

PROGRAM

Monday 24th September 2018

Registration

3:00pm - 5:00pm
Caminetto

Sala

Plenary Session

5:00pm - 6:00pm
Chair: Michelle Dunstone
5:00pm **Feng Shao**

Salone Grollo

1 Pyroptosis execution by the Gasdermin family of pore-forming proteins *abs#*

Welcome Reception

6:00pm - 7:00pm
Terrace

Tuesday 25th September 2018

Registration

8:00am - 5:00pm

Sala Caminetto

Immunology/Immune Synapse

9:00am - 10:30am

Salone Grollo

Chair: Iliia Voskoboynik

9:00am **Julien Husson**
Mechanics of leukocyte activation *abs#*
2

9:30am **Liza Filali**
Molecular mechanisms of melanoma cell resistance to perforin-mediated cytotoxicity at the lytic synapse *abs#*
3

9:45am **Anna Kabanova**
The CD58-CD2 axis regulates lytic granule trafficking in cytotoxic T cells *abs#*
4

10:00am **Yenan Bryceson**
Unavailable at time of print *abs#*
5

Coffee Break

10:30am - 11:00am
Bar

Sala Billiardo & Main

Molecular Studies of Perforin

11:00am - 12:30pm

Salone Grollo

Chair: James Whisstock

11:00am **Bart Hoogenboom**
Pathways of perforin pore assembly *abs#*
6

11:30am **Kwasi A Kwakwa**
Single-Particle tracking for visualizing dynamics of perforin self-assembly *abs#*
7

11:45am	Julie A Spicer Perforin inhibitors: A twist in the tale 8	abs#
12:00pm	Joseph Trapani Novel small molecule inhibitors of lymphocyte perforin 9	abs#

Lunch

12:30pm - 1:30pm
Bar

Sala Billiardo & Main

Animal Immunity

1:30pm - 3:00pm		Salone Grollo
Chair: Doryen Bubeck		
1:30pm	Suzan Rooijackers Molecular insights into complement-mediated killing of Gram-negative bacteria 10	abs#
2:00pm	Bradley A Spicer Protein conformation of C9 controls the final membrane complex assembly 11	abs#
2:20pm	Daniel Bakopoulos The role and function of the Perforin-like protein Torso-like in <i>Drosophila</i> cellular immunity 12	abs#
2:40pm	Dennis J. Doorduyn Surface-bound enzymes facilitate pore formation by the Membrane Attack Complex to efficiently kill Gram-negative bacteria 13	abs#

Afternoon Tea & Poster Session

3:00pm - 5:00pm
Veneziana

Sala

Anastasija Panevska Aegerolysin-based cytolytic complexes acting through lipid receptor as potential biopesticides 50	abs#
Anna Sukova Mapping the inner profile of pores formed by adenylate cyclase toxin of <i>Bordetella pertussis</i> 51	abs#
Arunika Mukhopadhaya Modulation of host cellular responses by <i>Vibrio cholerae</i> porin OmpU 52	abs#
Charles Bayly-Jones Structural investigation into the macrophage immune effector, MPEG1/perforin-2 53	abs#
Christa H Winslow Revealing the porin function of P66 in <i>Borrelia burgdorferi</i> 54	abs#
Noemi Havlová Cardiolipin affects surfactin permeabilizing activity 55	abs#
Edward S Parsons Pathway and kinetics of assembly of a hetero-oligomeric immune pore 56	abs#
Evelyn Schubert Membrane insertion of α -xenorhabdolyisin in near-atomic detail 57	abs#

Humaira Khaliq	Role of acylation status in pore-forming activity of RTX toxins	abs#
58		
Jordan Evans	Individual residues within a conserved CDC motif are necessary for ring geometry of prepore oligomer and conversion to the pore.	abs#
59		
Klára Hryzáková	Structure and function of fonticins, phage tail-like bacteriocins	abs#
60		
Matej Skočaj	The potential use of ostreolysin A, a membrane-raft binding protein from the mushroom <i>Pleurotus ostreatus</i> , in treatment of bladder cancer	abs#
61		
Milda Zilnyte	Insights into the role of CD59 in vaginolysin pore formation	abs#
62		
Monika Bokori-Brown	Evidence of <i>Clostridium perfringens</i> epsilon toxin associated with multiple sclerosis	abs#
63		

Wednesday 26th September 2018

Registration

8:30am - 5:00pm

Sala Caminetto

Ultrastructure

9:00am - 10:30am

Salone Grollo

Chair: Michael Landsberg

9:00am	Ohad Medalia	The functional structure of the nuclear pore complex	abs#
		14	
9:30am	Marina Ivanova	Structure of the immune synapse observed by electron and X-ray tomography	abs#
		15	
9:45am	Doryen Bubeck	Structural basis of membrane attack complex pore formation	abs#
		16	
10:00am	Helen Saibil	Membrane disruption by malaria parasites during blood stage proliferation	abs#
		17	

Coffee Break

10:30am - 11:00am

Sala Billiardo & Main

Bar

Nanotechnology and Technical Applications

11:00am - 12:30pm

Salone Grollo

Chair: Bart Hoogenboom

11:00am	John Kasianowicz	The detection and characterization of molecules, one at a time, with nanometer-scale pores	abs#
		18	
11:20am	Kristina Sepčić	Potential applications of lipid-binding proteins from the aegerolysin family, and	

	aegerolysin/MACPF bi-component cytolytic protein complexes 19	abs#
11:40am	Bart W Bardoel The human complement system sensitizes Gram-negative bacteria for Gram-positive-specific antibiotics via pore formation in the outer membrane 20	abs#
12:00pm	Lakmal Jayasinghe Technology, platforms and applications of Oxford Nanopore Sequencing 21	abs#

Lunch

12:30pm - 1:30pm Sala Billiardo & Main Bar

Pore Forming Toxins in Pest and Pathogen Control

	1:30pm - 3:00pm	Salone Grollo
	Chair: Michelle Dunstone	
1:30pm	Neil Crickmore The use of <i>Bacillus thuringiensis</i> toxins for insect and cancer control 22	abs#
2:00pm	Jelena Zaitseva Structure/function of the novel coleopteran-toxic protein isolated from <i>Chromobacterium piscinae</i> 23	abs#
2:15pm	Victor Guzov Continuous evolution of Bt proteins overcomes Bt resistance in insects 24	abs#
2:30pm	Michelle Boyle Complementing antibodies to target malaria: the fight between MAC and the malaria parasite 25	abs#

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	63	

Thursday 27th September 2018

Registration

8:30am - 5:00pm

Sala Caminetto

Toxins, Bacteria and Microbiomes

9:00am - 10:30am

Salone Grollo

Chair: Helen Saibil

9:00am	Alfredo J Guerra A hydrophobic loop in <i>T. gondii</i> PLP1 is required for cytolytic activity and egress competence	abs#
	26	
9:20am	Irene Chassagnon Cryo-EM structures of YenTc, an insecticidal pore-forming toxin	abs#
	27	
9:40am	Kausik Chattopadhyay Structural basis and functional implications of the membrane pore-formation mechanism of <i>Vibrio cholerae</i> cytolysin	abs#
	28	
10:00am	Laurie Comstock Pore-forming antibacterial toxins produced by the gut microbiota	abs#
	29	

Coffee Break

10:30am - 11:00am

Sala Billiardo & Main

Bar

Poster Talks

11:00am - 12:30pm

Salone Grollo

Lunch

12:30pm - 1:30pm
Bar

Sala Billiardo & Main

Lunchtime Seminar

1:00pm - 1:30pm
Chair: Michael Landsberg

Salone Grollo

Session sponsored by

ThermoFisher
SCIENTIFIC

1:00pm **Massimiliano Maletta**
Cryo EM workflows for Single Particle Analysis and Tomography of hydrated, intact cells.
Introducing the new Krios G3i and Aquilos *abs#*
30

Bacterial Toxins, Cell Receptors and Signalling

1:30pm - 2:45pm Salone Grollo
Chair: Laurie Comstock

1:30pm **Lucy K Shewell**
Identification of glycan receptors for seven major cholesterol-dependent cytolysins *abs#*
31

1:45pm **Klaus Aktories**
Intracellular factors involved in up-take and action of bacterial glucosyltransferase
toxins *abs#*
32

2:15pm **Timothy Cover**
New insights into Helicobacter pylori vacuolating toxin *abs#*
33

2:45pm **Evelyn Schubert**
Membrane insertion of α -xenorhabdolyisin in near-atomic detail *abs#*
57

Poster Prizes & Conference Close

2:45pm - 3:30pm
Bar

Sala Billiardo & Main

Conference Dinner

5:00pm - 9:00pm

Il Baghino Restaurant