Invitation to the Conference

Food, Microbiota and Immunity
"For strong immunity – feed your microbiota well"
June 7–10, 2017, Castle Třešť, Czech Republic

This conference is intended for approx. 90–100 participants, especially PhD students and young researchers. The conference will include a poster session, which will provide an excellent opportunity for early career researchers in immunology, microbiology and food research to meet prominent experts in these dynamic fields. The meeting is organized as part of Strategy of Czech Academy of Sciences AV21: “Foods for the Future” in cooperation with Czech Immunological Society, EFIS and the immunological foundation Homunculus.
Conference fee is waived for all participants.

Organizing Committee:
Helena Tlaskalová-Hogenová, Miloslav Kverka
Martin Bilej, Jiří Hrdý, Hana Kozáková, Luca Vannucci
Preliminary Program:

**Wednesday June 7**

17:00  
Arrival

18:00 - 19:00  
Dinner

19:00 - 19:15  
**Opening Ceremony**  
(Helena Tlaskalová-Hogenová, Martin Bilej and Miloslav Kverka)

Chairperson: Martin Bilej

19:15 - 20:00  
**Keynote Lecture – Přemysl Berčík (Canada)**  
The interplay between the intestinal microbiota and the brain

20:00 - 22:00  
**Welcome Cocktail**

**Thursday June 8**

**Session: Gut Physiology**

Chairpersons: **Jerry Wells (The Netherlands) and Pavel Drastich (Czech Republic)**

9:00 - 9:20  
**Vladimír Kořínek (Czech Republic):**  
Intestinal epithelial cell renewal

9:20 - 9:40  
**Tor Savigde (USA):**  
Microbial neuroregulators of intestinal inflammation

9:40 - 10:00  
**Maayan Levy (Israel):**  
Control of intestinal immunity by the microbiome

10:00 - 10:20  
**Martin Schwarzer (France):**  
Microbiota and selected lactobacilli strains sustain mouse juvenile growth dynamics upon undernutrition

10:20 - 10:40  
**Discussion**

10:40 - 11:00  
Coffee Break

**Session: Innate Immunity and Inflammation**

Chairpersons: **Omry Koren (Israel) and Helena Tlaskalová-Hogenová (Czech Republic)**

11:00 - 11:20  
**Marina Freudenberg (Germany):**  
Lipopolysaccharide sensing in innate immunity

11:20 - 11:40  
**Dominik Filipp (Czech Republic):**  
Enteric alpha-defensins, thymus and microbiota: Essential players of intestinal autoimmunity
11:40 - 12:00 Holm Uhlig (United Kingdom):
Defective bacterial handling in inflammatory bowel disease – insights from rare Mendelian disorders

12:00 - 12:20 Discussion
12:20 - 14:00 Lunch

Session: Inflammation and Cancer

Chairpersons: Michael Russell (USA) and Blanka Říhová (Czech Republic)

14:00 - 14:20 Ronnie Apte (Israel):
IL-1 in colon inflammation and carcinogenesis

14:20 - 14:40 Luca Vannucci (Czech Republic):
Microbiota and mucosal structure relationships: the example of germ-free animal conventionalization

14:40 - 15:00 Pavel Vodička (Czech Republic):
Could nutritional supplements modulate the conventional therapy of colorectal cancer?

15:00 - 15:20 Discussion
15:20 - 15:40 Coffee Break

Session: Microbiota – Diet Interaction

Chairpersons: Irma Schabussova (Austria) and Jan Kopečný (Czech Republic)

15:40 - 16:00 Ulrich Steinhof (Germany):
Immunological and microbiological effects of dietary protein vs. dietary fibers

16:00 - 16:20 Miloslav Kverka (Czech Republic):
Diet, gut microbiota and mucosal immunity in intestinal homeostasis, inflammation, and cancer

16:20 - 16:40 Vojtěch Rada (Czech Republic):
Effect of prebiotics on intestinal bacteria

16:40 - 17:00 Discussion
17:00 - 18:00 Panel Discussion (Panelists: TBA)
18:00 - 20:00 Dinner
20:00 - 22:00 Posters (Cheese and Wine)

Friday June 9

Session: Pathogens and Commensals

Chairpersons: Marina Freudenberg (Germany) and Ludmila Prokešová (Czech Republic)
9:00 - 9:20  **Michael Russell**  (USA):
Thinking globally, acting locally: using the mucosal immune system to
distinguish pathogens and commensals

9:20 - 9:40  **Peter Šebo**  (Czech Republic):
PAMP versus MAMPS: What makes molecular patterns of pathogens
different from structures of commensals

9:40 - 10:00  **Sabina Górska**  (Poland):
Structural diversity and biological significance of polysaccharide produced
by *Lactobacillus* bacteria

10:00 - 10:20  **Ursula Wiedermann**  (Austria):
Microbiome, probiotics and vaccination

10:20 - 10:40  Discussion

10:40 - 11:00  Coffee Break

*Session: Methodological Aspects*

Chairpersons:  **Tor Savidge**  (USA), …

11:00 - 11:20  **Marek Šinkora**  (Czech Republic):
Microbial colonization as driving factor in porcine gut lymphocyte development

11:20 - 11:40  **Jiří Janata**  (Czech Republic):
Oral microbiota in health and periodontal disease

11:40 - 12:00  **Petr Baldrián**  (Czech Republic):
Methods used in microbiome research

12:00 - 12:40  Discussion

12:40 - 14:00  Lunch

14:00 - 18:00  Trip to Telč

19:00 - 22:00  Barbecue Evening

*Saturday June 10*

*Session: Microbiota and Allergy*

Chairpersons:  **Ulrich Steinhoff**  (Germany) and Ludmila Tučková  (Czech Republic)

9:00 - 9:20  **Hana Kozáková**  (Czech Republic):
Effect of probiotics on allergic sensitisation

9:20 - 9:40  **Irma Schabussova**  (Austria):
Impact of microbiota on the development of allergy: Challenging the nose and the
gut

9:40 - 10:00  **Jiří Hrdý**  (Czech Republic):
Early administration of *E. coli* O83:K24:H34 prevents allergy development

10:00 - 10:20  **Božena Cukrowska**  (Poland):
Microbial programming and the role of probiotics in allergy development
Session: Influencing the Development of Microbial Ecology

Chairpersons: Holm Uhlig (United Kingdom) and Jiří Nevoral (Czech Republic)

11:00 - 11:20 Jerry Wells (USA):
Age-associated impairment of the mucus barrier function is associated with profound changes in microbiota and immunity

11:20 - 11:40 Omry Koren (Israel):
Antibiotics in infancy: what is happening to the microbiome?

11:40 - 12:00 Discussion

12:00 - 12:30 General Discussion

12:30 - 14:00 Lunch

14:00 Departure