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

Norwegian Centre of Excellence
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

We have lots of information and updates for you in this newsletter. First and foremost, the 9th CCBIO Annual Symposium 2021 is rapidly approaching, this time as a virtual event. There are still some available places, so be sure to register.

We are pleased to present the CCBIO Annual Report 2020 which can be downloaded and which is now also available in print. There you will get much information about the very unlikely and unusual year of 2020 and how CCBIO adapted to the COVID-19 pandemic. Information can be found on research projects and excellent contributions and achievements from CCBIO members. Congratulations to those of you who "stood out" lately and represented our vision and goals in the best way! Welcome to new faces, we are pleased to have you on board in our "research family".

A special congratulations to Inge Jonassen and Ole Frithjof Norheim who were elected to the Norwegian Academy of Science and Letters. A true achievement!

Some of you have to leave. PhD student Eirik Tranvåg, a visible CCBIO member who recently submitted his thesis, already landed a new job as a senior advisor for The Norwegian Biotechnology Advisory Board. We wish you best of luck - and at the same time we hope to stay in touch.

The CCBIO Research School is always active. CCBIO908 on Scientific Writing and Communication repeated its success from previous years. Thank you once again to those involved, in particular Christine Møller from Copenhagen. Through our collaboration with Neuro-SysMed, three new courses will be launched during the fall: CCBIONEUR910 on clinical trials, CCBIONEUR911 on patient and public participation in research, and CCBIONEUR912 on health innovation. For the last course, Robert Langer from MIT has accepted our invitation to hold a keynote presentation.

Finally, I would like to recommend the book *Personalized Medicine in the Making* edited by Marta Bertolaso and Chiara Beneduce. As you know, Marta is a member of our International Faculty. This book offers a multidisciplinary look at the concept of "personalized medicine".

See you all at the CCBIO Annual Symposium next week!

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

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.

PROGRAM FOR THE CCBIO ANNUAL SYMPOSIUM NOW AVAILABLE

We have the great pleasure of inviting you to the 9th CCBIO Annual Symposium, **May 19-20, 2021**! The format this year will be fully digital, so you can attend even from your home office. This also makes it possible to still accept registrations of participants – although note that registration for 3-minute presentations from our younger researchers is almost fully booked.

Illustration: colourbox.com

We have secured both international and local speakers, and several topics will be covered. Among others, Bernd Bodenmiller, Hans Clevers, Ezra Cohen, Kara Davis, Klaus Pantel, Morag Park and Anil Sood will present. See the program here.

In the current situation, we have created a new format starting later in the day to accommodate international participants, and with enhanced interactivity and longer breaks. This works best online – as the symposium this year will be a purely online event. This format allows for top notch keynote presentations from international experts within cancer research, several interactive panel discussions. Our younger researchers will have the opportunity to hold short 3-minute plenary presentations (with credits) instead of the usual poster-presentations.

Registration: https://skjemaker.app.uib.no/view.php?id=10106512

Symposium website: www.ccbiosymposium.no

Practical information: See practical info to participants here.

The symposium is open for all, so please feel free to pass on this invitation.

READ THE CCBIO ANNUAL REPORT 2020

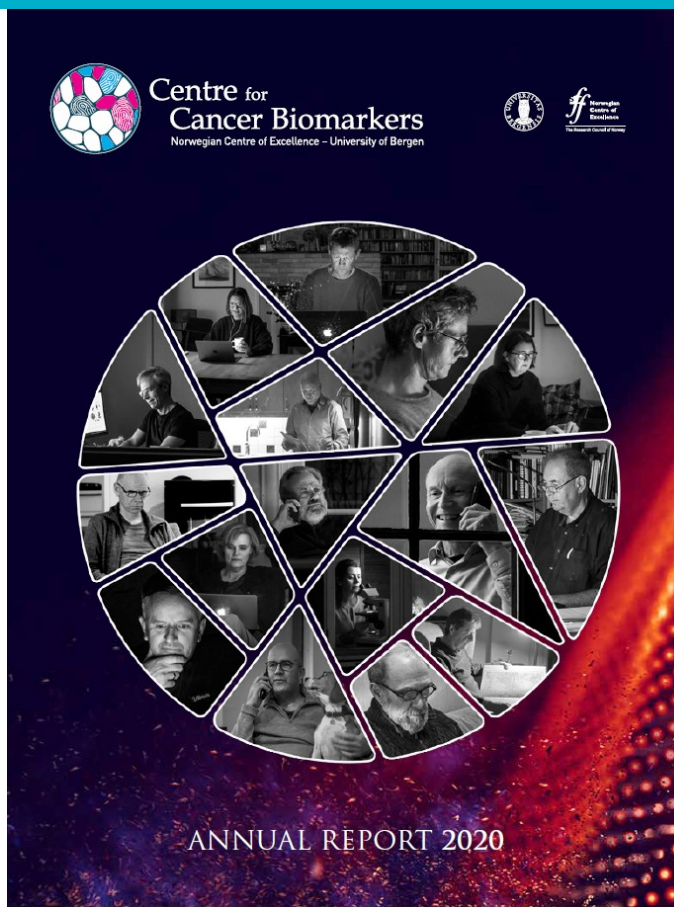
"During 2020, we all went viral and virtual," says the CCBIO Director in his Director's Comments in the CCBIO Annual Report 2020. Read all about how CCBIO performed in a year with unexpected and unprecedented challenges!

In the annual report, you will among other find:

- CCBIO's vision and research areas
- Facts on organization and performance indicators
- Interesting opinion pieces by selected CCBIO members
- Overview of scientific activities and progress in 2020
- Presentations of all CCBIO PIs, AIs and research teams
- Presentation of CCBIO's International Faculty members
- Description of all CCBIO Research School activities and plans
- Description of all CCBIO Seminars and other meetings
- Overview of dissertations during 2020
- Sum-up of CCBIO's dissemination and communication efforts
- Mini biographies of our current PhD candidates, postdocs and researchers
- The 2020 publication list

And not least, lots of photos and illustrations!

Download the annual report 2020 from this link in single page format, or this link in spread/double page format. Later in May/ June, we will circulate the printed version to CCBIO members and affiliates. You can also obtain the printed version from our HQ in Sentralblokken, or send an email to geir.loken@uib.no requesting it be mailed to you.

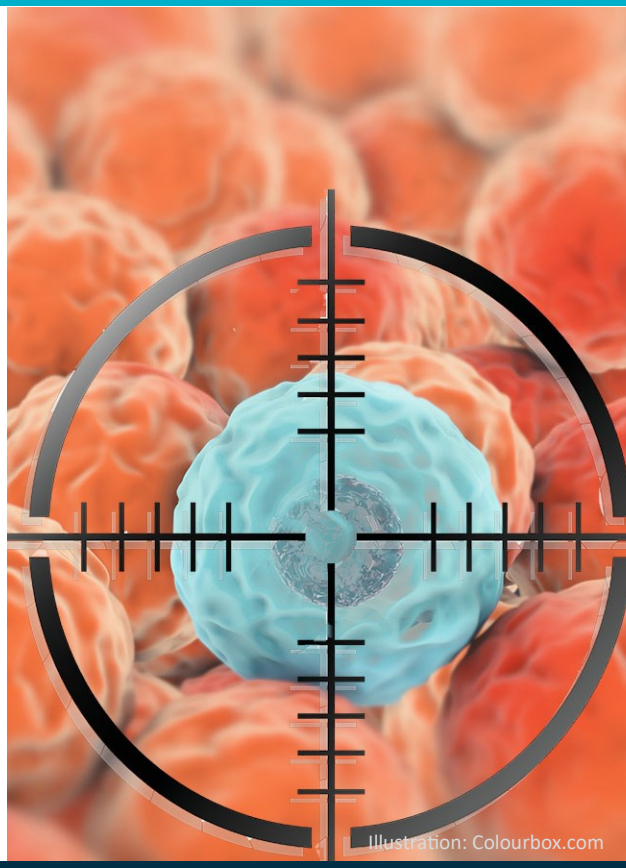


STARTUP OF ERAPerMed2020 SUPPORTED PROJECT

The ERAPerMED2020 supported project "Precision drugs against Resistance in subpopulations (PARIS)" is now launched, where Line Bjørge and Emmet McCormack are partners. The aim is to use novel concepts to identify effective treatment options for patients with a limited response to both standard chemotherapy and emerging PARP inhibitors, in high-grade serous ovarian cancer (HGSOC), with the potential to extend to other cancers.

To overcome treatment resistance in HGSOC, the team propose to implement a novel concept: to unbiasedly detect the distinct tumor subpopulations that confer resistance to current therapies, and then to predict and test which drugs they respond to. They propose to implement this concept by combining [i] a novel, unbiased, and robust algorithm to reliably identify the resistant tumor cell sub-populations from single cell transcriptomic data of HGSOC tumors and matched organoids, [ii] drug response prediction and screening in organoid cultures, using single cell readouts, and [iii] validation of the resulting personalized drug predictions in independent samples, in both organoid cultures and *in vivo* patient-derived xenografts, co-treated with chemo-therapy.

This novel approach enables the design of effective personalized treatments of HGSOC to complement chemotherapy by targeting the specific chemo-resistance mechanisms active in each patient's tumor cell subpopulations. The resulting tools and biomarkers can be used for screening and prioritization; first, in early-phase patient-centric studies, and then in larger trials. The overall approach can be extended to other diseases where sub-populations provide treatment resistance, towards a paradigm shift in personalized oncology.



STROMAL MICRORNA204 AS BIOMARKER FOR ORAL SQUAMOUS CELL CARCINOMA

A paper in Cancers from the Research Group in Experimental Pathology describes the group's establishment of a new method for multiplex detection of miRNA and proteins.

CCBIO PhD Candidate Saroj Rajthala and CCBIO Postdoc Harsh Dongre from the Research Group in Experimental Pathology of Professor Dana Costea recently published an article in Cancers (Basel), entitled "Combined In Situ Hybridization and Immunohistochemistry on Archival Tissues Reveals Stromal micro -RNA-204 as Prognostic Biomarker for Oral Squamous Cell Carcinoma." The paper thoroughly describes the establishment of a multiplex method for concomitant detection and visualization of miRNAs and proteins on histological tissue slides by combining chromogen-based *in situ* hybridization (ISH) and immunohisto-chemistry (IHC), respectively. They have used this method for exact delimitation of stroma from the tumor islands and simul-taneous visualization of several miRs, and have developed a guide to digital miR quantification in the tumor stroma using both the publicly available tool and the licensed software Aperio ImageScope. They further applied the method for investigating stromal miR-204 as a putative prognostic biomarker in a cohort of oral squamous cell carcinoma patients and identified expression of miR204 in the stroma at tumor front as an independent prognostic biomarker for this disease.

The paper can be found here:
https://pubmed.ncbi.nlm.nih.gov/33804049/

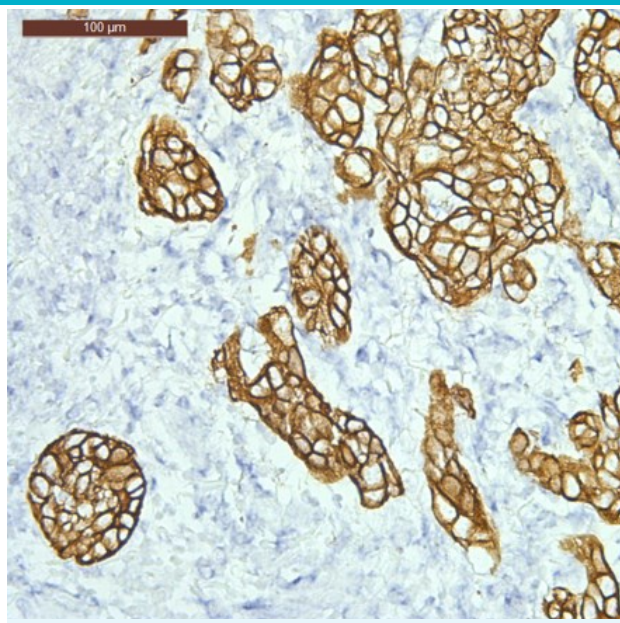


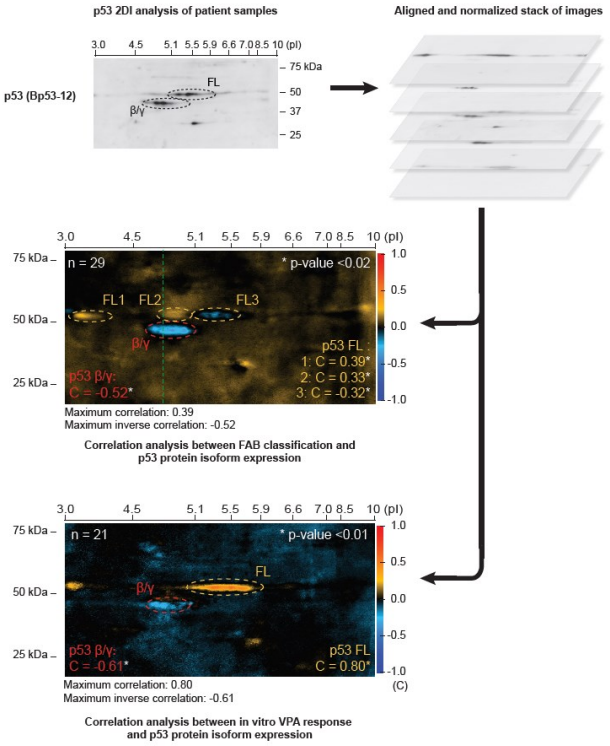
Figure by Saroj Rajthala: Representative images of the tumor front of an oral squamous cell carcinoma lesions double stained in blue for miR-204 (by chromogen based ISH) and in brown for pan-cytokeratin (IHC visualizing the epithelial tumor cells).

P53 PROTEIN ISOFORMS MAY PREDICT SENSITIVITY TO DIFFERENTIATION THERAPY IN AML

The Gjertsen group with first author Ingvild Haaland recently published a paper in Cells, with results suggesting that p53 protein isoform expression may predict sensitivity to differentiation therapy in AML.

p53 isoforms are involved in a complex interplay, in which they influence the activity of one another and regulate a number of different cellular processes. They have been found to predict prognosis and therapy response in several cancer types. In this study, p53 full length (FL), p53β and p53γ protein isoforms were analyzed by 2D gel immunoblots (2DI) in primary cells from patients with acute myeloid leukemia (AML). 2D gel images were aligned and normalized before pixel-by-pixel Spearman rank-order correlations were performed between p53 protein isoform expression and French-American-British (FAB) class or *in vitro* valproic acid (VPA) response. p53FL positively correlated with VPA response and the FAB class of AML, while p53β/γ isoforms negatively correlated with the same. The team's results suggest that p53 protein isoform expression may predict sensitivity to differentiation therapy in AML.

The paper is entitled "p53 Protein Isoform Profiles in AML: Correlation with Distinct Differentiation Stages and Response to Epigenetic Differentiation Therapy", and [is available here](#).



HIGHLIGHTED IN BLOG IN NATURE

Mari Kyllesø Halle is first author of a recently published article in the British Journal of Cancer, which in March was chosen to feature as a blog entry at nature.com and their Behind the Paper series.

[Nature's Behind the Paper](#) blog invites researchers to share the story behind their paper, from conception to publication, the highs and the lows.

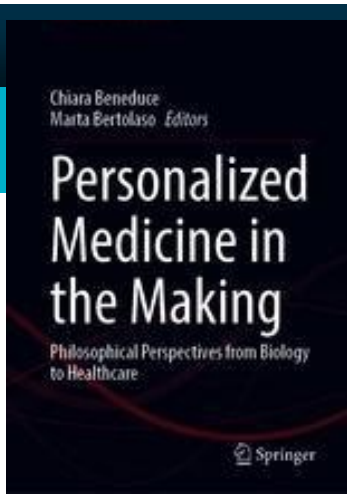
Read the blog entry on the article "A 10-gene prognostic signature points to LIMCH1 and HLA-DQB1 as important players in aggressive cervical cancer disease" [at this link](#).

Mari is currently a postdoc in the Krakstad group, with main focus to characterize targetable molecular alterations driving aggressive cervical carcinoma.

PERSONALIZED MEDICINE IN THE MAKING

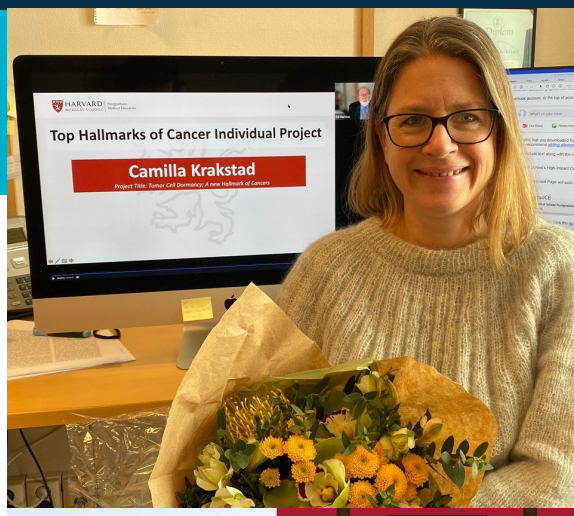
New book from one of our affiliated international investigators, Marta Bertolaso, with a multidisciplinary look at concept of "personalized medicine".

By combining a humanistic and a scientific approach, the book builds up a multi-dimensional way to understand the limits and potentialities of a personalized approach in medicine and healthcare. The book reflects on personalized medicine and complex diseases, the relationship between personalized medicine and the new bio-technologies, personalized medicine and personalized nutrition, and on some ethical, political, economic, and social implications of personalized medicine.
[The book is available from Springer](#).



BEST INDIVIDUAL PROJECT AND TOP HONORS

Professor Camilla Krakstad has since November 2019 been enrolled in the 12-Month Certificate Program Harvard Medical School Post-graduate Medical Education, High-Impact Cancer Research Program, and graduated in March with Top Honors (among the 5 best in the class of 2021), and with an award for best individual project.



High-Impact Cancer Research is the acclaimed Harvard Medical School postgraduate certificate program for cancer research. It teaches the principles and skills shaping today's most important cancer research activities. The certificate program is a combined workshop/online course, this year run online only as of March 2020. World leaders in cancer research shared their insights, teaching the participants the new fundamentals of a wide spectrum of cancer science and the skills necessary to envision, design and lead cutting-edge cancer research projects that can contribute to a changing science.

Camilla highly enjoyed the program, first 6 months with tumor biology and preclinical views on cancer research, and then 6 months with focus on clinical issues and cancer therapy. Among the renowned lecturers were also Nobel Prize winners, including William Kaelin. The last workshop had an interesting focus on the development of COVID19 vaccines, where Camilla would like to highlight the lecture of Bruce Walker on the process of the Johnson & Johnson vaccine.

Read an interview with Camilla (Norwegian only).

NEW ACADEMY MEMBERS

Professors Inge Jonassen and Ole Frithjof Norheim have been introduced as new members in The Norwegian Academy of Science and Letters.

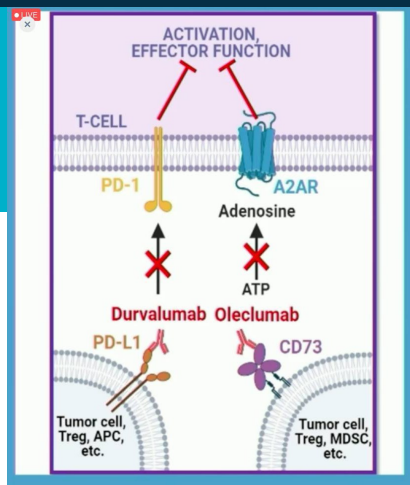
The Norwegian Academy of Science and Letters, founded in 1857, is a non-governmental, nationwide body which embraces all fields of science. Its main purpose is to support the advancement of science and scholarship in Norway. The Academy acts as a national contact body both within and between the individual scientific disciplines, and represents Norwegian science vis-à-vis foreign academies and other international scientific organizations. Inge Jonassen was elected to group 8; Technology, class of Mathematics and Natural Sciences. Ole Frithjof Norheim was elected to group 3; Philosophy and Psychology, in the Humanities and Social Sciences class.

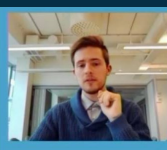

Photos: Ingvild Festervoll Melien

ORAL PRESENTATION AWARD

Luka Tandaric was awarded with best oral presentation at the NSGO 2021 meeting for his talk "The impact of combined use of immune checkpoint inhibitors in the phase II umbrella trial NSGO-OV-UMB1 / ENGOT-OV-30 incpatients with relapsed ovarian cancer – A presentation of the translational research protocol".

NSGO, the Nordic Society of Gynaecological Oncology, held its annual meeting on a digital platform March 10-12 2021. Luka Tandaric joined the INOvA group in 2020 as a PhD candidate with Line Bjørge and Emmet McCormack as main supervisors. His project aims to describe the value of combined CD73 and PD-L1 blockade in patients with relapsed high-grade serous ovarian cancer.





PHD PROJECT SUPPORT

Cecilie Fredvik Torkildsen was awarded with a project support of NOK 160 000 from the Folke Hermansen Foundation for 2021, for her project "Mapping the microenvironment in tumors from women with ovarian cancer".

Cecilie's project was also highlighted at Stavanger University Hospital's Facebook pages at the Women's Day, March 8. Cecilie is currently a PhD candidate in the Precision Medicine in Ovarian Cancer Research Group with Line Bjørge. Her focus is surgical management of ovarian cancer with the aim to identify clinical and molecular predictors of successful surgery.

SPAREBANK1 SCHOLARSHIP

Hanna Kosberg Bredin, third year medical student and student in the Medical Student Research Program, was recently awarded with a NOK 40.000 scholarship from Sparebank1's Young Talents program.

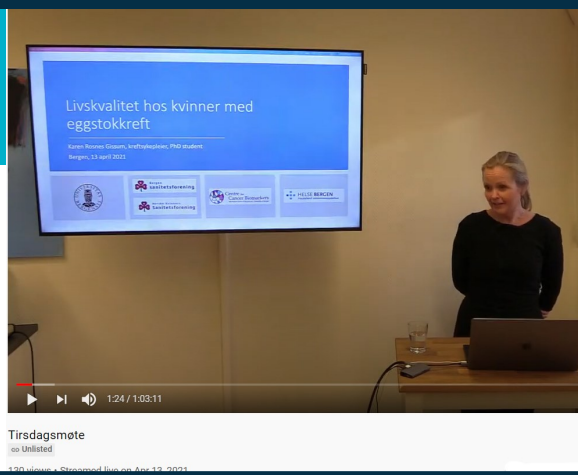
Hanna Bredin is affiliated to the Krakstad group, with Erling André Høivik as her supervisor.

Hanna sees the scholarship as a huge motivation to prioritize research, and is happy to be able to do that in parallel with her medical studies. Her research interest is particularly in endometrial cancer, with a focus on biomarkers for aggressive cancer.

Read an interview with Hanna here (Norwegian only).

RESEARCH COMMUNICATION

Karen Rosnes Gissum featured in a digital meeting April 13 2021 at the Norwegian Women's Public Health Association where she presented her research on quality of life among women under treatment for ovarian cancer. See also her newsletter on the project.



Karen is a PhD candidate in The Precision Oncology Research Group, with Line Bjørge as main supervisor and Roger Strand as co-supervisor. The focus of her PhD project is to reveal the association between cytoreductive surgery, inflammatory processes and patient-reported outcomes in epithelial ovarian cancer patients, and to use the knowledge obtained to identify biomarkers for disease management. Her research is financed by the Norwegian Women's Public Health Association and the Western Norway Regional Health Authority.

CCBIO PHD TO THE NORWEGIAN BIOTECHNOLOGY ADVISORY BOARD

PhD Candidate Eirik Tranvåg in the Norheim group is currently adding the final touches to his PhD thesis, and will in May embark on a new position, as a senior advisor for The Norwegian Biotechnology Advisory Board, which now is located in Bergen.

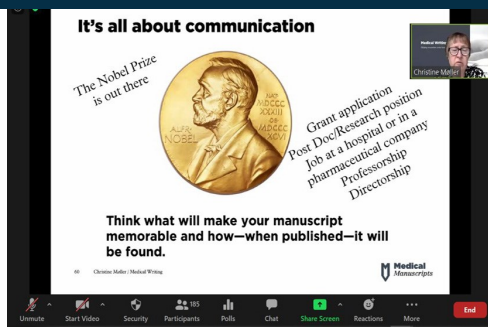
The main task of The Norwegian Biotechnology Advisory Board is to evaluate the social and ethical consequences of modern biotechnology, and Eirik will primarily work on human biotechnology topics like genetic testing and editing, stem cell technology, genetic therapies, and personalized medicine. Networking with relevant experts and researchers is an important part of the job, so hopefully his link to CCBIO will continue.

We look forward to the disputation in the fall term, and best of luck in the new job!

NEWS FROM THE CCBIO RESEARCH SCHOOL

The CCBIO Research School has recently completed CCBIO908, the Scientific Writing and Communication Seminar, still have some spots available on the Extracellular Matrix course BMED904, will be postponing CCBIO903 to the fall term, and has 3 new courses lined up for the fall term as well.

CCBIO908 THE SCIENTIFIC WRITING SEMINAR



CCBIO908, the Scientific Writing and Communication Seminar, took place April 12-15 as part of the CCBIO-Harvard INTPART collaboration. As was the case for 2020, the course was also this year held as a digital event. About 85 students attended – from CCBIO and other programs and research groups at UiB, and from other institutions in Norway, the Nordic countries, and even a few students from universities at other continents. The course has clearly become very popular both at campus and for students at other institutions. As in the previous years, Christine Møller carries the main course content, providing the students with up-to-date input on how to improve their scientific writing – from the initial problem statement to writing the cover letter. Randy Watnick from the Vascular Biology Program, Boston Children's Hospital and Harvard Medical School, and Medical Faculty Media Advisor Marion Solheim provided lectures and discussions adding to the excellence of this course.

"I am very happy that Christine Møller teams up with us, keeping this course running. It is great to be able to offer our students this gift package of a course," says Elisabeth Wik, leader of the CCBIO research school. "There will always be ways to improve our scientific writing and communication, and this course shows some of these paths. Applying what Christine teaches, ensures a benefit for our scientific texts, independent of the level in our scientific training and careers," Elisabeth concludes.

Many thanks are also due to course coordinators Vandana Ardawatia and Harsh Dongre, for excellent handling of the logistics during the preparation and the practical execution during the course days.

BMED904 STILL HAS SOME SPOTS AVAILABLE

We still have some spots available at BMED904, the Extracellular Matrix course, June 07-11, 2021, as an on-site/online combination.

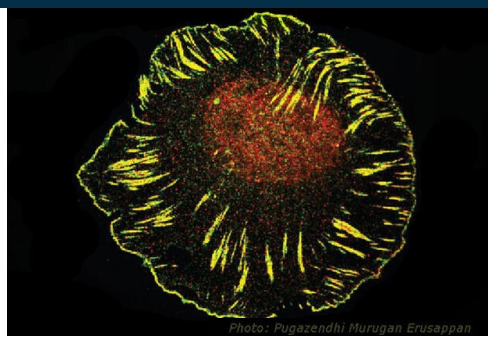


Photo: Pugazendhi Murugan Erusappan

This 3 ECTS course will cover various aspects of extracellular matrix (ECM) biology. A recurring theme will be the roles of the various ECM molecules and their functions in health and disease. Note that due to the uncertainty regarding the Covid-19 situation, the course is planned to combine face-to-face "seat time" for students attending in Bergen with online presentations of all lectures and lab demonstrations. The lectures are open to all interested.

Scientific program: See the preliminary program at this link.

If you want to follow the lectures of this course for **professional updates** and don't need the ECTS, please register here. For the ECTS; please send a request to Margarethe Bittins.

Place: option of on location at the University of Bergen, Haukeland University Hospital, or through a live Zoom streaming online.

Academic responsible are Marion Kusche-Gullberg and Donald Gullberg. Adm. coordinator is Margarethe Bittins. **More info**: at this page.

CCBIO903 MOVED TO THE FALL TERM

CCBIO903, Cancer research: Ethical, economic and social aspects, is now postponed to: Course week 1: September 6-10, 2021, and course week 2: October 11-15, 2021. Registration deadline: September 1.

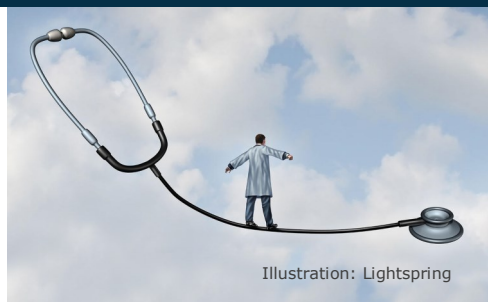


Illustration: Lightspring

CCBIO903 is a 5 ECTS course which focuses on ethical, economical and societal aspects of cancer and cancer research and aims to equip PhD candidates with tools for systematic reflection on their own and related research as well as methods for assessing the cost benefit of health measures and methods of treatment.

The course will address difficult questions:

- How can we deal with the uncertainties in the lab, while maintaining the quality of our science?
- Which drug is more suited to a patient?
- How can medical science contribute to debates on what is good for society?
- How can economic models help guide health care resource allocation?

Location will be announced (will be on-site only, at the Haukeland University Hospital campus).

John Cairns, Roger Strand and Anne Blanchard Bremer are academic responsible for the course. Administrative coordinator is Kjetil Utvik Harkestad. **More info**: at this page. Studentweb opens June 1 for registration.

NEW COURSES

CCBIO has, in collaboration with Neuro-SysMed, the pleasure of introducing three new courses this coming fall term. Registration is not yet available, so save the dates!

CCBIONEUR910: CLINICAL TRIALS

The completed program qualifies for a Good Clinical Practice (GCP) certificate and covers several aspects of clinical trials – from design planning to execution – with learning examples from cancer research and neurological research alike.

Line Bjørge (CCBIO) and Øivind Grytten Torkildsen (Neuro-SysMed) are academically responsible. This is a continuation of CCBIO's course Clinical trials in Cancer Research from 2019, at that time organized by Line Bjørge and Hani Gabra.

Topics lectured:

- What is a clinical study?
- Study design
- The pharmaceutical company perspective
- The patient's perspective
- Ethics
- GCP overiview and concepts
- Practical running of a clinical trial
- Formalities and regulations
- Writing a protocol
- Applications and funding
- Contracts
- Translational research protocols
- Clinical trials as part of normal clinical operations
- Success factors
- Clinical trials in the future

When: September 29 – October 1, 2021
Where: Combination of on-site (campus Haukeland) and online participation, if possible, otherwise online only.
Registration: not available yet, so save the date so far! Keep an eye on the website. Open to all, and no fee.
ECTS: approved for 2 ECTS.

CCBIONEUR911: PATIENT AND PUBLIC INVOLVEMENT IN MEDICAL AND HEALTH RESEARCH

The course aims to inspire increased user participation in research trials and will present methods on how to involve user representatives. This is highly relevant to all biomedical research fields, and Patient and Public Involvement is documented to positively impact the relevance and efficacy in medical research. The main objective of the course is to develop the participants' capacity to assess and convey the value of patient and public involvement in general, as well as promoting productive user involvement in their own research projects.

Nina Jebsen (CCBIO) and Tone Skår (Neuro-SysMed and VIS) are academic responsible. On board, to share their experiences and knowledge, are UiB Professor **Bettina Husebø** and co-researcher/user representative **Rune Samdal**, former head of UK NIHR National Director for Patients **Simon Denegri**, and Professor in theory of science **Roger Strand**, among other inspirational lecturers.

The primary language will be Norwegian, in order to facilitate communication with the patient representatives.

When: November 3-5, 2021
Where: Campus Haukeland University Hospital.
Registration: not available yet, so save the date so far! Keep an eye on the website. Open to all, and no fee.
ECTS: pending approval by the board, estimated 2.

CCBIONEUR912: HEALTH INNOVATION

The course aims to teach PhD candidates and other researchers how to recognize the close connection between research findings and innovation potential. The course will use examples from our own research environments as well as internationally, to showcase the practical route from idea to patent – and beyond. The overall aim is to encourage and enable our PhD students and young researchers to identify and evaluate the innovation potential in their own research projects, and provide them with the knowledge needed to be able to do this. The course will provide inspiration and practical knowledge on alternative ways to realize the innovation potential from research projects. Professional expertise from the Medical Faculty, Division of Research and Innovation at UiB, and the local tech transfer office VIS will provide a good understanding of the legal and practical framework for research-based innovation, including how to protect and exploit their intellectual property.

The students will also be introduced to the perspective of early stage venture capital fund managers and learn about the available funding instruments for the various stages of development. Last but not least, local and international entrepreneurs from the two centers of excellence will share their experiences with the students.

Agnete Engelsen (CCBIO) and Magnus Alvestad (Neuro-SysMed) are academically responsible.
When: November 8-9 and December 2-3, 2021
Where: Campus Haukeland University Hospital.
Registration: not available yet, so save the date so far! Keep an eye on the website. Open to all, and no fee.
ECTS: approved for 4 ECTS.

RELEVANT CALLS FOR FUNDING

Here is a list of current and relevant calls, so take a look and see if any of these are relevant for you.

- K.G. Jebsen centers for translational medical research (2^{nd} stage) 6/5/2021
- ERC (tentative dates):
  - Advanced grant 31/08/2021
  - Starting grant 13/01/2022
  - Consolidator grant 17/03/2022
  - Advanced grant 28/04/2022
  - Synergy grant 10/11/2022
- Kreftforeningen 1/6/2021
  - 1-4 years, 1-8 MNOK
  - This year, a *Young Talent* category is introduced (<40 years, 2-7 years since PhD)
  - Two calls:
    - Open Call
    - Krafttak mot kreft (proposals relevant for personalized medicine for breast cancer treatment)
- DAM stiftelse:
  - Forskning (2^{nd} stage) 10/06/2021
  - Helse 15/9/2021
- ERAPerMed
  - Invited full-proposals deadline 17/06/2021

More info and advise on grants and applications: contact CCBIO Research Advisor Yamila Torres Cleuren.
Deadline for in-depth advisor assistance: **8 weeks before deadline**.
Deadline for minor advisor assistance (3-4 hours): **2 weeks before deadline.**
Please note that Yamila will be on maternity leave from mid June until end of 2021. If you have any application plans to discuss with her for early 2022 or while she's away, please get in touch now to make arrangements. It is not yet clear what kind of replacement support we will be able to arrange in Yamila's absence.

NEW FACES

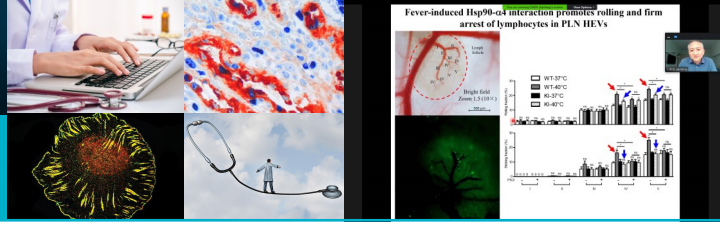
Ahmed Eltayeb Ali Ibrahim is an oral and maxillofacial surgeon from Khartoum Teaching Dental hospital (KTDH) and the University of Khartoum. He recently joined us as a guest researcher for a 5 month research stay at Gades Laboratory for Pathology within the Experimental Pathology Research Group lead by Professor Costea. He is working on a collaborative project in oral cancer between UiB and the University of Khartoum. He is particularly interested in clinico-pathological correlations and host immune response in toombak-related oral mucosa lesions. Toombak is a type of smokeless tobacco widely used in Sudan, with a much higher concentration of nicotine and nitrosamines than other types of smokeless tobacco and one of the important risk factors for oral cancer development in Sudan. His project and research stay are part of the NORPART project: NORPART-2018/10277 Establishment of joint research-based education in dentistry in Norway and East Africa (Ethiopia, Sudan, Tanzania, Uganda). More information about this project in which Professor Costea is partner, can be found here.

Irini Ktoridou-Valen is a new PhD candidate with Bjørn Tore Gjertsen as main supervisor, and Vibeke Andresen and Nina Louise Jebsen as co-supervisors. Irini has worked as an oncologist at the Department of Cancer Treatment and Medical Physics, at Haukeland University Hospital (HUH). The doctoral project focuses on biomarkers in repurposing of known drugs, for clinical trials and treatment of acute myelogenous leukemia in patients who can not receive conventional intensive care and chemotherapy. Clinical data and data from analyses of biological materials will be collected in parallel with patients participating in the study, with a focus on mapping biomarkers for early identification of responders and non-responders. The project is funded by the Research Council of Norway through the BEHANDLING program, anchored at HUH, the Medicine Department, with laboratory work at UiB, the Department of Clinical Science. The project involves a collaboration with Vestlandets Innovasjonsselskap (VIS).

Gro Vatne Røsland is a new researcher in James Lorens' group. Gro holds her MS Degree in cell biology from the University of Bergen. In her PhD in molecular cell biology from the Department of Biomedicine, UiB, she worked with molecular mechanisms involved in glioblastoma progression, with a focus on stem cell markers and the epidermal growth factor system. Prior to her postdoctoral period, she worked as a project researcher in the project "A study on metabolic inflexibility as a possible weakness in mammary tumors". As a part of her postdoctoral training, she worked with metabolic adaptation mechanisms involved in cancer therapy resistance, with main focus on non-small cell lung cancer. In 2020 she returned from a one-year research stay at the Institute of Biochemistry and Cellular Genetics (IBGC) at the University of Bordeaux, France. As a part of Lorens' Cellnet group, Gro will work on AXL-mediated immunotherapy resistance, using high dimensional analysis tools and super resolution microscopy to characterize how AXL receptor signaling regulates tumor intrinsic resistance to immunotherapy.

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.



- May 19-20, CCBIO Annual Symposium, digital platform.
- May 27, CCBIO Seminar, speaker Ellen Pure. Digital event (Zoom webinar).
- June 3, BBB Seminar, speaker Harald Barsnes, digital event (Zoom webinar).
- June 7-11, BMED904 – Graduate Course in Extracellular Matrix, on campus + digital platform
- June 10, CCBIO Seminar with speaker Andrew Leask. Chair: Donald Gullberg. Digital event.
- June 17, CCBIO Junior Scientist Symposium, (on campus if possible, digital platform otherwise)
- June 17, BBB Seminar, speaker Malcolm Walkinshaw, digital event (Zoom webinar).
- CCBIO Seminars for the fall term, dates not yet set
- September 6-10 + October 11-15, CCBIO903 – Cancer research: Ethical, economic and social aspects, on campus
- September 9—October 1, CCBIO-Neuro 910: Clinical Trials course, on campus and online
- November 3-5, CCBIO-Neuro 911: Patient and Public Involvement in Medical and Health Research course, on campus (primarily in Norwegian)
- November 8-9 and December 2-3, CCBIO-Neuro 912: Health Innovation course, on campus.

OTHER COMING EVENTS

- May 12, Oslo Cancer Cluster's 2021 Norwegian Constitution Day Networking Breakfast.
- May 28, Digital frukost: Digital optimization of the feed-microbiome-host axis, Centre for Digital Life Norway, digital event.
- June 9-11, 5th conference of Digital Life Norway Research School, Malangen Resort (Tromsø).
- June 10, Oslo Cancer Cluster's June Gathering – A Digital Event
- June 10-11 & 14-18, BIO Digital, world's largest virtual biotech partnering and education event.
- June 14, the 10th International Cancer Cluster Showcase (ICCS 2021), digital event
- June 15-17, Symposium on Cancer Biomarkers: Early Detection & Cancer Therapy Prediction – Are We There?, NTNU and Oslo Cancer Cluster, digital event.
- November 15-18, Medica 2021 – World Medicine Forum, Düsseldorf, Germany.

PUBLICATIONS

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

Ruiz de Garibay G, García de Jalón E, Stigen E, Lund KB, Popa M, Davidson B, Safont MM, Rygh CB, Espedal H, Barrett TM, Haug BE, McCormack E. Repurposing ^{18}F-FMISO as a PET tracer for translational imaging of nitroreductase-based gene directed enzyme prodrug therapy. Theranostics. 2021 Apr 7;11(12):6044-6057. doi: 10.7150/thno.55092. eCollection 2021.PMID: 33897898

Vrede SW, van Weelden WJ, Visser NCM, Bulten J, van der Putten LJM, van de Vijver K, Santacana M, Colas E, Gil-Moreno A, Moiola CP, Mancebo G, Krakstad C, Trovik J, Haldorsen IS, Huvila J, Koskas M, Weinberger V, Bednarikova M, Hausnerova J, van der Wurff AA, Matias-Guiu X, Amant F; ENITEC Consortium, Snijders MPLM, Küsters-Vandevelde HVN, Reijnen C, Pijnenborg JMA. Immunohistochemical biomarkers are prognostic relevant in addition to the ESMO-ESGO-ESTRO risk classification in endometrial cancer. Gynecol Oncol. 2021 Apr 12:S0090-8258(21)00269-9. doi: 10.1016/j.ygyno.2021.03.031. Online ahead of print.PMID: 33858677

Sletta KY, Castells O, Gjertsen BT. Colony Stimulating Factor 1 Receptor in Acute Myeloid Leukemia. Front Oncol. 2021 Mar 25;11:654817. doi: 10.3389/fonc.2021.654817. eCollection 2021.PMID: 33842370

Klingen TA, Chen Y, Aas H, Wik E, Akslen LA. Fibulin-2 expression associates with vascular invasion and patient survival in breast cancer. PLoS One. 2021 Apr 9;16(4):e0249767. doi: 10.1371/journal.pone.0249767. eCollection 2021.PMID: 33836007

Engen C, Hellesøy M, Grob T, Hinai AA, Brendehaug A, Wergeland L, Bedringaas SL, Hovland R, Valk PJM, Gjertsen BT. FLT3-ITD mutations in acute myeloid leukaemia - Molecular characteristics, distribution and numerical variation. Mol Oncol. 2021 Apr 5. doi: 10.1002/1878-0261.12961. Online ahead of print.PMID: 33817952

RECENT CCBIO IN THE MEDIA

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

05.05.21, HealthTalk, "Norske forskere har oppdaget en genmarkør med sterk prognostisk effekt ved brystkreft", Lars A. Akslen, Elisabeth Wik, Lise Ingebriktsen.

28.04.21, På Høyden, "Karikerer kreftcellen", Henriette Ertsås.

18.04.21, Nord24, "– Enten blir det suksess, eller så blir det fiasko", Nina Louise Jebsen (Gjertsen group).

16.04.21, Gynkreftforeningen, Afrodite magazine, "Ny studie på platinumresistent eggstokkreft", Line Bjørge.

13.04.21, Romsdals Budstikke, "Talentstipend til Hanna (22) og to andre romsdalinger", Hanna Kosberg Bredin (Krakstad group).

12.04.21, RBNett, "Talentstipend til Hanna (22) fra Molde", Hanna Kosberg Bredin (Krakstad group).

06.04.21, På Høyden, "UiB-professorer valgt inn i DNVA", Inge Jonassen and Ole-Frithjof Norheim.

17.02.21, På Høyden, "UiB må fortsatt satse på fremragende sentre", Inge Jonassen.

07.02.21, ABC Nyheter, "Kreftceller kan gå i dvale og unngå cellegift. Nå vet forskere mer om hvordan de skal vekke og drepe dem", Lars A. Akslen

04.02.21, Deutsche Welle, "Cancer research: Could drugs already on the market provide a cure?", Karl-Henning Kalland

01.02.21, Forskning.no, "Kreftceller kan gå i dvale og unngå cellegift. Nå vet forskere mer om hvordan de skal vekke og drepe dem", Lars A. Akslen

07.01,21, VG, "Ny metode mot føflekk-kreft", Lars A. Akslen.