



33RD ANNUAL CONFERENCE

SEPTEMBER 12-14

EMDS 2019

World Trade Center Marseille Provence, MARSEILLE, FRANCE The mononuclear phagocyte system in development, immunity and cancer

JOINT EVENT WITH THE FRENCH DENDRITIC CELL SOCIETY (CFCD)







33RD ANNUAL
CONFERENCE SEPTEMBER 12-14
EMDS 2019
World Trade Center Marseille Provence, MARSEILLE, FRANCE
The mononuclear phagocyte system
in development, immunity and cancer

WELCOME LETTER

Dear colleagues,

It is our great pleasure to welcome you to Marseille for the 33rd Conference of the European Macrophage and Dendritic cell Society (EMDS), organised jointly with the Club Francophone des Cellules Dendritiques(CFCD – French Dendritic cell Society).

The aim of the meeting is to bring together scientists, from Europe and beyond, working on mononuclear phagocytes, to better understand their properties in health and disease, and to foster scientific discussions and new collaborations.

We have put together a stimulating program of leaders in the field who will share their latest work on mononuclear phagocyte subsets, host-pathogen interactions, homeostasis, neuroimmunology, wound healing and tumor immunity.

We will also provide opportunities for young scientists to present their work to the community through oral presentations and posters.

We are looking forward to welcoming in Marseille for this exciting meeting.

The organizing committee, Marc Dalod, Sandrine Henri, Michael Sieweke, Elodie Segura





The European Macrophage and Dendritic Cell Society (EMDS) is an association of scientists interested in basic and clinical aspects of monocytes, macrophages, dendritic cells and other myleoid cells in man and experimental animal models. www.macrophage.de/

The Club Francophone des Cellules Dendritiques (CFCD) is the French Dendritic Cell society. Its goal is to favor the development of studies on dendritic cells in animals and humans, in normal or pathological situations, and to promote scientific exchanges for those interested or involved in dendritic cell research. www.cfcd.fr/

FINAL PROGRAM THURSDAY, SEPTEMBER 12TH



CONFERENCE SEPTEMBER 12-14

EMDS 2019

World Trade Center Marseille Provence, MARSEILLE, FRANCE
The mononuclear phagocyte system

in development, immunity and cancer

08.00 Opening of the registration desk

08.45 Welcome address

SESSION I

BIOLOGY OF DC SUBSETS

Chairs: Elodie Segura & Marc Dalod

09.00 Dendritic cells: central players in orchestration of type 2 inflammation.
 Andrew MacDonald (United Kingdom)

09.30 CO-01-1

NK cells orchestrate the migratory behavior of conventional type 1 dendritic cells to potentiate T cell priming. Karine Crozat (France)

09.42 CO-02-1

High fat diet modulates conventional dendritic cell development through Interferon regulatory factor 8. Mohamed Ibrahim (Germany)

09.54 CO-03-1

Intestinal mesenchymal cells induce the differentiation of pre-cDCs into CD103+ CD11b+ DCs ex vivo. Verena Kästele (United Kingdom)

10.06 Studies on the heterogeneity and specification of intestinal mononuclear phagocytes.

William Agace (Sweden)

10.36 Coffee break and poster viewing

11.00 Decoding human fetal liver haematopoiesis.

Muzlifah Haniffa (United Kingdom)

11.30 co-04-1

Microbiota-associated myeloid TNF production dictates the balance between tolerogenic and protective neonatal pre-cDC1.

Arnaud Köhler (Belgium)

11.42 CO-05-1

Unique cellular sources of CXCR3 ligands direct intranodal T cell positioning and interactions following viral infection.
Fanny Lafouresse (Australia)

11.54 CO-06-1

IRF8 is required for maintaining the lineage identity, but not survival, of type 1 conventional dendritic cells. Telma Lanca (Denmark)

12.06 Plasmacytoid dendritic cells, when origin matters.

Roxane Tussiwand (USA)

12.36 Lunch and poster viewing

SESSION I

HOST-PATHOGEN INTERACTION

Chairs: Bénédicte Manoury & Jean-Pierre Gorvel

14.00 Tuberculosis exacerbates HIV infection in macrophages through tunneling nanotube formation.

Olivier Neyrolles (France)

14.30 co-07-2

Analysis of the response of human primary blood DC (pre-DC) upon HIV-1 infection at the single-cell level. Flavien Brouiller (France)

14.42 CO-08-2

Pathogen recognition through TLR versus NOD receptors has opposite effects on monocyte fate decision.

Alice Coillard (France)

14.54 co-09-2

Getting to know your IL-1 cytokines: the distinct roles of IL-1 α and IL-1 β . Kevin Eislmayr (Austria)

15.06 CO-10-2

Lung-specific innate immune memory controls reactivity of mononuclear phagocytes to acute and chronic inflammation. Natalie Katzmarski (Germany)

- 15.18 Salmonella persisters during infection.

 Peter Hill (United Kingdom)
- 15.48 Coffee break and poster viewing

16.15 Dendritic cells beyond immunity.

David Sancho (Spain)

16.45 CO-11-2

Resident macrophage subsets differentially impact bladder immunity to uropathogen infection. Livia Lacerda (France)

16.57 co-12-2

Tuberculosis-driven expression of CD169 (Siglec-1) and localization in tunneling nanotubes leads to exacerbation of HIV-1 infection in human macrophages.

Geanncarlo Lugo (France)

17.09 CO-13-2

Death ligands are upregulated in influenza pneumonia and contribute to the apoptotic depletion of the resident alveolar macrophage pool.

Christina Malainou (Germany)

17.20 Non conventional immunity to the microbiota control tissue repair.

Yasmine Belkaid (USA)

SESSION II

NEUROIMMUNOLOGY (I)

Chairs: Helena Paidassi & Michael Sieweke

- 17.50 Harnessing the power of innate and adaptive immunity to combat Alzheimer's disease and dementia.

 Michal Schwartz (Israel)
- 18.20 POSTER SESSION ODD NUMBERS
- 19.30 Welcome cocktail

FINAL PROGRAM FRIDAY, SEPTEMBER 13TH



CONFERENCE SEPTEMBER 12-14

EMDS 2019

World Trade Center Marseille Provence, MARSEILLE, FRANCE

The mononuclear phagocyte system in development, immunity and cancer

08.00 Opening of the registration desk

SESSION III

NEUROIMMUNOLOGY (II)

Chairs: Helena Paidassi & Michael Sieweke

08.30 T cell-phagocyte interactions in neuroinflammation.

Burkhard Becher (Switzerland)

09.00 CO-14-3

Sensory neurons regulate dermal macrophage functions and tissue repair after skin exposure to UV radiation. Guillaume Hoeffel (France)

09.12 co-15-3

Infection alters MHC II and MHC II+ macrophage populations in the meninges which impairs CNS immunity. Rejane Rua (France)

09.24 Microglia in defense and disease during herpes simplex virus brain infection.

Soren Paludan (Denmark)

SESSION IV

HOMEOSTASIS

Chairs: Marc Bajénoff & Julie Helft

09.54 CO-16-4

Colonic IL10Ra deficient macrophages at the apex of colitis initiation. Biana Bernshtein (Israel)

10.06 co-17-4

Macrophages in distal colon form a unique type of trans-epithelial dendrites and are specialized to sample absorbed fluids. Aleksandra Chikina (France)

10.18 co-18-4

Spatial mapping of macrophage heterogeneity in murine atherosclerotic plaques. Pieter Goossens (Netherlands)

10.30 Dissecting brain macrophage subpopulations.

Steffen Jung (Israel)

11.00 Coffee break and poster viewing

11.30 In search of the potential macrophage niche.
Martin Guilliams (Belgium)

12.00 co-19-4

Dimerization partner shift of MafB determines macrophage polarization. Hao Huang (Germany)

12.12 co-20-4

Protection against inflammatory diseases by rodent malaria is due to a virus that cripples DC function in a IFN-I-dependent manner. Ali Hassan (France)

12.24 co-21-4

A PIVVI protein controls the replicative lifespan of alveolar macrophages. Stephanie Vargas Aguilar (Germany)

12.36 Macrophage niches:
novel immunobiological
functions of lymphoid stromal cells.
Marc Bajénoff (France)

13.05 Lunch and poster viewing

14.00 CFCD General Assembly & EMDS Business Meeting

SESSION V

TISSUE REPAIR

Chairs: Vanja Sisirak & Sandrine Henri

14.30 Tissue resident macrophages: from development to old age. Elisa Gomez-Perdiguero (France)

15.00 New cross-talk between signaling pathways triggering the resolution of inflammation in macrophages.

Bénédicte Chazaud (France)

15.30 CO-22-5

Understanding functional consequences of hepatic macrophage heterogeneity in NAFLD. Anneleen Remmerie (Belgium)

15.42 CO-23-5

Molecular dissection of macrophage control on tissue repair and regeneration. Petros Tzerpos (Hungary)

15.54 CO-24-5

Resident macrophages cloak tissue microlesions to prevent neutrophil-driven inflammatory damage. Stefan Uderhardt (USA)

16.05 Type 2 immunity, macrophages& tissue repair.Judith Allen (United Kingdom)

16.35 EMDS Young researcher award talk
Chair: Thomas Decker

ZEB1 expression by cDC1s is crucial for splenic macrophage numbers and splenic cDC1 and cDC2 phenotype.

Charlotte Scott (Belgium)

17.00 POSTER SESSION - EVEN NUMBERS

18.30 EMDS Council meeting

SOCIAL PROGRAM

19.00 Welcome desk for Gala dinner

20.00 Gala dinnerPalais de la Bourse9, La Canebière - 13001 Marseille

FINAL PROGRAM SATURDAY, SEPTEMBER 14TH



SEPTEMBER 12-14 The mononuclear phagocyte system in development, immunity and cancer

08.30 Opening of the registration desk

SESSION VI

TUMOR

Chairs: Toby Lawrence & Jenny Valladeau

09.00 Conserved myeloid cell populations across individuals and species. Mikael Pittet (USA)

09.30 co-25-6

Jun regulates monocyte-derived macrophage accumulation and tumour progression. Marcello Delfini (France)

09.42 CO-26-6

Single cell mapping of human brain cancer reveals tumor-driven education of tumor-associated leukocytes. Ekaterina Friebel (Switzerland)

09.54 CO-27-6

Inflammasome-independent IL-1 B release by myeloid cells in the tumor microenvironment promotes immune suppression and therapy resistance. Kiss Maté (Belgium)

10.06 CO-28-6

Mouse and human cutaneous sauamous cell carcinomas harbor distinct dendritic cell subsets that can be reprogrammed by a local immunomodulatory treatment. Ophélie Vermeulen (France)

10.18 IFN-III is selectively produced by cDC1 and predicts good clinical outcome in human breast cancer. Jenny Valladeau (France)

10.48 Coffee break and poster viewing

11.20 co-29-6

High-dimensional single-cell based functional immuno-metabolism by ZeNITH identifies conserved energetic programs in human and mouse myeloid cells. Rafael Arguello (France)

11.32 CO-30-6

Identification of two functionally distinct subsets of macrophages infiltrating human breast cancer. Rodrigo Ramos (France)

11.45 Immune archetypes in cancer and myeloid tuning strategies. Matthew Krummel (USA)

12.15 Invitation to EMDS 2020 in Aarhus, Denmark

12.25 Awards ceremony & concluding remarks

13.15 End of the meeting

CHAIRS & SPEAKERS

William AGACE (Sweden) Judith ALLEN (United Kingdom)

Marc BAJÉNOFF (France)

Burkhard BECHER (Switzerland)

Yasmine BELKAID (USA)

Bénédicte CHAZAUD (France)

Marc DALOD (France)

Thomas DECKER (Austiria)

Elisa GOMEZ-PERDIGUERO (France)

Jean-Pierre GORVEL (France)

Martin GUILLIAMS (Belgium)

Muzlifah HANIFFA (United Kingdom)

Sophie HELAINE (United Kingdom)

Julie HELFT (France)

Sandrine HENRI (France)

Peter HILL (United Kingdom)

Steffen JUNG (Israel)

Matthew KRUMMEL (USA)

Toby LAWRENCE (United Kingdom)

Andrew MACDONALD (United Kingdom)

Bénédicte MANOURY (France)

Olivier NEYROLLES (France)

Helena PAIDASSI (France)

Mikael PITTET (USA)

Soren PALUDAN (Denmark)

David SANCHO (Spain)

Michal SCHWARTZ (Israel)

Elodie SEGURA (France)

Michael SIEWEKE (France)

Vanja SISIRAK (France)

Roxane TUSSIWAND (Switzerland)

Jenny VALLADEAU (France)

COMMITTEES

SCIENTIFIC COMMITTEE

Marc BAJÉNOFF

Marc DALOD

Jean-Pierre GORVEL

Sandrine HENRI

Toby LAWRENCE

Bernard MALISSEN

Flodie SFGURA

Michael SIEWEKE

CFCD SCIENTIFIC COMMITTEE

Christelle FAVEEUW

Franck HALARY

Julie HELFT

Sophie LAFFONT-PRADINES

Bénédicte MANOURY

Helena PAIDASSI

Lionel POULIN

Elodie SEGURA

Vanja SISIRAK

Jenny VALLADEAU

ORGANIZING COMMITTEE

Marc DALOD

Sandrine HENRI

Michael SIEWEKE



POSTERS - ODD NUMBERS

THURSDAY, SEPTEMBER 12TH



CONFERENCE SEPTEMBER 12-14 EMDS 2019

World Trade Center Marseille Provence, MARSEILLE, FRANCE The mononuclear phagocyte system in development, immunity and cancer

BIOLOGY OF DC SUBSETS

- O1 Particulate antigen sampling, migratory and naïve T cell priming abilities of monocyte-derived phagocytes in Peyer's patches. Camille Wagner (France)
- O3 Differential regulation of human dendritic cell biology by Leishmania infantum and Leishmania braziliensis. Giulia Lopes (Brazil)
- **05** Genome-wide analysis of dendritic cell differentiation. *Ioanna Tiniakou (USA)*
- **07** Small intestine epithelial cells shape the identity and fate of dendritic cells. *Claudia Rivera (France)*
- O9 Tracking human intestinal monocyte differentiation through single cell RNA sequencing. Line Wulff (Denmark)
- 11 Dendritic cells pre-condition naive T cells to promote their proliferation and effector differentiation potential. Caroline Wrangel (Germany)
- 13 Role of RUFY4 in autophagy and immunity. Jan Valecka (France)
- 15 Investigation in SCFA effect on function and plasticity of intestinal dendritic cells. Anna Andrusaite (United Kingdom)
- 17 Mononuclear phagocytes analysis in mesenteric lymph nodes reveals differences between ulcerative colitis and Crohn's disease. Marika Sarfati (Canada)
- 19 Differentiation pathways of monocyte-derived phagocytes in Peyer's patches. Hugues Lelouard (France)

- 21 A gut microbiota-derived metabolite reroutes intestinal expansion of antigen presenting cells from circulating monocytes for enhancing anti-tumoral activity and survival in colorectal cancer.

 Camille Chauvin (France)
- 23 Regulation of lung dendritic cell homeostasis by Epstein-Barr virus induced gene 2 (EBI2). Lili Zhang (Germany)
- 25 STAT 1 and Type I IFN signaling pathway regulates dendritic cell development during steady state and inflammation.

 Chien-Kuo Lee (Taiwan)
- 27 Cytomegalovirus-encoded gamma-chemokine vXCL1 selectively activates XCR1 expressed on CD4- dendritic cells. Sebastian Voigt (Germany)
- 29 Extracellular release of antigen by dendritic cell regurgitation promotes B-cell activation.

 Fatah Ouaaz (France)
- 31 Single-cell RNA-seq reveals a segregation pattern of expression of the immunoregulatory protein GILZ in precursors of human blood DCs. Véronique Godot (France)
- 33 Bioactive glass: antibacterial efficacy and dose dependent in vitro modulation of dendritic cells. Elisabeth Zinser (Germany)

HOMEOSTASIS

35 Statins induce the anti-inflammatory mediator GILZ (glucocorticoid-induced leucine zipper) in macrophages.

Rebecca Linnenberger (Germany)

- 37 Mapping the spatial distribution of colonic mononuclear phagocyte populations.

 Dorothée Berthold (United Kingdom)
- 39 Characterization of tissue-resident and infiltrating macrophages in the resolution of inflammation.

 Peter Rappl (Germany)
- 41 Comparative transcriptional analysis of gut-associated regulatory factors on bone marrow-derived macrophages. Ian Prise (United Kingdom)
- 43 Hypoxic macrophage derived oncostatin-M inhibits cardiac fibrosis. Hiroaki Semba (Japan)
- 45 MEFV/miR-326 axis involvement in human macrophage polarization. Isabelle Duroux-Richard (France)
- 47 Role of intestinal dendritic cells and macrophages in inflammatory bowel disease. Charles Caër (Sweden)
- 49 A single-cell RNA-seq atlas of intestinal mononuclear phagocytes.

 Maria Gomez (United Kingdom)
- 51 Long term maintenance of alveolar macrophage identity through massive ex vivo expansion in culture.

 Sethuraman Subramanian (France)
- 53 Human mononuclear phagocyte kinetics in health and disease.

 Amit Patel (United Kingdom)
- 55 Transcriptional interplay during myelopoiesis. Nina Henning (Germany)
- **57** Fetal-derived macrophages dominate in adult mammary glands. *Pia Rantakari (Finland)*

- 59 Polymerase III transcription is necessary for T cell priming by dendritic cells. *Philippe Pierre (France)*
- 61 Splenic CD169+ marginal zone macrophages directly cross-prime CD8+ T cells in vivo using a vacuolar processing pathway. François-Xavier Mauvais (France)
- 63 Sex and age determine the heterogeneity, transcriptional identity and function of peritoneal macrophages.

 Stephen Jenkins (United Kingdom)
- 65 Lupus autoimmunity and metabolic parameters are exacerbated upon high fat diet-induced obesity due to TLR7 signalling.

 Lena Alexopoulou (France)
- 67 The fate and plasticity of inflammatory macrophages during peritonitis.

 Pieter Louwe (United Kingdom)
- 69 In vitro generation of colonic inflammatory monocyte-like cells and their plasticity into colonic macrophages.

 Marwa Bsat (Canada)

HOST-PATHOGEN INTERACTION

- 71 UPR-induced modulation of DC functions involved in T cell-mediated immunity during T. gondii infection.

 Anaïs Poncet (France)
- 73 Brucella abortus infection drives rapid macrophage disappearance reaction from the peritoneal cavity.

 Gonzalez Espinoza Gabriela (France)
- 75 Common monocyte progenitors are novel effector cells in mycobacterial immunity.

 Anne Kathrin Lößlein (Germany)

POSTERS - ODD NUMBERS

THURSDAY, SEPTEMBER 12TH



CONFERENCE SEPTEMBER 12-14
EMDS 2019

World Trade Center Marseille Provence, MARSEILLE, FRANCE The mononuclear phagocyte system in development, immunity and cancer

- 77 The fate and function of hepatic macrophages during parasitic infection.

 Mohamed Musrati (Belgium)
- 79 Role of transcription factors in peripheral blood monocyte responses to sepsis.

 Ivana Andrejcinova (Czech Republic)
- 81 Upregulation of interleukin-4 induced Arginase 1 leads to a more sufficient infection control in Salmonella typhimurium infected macrophages.

 Natascha Brigo (Austria)
- 83 The role of STAT1 isoforms in macrophage priming by IFNγ. Mojoyinola Joanna Ola (Austria)
- 85 Effect of antibody-dependent intracellular neutralization on antigen-presentation by dendritic cell. Patricia Na (Singapore)
- 87 Functions of PERK in autoimmune diseases and endoplasmic reticulum stress. Julien Gigan (France)
- 89 Dynamical modeling of human T helper cell differentiation.

 Camille Chauvin (France)
- 91 Ly6Chi monocytes are key orchestrators of gammaherpesvirus lifecycle. Céline Maquet (Belgium)
- 93 Elucidating the role of SteA of Salmonella typhimurium in modulating host responses. Aakanksha Gulati (India)
- 95 Helminth infection modifies the lung macrophage responses that is associated with early susceptibility to gammaherpesvirus concurrent infection in C57BL/6 mice.

 Benjamin G. Dewals (Belgium)

- 97 Deciphering the role of polysialic acid in the macrophage response to Mycobacterium tuberculosis infection. Aurélien Boyancé (France)
- 99 Macrophage-B cell interactions in the inverted porcine lymph node and their response to porcine reproductive and respiratory syndrome virus. Nicolas Bertho (France)
- 101 Deciphering activation pathways of CD64 on human neutrophils and CD169 on monocytes, application to bacterial versus viral infection diagnosis. Fabrice Malerque (France)
- 103 A gammaherpesvirus infection blocks the functionality of type 2 innate lymphoid cells in the context of HDM-induced airway allergy. Laurent Gillet (Belgium)

NEUROIMMUNOLOGY

- 105 Impact of macrophages on lymphoid neogenesis in CNS inflammation.

 Linda Groeneweg (Germany)
- 107 IFNγ controls the monocyte to phagocyte transition during tissue inflammation.
 Ana Amorim (Switzerland)
- 109 Probing the role of microglia in relapsing-remitting EAE.

 Zhana Haimon (Israel)

TUMOR

111 Dissecting dendritic cell sialic acid-mediated interactions in antitumor immunity.

Jinyu Wang (Switzerland)

- 113 TNF-RIPK3 axis is crucial for the Kupffer cell reduction associated with tumoral progression following partial hepatectomy. Jean-François Hastir (Belgium)
- 115 The association of chitinase-like protein YKL-39 with locoregional and distant metastases in human colorectal cancer. Patysheva Marina (Russian Federation)
- 117 Targeting dendritic cells
 with glycosylated liposome-based
 vaccines for modulation
 of the immune system.
 Aram De Haas (Netherlands)
- 119 Circulating lymphocytes and dendritic cells populations and subpopulations in cutaneous melanoma.

 Ionescu Adina-Claudia (Romania)
- 121 Tumor-derived inflammation drives T cell fate.

 Pierre Bourdely (United Kingdom)
- 123 The role of bone marrow macrophages in the HSC niche during leukaemia growth. Flora Birch (United Kingdom)
- **125** Identification of specific tumor associated macrophage targets in human breast cancer.

 Cassetta Luca (United Kingdom)
- 127 A paradoxical role for Flt3 ligand in tumor immune response reveals homeostatic control of NK and Treg cells by dendritic cells.

 Nicolas Cagnard (France)
- 129 CCR8 as a novel biomarker for the specific targeting of a highly suppressive tumor infiltrating regulatory T cell subset.

 Jo Van Ginderachter (Belgium)
- 131 In vivo pre-treatment of tumour-derived dendritic cells with anti-CD40

- agonist mAb results in therapeutic responses in resistant tumour models when used as vaccination strategies. *Aleks Murgaski (Belgium)*
- 133 Ganglioside-containing liposomes target antigen to splenic CD169+ macrophages and induce T cell responses via Batf3-dependent dendritic cells.

 Joanna Grabowska (Netherlands)
- 135 Lysates of glioma cells, glioma-conditioned or normal astrocytes differently influence dendritic cell function. Ivan Chekhonin (Russian Federation)
- 137 Food-derived β-glucans enhance plasticity of M2 macrophages towards new phenotype characterized by production of T cell chemo-attractants. Priscilla De Graaff (Netherlands)
- 139 Omental macrophages of embryonic origin promote metastatic spread of ovarian cancer. Anders Etzerodt (Denmark)

TISSUE REPAIR

- 141 A potential role for Bmp in macrophage recruitment to injured muscle revealed by mass cytometry. Matthew Borok (France)
- 143 Monocyte driven immune response in experimental aortic valve stenosis. Christina Weisheit (Germany)
- 145 Functional Impact of macrophages during tissue repair and aging.

 Kémy Adé (France)

POSTERS - EVEN NUMBERS

FRIDAY, SEPTEMBER 13TH



CONFERENCE SEPTEMBER 12-14 EMDS 2019

The mononuclear phagocyte system in development, immunity and cancer

BIOLOGY OF DC SUBSETS

- **02** Frequency of immature dual negative dendritic cells is altered in systemic lupus erythematosus.

 Preeti Gautam (India)
- **04** The role of Tyk2 in dendritic cells. Stephen Shoebridge (Austria)
- O6 Characterizing the immunosuppressive functions and development factors of CD1c+CD14+ dendritic cells. Anouk Becker (Netherlands)
- **08** 28 parameters flow cytometry for a better definition of myeloid cells in tissues. *Valentin Le Guen (France)*
- 10 Exploring mononuclear phagocyte diversity in the human gut with single-cell sequencing and flow cytometry. Thomas Fenton (Denmark)
- 12 ICELLNET: reconstruction of intercellular communication networks using transcriptomic profiles. Floriane Noel (France)
- 14 Diversity of osteoclasts contributes to the modulation of their inflammatory effect and resorptive function. Claudine Blin-Wakkach (France)
- 16 Regulation of steady state dendritic cell migration. Vuk Cerovic (Germany)
- 18 Creating new mouse strains to selectively track plasmacytoid dendritic cells across tissues and monitor their functions.

 Michael Valente (France)
- 20 Adjustment of dendritic cells to the breast-cancer microenvironment is subset specific.

 Paula Michea (France)

- 22 Skin dendritic cells progressively subvert the activation of pathogenic type-2 immunity upon epicutaneous allergen immunotherapy. Léo Laoubi (France)
- 24 Characterisation of chicken FLT3+ XCR1+ conventional dendritic cells (cDC) highlights conservation and divergences in amniote cDC function and development. Adam Balic (United Kingdom)
- 26 Effective cancer immunotherapy by natural mouse conventional type-1 dendritic cells bearing dead tumor antigen. Stefanie K. Wculek (Spain)
- 28 Differential accumulation and activation of monocyte and dendritic cell subsets in inflamed synovial fluid discriminates between juvenile idiopathic arthritis and septic arthritis.

 Pascale Louis-Plence (France)
- 30 CD103posCD11bneg dendritic cells are crucial for development of primary biliary cholangitis.

 Debby Reuveni (Israel)
- **32** Identification of a mononuclear phagocyte as the major source of IL-23 production in chronic plaque psoriatic skin. *Heena Mehta (Canada)*

HOMEOSTASIS

- 34 C/EBPβ-dependency of alveolar macrophages. Dorothea Dörr (Germany)
- 36 Non-)canonical TYK2 a monarch in signalling into chromatin?

 Anzhelika Karjalainen (Austria)
- **38** Unraveling the layers of embryonic myelopoiesis. *Laina Freyer (France)*

- 40 Identification of the red pulp macrophage niche in the mouse spleen. Alicia Bellomo (France)
- 42 MSR 1 triggers JNK-mediated lipid-induced inflammation and promotes obesity-associated non-alcoholic fatty liver disease. Sine Kragh Petersen (Sweden)
- **44** Resolving the Kupffer cell niche. *Johnny Bonnardel (Belgium)*
- **46** Aging associated immunosenecent phenotype of peripheral blood monocytes. *Barbora Frankova (Czech Republic)*
- 48 Adipose tissue macrophage specific deletion of SH2 domain-containing protein tyrosine phosphatase 1 (SHP-1) improves glucose homeostasis in obese insulin resistant model. Yadhu Sharma (India)
- 50 Unbiased analysis of the myeloid differentiation cascade using single-cell phenotyping and transcriptomics combined with lineage tracing. Joseph Pucella (USA)
- **52** A macrophage-specific transcription enhancer sustains MHCII expression and antigen-presenting capacity. *Cristina Lopez Rodriguez (Spain)*
- 54 Development of human lung macrophages from fetal and adult progenitors in vivo. Tim Willinger (Sweden)
- 56 Multilevel control of dendritic cell homeostasis by ADAM10-mediated ectodomain shedding. Ronald Backer (Germany)
- 58 Diverse macrophage populations exist in postnatal ovaries.

 Heli Jokela (Finland)

- **60** Crystalline silica impairs the efferocytosis ability of human and mouse macrophages. *Valérie Lecureur (France)*
- **62** MHC-II expression on resident colonic macrophages is partially regulated by the microbiota.

 Joël Guillaume (Germany)
- 64 Microbial disruption drives metabolic rewiring in pulmonary macrophages and a dysregulated type 2 response in the lung. Mann Elizabeth (United Kingdom)
- 66 Heterogeneous macrophage responses to dead cell clearance during development and inflammation.

 Noelia Alonso Gonzalez (Germany)
- 68 A single wave of monocytes is sufficient to replenish the long-term Langerhans cell network after immune injury.

 Clare Bennett (United Kingdom)
- 68A Epigenetic innate immune memory in hematopoietic stem cells. Bérangère de Laval (France)

HOST-PATHOGEN INTERACTION

- 70 Modulation of the IL-6 signaling pathway in herpes simplex virus type-1-infected mature dendritic cells. Alexandra Düthorn (Germany)
- 72 T cell-dependent upregulation of arginase 1 in monocyte-derived cells accounts for chronic cutaneous leishmaniasis caused by Leishmania mexicana.

 Baplu Rai (Germany)
- 74 CD14 turnover participates in regulation of inflammatory response in murine macrophages. Anna Ciesielska (Poland)

POSTERS - EVEN NUMBERS

FRIDAY, SEPTEMBER 13TH



CONFERENCE SEPTEMBER 12-14
EMDS 2019

World Trade Center Marseille Provence, MARSEILLE, FRANCE The mononuclear phagocyte system in development, immunity and cancer

- 76 Hepatitis B virus-induced modulation of liver macrophage function promotes hepatocyte infection.

 Marion Delphin (France)
- 78 Deciphering cell-to-cell communication in perturbed whole blood using single-cell RNA sequencing.

 Nico Reusch (Germany)
- 80 First description of human innate response immunomodulation by uropathogenic escherichia coli (UPEC). Lopes Giulia (Brazil)
- **82** Mechanisms of HIV-1 transfer from T lymphocytes to macrophages. *Christel Verollet (France)*
- **84** Expression of TCR, but not of CD3, on human macrophages is dependent on mycobacterium tuberculosis virulence. *Ramon-Luing Lucero De Los Angeles (Mexico)*
- 86 STAT1 in myeloid cells promotes extramedullary haematopoiesis during MCMV infection and sterile inflammation. Bulat Tanja (Austria)
- 88 Tolerant DCs induced upon exposure to HTLV-1-infected T cells.

 Auriane Carcone (France)
- 90 M-CSF induced myeloid and NK cell differentiation cascade protects from CMV viremia during hematopoietic stem cell transplantation. Prashanth Kumar Kandalla (Germany)
- 92 Constitutive Siglec-1 expression by human dendritic cell precursors enables HIV-1 replication and transmission to activated CD4+ T cells. Nicolas Ruffin (France)
- 94 Human CD1c+ dendritic cells are refractory to BK polyomavirus but transmit

- it to human primary renal tubular epithelial cells and protect it from neutralization. Franck Halary (France)
- 96 Herpes simplex virus paralyzes dendritic cell migration. Linda Grosche (Germany)
- 98 Characterization of Rufy3 protein in dendritic cells: potential modulator of autophagy and immunity. Remy Char (France)
- 100 Na+-boosted antibacterial defense is dependent on HIF1A and NFAT5. Patrick Neubert (Germany)
- 102 A gammaherpesvirus licenses CD8+ T cells to protect the host from pneumovirus-induced immunopathologies. Bénédicte Machiels (Belgium)

NEUROIMMUNOLOGY

- 104 CD83 expressed on dendritic cells and microglia controls inflammatory autoimmune responses in the periphery and the central nervous system.

 Andreas Wild (Germany)
- 106 A single-cell atlas of mouse brain macrophages reveals unique transcriptional identities shaped by ontogeny and tissue environment. Kiavash Movahedi (Belgium)
- 108 Exploring myeloid cell heterogenicity in the resolution of surgery induced intestinal inflammation reveals neuroprotective role for ariginase-1 macrophages. Matteoli Gianluca (Belgium)
- 110 The effect of traditional Chinese medicine compounds in regulating dendritic cells underlying Parkinson' disease.

 Allen Cheung (Hong Kong)

TUMOR

- 112 In vitro models for screening of immune modulating properties of drug candidates under immunosuppressed conditions seen in cancer.

 Gad Monika (Denmark)
- 114 Differences in the effect of cisplatin on the transcriptional profile of tumor-associated macrophages of breast cancer and colon cancer in vitro. Irina Larionova (Russian Federation)
- 116 Revisiting the role of type 1 conventional dendritic cells (cDC1) in cancer immunosurveillance.

 Raphaël Mattiuz (France)
- 118 Analysis at single cell level of the heterogeneity of tumor associated macrophage in triple negative breast cancer.

 Timperi Eleonora (France)
- **120** Tumor-induced monocyte adhesion drives pre-metastatic niche formation. Seung Hyeok Seok (Republic of Korea)
- 122 Tumor-infiltrating myeloid cells are conserved between human and mouse lung cancers.

 Camilla Engblom (Sweden)
- 124 Analysis of the transcriptome of circulating Ly6C(hi) monocytes reveals JAM-A as a novel marker of tumor-induced monocyte reprogramming.

 Laoui Damya (Belgium)
- 126 CCL17 suppresses macrophage anti-tumor activity to promote tumor growth.

 Rebecca Metzger (Germany)

- 128 BAD-LAMP influences TLR9 signaling zone in human plasmacytoid dendritic cell and contribute to triple negative breast cancer immune evasion.

 Leone Dario (France)
- 130 Polarization of TAMs to a pro-inflammatory phenotype by SPIONs as an adjuvant lung cancer therapy. Natalie Horvat (Germany)
- 132 Reactivation of tumor associated macrophages *via* proprotein convertase 1/3 inhibition.

 Marie Duhamel (France)
- 134 Impact of lactic acid on human macrophage polarization.

 Clément Adam (France)
- 136 Impact of tumor infiltration by DCs and other immune cells on patient survival.

 Guillaume Darrasse-leze (France)
- 138 Development of a next generation immune checkpoint modulator towards the clinic; a humanized BTN3A antibody (ICT01) activating gamm9delta2 T cells. René Hoet (France)
- 140 Metabolic re-programming of monocytes-macrophages in tumor settings regulates their pro-tumor functions. Subhra Kumar Biswas (India)

TISSUE REPAIR

- **142** Understanding hepatic macrophage heterogeneity in acute liver injury. *Anna Bujko (Belgium)*
- 144 Immune-instructive polymers
 for modulating macrophage polarization
 and promotion of wound healing.

 Amir Ghaemmaghami (United Kingdom)

GENERAL INFORMATION



EMDS 2019

World Trade Center Marseille Provence, MARSEILLE, FRANCE The mononuclear phagocyte system in development, immunity and cancer

CONFERENCE VENUE

World Trade Center Marseille Provence 2, rue Henri Barbusse 13001 Marseille, France Tel.: +33 (0)4 13 94 04 13



WORLD TRADE CENTER MAP

- Entrance
- 2 Reception desk
- 3 EMDS conferences
- 4 Exhibition area
- 5 Poster area



ACCESS/PUBLIC TRANSPORT

- By train: Saintt-Charles TGV station (5 minutes walk).
 1 hr30 min from Lyon, 3 hrs from Paris.
- By plane: Marseille-Provence International Airport (20 minutes by car). Direct flights to 18 destinations in France and 65 across Europe, Africa, the Middle East and North America.
- By metro or light rail: Vieux-Port or Colbert-Hôtel de Région station (1 minute walk).
- By car: direct access from major highways A7 and A55.



Parking: Parking Centre Bourse, 100 m away (1,800 spaces). Direct entry to the World Trade Center Marseille Provence.

Taxi: Taxi Radio Marseille Tel.: +33 (0)91 02 20 20

OFFICIAL LANGUAGE

English.

RECEPTION DESK

The reception desk at the conference venue will be open:

- Thursday, September 12th: 08.00 to 18.30
- Friday, September 13th: 08:00 to 18.30
- Saturday, September 14th: 08.30 to 13.15

REGISTRATION FEES ONSITE (fees are expressed in euros, VAT* included)

• 33RD ANNUAL CONFERENCE..........720€

Registration includes: congress material, welcome cocktail, gala dinner and lunches.

Information about VAT* for invoicing procedures: public institutions registering their employees should request for VAT exemption. Private citizens are due to pay the registration fees VAT included.

Separate registration is needed for the gala dinner.

*VAT: value added tax.



GENERAL INFORMATION



CONFERENCE SEPTEMBER 12-14 EMDS 2019

World Trade Center Marseille Provence, MARSEILLE, FRANCE The mononuclear phagocyte system in development, immunity and cancer

SOCIAL PROGRAM

(reserved only for those who have prebooked) For availability onsite, please ask to the registration desk.

Friday, September 13th: 20:00 Gala dinner at Palais de la Bourse 9, La Canebière - 13001 Marseille

4 minutes walking from the World Trade Center and the Hotel Mercure Vieux Port.



TECHNICAL HELP & MEDIA CHECK FOR SPEAKERS

A technician will help to transfer your presentation into the computer in conference room.

The use of a personal laptop for presentation is not allowed.

Please remember to bring your 16/9 PowerPoint presentation on a USB memory stick.
Please make sure to respect the schedule in order

Please make sure to respect the schedule in order to prevent any delay during the sessions.

GUIDELINES FOR ORAL COMMUNICATIONS

- Invited speakers: 30 minutes (discussion included)
- Short talks speakers: 12 minutes (discussion included)

Make sure to bring your 16/9 presentation before the beginning of the session.

GUIDELINES FOR POSTERS

- Thursday, September 12th:
 posters odd-numbered must be hang
 from 08.00 to 19.30.
 They must be removed at the latest
 at 19.30 the same day.
- Friday, September 13th:
 posters even-numbered must be hang
 from 08.00 to 18.30.
 They must be removed at the latest
 at 18.30 the same day.

The posters should remain in place for the entire time of scheduled poster session according to your day of presentation.

We kindly ask you to remove your poster at the end of the session, should you want to keep it or not.

Be careful: a poster not removed on time for the next session will be discarded.

The congress will provide double-sided adhesive for delicate surfaces at the reception desk.

WIFI

A free congress network is available at the conference venue:

• WiFi access: EMDS2019

• Password: Congres-EMDS-2019

WARNINGS

All participants should kindly remember that during the conference photographs will be taken and videos recorded for subsequent publication on the websites.

Participation at the event is considered as automatically consenting for the use of images.

LUGGAGE/CLOACK ROOM

A cloack room will be available only on saturday. We kindly ask you to leave your luggage at the luggage deposit of your hotel if possible. A limited storage for luggage will be available at the conference venue only on saturday.

CONGRESS OFFICIAL DOCUMENTS

INVOICES

Your invoice(s) can be downloaded from your Com&Co account using the passwords used to proceed to your online registration.

CERTIFICATE OF ATTENDANCE

An email will be sent right after the last day of the congress to propose you to fill out a congress feedback survey.

At this moment you will be able to download your certificate of attendance.





InvivoGen offers an expanding collection of InvivoFit™ recombinant mouse anti-mouse monoclonal antibodies (mAbs). These mAbs were engineered to limit their immunogenicity for a constant efficacy upon repeated injections in mice. Our collection includes mAbs targeting immune checkpoints such as PD-1, and tumor-associated antigens such as gp75. These mAbs are produced in Chinese hamster ovary (CHO) cells and are provided in an InvivoFit™ grade, a high-quality standard specifically adapted to in vivo studies.



Features of InvivoFit™ mouse anti-mouse mAbs:

- O Sequence is 85% to 100% murine
- O Guaranteed sterile, endotoxin level: <1 EU/mg
- Suitable for parenteral delivery in mice
 (azide-free)
- O Low aggregation: < 5%
- Produced in both animal-free facilities and defined media

www.invivogen.com/mouse-anti-mouse-mabs

ACKNOWLEDGEMENTS



The mononuclear phagocyte system in development, immunity and cancer

SCIENTIFIC SUPPORTERS

UNDER THE PATRONAGE OF







































L'instant où la qualité de votre recherche entre dans une nouvelle dimension **Avec la gamme ZEISS Microscopie optique 3D**







ZEISS ELYRA

ZEISS LSM 900 Airyscan 2

ZEISS LSM 980 Airyscan 2

Caractéristiques :

- Sensibilité accrue : pour l'imagerie du vivant
- Vitesse accrue : pour l'imagerie dynamique
- Résolution accrue : pour l'imagerie fine



