into 5 new institutions (see the illustration).

University of Bergen has also considered several options. A possible merger between UiB and the Norwegian School of Economics (NHH) was early rejected, while a merger between UiB and Bergen Academy of Art and Design (Kunst- og designhøyskolen i Bergen; KHiB) will be [further explored](#). A possible merger between UiB and Bergen University College (Høyskolen i Bergen; HiB) has been more extensively discussed. The opinions on this are varied among faculties and departments at UiB. In response to a question from UiB rector, Dag Rune Olsen, the Board of the Faculty of Mathematics and Natural Sciences decided

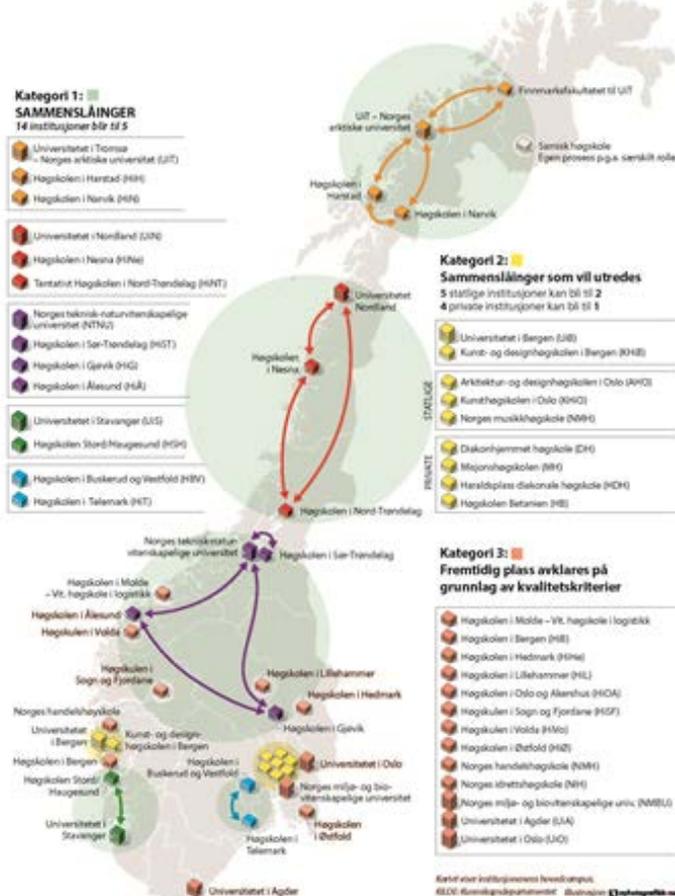
in its meeting on March 26th, to not recommend an exploration (no: utredning) of a possible merger between UiB and HiB now. The Board asked, however, to reconsider the case at a later stage. In the mean time, Rector Olsen said to Bergens Tidende (March 26th, 2015) that he is satisfied that UiB and the other institutions in Bergen will keep their autonomy (no: selvstyre). He would prefer to establish clusters (no: kunnskapsklynger) across the institutions in Bergen.

Head of Department of Molecular Biology, Rein Aasland, is very skeptical to a merger between UiB and HiB:

- It is very difficult to see how a merger can lead to the quality improvements that Minister Røe Isaksen is after.

Aasland believes that most of the advantages and improvements suggested to result from such a merger could equally well, and possibly better be achieved by formalised collaboration.

- I'm also critical to the possible consequences the nation-wide mergers now in preparation. I'm afraid that this could result in an unintended shift in balance between univeristy-type education at the expense of the many excellent university college-type educations, something that could weaken the overall profile of norwegian higher education, Aasland says.



The new map of Universities and University Colleges (Høyskoler) in Norway.

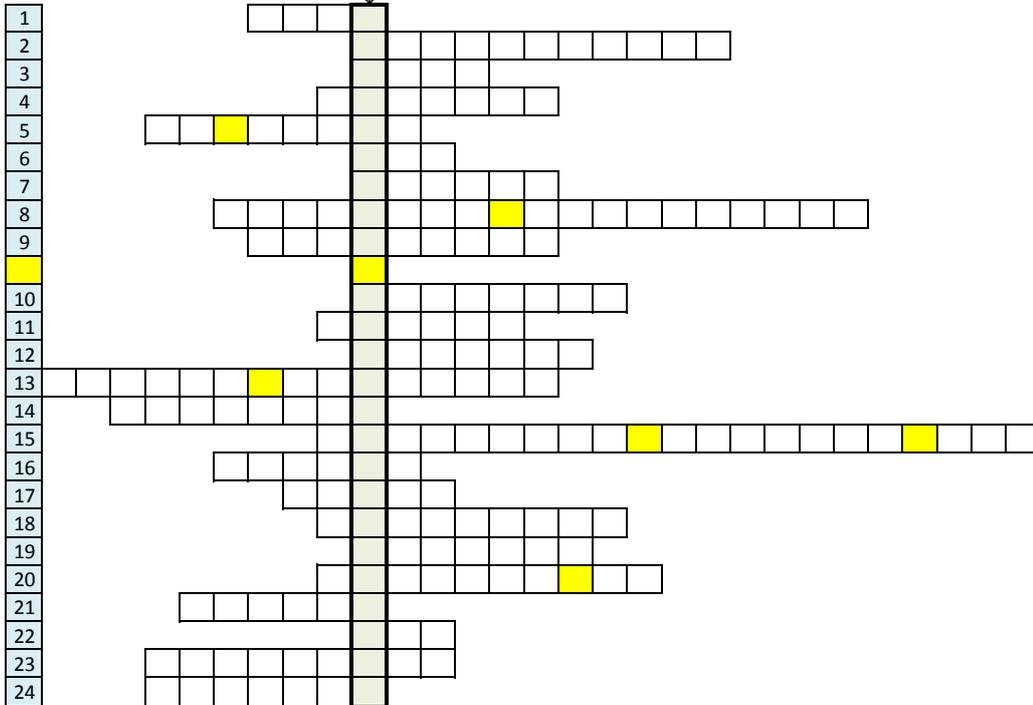
Source: The Ministry of Education and Research (graphics: nyhetsgrafikk.no)

See the e-version of MBI-nytt for active URLs in this article

MBI Easter crossword puzzle! Most of the answers can be found on uib.no/mbi/en.

When you have found the two words in the green squares, send the word to Gunhild.Brubakken@uib.no within 17 April.

The correct answers and a winner will be announced in next MBInytt. In accordance with MBI's financial situation, the winner will receive a substantial amount of Easter candy (if we find it on half price at Bunnpris).



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- 2 Chemical process introducing the acetyl group CH_3CO in various compounds
- 3 Head of programme board
- 4 Nathalie and Sandhya (and others, but not as significant) has published an article in this recognized magazine in December 2014
- 5 Application deadline for admission to master programmes, for applicants residing in Norway



- 7 HES (HMS) coordinator at MBI
- 8 What reveals new territory for an influential enzyme family?
- 9 Protects your skin on Easter vacation!

- 10 Building blocks of all living organisms with vital tasks in the cells.
- 11 This easy-to-use, scientifically proven system allows users to collect thousands of synchronised embryos
- 12 Proteins that catalyse (promote) the chemical processes in living organisms
- 13 Our favourite thursday
- 14 The programme formerly knows as MetaSig
- 15 On what yearly event does participant get to meet both zebrafish, salmon lice and their own DNA?
- 16 Appreciates a good challenge in a great environment
- 17 - a series about life
- 18 A structural unit of living cells that have a specific physiological function
- 19 The aqueous substance that is surrounded by the cell membrane
- 20 Something important, according to Love, Pollak, Dölle and Niere
- 21 Our favourite student organization



- 22 MOL950
- 23 The busy scientist