

Tuesday 26 March 2019

Exhibition hall
08:45 - 09:30 *Registration & coffee/tea*

09:30 - 11:00 **PLENARY SESSION**
Athene B/C *Chairs: Stanley Brul & Jetta Bijlsma*
09:30 - 09:35 **Opening**
09:35 - 10:15 0053 **The archaellum: how archaea swim**
Sonja Verena Albers
10:15 - 10:50 0054 **Micro-Scale Warfare with Macro-Scale Implications: Mechanisms and Consequences of Interbacterial Antagonism**
Joseph Mougous
10:50 - 11:00 **Kiem Award ceremony**
General Microbiology; Bacterial killing by complement requires membrane attack complex formation via surface-bound C5 convertases
Dani Heesterbeek
Medical Microbiology: Human CD45 is an F-component-specific receptor for the staphylococcal toxin Panton-Valentine leucocidin
Angelino Tromp
Microbial Ecology: Stress-induced formation of cell wall-deficient cells in filamentous actinomycetes
Karina Ranijan

Exhibition hall
11:00 - 11:30 *Coffee/tea break*

11:30 - 13:00 **PARALLEL SESSIONS**

Athene B/C **Risk of measles outbreak in Dutch hospitals anno 2019**
Chairs: Janke Schinkel & Annelies Riezebos-Brilman
11:30 - 11:45 0055 **A surprising souvenir from India...**
Serena slavenburg
11:45 - 12:00 0056 **Why you should't rush: implications of a rash decision during a grand round**
Matthijs Welkers
12:00 - 12:20 0057 **Epidemiology of measles; the risk of measles among healthcare workers in the Netherlands**
Irene Veldhuijzen
12:20 - 12:40 0058 **Correlates of protection; (what) should we test?**
Rik de Swart
12:40 - 13:00 0059 **Panel discussion: how do we protect health care workers and their patients from measles after occupational exposure**
Roel Coutinho

Sydney **Microbe-host interactions: from molecular to ecosystem scales**
Chairs: Paula Dalcin Martins & Annika Vaksmaa
11:30 - 12:00 0060 **Gut bacteria in the spotlight: discovery of a toxin breakdown pathway in the cabbage root fly**
Cornelia Welte
12:00 - 12:15 0061 **Deep impact: sponge-associated microbes and bioactivity change with depth**
Detmer Sipkema
12:15 - 12:30 0062 **The benefit of plant-*Streptomyces* interactions**
Anne van der Meij
12:30 - 12:45 0063 **Virally induced mortality of Antarctic algae**
Charlotte Eich
12:45 - 13:00 0001 **Campylobacter releases high levels of the inflammatory metabolite ADP-heptose that activate pro-inflammatory responses in intestinal epithelial cells**
Jiannan Cui

Room 4/5		Gut feeling; when microbiota meets microbiology <i>Chairs: Ed Kuijper & Paul Savelkoul</i>
11:30 - 12:00	O064	Role of the gut microbiota in patients with inflammatory bowel diseases Erwin Zoetedal
12:00 - 12:30	O065	Natural variations of microbiota in large populations Sasha Zhernakova
12:30 - 12:45	O066	How changes of the microbiota provokes colonization and disease by intestinal pathogens Quinten Ducarmon
12:45 - 13:00	O067	Guideline for probiotics to prevent and treat antibiotic-associated diarrhea in The Netherlands Ger Rijkers

Room 6/7		Microbial electron transfer pathways <i>Chairs: Julia Kurth & Stefanie Frisch</i>
11:30 - 12:00	O068	A novel sulfur oxidation system revealed in dimethyl sulfide-degrading <i>Hyphomicrobium denitrificans</i> Christiane Dahl
12:00 - 12:30	O069	What happens in the membrane, stays in the membrane; the role of quinones during microbial respiratory adaptation Duncan McMillan
12:30 - 12:45	O070	Purification and characterization of an oxygen-insensitive hydrogenase from a thermoacidophilic methanotroph Rob Schmitz
12:45 - 13:00	O002	Iron sheet piles are protected against corrosion by a consortium of anaerobic microorganisms Michiel In 't Zandt

Room 8/9		Microbial pathogenesis <i>Chair: Nina Sorge & Marcel de Zoete</i>
11:30 - 11:45	O003	MUC1 is a receptor for the Salmonella SiiE adhesin that enables apical invasion into enterocytes Xinyue Li
11:45 - 12:00	O004	Small molecule inhibition of the human microbiome-derived pro-oncogenic toxin BFT Annemarie Boleij
12:00 - 12:15	O005	Identification of protective antigens by exploring the natural niche of Streptococcus pneumoniae Lucille Van Beek
12:15 - 12:30	O006	Proteases C1r and C1s affect binding of C1q to certain human IgG subclasses Seline Zwarthoff
12:30 - 12:45	O007	Whole cell pertussis vaccination-induced antibodies efficiently block bacterial adherence to respiratory epithelial cells Evi van Schuppen
12:45 - 13:00	O008	Tumor promotion or inhibition? The effects of individual gut microbes on colorectal cancer cell proliferation Rahwa Taddese

Exhibition hall
13:00 - 14:00 Lunch

Room 4/5
13:00 - 14:00 KNVM Algemene Ledenvergadering

14:00 - 15:30 PARALLEL SESSIONS

Athene C
Analyzing (meta)genomics data; pitfalls, considerations and best practices
Chairs: Thijs Bosch & Birgitta Duim

14:00 - 14:30 O071 **Computational methods for microbiome analysis**
Marcus Claesson

14:30 - 15:00 O072 **Garbage in, Garbage out: Impact of raw data quality and data analysis in downstream genomic analysis**
João André Nogueira Custódio Carriço

15:00 - 15:15 O009 **Viral discovery using metagenomics in a clinical setting; the rediscovery of Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome**
Ellen Carbo

15:15 - 15:30 O010 **Unravelling the role of plasmid sequences in Enterococcus faecium**
Sergio Arredondo Alonso

Athene B
Education for increasing student numbers - from large groups to individual approach
Chair: Girbe Buist

14:00 - 14:30 O073 **Great interest of students creates challenges in higher professional education**
Ellen Hilhorst

14:30 - 14:45 O074 **Getting BSc students off to a flying start via a Student Centered Approach**
Nina Scheres

14:45 - 15:00 O075 **Large scale teaching technology**
Robbert van Veen

15:00 - 15:15 O076 **To honour or not to honour? Exploring the benefits of honoursprograms in applied sciences**
Willem van Leeuwen

15:15 - 15:30 O077 **StudentTalentCafe, a workshop creating a personal mission**
Aart van den Dool

Sydney
Viruses in cancer therapy
Chair: Bernadette van den Hoogen

14:00 - 14:30 O078 **Exploiting Virus Biology to Develop Cancer Therapeutics**
John Bell

14:30 - 15:00 O079 **Clinical translation of the oncolytic adenovirus Delta24-RGD for treatment of gliolastoma**
Martine Lamfers

15:00 - 15:15 O080 **Evolution of reovirus-based oncolytic viruses**
Iris Dautzenberg

15:15 - 15:30 O081 **The use of Newcastle Disease virus in oncolytic viro-immuno therapy**
Frederique de Graaf

Room 4/5		Host-microbe interaction <i>Chair: Linda de Graaf</i>
14:00 - 14:15	O011	A single gene enables phytopathogenic Pectobacterium to overcome the chemical defense system of Arabidopsis thaliana Tijs Van den Bosch
14:15 - 14:30	O012	Serum IgM binding to phosphorylcholine of non-typeable Haemophilus influenzae increases complement-mediated killing Jeroen Langereis
14:30 - 14:45	O013	Identification of mycobacterial PE protease PecA that cleaves secreted surface proteins and plays a role in virulence Maroeska Burggraaf
14.45 - 15:00	O014	Sensory neurons detect pathogens in the cerebrospinal fluid and improve survival during bacterial meningitis Kin Ki Jim
15:00 - 15:15	O015	Synthetic wall teichoic acid provides new insights into the systemic and mucosal human antibody repertoire for Staphylococcus aureus glycotypes Rob Van Dalen
15:15 - 15:30	O016	Mucosal immune response to controlled human Bordetella pertussis challenge Evi van Schuppen

Room 6/7		Microbial ecology <i>Chairs: Sudarshan Shetty & Guus Roeselers</i>
14:00 - 14:15	O017	Competition for glycans at the mucosal interface Ioannis Kostopoulos
14:15 - 14:30	O018	The identification of a novel Erysipelotrichaceae species, an immunogenic, IBD-associated mucin degrader Guus Van Muijlwijk
14:30 - 14:45	O019	Calcifying bacteria in sponges belong to different classes of Proteobacteria Leyre Garate
14.45 - 15:00	O020	An altered gut microbiota establishment in early life is linked with the development of atopic dermatitis Gianluca Galazzo
15:00 - 15:15	O021	The role of microbiome and soil composition on eelgrass seed germination and outgrowth Reindert Nijland
15:15 - 15:30	O022	Vegetative Cell and Spore Proteomes of Peptoclostridium difficile show finite differences and reveal potential biomarkers Wishwas Abhyankar

Room 8/9		New diagnostics and treatment modalities for orthopedic infections <i>Chairs: Ed Kuijper & Andre Trampuz</i>
14:00 - 14:30	O082	European approach to diagnose and treat prosthetic joints infections Andre Trampuz
14:30 - 15:00	O083	New antibiotic-free approaches to cure orthopaedic infections Harrie Weinans
15:00 - 15:15	O084	Radiological diagnosis of orthopaedic infections Ilse Kouijzer
15:15 - 15:30	O085	Induction heat to eradicate microorganisms from orthopaedic implants Bart Pijls

Exhibition hall**15:30 - 16:00***Coffee/tea break***16:00 - 17:30****PARALLEL SESSIONS****Athene C****The future of molecular diagnostics in microbiology***Chair: Suzan Pas*16:00 - 16:30 O086 **Next generation sequencing: first diagnostic one-stop shop in clinical microbiology**

John Rossen

16:30 - 17:00 O087 **How will Digital PCR advance clinical microbiology?**

Jim Huggett

17:00 - 17:15 O088 **Implementation of a rapid influenza A/B and RSV molecular assay at the Emergency Department of a peripheral hospital**

Mirjam Hermans

17:15 - 17:30 O089 **Extreme PCR, extreme possibilities?**

Petra Wolffs

Athene B**Human Disease Models for Studying Emerging Virus Pathogenesis***Chair: Barry Rockx*

16:00 - 16:30 O090

Organs-on-chips

Andries van der Meer

16:30 - 17:00 O091 **Models for studying arbovirus pathogenesis**

Jeroen Kortekaas

17:00 - 17:15 O092 ***In vitro* models of virus induced arthritis**

Noreen Mumtaz

17:15 - 17:30 O093 **Tissue microarrays for studying host-range**

Hélène Verheije

Sydney**The design and testing of alternative antibiotics: the examples of antibodies, peptides and phages***Chairs: Nina van Sorge & Oscar Kuipers*16:00 - 16:30 O094 **Molecular insight into antibody-dependent complement activation enhances bacterial clearance**

Suzan Rooijackers

16:30 - 17:00 O095 **The prospects of phage therapy**

Stan Brouns

17:00 - 17:15 O096 **Making NRPS the ribosomal way**

Fleur Ruijne

17:15 - 17:30 O023 **Inhibition of bacterial Type-5 secretion by small molecules**

Maurice Steenhuis

Room 4/5		Microbial physiology in anaerobic environments <i>Chairs: Cornelia Welte & Irene Sanchez Andrea</i>
16:00 - 16:30	O097	Autotrophy at the thermodynamic limit of life: what are the metabolic tricks of methanogenic archaea? Tristan Wagner
16:30 - 16:45	O098	An in depth look into the methanol metabolism of the acetogen Moorella thermoacetica strain AMP Nicolas Vecchini Santaella
16:45 - 17:00	O099	Characterization of a novel Verrucomicrobial methanotroph from Pantelleria island Nunzia Picone
17:00 - 17:15	O100	Sulfur reductive processes at low pH Lot van der Graaf
17:15 - 17:30	O101	Methane oxidation in anoxic lake waters mediated by novel facultative anaerobic methanotrophs Sigrid van Grinsven

Room 6/7		Focus on Mycology: Invasive and Emerging Fungi <i>Chairs: Esther Keizer & Pieter-Jan Haas</i>
16:00 - 16:30	O102	In vivo imaging of Aspergillus fumigatus infections Greetje Vande Velde
16:30 - 17:00	O103	Aspergillus taxonomy, diversity and resistance Jos Houbraken
17:00 - 17:15	O024	How are A. fumigatus conidia protected against peroxides? Esther Keizer
17:15 - 17:30	O025	Gene co-expression analysis identifies gene clusters associated with isotropic and polarized growth in Aspergillus fumigatus conidia Tim Baltussen

Room 8/9		Antimicrobial resistance <i>Chair: Jarne van Hattem & Karin von Eije</i>
16:00 - 16:15	O026	The impact of active HRMO surveillance in patients with prolonged hospitalization Guido Bastiaens
16:15 - 16:30	O027	The investigation of a nosocomial outbreak with vancomycin resistant enterococci; a comparison of amplified fragment length polymorphism and whole genome sequencing Victoria Janes
16:30 - 16:45	O028	Mechanisms of colistin resistance in nosocomial Escherichia isolates Axel Janssen
16:45 - 17:00	O029	Antimicrobial evaluation of a 3D printed dual antibiotic-loaded PLGA microparticles-GelMa hydrogel Clara Guarach Pérez
17:00 - 17:15	O030	Methicillin-resistant Staphylococcus argenteus from surveillance specimen misidentified as methicillin-resistant Staphylococcus aureus Roel Nijhuis
17:15 - 17:30	O031	Cross-border occurrence of an OXA-48 plasmid identified in three different Enterobacteriaceae species Casper Jamin
17:30 - 17:45	O104	Successful rescue treatment with aztreonam and ceftazidim/avibactam of a Dutch kidney transplant patient with sepsis due to a pandrug-resistant, New Delhi metallo-β-lactamase-producing Klebsiella pneumoniae Elske Sieswerda

Exhibition hall
17:30 - 18:30 *Drinks*

Restaurant
18:30 - 20:30 *Dinner*

Sydney
20:30 - 22:15 **POSTER SESSION**
20:30 - 21:15 Poster session - Even poster numbers
21:15 - 22:00 Poster session - Odd poster numbers
22:00 - 22:15 Poster award ceremony

Sydney
22:15 - 01:30 *Party*