

## Fra toppen!

Godt nytt år!

Så er vi i gang igjen, og et nytt år med blanke ark ligger foran oss. I hvert fall var det ganske blanke fortau som møtte oss på Nygårdsbroen tidligere denne uken! Spennende utfordringer venter: et Senter for forskningsbasert innovasjon (SFI) omkring lakselus skal ta form, Biofagevalueringen fortsetter med panelmøter utover våren og arbeidet med det nye bachelor-programmet i biologi skal avsluttes.

Samtidig nærmer strategiprosessen seg slutten. I løpet av uken har det kommet mange gode og konstruktive innspill til strategiplan-utkastet som ble sendt ut på høring før jul, og frem til rådsmøtet 19. januar er målet å få disse sydd sammen til en god og meningsfylt plan som peker fremover for instituttet og biologifaget.

[Arild Folkvord](#) (nederst til høyre) er den nye nestlederen ved BIO i det nye året. Han overtar etter Vigdis Vandvik som skal ha seg en velfortjent forskningstermin. Velkommen til Arild, og takk til Vigdis!

Hilsen Anders



## Ukens bilde



### Branching pattern in *Bryopsis hypnoiodes*

Photographer: **Kjersti Sjøtun**

Picture shows siphonous structure and the arrangement of side branches, which are not laying in one plane (like they are in *B. plumosa*). Location: Espesgrend, Hordaland

*We need more photos! You are invited to submit photos (electronically!) for "Ukens bilde". Please include a very short description and credit information. Picture can be of researchers / students in action, technology, organisms, field sites ... Please send your pictures to [bio.info@bio.uib.no](mailto:bio.info@bio.uib.no)*

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## Siste nytt fra BIO

Valg av verneombud, Victoria Braithwaite on BBC

### Trenger forslag til kandidater som verneombud/varaverneombud 2011-12

Nå er det på tide å velge nytt verneombudd med vara for perioden 2011-2012. Sist vi valgte valgte vi bare for 1. år slik at vi kunne tilpasse oss det etablerte valget.

Der skal velges 1 verneombud - idag er dette Paul Løvik Der skal også velges 1 stk vara for hhv A- og B-bygget, de som sitter i C bygget hører under B-bygget. I dag er dette A-bygget Lene Synøve Halvorsen og B-bygget Vibeke Lokøy.

I tillegg skal der velges for Espeland, idag er dette Tomas Sørlie.

Forslag kan sendes til meg, men husk at vedkommende kandidat må være forespurt. De som er verneombud i dag kan forsette med vervet om det er ønskelig. Jeg håper at jeg kan få forslag på kandidater til utgangen av tirsdag slik at vi kan avholde valget fort.

Hilsen [Eva Krzywinski](#).

### Nytt om ansettelser

Personal- og organisasjonslavdelingen ved UiB melder at det SKAL være tre ukers søknadsfrist på ALLE utlysinger. Dette betyr at når organisasjonene skal ha 3 dagers frist på uttalelse, går det minst fire uker fra vi sender en utlysning fra BIO og til søknadsfristen. Når vi tar høyde for egen og fakultetets saksbehandlingstid (som er avhengig av ledig kapasitet) må BIO beregne minst 6 uker fra vi får saken og til søknadene kan behandles av komitéen. Det kan altså lønne seg å starte prosessen med stillingsbeskrivelse i god tid!

### Victoria Braithwaite on BBC

Victoria Braithwaite was one of the panel on the "Forum" discussion programme on BBC World. Here's the [link](#) to the programme.

## Undervisningsnytt

### Semesterstart og masteruke

#### Semesterstart

Neste uke starter vårsemesteret og studentene kommer tilbake etter en velfortjent juleferie. Vi tar i mot nye masterstudenter på onsdag og undervisningen starter i hovedsak i uke 3.

Undervisningspåmeldingen er allerede i gang og studenttall på ulike emner vil være klare ca. mandag 17. januar.

#### Masteruke

Fakultetet planlegger i vår et nytt informasjonstilbud til våre studenter og andre interesserte om mulighetene for masterstudier ved fakultetet. I 2011 blir det innført en ny hovedfrist for å søke om masteropptak, den 15. april. Det vil derfor være hensiktsmessig å arrangere masteruken i mars, når søknadsperioden starter. På onsdag 16. mars vil det etter planen foregå et fellesarrangement på Realfagbygget med hovedforedrag av dekan og inviterte foredragsholdere, informasjons- og spørretorg og søknadshjelp. De andre dagene i denne uken kan instituttene bruke til sine lokale møter og arrangementer med presentasjon av forskningsgrupper, mulige masteroppgaver,



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studentpresentasjoner, etc. Informasjon om alle arrangementene vil bli samlet og publisert på en felles nettside og vil dermed være tilgjengelig for studenter på tvers av instituttene og fakultetene.

Studieadministrasjonen ved fakultetet og instituttene står for planlegging og store deler av gjennomføringen av arrangementet. Vi er imidlertid avhengig av at vitenskapelig ansatte og studenter stiller opp med bidrag til presentasjoner, informasjonsmøter, og lignende, og at noen møter og arrangementer kan foregå i instituttens lokaler.

BIO ønsker i forbindelse med masteruken å arrangere et større møte der de ulike forskningsgruppene får presentert sine ledige masterprosjekter, og veiledere får møte potensielle nye masterstudenter. Vi ber derfor alle grupper og veiledere om å skissere ledige masterprosjekter som kan presenteres i mars. Studieseksjonen vil sende ut mer informasjon om arrangementet, men de som allerede har prosjektforslag klare kan sende disse til [studie@bio.uib.no](mailto:studie@bio.uib.no).

## Siste nytt fra verden rundt oss

### Green light for IPBES, 7 ERC Advanced Grant til Norge

#### Green light for IPBES!

The United Nations 65th General Assembly (UNGA) has agreed to establish the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) during a plenary meeting held on 21st December in New York. The full text of the resolution on UNEP (Report of the Governing Council of the United Nations Environment Programme on its eleventh special session A/C.2/65/L.43), which includes the decision on IPBES, will be available shortly on the UNGA 65th Session website and at [www.ipbes.net](http://www.ipbes.net), and includes a request to UNEP to convene the 1st IPBES plenary in order to determine modalities and institutional arrangements to fully operationalize the platform. Read the full press release [here](#).

#### NDF Nordic Climate Facility

Newsletter for 2010 kan du lese [her](#)

### Nytt fra NFR

#### Samarbeid om rettferdig fordeling



Behovet for global helseassistanse alltid være større enn bidragene fra giverlandene. Sammen med et ledende amerikansk miljø, skal forskere fra Bergen undersøke mekanismer som kan bidra til gode og rettferdige prioriteringer.

[Les mer](#)

### Syv EU-toppstipend til Norge



Hele syv norske forskere er i år tildelt Advanced Grant fra Det europeiske forskningsrådet (ERC). Dette er et meget godt resultat.

[Les mer](#)

### Cod and salmon genomes sequenced - will pay off commercially



The genetic material of cod has been fully sequenced, and the salmon genome is not far behind. Now comes the task of applying this data to benefit Norway's aquaculture industry.

[Read more](#)

### Look to the Nordics!



“The Nordic countries have a good chance of influencing European research and innovation policy initiatives in areas where there is a common Nordic approach,” says Gunnel Gustafsson, Director of the Nordic research organisation NordForsk.

[Read more](#)

### Slik blir oppdrett bærekraftig



Forskning og kunnskapsmiljøene skal gjøre oppdrettsnæringen både bærekraftig og mer effektiv, skriver programstyreleder i HAVBRUK i en kronikk i Dagens Næringliv 22.12. [Les mer](#)

### Norge-Japan samarbeid åpner store muligheter



Statsråd Tora Aasland reiser i februar til Japan for å styrke Norges forskningssamarbeid med Japan. I forkant ønsker Forskningsrådet innspill til hvordan myndighetene kan fremme Japan-samarbeidet.

[Les mer](#)

### 45 mill. til nytt Polarforskningsprogram



I statsbudsjettet for 2011 er det bevilget 45 mill. kroner fra Forskningsfondet til et polarforskningsprogram som oppfølging av Klimaforliket, Svalbard-meldingen og nordområdesatsingen. De to første årene skal hoveddelen av bevilgningen forvaltes av NORKLIMA.

[Les mer](#)

### Ledige stillinger for biologer

Mer info finner du [her](#).

## Forskning: utlysninger, nye satsinger og prosjekter

NFR/RCN, ASSEMBLE, AEI

Several **RCN programmes** have application deadline 16.02.2011, including MAROFF, NARE, PETROMAKS, GASSMAKS and IS-MOBIL (Yggdrasil), [Read more](#)

### Time to apply for Assemble in Europe

ASSEMBLE is an EU FP7 research infrastructure project comprising a network of marine research stations, as listed below. We offer on-site and remote access for European research groups to conduct marine research projects.

The 4th ASSEMBLE call to apply for access to marine infrastructure is now open:

#### Deadline Feb 15, 2011

- For on-site access projects taking place between June and November 2011 (remote access can be applied for all year around).
- Support cover travel and up to an overall total of 60 person days of accommodation and infrastructure usage for up to 3 users. For IUI (Eilat) such support is limited to 1 or 2 users for up to 30 person days per user.
- Only European user groups (=user group leader and majority of the users working in Member States or Associated States) can apply and only to ASSEMBLE sites outside their own country.



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- Applicants working outside Europe (EU Member states and Associated states) can be funded if not being the main applicant and if in minority (less than 50%) of the user group applying for the access project.
- New users and users from outside the ASSEMBLE network are prioritized as are users moving from a non-marine area into the marine field.
- Projects cannot be led by scientists working at the infrastructure site applied to and cannot not be part of local projects. Proposed projects that to some extent include local scientists are welcome but will have lower priority than independent projects.
- Projects using local ecosystems, species or models will have a higher priority than projects bringing their own (marine only) samples.

For more information and to apply read [here](#):

**Aquaculture Environment Interactions** has now produced its second issue. Full Open Access to the articles is available at this [link](#)

**PEMSEA** e-updates: [link](#)

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

Husk å sende søknadsutkastet til [post@bio.uib.no](mailto:post@bio.uib.no) 1 uke i forveien (gjelder ikke mindre bevilgninger som legater og fonds)

## Kurs, møter, seminar og arrangement

Marine Biodiversity Forum, Sats på Torsk, MIC course, Grow, integrated Coastal Zone Management, European Wildlife Disease Association (EWDA) Student Workshop, Bergen Summer Research School, GeoHab, Int. Congress for Conservation Biology

The **Marine Biodiversity Forum** continues in 2011 with a schedule of every second Wednesday starting the **12th of January**. Full text of the papers for the first meeting and a preliminary schedule is attached [here](#). The first forum schedule is set until Easter and a new schedule for the rest of the semester will be planned and presented during the spring semester.

### **Nordens største konferanse for marine arter Bergen 9.-10. februar.**

Norsk Sjømatsenter i samarbeid med NCE Aquaculture arrangerer konferansen Sats på Torsk. For mer info om program og påmelding: [www.torsk.net](http://www.torsk.net)

**1st MIC course on image processing** at the Dept. of Biomedicine, University of Bergen **22nd–25th of February**, 2011. [More info](#)

**Grow, den femte innovasjons- og entreprenørskapskonferansen for Bergensregionen. 16. og 17. mars.** Grow 2011 går av stabelen i hjertet av Bergen sentrum, på Radisson Blu Hotel Norge. 16. mars blir det dessuten et spenstig kveldsarrangement, 17. mars blir det både foredrag og gruppesesjoner med **fokus på anvendt innovasjonsmetodikk, gründerhjelp og fremtidsvisjoner**. Mer info på [www.growbergen.no](http://www.growbergen.no), [Twitter](#), [LinkedIn](#) og [Facebook](#)

**Internasjonalt symposium i på tema "Integrated Coastal Zone Management"** i Arendal **3.-7. juli i 2011**. Frist for påmelding av abstracts er **15 januar** og frist for tidlig registrering er 1 april 2011. Det favner faglig bredt, se mer informasjon [her](#)

**4th European Wildlife Disease Association (EWDA) Student Workshop.** Open for MSc students, doctoral students, PhD students and residents The Workshop will be held from April **14th to 17th, 2011**, at the conference centre Les Pensières, of the Fondation Mérieux, in Veyrier-du-Lac, France. The registration fee, application instructions and abstract guidelines are available [here](#) The application deadline is **February 1st, 2011**.

**10th anniversary GeoHab (Marine Geological and Biological Mapping) meeting** will be celebrated in Helsinki, Finland, from **3.5. to 6.5.2011**. The main focus of the conference is: Development of New Methodologies to Map the Marine Environment in Support of Sustainable Ocean Management. [Read more](#)

**Bergen Summer Research School on Global Development Challenges (BSRS)**, som er en tverrfaglig, internasjonal sommerforskerskole på PhD-nivå, arrangeres for 4. gang ved Universitetet i Bergen, fra **20. juni til 1. juli 2011**, denne gang under temaet "Norms, values, language and culture". Søknadsfristen er 1. mars 2011. Mer informasjon om BSRS 2011, finner du [her](#), og mer info om de enkelte kursene finner du [her](#).

**15th INTERNATIONAL ECO-CONFERENCE® 9th ECO-CONFERENCE® ON ENVIRONMENTAL PROTECTION OF URBAN AND SUBURBAN SETTLEMENTS - NOVI SAD, SERBIA, 21<sup>st</sup> - 24<sup>th</sup> September 2011** – [read more](#)

**25th International Congress for Conservation Biology.** Meeting will be held in Christchurch between the **28th of November and the 2nd of December 2011**. The call for proposals for symposia, workshops, and focus groups is open via the website (**deadline 17 January 2011**), More details can be found [here](#)

Mer info om kurs, møter, seminar og arrangement etc finner du [her](#).

## Nye artikler

Bristow, Johannessen, Berland, Schander, Kamisaka, Rønnestad, Rapp, Samuelsen, Korsøen, Fernö, Brattegard, Eide, Vandvik

**Bristow GA, Johannessen P, Berland B and Schander C.** 2010. *Devonia perrieri* (Malard, 1903) (Bivalvia) found in situ on the holothurian *Leptosynapta inhaerens* (Müller, 1776) in Norway. *Fauna norvegica* 30: 25-27.

### Abstract:

The ectosymbiotic bivalve, *Devonia perrieri*, has earlier been found non-associated with its host in grab samples in Western Norway, but has never been found on its purported host, *Leptosynapta inhaerens*. Here we show it for the first time on its host, *Leptosynapta inhaerens*, in Norwegian waters. This confirms that the host in Western Norway is same as elsewhere in the bivalve's distribution area.

**Yuko Kamisaka and Ivar Rønnestad.** (2011) Reconstructed 3D models of digestive organs of developing Atlantic cod (*Gadus morhua*) larvae. *Marine Biology* 158: 233-243.

### Abstract

Six 3D models of the digestive system during ontogeny were reconstructed from histological sections of Atlantic cod larvae. The 3D models clearly visualize the following features: folding of the gut rotation; subdivision of digestive tract into foregut, midgut, and hindgut by sphincters; development of stomach and pyloric caeca from 39 dph; location of entrances of bile and pancreatic ducts in the medial plane of the anterior midgut; ontogeny of pancreas from a compact organ to an elongated and

branched (but not diffuse) organ along the posterior midgut; one dominant islet of Langerhans until 39 dph and several smaller satellite islets also visible from 53 dph; the relatively large volume of the anterior midgut that probably increases residence time of ingested food mixing with secretions from pancreas and bile. Calculated volumes of each digestive organ demonstrate allometric changes during ontogeny. Interactive 3D models are available as QuickTime format downloadable files.

**Korsøen, Ø.**, Dempster, T., Fosseidengen, J-E, **Fernö, A.**, Heegaard, E. and Kristiansen, T.S. 2010. Behavioural responses to pressure changes in cultured Atlantic cod (*Gadus morhua*): defining practical limits for submerging and lifting sea-cages. *Aquaculture* 308, 106-115.

### Abstract

Farmed Atlantic cod (*Gadus morhua*) are occasionally exposed to buoyancy changes in sea-cages, through lifting or lowering of cage nets. Physiological processes regulate the level of gas in the closed swim bladders of cod and thus the ability of cod to control their buoyancy. Rapid net lifting may cause positive buoyancy, leading to barotrauma, while net lowering may lead to negative buoyancy and alter cod behaviours. We tested how groups of farmed cod responded immediately after lifting events from 5 different start depths equivalent to 40% pressure reductions, and how long they took to return to pre-lifting pressure levels. In addition, we tested immediate responses and recovery times to cage lowering events equivalent to 100-300% pressure increases. Trials were conducted with 100 cod of 1.1-1.7 kg in a 63 m<sup>3</sup> sea-cage at the lower (5 °C) and upper (16 °C) water temperature limits experienced during culture. Swimming behaviours were measured at fixed intervals before and after cage lifting or lowering, and a feeding test was used to assess appetite. In general, lifting events increased swimming speeds 1.5-4 times and tail beats 2-3 times and fish swam with an average -14° head-down angle, indicating positive buoyancy. The depth before lifting affected the immediate response as the fish became more active after lifting events from shallow compared to deeper depths. Appetite levels decreased for about 2 h after cage lifting, independent of temperature or start depth. The overall recovery time of 8 h after lifting did not depend upon start depth or temperature. Lowering events appeared to cause negative buoyancy. Swimming speeds (1.3-2.3 times) and tail beat frequencies (1.4-2.3 times) increased immediately after cage lowering, and cod swam with an average 30° head-up swimming angle. Neither pressure level nor temperature affected this immediate response. Time to recover to neutral buoyancy for 300% pressure increases took 42-90 h, but only 18-34 h for 100% pressure increases. We conclude that a 40% pressure reduction is an upper limit for lifts of healthy farmed cod. Secondary lifts should not be done until at least 10 h after the first lift. Cage lowering should be done slowly to avoid potentially stressful crowding of negatively buoyant fish on the cage bottom, especially at low temperatures.

Narayanaswamy Bhavani E, Paul E Renaud, Gerard CA Duineveld, Jørgen Berge, Marc SS Lavaleye, Henning Reiss & **Torleiv Brattegard**. 2010. Biodiversity Trends along the Western European Margin. *PLoS ONE* 5(12): e14295. doi:10.1371/journal.pone.0014295

Sylvi M. Sandvik and **Wenche Eide** Short-term costs related to male and female structures in alpine *Parnassia palustris* *Nordic Journal of Botany* 28: 1-6, 2010

### Abstract

The aim of this study was to investigate the potential costs related to male and female structures in a small, hermaphroditic alpine plant species, *Parnassia palustris* L. We studied in the field the effect of experimental manipulation of seed set (female structures) as well as anthers and staminodes (male structures) on next year's survival, flowering, seed set and growth. We found no statistically significant differences between the treatments in survival, number of flowers and fruits, fruit/flower ratio, seed number or mean mass per seed the following year. Furthermore, there was no statistically significant difference in growth response between the treatments. These observations indicate both that the manipulations of the flowers the previous year had no effect on growth and that the competition between growth and sexual reproduction was negligible. Our results may reflect small investments in reproduction, abundance of soil resources and/or that all resources saved by the plant one year are not necessarily invested in reproduction or growth next year.



**Schander C, Rapp HT** and Dahlgren TG. 2010. *Osedax mucifloris* (Polychaeta, Siboglinidae), a bone-eating marine worm new to Norway. *Fauna norvegica* 30: 5-8.

### Abstract

The bone-eating siboglinid polychaete *Osedax mucifloris* Glover, Källström, Smith & Dahlgren, 2005 is reported from Norwegian waters for the first time. Dense growth was found on bovine bones deposited at 118 meters depth off western Norway. Dwarf males were observed for the first time. The two specimens sequenced were identical to haplotypes previously found at a Swedish whale fall. The possibility of finding additional species of *Osedax* is discussed.

Keuning R and **Schander C**. 2010. *Thyasira ockelmanni* (Mollusca: Bivalvia: Veneroidea), A new species of Thyasiridae from the Norwegian Sea. *Fauna norvegica* 30: 21-24.

### Abstract

A new species of Thyasiridae, *Thyasira ockelmanni* n.sp. is described from the abyssal depths of the Norwegian Sea. The generic assignment is tentative and possible alternatives are discussed. The new species has some resemblance to *Thyasira subovata* (Jeffreys, 1881) and *Adontorhina similis* Barry & McCormack, 2007, but the posterior outline is rounded and not angulate or truncate as in these species.

Irja Sunde Roiha, Erling Otterlei, Amund Litlabø, and **Ole Bent Samuelson** Uptake and elimination of florfenicol in Atlantic cod (*Gadus morhua*) larvae delivered orally through bioencapsulation in the brine shrimp *Artemia franciscana*. *Aquaculture*, Volume 310, Pages 27-31.

### Abstract

As an approach to combat bacterial infections, incorporation of florfenicol in Atlantic cod (*Gadus morhua*) larvae, administered orally through bioencapsulation in *Artemia franciscana* nauplii, was investigated. *Artemia* nauplii were enriched with 1000 mg/l florfenicol for 30 min and administered as a single dose, or daily for three consecutive days. The concentration of florfenicol in the medicated nauplii, and in the cod larvae, was analysed by high performance liquid chromatography (HPLC). Following a single oral administration, the elimination half-life ( $t_{1/2\beta}$ ) was calculated to 14 h,  $C_{max}$  to 4.7 µg/g dry weight (14.3 ng/larva),  $T_{max}$  to 0.5 h, and MRT to 20 h, respectively. An hour after administration of batch 1 in the triple dose study, a mean florfenicol concentration of 4.6 µg/g dry weight (14.0 ng/larva) was found in the cod larvae. One hour following administration of batch 2 and 3, corresponding values were 5.9 µg/g dry weight (17.9 ng/larva) and 4.2 µg/g dry weight (12.8 ng/larva), respectively. These data show that medication of cod larvae using *Artemia* nauplii as carriers of florfenicol is a promising approach for treatment.

### Nye Bokkapitler:

Sylvi M. Sandvik and **Wenche Eide** 2011 Long-Term Experimental Warming Affects Tissue C/N Ratios Differently in Three Strongly Chionophilous Alpine Species In *Global warming in the 21<sup>st</sup> Century* (editor JM Cossia). Nova Science Publishers, Inc

Løkkeborg, S., **Fernö, A.** and Humborstad, O.B. 2010. Fish Behaviour in Relation to Longlines. In *Behaviour of Marine Fishes: Capture Processes and Conservation* (editor P. Hi). Blackwell Publishing Ltd.

### Populærvitenskapelig:

Kronikk i Nationen av **Vigdis Vandvik**. [Lenke](#)

\*\*\*A full listing of BIO's ISI publications can be found on BIO's internal web pages. Click here for an [alphabetic listing for 2010](#). Click here for a [listing sorted by date](#) in ISI (most recent at the top).