



# 3<sup>rd</sup> European B Cell Forum 2021

FROM JUNE 30 TO JULY 2 2021 | Virtual event

## WEDNESDAY 30 JUNE

09:00-09:15

### Opening of the 3<sup>rd</sup> EBCNet Forum

Thierry Defrance & Hans-Martin Jäck

09:20-10:40

### Session #1. B cell memory/B cell subsets

#### Talk participants

*Chairs: Michel Cogné & Marc Seifert*

09:20-09:40

- **Most isotype switched memory B cells reside in bone marrow or spleen**

Marta Ferreira-Gomes (*Deutsches Rheuma-Forschungszentrum (DRFZ), an Institute of the Leibniz Association, Berlin, Germany*)

09:40-10:00

- **Human memory B cell dynamics in blood and spleen change with age**

Artur Kibler (*Institute of Cell Biology, University of Duisburg-Essen, Essen, Germany*)

10:00-10:20

- **Diversity of memory B cells repertoire cope with SARS-CoV2 variants after mRNA vaccination in naïve and recovered individuals**

Matthieu Mahévas (*Institut Necker Enfants Malades (INEM), INSERM U1151/CNRS UMS 8253, Université de Paris, Paris, France*)

10:20-10:40

- **Persistence of functional memory B cells recognizing SARS-CoV-2 variants despite loss of specific IgG**

Stephan Winklmeier (*Institute of Clinical Neuroimmunology, University Hospital, LMU Munich, Munich, Germany*)

10:40-10:47

#### Sponsor - Miltenyi Biotec

- **SARS-CoV-2 specific B cells and antibodies Analysis by Miltenyi Biotec**

Shahul Mouhamad - *Miltenyi Biotec*



10:47-11:00

#### Break

11:00-12:20

### Session #1 (continued). B cell memory/B cell subsets

#### Talk participants

*Chairs: Pierre Bruhns & Deborah Dunn-Walters*

11:00-11:20

- **VAST: a novel and versatile vaccination platform that induces robust and durable antibody responses**

Paraskevi Vlachou (*D150, German Cancer Research Center (DKFZ), Heidelberg, Germany*)

11:20-11:40

- **Single-Cell Transcriptomic Analyses Define Distinct Peripheral B Cell Subsets and Discrete Development Pathways**

Alexander Stewart (*School of Biosciences and Medicine, University of Surrey, Guildford, UK*)

11:40-12:00

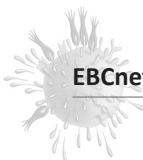
- **T-bet<sup>+</sup> B cells infiltrating the human brain: from peripheral induction to local effector function**

Marvin M. van Luijn (*Department of Immunology, MS Center Erasmus, Erasmus MC, Rotterdam, The Netherlands*)

12:00-12:20

- **Phenotypic and functional division of human Bregs in CD45<sup>lo</sup> and CD45<sup>hi</sup> B cells and their dependence on Btk and mTOR**

Vassilios Lougaris (*Pediatrics Clinic and Institute of Molecular Medicine A. Nocivelli, Department of Clinical and Experimental Sciences, University of Brescia and ASST - Spedali Civili of Brescia, Brescia, Italy*) .../...



12:20-12:27

**Sponsor - Stemcell****• Tools for B cell Research**Graeme Milton - *Senior European Market Development Manager, Immunology*

12:27-14:00

**Lunch**

14:00-15:40

**Session #2. B cell development/B cell neoplasia****Talk participants****Chairs: Marta Rizzi & Thierry Defrance**

14:00-14:20

**• Transcription factor networks coordinate transcriptional priming and cellular expansion in early B-cell development**Mikael Sigvardsson (*Division of Molecular Hematology, Lund University, Lund, Sweden*)

14:20-14:40

**• IL-7R signalling activates widespread V<sub>H</sub> and D<sub>H</sub> gene usage to drive antibody diversity in bone marrow B cells**Anne Corcoran (*Lymphocyte Signalling and Development Programme, Babraham Institute, Cambridge, UK*)

14:40-15:00

**• Tracking neonatal B cell function in the adult gut**Joan Yuan (*Division for Molecular Hematology, Lund Stem Cell Center, Department of Laboratory Medicine, Faculty of Medicine, Lund University, Lund, Sweden*)

15:00-15:20

**• Siglec-G controls the severity of Chronic Lymphocytic B-cell Leukemia**Lars Nitschke (*Division of Genetics, Department of Biology, University of Erlangen, Erlangen, Germany*)

15:20-15:40

**• Continuous MYD88 activation is associated with expansion and then transformation of IgM differentiating plasma cells**Christelle Vincent-Fabert (*UMR CNRS 7276/INSERM U1262 CRIBL. University of Limoges, and hematology Laboratory of Dupuytren Hospital University Center (CHU) of Limoges, France*)

15:40-15:47

**Sponsor - Cytex Biosciences****• How spectral flow could be the solution for your lab**Juliette Desfrançois - *Cytex Biosciences*

15:47-16:00

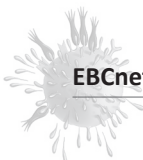
**Break**

16:00-16:45

**Keynote lecture****• Memory B cells differentiation**Dr Charlotte Viant (*Laboratory of Molecular Immunology, The Rockefeller University, New York, USA*)

16:45-17:15

**EBCnet General assembly**



## THURSDAY 1 JULY

09:00-10:20

## Session #3. Plasma cells

## Talk participants

**Chairs: Claude-Agnès Reynaud & Hans-Martin Jäck**

09:00-09:20

• **Dissecting antibody-secreting cells differentiation at single cell level**Niels J.M. Verstege (*Department of Immunopathology, Sanquin Research and Landsteiner Laboratory, Amsterdam UMC, University of Amsterdam, Amsterdam, The Netherlands*)

09:20-09:40

• **The Sec22b SNARE is indispensable for plasma cell maintenance and antibody secretion**Marion Espéli (*Université de Paris, Institut de Recherche Saint Louis, EMiLy, Inserm U1160, Paris, France*)

09:40-10:00

• **Single-cell analyses of autoreactive plasma cells from immune thrombocytopenia patients**Pierre Bruhns (*Unit of Antibodies in Therapy and Pathology, Institut Pasteur, UMR 1222 INSERM, Paris, France*)

10:00-10:20

• **TFG controls ER stress, autophagy and plasma cell function**Dirk Mielenz (*Division of Molecular Immunology, Department of Internal Medicine 3, Nikolaus-Fiebiger-Zentrum, Friedrich-Alexander-Universität (FAU) Erlangen-Nürnberg, Erlangen, Germany*)

10:20-10:27

## Sponsor - Immudex

• **dCODE® Klickmer - Exploring B-cell immunity at the single-cell level**Valérie Bodemeyer - *Immudex*

10:27-10:40

Break

10:40-12:20

## Session #3 (continued). Plasma cells

## Talk participants

**Chairs: René E.M. Toes & Idit Shachar**

10:40-11:00

• **Metabolic flux analysis of individual antibody-secreting cells – the impact of space, time, and immunization**Klaus Eyer (*Laboratory for Functional Immune Repertoire Analysis, Institute for Pharmaceutical Sciences, D- CHAB, ETH Zürich, Switzerland*)

11:00-11:20

• **Complementary but distinct protective roles of tumor-infiltrating IgG and IgA producing cells**Yasmine Lounici (*Centre de Recherche en Cancérologie de Lyon, Inserm U1052, CNRS 5286, Lyon, France*)

11:20-11:40

• **The BCR acts as a switch between the canonical and non-canonical functions of plasma cells**Thierry Defrance (*Centre International de Recherche en Infectiologie/CIRI, INSERM U1111, Lyon, France*)

11:40-12:00

• **The RNA m6A binding protein YTHDF2 promotes the B cell to plasma cell transition**Martin Turner (*Immunology Programme, The Babraham Institute, Cambridge, CB223AT, UK*)

12:00-12:20

• **IgA production decrease is associated with B cell differentiation and proliferation defects in multiple sclerosis**Jeremy Morille (*Centre de Recherche en Transplantation et Immunologie, INSERM UMR1064, Nantes University, CHU de Nantes, Nantes, France*)

12:20-12:27

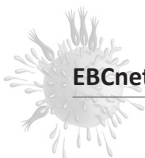
## Sponsor - Miltenyi Biotec

• **SARS-CoV-2 specific B cells and antibodies Analysis by Miltenyi Biotec**Shahul Mouhamad - *Miltenyi Biotec*

12:27-14:00

Lunch

.../...



14:00-15:20

**Session #4. B cells in disease****Talk participants***Chairs: Marion Espéli & Kai-Michael Toellner*

14:00-14:20

- **MHCII haplotype determines IgG autoantibody Fc N-glycosylation and development of murine autoimmune skin disease**

Rudolf Armin Manz (*Institute for Systemic Inflammation Research, University of Lübeck, Lübeck, Germany*)

14:20-14:40

- **N-linked glycosylation of the immunoglobulin variable domain affects antigen binding and autoreactive B-cell activation**

Theresa Kissel (*Department of Rheumatology, Leiden University Medical Center, Leiden, The Netherlands*)

14:40-15:00

- **Autoantibodies deconvolution in Membranous Nephropathy**

Sara Montagner (*Novartis Institutes for BioMedical Research, Basel, Switzerland*)

15:00-15:20

- **B cell defect in Prkcd G510S/G510S mice with autoimmunity and lymphoproliferation**

Marion Moreews (*CIRI, Centre International de Recherche en Infectiologie, Univ. Lyon, Inserm, U1111, Université Claude Bernard, Lyon 1, CNRS, UMR5308, ENS de Lyon, Lyon, France*)

15:20-15:27

**Sponsor - Stemcell**

- **Tools for B cell Research**

Graeme Milton - *Senior European Market Development Manager, Immunology*

15:27-15:40

**Break**

15:40-17:20

**Session #4 (continued). B cells in disease****Talk participants***Chairs: Yolanda R. Carrasco & Jean-Claude Weill*

15:40-16:00

- **Transcriptional dysregulation of CVID patients harboring the C104R TNFRSF13B mutation**

Neftali Jose Ramirez (*Centre for Chronic Immunodeficiency (CCI), University Medical Centre Freiburg, University of Freiburg, Freiburg, Germany*)

16:00-16:20

- **Inverted direct allorecognition triggers early donor specific antibody response after transplantation**

Xavier Charmetant (*CIRI, Centre International de Recherche en Infectiologie, Université de Lyon, INSERM U1111, Université Claude Bernard Lyon 1, CNRS, UMR5308, ENS de Lyon, Lyon, France*)

16:20-16:40

- **Post-transcriptional control of neuroinflammation by HuR**

Dunja Capitan-Sobrino (*Toulouse Institute for Infectious and Inflammatory Diseases, INSERM (U1291), Toulouse, France*)

16:40-17:00

- **Decreased Levels of T Follicular Helper (CD4+CXCR5+) Cells and CD27+CD38+ and CD27+CD38- B Cells in Ankylosing Spondylitis Patients Correlate with Marker of Inflammation**

Kristina Lejon (*Department of Clinical Microbiology, Umeå University, Umeå, Sweden*)

17:00-17:20

- **Follicular helper-like T cells in the lung highlight a novel role of B cells in sarcoidosis**

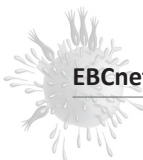
Laura Bauer (*Institute of Immunology, University Hospital Schleswig-Holstein, Kiel, Germany*)

17:20-17:27

**Sponsor - Cytek Biosciences**

- **How spectral flow could be the solution for your lab**

Juliette Desfrancois - *Cytek Biosciences*



## FRIDAY 2 JULY

09:00-10:20

## Session #5. Ag recognition/BCR signaling

## Talk participants

Chairs: Rudolf Manz &amp; Marieke Van Ham

09:00-09:20

## • BCR functions from within the endoplasmic reticulum

Marieta Caganova (*Max-Delbrück-Center for Molecular Medicine in the Helmholtz Association (MDC), Berlin, Germany*)

09:20-09:40

## • CD20 as a gatekeeper of the resting state of human B cells

Kathrin Kläsener (*Biology III, faculty of biology, University Freiburg, Freiburg, Germany*)

09:40-10:00

## • Tetraspanins: molecular organisers of the B-cell surface

Annemiek van Spriel (*Dept. of Tumor Immunology, Radboud Institute for Molecular Life Sciences, Radboud university medical center, Nijmegen, The Netherlands*)

10:00-10:20

## • Novel players in B cell antigen uptake and trafficking

Dessi Malinova (*Wellcome-Wolfson Institute for Experimental Medicine, Queen's University Belfast, Belfast, Ireland*)

10:20-10:27

## Sponsor - Immudex



## • dCODE® Klickmer - Exploring B-cell immunity at the single-cell level

Valérie Bodemeyer - Immudex

10:27-10:40

## Break

10:40-12:20

## Session #6. Genetics of immunoglobulins

## Talk participants

Chairs: Ulf Klein &amp; Lars Nitschke

10:40-11:00

## • Immunoglobulin enhancers increase RNA polymerase 2 (Pol2) stalling at somatic hypermutation (SHM) target sequences

Jukka Alinikula (*Unit of Infections and Immunity, Institute of Biomedicine, University of Turku, Finland*)

11:00-11:20

## • Study of IgH Locus Suicide Recombination 'LSR' in human normal and pathological conditions

Israa Al Jamal (*CBRS CRIBL UMR7276 CNRS INSERM1262, Limoges University, Limoges, France*)

11:20-11:40

## • IgTreeZ: A toolkit for immunoglobulin gene lineage tree analysis

Ramit Mehr (*The Mina and Everard Goodman Faculty of Life Sciences, Bar Ilan University, Ramat Gan, Israel*)

11:40-12:00

## • A dual effect upon deletion of Special A-T Rich Binding Protein 1 in B cells

Morgane Thomas (*Contrôle de la réponse immune B et des Lymphoproliférations, CNRS UMR 7276 Inserm 1062, Limoges, France*)

12:00-12:20

• Inactivation of EXO1 nuclease activity on genome maintenance and tumor suppression in Exo<sup>1D173A</sup> mice *in vivo*Richard Chahwan (*Institute of Experimental Immunology, University of Zurich, Zurich, Switzerland*)

## Farewell/Closure of the 3rd EBCnet Forum