

SCIENTIFIC PROGRAMME OF THE 2ND INTERNATIONAL CONFERENCE

"IMMUNOMICROTOPE – MICROENVIRONMENTAL, METABOLIC AND MICROBIAL SIGNALS REGULATING IMMUNE CELL-PATHOGEN INTERACTIONS"

Erlangen, April 9-11, 2025

Wednesday, April 9, 2025

12:30 - 02:00 pm Registration

02:00 - 02:30 pm Christian Bogdan | Speaker RTG 2740 and Director Institute of

Clinical Microbiology, Immunology and Hygiene, Erlangen, Germany |

Welcome and Introduction

SESSION 1: HEMATOPOIETIC CELLS AS HOST CELLS AND IMMUNOREGULATORS

Chair:

02:30 – 03:00 pm Gordon Brown | United Kingdom | C-type lectins in immunity.

03:00 - 03:30 pm Tim Lämmermann | Germany | Mast cell dynamics - unique among immune cells.

03:30 - 03:45 pm Short Talk 1

03:45 - 04:00 pm Short Talk 2

04:00 - 04:30 pm *Coffee-Break*

SESSION 2: EPIGENETIC AND METABOLIC REGULATION OF T-CELL IMMUNITY

Chair:

04:30 – 05:00 pm Wilfried Ellmeier | Austria | Histone deacetylases and the control of T

cell-mediated immunity.

05:00 – 05:30 pm Kilian Schober | Germany | Metabolic quiescence precedes and

maintains human antigen-specific T cell memory in vivo.

05:30 - 05:45 pm Short Talk 3

05:45 - 06:00 pm Short Talk 4

7:00 pm Speakers dinner (invited speakers and members of RTG 2740 only)

Thursday, April 10, 2025

SESSION 3: EPIGENETICS, INFECTION AND HOST IMMUNITY

Chair:

09:00 – 09:30 am Melanie Hamon | France | Bacteria-mediated histone modifications in

health and disease.

09:30 - 10:00 am Monica de Rolando | France | Exploring epigenetic reprogramming by

Legionella pneumophila during infection.

10:00 - 10:15 am Short Talk 5

10:15 - 10:30 am Short Talk 6

10:30 - 11:00 am *Coffee-Break*

SESSION 4: TISSUE MICROMILIEU FACTORS AND INFECTIONS

Chair:

11:00 - 11:30 am	Fernanda Novais USA Hypoxia and CD8 T cells in cutaneous leishmaniasis.
11:30 - 11:50 am	Jonathan Jantsch Germany Title to be announced
11:50 - 12:10 pm	Baplu Rai Germany Role of arginase and arginine in the pathogenesis and treatment of <i>L. mexicana</i> infections.

12:10 - 2:00 pm Lunch Palmeria / Free time

SESSION 5: IMMUNOMETABOLISM AND INFLAMMATION

Chair:

02:00 – 02:30 pm Joanna Maria Kalucka | Denmark | Endothelial interferon signaling drives inflammation through metabolic rewiring.

02:30 – 03:00 pm Thomas Weichhart | Austria | Metabolic regulation of tissue homeostasis by macrophages.

03:00 - 03:15 pm Short talk 7

03:15 - 03:30 pm Short talk 8

03:30 - 03:45 pm Short talk 9

03:45 - 04:15 pm *Coffee-Break*

SESSION 6: PATHOGEN METABOLISM, VIRULENCE AND IMMUNE CELL MODULATION

Chair:

04:15 – 04:45 pm Gerald Späth | France | Going nuclear: Leishmania epigenetic subversion of macrophage immuno-metabolic functions.

04:45 – 05:15 pm Malcolm McConville | Australia | Parasite metabolism and pathogenesis.

05:15 - 05:30 pm Short talk 10

05:30 - 05:45 pm Short talk 11

06:00 pmPoster session with dinner (invited speakers and members of RTG 2740 only)

Friday, April 11, 2025

SESSION 7: MUCOSAL AND INTESTINAL IMMUNOLOGY

Chair:

09:00 - 09:30 am Marco Colonna | USA | Exploring the heterogeneity of Roryt-positive

cells in the intestinal mucosa.

09:30 – 10:00 am Matthew Hepworth | United Kingdom | ILC regulatory networks in

mucosal barrier tissue microenvironments.

10:00 - 10:15 am Short talk 12

10:15 - 11:00 am Coffee-Break

SESSION 8: HUMAN INFECTION MODELS (PART 1)

Chair:

11:00 – 11:30 am Richa Mishra | Germany | Disrupting cord architectures to enhance antibiotic treatment and lung health in *Mycobacterium tuberculosis*

infections.

11:30 – 12:00 am Franziska Faber | Germany | Bacteroides thetaiotaomicron

accelerates *Clostridioides difficile* virulence programs during cocolonization of hypoxic, mucus-producing human colon models.

12:00 - 12:15 pm Short talk 13

12:15- 12:30 pm Short talk 14

12:30 - 12:45 pm Short talk 15

12:45 - 02:15 pm *Lunch Palmeria/ Free time*

SESSION 9: HUMAN INFECTION MODELS AND SYSTEMS IMMUNOLOGY (PART 2)

Chair:

02:15 – 02:45 pm Laura Dirkx | Belgium | Hematopoietic cells as niche for Leishmania.

02:45 – 03:15 pm Paul Kaye | United Kingdom | Landscape immunology of Old World cutaneous leishmaniasis.

03:15 - 03:30 pm Short talk 16

03:30 - 03:45 pm Short talk 17

03:45 – 04:00 pm Short talk 18

04:00 – 04:15 pm Christian Bogdan | Closing remarks

05:00 pm Social evening at "Klosterbräu" Bamberg