

30 MARCH

4 APRIL

Palazzo dei Congressi
Piazza Adua, 1 - Florence (Italy)

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**24th International Pathogenic
Neisseria Conference**

Florence, Italy



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24th International Pathogenic Neisseria Conference

Palazzo dei Congressi, Florence, Italy

30 March - 4 April 2025

30 March 2025 - Auditorium

17.30 **Opening Lecture:**
Vaccine technologies
Rino Rappuoli

31 March 2025 - Auditorium

Neisseriae: Clinical relevance and epidemiology in 2025

9.00 - 9.30 Keynote:
David Stephens on "Evolution of the Pathogenic Neisseria: Links to Clinical Presentations and Pathogenesis"

9.30 – 9.50 A Manually Curated Pathway and Genome Database for Neisseria
Gonorrhoeae FA 1090. **B. Wilson-Mortier**, Australia

9.50 – 10.10 LIN code: a robust approach for defining and exploring gonococcal lineages.
A. Unitt, UK

10.10 - 11.00 *Coffee break*

11.00 - 11.20 Bacterial Meningitis Epidemiology in Burkina Faso and Niger - High-Risk
Countries in the Meningitis Belt of Sub-Saharan Africa, 2022-2023. **V.P. Pinell-
Mcnamara**, USA

11.20 – 11.40 A large outbreak of Neisseria meningitidis serogroup C and the first global use
of Men5CV – Nigeria, October 2023—June 2024 **A.L. Mohammed**, Nigeria

11.40 - 12.45 Flash Poster session: n.13 Flash presentations (5 min each of selected
posters) on Epidemiology, Men and gono vaccines, Policy
See list at the end of the program

12.45 - 14.15 *Lunch*

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- 14.15 – 14.35 Genomic analysis uncovers multiple strains in Umrah- and travel-related outbreak of serogroup W invasive meningococcal disease ahead of Hajj 2024
J. Lucidarme, UK
- 14.35 – 14.55 Fluctuations in serogroup B meningococcal vaccine antigens prior to routine MenB vaccination in France. **A.-E. Deghmane**, France
- 14.55 – 15.15 The Rise and Fall of Gonorrhoea: A Three-Year Seasonal Trend Analysis. **A. Choudhary**, India

Testimonies of life after disease

- 15.15 - 16.15 Keynote:
Sinead-Delany-Moretlwe on “Gonorrhoea in LMIC and impacts on women and children”
- 16.15 - 16.45 *Coffee break*
- 16.45 - 18.00 Poster viewing in Poster Area

1 April 2025 - Auditorium

Meningococcal and gonococcal vaccines

- 9.00 - 10.00 Keynotes:
Ann Jerse on “Gonorrhoea Vaccines: Status and Challenges in 2025”
Federico Martinon on “Meningococcal Vaccines: Where We Are and Where We’re Headed”
- 10.00 - 10.20 Long-term protection against invasive meningococcal disease and gonorrhoea, 5 years after implementation of an infant and adolescent 4CMenB vaccine program in South Australia **H. Marshall**, Australia
- 10.20 – 10.40 Impact of 4CMenB and MenB-fHbp on pharyngeal carriage in UK adolescents: The 'Be on the TEAM' randomised controlled trial **J. Carr**, UK
- 10.40 - 11.20 *Coffee break*
- 11.20 - 11.40 Immunogenicity and functionality of a N. gonorrhoeae vaccine (LTB-NG6) in animals **P. Carranza**, Switzerland

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11.40 – 12.00 Mucosal and Serum Immune Responses Against *Neisseria gonorrhoeae* (Ng) Outer Membrane Vesicle Antigens following Meningococcal 4CMenB Immunization in Healthy Adults. **P. Varun**, USA

12.00 – 12.20 Characterising the genetic diversity of the *Neisseria gonorrhoeae* outer-membrane protein PorB for improved vaccine development and surveillance. **H. Odile**, UK

12.20 – 12.40 Expression of gonococcal 2C7 lipopolysaccharide on meningococcal outer membrane vesicles **P. Van Der Ley**, Netherland

12.40 - 14.00 *Lunch*

Presentation from Manufacturers /Industry symposia

14.00 - 15.00 GSK Symposium: Evolution of *Neisseria meningitidis* serogroup B strain coverage methods: the prospects of harnessing machine learning technology to further improve strain coverage predictions
14:00 – 14:05 – Opening remarks. **Muhamed-Kheir Taha**
14:05 – 14:20 - Classic principal laboratory methods. **Jay Lucidarme**
14:20 – 14:35 - Estimation of strain coverage with different methods and how it compares to RWE. **Muhamed-Kheir Taha**
14:35 – 14:50 - GeCoPred - Machine learning in strain coverage prediction.

Margherita Boldrini

14:50 – 15:00 - Closing Remarks, Q&A, Discussion. **Muhamed-Kheir Taha**

15.00 – 16.00 Serum Institute of India Symposium: Can Men5CV the novel pentavalent meningococcal conjugate vaccine plays a key part in “Defeating Meningitis by 2030 - Global road map”??
15:00-15:10 - Welcome; history of meningitis vaccination and the MenAfriVac success story. **Seth Berkley**
15:10-15:20 - Trends in meningitis serogroup prevalence and the emergence of serogroup X. **Ana Paula Silva de Lemos**
15:20 – 15:30 - Advances in vaccine technology and the development of MenFive. **Prasad Kulkarni**
15:30 – 15:40 - Country perspectives on clinical trials, data collection and enabling access and uptake of vaccines. **Samba Sow**
15:40 – 16:00 - Q&A

16.00 -16.30 *Coffee break*

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Policy regulation/ Cost-effectiveness

16.30 - 18.00

Round table on WHO Global road map to defeat meningitis by 2030 and plans to introduce vaccines to eliminate epidemics **Chair/Speaker: Marie-Pierre Preziosi**

A 5-10 minute series of perspectives from each panelist, followed by opening to the audience for discussion and interaction with the panel

Introduction: will we defeat meningitis by 2030 **Marie-Pierre Preziosi**

Prevention and control of meningococcal meningitis: can and is the road map driving the impact **Samba Sow and Caroline Trotter**

A global landscape of meningococcal vaccines policies: significant heterogeneity in meningococcal vaccine use policies and practices **Nicole Basta**

Competing priorities and challenges for Gavi's vaccine support programmes: the place of multivalent meningococcal conjugate vaccines in Gavi Vaccine Investment Strategy. **Marta Tufet**

Multivalent meningococcal conjugate vaccines can curb outbreaks, and, above all, put African countries on the path to epidemic elimination **Abdulrazaq Habib**

Meningococcal carriage studies are essential to inform strategies for the use of multivalent meningococcal conjugate vaccines **Dominique Caugant**

The policy considerations for the use of multivalent meningococcal conjugate vaccines are complex. **Ziad Memish**

2 April 2025 - Auditorium

Clinical studies and translational research and correlates of protection

9.00 - 9.30

Keynote:

Alex Duncan on "Controlled Human Infection with *N. gonorrhoeae*, role of this model in understanding pathogenesis and immunity"

9.30 - 9.50

A randomised controlled trial of 4CMenB vaccine against gonorrhoea incidence. **C.C.M. Thng**, Australia

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- 9.50 – 10.10 Exploring the upper respiratory microbiome implications of nasal inoculation with *Neisseria lactamica* in mother-infant pairs and non-pregnant adults. **A. Theodosiou**, UK
- 10.10 – 10.50 *Coffee break*
- 10.50 - 11.10 ANRS 174 DOXYVAC: A randomized trial to prevent STI in MSM using antibiotic prophylaxis or 4CMenB Vaccine. **M. Molina**, France
- 11.10 – 11.30 Ability of Menb-fhbp-containing vaccines to provide immune protection against serogroup b sequence type 1161 UK university outbreak strains. **J. Findlow**, UK
- 11.30 - 12.40 Flash Poster session: n.14 Flash presentations (5 min each of selected posters) on **Clinical translational and correlates, Physiology, Antimicrobial**
See list at the end of the program
- 12.40 - 14.00 *Lunch*
- 14.00 – 14.20 A potent monoclonal antibody against gonococcal lipooligosaccharide with enhanced effector function and plasma half-life. **G. Davinder**, USA
- 14.20 - 14.40 Human monoclonal antibodies reveal subdominant gonococcal and meningococcal cross protective antigens. **E. Andreano**, Italy
- 14.40 – 15.00 Strain selection for the development of an oropharyngeal gonorrhoea controlled human infection model. **G. Pollock**, Australia
- 15.00 - 16.00 *Coffee break*
- 16.00 - 17.00 Round table on Preventing Gonococcal Infection Utilizing the 4CMenB Vaccine
Carolyn Deal, Shamez Ladhani, Helen Marshall, Stephane Regnier
- 17.00 - 18.00 Poster viewing in Poster Area

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3 April 2025 - Auditorium

Bacterial physiology and virulence, and in vivo & in vitro models

- 9.00 - 9.30 Keynote:
Chris Tang on “Gc plasmids”
- 9.30 – 9.50 Phase-Variable LOS epitopes of Neisseria gonorrhoeae and their role in sex-specific epithelial adherence. **L.M.B. De Deus Ponces De Carvalho**, UK
- 9.50 – 10.10 Exploring the metabolism of Neisseria gonorrhoeae during infection through genome scale metabolic modelling **D. Carruthers-Lay**, Canada
- 10.10 – 10.30 Interaction of human macrophages with Neisseria Gonorrhoeae. **A.-M. Dragoi**, USA
- 10.30 - 11.15 *Coffee break*
- 11.15 – 11.35 Gonococcal outer membrane vesicles induce porB-dependent epithelial cell mitophagy to enhance intracellular survival. **S. Van der Veen**, China
- 11.35 – 11.55 Neisseria gonorrhoeae suppresses inflammation at the human cervix by spatially regulating the initial local cytokine responses. **Y Dai**, USA
- 11.55 – 12.15 The role of CD9 across the meningococcal infective pathway. **P. Wolverson**, UK
- 12.15 – 12.35 Neisseria meningitidis Induces Dihydroceramide Accumulation and Alters Lipid Trafficking in Brain Endothelial Cells. **A. Weinmann**, Germany
- 12.35 - 14.00 *Lunch*
- 14.00 – 15.45 Poster Session 1 – Poster discussion in Poster Area
See Poster Presentation list at the end of the program
R. Rappuoli, Italy - **M. Pizza**, UK - **C. Azzari**, Italy
- 15.45 – 16.15 *Coffee break*
- 16.15 – 18.00 Poster Session 2 – Poster discussion in Poster Area
See Poster Presentation list at the end of the program
R. Rappuoli, Italy - **M. Pizza**, UK - **C. Azzari**, Italy

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4 April 2025 - Auditorium

Antimicrobial resistance: Clinical relevance and how to address it

- 10.00 - 10.30 Keynote:
Magnus Unemo (WHO collaborating centers / Orebro Univ Hospital)
- 10.30 - 10.50 An Investigation of Drug-Drug Interactions and Resistance Mutation Interactions Involving the Neisseria gonorrhoeae Replisome. **B. Bowcutt, USA**
- 10.50 – 11.10 A Novel Solution for Combating Multi-Drug Resistance in Neisseria gonorrhoeae. **F. Jen** Australia
- 11.10 – 11.30 Genome reorganization can contribute to antibiotic resistance in Neisseria gonorrhoeae. **D. Stein, USA**
- 11.30 - 12.00 *Coffee break*
- 12.00 – 12.20 Antimicrobial susceptibility trends and genomic characterization of Neisseria gonorrhoeae in Italy: 2021-2024. **P. Stefanelli, Italy**
- 12.20 – 12.40 Pharyngeal carriage study of UK adolescents reveals wide-spread carriage of genetically diverse Neisseria species harbouring various antimicrobial resistance mechanisms. **L. Walsh, UK**
- 12.40 – 13.00 Antimicrobial resistance determinants associated with azithromycin resistance in South African Neisseria gonorrhoeae, 2017- 2021. **M.P. Mahlangu, South Africa**

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FLASH POSTER PRESENTATIONS (5 min each in Auditorium):

Epidemiology

High Neisseria meningitidis oropharyngeal carriage trends in men who have sex with men: a public health warning	Memon Aminah
Update on the Epidemiology of Invasive Meningococcal Disease: Canada 2002-2023	Bettinger Julie
Assessing Maternal Contributions to the Prevention and Control of Sporadic Meningitis in Rural Communities: A Growing Concern of Geographic Risk Dynamics and Migration from High-Burden Regions	Iwu Chinedu Anthony
Assessing the use of point of care diagnostic testing for invasive meningococcal disease and the impact of this on the implementation of essential public health actions	Heymer Emma

Men and gono vaccines

Turbo, an adjuvant for multivalent meningococcal glycoconjugate vaccines	Alugupalli Kishore
Characterising the genetic diversity of the Neisseria gonorrhoeae outer-membrane protein PorB for improved vaccine development and surveillance	Harrison Odile
Insights into the Epitope-Specific Roles of Neisseria gonorrhoeae Reduction Modifiable Protein (Rmp) in Modulating Bactericidal Activity	Kasimov Vasilli
A combination native outer membrane vesicle (NOMV) vaccine to prevent meningococcal and gonococcal disease	Giuntini Serena
The importance of selecting outer membrane antigens from Neisseria meningitidis strains associated with different meningococcal polysaccharides for an effective protection	De Gaspari Elizabeth
Validation of bacterial meningitis case-based data in Niger, from 2021 to 2023: Analysis of validated data contribution to assess the impact of the new multivalent meningococcal conjugate vaccine	Tarbangdo Tiga Felix

Policy

Estimating the impact of immunization against Neisseria meningitidis with a pentavalent conjugate vaccine compared to monovalent serogroup A conjugate vaccine in the African meningitis belt	Habib Abdulrazaq
Estimating the full impact of implementing the "WHO Defeating meningitis by 2030: a global road map	Durupt Antoine
Identification and control of an outbreak of Serogroup Y invasive meningococcal disease in Quebec	De Wals Philippe De Wals

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Clinical translational and correlates

A Bioluminescence-based high-throughput Serum Bactericidal Assay to detect bactericidal antibodies against <i>N. meningitis</i> in human sera	Fantoni Giulia
Evaluation of the impact of insecurity and the COVID-19 pandemic on meningitis surveillance in Burkina Faso, 2015–2021	Ouedraogo Hamed Sidwaya
Two decades of <i>Neisseria gonorrhoeae</i> evolution in Western Kenya	Harrison Odile
Clinical management of gonorrhoea contacts: evaluation of a change from universal to selective treatment	Chow Eric
Characterization of IgG/IgM depleted pooled human complement and performance in meningococcal serogroup B human serum bactericidal activity assays	Reveille Alexandra

Physiology

Female sex hormones enhance gonococcal colonization at the endocervix by modifying cervical mucus	Di Benigno Sofia
Neutrophil-Derived Catecholamines Support Gonococcal Resistance to Nutritional Immunity	Westlake Camille
Initiation of Gonococcal Pilus Assembly by PilC: the Licensing Model	Merz Alexey
Macrophage infectivity potentiators are important in pathogenic <i>Neisseria</i> spp. for host innate defences and antibiotic resistance.	Hooton Thitiwat Joe
Evolution And Phylogeny of the Newly Characterized Ssn Protein Family of Site-Specific Single-Stranded DNA Endonucleases in Neisseriaceae and Beyond	Harrison Luke

Antimicrobial

Impact of the L421P mutation in the ponA1 gene, encoding Penicillin-Binding Protein 1, on fitness and antibiotic resistance in <i>Neisseria gonorrhoeae</i>	Nicholas Robert
The central role of the beta3-beta4 loop of penicillin-binding protein 2 in the cephalosporin resistance of <i>N. gonorrhoeae</i>	Davies Christopher
Development of a Culture-Independent Nanopore Sequencing Assay for Antimicrobial Resistance Gene Surveillance in Gonorrhoea	Hutton Shelby
Accelerated antimicrobial resistance testing of <i>Neisseria gonorrhoeae</i> in sexual health samples	Dhanjal Anisha

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IPNC2025**POSTER PRESENTATIONS** (Poster Area):

Title	Presenting
MOFs as Novel Antibacterial Agents: A Computational, Material Science and Experimental Investigation of Their Potential Against Neisseria gonorrhoeae	KANT RAVI
Artificial Intelligence-Driven Functional Annotation and Reverse Vaccinology based approach to Identify Novel Vaccine Candidates Against Neisseria gonorrhoeae	KANT RAVI
Botanical extract-guided discovery of phenethyl caffeate as antimicrobial compound with in vitro and in vivo anti-gonococcal activity through inhibition of elongation factor Tu	VAN DER VEEN STIJN
Bioinformatics-Driven discovery of potential vaccine candidates using Hypothetical Proteins in Neisseria gonorrhoeae: Toward New Therapeutic Strategies	TANEJA JYOTI
Re-evaluating the potential impact of doxycycline post-exposure prophylaxis (Doxy-PEP) on the selection of resistance in Neisseria commensals	ROBINSON LEAH
In vitro activity of an aqueous allicin extract against Neisseria gonorrhoea	MAHARJAN SUNIL
The GyrA-mediated in vivo fitness advantage in ciprofloxacin-resistant Neisseria gonorrhoeae is reproduced in media that mimics the thiamine- and iron-limited microenvironment of the genital tract	BOCCO GILDA
Antimicrobial Susceptibility Patterns of Neisseria Gonorrhoeae to Tetracycline and Penicillin: Should we Celebrate or Consternate?	DASH ANSHUMAN
Accelerated antimicrobial resistance testing of Neisseria gonorrhoeae in sexual health samples	DHANJAL ANISHA
GonoGate: A modular vector assembly system for the expression of genes in Neisseria gonorrhoeae	FLEMMING CHLOE
Targeting cysteine biosynthesis for new antimicrobials	HICKS JOANNA
RNase HI as a Drug Target in Neisseria gonorrhoeae	PENNYCUICK KATE
Three cases of XDR ST16406 in Norway, 2024	ELDHOLM VEGARD
Active-site tyrosine-422 is crucial for acylation and transpeptidation in penicillin-binding protein 2 from multi-drug resistant Neisseria gonorrhoeae H041	MONTEIRO-PAI JUANITA
HIGH RELIABILITY AND SPECIFICITY OF AGGLUTINATION TESTS IN THE LABORATORY DIAGNOSIS OF BACTERIAL MENINGITIS AT THE SUBNATIONAL LEVEL IN TOGO, FROM 2016 TO 2024	SADJI ADODO YAO
Multitarget real-time PCR assay for the rapid detection of Neisseria meningitidis, Haemophilus influenzae, and Streptococcus pneumoniae.	SHRESTHA SANDIP
In Vivo-Selected Gentamicin-Resistant Neisseria gonorrhoeae Exhibits a Fitness Cost In Vitro and In Vivo, and Compensatory Mutations May Support Spread of Resistance	OLIVER VINCENT
Material Science: The New Era of Gonococcal Treatment	RAVIKANT CHHAYA
Development of a Culture-Independent Nanopore Sequencing Assay for Antimicrobial Resistance Gene Surveillance in Gonorrhea	HUTTON SHELBY

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Identifying a minimal set of mutations in penicillin-binding protein 2 from the ceftriaxone-resistant strain H041 that confer a majority of cephalosporin resistance	BIVINS MARISSA
The central role of the beta3-beta4 loop of penicillin-binding protein 2 in the cephalosporin resistance of <i>N. gonorrhoeae</i>	DAVIES CHRISTOPHER
Phenotypic and Genomic Characterization of Multi-drug Resistant Gonococcal Isolates from the Global Surveillance GEIS Antimicrobial Resistance Program	LE VAN ADRIANA
Combating antibiotic resistance in <i>Neisseria gonorrhoeae</i> by targeting CysK, the final enzyme in cysteine biosynthesis	MCGARVIE JACK
Identification of two expanded-spectrum cephalosporins that target penicillin-binding protein 1 (PBP1) in <i>Neisseria gonorrhoeae</i>	ROBERT A NICHOLAS
Impact of the L421P mutation in the ponA1 gene, encoding Penicillin-Binding Protein 1, on fitness and antibiotic resistance in <i>Neisseria gonorrhoeae</i>	NICHOLAS ROBERT
Selection of a hyper adhesive meningococcal population by a filamentous phage	BILLE EMMANUELLE
Meningococcal capsule in determining the initial outcome of host-pathogen interactions	SAROJ SUNIL
Abdominal presentation of invasive meningococcal disease is correlated with the induction of plasminogen activator inhibitor in adipocyte of the omentum	TAHA MUHAMED- KHEIR
Restriction-methylation systems in <i>Neisseria gonorrhoeae</i> pilin antigenic variation	METAANE SELMA
Using CRISPRi to modulate <i>Neisseria gonorrhoeae</i> Pilin Antigenic Variation	METAANE SELMA
The periplasmic zinc binding protein Ngo1049 aids <i>Neisseria gonorrhoeae</i> assimilation to zinc limitation	LIYAYI IAN
Neutrophil-Derived Catecholamines Support Gonococcal Resistance to Nutritional Immunity	WESTLAKE CAMILLE
Investigating the contribution of <i>Neisseria gonorrhoeae</i> lactate metabolism to oxidative stress resistance	POTTER AIMEE
Environmental desiccation induces VBNC state in <i>Neisseria meningitidis</i>	KANOJIYA POONAM
Infection of cornea models with different <i>Neisseria gonorrhoeae</i> derivatives to study the importance of the Type IV pilus for bacterial adherence and infection outcome	KAFURI CIFUENTES LINA MARIA
The role of acetyl-phosphate in the pathogenesis of <i>Neisseria gonorrhoeae</i>	SHAW JONATHAN
HIGH THROUGHPUT TESTING FOR ASSOCIATIONS BETWEEN PHASE VARIATION STATES AND DISEASE-ASSOCIATED PHENOTYPIC TRAITS OF MENINGOCOCCAL DISEASE AND CARRIAGE ISOLATES	KIMANI MERCY
Identification of an interaction between the C-lobe of TbpB and the C-lobe of human transferrin: A potential role in the removal of iron-stripped transferrin from the TbpA, TbpB, transferrin complex	STOUDENMIRE JULIE
Unraveling the role of LutACB operon for the survival of <i>Neisseria gonorrhoeae</i> in the presence of neutrophils	KOZJAK-PAVLOVIC VERA
COMPLEMENT C5b-C8 AND C5b-C9 MEMBRANE ATTACK COMPLEXES POTENTIATE ANTIMICROBIAL ACTIVITY AGAINST DRUG-RESISTANT NEISSERIA GONORRHOEAE	CRISS ALISON
Gene conversion of the gonococcal NEIS1446-NEIS1442 operon contributes to anaerobic survival of the <i>Neisseria meningitidis</i> urethritis clade, NmUC	RODRIGUEZ EMILIO

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Investigating a Putative Surface Lipoprotein Assembly Modulator and dependent cargo in <i>Neisseria muscoli</i>	MCVICKER SLOANE
Molecular Characterization of Meningococcal Isolates from U.S. STD Clinics, 2017–2019	MARASINI DAYA
Regulatory mechanisms of <i>Neisseria subflava</i> capsule polysaccharide biosynthesis	NGUYEN ANH
Novel approach to selecting a contemporary <i>Neisseria gonorrhoeae</i> strain for oropharyngeal gonorrhoea human challenge: a genomics-based analysis	WILLIAMS ELOISE
A guanine-quadruplex and small RNA are pilE-associated structures that stall <i>Neisseria gonorrhoeae</i> chromosomal replication	BOIKO IRYNA
Decoding Bacterial Epigenetic Regulation via Phase-Variable Methyltransferases in Pathogenic <i>Neisseria</i> Species	ASCARI ALICE
Sulfur assimilation and metabolism in <i>Neisseria gonorrhoeae</i>	VAN NIEKERK STACY
Advanced human UV mucosal infection models as validation tools for vaccine development	MEHLING HELENE
The gonococcal candidate vaccine antigen NGO1701 is a periplasmic copper-binding protein, Csp1	MASSARI PAOLA
Investigation of metal uptake systems in commensal <i>Neisseria subflava</i>	RENDON MARIA
The <i>Neisseria meningitidis</i> Capsule Plays a Crucial Role in Impairing Efflux Transporter Function in Brain Endothelial Cells	NOSRATABADI FATEMEH
Evolution of Host-Pathosymbiont Interaction in <i>Neisseria</i>	RIVERA-MILLOT ALEX
<i>Lactobacillus crispatus</i> enters epithelial cells via caveolae-mediated endocytosis and increases internalization of <i>Neisseria meningitidis</i> but prevents transcytosis	PILHEDEN SARAH
EVOLUTION OF THE NEISSERIACEAE FAMILY	SHARMA LAXMI
Innate Immune Responses to <i>Neisseria gonorrhoeae</i> in a Female Mouse Model of Ascending Reproductive Tract Infection	ONORINI DELIA
Diversity and evolution of the Opa protein in <i>Neisseria gonorrhoeae</i>	YU QINQIN
Contributions of C4b-binding protein to interactions of <i>Neisseria gonorrhoeae</i> and primary human neutrophils	BRODEN MARY
Biochemical studies of Type IV pilus tip-located proteins of <i>Neisseria gonorrhoeae</i> support a licensing model for fiber initiation	APPLEGATE JUSTIN
Genetic Analyses of PilC Function in <i>Neisseria gonorrhoeae</i> Type 4 Pili Support a Licensing Model for Fiber Initiation	LITT ZOEY
Initiation of Gonococcal Pilus Assembly by PilC: the Licensing Model	MERZ ALEXEY
Lipooligosaccharide (LOS) of Contemporary Disseminated Gonococcal (DGI) Strains	MCLAUGHLIN STEPHANIE
Molecular characterization of a novel Type IV pilus component in <i>Neisseria gonorrhoeae</i>	NICHOLSON KATHLEEN
Ribosomal protein paralogs and zinc homeostasis in <i>Neisseria gonorrhoeae</i>	FOREHAND AMY
Functional Characterization of a Possible Resistance Enhancing Protein from <i>Neisseria gonorrhoeae</i>	SINGH AVI

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Using biochemical approaches to identify the donor molecules for phosphorylcholine modification of pilin in <i>Neisseria meningitidis</i>	JEN FREDA
Methionine Sulfoxide Reductase (MsrA/B) of Pathogenic <i>Neisseria</i> Moonlights as a Complement Component 5a Binding Protein.	JENNINGS MICHAEL
Polyamines modulate the survival of <i>Neisseria meningitidis</i> inside the host cell by regulating the oxidative stress response	HALDAR TIYASA
Macrophage infectivity potentiators are important in pathogenic <i>Neisseria</i> spp. for host innate defences and antibiotic resistance.	HOOTON THITIWAT JOE
Dynamism of the CD9 interactome during meningococcal infection	GREEN LUKE
Characterisation and development of gonococcal glycan-binding proteins as therapeutic targets	SEMCHENKO EVGENY
Female sex hormones enhance gonococcal colonization at the endocervix by modifying cervical mucus	DI BENIGNO SOFIA
<i>Neisseria gonorrhoeae</i> adaptation during vaginal colonization of CEACAM-humanized mice	DYZENHAUS SOPHIE
Pharyngeal colonization by <i>Neisseria gonorrhoeae</i> in humanized transgenic mice	FEGAN JAMIE
Genotypic and phenotypic studies of gonococcal strains of different origins (Sexually Transmitted Infections, invasive infections and colonisations): focus on serum resistance	BROUSSEAU JULIE
Impact of Intergenic Region Variation on Gene Expression Among Phylogenetically-Related <i>Neisseria meningitidis</i> Isolates	CLARK JACK
Gene Co-Expression Between <i>Neisseria gonorrhoeae</i> and the Genital Tract Microbiome During Natural Mucosal Infection	GENCO CAROLINE
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