

CMMC SYMPOSIUM



Leopoldina
Nationale Akademie
der Wissenschaften

25 Years of Progress

in Molecular Medicine: From Basic Research to Clinical Application

September 26-28, 2021 in Cologne, DE

Goes
Hybrid

- » Stem Cell Biology and Regenerative Medicine
- » Molecular Oncology and Genomic Medicine
- » Precision Medicine in Cancer Treatment
- » Infectious Diseases
- » Neuroplasticity and Neurodegeneration
- » Metabolism and Aging

Fritz Thyssen Stiftung
für Wissenschaftsförderung

Program
www.cmmc-uni-koeln.de

Organized by: Center for Molecular Medicine Cologne - University of Cologne

and supported by following partners:



© Gerhard Richter 2019 (061.12019)

Sunday - Sept. 26, 2021

- 12.45 p.m. Welcome Address
Axel Freimuth - Rector of the University of Cologne (pending)
Thomas Benzing - Chair - Center for Molecular Medicine Cologne, University of Cologne

Session I Stem Cell Biology and Regenerative Medicine

Chairs Claus Cursiefen and Carien Niessen - Cologne, DE

- 1.00 - 1.10 p.m. Introduction of the research field
- 1.10 - 1.40 p.m. **Title to be announced**
[Rudolph Jaenisch](#) - Whitehead Inst. for Biomedical Research and Dept. of Biology, Massachusetts Institute of Technology - Cambridge, US
- 1.40 - 2.10 p.m. **Mechanisms of mammalian cell fate decisions**
[Thomas Graf](#) - Centre for Genomic Regulation (CRG) - Barcelona, ES
- 2.10 - 2.40 p.m. **Title to be announced**
[Fiona M Watt](#) - Centre for Stem Cells & Regenerative Medicine, King's College – London, GB
- 2.40 - 3.10 p.m. Break
- 3.10 - 3.40 p.m. **Title to be announced**
[Konrad Hochedlinger](#) - Massachusetts General Hospital, Harvard Dept. of Stem Cell and Regenerative Biology and Howard Hughes Medical Institute - Boston, US
- 3.40 - 4.10 p.m. **Title to be announced**
[Lorenz Studer](#) – Memorial Sloan Kettering Cancer Center - New York, US
- 4.10 - 4.40 p.m. **Advanced genetic engineering of hematopoiesis to treat inherited diseases and cancer**
[Luigi Naldini](#) - San Raffaele Telethon Inst. for Gene Therapy and Vita-Salute San Raffaele University - Milan, IT
- 4.40 - 5.00 p.m. Break

Special CMMC Lecture

- 5.00 - 5.30 p.m. Introduction - [Thomas Krieg](#) - Cologne, DE
The Center for Molecular Medicine Cologne: the last 25 years and the future
[Franz Hofmann](#)
Institute for Pharmacology and Toxicology, Technical University Munich - Munich, DE
- 5.30 - 8.30 p.m. **Digital Poster Session “25 Years of Progress in Molecular Medicine”**
Selection of three posters for the Poster Awards

Call for submission of poster abstracts

Deadline: August 06, 2021

Participants are invited to submit abstracts for poster presentation related to the following topics:

- Stem Cell Biology and Regenerative Medicine
- Molecular Oncology and Genomic Medicine
- Precision Medicine in Cancer Treatment
- Infectious Diseases
- Neuroplasticity and Neurodegeneration
- Metabolism and Aging

For more information: [Poster Presentation - CMMC Symposium 2021](#)

Session II Molecular Oncology and Genomic Medicine

Chairs Reinhard Büttner and Michal Ruth Schweiger - Cologne, DE

8.30 - 8.40 a.m. Introduction of the research field

8.40 - 9.10 a.m. **Title to be announced**

[Peter Lichter](#) - German Cancer Research Center, DKFZ, Heidelberg, DE

9.10 - 9.40 a.m. **Mutational footprints of cancer therapies**

[Núria López-Bigas](#) - The Barcelona Institute of Science and Technology (BIST) - Barcelona, ES

9.40 - 10.10 a.m. **The Human Cell Atlas: mapping the body one cell at a time**

[Sarah Teichmann](#) - Cellular Genetics, Wellcome Sanger Institute - Hinxton, GB

10.10 - 10.30 a.m. Break

10.30 - 11.00 a.m. **Somatic mutations in normal tissues** (tentative)

[Sir Mike Stratton](#) - Wellcome Sanger Institute Cambridge, GB

11.00 - 11.30 a.m. **Mapping childhood brain tumors onto normal cerebellar development**

[Stefan Pfister](#) - University Hospital Heidelberg - Heidelberg, DE

11.30 - 12.30 p.m. Break with Poster Presentation

Session III Precision Medicine in Cancer Treatment

Chairs Thomas Benzing and Christiane J Bruns - Cologne, DE

12.30 - 12.40 p.m. Introduction of the research field

12.40 - 1.10 p.m. **The role of stress signaling in cancer and cancer treatment**

[Michael B Yaffe](#) - MIT and Koch Institute for Integrative Cancer Research - Cambridge, US

1.10 - 1.40 p.m. **Exploiting synthetic lethality in the treatment of cancer**

[Chris J Lord](#) - Breast Cancer Now Toby Robins Research Centre - London, GB

1.40 - 2.10 p.m. **The making of diffuse large B cell lymphoma**

[Laura Pasqualucci](#) - Institute for Cancer Genetics, Columbia University - New York, US

2.10 - 2.30 p.m. Break

2.30 - 3.00 p.m. **Lymphoma epigenetics**

[Ari M Melnick](#) - Weill Cornell Medicine - New York, US

3.00 - 3.30 p.m. **10 years checkpoint blockade – what have we learned?**

[Dirk Schadendorf](#) - Dept. of Dermatology, Univ. Hospital Essen, Univ. Duisburg - Essen, DE

3.30 - 4.00 p.m. Break

Session IV Infectious Diseases

Chairs Martin Krönke - Cologne, DE and Ulrike Protzer - Munich, DE

4.00 - 4.10 p.m. Introduction of the research field

[Ralf Bartenschlager](#) - Dept. of Infectious Diseases, University Hospital Heidelberg - Heidelberg, DE

4.10 - 4.40 p.m. **Towards a curative therapy for Hepatitis B and D co-infected patients**

[Stephan Urban](#) - Dept. of Infectious Diseases, Univ. Hospital Heidelberg - Heidelberg, DE

4.40 - 5.10 p.m. **Monoclonal antibodies to prevent and treat viral infections**

[Florian Klein](#) - Institute for Virology, University of Cologne - Cologne, DE

5.10 - 5.30 p.m. Break

5.30 - 6.00 p.m. **Respiratory virus pathogenicity in high-risk groups**

[Gülsah Gabriel](#) - Heinrich-Pette-Institute, Leibniz Inst. for Experimental Virology - Hamburg, DE

6.00 - 6.30 p.m. **Vaccines and monoclonals to regain our freedom**

[Rino Rappuoli](#) - Research and Development (R&D) at GlaxoSmithKline Vaccines - Siena, IT

6.30 - 7.00 p.m. **Survival strategies of malaria parasites in the dry season**

[Silvia Portugal](#) - Max Planck Institute for Infection Biology - Berlin, DE

Tuesday - Sept. 28, 2021

Session V Neuroplasticity and Neurodegeneration

Chairs Tatiana Korotkova and Wilhelm Stoffel - Cologne, DE

9.00 - 9.10 a.m. Introduction of the research field

9.10 - 9.40 a.m. **Dynamic control of presynaptic function in health and disease**

[Nils Brose](#) - Max Planck Institute for Experimental Medicine - Goettingen, DE

9.40 - 10.10 a.m. **Neuronal correlates of emotion states in mice**

[Nadine Gogolla](#) - Max Planck Institute of Neurobiology - Munich, DE

10.10 - 10.40 a.m. **Tau toxicity at the synapse**

[Patrik Verstreken](#) - VIB-KU Leuven Center for Brain & Disease Research - Leuven, BE

10.40 - 11.00 a.m. Break

11.00 - 11.30 a.m. **Negative feedback control of neuronal activity by microglia**

[Anne Schaefer](#) - Icahn School of Medicine at Mount Sinai - New York, US

11.30 - 12.00 p.m. **Mechanisms for fast dopamine signaling**

[Pascal S Kaeser](#) - Department of Neurobiology, Harvard Medical School - Boston, US

12.00 - 1.00 p.m. Break

Session VI Metabolism and Aging

Chairs Sabine Eming and Aleksandra Trifunovic - Cologne, DE

1.00 - 1.10 p.m. Introduction of the research field

1.10 - 1.40 p.m. **CNS-dependent control of metabolism**

[Jens C Brüning](#) - Max Planck Institute for Metabolism Research, Univ. Hospital Cologne - Cologne, DE

1.40 - 2.10 p.m. **Hormone sensing in astrocytes for the control of systemic metabolism**

[Cristina García Cáceres](#) - Helmholtz Zentrum München - Neuherberg, DE

2.10 - 2.30 p.m. Break

2.30 - 3.00 p.m. **Title to be announced**

[Lora Heisler](#) - The Rowett Institute, Univ. of Aberdeen - Aberdeen, GB

3.00 - 3.30 p.m. **Mechanisms of stem cell aging and rejuvenation**

[Anne Brunet](#) - Stanford University School of Medicine - Stanford, US

3.30 - 4.00 p.m. **Title to be announced**

[Andrew Dillin](#) - Dept. of Molecular and Cell Biology, Univ. of California Berkeley - Berkeley, US

4.00 - 4:10 p.m. Summary, open questions, concluding remarks

General Information: The meeting is open and no registration or attendance fee is required. Participation is free of charge - free registration is required. Please sign up [here](#).

Venue: Main Lecture Hall, Faculty of Medicine, University of Cologne

Access only possible from Joseph-Stelzmann-Str. 26 - please follow the yellow CMMC Symposium signs.

We gratefully acknowledge support by following partners:

[LMS Consult](#) conference material

The sponsoring is used for conference rooms, technology, travel expenses of the speakers, conference material and event management.