UGMLC
UNIVERSITIES OF GIESSEN & MARBURG LUNG CENTER

JUSTUS-LIEBIG-UNIVERSITÄT GIESSEN

28.09.2023 - 29.09.2023 | Biomedical Research Center Seltersberg (BFS) Giessen

International CO_2 Meeting

Day 1 – 28.09.2023

11:00	**Opening remarks** ***István Vadász*** (Justus Liebig University)
11:10	**Keynote address** Twenty years of hypercapnia research in human health and disease ***Jacob Iasha Sznajder*** (Northwestern University)
12:00	**Light lunch**

Session 1: CO_2 sensing

13:00	The carbamate post-translational modification in carbon dioxide detection ***Martin Cann*** (Durham University)
13:30	Chemical strategies to selectively sense and image carbon dioxide in biological systems ***Ori Green*** (Technion – Israel Institute of Technology)
14:00	Quantitative chemoproteomic profiling of CO_2-dependent lysine carboxylation ***Dustin King*** (Simon Fraser University)
14:30	Environment matters: Visualising the effect of CO_2 on human connexin 26 ***Deborah Brotherton*** (University of Warwick)
15:00	**Coffee break**

Session 2: CO_2 signaling (part 1)

15:30	Myeloid Zfhx3 deficiency protects against hypercapnia-induced suppression of host defense against influenza A virus ***S. Marina Casalino-Matsuda*** (Northwestern University)
16:00	Carbonic anhydrase 2-dependent effects of CO_2 on macrophage activation ***Moritz Strowitzki*** (University College Dublin)
16:30	Hypercapnia limits alveolar type 2 cells proliferation and differentiation by altering the spatial distribution of Wnt expression in the niche surrounding AT2 cells ***Laura Dada*** (Northwestern University)

DZL Deutsches Zentrum für Lungenforschung

CARDIO PULMONARY INSTITUTE

ILH Institute for Lung Health

GIESSEN ARDS-ECMO CENTER

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Day 2 – 29.09.2023

Session 3: CO_2 signaling (part 2)

09:00 Mechanisms of hypercapnia-induced endoplasmic reticulum dysfunction
Vitalii Kryvenko (Justus Liebig University)

09:30 CO_2 and immunometabolism
Eoin Cummins (University College Dublin)

10:00 Coffee break

Session 4: Translational aspects of CO_2 research

10:15 Hypercapnia increases airway constriction in chronic obstructive pulmonary disease
Masahiko Shigemura (Northwestern University)

10:45 Extracorporeal carbon dioxide removal using a renal replacement therapy platform in acute respiratory distress syndrome
István Vadász (Justus Liebig University)

11:15 Coffee break

Roundtable discussion

11:30 Faculty meeting on future CO_2 research

12:30 Closing remarks, snacks and farewell

Please register here:

https://form.jotform.com/232353972379365

Venue:

BFS Gießen
Schuberstr. 81
35392 Gießen