

# Infection & Immunity

## Joint Doctoral Retreat

06.03.16 - 10.03.16

HOROS Innsbruck & Univ. Copenhagen

in cooperation with International doctoral programmes

The logo for the Austrian Science Fund (FWF) consists of the letters 'FWF' in a bold, blue, sans-serif font.

Der Wissenschaftsfonds.



HOROS

doctoral programme of excellence



UNIVERSITY OF  
COPENHAGEN



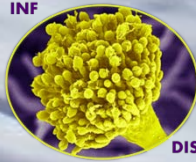
MEDIZINISCHE UNIVERSITÄT  
INNSBRUCK



universität  
innsbruck



INF



DIS



Rigshospitalet

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## Sunday 06 MARCH

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### TRANSFERS

#### Bus

Innsbruck Airport: 14:00 (but will wait until all Danish students are on board)

#### Bus

Innsbruck Clinics

South Entrance: 14:30 (coming from the airport!)

#### Taxi

Innsbruck Airport: 18:30 (for Martin – sorry for waiting a bit – Ebbe and Andreas!)

**LOOK OUT FOR THE HOROS SIGN – AS SEEN ON LAST PAGE!**

#### Address of Venue:

Universitycentre Obergurgl, Gaisbergweg 5, A-6456 Obergurgl,  
[www.universitycenter-obergurgl.at](http://www.universitycenter-obergurgl.at), [obergurgl@uibk.ac.at](mailto:obergurgl@uibk.ac.at)  
+43 512 507 37201

Emergency Mobile (Reinhard Würzner): +43 650 2009592

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## Sunday 06 MARCH

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- 16.00-18:00**      Arrival
- 18:00-19:45**      **D I N N E R**
- 19:45-20:00**      **Opening - Introduction of HOROS & INF-DIS**  
*Reinhard Würzner*
- 20:00-21:00**      **Satellite PhD projects**
- A pilot trial to assess the efficacy of Argatroban (Argatra®) in critically ill patients with heparin resistance**  
*Mirjam Bachler, INF-DIS, Innsbruck*
- Ex vivo reversal of the effects of rivaroxaban evaluated using ROTEM thromboelastometry and thrombin generation assay**  
*Bettina Schenk, INF-DIS, Innsbruck*
- The role of hospital surfaces in the transmission of nosocomial pathogens in wards and intensive care units- an overview of a PhD- project**  
*Christina Brühwasser, INF-DIS, Innsbruck*
- Non-molecular transduction of a biological signal using bacteria as a highly sensitive detection system**  
*Bernhard Pollner, INF-DIS, Innsbruck*
- 21:00-21:30**      **NK cells in immunity against Intracellular pathogens**  
*Ulrike Schleicher, Erlangen*
- 21:30**              **BAR DISCUSSION & DISCO**

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## Monday 07 MARCH

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08:15-09:15

**Arginase 1 and inducible oxide: two key players in antimicrobial defence**

*Christian Bogdan, Erlangen*

**Antimicrobial function and intracellular localization of inducible nitric oxide synthase in Leishmania infections**

*Stephanie Obermeyer, Erlangen*

09:15-09:45

**Dopamine regulates iron homeostasis and innate immune responses of macrophages to salmonella infection**

*Stefanie Dichtl, HOROS, Innsbruck*

**Effects of iron imbalances on mitochondrial activity *in vivo***

*Chiara Volani, BIDOC & HOROS, Innsbruck*

09:45-10:15

**C O F F E E   B R E A K**

10:15-10:45

**IFIH1-deficiency results in a cell-type specific alteration of autophagic activity in response to stimulation with *S. typhimurium***

*Sophie Macheiner, INF-DIS, Innsbruck*

**The role of prophylactic treatment with *A. muciniphila* in the acute alcoholic liver disease**

*Christoph Grander, INF-DIS, Innsbruck*

10:45-11:30

**Single shot booster vaccination against diphtheria does not induce sufficient long-term protection, particularly in elderly people**

*Marco Grasse, HOROS, Innsbruck*

**How fat influences the adaptive immune system in the bone marrow in old age**

*Carina Miggitsch, HOROS, Innsbruck*

**Phenotypical and functional characterisation of immune cells in the human bone marrow and the impact of aging"**

*Erin Naismith, HOROS, Innsbruck*

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16:00

**HOROS**

**Internal meeting** of faculty members with student representatives

- 17:00-17:15**      **BIDOC - Organisation and objectives**  
*Günter Weiss, BIDOC & HOROS, Innsbruck*
- 17:15-18:30**      **GWAS as a toolbox to find new genetic associations and to support causality**  
*Florian Kronenberg, BIDOC, Innsbruck*
- Precise determination of mitochondrial DNA copy number per cell**  
*Federica Fazzini, BIDOC & HOROS, Innsbruck*
- Identification of genetic & clinical correlates of the complement activation system in the Coop. Health Research in South Tyrol (CHRIS) study**  
*Damia Noce, BIDOC & HOROS, Innsbruck*
- 18:30-20:00**      **D I N N E R**
- 20:00-21:30**      **The relevance of novel missense mutations in the two newly described orthologues of lanosterol 14- $\alpha$  demethylase for azole resistance in clinically relevant Mucorales**  
*Rita Caramalho, INF-DIS, Innsbruck*
- Establishment of a 3D Human Lung Tissue Model to Study Polymicrobial Infections Projects & Initial findings**  
*Parul Chandorkar, HOROS, Innsbruck*
- The impact of biologic therapies and immunosuppressants on the risk of opportunistic infections**  
*Valentina Stolz, HOROS, Innsbruck*
- Tackling *Aspergillus* virulence from a nutritional angle**  
*Sven Krappmann, Erlangen*
- 21:30**              **BAR DISCUSSION & DISCO**

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## Tuesday 08 MARCH

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08:15-09:45

**Leucine biosynthesis is crucial for adaptation to iron starvation and virulence of *Aspergillus fumigatus***

*Thomas Orasch, HOROS, Innsbruck*

**Identification and characterization of antifungal drug targets in *Aspergillus fumigatus***

*Anna- Maria Dietl, HOROS, Innsbruck*

**The *Candida albicans* factor H binding molecule Hgt1p - in vitro and in vivo evidence that it function as virulence factor**

*Samyr Kenno, HOROS, Innsbruck*

**MBL is the main activator of complement on *Aspergillus fumigatus* conidia under immunocompromised conditions.**

*Anne Rosbjerg, UoC/RH, Copenhagen*

**Ficolins promote fungal clearance during the early stage of pulmonary infection with *Aspergillus fumigatus*.**

*Ninette Genster, UoC/RH, Copenhagen*

09:45-10:15

**C O F F E E   B R E A K**

**10:15-11:30**

**Antimicrobial and immunological  
competence of platelets**

*Cornelia Speth, HOROS, Innsbruck*

**Relevance of platelets and complement for  
the pathogenesis of invasive fungal  
infections**

*Hemalata Deshmukh, HOROS, Innsbruck*

**The gut microbiome and its impact on  
inflammation**

*Alexander Moschen, Innsbruck*

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**16:00**

**HOROS**

**Internal meeting** of all HOROS students  
(HOROS faculty members and INF-DIS  
students welcome)



**17:00-18:15**

**Microbial escape of innate immunity**

*Seppo Meri, Helsinki, Finland*

**Interaction of *Pseudomonas aeruginosa* with complement**

*Daniela Bichler, HOROS, Innsbruck*

**Specific acquisition of complement regulators by HCV**

*Britta Schiela, HOROS, Innsbruck*

**18:15-20:00**

**D I N N E R**

**20:00-21:30**

**Complement and Toll's - searching for "bottle-neck" molecules to treat inflammation**

*Tom Eirik Mollnes, Bodo/Oslo*

**The pig as laboratory animal in various relevant experimental *in vivo* models**

*Andreas Barratt-Due, Oslo*

**The efficacy of upstream inhibition of complement and CD14 in sepsis and ischemia-reperfusion injury: Key results from porcine models**

*Ebbe Billmann Thorgersen, Oslo*

**In vitro model of Ischemia/reperfusion (I/R) injuries**

*Rafael Bayarri Olmos, UoC/RH, Copenhagen*

**21:30**

**BAR DISCUSSION & DISCO**

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## Wednesday 09 MARCH

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**08:15-09:45**

**The lectin complement pathway-  
recognition, function and regulation**

*Peter Garred, UoC/RH, Copenhagen*

**Soluble collectin-12 (CL-12)/properdin  
crosstalk boosts innate immune  
recognition and complement activation**

*Ying Jie Ma, UoC/RH, Copenhagen*

**MAP-1 defines a role of the lectin  
complement pathway as a trigger and  
amplifier of the coagulation system**

*Mikkel-Ole Skjoedt, UoC/RH, Copenhagen*

**Cholesterol crystals activate the lectin  
complement pathway via ficolin-2 and  
MBL – implications for the progression  
of atherosclerosis**

*Katrine Pilely, UoC/RH, Copenhagen*

**09:45-10:15**

**C O F F E E   B R E A K**

**10:15-11:30**

**Fine-tuning of dendritic cell functions  
by complement-opsonized HIV**

*Doris Wilflingseder, MCBO, Innsbruck*

**Complement opsonization of *A. fumigatus* modifies dendritic cell function**

*Marion Steger, INF-DIS, Innsbruck*

**An investigation of the expression and  
activation of intracellular complement in  
children with acute lymphoblastic T cell  
leukemia (T-ALL).**

*Cecilie Bo Hansen, UoC/RH, Copenhagen*

**16:00**

**APRES SKI & FAREWELL AT A HUT**  
**<http://www.nederhuetten.at/en/apres-ski/>**

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## Thursday 10 MARCH

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**08:30-09:30**

**The complement modulator SALSA in placenta**

*Martin Reichhardt, Oxford*

**The viral vector vaccine VSV-GP as vaccine platform**

*Anika Bresk, INF-DIS, Innsbruck*

**Interaction of Shiga toxin and other EHEC virulence factors with the innate immune system**

*Sneha Chatterjee, HOROS, Innsbruck*

**10:00**

**Departure of bus to airport  
(will approx. arrive around 12:00-12:30)  
and further to clinics  
(will approx. arrive around 12:30-13:00)**

## Contact:

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+43 650 2009592

## Doctoral Programs:

HOROS	Host response in opportunistic infections (Innsbruck)
INF-DIS	Infectious diseases: molecular mechanisms (Innsbruck)
MCBO	Molecular Cell Biology and Oncology (Innsbruck)
UoC/RH	University of Copenhagen/Rikshospitalet (Copenhagen)



HOROS