



Centre for
Cancer Biomarkers



The Research Council of Norway



CCBIO Newsletter

www.ccbio.no

ISSUE NO 2, VOL 10, JUN 27, 2023

DIRECTOR'S COMMENTS

Dear all

In this newsletter, you can read several stories covering CCBIO's many activities and achievements at different levels. The CCBIO Annual Symposium in May was perhaps the most vibrant one ever – under the motto “come together”. The presentations were amazing and most stimulating, covering a wide range of topics and learning possibilities, as usual. The cross-talk and networking in between could easily be compared to a beehive. This meeting is a unique event for the cancer community in CCBIO and Bergen, and with increasing national and international participation.

We have had a long-standing collaboration with the Vascular Biology Program (VBP) at Boston Children's Hospital and Harvard Medical School. The CCBIO907 course was a success, with Diane Bielenberg, Michael Rogers, Dipak Panigrahy, Edward Smith, Bruce Zetter and Randy Watnick as visiting faculty. Lab visits were also organized this spring – please take a look at the stories from Camilla Tvedt Ekanger, Amalie Bark Kvamme and Ole Vidhammer Bjørnstad. Thank you to VBP for your continuous support.

Many congratulations to Cecilie Fredvik Torkildsen and Christiane Helgestad Gjerde (Bjørge team) for the shared Best Scientific Presentation Award at the recent NSGO Annual Meeting 2023 at Iceland, to Emmet McCormack, Pascal Gélébart and Vibeke Fosse for receiving Inven2 Idéprisen (Oslo), and to Neha Rana for defending her PhD thesis.

Please also look at other stories: Roger Strand visiting the Vatican, CCBIO researchers visiting the lab of International Faculty member Klaus Pantel, and Dana Costea visiting Tanzania. Two of CCBIO research teams are in the SKGJ finals (Gjertsen and Akslén teams).

Finally, we have included information on media appearances, publications, funding calls, upcoming courses and relevant events.

After 10 years, the activities and formats of CCBIO are still expanding. We sure look forward to the next phase. Have a nice summer!

Best regards, Lars A. Akslén, Director

*Capturing cancer complexity
and clinical challenges*

Fertilizing research collaborations at the 11th CC BIO Annual Symposium



The 11th CC BIO Annual Symposium was this time enlarged with a generous time frame and two overnight stays, May 8-11, 2023. Although there was an option for online attendance, only 14 participants chose to attend online, and the rest of the total of 235 chose to enjoy the company of colleagues and the informal and mutually fertilizing scientific crosstalk in the breaks and the evenings.



The best symposium ever and a bubbling atmosphere, says CC BIO Director Lars A. Akslen about the 11th symposium at Solstrand. A wide range of cancer topics and high-profiled international names were featured in [the program](#), including talks and presence from CC BIO's international faculty as well as our INTPART program partners at the Vascular Biology Program in Boston.

A panel debate addressed the current challenges met in clinical trials as well as the vision, assumptions, hopes and practices around personalized cancer medicine, and rounded up the discussions by looking at the role of the patients in the trials.

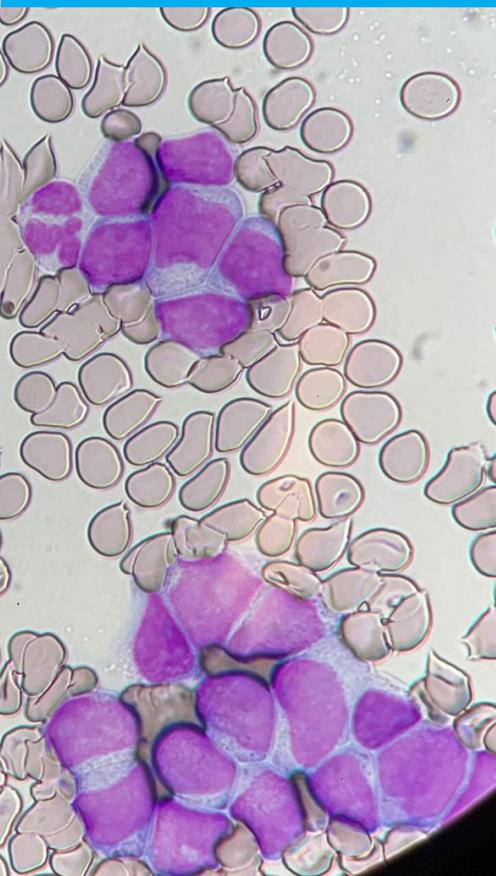


The speed talk session for younger researchers was actually extended this year as there were far more submitted abstracts than the program could accommodate, and many still had to be declined. This has become a popular opportunity for younger researchers to train in presentation skills and simultaneously show their research to top notch scientists in their field. The two poster sessions also proved to be a popular format among the younger researchers, this year featuring an all-time high poster number of 51, which were fitted in the poster room and object to mingling with scientific discussions.

Read more in a [Medical faculty article](#) and [in this article](#).

Photos by Ingvild Festervoll Melien

Two projects from the CC BIO family made the K. G. Jebsen Centre national final



The Kristian Gerhard Jebsen Foundation currently has a call for funding for new K.G. Jebsen Centres for Medical Research at Norwegian medical faculties and university hospitals. The deadline for the internal prequalification round was March 3, 2023, and from the Bergen medical community, 2 of the 4 prequalified projects come from the CC BIO community. The same two have now made it to the national final.

This is a funding scheme for translational medical research aiming for the highest international level. The intention is to establish two new K.G. Jebsen Centers in 2023 that each may receive a maximum of 4.5 MNOK a year for a duration of five years. [See the terms of the call here](#). In total 7 projects will be in the national final.

The projects from the CC BIO family to qualify were:

From Bjørn Tore Gjertsen's group, building on recent publications (in [Nature](#) and [Cancer Discovery](#)) on how functional diagnostics with cancer cell signaling can be used to optimize treatment in acute myeloid leukemia.

The Akslen team has proposed a center around studies of cancer neuroscience, a rapidly expanding field in current cancer research.

Idéprisen award to McCormack, Fosse and Gélébart

The collaboration project DogBiTE between the University of Bergen (Emmet McCormack, Vibeke Fosse and Pascal Gélébart) and Oslo University Hospital (Sébastien Wälchi) has received Inven2's Idéprisen award 2023 consisting of NOK 250.000 and counselling from Inven2 to commercialize the idea.

The Idéprisen award is an annual initiative by [Inven2](#) to generate more ideas from skilled researchers and to reward the most innovative ideas. Inven2 is one of Norway's biggest technology transfer offices and wants to get more research out to the public by developing products and services that benefit society.

DogBiTE is a platform for immunotherapeutic treatment of cancer in dogs, which can also serve as a good model for the development of cancer treatment in humans. By testing new immunotherapeutic treatments on dogs, the researchers gain better insight into how the treatment can affect humans. There is no question of doing research on dogs in the laboratory. This is merely an offer for dogs with cancer, where available treatment does not work. The dog's owner get the opportunity to decide whether the dog should have the experimental treatment, and thereby get an extra chance to possibly cure the dog's cancer.

"You can say it is an opportunity for the dog to participate in a clinical study when all other treatment has been explored and failed," Wälchli explains [in this article](#). (Norwegian only.)



Photo by Inven2, Yannicke Kristoffersen



Colourbox photo

A Harvard experience in Bergen

The INTPART-II flagship-course CC BIO907 Cancer-Related Vascular Biology took place in Bergen March 24th to March 31st 2023, with fortunate students from UiB and a couple of visiting students from abroad who got the opportunity to learn from and connect with excellent Harvard Medical School faculty on campus in Bergen.

This unique learning experience was made possible through support for the INTPART-II project "Bergen-Harvard Cancer Studies phase 2: Continued Partnership for Responsible Education, Research and Innovation Excellence."

The participants got to learn cutting-edge technologies and concepts in the field of vascular biology, and was supervised in planning their own projects in the field of cancer-related vascular biology. They were challenged by the Harvard faculty through relevant field-specific puzzles and structured, student active learning methods like case-based collaborative learning.

The excellent Harvard faculty this time were **Diane Bielenberg, Michael Rogers, Dipak Panigrahy, Edward Smith, Bruce Zetter and Randy Watnick**. Some were familiar with the streets of Bergen and the corridors of CC BIO's facilities from their previous visits, and some explored our campus and city for the first time.

The participating students were generous with their praise after the course, having benefitted both on vascular biology knowledge and transferrable skills.

[Read more here.](#)



Photos by Agnete Engelsen

ELSA aspects at Vatican conference



In his opening lecture of the 2023 General Assembly at the Vatican City, UiB professor Roger Strand explored the role of ethics in converging technologies. He was invited to give the opening lecture of the public workshop "Converging on the person. Emerging technologies for the common good."

About his lecture, "Ethical issues of converging technologies", Strand says the following:

"My main message overall is that converging technologies and the ethical issues that they raise are linked to structural features of contemporary modern societies and should be addressed as such. Neither science nor technology emerges in a vacuum but is co-produced with the society in which it takes place."

The assembly's focus on converging and emerging technologies was requested by Pope Francis in *Humana Communitas* in 2019; a letter to the Pontifical Academy for Life for the 25th anniversary of its establishment in which he emphasized the importance of putting the "full flourishing of human beings" front and centre:

"Another area calling for study is that of the new technologies described as "emergent" and "convergent." (...) There is a pressing need (...) to understand these epochal changes and new frontiers in order to determine how to place them at the service of the human person, while respecting and promoting the intrinsic dignity of all."

[Read more here \(incl. link to the lecture\).](#)



Photos by Pontifical Academy of Life/Cristian Gennari/Siciliani

Bringing home new perspectives



This winter/spring, three of CCBIO's PhD candidates got the opportunity to have research stays at different labs of the Vascular Biology Program in Boston, through CCBIO's INTPART collaboration with Harvard Medical School and Boston Children's Hospital. Camilla Tvedt Ekanger, Amalie Bark Kvamme and Ole Vidhammer Bjørnstad are now back in Bergen with invaluable experience in their backpacks.

Camilla had her research stay in Dr. Michael Rogers lab where they work to develop new therapies for endometriosis, cancer, and blinding eye disease. In the recent years, Dr. Rogers along with his research fellows, Daniëlle Peterse and Victor Fattori, have developed a new mouse model of endometriosis that more accurately represents the human experience. During Camilla's stay in the lab, she worked with Daniëlle on establishing and optimizing growth conditions for mouse uterine and lesion derived organoids and compared the potential to grow organoids between uterine samples and endometriosis lesions.

Amalie was assigned to work in Dr. Watnick's lab, where they focus on uncovering the role of the tumor microenvironment in tumor growth and metastasis, and the role of cancer stem cells in tumor initiation and drug resistance. While there, Amalie worked on understanding how the non-canonical Notch1 signaling pathway drives chemoresistance and tumor initiating properties in breast cancer stem cells.

Ole worked in Dr. Timothy Hla's lab under the personal supervision of research associate Dr. Colin Niaduet. The Hla lab's main research centers around the biology of the lipid mediators sphingosine 1-phosphate (S1P) and prostanoids in vascular biology and disease, with other projects being pursued as well. In the lab, Ole's task was to develop a 3D model of retinal vasculature. He accomplished this by developing a robust model using retinal mice explants during his stay.

Read the full report from Camilla, Amalie and Ole [in this article](#).



Studying CTCs in Hamburg



Earlier this spring, two of our CCBIO Masterclass candidates, Liv Cecilie V. Thomsen and Dimitrios Kleftogiannis, spent a week in Hamburg, visiting Professor Klaus Pantel's group at the Center for Experimental Medicine, Institute of Tumor Biology, Universitätsklinikum Hamburg-Eppendorf.

Professor Pantel is a CCBIO International Faculty member, and has initiated the inclusion of CCBIO researchers into the program of his second ERC Advanced Investigator grant INJURMET, focused on the question whether diagnostic biopsies or surgery can contribute to the dissemination of tumor cells and whether this dissemination is relevant to the development of metastatic relapse.



Liv Cecilie and Dimitrios learnt in particular about how Pantel's group detect circulating tumor cells (CTCs). "We were both inspired by the days we spent in this lab," Liv Cecilie explains. "They were all very welcoming and inclusive, and open about their research. Furthermore, we see the potential for further collaborations with regard to use of CyTOF on some of their material, and to use some of their methods for validation in the work we are doing. A lot of the scientific methods they use are a much clearer and more understandable for us after this week in Hamburg," she concludes.

Collaboration with Tanzania on head and neck cancer



The research group of Professor Daniela Costea is currently engaged in a DIKU/NORPART funded collaboration project with partners in Tanzania, establishing immunohistochemistry for p16 as a method for more precise diagnostic of head and neck cancers (HNC). CCBIO has just had a visit from Tanzania, and Professor Costea has just returned from a 2 week stay in Dar Es Salaam.

The Tanzanian partner institutions are the Muhimbili University of Health and Allied Sciences (MUHAS) and Muhimbili National Hospital in Dar es Salaam. For this purpose, Dr. Sira Owibingire, senior lecturer and oral maxillofacial surgeon at the Department of Oral and Maxillofacial Surgery, School of Dentistry at MUHAS and Muhimbili National Hospital, was last month visiting the laboratories at CCBIO for learning the immunohistochemistry method and transferring the new skills to his home laboratories. Dr. Owibingire is currently undertaking PhD studies at MUHAS with a project on ethiology and reasons for delay of head and neck cancers in Tanzania, with Professor Costea as one of the supervisors.

[Read more here.](#)

Best presentation award at NSGO



Congratulations to CCBIO PhD students Cecilie Fredvik Torkildsen and Christiane Helgestad Gjerde for the shared Best Scientific Presentation Award at the recent NSGO Annual Meeting 2023 at Iceland!

The INOVa research group hence did an excellent impression at the annual meeting of the The Nordic Society of Gynaecological Oncology, held in [Reykjavik June 14-16, 2023](#).

Cecilie held the presentation *Longitudinal serum cytokine profiling in HGSOC patients*, and Christiane held the presentation *A 3D in vitro model of epithelial ovarian cancer peritoneal metastases*.

High impact papers from CCBIO



Illustration: Colourbox.com

Note the recently published papers from the McCormack group and the Akslen group, published in *Blood* and in *Nature Communications*.

P. Gelebart, M. E. Gjerstad, S. Benjaminsen, J. Han, I. Karlsen, M. M. Safont, C. Leitch, Z. Fandalyuk, M. Popa, L. Helgeland, B. Papp, F. Baran-Marszak & E. McCormack: [Inhibition of a new AXL isoform \(AXL3\) induces apoptosis of mantle cell lymphoma cells](#). *Blood*. 2023 Jun 20;blood.2022015581. doi: 10.1182/blood.2022015581. Online ahead of print.

S. Kjølle, K. Finne, E. Birkeland, V. Ardawatia, I. Winge, S. Aziz, G. Knutsvik, E. Wik, J. A. Paulo, H. Vethe, D. Kleftogiannis & L. A. Akslen: [Hypoxia induced responses are reflected in the stromal proteome of breast cancer](#). *Nat Commun*. 2023 Jun 22;14(1):3724. doi: 10.1038/s41467-023-39287-7.

Recent doctoral defense



Neha Rana defended February 24, 2023 her doctoral dissertation "Immunomodulatory effects of mesenchymal stromal cells and calcium phosphate scaffolds in bone regeneration - Preclinical and clinical studies".

Supervisors were Professor Kamal Mustafa, Professor Bjørn Tore Gjertsen, Senior Researcher Sonia Gavasso and Researcher Salwa Sulima.

Neha's PhD project explored immune interactions in mesenchymal stem cell based regenerative therapies with special focus on liquid biopsy approaches.

See the [press release here](#).

Cancer research ethics course this fall



Illustration: Lightspring

This fall term, we will run another round of the unique 5 ECTS course CCBIO903 – Cancer research: Ethical, economic and social aspects. Such knowledge is not only important on a personal level as a researcher, but also in funding proposals to be able to clarify any ethical issues related to the implementation of projects, and be better equipped to provide an explanation of how such issues will be dealt with.

This course focuses on ethical, economical and societal aspects of cancer and cancer research and aims to equip the participants with tools for reflecting on the limits, challenges and opportunities of their own research, as well as provide an understanding of the outside-the-lab context, with discussions on the broader ethical, social, economic and political implications of their research.

The course will focus on difficult questions such as:

- What is considered as a 'good biomarker', and according to who?
- How can we navigate risks, uncertainties and even ignorance, in processes of research design and clinical decision-making processes?
- In an era of big data, what are the promises and limits of using real-world data in Health Technology Assessments?
- How can we enrich the discussions of cancer as a biologically-measured disease, with cancer as an illness, an experience owned by the patient?
- And finally, what does it do to our practices of producing knowledge, caring for patients, and prioritising cancer, to be guided by a vision of precision oncology?

Dates: Course week 1: October 2-6, 2023, and course week 2: December 4-7, 2023.

Program: will be available at a later point.





Place: Personal attendance, campus Haukeland University Hospital, Bergen.

Responsible: Roger Strand and Anne Blanchard are academic responsible for the course. Jiyeon Kang will bring in the perspectives from health economics. Administrative coordinator is Kjetil Utvik Harkestad.

ECTS: 5 ECTS, but also open for non-ECTS participation.

Capacity: 20 participants. Members of the CCBio Research School have priority in the selection process.

More info: See more information about the course [here](#).

Registration: Deadline is September 1, 2023. Registration for any vacant places after that will be considered. If you are already enrolled at the University of Bergen (UiB), you register through [Studentweb](#). Studentweb opens for registration June 19, 2023. If you are not enrolled at the UiB, you can apply for guest student status by filling in [this form](#).

Coming Cancer Genomics course



CCBio will also this fall term run the course CCBio906 – Cancer Genomics, October 23-26. This 3 ECTS course will provide a broad understanding of aspects related to the cancer genome. Methods for analyzing DNA and RNA will be covered, including next generation sequencing (NGS) technologies. Focus will be on mutations, copy-number alterations, chromatin structures and RNA transcriptome and expression patterns. Further, ethical, legal aspects, and hereditary predispositions in relation to investigations of the cancer genome will be taught.

Get knowledge regarding:

- What kinds of mutations may predispose for, contribute to, or appear during cancer development.
- How these variants can be detected by NGS methods and be analyzed bioinformatically.
- How to employ these methods to stratify patients both diagnostically and therapeutically.
- The different implications of the same aberrations depending on tissue type.
- Ethical and legal regulations regarding genetic analyses of patient samples.

When: October 23-26, 2023

Program: will be available [here](#) closer to the course date.

Registration:

If you are already enrolled at the University of Bergen (UiB) and want the 3 ECTS, you register through [Studentweb](#). Deadline is **September 1**.

If you are *not* enrolled at the UiB but want the 3 ECTS, you can apply for guest student status through [Søknadsweb](#). Deadline is **August 15**.

If you don't need the 3 ECTS (studiepoeng) registered as part of an education/degree, and just want to join the lectures for professional update, you register [through this link](#), with deadline **October 9, 2023**. Note that registration might be closed earlier when fully booked.

Who: Mainly intended for PhD candidates, but open to all.

Place: Personal attendance in an auditorium at campus Haukeland University Hospital.

Responsible: Erling Høivik is academic responsible for the course. Administrative coordinator is Kjetil Utvik Harkestad.



Relevant calls for funding



Here is an overview of upcoming deadlines for funding, relevant to CC BIO students and researchers. For more details, please check the links below and find more at the Medical Faculty's page on [External funding opportunities](#). Do you have concrete plans to apply for funding, want to discuss funding possibilities for your idea, or want more information on a specific call, please send an email to: medforsk@uib.no

[NFR Infrastructure.](#)

2-200 MIO NOK, 5 years. Establishment or upgrading of research infrastructure of national importance. **Deadline: 21 June 2023 (sketch) / 15 November 2023 (full)**

[NFR Qualification - Research Commercialisation from Publicly Funded Research.](#)

200.000-500.000 NOK, 3-12 months. The funding must be used to clarify the commercial potential of promising research results. **Deadline: open-ended**

[NFR Doctoral Project in the Public Sector.](#)

Doctoral scholarships, 3-4 years. The public sector PhD-scheme (OFFPHD) is intended to expand research activities in public sector bodies, to increase researcher recruitment within the public sector and to promote greater collaboration between academia and the public sector. The applicant must be a public sector body. **Deadline: continuous**

[NFR Researcher Project for Young Talents](#)

4-8 million NOK over 3-4 years. For researchers in the early stages of their careers and who have demonstrated the potential to conduct research of high scientific quality. **Deadline: November 2023**

[Helse Vest - Call for proposals 2024](#)

The following application categories are active in the call for proposals 2024:

- PhD Fellowships
- Postdoctoral Fellowships
- Clinical Researcher Fellowships
- Clinical Career Fellowships
- Short-term Projects
- Open Project Support
- Overseas Fellowships

Deadline is September 15, 2023

[Transcan 3 - Translational research on cancer epigenetics](#)

The EU-funded TRANSCAN-3 project is bringing together 31 funding organisations from 20 countries, with the common goal of supporting high-impact translational cancer research. To stimulate new partnerships between researchers and clinicians and support original, high-quality projects, with significant clinical impact. 400 000 EUR for Norwegian participants. **Deadline for pre-proposals: 21 July 2023**

[ERC Starting Grant](#)

For talented early-career scientists of any nationality with 2-7 years of experience since completion of PhD, who have already produced excellent supervised work, is ready to work independently and shows potential to be a research leader with a scientific track record showing great promise. Up to 1,5€ million, 5 years. **Deadline: recurring. Next: 17 October 2023**

[Nordic Cancer Union - Research Grants](#)

50-100.000 EUR per year, 1-3 years. For cancer-relevant research collaboration between at least 3 Nordic countries. **Deadline: 1 September 2023**

[EMBO Postdoctoral Fellowships](#)

2-year fellowships with obligatory mobility, relocation allowance and support for children. Eligibility: 0-2 years after obtained PhD, extensions are possible due to career breaks as parental leave, military service/civil service or other extraordinary circumstances. Applicants must have at least one first (or joint first) author primary research paper accepted for publication or published in an international peer reviewed journal at the time the application is complete. **Deadline: continuous**

[MSCA Postdoctoral Fellowship](#)

1-3 year fellowships for excellent researchers holding a PhD and undertaking international mobility. Researchers of any nationality can apply. **Deadline: recurring. Next: 13 September 2023**

[Familien Blix' fond](#)

Støtter medisinsk forskning, særlig innen feltene hjerte- og karsykdommer og kreft, inkludert medisinsk diagnostikk innen disse feltene. Støtte fra fondet vil i særlig grad gå til drift av forskningsprosjekter som kombinerer basal- og klinisk forskning, med spesiell vekt på søknader fra yngre forskere. Det vil ikke bli gitt midler til lønn eller kongressreiser.

Søknad om støtte sendes på epost til fondets styre v/ Grethe Østervold, blix.fond@gmail.com.

Søknaden må være sendt senest **25. juni 2023** og må skrives på [fastsatt skjema](#).

Coming CCBio events



Make sure to save the dates in your calendar, and register when applicable. You can see all planned CCBIO events in the [CCBio web calendar](#).

- October 2-6, 2023, and December 4-7, 2023, the course [CCBio903 – Cancer research: Ethical, economic and social aspects](#).
- October 23-26, 2023, [CCBio906 – Cancer Genomics course](#).



Note the dates for the **CCBio Seminars in the fall term of 2023**:

- August 31
- September 28
- October 26
- November 30
- December 14



Other relevant coming events

Events from collaboration partners and other relevant events.

- August 10-12, [2023 SNO/ASCO CNS Cancer Conference](#), San Francisco, California
- August 15, [Arendalsuka: Fremtidens kreftbehandling](#), Arendal
- August 15, [Arendalsuka, Medisinsk innovasjon etter Inflation Reduction Act](#), Arendal
- August 16, [Arendalsuka: Kan persontilpasset medisin bidra til å løse ressurskrisen i helsetjenesten?](#) Arendal
- September 7-8, [Digital Life 2023, the DNA of Innovation](#), Solstrand, Bergen
- September 17-19, [NPCM 2023, Nordic Precision Cancer Medicine](#), Oslo
- September 28 - October 1, [ESGO 2023 European Congress on Gynaecological Oncology](#), Istanbul.
- November 2-3, årets helsetjenesteforskingskonferanse, av Nasjonalt nettverk for helsetjenesteforskning og Universitetet i Stavanger. Stavanger. Info kommer, save the date. Emne: [Nasjonal helse- og samhandlingsplan 2024](#).
- November 29-30, [NLS Days 2023](#) (Nordic Life Science Days), Copenhagen



Publications

You can find the CC BIO publications on [this pubmed link](#). See the most recent 5 below.

- Milosevic V, Edelmann RJ, Winge I, Strell C, Mezheyski A, Knutsvik G, Askeland C, Wik E, Akslen LA, Östman A. [Vessel size as a marker of survival in estrogen receptor positive breast cancer](#). *Breast Cancer Res Treat*. 2023 Jul;200(2):293-304. doi: 10.1007/s10549-023-06974-4. Epub 2023 May 24. PMID: 37222874
- Bjørnstad OV, Carrasco M, Finne K, Winge I, Askeland C, Arnes JB, Knutsvik G, Kleftogiannis D, Paulo JA, Akslen LA, Vethe H. [Global and single-cell proteomics view of the co-evolution between neural progenitors and breast cancer cells in a co-culture model](#). *bioRxiv*. 2023 May 5:2023.05.03.539050. doi: 10.1101/2023.05.03.539050. Preprint. PMID: 37205344
- Torkildsen CF, Thomsen LCV, Sande RK, Krakstad C, Stefansson I, Lamark EK, Knappskog S, Bjørge L. [Molecular and phenotypic characteristics influencing the degree of cytoreduction in high-grade serous ovarian carcinomas](#). *Cancer Med*. 2023 May 16. doi: 10.1002/cam4.6085. Online ahead of print. PMID: 37191035
- Erikstein BS, Ahmed AB, Forthun RB, Leh F, Gjertsen BT, Reikvam H. [Treatment and Response Evaluation Challenges in a Pregnant Woman With B-Cell Lymphoblastic Leukemia and Li-Fraumeni Syndrome](#). *J Hematol*. 2023 Apr;12(2):92-99. doi: 10.14740/jh1107. Epub 2023 Apr 30. PMID: 37187497
- Das R, Harper L, Kitajima K, Osman TA, Cimpan MR, Johannssen AC, Suliman S, Mackenzie IC, Costea DE. [Embryonic Stem Cells Can Generate Oral Epithelia under Matrix Instruction](#). *Int J Mol Sci*. 2023 Apr 22;24(9):7694. doi: 10.3390/ijms24097694. PMID: 37175400

Recent CC BIO in the media

Recent media appearances by CC BIO PIs and group members. For all media hits, see [CC BIO's web pages](#).

- 31.05.23, HealthTalk, "[Prisdryss fra Inven2: Jan Terje Andersen ble «Årets innovatør» - Idéprisen gikk til DogBITE](#)", Pascal Gélébart, Vibeke Fosse, Emmet McCormack.
- 25.05.23, Helse Vest, "[Injisering direkte i kreftsvulst er testet på mennesker](#)", Nina Louise Jebsen.
- 22.05.23, HealthTalk, "[Utsetter blodkreft-vedtak etter legekritikk: – Glad for at vi blir hørt](#)", Bjørn Tore Gjertsen.
- 22.05.23, HealthTalk, "[Beslutningsforum sa ja til 15 legemidler - to saker med Venclyxto utsettes](#)", Bjørn Tore Gjertsen.
- 19.05.23, Romsdals Budstikke, "Jeg har fått forlenget levetiden med mange år", Bjørn Tore Gjertsen.
- 19.05.23, Tannlegetidende, "[Immunmodulering ved stamcellebehandling for beinregenerering](#)", Neha Rana.
- 18.05.23, HealthTalk, "[Ny podcast: Frykter det blir nei i Beslutningsforum; Arctic Bioscience med stor studie og lovende kreftvaksine](#)", Bjørn Tore Gjertsen.
- 27.04.23, Forskning.no, "[Finnes løsningen på kreftgåten? – Det grunnleggende problemet er hvordan kroppen vår er konstruert, sier professor](#)", Lars A. Akslen.
- 11.04.23, TV2 Nyheter, "[Snart kan Julie slippe «drittjobbene»](#)", Julie Dybvik, Ingfrid Haldorsen.

Programs and Research Teams

Mechanisms of Tumor Micro-environment Interactions:

- Donald Gullberg
- Karl-Henning Kalland
- Emmet McCormack

Exploration and Validation of Cancer Biomarkers:

- Lars A. Akslen
- Jim Lorens
- Camilla Krakstad
- Daniela Costea
- Elisabeth Wik
- Carina Strell
- Agnete Engelsen

Clinical Applications and Trial Studies:

- Bjørn Tore Gjertsen
- Oddbjørn Straume
- Line Bjørge

Health Ethics, Prioritization and Economics:

- Roger Strand
- John Cairns
- Ole Frithjof Norheim

Additional resources: Bioinformatics and Big Data

- IngeJonassen

Strategic Advice

- Rolf Reed

Centre Director:

Prof. Dr.Med Lars A. Akslen
+ 47 55 97 31 82
lars.akslen@uib.no

Administrative Leader:

Geir Olav Løken
+ 47 55 58 54 36
geir.loken@uib.no

All administrative officers:
[link](#).

