

# Newsletter

DEPARTMENT OF INFORMATICS, UIB  
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Editor-in-chief: Inge Jonassen. Editor: Randi Heggernes Eilertsen.  
Contributions or comments to the newsletter are very welcome.

## Dear Colleagues,

In these dark days of Europe, it is good to see the engagement at the department and not the [least the initiative driven by our own Anna Kornienko, her husband Viktor and others.](#)

I use this opportunity to tell you about the establishment of a new research school in artificial intelligence driven by NORA – the Norwegian Artificial Intelligence Research Consortium (see [nora.ai](#)). The school is supported by a new grant from the Research Council of Norway and will offer courses, lectures, and events for PhD students with projects linked with AI, machine learning or robotics. So please, if you are a PhD student in the relevant domain, register – and do let others know about the opportunity! And of course, NORA along with UiB AI and our own CEDAS organize seminars and events that can potentially be interesting for all our staff and students.

Artificial intelligence is certainly attracting a lot of attention these days. Researchers in

other fields as well as companies are contacting the department to see if we are interested in collaborations around this topic. Such initiatives can potentially involve expertise from any of our research groups. For the department it can be good to engage in such collaborations when they involve informatics research aligned with our own interests so that our engagement strengthens rather than dilutes our own research efforts. And simply talking with these companies and researchers help to raise their knowledge about our expertise and can help our visibility and local network in the longer run.

I wish you all a good weekend!

Inge



## The Dean's Blog – Gunn Mangerud



[The Dean's blog](#) aims to inform us of ongoing work and processes at The Faculty of Mathematics and Natural Sciences.

Her latest posting:  
[«En verden i krig»](#)

## From the faculty:

[Møter bergenserne med unikt innhold](#)



# Welcome, “new” colleagues!



## Wim Van Den Broeck

Wim is starting as a PhD Research Fellow working with Symbolic Algorithms.

Some of you will know Wim already, as he has done both his bachelor's and master's degree here at our department.

Welcome (back) to the team, Wim!



## Nikolay Stoyanov Kaleyski

Nikolay has been working as a PhD research fellow at the Selmer Center, completing his PhD in August 2021, and has since worked for us as a lecturer.

On 10 March he started in the position of tenure track associate professor in applied cryptography.

Congratulations on your new position, Nikolay!

## PhD updates



## There's a new PhD in town: Congratulations, Martha Norberg Hovd!

Martha successfully defended her thesis "Studies on the Security of Selected Advanced Asymmetric Cryptographic Primitives" on the 11<sup>th</sup> of March.

Congratulations, Martha!

# PhD Defense - Isaac Canales Martinez



Isaac Canales Martinez will be defending his thesis “New cryptanalysis of LFSR-based stream ciphers and decoders for p-ary QC-MDPC codes” on the 18<sup>th</sup> of March at 10:15 in Høyteknologisenteret, Stort auditorium.

[Press release](#)

- Opponent: Professor Emeritus Willi Meier, The FHNW University of Applied Sciences and Arts Northwestern
- Opponent: Dr. Svetla Nikova, ESAT University of Leuven
- Committee member: Chunlei Li
- Leader for defense: Crystal Chang Din

## Current Issues

### Short overview of upcoming department events:

15-16 March	Teacher's retreat (Faculty event)
17 March	Department seminar: <a href="#">“Privacy Risks and Anonymization of Microbiome Data”</a>
4-5 April	Department gathering 2022, at Solstrand
20-23 April	6th Creative Mathematical Sciences Communication conference ( <a href="#">CMSC'22</a> ) in Bergen
13 May & 13 June	Faculty and Staff lunch, in Skogen (4 <sup>th</sup> floor)

## Department gathering 2022

It is a pleasure for us to invite you all\* to this year's department gathering at Solstrand on April 4-5.

The registration is now open: [Department of Informatics gathering 2022 \(uib.no\)](#) Closing date for registration: **March 21<sup>st</sup>**

\*all employees of the Department of informatics, Group leaders of CBU, emeriti, visiting guest researchers, PhD students enrolled in our organized research training program, and the main board of Echo.

Below is the tentative program, subject to minor adjustments:

### Monday 4<sup>th</sup> April

- 08:00 **Bus departures from HIB**
- 09:30 **Welcome** - Inge Jonassen
- 09:40 **Siv.ing program** - report from the committee for designing a possible Siv.ing program Data Science (working title) – discussion
- 10.30 **SFU** (Senter for fremragende utdanning) – application updates
- 11:00 Short break

11:20	<b>CodeGrade</b> – info and demo
12:00	<b>PhD</b> relevant theme (tbd)
12:30	Lunch
13:30	<b>Fredrik &amp; team</b> - current issues within the field of student affairs
14:30	Short break
15:00	<b>Thank you, Petter!</b>
17:00	Long break
19:30	<b>Aperitif &amp; entertainment</b>
20:00	<b>Dinner</b>
<b>Tuesday 5<sup>th</sup> April</b>	
09.00	<b>RCN 10 years evaluation of ICT research in Norway</b> – how does it work and how can we prepare?
10.30	Short break
11:00	<b>HSE seminar part 1:</b> Multicultural workplaces something
12:20	<b>HSE seminar part 2:</b> UiB Ferd Career Center for Early Stage Researchers
12.55	<b>End note</b> - Inge Jonassen
13:00	Lunch
14:00	<b>Bus departures from Solstrand.</b> Arrival in Bergen approximately at 15:00.

Please join in for a nice time at the wonderful Solstrand together with your awesome colleagues! ❤️

## Department seminar



### Privacy Risks and Anonymization of Microbiome Data - A talk by Markus Hittmeir

17.03.2022 - 12.30–13.30, Stort auditorium

Abstract: “The microbial communities of the human body are subject to extensive research. While individual variations in the microbiome reveal valuable information about health and diseases, they also allow for the identification of individuals among populations of hundreds. In 2015, Franzosa et al. presented a method for the unique characterization of individuals via codes constructed from their microbiome samples. The temporal stability of these codes allows to correctly match different samples from the same individual, thus posing substantial privacy risks. The true-positive rate was particularly high on the widely studied microbiome of the gastrointestinal tract.

## Kunnskapseplet

The Mathematics and Natural Sciences Library have monthly popular science talks. The aim of these talks is to provide an informal arena for students, PhD students, researchers, and other staff to share their work or talk about a topic they are passionate about. The events will last 30-45 minutes, depending on the length of the presentation. [Read about Kunnskapseplet here.](#)

Next talks:

Torsdag 21. april: [Nanoteknologi for fremtiden og klima](#) (in Norwegian)

Torsdag 19. mai: Bergens ferskeste og strålende legemidler (in Norwegian)

# Invitation: Norwegian Bioinformatics Days 2022

(The NBD organizing team): Welcome to the national bioinformatics conference Norwegian Bioinformatics Days 2022 taking place September 28-30, 2022, at Sundvolden Hotel (~one hour drive from Oslo).

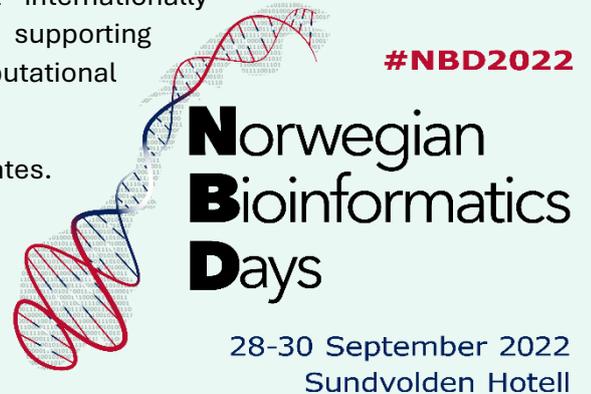
This meeting aims to gather people who work with bioinformatics in Norway for three days of research sharing and networking. Hear from several internationally interesting keynote speakers and get an insight into the supporting infrastructure and activities within bioinformatics and computational biology in Norway.

Visit the website <https://norbioinfo.no/> and sign up for updates. Conference program, registration and invitation to submit abstracts will follow soon.

Please help us spread the word in your networks. In the attachments, we also include an invitation to display on screens.

We are looking forward to seeing you all in Sundvolden in person!

*This meeting is a collaboration with Centre for Digital Life Norway, Elixir Norway, NORBIS, RSG-Norway, Computational Biology Unit (UiB), and many more.*



## Updating your page on UiB

Are you sick of the first google result when someone searches for you being that one photo where you're passing the finishing line of Stoltzkleiven Opp, looking sweaty and gasping for air?

Luckily, you can present yourself in a whole new way by updating your UiB profile page.

[Påhoyden.no](#) has made a new guide to help you make the perfect UiB profile page [here](#). There is also an existing guide in English [here](#).

If you need a new profile picture, you can ask [Randi](#) for a free photoshoot.

## Welcome to Yoga on Wednesdays! (new time)



*Illustration: Your body after a single yoga session*

Yoga is a great way to reduce stress and tensions from work. Yoga classes are held at our department on Wednesdays at **2:00 p.m. to 3:00 pm** at the CBU seminar room in 5th floor.

Our professional yoga instructor, Kjersti Næss, is teaching in English. No signing up, and no participation fee. Please bring your own yoga mat. We also have some mats for loan. All employees are welcome – also those of you who never tried yoga before.

And remember: When you are too busy to go to the yoga class – then is when you need it the most!

## NORA Research School

If you are a PhD student within the field of AI from a NORA-partner institution (that includes us), we encourage you to become a member of the NORA [Research School](#).

NORA is in the process of establishing research school for PhD students at our partner institutions. However, membership in NORA's Research School is already open to any PhD student from a NORA partner institution with a project related to artificial intelligence, machine learning and/or robotics.

You can be a member of several research schools simultaneously, and there are no obligations, costs or commitments to being a member. Through membership in NORA Research School you will be the first to receive relevant information about and the opportunity to participate in courses, lectures and events.

The logo for NORA, consisting of the word "NORA" in a bold, white, sans-serif font on a dark blue rectangular background.

## NORA Annual Conference Awards



### Call for nominations! (Open until 14 March)

The Norwegian Artificial Intelligence Research Consortium (NORA) is seeking nominations for our annual awards! These awards are given to recognise exceptional efforts of individuals and actors in the Norwegian AI community throughout the year.

You can now submit your recommendations for the following awards:

- NORA Award for Lifetime Achievement
- NORA Award for Distinguished Early-Career Investigator
- NORA Award for AI Community Building
- NORA Award for Diversity in AI
- NORA Award for Outstanding Publication of the Decade 2011–21
- NORA.startup Award

**Feel free to nominate your colleagues (or yourself) generously.**

[Read more about the NORA Annual Conference Awards and submit your nominations here!](#)

## Course invitation: “Introduction to GPU Programming with OpenACC” (29 March)

The Scientific Computing group at the IT department (UiB) in collaboration with NRIS (Norwegian Research Infrastructure Services) is offering a one day hands-on physical course for Introductory GPU Programming with OpenACC. [Read more here.](#)

# Upcoming Funding Opportunities



**Enabling technologies:** There is an open call for Collaborative Projects on [Digital Security and Artificial Intelligence, Robotics and Autonomous Systems](#). “The objective of this call is to develop new knowledge within one or both topics for the call: Digital security and/or AI, Robotics and Autonomous Systems. [...] The project must involve two or more Norwegian partners that are not research organisations. Partners that are not research organisations must together participate with a minimum of 10 per cent of the total project costs.”

Application deadline: open-ended

We have received information from the RCN that they are uncertain if this call will stay open for all of 2022. If the call will be closed, they will publish this information on their website in due time.



**New DKNVS Research Funds:** Support of research on sustainable development of society, funds for travels, field work, seminars and conferences. Apply [here](#).

Application deadline: 4 April 2022



**New NORA Awards:** “These [awards](#) are given to recognise exceptional efforts of individuals and actors in the Norwegian AI community throughout the year.”

- NORA Award for Lifetime Achievement
- NORA Award for Distinguished Early-Career Investigator
- NORA Award for AI Community Building
- NORA Award for Diversity in AI
- NORA Award for Outstanding Publication of the Decade 2011 – 2021
- NORA.startup Award

Nomination deadline: 14 March 2022



**Meltzer Research Fund** has made additional funds available this year, and the university has now released an **extraordinary call for applications**.

Please read the instructions on this [website](#) carefully.

Application deadline: 18 March 2022

**UTFORSK:** “The [programme](#) supports the establishment of long-term partnerships between Norway and Brazil, Canada, China, India, Japan, Russia, South Africa, South Korea, and the USA.”

Application deadline: 20 April 2022



**ERC Advanced Grant:** For scientists who are “established, [leading](#) principal investigators who want long-term funding to pursue a ground-breaking, high-risk project.” ([ERC funding explained](#))

Application deadline: 28 April 2022



**Peder Sather Grant Program:** “The Peder Sather Center for Advanced Study supports projects carried out by researchers at UC Berkeley in collaboration with researchers from [UiB]. [Grants](#) can support activities such as workshops, mini-conferences, virtual intellectual exchanges, the undertaking of exploratory and pilot studies, activities such as PhD student exchanges, longer-term stays for Principal Investigators, the collection and analysis of data, and other core research activities.”

Application deadline: 1 June 2022



**New Abel Prize:** “The Abel Prize recognises pioneering scientific achievements in mathematics”. For more information, please visit [this website](#).

Nomination deadline: 15 September 2022



**AIM SQuaREs: Program** “to allow a dedicated group of four to six mathematicians to spend a week at AIM in San Jose, California.”

Application deadline: 1 November 2022

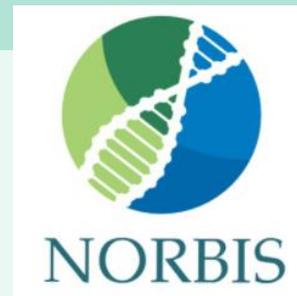


**ERC 2023:** The ERC has published tentative application deadlines for the 2023 calls on their [website](#):

- ERC-StG-2023, 25.10.2022
- ERC-SyG-2023, 08.11.2022
- ERC-CoG-2023, 02.02.2023
- ERC-AdG-2023, 23.05.2023

*Please contact research coordinator [Stefanie Meyer](#) if you have questions with regard to your **planned and ongoing funding applications** as well as **all contractual work related to external funds**! All applications and agreements/ contracts need to be approved by the department leadership. In addition, you can have a look at our websites for [research support services](#), where you will also find a list of our services.*

# NORBIS activities



## NORBIS conference - SAVE THE DATE!

The 8th and last NORBIS conference will be arranged in 2022 at Rosendal Fjordhotell week 43, 24-28 October. More information to come! But for now, save the date!

## High Performance Computing in Bioinformatics

**Dates:** March 14-25, 2022. **Location:** University of Oslo. **Course code:** INF9380. **Organizers:** Torbjørn Rognes, Abdulrahman Azab, Arvind Sundaram. **Invited lecturers:** Marri Louhivuori & Jussi Enkovaara, CSC (IT Center for Science), Finland. Abdulrahman Azab, Chief Engineer, University Centre for Information Technology, UiO. Arvind Sundaram, Research scientist, Norwegian Sequencing Centre, Oslo University Hospital. Bjørn-Helge Mevik, Darren Starr, Leon Charl du Toit, Marcin Krotkiewski, Maiken Pedersen, Ole Widar Saastad, Sabry Razick, USIT, UiO **Credits:** 5 ECTS. **Evaluation:** Practical student project (home exam) with hand-in of written report.

**Short course description:** This course focuses on the application of high performance computing (HPC) to bioinformatics analysis. The main target is to provide a background on how to effectively use HPC clusters for running computationally or data intensive bioinformatics applications. The course will mainly include teaching students selected bioinformatics tools and workflows, and how to use HPC platforms to speed up and maximize the overall throughput of intensive bioinformatics analysis. [More information and external links to registration as visiting student at UiO here](#)

## Machine Learning in Medical Bioinformatics

**Dates:** May 2-6, 2022. **Location:** Linköping University, Sweden. **Course responsible:** Björn Wallner. **Lecturers:** Björn Wallner, Claudio Mirabello, Manuela Zucknick. **Credits:** 5 ECTS.

**Short course description:** This workshop will consist of a mix between research talks, the theory behind the research, and actually applying the theory yourself in practical exercises. Topics discussed during the workshop: unsupervised and supervised learning and various machine learning techniques, ranging from linear models, support vector machines, random forests, neural networks, and deep neural networks. Pre-course assignment must be completed before the course start. [More information and link to registration here.](#)

## Sequence comparison and database search

**Dates:** May 9-13, 2022. **Location:** University of Bergen. **Course code:** NORBIS901. **Organizers:** Inge Jonassen, Cedric Notredame. **Lecturer:** Cedric Notredame, Center for Genomic Regulation. **Credits:** 5 ECTS. **Evaluation:** The students will sit through a two-hours written exam. In addition, the written report will need to be approved.

**Short course description:** This course provides insight into methods for analyzing biological sequences. Its goal is to present an overview of some advanced concepts of sequence alignments and some of their applications with a strong emphasis the algorithmic homology based multiple sequence alignment modelling, one of the most widely used method in biology. The first part is dedicated to molecular evolution, in the second part we will cover the pairwise and single sequence analysis, and the third part of the course will deal with Multiple Sequence Alignment algorithms of both RNA and Protein sequences. [More information and link to registration here.](#)

# Open Science at UiB

The University Library offers open webinars on the principles of Open Science, and you are all welcome to participate:

<u>Making your research visible and open using ORCID</u>	<u>25.02.2022</u>
<u>DMP workshop</u>	<u>11.03.2022</u>
<u>How to make your research data open and FAIR?</u>	<u>25.03.2022</u>
<u>Finding &amp; reusing research data</u>	<u>22.14.2022</u>
<u>Introduction to DMP</u>	<u>13.05.2022</u>
<u>Open Access - step by step</u>	<u>03.06.2022</u>

Read about Open Science policy and opportunities:

UiB's Policy for  
Open Science

UiB Publication  
Fund

Open Access  
Publishing  
Deals

Open Access –  
What, why and  
how

Data  
management  
plans

## Vacant Positions

### **Postdoctoral Research Fellow position within Informatics – AI and Algorithms**

Please find [the announcement here](#). Closing date: 15.03.2022

### **Postdoctoral Research Fellow position within Informatics - Optimization**

Please find [the announcement here](#). Closing date: 30.04.2022



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