Reins hjørne

Dear all MBIers,

We are already well into the new semester and I welcome all the new students who have started their bachelor and master studies with us. Most courses are already well on their way and I'd like to thank everyone involved in our teaching activities. I also welcome all the new MOL231 project students, many of whom will get their first experience with real molecular biology research. I wish that we could offer this excellent type of teaching to a larger number of bachelor students. Just before and after the summer, two of our PhD candidates defended their theses: Ganka Dineva and Håvard Foyn. Congratulations both to the new doctores and their supervisors.

With the decision on the plan for collocating the research programs, we will soon enter a period were many of us will move to new labs and offices. In the process, we hope that we get the opportunity to renovate some of the most worn out lab spaces and offices. We will keep you posted on the progress plans for this and we shall do everything we can to make each step in moving process as swift and smooth as possible. Once we're through with this, I'm confident that we will have a nicer and more functional place for lots of exciting research.

Monday September 2nd, I would also like to reactivate our Monday lunch gatherings at 12:00, serving to spread information to and within the department. These will immediately precede the Monday seminars, when they start again later this autumn. You are all invited – bring your lunch and we will serve coffee and tea.

Monday September 9th is general election day for our parliament, Stortinget, and we will soon thereafter know who will fill the posts in the ministries. There are good reasons to believe that the results of this election will have some impact on the Norwegian landscape for research and higher education. Maybe some of you have attended some of the meetings with politicians who have visited our University. Wednesday September 4th, the Minister of Petroleum and Energy, Ola Borten Moe, will speak in Realfagbygget.

As we turn to September, professor Arnt Raae will leave us for retirement after a long career at UiB, first at the (old) Department of Biochemistry and then, since 1997, at our department. I take this opportunity to thank Arnt for his many contributions to research and teaching. We shall miss the many interesting and vigorous discussions with him and also his fine artistic talent as the departmental cartoonist. I wish you all the best, Arnt! Later this autumn, Nathalie Reuter will join us as professor after four years as group leader with one of the prestigious fellowships from the Bergen Research Foundation. Welcome Nathalie!

Molecule of the month: DJ-1

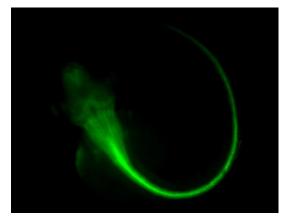
By Kari E. Fladmark



DJ-1 (uniprot:Q99497 pdb:1j42) is a protein that is mutated and becomes dysfunctional in several neurodegenerative diseases, particularly Parkinson's disease. A reverse correlation has been reported between cancer risk and Parkinson's disease. DJ-1 appears to have a general function of protecting cells from death, most possibly through controlling the redox state of cells, but the mechanisms by which it exerts this function is far from understood. Balancing the cellular

redox state is important for all cell types, but particularly crucial in neurons. In order to protect neurons from cell death, not only neuronal DJ-1, but also proper DJ-1 expression in their supporting glial cells seems necessary.

In the Cell Stress group (Lab 6) we have established transgenic zebrafish with cell type specific (neurons vs glial cells) expression of tagged-DJ-1. We have started to use these models to study the effect of increased cell specific DJ-1 expression in order to protect neurons from oxidative stress-induced death.



Glial GFP expression in transgenic zebrafish embryo. Foto: Misbah Sabir (project studentMol231)

PhD Defences

Kristine Hole

Friday September 6th, Kristine Hole will defend her PhD-thesis entitled: "The N-terminal acetyltransferases NatD, NatE and NatF: Evolutionary conservation and divergence of NATs and their substrate specificities". Kristine has been a PhD-fellow at Det Medisinsk-odontologiske fakultet, but has done her work at MBI. She was supervised by Thomas Arensen's group and Jon Eirik Varhaug.

The Trial Lecture and the PhD Defence will be held in Birkhaugsalen, at Haukeland Universitetssykehus at 10:15 am (Trial lecture) and 11:45 am (PhD-Defence). You can read more about her thesis in the <u>press release</u>.



New master degrees

11 magnificent students successfully completed their master degrees in June and July: Helene Stuart, Marianne Kristvik Holmedal, Christopher Florian Holte, Sepideh Mostafavi, Helene Heitmann Sandnes, Alex Kojo Datsomor, Marie Holm Solheim, Ingvill Tolås, Rasmus Moen Ree, Marianne Goris, Mari Katrine Berg

Our warmest gratulations to all of you!

Semesterstart 2013

For our students the autumn semester started in week 33 and 34, depending on which level they're at. The Section for Student Affairs is back in business and we are glad to see old and new students again.

This autumn, our department has the pleasure to welcome 40 new bachelor's students and 12 new master's students. We hope everyone will contribute to a enjoyable study start for them, and be helpful if you should find a lost and/or confused student in the hallway!

Best, Grethe and Gunhild

Heliks



God stemming og interessante diskusjoner under karrieredagen 19. februar

Heliks er studentorganisasjon på Molekylærbiologisk Institutt. Hovedfunksjonen til Heliks er å opprettholde et sosialt- og faglig studentmiljø. Heliks ønsker å være bindeleddet mellom studentene og instituttet, og mellom studentene og næringslivet. Alle studenter som studerer ved MBI blir automatisk medlemmer av Heliks.

Heliks har et styre bestående av 15 studenter hvor både bachelor- og masterstudenter er godt representert. Styret har månedlige møter og gjennom denne høsten vil styret gjennomføre flere sosiale arrangement slik at studentene kan bli bedre kjent:

- Heliks vil arrangere "Back to school party" for alle studentene ved MBI 6. September, slik at man kan få muligheten til å bli bedre kjent med hverandre. Vi håper at både nye elever og gamle veteraner tar turen; dette er en god mulighet til å stifte nye bekjentskaper!
- Det arrangeres en *masterkveld* i løpet av august for nye studenter som begynner på master. Dette er et sosialt tiltak for at studentene skal kunne bli kjent og utveksle erfaringer med studentene som er allerede har påbegynt mastergraden.

- Som arrangert tidligere vil det blir holdt en bachelor-masterkveld i november. Her vil masterstudenter fra ulike grupper presentere deres oppgave til bachelorstudentene, og fortelle hvordan man opplever det å ta en master gjennom insituttet.
- Vi fortsetter den gode trenden med vaffel-torsdag i loopen annenhver torsdag, og Finally Friday som er et fint tilbud for de som ønsker å gjøre noe sosialt den siste fredagen i måneden, før man tar helg.
- Heliks arrangerte i vår en karrieredag med ni ulike innslag fra næringslivet, som alle hadde tilknytning til vår utdannelse. Dette var en stor suksess med oppimot 100 deltagere, og vi håper på en gjentagelse våren 2014!

Legg til Heliks på Facebook, så vil du få med deg de nyeste oppdateringene. Dersom det er noe du skulle lure på er det bare å kontakte styret: Heliks.styret@mbi.no

Vi håper alle har hatt en fin sommer og er klare for ett nytt semester.

- Heliksstyret: Ina Blindheim Johansen (leder), Elisabeth Ueland (nestleder), Sandra Håland Kleppe (kasserer), Kristina Strand (infoansvarlig), Karina Dale (praktisk ansvarlig), Ingvild Stensland (sosialgruppe, master), Nina McTiernan (sosialgruppe, bachelor), Lorentze Hope Hornnes (representant realistutvalget), Kjetil Løtveit Thorstensen (instituttrådsrepresentant, master), Christina Tronstad (instituttrådsrepresentant, bachelor), Kristin Gravdal (programstyrerepresentant, master)

New in the job

Michael Marië has been employed as a researcher for 2 years in Thomas Arnesen's group

Kirill Jefimov starts in a 3-year PhD-fellowship with Rein Aasland's group September 1st. The fellowship is financed by Kreftforening (picture in next issue of MBINytt).

Edvin Fuglebakk has been employed as a post doc fellow in Nathalie Reuter's group, financed by Bergen forskningsstiftelse and Norges forskningsråd.

Håvard Foyn has been employed as a post doc fellow in Thomas Arnesen's group, financed by Kreftforening.

Muhammad Tanveer Khan is a PhD-fellow at the Department of Biology. He is affiliated with the Sea Lice Research Centre, and will be working with Rune Male's group.

Rasmus Moen Ree is a research assistant in Thomas Arnesen's group





Horizon lectures We can look forward to two lectures in the Science Faculty's Horizons series that should be particularly interesting for us: On Thursday September 12th, Leonie Ringrose (IMBA, Wienna) will lecture on the myths and mysteries of epigenetics and a week later, Ewan Birney (EBI, Cambridge) will lecture on new approaches in genetics and computational biology. I

encourage everyone to attend and to bring some of your friends and colleagues.

New in the job



Michael Marië



Edvin Fuglebakk



Håvard Foyn



Muhammad Tanveer Khan Tenuum Batsaikhan



Rasmus Moen Ree

Møt Ola Borten Moe



Olje-og energiminister Ola Borten Moe vil holde foredrag ved Universitetet i Bergen. Statsråden kommer til å snakke om teknologi og våre fremtidige utfordringer innen energi: Om energinasjonen Norge – både på fossile kilder og fornybar. Rektor Dag Rune Olsen vil ønske velkommen og introdusere statsråden. Det vil bli anledning til å stille spørsmål til statsråden.

Auditorium 2, Realfagbygget 11:00 Onsdag 4.9

New publications

Identification of dynamic changes in proteins associated with the cellular cytoskeleton after exposure to okadaic acid. Opsahl JA, Ljostveit S, Solstad T, Risa K, Roepstorff P, Fladmark KE. Mar Drugs. 2013 May 24;11(6):1763-82.

Outcome after surgery for primary hyperaldosteronism may depend on KCNJ5 tumor mutation status: a population-based study from Western Norway. Arnesen T, Glomnes N, Strømsøy S, Knappskog S, Heie A, Akslen LA, Grytaas M, Varhaug JE, Gimm O, Brauckhoff M. Langenbecks Arch Surg. 2013 Aug;398(6):869-74. doi: 10.1007/s00423-013-1093-2. Epub 2013 Jun 19.

Molecular basis for N-terminal acetylation by the heterodimeric NatA complex. Liszczak G, Goldberg JM, Foyn H, Petersson EJ, Arnesen T, Marmorstein R. Nat Struct Mol Biol. 2013 Aug 4. doi: 10.1038/nsmb.2636. [Epub ahead of print]

New master-students in the labs

Kristin Gravdal og **Mamata Khatri** are new master students at lab 3 (NucReg), both have Rune Male as their main supervisor

Altanchimeg Altankuyag is a new master student at lab 2 (NucReg), Aurelia Lewis is the main supervisor.

Morten Larsen is a new master student at lab 2 (NucReg). Øyvind Halskau is the main supervisor.

Øyvind Ødegård is a new master student at lab 2/3 (NucReg). Øyvind Halskau and Rein Aasland are supervisors.

Ray 1

Guest student

Tenuun Batsaikhan is a IAESTE guest student with Rune Male at lab 4. He is from Mongolia and will be here for 8 weeks, until the end of October.

New students in the labs



Kristin Gravdal



Mamata Khatri



Altanchimeg Altankuyag



Morten Larsen



Øyvind Ødegård

I siste liten / Last minute notes

- <u>Silvana Konemann and her colleagues</u> at Harvard and MIT have now combined two exciting new technologies into one. From optogenetics, a cryptochrome has been engineered in a two-hybrid-like fashion to become a light regulated transcriptional activator. From gene targeting, the TAL and CRISPR technologies are used to direct the light-regulated activator to desired places in the genome. And: bingo! - you have a wonderful new method for light-induced gene regulation.

I get easily carried away by such fancy, new stuff and I'm already considering how I we could use this technology to shine light on mechanisms in chromatin. Read the <u>Nature News&Views</u> here. [Rein]