

Innhold (klikk på sidetallet, så kommer du dit direkte ...)

Viktige tidsfrister	1
Frister for prosjektsøknader.....	1
Andre viktige frister.....	1
Siste nytt fra BIO	2
Livsfasepolitikk, takk!.....	2
BIO Book Exchange	2
Report from Byrknes-trip (STIM) 1st-3rd of September.....	2
JULEBORD.....	3
BLÅ-TUREN.....	3
Forskning: utlysninger, nye satsinger og prosjekter	3
Ny utlysning av Yngre fremragende forskere	3
Nordic Marine Academy: call for proposals for organising Advanced Courses	4
Ny doktorgrad	4
Anthony Oxley: Fettomsetning i tarm hos laksefisk	4
Ny medarbeider	5
Stipendiat Mia Bengtsson.....	5
Gjesteforelesninger, seminarer og kollokvier	5
Günter Försterra and Vreni Häussermann: Marine diversity in the Chilean fjord region and its study at the Huinay Scientific Field Station	5
Michael Greenacre: Tying up the loose ends in simple, multiple and joint correspondence analysis...	5
Nye artikler	6
Thorolf Magnesen, Øivind Bergh & Gyda Christophersen: produktivitet hos kamskjell i oppdrett.....	6
Gyda Christophersen: studie av effekt av gjenbruk av vann på kamskjell-larver.....	6

Viktige tidsfrister

Frister for prosjektsøknader

Mer info om følgende utlysninger og mange flere (inkl. løpende, dvs. uten frister) finner du [her](#)

Husk BIOs interne frister 1 uke i forveien (gjelder ikke mindre bevilgninger som legater og fonds)

- | | | | |
|-----------------|--|----------------|---|
| 15. sep: | - Bergens forskningsstiftelse | 1. okt: | - Stipender til studier eller forskning i Finland, Israel, Nederland, Polen, Russland, Sveits, eller Tyskland |
| | - Food for Better Human Health (ERANET) | | |
| | - Div. mobilitet: USA (Fullbright), Frankrike (AURORA), Tyskland | | |
| | - Tilgang til biologiske samlinger mm. | 2. okt. | - ESF: støtte til org. av konferanser 2008 |
| | - Taxonomy of deep-sea life | 10. okt | - UiB: FP7-posisjonering |
| 30. sep | - OECD mobilitet | 12. okt | - Forskningsrådet: YFF, BILAT, SOUTH AFRICA, HAVBRUK (BIP) |
| | - EØS Ungarn | 15. okt | Food safety (ERANET) |
| 1. okt: | - NMA: organisering av forskerkurs | 26. okt | - EØS: Tsjekkia |

Andre viktige frister

11. september: BIO-frist for Mohn-søknader (gi beskjed til Jarl allerede nå dersom du arbeider med en!)

15. september: studieplanendringer

Postadresse:	Besøksadresse:	Telefon:	E-post:	Jarl Giske:
Postboks 7800	Bioblokken, 3. etg.	+47 55 58 44 00	post@bio.uib.no	Tlf 84403
N-5020 Bergen	Høyteknologisenteret	Telefaks:	Internett:	Mob 9920 5975
Norge	i Bergen.	+47 55 58 44 50	http://www.bio.uib.no	
	Thormøhlensgate 55			

Siste nytt fra BIO

Livsfasepolitikk, takk!

I lys av de siste dagers kjønnsdebatt og livsfasepolitikk, blant annet i På Høyden, vil vi komme med et innspill til debatt som gjelder alle unge forskeres arbeidsvilkår. Vi anser oss for å være ganske gjennomsnittlige hva gjelder logistiske utfordringer i forbindelse med overgangen jobb/hjem.

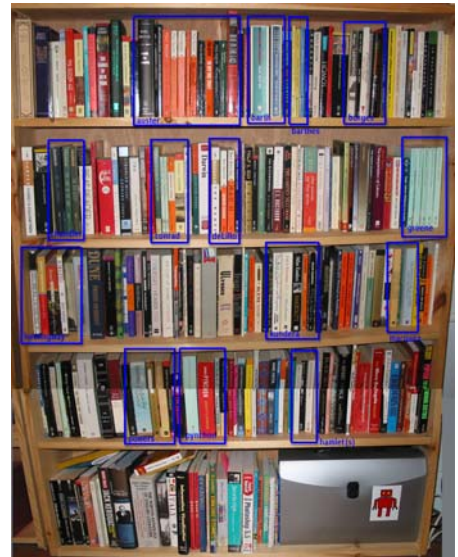
Hva kan gjøres for å gi unge kvinner og menn med familie mulighet til å bruke dagen til det de aller mest vil, nemlig forskning? Jo, praktisk tilrettelegging i form av flere praktiske løsninger som for eksempel noe så enkelt som flere øremerkede parkeringsplasser.

Les hele innlegget til botanikerne Anne Bjune og Inger Elisabeth Måren [her!](#)

BIO Book Exchange

BIO has established a book shelf in the third floor at the High tech centre with lots of books, many in English. You are free to borrow, and if everybody comes back with at least as many books as they borrow, then this book shelf can be valuable for many. The book shelf is based on personal integrity, there is no inventory or paperwork (except the reading..).

Maybe you have a donation, also?



Report from Byrknes-trip (STIM) 1st-3rd of September

On Friday the 1st of September, a group of 27 master and 2 bachelor students from the Department of Biology left Bergen heading for their common destination: Byrknes Island (Sogn og Fjordane). The locals had never seen the speed-boat this packed, and with 29 large back-packs, fishing gear, diving equipment for 3 scuba divers plus 5 free-divers, AND a bike, we were lucky the bus-driver let us on her bus.

Byrknes Island was as pretty as we had imagined, the cabins we had rented were beyond all expectations, and so was the atmosphere in the group. Friday night, we all gathered in the *party-cabin* (internal vocabulary describing the largest cabin we had at our disposal) for a common dinner consisting of Lapskaus and flat bread. It was not easy estimating amounts of food for 29 people, but even though it looked like there would be large amounts of leftovers, every single piece of flat bread magically disappeared during the night (beer = increased hunger?).

Saturday we woke up to a blue sky with nice temperature, and we spent the day swimming, fishing, diving, spotting the locals at the supermarket and catching crabs. The free-divers managed to collect 65 scallops, the crab-catchers gathered around 50 crabs, and the fishers and divers contributed with a whole lot of mackerel, European plaice and grey gurnard. In the night we had a huge feast of scallops, crabs, shrimps (brought from Bergen) and grilled fish, together with freshly baked bread (from the Supermarket at Byrknes, baked especially for us!) and mayonnaise. We continued the night at the local pub, before we went back to the *party-cabin* where some people went swimming and others were dancing. It seemed like people were clinging on to the last hours we had together, and some of us did not go to bed before the sun had been up a couple of hours.

Sunday, the mandatory activity was washing and relaxing. Those who still had some energy left went fishing and free-diving. Take-off was at 18:30, and we arrived in Bergen around 20:00. It was hard splitting up at the harbour in Bergen, and a lot of good hugs were passed around.

As a summary, this was one of the greatest trips arranged in history, and there could not have been a better composition of Norwegians, Australians, Canadians, South Africans, English, Venezuelans, Americans and New Zealanders travelling together. STIM is not only a growing organisation; it is also getting very international. We owe a lot to the Department of Biology, who sponsored us so much that we could make this trip happen. Thank you!

At last, we at **STIM** invite everybody to join the week-ending on Friday (8th), at 19:00 in the seminar room, HIB. There you will be able to meet this great group of travellers, and to watch a slide-show of photos summarising the Byrknes-trip.



JULEBORD

BIO skal ha julebord **fredag 15. desember**. Alle ansatte og mastergradsstudenter: Sett av datoen!

BLÅ-TUREN

BIOs blåtur med MS Midthordland i går ble en suksess og vi gleder oss til neste gang:



Forskning: utlysninger, nye satsinger og prosjekter

Ny utlysning av Yngre fremragende forskere

Om YFF: Formålet med satsingen er å gi yngre, talentfulle forskere innenfor alle fagområder ekstra gode rammevilkår, slik at de kan nå internasjonal toppklasse. Ordningen skal bidra til å utvikle gode forskningsledere og til å heve kvaliteten på norsk forskning.

For utlysningen er det satt følgende krav:

Kandidatene må ha doktorgrad og en viss vitenskapelig produksjon etter avlagt doktorgrad. Det er ikke satt en øvre aldersgrense for kandidatene, men det skal ved søknadsfristens utløp ikke ha gått mer enn 8 år siden avlagt doktorgrad (disputastidspunkt), med fratrekk av tid for lovbestemte permisjoner. Søknaden fremmes av en forskningsinstitusjon innen U & H- eller instituttsektoren, og institusjonen står som prosjektansvarlig. Kandidaten behøver ikke å være ansatt i fast vitenskapelig stilling.

<http://www.forskningsradet.no/servlet/ContentServer?c=Page&pagename=ForskningsradetNorsk%2FPage%2FStandardSidel&cid=1138710476814>

Se også Forskningsavdelingens YFF-side: <http://www.uib.no/fa/content/Funding/yff.htm>
Ved BIO skal alle YFF-søknader først vurderes gjennom forskergruppene. Forslag skal så tidlig som mulig sendes Jarl, som deretter diskuterer dem med forskergruppelederen. Instituttene kan fremme liste over potensielle kandidater til UiBs Forskningsavdeling innen 15. september. Forskningsavdelinga vil, så langt den rekker, assistere kandidatene i å utvikle gode YFF-søknader. Derfor arrangerer den et skriveseminar for potensielle kandidater 19. september 11.30-14.00 med påmelding innen 15. september.

Nordic Marine Academy: call for proposals for organising Advanced Courses

The Nordic Marine Academy (NMA) offers different opportunities for scientists and research students from over 60 member institutions in the Nordic and Baltic countries.



4th CALL FOR PROPOSALS for organising Advanced Courses

Scientists from NMA member institutions are invited to organise Advanced Courses during 2007. Proposals should be submitted within **October 1, 2006**. This is an open call, which means that no thematic priorities have been established.

More information at <http://www.bio.uib.no/nma>

Mobility Grants: for short term projects/visits to labs /research groups at other NMA members. Next deadline: **November 1**.

Ny doktorgrad

Anthony Oxley: Fettomsetning i tarm hos laksefisk

Anthony Oxley disputerte tirsdag 5. september for PhD-graden ved UiB med avhandlingen: "Intestinal lipid metabolism in salmonid fish". Tradisjonelt er oljer fra marine kilder brukt som fetteingrediens i fiskefôr til rovfisk som laks og ørret. Fiskeoljer er en begrenset ressurs, og dagens forbruk kan ikke ytterligere øke i takt med produksjonsøkningen av oppdrettsfisk. Men å bruke de alternative bærekraftige fettkildene, som for eksempel planteoljer, i fôr til fisk kan føre til endring av tarmens permeabilitet og evne til å beskytte fisken mot patogene bakterier. Til tross for at funn er gjort som viser at alternative oljekilder påvirker tarmen, er de grunnleggende biokjemiske mekanismer for fettomsetning i tarm lite kjent.

I doktorgradsoppgaven ble syntese av fett i tarm hos laksefisk (Atlantisk laks og ørret) undersøkt ved å bruke radioaktivt merkede fettkomponenter i ulike tarmmodell systemer på subcellulært, cellulært og vevsnivå. Resultatene viser at lipid (triacylglycerol; TAG) resyntese i tarmcellene hos laksefisk følger de samme biokjemiske synteseveier som de beskrevet for mennesketarm. Videre er det vist en endring i fettsyntesen avhengig av hvilke typer fettsyrer som er tilgjengelig. Fettsyrer som man finner høye nivåer av i planteoljer "overstimulerte" triacylglycerolsyntesen i tarmcellene, og kan være årsaken til fettdråpeakkumuleringen som man finner i tarmcellene hos planteoljefôret fisk. De samme fettsyrene stimulerte ikke fosfolipidsyntese, som er nødvendig for å ha en effektiv triacylglycerol (oljedråpe) transport ut av tarmcellene. Flerumettede fettsyrer som man finner i marine oljer (20:5n-3; EPA og 22:6n-3; DHA) ble brukt som energikilde i tarmcellene. Generelt var fettsyreutnyttelsen i tarm hos laksefisk delt mellom fettsyntese og fettforbrenning, der plantefettsyrer stimulerte syntese og marine fettsyrer var foretrukket til forbrenning og energiproduksjon.

Personalia: Anthony Oxley, født 1979 vokste opp i Leeds (UK). Han tok mastergraden i "Applied Fish Biology" på University of Plymouth (UK) i 2002. Han startet på PhD graden ved UiB i 2003 med arbeidssted ved NIFES og HI. Doktorgradsarbeidet var finansiert av Norges forskningsråd, prosjekt "Krill as feed source for fish" og EU prosjektet "Gut integrity".

Tid og sted for disputasen: 05.09.2006, kl. 10:15, Sildetønner, Nordnesboder 4, NIFES



Ny medarbeider

Stipendiat Mia Bengtsson

Mia Bengtsson comes from Stockholm, Sweden. She started studying biology at Stockholm University in 1998 and completed her Masters degree in Plant physiology in 2003. The masters project dealt with molecular biology of the kelp *Laminaria digitata*. After graduating she has worked within different research projects as an assistant. The work has included photosynthetic studies of tropical seagrasses in Zanzibar, Tanzania as well as fieldwork relating to population ecology of Swedish forest plants. Before coming to Bergen, she worked at the Museum of Natural History in Oslo and studied at the University of Oslo. While working with marine algae and seagrasses, she became interested in the bacteria that grow on the surfaces of these organisms. The topic of her Ph.D. here at the University of Bergen is "Bacteria associated to marine macroalgae – diversity and roles in carbon cycling". She aims to study the bacterial communities on the surfaces of different macroalgae that grow along the Norwegian coast using molecular techniques. The role of these bacteria in the cycling of organic carbon in macroalgae dominated ecosystems, such as kelp forests, will also be addressed. The work will be supervised by **Kjersti Sjøtun** from the Marine Biodiversity group and **Lise Øvreås** from the Geomicrobiology group.



Gjesteforelesninger, seminarer og kollokvier

Günter Försterra and Vreni Häussermann: Marine diversity in the Chilean fjord region and its study at the Huinay Scientific Field Station

Dato: **11 Sep 2006** Tidspunkt: **10.15** Sted: **Stort auditorium HIB**

Abstract: The Chilean Patagonian coast is one of the largest and probably the most structured fjord region in the world. Coastal heterogeneity and a complex interference pattern of physical factors produce an almost countless number of habitats. This region presents many similarities to the Scandinavian fjord region, but also interesting differences. Its marine life also belongs to the least studied. Only recent research found hitherto unknown and unique species and communities, unexpected benthic diversity, and interesting zoogeographic pattern. But this region also encounters an unparalleled economic development, including aquaculture and exploitation of marine resources. This could threaten the impressive marine life in this breathtaking beautiful area before it is even known. The PowerPoint presentation with many photos of the region and its marine life intends to address scientific questions and results, to illustrate the beauty of Chilean Patagonia, and to raise awareness for its threats.

Michael Greenacre: Tying up the loose ends in simple, multiple and joint correspondence analysis

Tirsdag 19. september kommer Michael Greenacre, Pompeu Fabra-Universitetet, Barcelona, på besøk til Institutt for Samfunnspsykologi, Det psykologiske fakultet, og skal holde en kombinert forelesning og seminar fra klokken 1115 til 1500. Stedet er rom 120, Det psykologiske fakultet, Christies gt. 12.

For de som ikke er kjent med korrespondanseanalyse kan vi sitere følgende fra materialet som følger med Statistica: "Correspondence analysis is a descriptive/exploratory technique designed to analyze simple two-way and multi-way tables containing some measure of correspondence between the rows and columns. The results provide information which is similar in nature to those produced by Factor Analysis techniques, and they allow one to explore the structure of categorical variables included in the table. The most common kind of table of this type is the two-way frequency crosstabulation table (see, for example, Basic Statistics or Log-Linear)."

Greenacre er en meget sentral person med hensyn til denne type analyse, dessuten er han en meget god foreleser. Tittelen på innlegget hans er: "Tying up the loose ends in simple, multiple and joint correspondence analysis"

Abstract: Although correspondence analysis is now widely available in statistical software packages and applied in a variety of contexts, notably the social and environmental sciences, there are still some misconceptions about this method as well as unresolved issues which remain controversial to this day. In this paper we hope to settle these matters, namely (i) the way CA measures variance in a two-way

table and how to compare variances between tables of different sizes, (ii) the influence, or rather lack of influence, of outliers in the usual CA maps, (iii) the scaling issue and the biplot interpretation of maps, (iv) whether or not to rotate a solution, (v) statistical significance of results, (vi) measuring percentages of inertia and relative contributions in multiple correspondence analysis, and (vii) the "true" dimensionality of a multivariate categorical data set.

Nye artikler

Thorolf Magnesen, Øivind Bergh & Gyda Christophersen: produktivitet hos kamskjell i oppdrett

[Magnesen T](#), [Ø Bergh](#) & [G Christophersen](#) 2006. Yields of great scallop, *Pecten maximus*, larvae in a commercial flow-through rearing system in Norway. *Aquaculture International* 14: 377-394

Abstract Survival, growth and yield of competent great scallop (*Pecten maximus*) larvae were investigated during a full production season in a commercial hatchery in western Norway. Broodstock were collected from natural scallop beds and 12 groups were induced to spawn during the period December 2002 to July 2003. Larvae were reared on a large scale in 36 flow-through tanks (3500 l) at 17 ± 1 °C and continuously fed a mixture of five algal species produced in an indoor continuous-flow system. Large variations in larval performance between spawning groups and tanks were observed, but the results were as good as earlier results using the batch system and prophylactic addition of chloramphenicol. Growth from days 3–24 averaged $4.8 \mu\text{m day}^{-1} \pm 0.8$ (sd) and survival $22.4\% \pm 21.8$ (sd). Mean yield of day 3 larvae was $7.1\% \pm 10.0$ (sd) and $26.6\% \pm 25.9$ (sd) for those surviving to day 24. Yield was significantly correlated to larval survival. Larval success was related to initial larval density, algal concentration and season. It was found that the best production regime had an initial larval density lower than 6 ml^{-1} and algal concentration of less than $12 \mu\text{l}^{-1}$ regardless of season. Seventeen tanks met these criteria and produced a mean yield of 0.5 larvae ml^{-1} to settlement. Flow-through systems are currently regarded as the only feasible method for viable hatchery production of *P. maximus* larvae in Norway.

Gyda Christophersen: studie av effekt av gjenbruk av vann på kamskjell-larver

[Christophersen G](#), [L Torkildsen](#) & [T van der Meeren](#) 2006. Effect of increased water recirculation rate on algal supply and post-larval performance of scallop (*Pecten maximus*) reared in a partial open and continuous feeding system *Aquacultural Engineering* 35: 271-282

Abstract In a commercial scallop hatchery spat production depends on a culture system which ensures high survival and good growth. Reuse of water with algae may increase the food exploitation and hence reduce the costs. Post-larvae of great scallop (*Pecten maximus*) were studied in a commercial hatchery using a partial open and continuous feeding tank system. Three different water recirculation rates (67, 83 and 92%) were tried out in two experiments with post-larvae originating from three spawning groups of ages between 43 and 57 days post-spawn, 316–886 μm shell-height and 1.1–9.6 μg ash-free dry weight. The post-larvae were held in sieves in tanks of 2500 l where a downwelling flow was maintained by airlifts. New water with a mix of monocultured algae was continuously added to the tanks at algal concentrations of 10 and 15 cells μl^{-1} in experiment 1 (groups 1 and 2) and 2 (group 3), respectively. The algal supply to each sieve was reduced along with increased recirculation rate, but was kept between 6 and 13 cells μl^{-1} . Generally no significant differences in survival, growth or chemical content were found between the three recirculation rates, while few differences were found between and within groups. Large variation in survival was found between and within groups (1–81%). Highest survival was found in experiment 1, and where post-larvae from two settlements were used, the first settlement survived better than the second. The daily growth ranged from 15 to 62 μm shell-height and from 0.3 to 2.6 μg ash-free dry weight. The scallop post-larvae could well be reared at all three recirculation rates studied as an increase from 67 to 92% did not seem to affect the post-larval performance seriously. The algal supply, however, had to be compensated by an increasing number of cells ($>10 \text{ cells } \mu\text{l}^{-1}$) when increasing the recirculation rate.