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Centre for Cancer Biomarkers
Norwegian Centre of Excellence – University of Bergen

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The Research Council of Norway

UNIVERSITAS BERGENSIS

"CAPTURING CANCER COMPLEXITY AND CLINICAL CHALLENGES"

CCBIO Newsletter

DIRECTOR'S COMMENTS

EDITOR: eli.vidhammer@uib.no

Dear all

First of all: Congratulations from the entire CCBIO family to Bjørn Tore Gjertsen who received the King Olav V's Prize for Cancer Research 2021 on Oct 18! Read the story in this newsletter, and you are all invited to the Celebration Seminar for Bjørn Tore on October 20 at 15:00 – 18:00 (details below).

Please also read about research news, new faces, and doctoral defenses. It is impressive and highly rewarding to read about all the excellent studies being performed in CCBIO.

In a recent paper in BMC Medical Ethics, authors Mille Marie Stenmarck, Caroline Engen, and Roger Strand discuss the media coverage of new and expensive cancer drugs, and reflect on the underlying premises. Highly recommended!

In this newsletter, you will also find lots of information on recent papers, media coverage, and upcoming events. In particular, on November 9, at 17:00 – 18:00, Professor Robert S. Langer, Massachusetts Institute of Technology, will present the Falch Lecture entitled Creating and implementing breakthrough technologies in biotechnology and nanotechnology (more info from the Medical Faculty). Dr. Langer has been called "The Edison of Medicine", and he has an exceptional record in science and innovation. You should not miss his presentation.

Best regards, Lars A. Akslen, Director

Programs and Research Teams

Mechanisms of Tumor-Microenvironment 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

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
- Inge Jonassen

Strategic Advice
- Rolf Reed

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KING OLAV V'S PRIZE FOR CANCER RESEARCH 2021 TO BJØRN TORE GJERTSEN

The Norwegian Cancer Society announced September 2nd that this year's King Olav V's Prize for Cancer Research will go to Professor Bjørn Tore Gjertsen. This award is considered as a great honor in the Norwegian research communities, and the univeristy celebrates this with a Celebration Seminar October 20 in Store Auditorium, Sentralblokken at Haukeland University Hospital.

According to the criteria, the candidate's research should be of benefit to cancer patients and will continue to do so in the future, the researcher should have achieved international recognition, and he or she should promote and strengthen Norwegian research communities. King Harald presented the prize in the University of Oslo Aula on October 18, 2021. CCBIO will host a Celebration Seminar October 20 at 15.00–18.00 with an informal reception with tapas, coffee/tea, cake and fruit.

"Bjørn Tore is an enthusiastic colleague with a unique ability to combine updated insights in biology with innovative cancer therapy and care for the patients," CCBIO Director Lars A. Akslen says. "His creativity and energy also affect those around him, which explains his huge network of collaborative partners both nationally and internationally. He is a driving force in CCBIO and a role model for young research talents. Congratulations to Bjørn Tore Gjertsen with this award – it is highly deserved," Lars A. Akslen concludes.

The Norwegian Cancer Society has each year since 1992 awarded the King Olav V's Prize for Cancer Research to a cancer researcher or research group who has distinguished themselves through scientific contributions to Norwegian cancer research.

Read more in UiB's article and the Cancer Society's article. The news has also recently been in several national media.


Photo: Ingvild Festervoll Melien

Related event:

Celebration seminar for the Cancer Research Prize to Bjørn Tore Gjertsen

When: October 20 at 15:00

Where: Store Auditorium, Sentralblokken. Including informal reception with tapas, coffee/tea, cake and fruit.

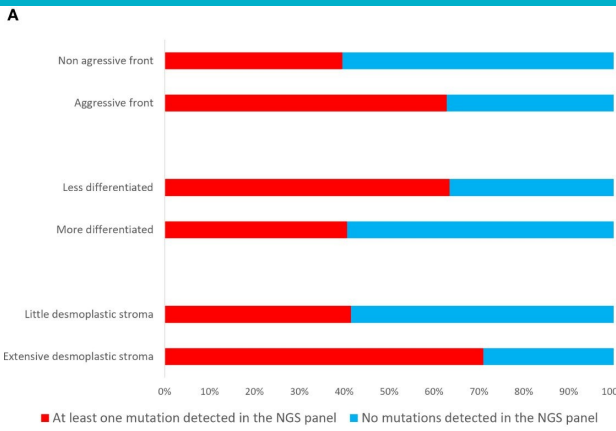
Registration: through this link.

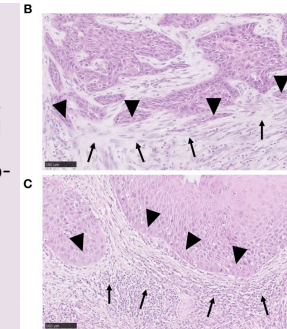
NOVEL ASSOCIATIONS BETWEEN MUTATIONAL BURDEN AND PATHOLOGICAL VARIABLES

A recent study from Costea's group published in Frontiers in Oncology with Postdoctor Harsh Dongre as first author, suggests that a more complex mutational landscape is associated with a more intense stromal desmoplastic response and a more aggressive tumor front.

Using a custom made targeted next generation sequencing (NGS) panel, several specific mutations could be reliably identified in archival samples preserved up to 17 years in a well-described cohort of head and neck squamous cell carcinomas (HNSCC) from Haukeland University Hospital. Using NGS mutational data together with the histopathological evaluation of the tumors, the study revealed novel associations between the mutational burden and pathological variables such as stromal desmoplasia, pattern of invasion at the tumor front and the degree of differentiation. This is among the first studies indicating a link between the mutational burden and stromal host reaction.

The study can be found here: Targeted Next-Generation Sequencing of Cancer-Related Genes in a Norwegian Patient Cohort With Head and Neck Squamous Cell Carcinoma Reveals Novel Actionable Mutations and Correlations With Pathological Parameters Harsh N. Dongre, Hilde Haave, Siren Fromreide, Fredrik A. Erland, Svein Erik Emblem Moe, Sophia Manueldas Dhayalan, Rasmus Kopperud Riis, Dipak Sapkota, Daniela Elena Costea, Hans Jorgen Aarstad and Olav K. Vintermyr.





A.Correlations between mutational landscape and histopathological parameters in HNSCC.
B.Tumour with several detectable mutations, intense stromal desmoplastic response (solid arrows), and weak inflammatory response.
C.Tumour with no detectable mutations, little stromal desmoplastic response, and intense inflammatory response.

CHALLENGING THE MEDIA DISCOURSE ON CANCER AND CANCER DRUGS

Authors Mille Sofie Stenmarck, Caroline Engen and Roger Strand has recently published an interesting study in BMC Medical Ethics, where they analyze the Norwegian media discourse on the issue of priority-setting in relation to expensive cancer drugs, identify four underlying premises and challenge these premises.

The study is part of CCBIO's research program on the ethical and social aspects of cancer research and cancer care.

The four underlying premises identified in the analysis of the Norwegian media discourse are: (1) Cancer drugs are de facto expensive, and one does not and should not question why. (2) Cancer drugs have an indubitable efficacy. (3) Any lifetime gained for a cancer patient is an absolute good, and (4) cancer patients and doctors own the truth about cancer. Within the Norwegian public discourse, these premises largely remain un-challenged due to what the authors find to be unjustified claims of moral superiority. They therefore explore alternative framings of the issue of expensive cancer drugs and discuss their potential to escape the predicament of tragic choices.

Is it unethical and cold-hearted to challenge such premises? Read the open access article and get food for thought:
Reframing cancer: challenging the discourse on cancer and cancer drugs—a Norwegian perspective.

Illustration: colourbox.com

NEW FACES

Welcome to new members in the CCBIO groups, Raúl, Rammah and Ângela!

Raúl Pérez Mato

Raúl Pérez Mato is a new PhD candidate in Donald Gullberg's group. Raúl did his master's degree in Molecular Biomedicine at the Autonomous University of Madrid, Spain, and worked as research assistant at the University of Edinburgh, Scotland. The doctoral project deals with basic mechanisms occurring in the stromal compartment of the tumor micro-environment, focusing on integrin α11β1 as a regulator of interplay between tumor and stromal cells. The overall aim is to explore integrin α11 as a novel useful therapeutic tumor target in cancer.

Rammah Mustafa

Rammah Mustafa is a new PhD candidate in Professor Dana Costea's group. He did his MS project at Karolinska Institutet (KI), Sweden, within the Cancer Proteomics Group. The PhD research project will be performed as part of a close and successful collaboration between Costea's group and Bjørge's group. The project will involve the exploration of innovative approaches for the establishment of patient derived organoid (PDO) models which can be used to predict drug response in vulva cancer. The correlation between PDO drug response and the expression of an established panel of tissue biomarkers will also be assessed using mass cytometry (CyTOF). The PDOs will be developed from vulva cancer biological samples from patients enrolled in a combination therapy clinical trial led by Professors Karl-Henning Kalland and Line Bjørge. The project is a multidisciplinary collaboration with groups with expertise in bioprinting (Tissue Engineering Research Group at the Dept. for Clinical Odontology, UiB) and in high content image analysis & unbiased drug screening (the Phenotypic Screening Facility, Blizard Institute, Queen Mary University of London, where Rammah is invited to spend part of his PhD research program).

Ângela Mesquita

Ângela Mesquita is a new PhD candidate in the PreCOS Research Group, under the supervision of Professor Emmet McCormack and Dr. Pascal Gelebart. Ângela holds a master degree in Molecular genetics, and in Health sciences, from the University of Minho (Portugal). Her PhD research project will focus on the development new humanized mouse Patient Derived Xenograft (PDX) models of Myelodysplastic syndrome (MDS) to assess their ability to maintain the disease phenotype and cellular complexity for the pre-clinical evaluation of new innovative drugs.

COMING DOCTORAL DEFENSE

Astrid Børretzen defends Friday October 22, 2021 her doctoral dissertation "Epithelial-mesenchymal transition, angiogenesis, and molecular markers in aggressive prostate cancer."

Astrid Børretzen.
Photo by Jørgen Barth.

Astrid has done her work at the Department for Clinical Medicine and CCBIO. Main supervisor is Professor Ole Johan Halvorsen, and co-supervisors are Professor Lars A. Akslen and Professor Christian Beisland.

Trial lecture: Friday October 22, 2021 at 10:15
Place: Auditorium 4, BB-building, Jonas Liesvei 91
Topic: "Prognostic and predictive biomarkers and use of artificial intelligence in prostate cancer care. Current and future perspective"

Doctoral defense: Friday October 22, 2021 at 12:15
Place: Auditorium 4, BB-building, Jonas Liesvei 91
Dissertation title: "Epithelial-mesenchymal transition, angiogenesis, and molecular markers in aggressive prostate cancer"

1. opponent: Professor Lars Egevad, Karolinska Institutet, Sweden
2. opponent: Professor Kristin Austlid Taskén, University of Oslo
3. member of the committee: Professor Daniela Elena Costea, Universitety of Bergen

The defense will be led by Professor Olav Karsten Vintermyr.

Open to the public. See also the press release.

RECENT DOCTORAL DEFENSES

Elvira García de Jalón Viñegra defended June 25, 2021 her doctoral dissertation "Preclinical molecular imaging in oncology – From chemical synthesis to clinical translatable applications."

Elvira Viñegra.
Photo by Spiros Kotopoulis.

Elvira did her work at the Department for Clinical Science, the Chemical Department, the Centre for Pharmacy, and CCBIO. Supervisors were Professor Emmet McCormack and Professor Bengt Erik Haug.

In her work, Elvira introduced a DNA segment (a gene) with information that can be used to produce an enzyme (nitroreductase, NTR) in the tumors of animal cancer models. The main activity of this enzyme is to convert inactive chemical compounds into highly toxic compounds within the cancer cells and thus kill these cells without affecting healthy cells, reducing the adverse effects of traditional cytotoxins. Furthermore, this enzymatic reaction can be used to activate molecules that can enable detection of these cancer cells. In addition, Elvira's work has contributed to improved fluorescence-based imaging in oncology and other research areas. She has chemically prepared and investigated various fluorescent molecules for preclinical visualization of NTR. She has also studied how the tumor tissue in an animal model can be detected in contrast to healthy tissue by using five different fluorescent substances, which is very useful during cancer surgery. See press release.

Shamundeeswari Anandan defended September 3, 2021 her doctoral dissertation "Rethinking High-Grade Serous Carcinoma: Development of new tools for deep tissue profiling."

Shamundeeswari Anandan.
Photo by Spiros Kotopoulis.

Sam did her work at the Department of Clinical Science, and CCBIO. Main supervisor was Professor Line Bjørge, and co-supervisors were Professor Emmet McCormack and Researcher Liv Cecilie Vestrheim Thomsen.

Sam established several mass cytometry panels for tissue analysis from patients with ovarian cancer, and used these antibody panels to map cancer cells, immune cells and support cells in the tissues. She also showed that protocol standardization for tumor tissue processing is important for the reproducibility of the results. By analyzing a well-characterized patient cohort, Sam showed that the composition of cells in tumor tissue from ovarian cancer patients varies greatly. However, some common features, such as a high prevalence of immunosuppressive myeloid cells, and an association between the presence of specific dendritic cells and clinical parameters, could be identified. The findings in Sam's work show the importance of standardization of examination methods, contribute to increased disease understanding, and form the basis for identification of new biological properties in the tumors. See the press release.

Moses Musiime defended September 24, 2021 his doctoral dissertation "Novel tools and assays for the study of integrin α11 expression and function."


Moses Musiime.
Photo by Jørgen Barth.

Moses did his work at the Department of Biomedicine and CCBIO. Main supervisor was Professor Donald Gullberg, and co-supervisor was Professor Daniela Elena Costea.

The main objective of this work was to understand the mechanisms by which integrin α11β1 contributes to the function of fibroblast cells related to collagen remodeling in tissue and tumor fibrosis. In one study, Moses characterized the binding site, or epitope, for a newly developed antibody for the human integrin α11 subgroup. In another study, Moses does surprising findings that break with the currently recognized dogmas in this field. The findings suggest that α11β1 integrin may act as an important collagen assembly receptor on the cell surface, which, independently of the protein fibronectin, can accumulate collagen I fibrils. Such studies are important for understanding how fibroblasts regulate wound healing, scarring and tumor growth. Moses has also contributed in the development of a new transgenic mouse model. The new mouse strain, ITGA11-Cre delete -strain, can be used to deactivate genes in an integrin α11-specific way. See the press release.

Hilde Ytre-Hauge Smeland defended September 24, 2021 her doctoral dissertation "Role of integrin α11β1 in breast cancer."


Hilde Ytre-Hauge Smeland.

Hilde did her work at the Department of Biomedicine and CCBIO. Main supervisor was Professor Linda E. Birkhaug Stuhr. Co-supervisors were Professor Lars A. Akslen, Professor Donald Gullberg and Professor Rolf K. Reed.

To study the role of integrin α11 in human breast cancer, Hilde has tested newly developed antibodies and developed a method to detect integrin α11 in tissue samples from breast cancer patients. Hilde found that integrin α11 was expressed on fibroblast-like cells in the microenvironment in a majority of the tumors. Strong expression of integrin α11 was associated with aggressive cancer properties. Hilde has found a new function of integrin α11 in regulating fluid pressure in the microenvironment, in addition to stimulating the growth of a type of aggressive breast cancer. The antibodies represent a new tool in further studies of the expression and function of integrin α11.
See the press release.

Eirik Joakim Tranvåg defended September 24, 2021 at 12:30 his doctoral dissertation "Precision and Uncertainty. Cancer biomarkers and new perspectives on fairness in priority setting decisions in personalized medicine."


Eirik Joakim Tranvåg. Photo by Margrethe Heen Ottesen.

Eirik did his work at the Department of Global Public Health and Primary Care and CCBIO. Main supervisor was Professor Ole Frithjof Norheim. Co-supervisors were Professor Roger Strand, Professor Lars A. Akslen and Associate Professor Trygve Ottersen.

In his work, Eirik studied how personalized cancer drugs and biomarkers are used in priority setting decisions in Norway, and discusses how the tension between precision and uncertainty both challenges and contributes to broadening the understanding of justice. Eirik argues that the current prioritization system must to a greater extent recognize that science and society are mutually dependent on each other and that such recognition implies that a broader co-production of knowledge and a fairer prioritization process will contribute to a fairer priority setting for personalized cancer drugs. Three articles in the dissertation have three different approaches and each contributes in its own way in illuminating our understanding of fair priority setting. See the press release.

David Erik Forsse defended Friday October 1, 2021 his doctoral dissertation "Novel preoperative biomarkers and evaluation of altered treatment strategies to improve outcome for endometrial cancer patients."


David Forsse.
Photo by Jørgen Barth.

David did his work at the Department of Clinical Science and CCBIO. Main supervisor was Professor Camilla Krakstad, and co-supervisor was Professor Jone Trovik.

David investigated whether measurements of hormone levels in endometrial cancer patient's blood can provide information on how aggressive the carcinoma is. He found that low hormone levels can predict poorer disease prognosis. He further investigated how altered treatment strategies in the period 2001-2019 have affected survival and relapse. He found that a reduction in radiotherapy and less use of extensive surgery resulted in as good survival as before the interventions were introduced. In the third subproject, he investigated adverse effects and quality of life over several years at different treatment levels in patients from several Norwegian hospitals. He found that chemotherapy was the most important factor for adverse effects and impaired function over a long period of time. An important overall conclusion in this work is that increased chemotherapy does not necessarily improve survival in all groups and can worsen the quality of life over a long period of time. See the press release.

CELEBRATION SEMINAR FOR KING OLAV V'S PRIZE FOR CANCER RESEARCH 2021 TO BJØRN TORE GJERTSEN

We are happy to invite you to a celebration seminar October 20 at 15.00 to celebrate the awarding of King Olav V's Prize for Cancer Research 2021 to CCBIO PI and Co-Director Bjørn Tore Gjertsen. Reception with tapas and refreshments afterwards.

Join us in Store Auditorium to celebrate the awarding of King Olav V's Prize for Cancer Research 2021 to CCBIO PI and Co-Director Bjørn Tore Gjertsen! This is also a great occasion to celebrate that we are finally able to meet in person, and enjoy a dinner of tapas, cake, coffee and fruit together.

Program: Artistic opening by music highly related to Professor Gjertsen, followed by congratulatory statements and an interesting scientific program, including a talk from the awardee himself. The program is available here.

Registration: Through this link.

Place: Store Auditorium (the large auditorium), Sentralblokken (main building), Haukeland University Hospital.

Time: October 20, 2021 at 15:00–18:00

Including informal gathering with tapas, coffee/tea, cake and fruit.


CCBIO event in Store Auditorium. Photo by Geir Olav Løken.

RESEARCH DAY AT THE WOMEN'S CLINIC

The Women's Clinic, the University of Bergen and the Western Norway University of Applied Sciences are inviting you to sign up for their 'Research Day' October 20th.

Obstetrics and gynecology are broadly engaging subjects, and the Women's Clinic would like present their research projects, results and how new knowledge can be used.

Place for the daytime part of the program: the auditorium Bikuben at Haukeland University Hospital.
Time: 12:00-16:00
Program: available at this page.
Registration at this link.

The event will continue with an award ceremony and debate at 'Litteraturhuset' downtown 6 to 8 pm. (Separate registration through the initial registration above).

Welcome!

Photo: Helse Bergen

RELEVANT CALLS FOR FUNDING

Please find funding opportunities on the faculty's web pages. They will be updated every 2 weeks.

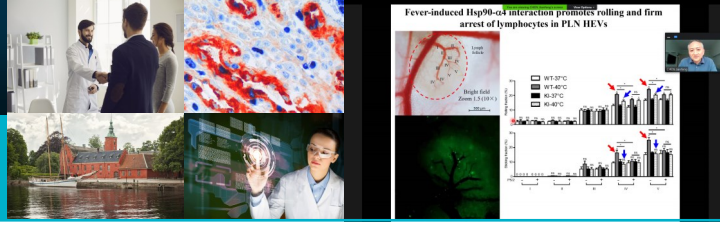
Links:

- External funding opportunities
- Support for stays abroad

Illustration: colourbox.com

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 20, Celebration Seminar for King Olav's Cancer Research Prize to Bjørn Tore Gjertsen, 15:00-17:00, Store Auditorium, Sentralblokken. Haukeland University Hospital. Tapas.
- October 28, CCBIO Seminar as webinar, speaker Sebastian Marwitz, PI at the Lung Research Center, Borstel, Germany.
- November 3-5, CCBIONEUR910: Patient and Public Involvement in Medical and Health Research course, on campus (primarily in Norwegian)
- November 8-9 and December 2-3, CCBIONEUR912: Health Innovation course, on campus.
- November 11, Junior Scientist Symposium.
- November 18-20, the Scandinavian Seminar on Translational Pathology 2021, in Halmstad, Sweden. We plan for on-site participation, but will monitor the pandemic closely and adapt to a digital platform if needed. Registration: not yet open, **save the date**!
- November 25, CCBIO Seminar as webinar, speaker Emily Arner, the Brekken lab, UT Southwestern Medical Center, Texas, USA.
- December 16, CCBIO Seminar as webinar, speaker Eystein Jansen, UIB, Bjerknes Centre for Climate Research.

OTHER COMING EVENTS



- October 20, Research Day at the Women's Clinic, Haukeland University Hospital.
- October 20, Helsedata som gullgruve? Paneldebatt, Trondheim litteraturhus + online, kl. 19:30. Centre for Digital Life Norway.
- October 21, BBB Seminar, Michael Rosen, Department of Biophysics and Howard Hughes Medical Institute, University of Texas Southwestern Medical Center, Dallas, TX, USA.
- October 21, An introduction to drug repurposing for rare diseases – the benefits, the process and the patient perspective, EATRIS, online event. Registration is free but places are limited. Webinar in 3 part series, also 28 October 2021: Towards commercialization of a repurposed drug, and 4 November 2021: Getting a repurposed drug the to the patient – regulatory processes, reimbursement and prescription scenarios for repurposed drugs.
- October 25-28, BIO Europe, digital event.
- October 26-27, AI in Cancer Diagnostics: from research to clinical practice, virtual event. European Association for Cancer Research (EACR) conferences.
- October 29, Digital frukost: Critical reflection on open life science – then, now, future. 08.30-09.30, in Zoom, and at CBU, UiB. Centre for Digital Life Norway.
- November 4, BBB Seminar, Thomas Daubon, Institute of Biochemistry and Cell Genetics, CNRS, University Bordeaux, France.
- November 10, Dataanalyser som redder verden – science not fiction, Kulturhuset i Oslo + online. Centre for Digital Life Norway.
- November 11, BBB seminar, Simona Chera, Department of Clinical Science, University of Bergen.
- November 10-12, Digital Life 2021. Main conference day November 11, with associated events November 10 and 12. The annual conference for the Centre for Digital Life Norway. Venue: in Oslo.
- November 15-18, Medica 2021 – World Medicine Forum, Düsseldorf, Germany.
- November 18, BBB Seminar, Jason Shepherd, Departments of Neurobiology, Biochemistry, and Ophthalmology & Visual Sciences, University of Utah, School of Medicine, Salt Lake City, UT, USA.

PUBLICATIONS

You can find the CCBIO publications on this pubmed link (link shortened through Tinyurl). See the most recent 5 below.

Ruiz FJ, Sundaresan A, Zhang J, Pedamallu CS, Halle MK, Srinivasasainagendra V, Zhang J, Muhammad N, Stanley J, Markovina S, Tiwari HK, Grigsby PW, Krakstad C, Schwarz JK, Ojesina AI. Genomic Characterization and Therapeutic Targeting of HPV Undetected Cervical Carcinomas. Cancers (Basel). 2021 Sep 10;13(18):4551. doi: 10.3390/cancers13184551.PMID: 34572780.

Espedal H, Berg HF, Fonnes T, Fasmer KE, Krakstad C, Haldorsen IS. Feasibility and utility of MRI and dynamic ^{18}F-FDG-PET in an orthotopic organoid-based patient-derived mouse model of endometrial cancer. J Transl Med. 2021 Sep 26;19(1):406. doi: 10.1186/s12967-021-03086-9.PMID: 34565386.

Stenmarck MS, Engen C, Strand R. Reframing cancer: challenging the discourse on cancer and cancer drugs-a Norwegian perspective : Reframing Cancer. BMC Med Ethics. 2021 Sep 21;22(1):126. doi: 10.1186/s12910-021-00693-5.PMID: 34548091

Seo MK, Cairns J. How are we evaluating the cost-effectiveness of companion biomarkers for targeted cancer therapies? A systematic review. BMC Cancer. 2021 Sep 1;21(1):980. doi: 10.1186/s12885-021-08725-4.PMID: 34470603.

Aamdal E, Jacobsen KD, Straume O, Kersten C, Herlofsen O, Karlsen J, Hussain I, Amundsen A, Dalhaug A, Nyakas M, Schuster C, Hagene KT, Holmsen K, Russnes HG, Skovlund E, Kaasa S, Aamdal S, Kyte JA, Guren TK. Ipilimumab in a real-world population: A prospective Phase IV trial with long-term follow-up. Int J Cancer. 2021 Aug 27. doi: 10.1002/ijc.33768. Online ahead of print.PMID: 34449877.

RECENT CCBIO IN THE MEDIA

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

01.10.21, Onkologisk Tidsskrift, "Keytruda øker overlevelsen for pasienter med avansert livmorhalskreft", L.Bjørge.
28.09.21, UiO, Centre for Molecular Medicine Norway, "Former NCMM Associate Investigator awarded the King Olav V Cancer Prize", Bjørn Tore Gjertsen.
20.09.21, TV2 nyheter, "Kjeld fikk aggressiv blodkreft – så kom redningen", Bjørn Tore Gjertsen.
19.09.21, TV2, "Fikk tilbud om risikofylt behandling", Bjørn Tore Gjertsen.
19.09.21, TV2 nyheter, "Overlege og professor Bjørn Tore Gjertsen vinner pris", Bjørn Tore Gjertsen.
18.09.21, Dagbladet (in paper), "Rivende utvikling innen AML-medisiner", Bjørn Tore Gjertsen.
18.09.21, Dagbladet (in paper), "Bjørn Tore på sporet", Bjørn Tore Gjertsen.
18.09.21, Dagens Medisin, "Tror på praksisendring for bruk av immunterapi ved livmorhalskreft", Line Bjørge.
16.09.21, Dagens Medisin, "Store forventninger til årets europeiske kreftmøte", Line Bjørge.
03.09.21, Firdaposten, "Bjørn Tore frå Florø får prestisjepris for verdsleiande kreftforsking", Bjørn Tore Gjertsen.
02.09.21, Adresseavisen, "Bjørn Tore Gjertsen tildelt Kreftforskningsprisen for forskning på aggressiv blodkreft", Bjørn Tore Gjertsen.
02.09.21, Dagens Medisin, "Haukelandsforsker får forskningspris", Bjørn Tore Gjertsen.
27.08.21, Dagens Medisin, "Slik kan genterapier få «ja» i Beslutningsforum", Ole Frithjof Norheim.
24.08.21, Forskning.no, "Medisinsk genterapi hindrer alvorlig sykdom, hvorfor får ikke norske pasienter ta det i bruk?", Ole Frithjof Norheim.
19.08.21, HealthTalk, "HealthTalk Debatten: Evaluering av nye metoder og medisinsk genterapi", Ole Frithjof Norheim.
17.08.21, Morningstar, "Papyrus Therapeutics Inc. Announces Additions to Its Board of Directors", James Lorens.
10.07.21, NewsWeb Oslo Børs, "Preclinical bemcentinib and tilvestamab data presented at EAU 2021", Dept. of Clinical Medicine.
01.07.21, UiB, Inst. for informatikk, "Inge Jonassen blir ny instituttleder", Inge Jonassen.