



GIREM Session Program

Scientific Group : GIREM
February 10, 2022

Session 1:

Moderators: Annemieke Smet (UAntwerpen), Lukas Van Oudenhove (KU Leuven)

- 8:30 **Invited Lecture: Of bowels, brain and behavior: The Microbiota-Gut-Brain Axis in Psychiatry and Beyond.**
 Gerard Clarke (University College Cork, Ireland)
- 9:15 **B 01 Distinct mucin-microbiome signatures in patients with gastric cancer.**
 B. OOSTERLINCK (1), T. BREUGELMANS (1), W. ARRAS (1), J. DE MAN (1), K. GEBOUS (2), J. KUPČINSKAS (3), A. LINK (4), M. PEETERS (5), B. DE WINTER (1), A. SMET (1) / [1] U Antwerpen, [2] UZ Gent, [3] Lithuanian University of Health Sciences, Kaunas, Lithuania, [4] Otto von Guericke University Magdeburg, Germany, [5] UZ Antwerpen
- 9:30 **B 02 Short chain fatty acids affect stem cell differentiation towards the entero-endocrine cell lineage in obese enteroids.**
 M. FARHADIPOUR (1), M. CLARYSSE (2), K. ARNAUTS (1), K. LISZT (1), T. THIJS (1), L. CEULEMANS (1), E. DELEUS (2), B. VAN DER SCHUEREN (2), M. LANNOO (2), M. FERRANTE (1), I. DEPOORTERE (1) / [1] KULeuven, [2] UZLeuven
- 09:45 **B 03 Eosinophil depletion partially protects from intestinal inflammation, but results in increased collagen deposition in a DSS colitis model.**
 I. JACOBS, S. DELEU, J. CREMER, J. GUEDELHA SABINO, M. FERRANTE, S. VERMEIRE, C. BREYNAERT, B. VERSTOCKT, T. VANUYTSEL / KULeuven
- 10:00 **B 04 Early Kupffer cell depletion does not affect sclerosing cholangitis progression in mice.**
 K. DE MUYNCK (1), B. VANDERBORGHT (1), C. SCOTT (1), M. GUILLIAMS (1), A. BESCHIN (2), X. VERHELST (1), L. DEVISSCHER (1) / [1] Ugent, [2] VUB, Jette

- 10:15 **B 05** **Gut-Kidney Crosstalk In Chronic Kidney Disease: Remote Sensing Of Indole-Derived Uremic Toxins.**
M. LAURIOLA, S. DEJONGH, R. FARRÉ, K. VERBEKE, B. MEIJERS / KU Leuven
- 10:25 **B 06** **pitch: A single-cell survey of colorectal epithelial cells unveils multiple cellular perturbations in patients with gastrointestinal disorders.**
A. DENADAI-SOUZA (1), Y. WU (1), E. MODAVE (1), X. ABALO (2), L. LARSSON (2), J. AGUILERA-LIZARRAGA (1), S. GIACOMELLO (2), T. LEFEVRE (1), K. VANDEREYKEN (1), K. VAN BEEK (1), K. BELLENS (1), J. SABINO (1), S. VERMEIRE (1), M. FERRANTE (1), A. SIFRIM (1), J. LUNDEBERG (2), T. VOET (1), G. BOECKXSTAENS (1) / [1] KUL Leuven, [2] Karolinska University Hospital, Sweden
- 10:35 **B 07** **pitch: Mucin mRNA isoform signatures as potential novel biomarkers to evaluate disease status in patients with inflammatory bowel diseases (IBD).**
W. ARRAS, T. BREUGELMANS, B. OOSTERLINCK, H. DE SCHEPPER, M. SOMERS, E. MACKEN, F. VAN AERT, J. DE MAN, A. JAUREGUI-AMEZAGA, B. DE WINTER, A. SMET (1) / U Antwerpen/ UZ Antwerpen
- 10:45 **B 08** **pitch: Alterations of the differentiation and proliferation programs in the intestinal epithelium compartment contribute to the gut barrier dysfunction in alcohol use disorder patients.**
J. LUPIANEZ (1), L. MACCIONI (1), S. RAVAU (1), I. LECLERCQ (1), P. STÄRKEL (1) / UCL, Brussels

Session 2

Moderators: Heiko de Schepper (U Antwerp) & Tim Vanuytsel (KU Leuven)

- 11:15 **B 09** **Volatile organic compound (VOC) profiling in breath and faecal samples discriminates patients with irritable bowel syndrome from healthy controls.**
K. VAN MALDEREN (1), N. HANNING (2), H. LAMBRECHTS (2), T. HAVERHALS (2), S. VAN MARCKE (2), J. DE MAN (2), B. DE WINTER (2), K. LAMOTE (2), H. DE SCHEPPER (1) / [1] UZ Antwerpen, [2] U Antwerpen
- 11:30 **B 10** **The six-food elimination diet improves symptoms in functional dyspepsia.**
K. ROUTHIAUX, J. SCHOL, E. ROELANTS, K. VAN DEN HOUTE, J. TÓTH, I. HUANG, F. CARBONE, T. VANUYTSEL, J. TACK / KU Leuven
- 11:45 **B 11** **Censoring reflux episodes by the Wingate consensus reduces supportive evidence for GERD provided by pH/impedance monitoring.**
S. KINDT, M. SURMONT / UZ Brussel, Jette

- 12:00 **B 12** pitch: **Relevance of the diagnosis of autoimmune gastritis in patients with autoimmune thyroiditis.**
T. HAURYLENKA / Republican Research Center for Radiation Medicine and Human Ecology, Gomel, Belarus
- 12:10 **B 13** pitch: **The prevalence of gastrointestinal symptoms during acute COVID-19 infection assessed using a digital questionnaire.**
K. VAN MALDEREN, J. DE MAN, B. DE WINTER, H. DE SCHEPPER / U Antwerpen
- 12:20 **B 14** pitch: **Differences in caloric intake and macronutrient composition in FD and IBS cohorts compared to healthy subjects.**
S. PELLENS, K. VAN DEN HOUTE, F. CARBONE, J. TACK / KULeuven
- 12:30 **B 15** pitch: **Lack of effect of intravenous corticotropin-release hormone on anxiety scores and duodenal permeability in healthy subjects.**
J. LUCA, J. SCHOL, J. TÓTH, K. VAN DEN HOUTE, I. HUANG, F. CARBONE, T. VANUYTSEL, J. TACK / KULeuven
- 12:40 **B 16** pitch: **Duodenal inter-cryptal but not villous eosinophils are increased in functional dyspepsia and affected by inter-rater disagreement.**
P. HUYGHE (1), M. CEULEMANS (1), G. DE HERTOOGH (2), J. TACK (1), L. WAUTERS (1), T. VANUYTSEL (1) / [1] KULeuven, [2] UZ Leuven

Session 3

Moderators: Gianluca Matteoli (KU Leuven), Werend Boesmans (UHasselt)

- 13:30 **B 17** **Neuro-immune Crosstalk in the Myenteric Plexus from Early Postnatal Development to Adulthood.**
M. VIOLA, M. CHAVERO PIERES, M. ELODIE, N. STAKENBORG, S. ALEJANDRO, K. VANDEREYKEN, J. VAN HERCK, T. MARTENS, T. VOET, P. VANDEN BERGHE, B. GUY / KULeuven
- 13:45 **B 18** **Mrgprb2-mediated signaling represents a novel mast cell degranulation pathway in the mouse colon.**
S. VAN REMOORTEL, L. LAMBEETS, J. DE MAN, B. DE WINTER, S. IBIZA MARTINEZ, J. TIMMERMANS / U Antwerpen
- 14:00 **B 19** **MicroRNA profiling of enteric glia status.**
A. HOLLAND (1), A. BON-FRAUCHES (2), F. PROGATZKY (3), D. KESZTHELYI (2), D. JONKERS (2), V. PACHNIS (3), V. MELOTTE (2), W. BOESMANS (1) / [1] Hasselt University, [2] Maastricht University Medical Center, The Netherlands, [3] The Francis Crick Institute

- 14:15 **B 20** **Gliadin cytotoxicity on enteric glial cells: novel insights on celiac pathogenesis based on a new enteric glial cells in vitro model.**
L. ZANOLETTI (1), A. VALDATA (2), K. NEHLSSEN (3), P. FARIS (2), C. CASALI (2), R. CACCIATORE (2), I. SBARSI (2), F. MILELLA (2), F. CARRIERO (2), C. MARTINELLI (2), G. BARBIERI (2), L. VAN BAARLE (1), V. DE SIMONE (1), E. RAIMONDI (2), T. MAY (3), F. MOCCIA (2), G. MATTEOLI (1), S. COMINCINI (2), F. MANAI (2) / [1] KULeuven, [2] University of Pavia, Italy, [3] InScreenEx GmbH, Braunschweig, Germany
- 14:30 **B 21** **Live Imaging of Primary Neurons in Long-Term Cryopreserved Human Nerve Tissue.**
M. FORTEA (1), P. JAIN (1), I. DEMEDTS (2), J. TACK (2), T. VANUYTSEL (2), C. CIRILLO (3), P. VANDEN BERGHE (1) / [1] TARGID, KU Leuven, [2] UZ Leuven, [3] Toulouse NeuroImaging Center, France
- 14:45 **B 22** pitch: **Study of neurodegeneration and gastrointestinal motility During diet-induced obesity.**
M. CHAVERO PIERES, M. VIOLA, G. BOECKXSTAENS / KULeuven,
- 15:00 **Invited Lecture: Enteric nervous system evolution in the blind Mexican cavefish.**
Misty Riddle (University of Nevada, Reno, USA)
- 15:45 **Closing remarks**