Centre for Cancer Biomarkers

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CCBIO Newsletter

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DIRECTOR'S COMMENTS

Dear all,

The 13th CCBIO Annual Symposium became another success - with 'crossroads' as this year's keyword (picked up from popular culture). Industry was actively present, both startups and big pharma, sharing their 'personal pathways' and motivating our young recruits. Thank you for coming— and we are grateful for the support, from GSK in addition to AbbVie and AstraZeneca. We hope that this will become a tradition.

We also heard molecular biology legend Sir David Lane continue to reflect on and still ask provocative questions about the persisting mysteries of p53—truly inspiring for all of us—from a true scientist!

In this edition of the newsletter, you can read about inspiring persons, projects, publications, and pieces in the media—as well as course events and CCBIO in the Himalayas. Many thanks to Christine Møller for giving the 'science writing course' once again—a strong tradition.

Congratulations to Harsh Dongre on landing FRIPRO support for international mobility, and to award winning young colleagues, those defending their thesis work, and welcome to new faces. Please take a look at funding possibilities and upcoming events.

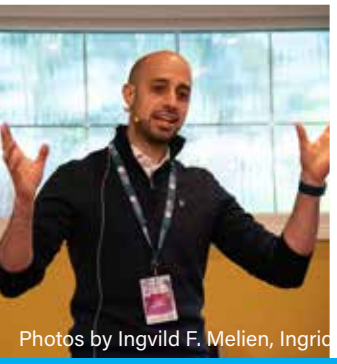
Thank you—and have a nice summer!

Best regards, Lars A. Akslen, Director

PS: If you have not yet received a hard copy of 'CCBIO in Brief 2024', our history book, please stop by CCBIO-HQ to get one! And thanks indeed to professor emeritus Harald Kryvi (UiB) for the exclusive cover art: "*This crab is about to lose it's grip*".

Capturing cancer complexity and clinical challenges

CCBIO crossroads at Solstrand



Photos by Ingvild F. Melien, Ingrid Hagerup, and Geir Olav Løken.

The 13th CCBIO Annual Symposium at Solstrand marked a shift in the strategy of the center, towards more focus on innovation and industry development.

Over 150 participants in a global mix from all over the world gathered at the 13th CCBIO Annual symposium at Hotel Solstrand, May 13th-14th.

The symposium marks the transition from the CCBIO1.0 CoE-phase (2013–2024) to the continuation phase of CCBIO2.0. The Director of CCBIO, Professor Lars A. Akslen, explains:

"CCBIO is still a Centre of Excellence, past the Research Council of Norway funding phase. We are now continuing our research, with significant momentum and enhanced focus on innovation and entrepreneurship." This was visible in the program for the symposium, which for the first time had sessions dedicated to industry:

"This is simply a reflection of the increased focus that we will now have on innovation and industry interactions, from startups to collaborations with big pharma", Akslen says, and adds:

"Of course, we collaborate with big pharma when it comes to trials, but the startup phase and small companies are also extremely important. They can pick up early scientific discoveries and try to develop them into strategies for diagnostic tests or drugs for the market".

Read more in the full article.

"CCBIO in Brief"—annual report, photo book, scientific accounts and how-to-CoE in one

Those who attended our Annual Symposium last month, found an impressive gift on their seat as they arrived. This was the "CCBIO in Brief" report—an account for all 11 years as a Norwegian Research Council-funded Centre of Excellence (CoE). The cover is adorned with exclusive CCBIO artwork by the UiB Professor Emeritus and artist Harald Kryvi, depicting his unique take on cancerous tissue.

Needless to say, the CCBIO administration has had its hands full the last year with the day-to-day operations as well as assembling this massive compilation of the CCBIO legacy. Nevertheless, we find it to be an important work. "Organizing knowledge is a challenge," to use the words of the CCBIO Director Lars A. Akslen. In this work, we have tried to organize a very brief version of our accumulated knowledge. Not only of our research portfolio and scientific achievements, but also our experiences from establishing and running a successful CoE. That is an undertaking in its own right. And not least—we are celebrating the people who made it all happen! Together, we are continuing the Centre of Excellence spirit in CCBIO 2.0.

Ask us for a printed copy.

TGF-β signaling may hold clues to breast cancer recurrence risk

Photo by Ingvild Festervoll Melien.

The TGF-β pathway is known to both suppress and promote cancer. This collaboration study, which was led by CCBIO PI Carina Strell, explored how active TGF-β signaling affects recurrence and response to radiotherapy in early-stage breast cancer.

Using tumor samples from over 1,100 patients, the team found that moderate levels of TGF-β activity in breast cancer cells, as measured by the marker pSMAD2, were linked to a higher risk of local recurrence as compared to high activity levels. Low levels showed no clear impact. Importantly, all patients benefited from radiotherapy, regardless of TGF-β activity. In hormone-sensitive (Luminal) tumors, higher TGF-β signaling was also linked to fewer immune cells in the tumor, suggesting subtype-specific micro-environmental effects.
This shows that TGF-β's role in breast cancer is complex, and any future therapies targeting this pathway will need to account for tumor stage, subtype, and signaling activity to be truly effective.

See: **A.S. Tullberg et al**: Tumoral pSMAD2 as a prognostic biomarker in early-stage breast cancer: insights from the randomized SweBCG91RT trial

Patient-derived organoids mirror real tumors

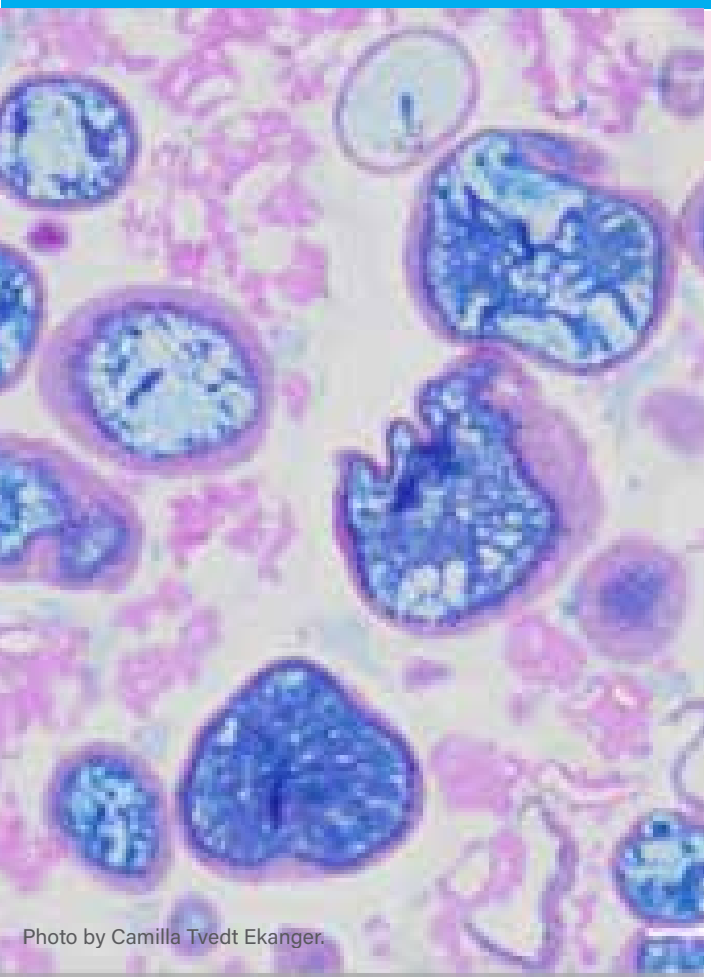


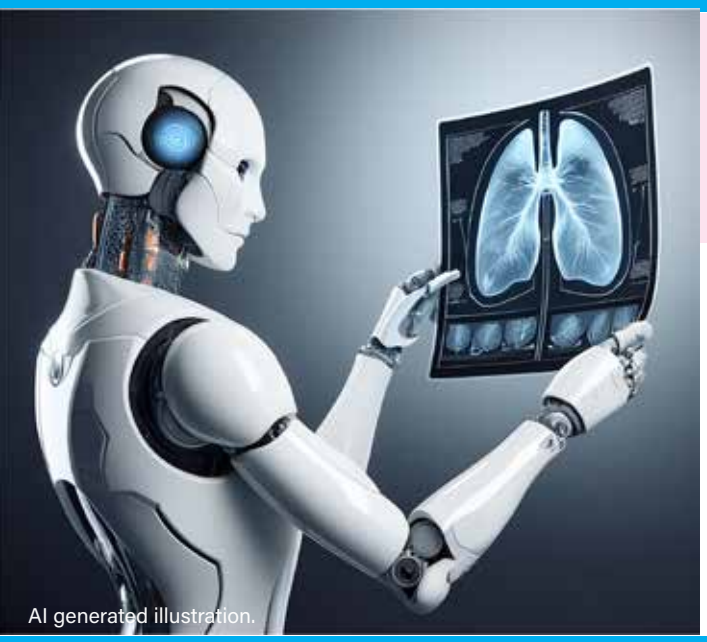
Photo by Camilla Tvedt Ekanger.

In this CCBIO work recently published in Cancers, the authors have successfully established a multicellular 3D model of patient-derived tumor organoids from non-small-cell lung cancer tissues.

Organoid models are emerging as a translational bridge between basic biomedical science and clinical medicine. In this study, the authors have successfully established a multicellular 3D model of patient-derived tumor organoids (PDTOs) from non-small-cell lung cancer (NSCLC) tissues, and shown, through robust tissue-based analyses, that these organoids closely mimic the structure and behavior of the original tumors. Because of this, these models reflect the complexity of real cancer tissue and offer a powerful new tool for studying how lung cancer develops, why it resists treatment, and how individual patients might respond to therapy.

See: **C. T. Ekanger et al**: An Organoid Model for Translational Cancer Research Recapitulates Histoarchitecture and Molecular Hallmarks of Non-Small-Cell Lung Cancer.

AI models can help detect lung tumors in pathology images



AI generated illustration.

As workloads grow in pathology labs, AI tools can help ease the burden. In this collaboration study which includes CCBIO Director Lars A. Akslen and Dr. Maria Ramnefjell at CCBIO, the team developed DRU-Net, a deep learning model designed to identify and outline lung tumors in pathology images of non-small cell lung cancer.

Using two Norwegian datasets, DRU-Net accurately segmented tumor regions, achieving a high Dice score of 0.91, a common measure of image overlap accuracy. A new image enhancement method also boosted the model's performance.

Expert pathologists confirmed the model's effectiveness, though minor errors occurred near tumor edges with inflammation. Overall, DRU-Net shows strong potential as a supportive tool for pathologists, helping improve accuracy and efficiency in cancer diagnosis.

See: **S Oskouei et al**: Segmentation of Non-Small Cell Lung Carcinomas: Introducing DRU-Net and Multi-Lens Distortion.

Bemcentinib shows promise for AML treatment

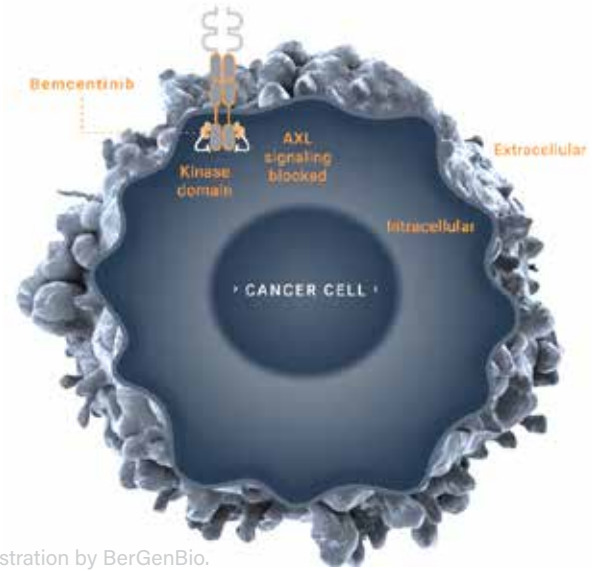


Illustration by BerGenBio.

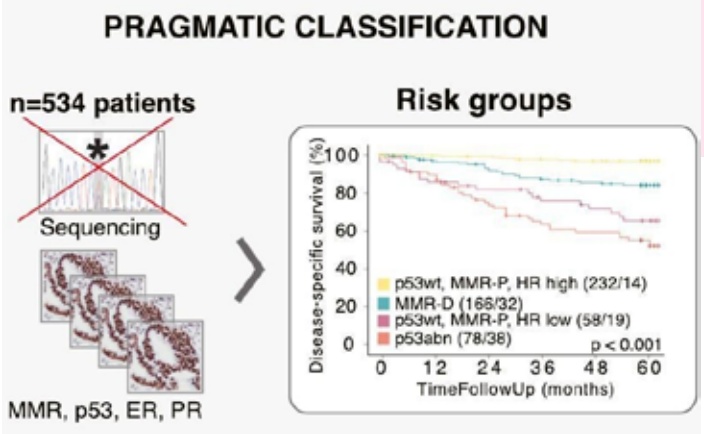
Patients with relapsed or treatment-resistant acute myeloid leukemia (AML) often have few options. A recent BerGenBio clinical trial including CCBIO PI Bjørn Tore Gjertsen tested bemcentinib, a targeted oral drug that blocks AXL—a protein linked to poor outcomes and chemotherapy resistance.

The trial found that bemcentinib alone or combined with low-dose chemotherapy (cytarabine) was safe and well tolerated in patients too frail for intensive chemotherapy. Adverse effects were manageable, and no treatment-related deaths occurred.

These early results suggest bemcentinib could offer a new, gentler option for patients with hard-to-treat AML.

See: **S Loges et al**: Bemcentinib as monotherapy and in combination with low-dose cytarabine in acute myeloid leukemia patients unfit for intensive chemotherapy: a phase 1b/2a trial.

Simplified test may help personalize endometrial cancer treatment without full genetic sequencing



Genetic testing, including POLE sequencing, is often used to guide treatment in endometrial cancer. This CCBIO and Haukeland University Hospital study suggests that a simpler, faster method using hormone receptor and protein staining could work just as well.

We compared the standard genetic approach with a new, streamlined method in over 500 patients. Both approaches identified groups with different outcomes, but the simplified test more accurately predicted survival and identified more patients with low-risk disease—without the need of POLE testing in most cases.

This approach could save time, reduce costs, and still help us tailor treatment effectively for endometrial cancer patients.

See: **H. F. Berg et al.**: Pragmatic preoperative molecular classification of endometrial cancers; Replacing POLE sequencing with hormone receptor staining.

FRIPRO funding to Harsh Dongre

Photo from the awarding of the 2025 Monga Family Trainee Scholar Award for Excellence in Neoplasia Research

June 10, the Research Council of Norway announced funding to new projects in the FRIPRO scheme. Of 3 awarded projects to the UiB, Postdoc Harsh Dongre in Dana Costea's group received 3-year project support with international mobility.

Harsh receives NOK 4,8 million for the project *Disrupting Neuropilin-2 mediated Immunosuppression: A New Frontier in Cancer Immunoediting*.

The immune system plays a double-edged role in cancer—it can destroy emerging cancer cells but also shape their evolution in ways that help tumors escape detection. This complex interaction, known as cancer immunoediting, involves both protective and harmful effects. While cutting-edge treatments like immune checkpoint inhibitors and adoptive T cell therapy have revolutionized cancer care, some cancers—such as pancreatic cancer and head and neck cancer—remain stubbornly resistant. Recent research points to a molecule called neuropilin-2 (NRP2) as a potential game-changer. Early studies suggest that NRP2 helps regulate the activity of CD4+ T cells, a key type of immune cell. When NRP2 is removed or blocked, these T cells become more active and inflammatory, leading to slower tumor growth in mouse models of pancreatic and head and neck cancers. Even more intriguing, interrupting the interaction between NRP2 and its binding partner, Semaphorin-3F (SEMA3F), not only boosts T cell proliferation but also reduces the likelihood of tumors forming in the first place. These results suggest that the SEMA3F/NRP2 pathway may act as a brake on the immune system, limiting the ability of CD4+ T cells to fight cancer.

The core idea is simple but powerful: by targeting NRP2 in immune cells, it may be possible to unleash the body's natural defenses—even against cancers that don't usually respond to current immunotherapies.

Here's the complete FRIPRO grant list from the Research Council.

Harsh was also recently awarded **the 2025 Monga Family Trainee Scholar Award for Excellence in Neoplasia Research** at the American Society for Investigative Pathology Annual Meeting held on April 26-29 in Portland, Oregon, USA. His talk was titled *Cancer-associated fibroblasts induce a neuropilin-2 dependent lymphangiogenic secretome in HPV E6E7 cancer cells*.

Double congratulations to Harsh!

EU TRANSCAN grant to Berlin/Bergen project

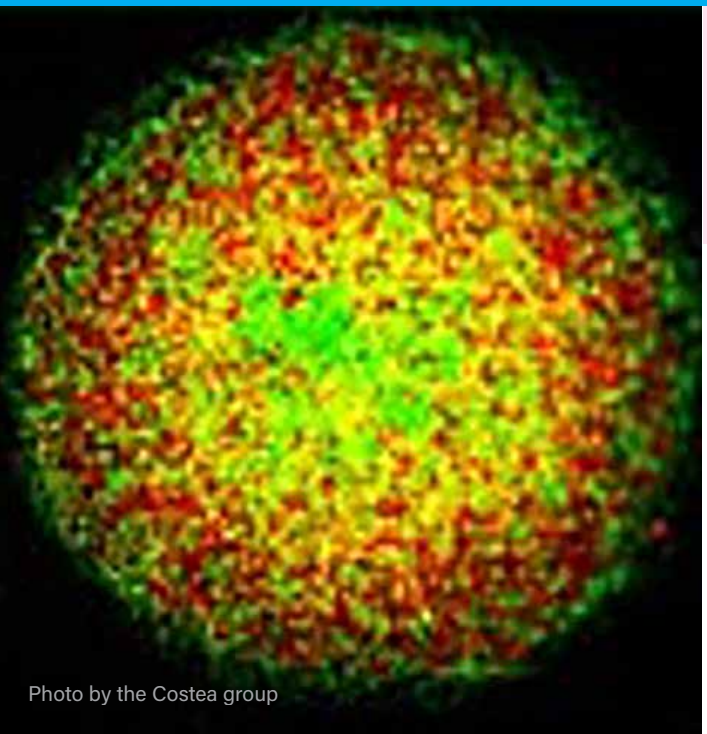


Photo by the Costea group

CCBIO P, Professor Daniela Elena Costea has received funding under the EU TRANSCAN-3 scheme as part of the collaborative project BePREPARED (*Building an ex vivo complex tumour microenvironment platform for development of combination therapies and drug resistance studies in head and neck cancer*), coordinated by Professor Ingeborg Tinhofer-Keilholz at Charité – Universitätsmedizin Berlin.

The project aims to improve treatment outcomes in head and neck squamous cell carcinoma (HNSCC) by incorporating tumor microenvironment (TME) components into patient-derived organoid (PDO) models to enable advanced drug screening and resistance profiling.

Professor Costea's group contributes key expertise in 3D tumor modeling and tumor-stroma interactions, particularly the functional characterization and integration of cancer-associated fibroblasts (CAFs). Their established protocols for CAF isolation and co-culture systems will support the development of complex, clinically relevant PDO-TME models, reinforcing CCBIO's commitment to biomarker discovery and translational cancer research.

We look forward to the project results!

"Foreign adjunct professor of pathology" at KI

Lars A. Akslen and Arne Östman, photo by Camilla Ekanger.

CCBIO's Director Lars A. Akslen is from April 1st 2025 and for 3 years appointed "Foreign Adjunct Professor of Pathology" at Karolinska institutet, Department of Oncology-Pathology, Stockholm, to increase the collaboration between our research communities.

There, Lars will be affiliated to the research groups of **Arne Östman** and **Linda Lindstrøm**:

- The Östman group focuses on tumor microenvironment, with discovery studies as well as biomarker and drug target identification. Special attention is given to cancer-associated fibroblasts. Many studies use novel methods for spatial tissue profiling of human tumors. The ultimate goal is to contribute to the use of CAFs as drug targets and biomarkers of clinical utility.
- Linda Lindström's group conduct interdisciplinary research on breast cancer, with a particular interest in long-term risk of metastatic disease, intra-tumor heterogeneity and the heterogeneous tumor microenvironment. Their research is focused on elucidating the mechanisms behind this prolonged risk and the benefit from endocrine treatment in a long-term perspective.

We look forward to strengthened collaboration activities!

Strong CCBIO attendance at EHA

The EHA2025 Congress took place June 12–15 in Milan, Italy, and included 3 presentations from young CCBIO researchers.

The EHA (European Hematology Association Congress) is the most important professional congress on blood disorders in Europe. **Stein-Erik Gullaksen** gave presentation at an oral session, presenting early response prediction from single-cell analysis of the immune system and signaling pathways in chronic myeloid leukemia (CML). See a HealthTalk interview with Stein Erik.
Oriol Castells presented a poster on AML, addressing intracellular signaling signatures in the monocytic cell compartment and how these distinguish AML from healthy peripheral blood and bone marrow. **Inga Motzfeldt** presented a poster on immunophenotyping in erythroid-derived AML. **Bjørn Tore Gjertsen** also participated, but left the presenting to his team members.

From Bergen to the Himalayas: The CCBIO cup joins a medical mission to Nepal

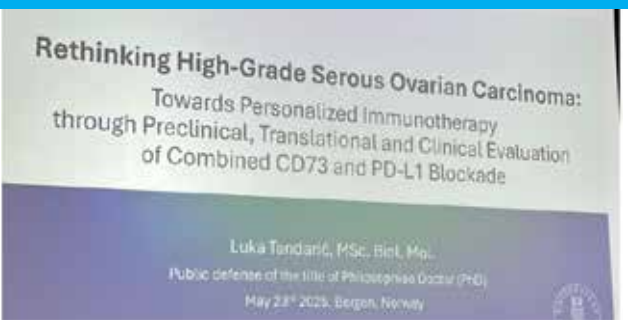
This April, the CCBIO cup traveled far beyond its usual surroundings—all the way to the Himalayas, accompanying CCBIO Principal Investigator Professor Daniela Elena Costea on a remarkable health charity mission. The destination: Manang, a remote village located at 3,540 meters in the mountains of Nepal.

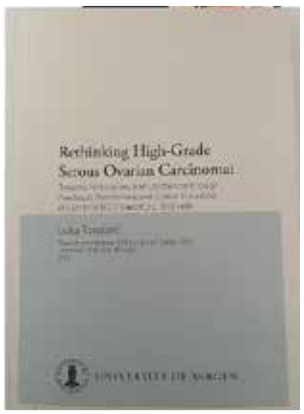
The mission, which took place from April 5th to 14th, was organized by the Nordic Nepal Medical Society (NNMS) and the Nepalese Doctors Association-UK (NDA UK). It provided free dental and medical care to the local population and Tibetan Buddhist monks in nearby monasteries.

A dedicated team of 10 dentists and 14 medical doctors participated in the initiative, including three from Norway: Professor Daniela Elena Costea (UiB), Professor Dipak Sapkota (UiO), and Associate Professor Tine Merete Søland from the University of Oslo (UiO).

See article with more information on the Nepal mission.

Recent doctoral defense





Luka Tandaric defended May 23, 2025 his doctoral work at the University of Bergen with the thesis "Rethinking High-Grade Serous Ovarian Carcinoma: Towards Personalized Immunotherapy through Preclinical, Translational and Clinical Evaluation of Combined CD73 and PD-L1 Blockade". The trial lecture was the same day. Opponents were Frederic Amant and Leticia Oliveira-Ferrer, and the leader of the leader of the evaluation committee was Carina Strell. Supervisors have been Line Bjørge (main supervisor) Emmet Mc Cormack, Liv Cecilie Vestrheim Thomsen and Katrin Kleinmanns.

Ovarian cancer is challenging to treat due to its frequent resistance to therapies. When immunotherapy, which boosts the body's own defense against cancer cells, was introduced, it sparked significant hope. However, its effect in ovarian cancer has been modest, partly because the disease possesses advanced mechanisms for evading the immune system.

This PhD work aimed to clinically evaluate the efficacy of a novel oleclumab/durvalumab ICI combination therapy in HGSOC (Paper I), identify blood-based biomarkers of response and resistance to said treatment (Paper II), and develop a cutting-edge humanized patient-derived xenograft (PDX) mouse model of HGSOC for improved preclinical result translation (Paper III). The work makes important contributions to preclinical and translational cancer research and lays the foundation for more precisely targeted immunotherapy against ovarian cancer.

See the dissertation in BORA.

Luka will now continue to build his competence and career as a postdoctoral researcher in a project supported by Trond Mohn Research Foundation.

Co-creation between researchers and patient representatives

May 7–9, 2025, the course User Involvement in Medical and Health Research (CCBIONEUR910) was held for the fourth time. Eitri Health Innovation Centre and startup incubator provided the perfect setting for an innovative course that brought together researchers, healthcare professionals, and user representatives – a total of 80 participants.

Experienced user representatives were connected with early-career researchers, and new patient representatives had the opportunity to network with more established patient communities. Both the course organizers and participants expanded their professional networks. The course concluded with a panel debate that brought together stakeholders across disciplines and organizations, addressing role understanding and the tension between representativeness and specialization in modern societal structures. A joint effort is needed to strengthen diverse user representation in medical research!

See full article (Norwegian only) about the User Involvement course here.

A to-the-point course

Getting started on a manuscript or scientific text can often feel like the hardest part. Wouldn't it be great to have expert guidance to kickstart the process? That's exactly what seventy-five students and several researchers signed up for when they filled the auditorium for this year's CCBIO908 Scientific Writing & Communication Seminar, held May 20–21, 2025.

This 2 ECTS course has been very well received through several years and always fully booked, as it covers a wide range of key topics: crafting a clear problem statement, organizing data and messages, mastering grammar, punctuation and numbering conventions, and how to write an effective cover letter that captures a journal editor's attention.

In just two intensive days, lecturers Christine Møller, Randy Watnick, and Marion Solheim provided the participants with a comprehensive toolbox to approach their next scientific writing task with confidence and clarity—ready to get started, elevate the quality of the text and communicate the story of their research.

Read the full CCBIO908 report here.

New faces in the CCBIO family

Alexander Marks is a third-year medical student at the University of Bergen. Over the next year, he will be starting full-time research as part of the Medical Student Research Programme, under the supervision of Christian Arvei Moen and Daniela Elena Costea. His research will focus on identifying potential prognostic biomarkers in penile cancer, with the project "Prognostic Factors in Penile Cancer: A Study of Biomarkers in Penile Cancer Tissue."

Saygo Tomo is a postdoctoral research fellow at the Laboratory of Experimental Pathology of the School of Dentistry, University of São Paulo (USP), Brazil, holding a PhD and Master's in Oral Medicine from São Paulo State University (UNESP). His research interests are focused on exploring innovative oral cancer detection and treatment strategies, including photodynamic and sonodynamc therapies, with the aim of improving clinical outcomes. Supported by the São Paulo State Research Foundation (FAPESP), he is now a guest researcher for 1 year in Prof. Costea's group, during which we will investigate how cancer assocaited fibroblasts (CAFs) can influence on regulated necrosis pathways in dysplastic oral keratinocytes using 3D organotypic models. This study will contribute significantly to his main project in Brazil, entitled "Regulated necrosis induced by photodynamic and sonodynamic therapies in oral epithelial dysplastic cells: in vitro and in vivo study".

Hassan Elsaid, Ph.D. is a new postdoctoral fellow in the Costea group. His project, titled "Fish and Chips for Understanding the Role of Heterogeneity in Head and Neck Cancer Stroma for Enhanced Therapy Efficacy," aims to uncover how distinct subpopulations of cancer-associated fibroblasts (CAFs) contribute to treatment resistance in head and neck cancer. By integrating zebrafish xenografts and microfluidic chip platforms with single-cell RNA sequencing, Dr. Elsaid will develop and test patient-derived models to functionally characterize CAF subsets and explore targeted strategies to reverse therapy resistance.

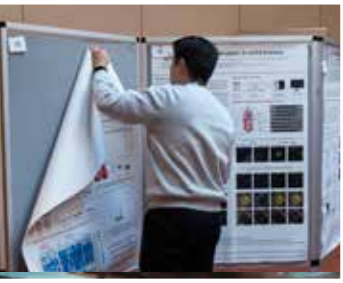
Find relevant calls for funding

For current calls of funding, please see the Faculty of Medicine'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

Note: even if there are many various deadlines, the Faculty of Medicine now has introduced the internal deadlines March 15 and September 15.

First, you submit your intention of applying for external funding in this registration form, and a notification of your plans will be sent to the Head of Department, Head of Administration, a financial officer and research advisors at the Faculty of Medicine. All applications must be approved by the department's management. This form is a tool intended to ensure that these administrative processes are taken care of.

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.

- August 28, CCBIO Seminar. Time: 14:30–15:30
- September 25, CCBIO Seminar. Time: 14:30–15:30
- October 16, CCBIO Seminar, cMYC topic. Time: 14:30–15:30

- **October 29–30, the 9th Scandinavian Symposium on Translational Pathology (ScanPath).** This year, ScanPath will be hosted by CCBIO, at Solstrand outside of Bergen! Similar to previous years, the seminar will include inspirational speakers representing different research groups attending the meeting. We will have a poster session where participants can present their work, and ample time for informal interaction. The seminar is open for all with an interest in morphology oriented research. **SAVE THE DATE!**

- November 27, CCBIO Seminar. Time: 14:30–15:30
- December 11, CCBIO Seminar. Time: 14:30–15:30
- January 15–16, CCBIONEUR911, Clinical Trials course. Save the date!

Other relevant coming events

Illustration: colourbox.com

Events from collaboration partners and other relevant events.

- August 11–15, Arendalsuka 2025
- August 21, BBB Seminar, speaker Stephan Pless. Bergen
- September 3–5, 9th conference of Digital Life Norway Research School, Centre for Digital Life Norway, Sola Strand Hotel, Stavanger
- September 23–23, EACR conference: Goodbye Flat Biology: ex vivo to in vivo models of cancer, Essen, Germany
- September 25, Lung Cancer Symposium 2025, Oslo Cancer Cluster Innovation Park
- October 13–14, Nordic Life Science Days 2025, Göteborg, Sweden
- October 17–21, ESMO Congress 2025, Berlin, Germany
- November 3–5, BIO-Europe® 2025, Vienna, Austria
- November 5, Nasjonal konferanse om kvinnehelseforsking, DRIV, Bergen. Open for abstracts from August 1! Appropriate for several CCBIO groups.
- November 12–14, ESMO AI & Digital Oncology, Berlin, Germany
- November 24–25, 43rd World Cancer Conference, "Early Detection and Screening: Advancements in Cancer Diagnosis", Barcelona, Spain.

Publications

You can find the CCBIO publications on this pubmed link. See some of the most recent below.

- **Stenmark Tullberg A, Thurfjell V, Kovács A, Micke P, Moustakas A, Killander F, Niméus E, Holmberg E, Karlsson P, Strell C.** Tumoral pSMAD2 as a prognostic biomarker in early-stage breast cancer: insights from the randomized SweBCG91RT trial. Breast Cancer Res Treat. 2025 Jun 9. doi: 10.1007/s10549-025-07744-0. Online ahead of print. PMID: 40488800.

- **Ekanger CT, Ramnefjell MP, Guttormsen MSF, Hekland J, Dahl-Michelsen K, Lotsberg ML, Lu N, Stuhr LEB, Hoareau L, Salminen PR, Gärtner F, Aanerud M, Akslen LA, Lorens JB, Engelsen AST.** An Organoid Model for Translational Cancer Research Recapitulates Histoarchitecture and Molecular Hallmarks of Non-Small-Cell Lung Cancer. Cancers (Basel). 2025 Jun 3;17(11):1873. doi: 10.3390/cancers17111873. PMID: 40507353.

- **Elnour R, Hindenes IH, Færevaag M, Moss Kolseth IB, Vestrheim Thomsen LC, Johannessen AC, Costea DE, Bjørge L, Dongre HN.** Prognostic value of an integrated human papillomavirus and immunoscore model to predict survival in vulva squamous cell carcinoma. Mod Pathol. 2025 Jun 10:100809. doi: 10.1016/j.modpat.2025.100809. Online ahead of print. PMID: 40505815.

- **Datar GK, Khabusheva E, Anand A, Beale J, Sadek M, Chen CW, Potolitsyna E, Alcantara-Contessoto N, Liu G, De La Fuente J, Dollinger C, Guzman A, Martell A, Wohlan K, Maiti A, Short NJ, Yi SS, Andresen V, Gjertsen BT, Falini B, Rau RE, Brunetti L, Sahni N, Goodell MA, Riback JA.** Nuclear Phase Separation Drives NPM1-mutant Acute Myeloid Leukemia. bioRxiv [Preprint]. 2025 May 28:2025.05.23.655671. doi: 10.1101/2025.05.23.655671. PMID: 40501735. Preprint.

- **Fasmer KE, Gulati A, Lindås S, Krakstad C, Haldorsen IS.** Predicting aggressive disease and poor outcome in endometrial cancer using preoperative [^{18}F]FDG PET primary tumor radiomics. Eur J Nucl Med Mol Imaging. 2025 Jun 11. doi: 10.1007/s00259-025-07335-7. Online ahead of print. PMID: 40498156.

- **Oskouei S, Valla M, Pedersen A, Smistad E, Dale VG, Høibø M, Wahl SGF, Haugum MD, Langø T, Ramnefjell MP, Akslen LA, Kiss G, Sorger H.** Segmentation of Non-Small Cell Lung Carcinomas: Introducing DRU-Net and Multi-Lens Distortion. J Imaging. 2025 May 20;11(5):166. doi: 10.3390/jimaging11050166. PMID: 40423022.

Recent CCBIO in the media

Recent media appearances by CCBIO PIs and group members. For all media hits, see CCBIO's web pages.

- 11.04.25, UiB News, "Mye å feire på det nye stamcellesenteret," Heidrun Vethe.
- 01.04.25, Helse Bergen News, "Haukeland satsar mot europeisk toppnivå i kreftbehandling," Oddbjørn Straume.
- 01.04.25, BT, "Mangler penger til kreftstudie: – Bergenbio mistet fokus," Bjørn Tore Gjertsen.
- A special release from Laboratorieklinikken, Haukeland Universitetssjukehus, Årsrapport 2024 for forsking i laboratorieklinikken. (Norwegian only.) Ti år har gått siden Laboratorieklinikken ble etablert som egen klinikk i Helse Bergen. I deres aller første årsrapport får du et mangfoldig innblikk i forskningsnyheter i LK fra året som har gått. Inkludert tre sider om CCBIO, og ellers omtale om mange kjente ansikter.
- 06.03.25, Shifter.no, "Her er forskerne som vil bli gründere - sjekk om du har tro på de syv ideene," Pascal Gelebart, Emmet Mc Cormack.
- 25.02.25, Helse Bergen News, "Opnar Kreftpoliklinikk i Protonbygget," Oddbjørn Straume.
- 18.02.25, Bergensavisen, "Klarer ikke å behandle kreft innen fristen. - Ventetiden er tøff, sier tidligere pasient," Oddbjørn Straume.
- 05.02.25, Psykologisk.no, "I Bergen starter kampen for en mer likeverdig helsetjeneste – også for kvinner," Line Bjørge.
- 29.01.25, Healthmedicinet, "HMN 2025: How to uncover biomarker for prime threat of metastasis in a number of cancers," Rolf Brekken, James Lorens.

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
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