



5th International
Workshop on
Streptococcus suis



Canada



The 8th International Symposium on Emerging
And Re-Emerging Pig Diseases
ISERPDP 2023
BANGKOK, THAILAND



5th International Workshop on *Streptococcus suis*

Advanced Research in the Era of Antimicrobial Restriction

6 • 7

June 2023



The 8th International Symposium on Emerging
And Re-Emerging Pig Diseases

ISERPDP 2023
BANGKOK, THAILAND



5th IWSSs 2023
Bangkok, Thailand

IMPACT Forum

Muang Thong Thani





× **AGENDA** for
The 5th IWSSs 2023

The 5th International Workshop on *Streptococcus suis*



SAPPHIRE ROOM 201

6th June 2023

8:00 – 8:30

Registration

8:30 – 8:45

Welcome talk; Acknowledgements

Profs. Mariela Segura, Marcelo Gottschalk and Potjane Srimanote

PATHOGENESIS OF THE INFECTION:

VIRULENCE FACTORS & HOST-PATHOGEN INTERACTIONS

Chairwoman: Prof. Gemma Murray

8:45 – 9:25

Keynote lecture: Pathogenomics: new insights into *Streptococcus suis* lifestyle and pathogenesis

Prof. Jerry Wells (Wageningen University, The Netherlands)

9:25 – 9:45

A small RNA promotes *Streptococcus suis* survival in host by enhancing oxidative stress resistance, survival in iron-limited condition, and glycerol uptake

Prof. Zongfu Wu (Nanjing Agricultural University, China)



SAPPHIRE ROOM 201

6th June 2023

9:45 – 10:05

Coinfection with *Bordetella bronchiseptica* does not enhance disease with *Streptococcus suis*

Dr. Samantha Hau (USDA-National Animal Disease Center, USA)

10:05 – 10:25

The streptococcal phase-variable Type I Restriction-Modification system SsuCC20p dictates *Streptococcus suis* methylome and impacts virulence

Dr. Thomas Roodsant (University of Amsterdam, The Netherlands)

10:25 – 10:35

Discussion

10:35 – 11:00

COFFEE BREAK

11:00 – 12:00

SATELLITE SYMPOSIUM IV
(SPONSORED BY ELANCO)

12:00 – 13:40

LUNCH & POSTER SESSION
(ALL THEMES)



SAPPHIRE ROOM 201

6th June 2023

DIAGNOSIS AND EPIDEMIOLOGY OF THE STREPTOCOCCUS SUIS INFECTION

Chairman/woman: Prof. Nahuel Fittipaldi & Dr. Tracy Nicholson

13:40 – 14:20

Keynote lecture: Human *Streptococcus suis* Infections in Thailand: Sociocultural factors, epidemiology, and genotypes

Prof. Anusak Kerdsin (Kasetsart University, Thailand)

14:20 – 14:40

Burden of disease and productivity impact of *Streptococcus suis* infection in Thailand

Dr. Ajaree Rayanakorn (Chiang Mai University, Thailand)

14:40 – 15:00

Streptococcus suis is an emerging underreported zoonotic pathogen in Europe: a systematic review and molecular epidemiology study

Mr. Jaime Brizuela (University of Amsterdam, The Netherlands)

15:00 – 15:25

COFFEE BREAK



SAPPHIRE ROOM 201

6th June 2023

- 15:25 – 16:05 ● **Keynote lecture: Diagnosis and epidemiology of *Streptococcus suis* infections in pigs**
Prof. Maria Clavijo (Iowa State University, USA)
- 16:05 – 16:25 ● The emergence and spread of pathogenic lineages of *Streptococcus suis*
Prof. Gemma Murray (University College London & University of Cambridge, UK)
- 16:25 – 16:45 ● European *Streptococcus suis*: genomic insights into diversity and resistance
Prof. Nahuel Fittipaldi (University of Montreal, Canada)
- 16:45 – 17:00 ● **DISCUSSION**
- 17:00 – 18:00 ● **SATELLITE SYMPOSIUM VI**
(SPONSORED BY VIRBAC)
- 20:00 – 23:00 ● **FAREWELL DINNER**
(YOU MUST PURCHASE A TICKET)



SAPPHIRE ROOM 201

7th June 2023

INFECTION CONTROL & PREVENTION IN THE ERA OF ANTIMICROBIAL REDUCTION

Chairwomen: Prof. Maria-Jose Clavijo and Dr. Samantha Hau

8:30 – 9:10

Keynote lecture: Interaction of *Streptococcus suis* with IgM

Prof. Christoph Baums (University of Leipzig, Germany)

9:10 – 9:30

A new generation glycoconjugate vaccine
against *Streptococcus suis*

Prof. Todd L. Lowary (University of Alberta, Canada)

9:30 – 9:50

Comparative virulence and antimicrobial resistance distribution
of *Streptococcus suis* isolates obtained from the United States

Dr. Tracy Nicholson (USDA-National Animal Disease Center, USA)

9:50 – 10:10

Immunoglobulin M-degrading enzyme of
Streptococcus suis (IdeS_{suis}) impairs
porcine B cell signaling

Ms. Annika Breifelder (University of Leipzig, Germany)



SAPPHIRE ROOM 201

7th June 2023

10:10 – 10:30

Invited oral presentation: Policy for antibiotic management in livestock in Thailand

Dr. Julaporn Srinha (Ministry of Agriculture and Cooperatives, Thailand)

10:30 – 11:00

COFFEE BREAK

11:00 – 11:40

Keynote lecture: Update on autogenous vaccines

Prof. Mariela Segura & Marcelo Gottschalk
(University of Montreal, Canada)

11:40 – 12:00

Assessment of immunogenicity of different autogenous *Streptococcus suis* bacterins in piglets

Dr. Hubert Gantelet (Ceva Biovac, France)

12:00 – 13:00

LUNCH & POSTER SESSION

(ALL THEMES)



SAPPHIRE ROOM 201

7th June 2023

● SHORT PRESENTATIONS - STUDENTS

Chairman: Mr. Dominic Dolbec

- 13:00 – 13:15 ● Mobile genetic elements that carry macrolide-lincosamide and tetracycline resistance genes in *Streptococcus suis* strains isolated in France
Ms. Manon Dechêne-Tempier (ANSES-INRAE, France)
- 13:15 – 13:30 ● Contact-dependent growth inhibition of serotype 2 *Streptococcus suis* by commensal non-serotype 2 *S. suis*
Ms. Prajiraporn Prasopthum (Thammasat University, Thailand)
- 13:30– 13:45 ● Molecular characterization of Spanish *Streptococcus suis* clinical isolates belonging to serotypes 1-14 and 2-1/2
Mr. Jose Luis Arnal Bernal (Exopol & Universidad de Zaragoza, Spain)
- 13:45– 14:00 ● Precision genome engineering in *Streptococcus suis* based on a broad-host-range vector and CRISPR-Cas9 technology
Mr. Alex Gussak (Wageningen University, The Netherlands)
- 14:00 – 14:15 ● Do lipoteichoic acids play a role in the pathogenesis of *Streptococcus suis*?
Ms. Servane Payen (University of Montreal, Canada)
- 14:15 – 14:30 ● **CLOSURE AND ACKNOWLEDGMENTS**

