UiB Institutt for biologi

BIO-INFO 39/2008, 3. november 2008 BIO: sakslister og møtereferater BIO-INFO arkiv

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Denne ukas viktigste

Programmøter i bachelorgraden – sett av 14. november 09:15 – 10:45

Det er dokumentert at svært mange studenter forlater studiene ved fakultetet i løpet av bachelorgraden og dette er ofte er dette dyktige studenter som i utgangspunktet hadde planer om å fullføre utdanningen. Allerede i dag arrangeres det samlinger for studentene på det enkelte program (programmøter) gjennom det første studieåret, men det store frafallet fra studiene i bachelorgradene ved fakultetet er bekymringsfullt, og et viktig tiltak vil være å formalisere regulære programmøter.

Instituttene har mottatt en høringssak om problemstillingen, og Hovedprogramstyremøte har bedt rådgiver Harald Åge Sæhtre ved fakultetet om å holde en orientering forbindelse med høringssaken. Det legges opp til en presentasjon med påfølgende diskusjon, og spesielt med tanke på BIO sin rolle. Saken kan i høyeste grad sees i sammenheng med revideringsarbeidet vi nå skal gjennom, det vil bli mange viktige momenter i denne diskusjonen som vi kan ta med oss videre. I tillegg er alle andre interesserte invitert til å være med på møtet!

Saksdokumentet tilhørende saken finnes her.

Tid og sted: **fredag 14. november 09:15 – 10:45, Aud. 101 Jahnebakken 5**

Hilsen Eli

Mer info om følgende utlysninger og mange flere (inkl. løpende, dvs. uten frister) finner du **her**
Husk å sende søknadsutkastet til post@bio.uib.no 1 uke i forveien (gjelder ikke mindre bevilgninger som legater og fonds)

Løpende	Stimulering til bilateralt forskningssamarbeid innenfor grunnleggende forskning (BILATGRUNN)	01. des	Meltzerfond kl. 13:00 Bergen universitetsfond kl. 13:00 fakultetsspesifikke legater og fond
01. nov	American Scandinavian Foundation fellowships		
01. nov	**Nordic Marine Academy** (mobility & conferences / workshops / seminars)	apr '09	Erasmus Mundus II programmet.
26. nov	NFR deadline (more info) NB kl. 12:00 - forskningssamarbeid med Kina (NORKLIMA)		

Essentials in English

The building process continues …

We will almost certainly be moving into the new building in a year's time. The renovation of the southern part of HiB 3rd floor will be finished then too. If we are lucky the new building will be finished first so that we can move into the Blokk B lab facilities before the labs in the northern HiB 3rd floor wing need to be emptied for their renovation. Cross your fingers!

Renovation of 3rd and 4th floor HiB

The renovation process in the southern end of HiB 3rd floor will start the last week of November. A revised timeline for the process and the plans are available on the web and will also be posted by the elevator. **Ståle Kolbeinson** will be the local contact person during the building period. The construction personnel will work with him (alone).

Marineholmen Nursery School

Do you have children between the ages of 0-6? If yes, then you can apply for places at the Marineholmen Nursery School. Read more.

Meltzer- and Universitetsfondet

Remember the 1 Decemnber deadline for the University funding programmes: Melzer, MatNat, and the University Funds. Applications are electronic and the web sites are already open. These funding opportunities are particularly relevant for young researchers, who can apply for up to 75 000NOK to cover research- and study-related expenses.

Applications are processed first at the Faculty level. Applications from students are handled by a special committee led by Asbjørn Strandbakken. The secretariat for this committee is at Utdanningsavdelingen. er sekretariat for dette arbeidet.

Siste nytt fra BIO

To be a PhD student at BIO

A week ago, BIO arranged the annual meeting for PhD students who are in their final year before thesis submission. We do this to inform and prepare the students for the challenges ahead, but we also ask them to return challenges to us. In today's BIO-INFO, their report is the major reading. I thank **Paolo Simonelli** and **Roland Koedijk** for taking the job to advocate the issues emerging in these two groups, to write this report, and also for their willingness to challenge the research group leaders early next week.

We will follow up by addressing "The PhD in the research group" in the monthly meeting of BIO's research group leaders this coming Monday. We also intend to arrange a full-day meeting next year focussing on the role of supervisors and research groups. But today: read the report from the meeting, and start the discussions in the morning coffee and lunch break meetings. There is something for most of us …

Hilsen Jarl Giske

Annual Meeting for last years PhD students: Summary of the comments that were discussed

22 October 2008

During the annual meeting for PhD students at the department of Biology were several relevant topics like planning, funding, and proposal writing presented and discussed. On the basis of these topics a discussion was initiated with the aim to highlight problems that might have arisen during our PhD periods so far, with the aim to formulate feedback and ideas for improvement as an advice from the PhD students to the department, to avoid such problems in the future.

Both discussion groups came with largely the same issues and recommendations, and communication issues were recognized as being the main problem. A short summary of the meeting and the proposed list of recommendations are being given below, to inform about the proceedings of this fruitful meeting.

Communication problems were among the biggest of problems which the average PhD student has run into. The majority of PhD students have faced several difficulties regarding communication. These difficulties in communication can be broadly divided in two groups.

1) *Organizational communication problems* (between the PhD student and the PhD administration about courses, contracts, forms, obligations, rules, PhD credits, etc.)
2) *Direct-, or scientific communication problems* (between PhD student and supervisors)

The organizational communication problems have been experienced by the majority of the PhD students, and it became clear that this has lead to many frustrations. It is difficult to get the right information from the department administration about the obligatory PhD courses and the awarding of PhD credits in general. It often takes long before e-mails are being answered. This should be improved, and this could be improved by giving the exact regulations and information about the requirements of the PhD credits and other mandatory activities (i.e. the required popular scientific contribution and the attendance at conferences) at the beginning of the work period, or on a detailed website. Easy access to information and quick response to questions could potentially easily lead to improvement.

The direct communication problems occur in more specific cases, but also at all thinkable severities. They strongly depend upon the PhD student him/herself and the individual supervisor(s). A clear reason is however difficult to find since supervisors and students are all different and wish-, or require perhaps different levels of supervision. Clarity about expectations of the level of supervision is required both ways and early in the working period, but a newly starting PhD student will likely have difficulty understanding the expectations for supervision over the whole PhD period. An often heard problem is the fact that supervisors don't have time to supervise properly, and are unaware about the students work and progress. If the student needs to supervise the supervisor to supervise, then something is wrong, but when it reaches this point it is also difficult to change the situation. The students are largely dependent on the supervisor. Clear communication between supervisors and students is key, and additionally it is important that group leaders are aware of the students' situation and progression to recognize and mediate in fixing possible problems at an early stage.

In relation to this, a few points of interest were proposed to increase the chances for optimal communication and supervision:

1. The department should be more assertive in providing information regarding PhD obligations, time frames, travel funds, deadlines, PhD credit requirements, etc. The approachability needs to be improved, and answers to questions should be given in shorter time.
2. Supervisors should be selected for their capacity to supervise PhD students according to criteria such as the availability of time, physical placement of supervisor and student (external supervisors), and the possibility to be reached. A minimum amount of meetings per year should be defined. Previous experiences in supervision should be taken into account.
3. A document concerning the rights and duties for supervisor and student should be provided by the department at the beginning of the PhD fellowship. It should be written both in Norwegian and English, and both parties should be aware of the document.
4. The research budget for a PhD student should be planned and guaranteed in a financial planning made by the supervisor.

Besides the communicative improvements it is worth wile to point out some additional options for general improvements by the department. They are based on the principle of equality. Currently there has been an ongoing discussion about the fact that PhD students have different salaries. New PhD's earn more than current PhD's. Additionally there are differences between the rights of 'quota PhD students' and 'regular PhD students' within BIO. This encourages dissatisfaction among employees. Without going into specific cases it is important to address this issue here, and to give general thoughts/wishes concerning this topic:

5. Quota PhD students do not have the same rights (e.g. funding or paternity leave) as other PhD students because they are not considered to be employees. Since the requirements, responsibilities and quality of their work is the same compared to other PhD students, the Department of Biology should change their status accordingly.
6. PhD students with equal working history at UIB and with the same responsibilities or tasks should earn the same salary.

The last topic of concern is the progression of PhD students, because too many PhD students do not finish in time. Even though all the different aspects discussed above are intertwined and of importance for well functioning and scheduled progression, one additional suggestion can be made to improve focus and detailed planning:

7. Half way during their PhD fellowship students should present the arguments, progress results and final planning of their project to ensure progression and to give the student the possibility to present the work status.

The overall goal of this is to have more PhD student to finish within the required time frame. Optimizing awareness and supervision, together with better communication with the department will hopefully give the means to improve the chance to do so, to everyone's benefit.

On behalf of the last years' PhD students:
Paolo Simonelli and Roland Koedijk

Det går framover med nybyggingen

- og om et år er vi ganske sikkert innflyttet i nybyggene. Da er også første del (sørenden) av ombyggingen av 3. etasje ferdig. Er vi heldige, nybyggene ferdig først, slik at fiskeriøkologene kan flytte inn i blokk B før laben deres i nordenden av 3. etasje skal bygges om. Men det er ikke sikkert…

Ombygging av 3. og 4. etasje i dagens bioblokk

Ombyggingen i sørenden av 3. etasje starter siste uke i november. Revidert fremdriftsplan og planer for ombyggingen ligger her: http://www.bio.uib.no/internesider/Ombygg/ombygg.php. (Studenter har ikke tilgang til denne siden, men det henger oppslag ved hovedheisen).

Ståle Kolbeinson vil være lokal brukerkontakt i byggeperioden - Byggeleder vil forholde seg til ham og ingen andre brukere på byggeplassen.

Win-win in international co-operation

Sidsel Kjølleberg is the Co-ordinator for International Developmental Projects at BIO. "We contribute to 'reverse-brain-drain': we train PhD and masters students who return to their homelands to teach and conduct research there." Her activity makes a significant contribution to the impact BIO researchers have on the world around them. Learn more.

Velkommen til julefest på BIO!

Alle ansatte og masterstudenter ønskes velkommen til BIO sitt julebord fredag 5. desember. I år er julebordet i den lune og hyggelige kantinen i Skibsbyggerhallen i Arenum (Solheimsviken). Alle vil få servert både pinnekjøtt og svineribbe (i år trenger vi ikke velge, vi kan få begge deler!), og det blir vegetarmat til dem som ønsker det. Mer informasjon om blant annet pris og påmelding vil følge senere.

Welcome to Christmas party at BIO Friday December 5.
This year the Christmas party will be held in the nice and friendly cantine at Skibsbyggerhallen in Arenum

(Solheimsviken). Everyone will be served pinnekjøtt (traditional Christmas dinner in Western Norway, sheep) and svineribbe (traditional Christmas dinner in Eastern Norway, pork). This year we don't have too choose, we can have both! A vegetarian alternative will also be provided. Information about price, registration and more will follow.

Vennlig hilsen Julebordskomitéen
(**Mia Bengtsson**, **Øyvind Fiksen**, **Rune Rosland** og **Kaja Iden**)

Forskningsgruppa Anvendt og industriell biologi legges ned

Forskningsgruppestrukturen på BIO er flytende, med 1-2 grupper som kommer og går hvert år. Det er veldig bra at vi har en slik dynamikk, og at gruppene ikke oppfatter seg som permanente avdelinger. Nå skal vi legge ned forskningsgruppa Anvendt og industriell biologi. Noen går over til Fiskeriøkologi og havbruk, de andre til Utviklingsbiologi hos fisk.

Overgang til Utviklingsbiologi hos fisk:
- Professor Ole Brix
- Førsteamanuensis II Anne Sverdrup
- Stipendiat Radoslav Borissov
- Stipendiat Sølvi Espeland

Overgang til Fiskeriøkologi og havbruk:
- Professor Ragnar Nortvedt
- Forsker Lars Helge Stien
- Stipendiat Patricia Apablaza
- Stipendiat Endre Grimsbø
- kvotestudent (PhD) Mach Diep
- kvotestudent (PhD) Xuan La Thao
- Professor II Gen Marianne Larsson
- Professor II Bjørn Tore Lunestad

Ragnar Norvedt har 80 % permisjon i et år for å jobbe i Marine Harvest. **Ole Brix** slutter ved BIO ved kommende årsskifte for å begynne på CMR. Han vil da få en prof II-tilhørighet hos oss for å fullføre veiledningen av igangværende stipendiater.

Omringet av gravemaskiner

Høyteknologisenteret i Bergen ser ut som en øy i et hav av anleggsmaskiner for tiden. For å komme seg helskinnet frem til døren, må en gå i sirkler mellom brølende gravemaskiner og hissige lastebiler. Les journalisten reiseskildring [På Høyden ..]

STIM Hallowe'en Weekending event

Come one, come all to the STIM Hallowe'en Weekending event this Friday 31st at room 329C1 in HIB. The evening starts at 18:30 with a showing of Tim Burton's 'The Nightmare Before Christmas' followed by a brief presentation of the history of Hallowe'en, and then finally lots of fun and games as usual. We will have snacks, candy, and some Halloween treats. We will be selling beer and wine at the student friendly prices. Feel free to come in a costume, and everyone is welcome to bring their friends. If we don't see you there, then Happy Hallowe'en)

Siste nytt fra verden rundt oss

Gratisbussen skal gå til Marineholmen

Tenkt oppstart av Sentrumsbuss er mandag 3.november fra kl. 07.30. Bussen vil gå med 10 minutters frekvens frem til kl. 21.00 som er siste avgang. Bussen vil ikke gå på lørdager. Bussens trasé blir endret slik at VilVite-senteret på Møhlenpris blir omfattet av ruten. Les mer på [marineholmen.com]

Marineholmen Barnehage

Har du barn i alderen 0-6 år? Da kan du søke om barnehageplass i Marineholmen Barnehage. Les mer: http://www.marineholmen.com/

Ny direktør ved Nofima Ingrediens

Trond Mork Pedersen (47) er ansatt som direktør for Nofima Ingrediens i Bergen. Pedersen driver i dag sitt eget konsulentselskap. Han har 20 års erfaring fra marin næringsvirksomhet, blant annet i Marine Farms, sildemelnæringen og ensilasjeindustrien.

Han har jobbet både med forskning og utvikling og salg/marked, samt vært daglig leder. Pedersen har sin utdanning fra Norges Landbrukshøyskole med spesialisering innen økonomi og ernæring. I Nofima Ingrediens vil han få ansvaret for å bygge opp en slagkraftig forskningsenhet med hovedsatsinger som fôr og ernæring, analysetjenester og utnyttelse av biprodukter. Les mer ..

Håndbok for felles gradssamarbeid

Universitets- og høyskolerådet (UHR) sitt utdanningsutvalg har utarbeidet en håndbok med praktiske kjøreregler for felles gradssamarbeid. Denne skal bistå i arbeidet med inngåelse og gjennomføring av felles gradssamarbeid, nasjonalt og internasjonalt.
Håndboken (pdf) vil revideres med jevne mellomrom. Innspill og momenter som du mener bør være med i håndboken sendes til utdanningsutvalgets sekretær.

Ledige stillinger for biologer

Sjekk oversikten på jobbnor!

Frist	Stilling
several	Audrey Geffen tips us about several openings at CalMarO
open	Canadian Post-Doctoral Research Fellowships
01.11	PhD, sponge taxonomy, GeoBioCenter, Ludwig-Maximilians-Universität (LMU) München
01.11	Post-doc. American-Scandinavian fellowships
02.11	University of Texas at Austin: Assistant Professor of Fish Physiology/Fish Culture
03.11	Two faculty positions, University of Texas, Austin
05.11	PhD, North Sea cod, Aarhus, Denmark
12.11	Conservation Director, Atlantic. WWF-Canada
14.11	1 Postdoc and 4 PhD, Plant Invasion Ecology, Lincoln University, New Zealand
14.11	PhD, sediments, Lough Hyne Marine Reserve
15.11	**BIO: førsteamanuensis i botanisk økologi og bevaringsbiologi**
15.11	Post-doc, IFM-GEOMAR
16.11	Project officer, PESI project, Natural History Museum, South Kensington
21.11	2 associate professor positions, University of South Florida Tampa
30.11	**BIO: Postdoctoral Research Fellow in Fish larvae and Otolith Microchemistry**
01.12	Post-doc, Fisheries Oceanography, Denmark
01.12	1 prof, 3 assist-prof (Extreme environments) Florida State University
22.12	Assistant prof. Biogeoscience, Vanderbilt University, USA
31.12	Scientific Researchers - Charles Darwin Foundation – Galapagos Islands

Halloween will be held at Bergen Museum

De kulturhistoriske samlinger, Haakon Sheteligs plass 10 FRIDAY, 31. October, from 18-21 (6 p.m.-9 p.m.)! FREE There will be a Treasure Hunt in the DARK areas of the museum! Prizes will be awarded to everyone who completes the search! Face Painting, pumpkin carving while supplies last, the film: A nightmare before Christmas - will be shown, there will be creepy things to feel, etc.

Stone Day!

SUNDAY 2. November (NB! NEW DATE!!) from 11 a.m. - 3 p.m., the museum is open until 4 p.m., De naturhistorisk samlinger, Muséplass 3. It is only FREE for this one museum. There will be stone

workshops, lectures, you can bring in a stone you want identified by geologists! See newspaper for more info.

Forskning: utlysninger, nye satsinger og prosjekter

Meltzer- og Universitetsfondet

Vi minner om fristene for å søke Meltzer- og Universitetsfondet.

SØKNADSRUNDEN

Meltzerfondets og Universitetsfondets søknadsfrist er i år 1. desember kl 13. Websøknad er åpnet for redigering og levering av årets søknader. Vil spesielt minne om muligheten som stipendiater og studenter har til å søke inntil kr 75.000 til dekning av utgifter til faglig virksomhet i forbindelse med doktorgradsarbeid og studium.

SØKNADSBEHANDLING

- Prosjektsøknader til Meltzer og Universitetsfondsøknader behandles av sakkyndige innenfor de 6 fakultetene. Fakultetet nominerer disse og fondet oppnevner dem.
- Prosjektstipendsøknader fra studenter og stipendiater behandles av et Innstillingsrådet for studentstipend under ledelse av professor Asbjørn Strandbakken. Utdanningsavdelingen er sekretariat for dette arbeidet.

Hjemmeside for Meltzerfondene er: http://www.meltzerfondet.no/
Hjemmeside for Universitetsfondet er: http://www.uib.no/fond/

NOMINASJON AV PRISKANDIDATER

Fristen for å nominere kandidater til pris for yngre forskere og formidling er som vanlig 1. november (de som trenger lenger frist må SNAREST ta kontakt med fondet for å få vurdert mulighetene for utsatt frist). Det er ulike tradisjoner for å nominere rundt om, og det er god grunn til å minne faglige ledere på at de bør vurdere å nominere kandidater.
Retningslinjer for prisene: http://www.uib.no/meltzer/omfondet/retningslinjer.htm
Sjekkliste for dem som skal nominere: http://www.uib.no/meltzer/priser/sjekkliste.htm

Utlysning av prosjektmidler til ernæringsrelatert forskning

Programstyret for ernæring lyser ut midlar til å stimulera forskingssamarbeidet innan ernæring. Ca 4 millionar kroner står til årets disposisjon. **Søknadsfrist 15. november**. Utlysingstekst ernæringsforskning og UiBs nettside: Department of Research Management.

Satser mot Canada

Science Week arrangeres hvert år for å fremme norsk forskningssamarbeid med Nord-Amerika. Men Nord-Amerika er ikke bare USA. Les mer
In particular: There is a Government of Canada postdoctoral fellowship that is exclusively for international applicants from a selected list of countries, one of which is Norway. More information: Guidelines, letter of recommendation form, application form.

Forskningsrådet sikrer europeisk satsing

ERC har ikke midler til å finansiere alle søkere som oppfyller exellence-kravene for Starting Grant. Nå stiller Forskningsrådet med nasjonal finansiering til disse. Les mer

Utlysning av fakultetets legater og fond 2009

Second reminder: (from the new Faculty Director, Bjørn Åge Tømmerås and Kari Eeg) Vedlagt følger informasjon om frister for søknader til fond og legater for 2009. Se også lenke til "Fond og legater". Details about funding available.

Ny doktorgrad

Disputas, Nina Sandlund

Cand.scient. Nina Sandlund disputerer for PhD-graden med avhandlingen:
"The role of opportunistic bacteria in marine cold-water larval cultures"
Veileder: Øivind Bergh, Are Nylund
Bedømmelseskomite: Professor, PhD Brian Austin, Heriot-Watt University, Edinburgh, UK
Research Professor, PhD Bjarnheidur K. Gudmundsdóttir, University of Iceland
ProfessorHeidrun Inger Wergeland, BIO
Leder av disputasen: Professor Tron Frede Thingstad, Universitetet i Bergen
Tid og Sted: Fredag 7. november, kl. 10:15, Aud. 2, Realfagbygget
Adgang for interesserte tilhørere – velkommen til lokalet i god tid før disputasen!

Disputas, Tina Kutti

Cand.scient. Tina Kutti disputerer for PhD-graden med avhandlingen: Regional impact of organic loading from a salmonid farm. Dispersal, sedimentation rates and benthic fauna response.
Veiledere: Tore Høisæter, Per Johannessen, Arne Ervik
Bedømmelseskomite: Retired researcher Thomas H. Pearson, Argyll, UK
Lecturer Gunilla Ejdung, Department of Systems Ecology Stockholm University
Professor Christoffer Schander, University of Bergen

Tid og Sted: **Fredag 7. november, kl. 10:15, Aud. 101, Jahnebakken 5**
Adgang for interesserte tilhørere – velkommen til lokalet i god tid før disputasen!

Ny medarbeider

Postdoctoral researcher Adèle Mennerat started in late September 2008 at the Evolutionary Ecology group. She will be working in a project supervised by professor **Arne Skorping** on the evolutionary ecology of the salmon louse *Lepeophteirus salmonis*. The main goal is to test to what extent the life history and virulence of salmon lice have evolved in response to ecological changes introduced by fish farming. This project will be done in collaboration with Professor **Frank Nilsen** and Professor Dieter Ebert (University of Basel, Switzerland).

Prior to moving to Bergen, she was a PhD student at the Université de Montpellier (France). She investigated an original behaviour in Mediterranean populations of a small passerine bird, the blue tit *Cyanistes caeruleus*. These birds use aromatic plants to improve the health of their chicks via anti-bacterial effects. Her master thesis was also done at the Université de Montpellier and concerned the use of olfaction in foraging and reproduction of small birds such as the blue tit and the great tit *Parus major*.

As private activities, she likes cross-country skiing (therefore was very happy to move to Norway!), hiking, birdwatching, drawing and sharing good meals with friends and family.

Gjesteforelesninger, seminarer og kollokvier

BBB Seminars, The BioMedical and BioSciences Lecture Series (HUCEL371)

Welcome to the BBB Seminars at the Gade Institute. Please check the web page for upcoming information. The seminars are held Thursdays in BBB, Auditorium 4. NB! Extra BBB-HIB/Realfagb./NIFES campus bus trip after the seminar, departure at 14.05 from the BBB main entrance.

MBI and Sars Centre Seminars

Check out upcoming speakers and topics on the schedule.
GUEST SPEAKERS:
Nov 06 MBI Sem Room 520B1, 14:15

Dr. Evelyn Houliston, Biologie de Development, Station oceanographique, Villefranche-sur-Mer, France "Development of oocyte and embryo polarity in the hydrozoan cnidarian Clytia hemisphaerica."
Nov 07 MBI Sem Room 520B1, 14:15
Prof. Dr. Siegfried Roth, Institute of Developmental Biology, University of Cologne, Germany, "The evolution of dorsoventral patterning in insects."

Artedi Lectures on Systematic Ichthyology

Time: 5 December 2008, 8:30 – 12:30
Place: Beijer Hall, The Royal Swedish Academy of Sciences, Stockholm, Sweden. More information

Nye artikler

Har du en artikkel, kapittel eller bok som ikke har stått her?
Du kan sende bibliografi og abstract (helst i Word-format) til Jarl så snart du har sidetall.

Lars Ebbesson & Sigurd Stefansson: daglige hormon-endringer hos parr og smolt

Ebbesson, LOE, Björnsson, BTh, Ekström, P, Stefansson, SO. (2008) Daily endocrine profiles in parr and smolt Atlantic salmon. Comp Biochem Physiol A Mol Integr Physiol. 151: 698-704.
Abstract: To elucidate possible mechanisms behind the endocrine control of parr–smolt transformation, the daily plasma profiles in thyroid hormones (TH; free thyroxine (FT4), total thyroxine (TT4), and total 3,5,3′-triiodothyronine (TT3)), growth hormone (GH) and cortisol were studied in Atlantic salmon parr and smolts under simulated-natural winter (8 L:16D) and spring (16.5 L:7.5D) photoperiods, respectively. Overall, TT4, TT3 and GH levels were higher in smolts than in parr, whereas FT4 levels fluctuated within the same range in parr and smolts. Significant diurnal changes in plasma TH were present in parr. Both FT4 and TT4 levels increased during the photophase and decreased during the scotophase, while TT3 levels followed an inverse pattern. Growth hormone showed no significant changes in parr. Changes in FT4, TT4, GH, and cortisol, but not TT3, levels, were observed in smolts with peak levels during both the photophase and scotophase for FT4, TT4 and GH. Plasma cortisol was not assayed in parr but in smolts the peaks were associated with dusk and dawn. In addition to the general increases in TH, GH and cortisol, the distinct endocrine differences in nighttime levels between parr in the winter and smolts in the spring suggest different interactions between TH, GH, cortisol and melatonin at these different time points. These spring scotophase endocrine profiles may represent synergistic hormone interactions that promote smolt development, similar to the synergistic endocrine interactions shown to accelerate anuran metamorphosis. The variations in these diurnal rhythms between parr and smolts may represent part of the endocrine mechanism for the translation of seasonal information during salmon smoltification.

John-Arvid Grytnes: mer om artsrikdomsmaksimum i mellomhøyder

Grytnes, J.A., Beaman, J.H., Romdal, T.S. and Rahbek, C. (2008) The mid-domain effect matters: simulation analyses of range-size distribution data from Mount Kinabalu, Borneo. Journal of Biogeography 35: 2138-2147.
Abstract: A comparison of simulated and observed patterns indicates that an underlying monotonically decreasing trend in species richness with elevation is essential to explain fully the observed pattern of richness and range size. When the underlying trend is accounted for, the mid-domain effect model that restricts the distributions of theoretical midpoints performs better than both the classical mid-domain effect model and the model that does not incorporate geometric constraints.

Kathy Willis: Klimaendringers innflytelse på bestander, arter og samfunn

MacDonald, G.M., Bennett, K.D., Jackson, S.T., Parducci, L., Smith, F.A., Smol, J.P. and Willis, K.J. (2008) Impacts of climate change on species, populations and communities: palaeobiogeographical insights and frontiers. Progress in Physical Geography 32: 139-172.
Abstract: Understanding climate change and its potential impact on species, populations and communities is one of the most pressing questions of twenty-first-century conservation planning. Palaeobiogeographers working on Cenozoic fossil records and other lines of evidence are producing

important insights into the dynamic nature of climate and the equally dynamic response of species, populations and communities. Climatic variations ranging in length from multimillennia to decades run throughout the palaeo-records of the Quaternary and earlier Cenozoic and have been shown to have had impacts ranging from changes in the genetic structure and morphology of individual species, population sizes and distributions, community composition to large-scale biodiversity gradients. The biogeographical impacts of climate change may be due directly to the effects of alterations in temperature and moisture on species, or they may arise due to changes in factors such as disturbance regimes. Much of the recent progress in the application of palaeobiogegraphy to issues of climate change and its impacts can be attributed to developments along a number of still advancing methodological frontiers. These include increasingly fi nely resolved chronological resolution, more refined atmosphere-biosphere modelling, new biological and chemical techniques in reconstructing past species distributions and past climates, the development of large and readily accessible geo-referenced databases of biogeographical and climatic information, and new approaches in fossil morphological analysis and new molecular DNA techniques.

Frank Nilsen: endring i gen-uttrykk hos laks med lakselus

Skugor, S, Glover, K, Nilsen, F, Krasnov, A. (2008) Local and systemic gene expression responses of Atlantic salmon (*Salmo salar* L.) to infection with the salmon louse (*Lepeophtheirus salmonis*). BMC Genomics 2008, 9:498 doi:10.1186/1471-2164-9-498
http://www.biomedcentral.com/1471-2164/9/498

BACKGROUND: The salmon louse (SL) is an ectoparasitic caligid crustacean infecting salmonid fishes in the marine environment. SL represents one of the major challenges for farming of salmonids, and veterinary intervention is necessary to combat infection. This study addressed gene expression responses of Atlantic salmon infected with SL, which may account for its high susceptibility.
RESULTS: The effects of SL infection on gene expression in Atlantic salmon were studied throughout the infection period from copepodids at 3 days post infection (dpi) to adult lice (33 dpi). Gene expression was analyzed at three developmental stages in damaged and intact skin, spleen, head kidney and liver, using real-time qPCR and a salmonid cDNA microarray (SFA2). Rapid detection of parasites was indicated by the up-regulation of immunoglobulins in the spleen and head kidney and IL-1 receptor type 1, CD4, beta-2-microglobulin, IL-12beta, CD8alpha and arginase 1 in the intact skin of infected fish. Most immune responses decreased at 22 dpi, however, a second activation was observed at 33 dpi. The observed pattern of gene expression in damaged skin suggested the development of inflammation with signs of Th2-like responses. Involvement of T cells in responses to SL was witnessed with up-regulation of CD4, CD8alpha and programmed death ligand 1. Signs of hyporesponsive immune cells were seen. Cellular stress was prevalent in damaged skin as seen by highly significant up-regulation of heat shock proteins, other chaperones and mitochondrial proteins. Induction of the major components of extracellular matrix, TGF-beta and IL-10 was observed only at the adult stage of SL. Taken together with up-regulation of matrix metalloproteinases (MMP), this classifies the wounds afflicted by SL as chronic. Overall, the gene expression changes suggest a combination of chronic stress, impaired healing and immunomodulation. Steady increase of MMP expression in all tissues except liver was a remarkable feature of SL infected fish.
CONCLUSIONS: SL infection in Atlantic salmon is associated with a rapid induction of mixed inflammatory responses, followed by a period of hyporesponsiveness and delayed healing of injuries. Persistent infection may lead to compromised host immunity and tissue self-destruction.