

Siden sist!

FIRE ROUTINES in the new building

If the alarm rings

If the fire alarm starts ringing, you must evacuate the building as quickly and calmly as possible by the nearest accessible escape route and go to the area between the new buildings and the old HIB building.

Identify the fastest way out – today!

We urge everybody to identify the nearest escape routes from your office, your lab(s) and any other places in the building where you do your work. Find more info in the [moving FAQ](#).

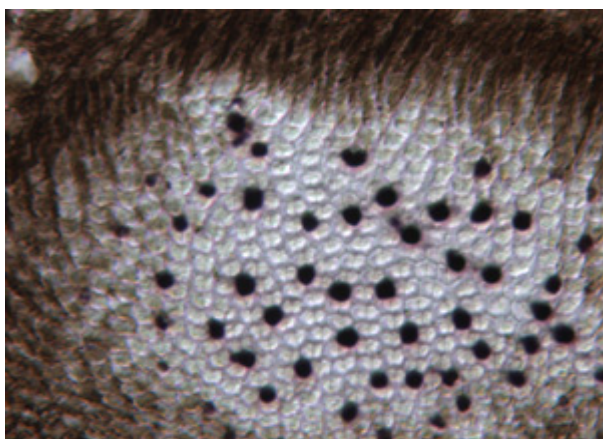
The moving FAQ has been updated

The [moving FAQ](#) has been updated again – with important information about fire routines and other things.

Oppdaterte interne BIO forskningssider

Lenker til BIO-aktuelle utlysninger på BIO sine interne forskningssider er nå oppdatert. Lenken til internsidene legges hver uke i BIO-info under Forskning. Tips oss gjerne om du vet om flere aktuelle utlysninger.

Ukens bilde



Fotoreseptorer hos torsk

Fotograf: **Jon Vidar Helvik**

Bildet viser spesielle fotoreseptorer i retina hos torsk som detekterer den blå delen av lysspekteret. Denne klassen av fotoreseptorceller er farget ved hjelp av in situ hybridisering mot blått-synspigment.

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 Elinor Bartle.

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Fra toppen

Fotball og forskning

Instituttrådet har tirsdag denne uken vedtatt BIOs budsjett for 2010. Budsjettet er som ventet trangt. Samme dag fortalte Jens Stoltenberg kontaktkonferansen, en viktig møteplass mellom Kunnskapsdepartementet og universitetene og høyskolene, at vi ikke kan forvente noe særlig mer penger til forskning i årene fremover (<http://www.tu.no/jobb/article234205.ece>).

Victor Norman har i et innlegg i Dagens Næringsliv sist lørdag (18.1.) sammenlignet fotball med forskning. Han skriver at statens bruk av poenger «er som om vi skulle ha som mål å få verdens beste fotballag, brukte en formue på å skaffe oss gode spillere - og så glemme å gjøre noe med trenerstallen». Normans poeng er at vi må kunne investere i forskning og utdanning, på samme måte som vi investerer i utenlandske aksjer. At det faktisk vil lønne seg på sikt.

I arbeidet med årets budsjett har fotballmetaforen vist seg relevant på flere måter. Lønnsbudsjettet for 2010 utgjør 107% av rammebevilgningen når husleien er trukket fra, en økning fra 102% i 2009 - altså omtrent som et gjennomsnittlig norsk tippeliga-lag. Det betyr at vi ikke kan kjøpe noen nye toppspillere - uten at vi får med oss noen snille, eksterne investorer.

Med overfylte lønnsbudsjett er det lite igjen til drift og utskiftning av instrumentparken. Da blir rekrutteringsarbeidet også vanskelig - omtrent som å forsøke å lokke Zlatan Ibrahimovitsj eller Cristiano Ronaldo til å spille på en grusbane de neste ti årene.

Overgangsmarkedet er allerede vanskeligere å håndtere for et universitetsinstitutt enn for et fotballag: Vi kan vanskelig selge spillere, og når vi ønsker å kjøpe noen må stillingen som midtstopper eller høyrekant lyses ut, slik at vi risikerer på gå glipp av gode kandidater.

Riktignok har BIO i forbindelse med flyttingen til nybyggene en ekstraordinær utstyrbevilgning som vil hjelpe godt de nærmeste årene. Men 14 millioner går raskt unna når det innmeldte behovet passerer 30!

I en sann situasjon kan motløsheten lett ta overhånd. Da er det viktig å tenke som en fotballtrener: sette seg ambisiøse, langsiktige mål, og bygge stein på stein. Vi kan vinne gull i tippeligaen, og vi kan slå mange av de gode lagene ute i verden. Vi skal hevde oss som et av de beste biologi-instituttene i Europa. Arbeidet med strategiplanen skal vise oss hvordan vi legger opp treningsarbeidet.

Anders Goksøyr



Siste nytt fra BIO

STIM skal på tur, "Hvem sitter hvor?", oppdatert Flytte-FAQ

Sælenvatnet stinker

Fra Sælenvatnet i Fyllingsdalen siver det nå opp en illeluktende og farlig gass. **Mikal Heldal** og **Frede Thingstad** se på saken. [Les mer fra BT](#)



Winter Trip Sign-up!

STIM in partnership with the Biology Department is happy to announce this year's Winter Trip to Kvamskogen, which is to take place from February 12-14th.

[Learn more](#)



BIO-info

Nyheter fra Institutt for biologi

Folk og lokaliteter på BIO

Lurer du på hvor folk sitter etter flyttingen? Eller hvem som hører til i de forskjellige forskningsgruppene? Eller hvem som er romansvarlige for ulike laber og lignende? Svaret finner du på en [egen side](#) på BIOs interne sider.

The moving FAQ has been updated

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Siste nytt fra verden rundt oss

Studentene slutter, pappa bestemmer, flest Bergensstudenter reiser ut m.m.

Strømmer fra universitetet

Mer enn hver femte universitetsstudent slutter før de er ferdig med utdanningen sin. Det sosiale miljøet får mye av skylden. Les mer fra [Studvest](#)

Påvirket av pappa

Ny forskning viser at mange jenter velger realfagsstudier etter inspirasjon fra far. Gode jobbmuligheter hjelper også. Les mer fra [Studvest](#)

Flest utvekslingsstudenter fra Bergen

Universitetet i Bergen er det universitetet i Norge som sender flest studenter på utveksling. Les mer fra [NRK](#)

Stenger kranene for forskning

Statsminister Jens Stoltenberg advarer universiteter og høyskoler mot å tro at pengene vil renne fritt fra statens kraner i årene framover. Les mer fra [Teknisk Ukeblad](#)

Forskning gjør livet rikare

– Den viktigaste verdien med forskning og høgare utdanning er at den gir menneska meir kunnskap og bidrar til å gjera livet vårt rikare. Les mer fra [På Høyden](#)

Unige med forskningsministeren

Rektorer ved flere universiteter i Norge vil ikke utelukke akademisk boikott som virkemiddel. Les mer fra [NRK](#)

Bellona misforstår

Eiendomsdirektør Even Berge mener Bellona har misforstått i sin kritikk av UiBs handlingsplan for det ytre miljø. Les mer fra [På Høyden](#) - notis

'Big science' spurs collaborative trend.

Complicated projects mean that science is becoming more globalized. [Read more from Nature.](#)

BIO-info

Nyheter fra Institutt for biologi

Ledige stillinger for biologer

Sjekk oversikten på [jobbnor!](#)

31.01	Postdoc phytoplankton ecology, Kellogg Biological Station of Michigan State University, US
01.02	Four Research Fellow positions (Morphology and evolutionary developmental genetics, Phylogenetics and horizontal genomics, Biogeography, Global Change Biology) at NCB Naturalis, The Netherlands
05.02	Postdoc Molecular plankton taxonomist, SAHFOS, Plymouth UK
Until filled	Several positions in Physical, Chemical and Biological Oceanography, Marine Biology/Marine Ecology, Genomics, and Ecosystem Modeling at KAUST (the King Abdullah University of Science and Technology)

Forskning: utlysninger, nye satsinger og prosjekter

Finn informasjon og søknadsfrister om Posisjoneringsmidler (PES) , Human Frontier Science Program (HFSP), flere NordForsk-utlysninger samt Japan-stipend

Mer info om følgende utlysninger og mange flere (inkl. løpende, dvs. uten frister) finner du [her](#)
NB! Siden er nylig (21.01.10) oppdatert!

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

31. jan	SCOR visting scholars
09. feb	Posisjoneringsmidler (PES) Norges forskningsråd/Universitetet i Bergen. Les her . Søknadsskjema finnes her .
17. feb	YGGDRASIL (IS_MOBIL) mobilitetsprogram for utenlandske ph.d-studenter og yngre forskere
28. feb	IIASA Post-doctoral program
28. feb	ABEL EXTRAORDINARY CHAIR – funding exchanges learn more
5. mar	Living labs samarbeidet (LILAN) (RCN and NordForsk)
17. mar	ERC Advanced Grants, Life sciences
17. mar	Research Training Courses (NordForsk)
22. mar	HFSP preregistration
25. mar	Marie Curie International Research Staff Exchange Scheme (IRSES)
25. mar	Researcher Networks 2010 (NordForsk)
31. mar	HFSP Submission deadline
21. apr	SFI Endelig søknad
02.juni	Aurora-programmet . Forskerutveksling mellom Norge og Frankrike (IS-AUR)

Human Frontier Science Program – HFSP

The HFSP supports novel, innovative and interdisciplinary basic research focused on the complex mechanisms of living organisms; topics range from molecular and cellular approaches to systems and cognitive neuroscience. Research Grants are awarded for novel collaborations involving extensive collaboration among teams of scientists working in different countries and in different disciplines. Two types of grants are available: Young Investigator Grants and Program Grants. The submission site for letter of intent for research grant applications is now open. [Read more](#)

Deadlines:

22nd March 2010: Compulsory Pre-Registration deadline for obtaining a reference number

31st March 2010: Submission deadline

Lyser ut over 15 millioner til brukerdrevet innovasjon

Den første utlysningen i det nordisk-baltiske Living Labs-samarbeidet (LILAN) har åpnet. Søknadsfrist er 5. mars. [Les mer.](#)



Research Training Courses 2010

NordForsk invites applications for funding for research training courses (PhD) from institutions in the Nordic and Baltic countries. The objective is to offer research training in fields that are difficult for the national research institutions to cover on their own. The courses may be within all scientific areas, but areas where the Nordic countries are or have the potential to become internationally leading, are prioritised. The research training courses usually take place in the Nordic or Baltic countries, and should be specialised intensive courses (minimum 5 days) for PhD students and young researchers (at postdoctoral level).

Final submission date: 17.03.2010

Researcher Networks 2010

NordForsk aims to bring together prominent research groups in the Nordic and Baltic countries in order to strengthen and increase the quality of research and research training on Nordic, European and international levels. NordForsk researcher networks should aim to establish joint research training in a given field, to consolidate research as a basis for joint European or international projects, or to strengthen a given field of research in order to establish an excellent researcher network.

Final submission date: 25.03.2010.

Postdoc i Japan?

The Japanese Society for the Promotion of Science offers 2 types of post doc fellowships for applicants from Europe (also Norway):

- 1) Short term fellowship of 1-12 months, several deadlines 2010
- 2) Long term fellowships for 12-24 months, deadline May 2010

Both fellowships are open to all disciplines (also natural sciences) and need a Japanese professor to host you and send in the application for you. More information on procedures, funding and application can be found [here](#).

Forskerutdanning / PhD training

PhD-kurs og prøveforelesninger

PhD course “Physiological responses to climate change in aquatic animals”

(6 ECTS) University of Gothenburg, 22 Feb - 19 March 2010, For further details on the course and application form please go to: www.grip.science.gu.se

Nicolas Dupont PhD-forelesning

Nicolas vil mandag 25. januar holde forelesning over oppgitt emne for PhD graden.

Tittel: What can satellites tell us about marine biology?

Tid: Mandag 25. januar . Kl. 11:15

Sted: Grupperom 1 G19, BIO-byggene

Bedømmelseskomite: Jarl Giske, Jorun Egge, Svein Rune Erga

Alle interesserte er velkommen

BIO-info

Nyheter fra Institutt for biologi

Chitra Bahadur Baniya PhD-forelesning

Chitra Bahadur Baniya vil tirsdag 26. januar holde forelesning over oppgitt emne for PhD graden.

Tittel: How climate change affect biodiversity in high altitude ecosystem

Tid: Tirsdag 26. januar . Kl. 13:15

Sted: Grupperom 1 C17, BIO-byggene

Bedømmelseskomite: John-Arvid Grytnes, Endre Willassen, Anders Lundberg

Alle interesserte er velkommen

Faglige møter

Interessert i biogeokjemi, klimaendringer og forurensninger – eller kanskje stør - se her:

Strategi for forsk klimaforskning

Styringsgruppen for Klima21 overrekker sin rapport til kunnskapsminister Tora Aasland mandag 1. februar kl 14. Overrekkelsen skjer på et miniseminar i regjeringskvartalets bygning R5, Akersgaten 59, fra klokken 14.00 til 16.00. På seminaret vil styringsgruppen presentere innholdet og anbefalingene i sin rapport, og norsk klimaforskning vil bli eksemplifisert gjennom tre ulike bidrag. Klima 21 er et strategisk forum for klimaforskning opprettet av Regjeringen. Utvalget skal utvikle en helhetlig strategi for norsk klimaforskning, og bidra til at forskningsresultater tas i bruk.

Arrangementet er åpent. Påmelding til gb@forskningsradet.no innen torsdag 28. januar.

IMBER IMBIZO II - First announcement

Integrating biogeochemistry and ecosystems in a changing ocean: Regional comparisons
10 - 14 October 2010, Crete, Greece.

IMBER is an IGBP-SCOR project focussing on ocean biogeochemical cycles and ecosystems research. The goal of IMBER is "to investigate the sensitivity of marine biogeochemical cycles and ecosystems to global change, on time scales ranging from years to decades". To achieve this goal we need to identify key interactions between marine biogeochemical cycles and ecosystems, and assess how these interactions respond to complex natural and anthropogenic forcings.

[Read more.](#)

Biological effects of climatic changes and pollution: from biomarkers to system biology

The 27th ESCPB^{new} annual meeting will be held from 5 to 9 September 2010 in Alessandria (Italy). Its cultural target is a contribution to clarify the role of climate changes on possible effects of pollutants on living organisms. The year 2010 is the international year for studies on biodiversity and therefore the meeting concerning climate changes and their biological effects will represent a central point in the European and international scientific debate on this topic. Read more about the 27th [ESCPB](#) congress [here](#).

Faglunsj om stør i Danube elven i Romania på NIVA fredag 29. januar

Foredrag ved Carolyn Knight and Kate Hawley fra NIVA Fisk og Akvakultur i Thormøhlensgate 53D (1. etg. møterom hos Ernst & Young) 29. januar kl 1130-1230:

Development of a management strategy for Danube sturgeon: a case study with beluga (*Huso huso*). Sturgeons of the Danube River are in decline. Long term changes in both population size and structure of sturgeon species have been observed. Using beluga sturgeon as a case study, we shall discuss the changes in population and the management procedures put into place to protect and restore this species.

Seminar series - Department of Molecular Biology

Everybody is welcome to join next week's seminar series at Department of Molecular Biology. All seminars will take place at the seminar room in the 5th floor (Bioblokken) at Høyteknologisenteret. You will find the program [here](#).

BCCR/GFI colloquium

Sabine Baumann will talk about "Analysis, interpretation and comparison of the glacier inventory and glacier fluctuation data from Jotunheimen, South-Norway, since the maximum of the Little Ice Age at GFI for this years first BCCR/GFI colloquium. Time: Monday 25, 1115 Place: Auditorium in the East Wing. Abstract of talk [here](#).

Summer school programmes

Date	Location	Course title	application deadline
May 18-June June 1	University of Iceland	Introduction to Hydrodynamic Modelling	20 February 2010
May 31-July 10	University of Hawaii	Microbial Oceanography: Genomes to Biomes	29 January 2010
June 15-29	University of Iceland	Ecological Modelling	20 February 2010
July 1-22	University of Iceland	Fisheries Ecology: Management and Conservation of Marine Resources	20 February 2010
July 4-20	White Sea Biological	Embryology of marine invertebrates	31 January

Nye artikler

Har du en artikkel, kapittel eller bok som ikke har stått her?

Du kan sende bibliografi og abstract i Word-format til Anders så snart du har sidetall.

Christoffer Schander: mer om utbredelse til aplacophor mollusk i Norge

Ivanov DL, Mikkelsen NT, Schander C. 2009. *Falcidens sagittiferus* Salvini-Plawen, 1968: additional data on morphology and distribution (Mollusca, Aplacophora, Caudofoveata). *Fauna Norvegica* 29: 3-9.

Abstract *Falcidens sagittiferus* Salvini-Plawen, 1968 is a species of caudofoveate (Chaetodermomorpha) not uncommon in southern Scandinavia. Previous descriptions have however been based mainly on fixed material, and illustrations of sclerites and radula have been incomplete. We here present data from an investigation based on over 70 specimens from Norway (including the type material). Radula, sclerites and living specimens are illustrated.

Aage Paus: vegetasjon i Rødalen i tidlige holosen

Paus, Aage 2010. Vegetation and environment of the Rødalen alpine area, Central Norway, with emphasis on the early Holocene. *Vegetation History and Archaeobotany* 19: 29-51

Abstract Detailed pollen analysis and pine megafossils from the immediate area of Rødalen in Central Norway have revealed new knowledge of Holocene alpine environments. A period of about 1,000 years characterised by pioneer herbs, dwarf-shrubs (*Betula nana*, *Empetrum*) and *Juniperus* followed the Holocene climatic amelioration. Local birch forest became established around 10.3 ka B.P., ca 150 years earlier than the local pine rise. Pine dominated at 1,100 m a.s.l. from 9.9 to 8.5 ka B.P., followed by birch forests until 1.3 ka B.P. when deforestation occurred. Slightly after 6 ka B.P., pine forests disappeared from the valley floor (930 m a.s.l.), an area that today is dominated by birch forest. Three short-lasting vegetational set-backs at ca 10.7, 10.5 and 10.3 ka B.P. may indicate climate oscillations. A temporary reduction of local forests reflects the Erdalen 2/9.7 ka B.P. event. The influence of the 8.2 event, superimposed on a cooling trend, lasted ca 400 years and involved a two-

step vegetational regression: (1) A strong reduction of pine forests due to cooling and (2) reduction of alder due to cold and drought. Winter stress preventing pine regeneration may have caused scarcity of pine megafossils from the latter period. In the early Holocene, vegetation in the present alpine region was not in equilibrium with temperature development. It is suggested that the birch forest establishment lagged by about 1,000 years due to drought, whereas winter stress may have delayed the establishment of pine even longer.

Jostein Gohli & Göran Högstedt: sammenheng mellom duftkjemi og vernefarger?

Gohli J, Högstedt G, 2009 Explaining the Evolution of Warning Coloration: Secreted Secondary Defence Chemicals May Facilitate the Evolution of Visual Aposematic Signals. PLoS ONE 4(6): e5779. doi:10.1371/journal.pone.0005779

Abstract: Several pathways have been postulated to explain the evolution of warning coloration, which is a perplexing phenomenon. Many of these attempt to circumvent the problem of naïve predators by inferring kin selection or neophobia. Through a stochastic model, we show that a secreted secondary defence chemical can provide selective pressure, on the individual level, towards developing warning coloration. Our fundamental assumption is that increased conspicuousness will result in longer assessment periods and divergence from the predators' searching image, thus reducing the probability of a predator making mistakes. We conclude that strong olfactory signaling by means of chemical secretions can lead to the evolution of warning coloration.

Aud Larsen, Jorun Egge, Anita Jacobsen: effekt av næring og turbulens på mikrobiologen

Iversen KR, Primicerio R, Larsen A, Egge JK, Peters F, Guadayol O, Jacobsen A, Havskum H & Marrase C 2010. Effects of small-scale turbulence on lower trophic levels under different nutrient conditions. JOURNAL OF PLANKTON RESEARCH 32: 197-208

Abstract: Small-scale turbulence affects the pelagic food web and energy flow in marine systems and the impact is related to nutrient conditions and the assemblage of organisms present. We generated five levels of turbulence ($2 \cdot 10^{-9}$ to $1 \cdot 10^{-4}$ W kg⁻¹) in land-based mesocosms (volume 2.6 m³) with and without additional nutrients (31:16:1 Si:N:P μ M) to assess the effect of small-scale turbulence on the lower part of the pelagic food web under different nutrient conditions. The ecological influence of nutrients and small-scale turbulence on lower trophic levels was quantified using multivariate statistics (RDA), where nutrients accounted for 31.8% of the observed biological variation, while 7.2% of the variation was explained by small-scale turbulence and its interaction with nutrients. Chlorophyll a, primary production rates, bacterial production rates and diatom and dinoflagellate abundance were positively correlated to turbulence, regardless of nutrient conditions. Abundance of autotrophic flagellates, total phytoplankton and bacteria were positively correlated to turbulence only when nutrients were added. Impact of small-scale turbulence was related to nutrient conditions, with implications for oligotrophic and eutrophic situations. The effect on community level was also different compared to single species level. Microbial processes drive biogeochemical cycles, and nutrient-controlled effects of small-scale turbulence on such processes are relevant to foresee altered carbon flow in marine systems.

Thorolf Magnesen: gener og funksjon i muskelen hos kamskjell

Øivind Andersen, Jacob S. Torgersen, Helene H. Pagander, Thorolf Magnesen & Ian A. Johnston 2009. Gene expression analyses of essential catch factors in the smooth and striated adductor muscles of larval, juvenile and adult great scallop (*Pecten maximus*). Journal of Muscle Research and Cell Motility 30: 233-242.

Abstract: The scallop adductor muscle consists of striated fibres responsible for the fast closure of the shells, and smooth fibres able to maintain tension in a prolonged state of contraction called catch. Formation of the force-bearing catch linkages has been demonstrated to be initiated by dephosphorylation of the key catch-regulating factor twitchin by a calcineurin-like phosphatase, while the involvement of other thick filament proteins is uncertain. Here we report on the development of catchability of the adductor smooth muscle in the great scallop (*Pecten maximus*) by analysing the spatio-temporal gene expression patterns of the myosin regulatory light chain (MLCr), twitchin, myosin and calcineurin using whole mount in situ hybridization and real-time quantitative PCR. The MLCr signal was identified in the retractor and adductor muscles of the pediveliger larvae, and the juvenile and adult scallop displayed abundant mRNA levels of MLCr in the smooth and striated adductor

muscles. Twitchin was mainly expressed in the smooth adductor muscle during metamorphosis, whereas the adult striated adductor muscle contained seven-folds higher twitchin mRNA levels compared to the smooth portion. Calcineurin expression predominated in the gonads and in the smooth adductor, and five-folds higher mRNA levels were measured in the smooth than in the striated fibres at the adult stage. In contrast to the other genes examined, the expression of myorod was confined to the smooth adductor muscle suggesting that myorod plays a permissive role in the molluscan catch muscles, which are first required at the vulnerable settlement stage as a component of the predator defence system.

Håkon Dahle & Nils-Kåre Birkeland: ny varmekjær bakterie funnet

DiPippo, Jonathan L., Nesbo, Camilla L, Dahle, Håkon, Doolittle, W. Ford, Birkeland, Nils-Kåre & Noll, Kenneth M. 2009. *Kosmotoga olearia* gen. nov., sp nov., a thermophilic, anaerobic heterotroph isolated from an oil production fluid. INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY 59: 2991-3000

Abstract: A novel thermophilic, heterotrophic bacterium, strain TBF 19.5.1(T), was isolated from oil production fluid at the Troll B oil platform in the North Sea. Cells of strain TBF 19.5.1(T) were nonmotile rods with a sheath-like structure, or toga. The strain was Gram-negative and grew at 2080 degrees C (optimum 65 degrees C), pH 5.5-8.0 (optimum pH 6.8) and NaCl concentrations of 10-60 gl(-1) (optimum 25-30 gl(-1)). For a member of the order Thermotogales, the novel isolate is capable of unprecedented growth at low temperatures, with an optimal doubling time of 175 min (specific growth rate 0.24 h(-1)) and a final optical density of >1.4 when grown on pyruvate at 37 degrees C. Various carbohydrates, proteinaceous compounds and pyruvate served as growth substrates. Thiosulfate, but not elemental sulfur, enhanced growth of the isolate. Sulfate also enhanced growth, but sulfide was not produced. The strain grew in the presence of up to approximately 15% oxygen, but only if cysteine was included in the medium. Growth of the isolate was inhibited by acetate, lactate and propionate, while butanol and malate prevented growth. The major fermentation products formed on maltose were hydrogen, carbon dioxide and acetic acid, with traces of ethanol and propionic acid. The G + C content of the genomic DNA was 42.5 mol%. Phylogenetic analyses of the 16S and 23S rRNA gene sequences as well as 29 protein-coding ORFs placed the strain within the bacterial order Thermotogales. Based on the phylogenetic analyses and the possession of a variety of physiological characteristics not previously found in any species of this order, it is proposed that the strain represents a novel species of a new genus within the family Thermotogaceae, order Thermotogales. The name *Kosmotoga olearia* gen. nov., sp. nov. is proposed. The type strain of *Kosmotoga olearia* is TBF 19.5.1(T) (=DSM 21960(T) =ATCC BAA-1733(T)).

Christoffer Schander: observasjon av symbiose mellom amfipod og bivalv

Tandberg Anne Helene S., Christoffer Schander and Fredrik Pleijel 2010. First record of the association between the amphipod *Metopa alderii* and the bivalve *Musculus*. Marine Biodiversity Records 3:e5 doi:10.1017/S1755267209991102

Abstract The amphipod *Metopa alderii* is for the first time reported to live in symbiosis with the bivalves *Musculus discors* and *M. niger* in northern Spitzbergen. *Metopa alderii* has previously only been reported as free-living, and never before this far north.

Suneetha Gunawickrama, Mangala De Silva, Torild Johansen, Anne Gro Salvanes & Gunnar Nævdal

Gunawickrama KBS, PMCS De Silva, T Johansen, AGV Salvanes and G Nævdal 2010. Preliminary evidence for genetic heterogeneity of the goby (*Sufflogobius bibarbatus*) in the Benguela ecosystem. J. Appl. Ichthyol. 26: 110–112

Summary PCR-RFLP analysis of mitochondrial DNA (NADH-3/4 gene and the control region) of the Benguelan bearded goby *Sufflogobius bibarbatus* revealed weak, but significant genetic differentiation (overall FST = 0.137) that could not be predicted by hydrodynamics alone, thus warranting further investigations to understand the forces behind population divergence within an ecosystem having complex dynamics.

