

TUESDAY 26TH SEPTEMBER

08:00 | 09:10 Registration

09:10 | 09:30 Welcome ceremony

09:30 | 10:00 **OPENING LECTURE**

Chair : G. Yousef

BATRA Jyotsna [Brisbane, Australia]

- Kallikreins in post-GWAS era

10:00 | 10:25 Coffee break

10:27 | 11:45

Session 1

DESIGNING OF SUBSTRATES AND INHIBITORS FOR KLKS

Chairs : P. Goettig - G. Lalmanach

10:30 **HARRIS Jonathan** [Brisbane, Australia]

- Perspectives on peptide-based kallikrein inhibition: Coup de foudre or coup de folie?

11:00 **MILLER Aubry** [Heidelberg, Germany]

- Potent and Selective Small Molecule Inhibitors of KLK6

11:15 **WIECZOREK Anna** [Wroclaw, Poland]

- Designing of new substrates and inhibitors for kallikrein 5 and 7

11:30 **CHEN Xingchen** [Brisbane, Australia]

- Potent, broad-spectrum serine protease inhibition achieved by a simplified β -sheet motif

11:47 | 12:55

Session 2

KLKS AS BIOMARKERS (I)

Chairs : A. Scorilas - D. Ulmerth

11:50 **MAGDOLEN Viktor** [Munich, Germany]

- The clinical relevance of kallikrein-related peptidases in ovarian cancer

12:20 **PREIS Sarah** [Munich, Germany]

- Clinical relevance of kallikrein-related peptidase 8 [KLK8] in triple-negative breast cancer [TNBC]

12:35 **JORDA Mireia** [Barcelona, Spain]

- Kallikreins stepwise scoring reveals three subtypes of papillary thyroid cancer with prognostic applications

12:55 | 14:10 Lunch

TUESDAY 26TH SEPTEMBER

14:12 | 15:15

Session 3

KLKS IN PHYSIOLOGY AND NON-MALIGNANT DISEASES (I)

Chairs : F. Marceau - R. Sledacek

14:15

ALHENC-GELAS François [Paris, France]

- Kallikrein [K1]-kinins-kininase [ACE] in cardiovascular and renal diseases; new therapeutic developments.

14:45

HEIKER John [Leipzig, Germany]

- Ablation of kallikrein 7 [KLK7] in adipose tissue ameliorates metabolic consequences of high-fat diet induced obesity by counteracting adipose tissue inflammation in vivo

15:00

Di CANDIA Leonarda [Paris, France]

- Differential roles of kallikrein 5 and kallikrein 14 in the regulation of airway smooth muscle cell function in asthma

15:15 | 16:15

Session 4

KLKS IN PHYSIOLOGY AND NON-MALIGNANT DISEASES (II)

Chairs : J. Hooper - J. Clements

15:15

SCARISBRICK Isabel [Rochester, USA]

- Kallikreins as Signaling Molecules in the Central Nervous System.

15:45

PETIT-COURTY Agnès [Tours, France]

- Klk1 plays a detrimental role during the exudative phase of influenza virus infection in mice

16:00

FILIPPOU Panagiota [Toronto, Canada]

- Human tissue KLK15: Biochemical signature and first insights to potential pathophysiological roles

16:15 | 16:40

Coffee break

16:42 | 15:15

Session 5

PERSPECTIVES: MONOCLONAL ANTIBODIES TO THERAPEUTICALLY TARGET PROTEASES

Chairs : N. Heuzé-Vourc'h - O. Schilling

16:45

POUPON Anne [Tours, France]

- Bioinformatics methods for antibody development.

17:15

LIAUDET Emma [Montpellier, France]

- Targeting the protease cathepsin D in the tumor microenvironment of triple-negative breast cancer with human antibody.

17:45

HOOPER John [Brisbane, Australia]

- Inhibiting progression of ovarian cancer by antibody blockade of receptor activation mediated by kallikreins and other proteases

18:15

ULMERTH David [Malmö, Sweden]

- Immune-targeting of uncomplexed PSA and hK2 for precision imaging and therapy.

18:50 | 20:00

Welcome cocktail

WEDNESDAY 27TH SEPTEMBER

09:00 | 10:15

Session 6

KLKS IN TISSUE AND CELL SIGNALING

Chairs : D. Darmoul - F. Alhenc-Gelas

- 09:00 **MARCEAU François** [Quebec, Canada]
 • Tissue kallikrein [KLK-1] relationship with the bradykinin B1 and B2 receptors.
- 09:30 **PARSOPOULOU, Faidra** [Grenoble, France]
 • Carboxypeptidase N deficiency: variants in the CPN1 gene and biological phenotype
- 09:45 **HOLLENBERG Morley** [Calgary, Canada]
 • KLKs and microenvironment signaling in cancer and inflammation

10:15 | 10:40

Coffee break

10:42 | 12:15

Session 7

KLKS AND IMMUNITY

Chairs : D. Darmoul - F. Marceau

- 10:45 **SOTIROPOULOU Georgia** [Patras, Greece]
 • Update on KLKs and immunity.
- 11:15 **MAGEN Mélia** [Tours, France]
 • Tissue kallikrein [KLK1] regulates apoptosis of alveolar macrophages during influenza virus infection.
- 11:30 **FIGUEROA Carlos** [Valdivia, Chile]
 • Interrelationship between the kallikrein-related peptidases family and the classical kinin system in the human neutrophil.
- 12:00 **DREYER Tobias** [Munich, Germany]
 • CX3CL1 cleavage: a potential role in NK cell-mediated cell lysis in breast cancer.

12:17 | 12:46

BREAKING NEWS [I]

Chairs : P.Reverdiou - J.Batra

- 12:20 **GENG Xiaocong** [Munich, Germany]
 • Establishment of immunohistochemistry for kallikrein-related peptidase 10 [KLK10] and 11 [KLK11] protein expression in high-grade advanced [FIGOIII/IV] serous ovarian cancer.
- 12:27 **DI PAOLO Caitlin** [Toronto, Canada]
 • Elucidating the role of human tissue kallikrein-related peptidases in atopic dermatitis.
- 12:34 **WARTENBERG Mylène** [Tours, France]
 • A bradykinin-derived azapeptide as a potent inhibitor of cathepsin K.
- 12:41 **SIZARET Damien** [Tours, France]
 • KLK14 is downregulated in Chronic Obstructive Pulmonary Disease [COPD].

Free afternoon or excursion [13h30]

THURSDAY 28TH SEPTEMBER

08:45 | 10:15

Session 8

KLKS AS BIOMARKERS (II)

Chairs : V. Magdalen - E. Diamandis

08:45

LILJA Hans [New York, USA]

- Translation of data from prostate cancer susceptible GEM expressing abundant levels of catalytic vs. non catalytic PSA specifically in their prostates to improve the specificity in screening for lethal prostate cancer at early stage.

09:15

LIU Yueyang [Munich, Germany]

- Quantitative assessment of kallikrein-related peptidase [KLK] 9, 10, 11 and 15 mRNA expression in tumor tissue of advanced ovarian cancer patients: correlation with clinical outcome

09:30

SRINIVASAN Srilakshmi [Brisbane, Australia]

- Prostate cancer-risk associated germline variants in the PSA/KLK3 gene have a clinical impact

09:45

SCORILAS Andreas [Athens, Greece]

- KLK gene targeted non-coding RNAs (ncRNAs) and novel KLK transcripts: A new generation of multifactorial tumor biomarkers

10:15 | 10:40

Coffee break

10:42 | 12:15

Session 9

KLKS IN MALIGNANT DISEASES

Chairs : M. Hollenberg - C. Figueroa

10:45

CLEMENTS Judith [Brisbane, Australia]

- KLK peptidases in the tumour microenvironment.

11:15

IGNATENKO Natalia [Tucson, USA]

- Human tissue Kallikrein 6 enzyme activity regulates epithelial-mesenchymal transition in colon cancer.

11:30

EHRENFELD Ingrid [Valdivia, Chile]

- Role of kallikrein-related peptidases and kinin system in breast cancer progression.

11:45

LOWELL Scott [London, England]

- Activity-based Probes for Studying Kallikrein-related Peptidases in Prostate Cancer.

THURSDAY 28TH SEPTEMBER

12:02 | 12:46

BREAKING NEWS (II)

Chairs : A. Petit-Courty - J.Harris

- 12:05 **DETTMAR Larissa** [Munich, Germany]
 • Clinical relevance of kallikrein-related peptidase 13 [KLK13] and 14 [KLK14] mRNA expression levels in high-grade advanced (FIGO III/IV) serous ovarian cancer.
- 12:12 **GONG Weiwei** [Munich, Germany]
 • Establishment of qPCR assays for quantification of kallikrein-related peptidase 4 [KLK4] and 5 [KLK5] mRNA expression in tumor tissue of ovarian cancer patients.
- 12:19 **DE VITA Elena** [Heidelberg, Germany]
 • Discovery of KLK6 small molecule inhibitors.
- 12:26 **KRIAA Aicha** [Jouy en Josas, France]
 • Bacterial Serine proteases in IBD: innocent witness or partner in crime ?
- 12:33 **REVERDIAU Pascale** [Tours, France]
 • Tissue Factor Pathway Inhibitor 2, A Novel Inhibitor of Kallikrein-Related Peptidase 12.

12:50 | 14:10

Lunch

14:12 | 16:00

Session 10
KLKS IN SKIN DISORDERS

Chairs : M.Brattsand - G.Sotiropoulou

- 14:15 **SEDLACEK Radislav** [Prague, Czech Republic]
 • A TALE of novel mouse models to study KLK-networks in vivo.
- 14:45 **DARMOUL Dalila** [Paris, France]
 • Aberrant expression of kallikrein-related peptidase 7 in human melanoma, effects of its overexpression on cell migration and invasion.
- 15:00 **KASPAREK, Petr** [Prague, Czech Republic]
 • KLK5, KLK7 and LEKTI deficient mice shed light on the pathogenesis of Netherton syndrome.
- 15:15 **ZINGKOU Eleni** [Patras, Greece]
 • Effective therapy for Netherton syndrome requires combined targeting of KLK5 and TNF α .
- 15:30 **SCHILLING Oliver** [Freiberg, Germany]
 • Proteomic Approaches for a Better Understanding of Cellular Proteolysis.

16:00 | 17:30

Coffee break and poster session

19:30 | 22:00

Gala dinner

FRIDAY 29TH SEPTEMBER

09:00 | 10:05

AWARDS AND PRIZE

Chairs : V. Magdolen, F. Lecaillon, Y. Courty

E.K. FREY - E. WERLE FOUNDATION GOLD MEDAL AWARD

- 09:00 • History of the E.K. Frey - E. Werle Foundation of the Henning L. Voight Family.
V. Magdolen (Munich, Germany)
- 09:10 • Laudation for the 2017 E.K. Frey - E. Werle Commemorative Gold Medal.
E. Diamandis (Toronto, Canada)

- 09:20 **Commemorative Gold Medal Award talk : YOUSEF George** (Toronto, Canada)
• Kallikreins and Cancer: Re-kindling an Old Flame !

10:05 | 10:30

Coffee break

E.K. FREY - E. WERLE AND HENNER GRAEFF PROMOTION PRIZE

- 10:30 • History of the Henner Graeff Foundation.
V. Magdolen (Munich, Germany)
- 10:40 • Laudation for the 2017 E.K. Frey - E. Werle /Henner Graeff Promotion Prize.
G. Lalmanach (Tours, France)

- 10:50 **Promotion Prize talk : GOETTIG Peter** (Salzburg, Austria)
• The regulatory loop network of the KLKs.

2017 E.K. FREY - E. WERLE YOUNG INVESTIGATOR AWARD

- 11:25 • Laudation for the 2017 EK Frey - E Werle Young Investigator Awardee.
J. Clements (Brisbane, Australia)

- 11:30 **E.K. Frey - E. Werle Young Investigator Award talk : KRYZA Thomas** (Brisbane, Australia)
• The kallikrein-related peptidases are actively involved in the remodelling of the tumour microenvironment.

2017 HENNER GRAEFF YOUNG INVESTIGATOR AWARD

- 11:50 • Laudation for the 2017 Henner Graeff Young Investigator Awardee.
C. El Amri (Paris, France)

- 11:55 **Henner Graeff Young Investigator Award talk : SOUALMIA Feryel** (Paris, France)
• Synthetic modulators of kallikrein-related peptidases involved in skin and CNS diseases.

12:15 | 12:35

STUDENT AWARDS AND CLOSING REMARKS

- 12:45 Symposium closure, lunch / departure.