



11th International Conference on *Legionella*

Commemorating 50 years
of *Legionella* discovery

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University of Zurich, Main Campus, Switzerland

Monday September 7 to Friday September 11, 2026

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Congress office Management

Meeting.com Congress Organisation – info@legionella2026.com
021 312 92 61 – Rue des Pâquis 1 – CH-1033 Cheseaux-sur-Lausanne
Registration on <https://legionella2026.com>



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Organization

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Congress organization – Scientific committee

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Istituto Superiore di Sanità, Italy

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Toho University, Japan

Welcome to the 11th International Conference on *Legionella* 2026 in Zürich

Dear colleagues,

In the summer of 1976, more than 200 participants at an American Legion convention in Philadelphia developed severe pneumonia, leaving 34 dead. In the aftermath of the outbreak, microbiologist Dr. Joseph McDade and his team at the Centers for Disease Control and Prevention identified a previously unknown bacterium as the causative agent. Reflecting its first victims and its lifestyle, the pathogen was named *Legionella pneumophila*.

On behalf of the Scientific Committee, it is our great pleasure to welcome you to the 11th International Conference on *Legionella*, taking place September 7-11, 2026. Commemorating 50 years since the discovery of *Legionella*, the meeting will open with a keynote lecture on the history and fascinating biology of the pathogen, followed by a session highlighting rising stars and key questions in the field.

The conference will cover the many facets of *Legionella* and Legionnaires' disease through sessions on Virulence & Pathogenicity, Immunology & Disease, Ecology & Environment, Clinics & Diagnostics, and Epidemiology & Prevention. In addition to invited talks, short oral presentations and posters will be selected from submitted abstracts. The varied program is designed to foster exchange among researchers approaching the topic from different perspectives.

The conference will take place at the University of Zurich main campus, conveniently accessible from Zurich Airport and the city's main train station. Zurich is a picturesque city in the heart of Switzerland, surrounded by forests, hills, rivers, and Lake Zurich. The water temperature may still be permissive for the brave-hearted in September.

Alongside superb science, participants can look forward to a welcome reception and a networking dinner – not to mention cozy bars in downtown Zurich, renowned art and history museums, and the Giacometti frescoes in “Europe’s prettiest police station.” So don’t miss the opportunity to be part of a fantastic meeting!

Hubert Hilbi & Carmen Buchrieser

General Information

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Venue

University of Zurich (City Campus), Haldeliweg 2, 8044 Zürich, Switzerland

Registration online on <https://legionella2026.com/registration>

Registration fee	Early fee (until June 25, 2026)	Late & onsite fee (as of June 26, 2026)
PhD/postdoc	CHF 500.00	CHF 650.00
Academic	CHF 700.00	CHF 850.00
Industry	CHF 1'100.00	CHF 1'250.00

Please note that registration is possible **without submitting an abstract**.

Conference Dinner (*place tbc*)

on Thursday, September 10, 2026 (limited places), CHF 70.00

Free Guided City Tour on Wednesday, September 9, 2026

Free of charge (limited places)

Congress office management

Meeting.com Sàrl Congress Organisation

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Credits in demand to

This information will be updated shortly

Abstract submission and abstract book

Abstract submissions are now open on: <https://legionella2026.com/abstracts>

Deadline: June 2025, 2026

The link to the abstract book will be updated after the submission deadline.



This meeting was selected by the Federation of European Microbiological Societies (FEMS) to offer a grant

Program

Monday September 7, 2026

12.00-14.00 **Registration** BUILDING HAH, FOYER

16.00-16.30 **Welcome address** BUILDING HAH, PLENARY ROOM

16.30-17.30 **Opening session – 50 years of *Legionella*** BUILDING HAH, PLENARY ROOM
Chairs

16.30-17.30 **50 years of the Perfect Replication Vacuole**
M01 *Ralph Isberg, Tufts University, Boston, USA*

17.30-19.30 **Rising stars and burning questions** BUILDING HAH, PLENARY ROOM
Chairs

17.30-18.00 Discovery of antiphage defence systems targeting a
RS01* novel bacteriophage of *Legionella pneumophila*
Dustin Loso, Toronto (CA)

18.00-18.30 Single-cell spatial metabolomics during *Legionella*
RS02 *pneumophila* infection reveals specific metabolic
signatures in human macrophages
Paula Martinez-Oca, Paris (FR)

18.30-18.45 *Legionella* effector AnkX puts the brakes on IMPDH2 filaments
RS03 *Marietta Sandkamp-Kaspers, Hamburg (DE); Pia Stauffer, Zurich*

18.45-19.00 Subversion of IMPDH2 oncoprotein activity by
RS04* *Legionella pneumophila* effector AnkX
Pia Stauffer, Zurich

18.45-19.00 CRISPR-Cas12a detection of *Legionella* cell-free
RS05* DNA for the diagnosis of Legionnaires' Disease
Elizabeth Chernysheva, Christchurch (NZ)

20.00 **Welcome reception** ETZ, E FOYER

Tuesday September 8, 2026

07.45

Registration

BUILDING HAH, FOYER

08.30-10.15

Session 1 – Ecology and environment

BUILDING HAH, PLENARY ROOM

Chairs

08.30-09.00

Where is Legio, a not so simple question in the environment?

M02

Yann Héchard, University of Poitiers, France

09.00-09.15

Two Chemical-Free Approaches to Legionella Control in Building Water Systems: Dissolved Oxygen Reduction and Charged-Membrane Filtration
Chris Nancrede, Indianapolis (USA)

S01

09.15-09.30

U.S. Cruise-associated case surveillance of Legionnaires' disease – 2016-2025
Sooji Lee, Atlanta (USA)

S02

09.30-10.00

How Treatment Reshapes the Water Microbiome and Legionella Presence
Laura Gomez-Valero, Institut Pasteur, Paris, France

M03

10.00-10.15

Comparative genomic analysis reveals distinct population structure in Legionella anisa
Maria Najeeb, Montreal (CA)

S03*

10.15-10.50

Coffee break / Poster viewing / Exhibition

ETZ, E FOYER

10.50-12.35

Session 2 – Epidemiology and diagnostics

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Chairs

10.50-11.20

Ending Legionnaires' Disease: An Audacious or Achievable Goal?
Janet Stout, University of Pittsburgh, USA

M04

11.20-11.50

Pulmonary and extrapulmonary legionellosis: diagnostic challenges and unresolved questions
Sophie Jarraud, University of Lyon, France

M05

11.50-12.20 M06	Legionella Diagnostics: From Culture to Metagenomics <i>Valeria Gaia, Swiss National Reference Center, Bellinzona, Switzerland</i>
12.20-12.35 S04	Evaluation of the national enhanced legionella surveillance system in England, 2025 <i>Katie Wrenn, London (UK)</i>

12.35-13.35 Lunch break / Poster viewing / Exhibition

ETZ, E FOYER

13.35-15.20	Session 3 – Microbe interactions Part 1: Secretion systems and their substrates Chairs	BUILDING HAH, PLENARY ROOM
13.35-14.05 M07	Legionella and its secreted phospholipases: a universe in a nutshell <i>Antje Flieger, Robert Koch Institut, Wernigerode, Germany</i>	
14.05-14.20 S05*	Exploring the biphasic lifecycle of Legionella through characterization of <i>L. pneumophila</i> protein Lpg1968 <i>Tiffany Penner, Winnipeg (CA)</i>	
14.20-14.35 S06*	Legionella pneumophila delays host cell apoptosis by modulating host chromatin landscape <i>Cristina Di Silvestre, Paris (FR)</i>	
14.35-15.05 M08	Expanding role of the Legionella pneumophila type II secretion system <i>Nicholas Cianciotto, Northwestern University, Chicago, USA</i>	
15.05-15.10 PF01 / P001	From source to tap: mapping the water distribution system microbiome and analyzing opportunistic pathogens at species-level resolution <i>Pierre Foucault, Paris (FR)</i>	
15.10-15.15 PF02* / P002*	Experimental evolution of copper resistance in Legionella pneumophila also selects for improved recovery after stress <i>Gillian Cameron, Montreal (CA)</i>	
15.15-15.20 PF03 / P003	Association between genetic lineage and antimicrobial susceptibility in clinical and environmental <i>Legionella pneumophila</i> isolates from Japan <i>Shoko Komatsu, Kobe (JP)</i>	

15.20-15.55 Coffee break / Poster viewing / Exhibition

ETZ, E FOYER

15.55-17.10

Session 4 – Microbe interactions
Part 2: Immunology and virulence

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Chairs

15.55-16.25
M09

Protein sociology of *Legionella pneumophila*
PPlase Mip and infection interference
Michael Steinert, University of Braunschweig, Germany

16.25-16.40
S07

Macrophage Dysfunction in VEXAS Syndrome
Abdelrahim Zoued, Lyon (FR)

16.40-17.10
M10

Innate immune detection and restriction of *Legionella pneumophila*
Sunny Shin, University of Pennsylvania, Philadelphia, USA

17.10-19.10

Poster session 1 and aperitive

ETZ, E FOYER

P001 – P038

Wednesday September 9, 2026

07.45

Registration

BUILDING HAH, FOYER

08.30-10.15

Session 5 – Microbe interactions
Part 3: Remodeling of the pathogen vacuole
Chairs

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08.30-09.00
M11

Structural elucidation of the essential *Legionella pneumophila* effector SdhA
Sagar Bhogaraju, EMBL Grenoble, France

09.00-09.15
S08

SidL is an adenylyltransferase that modifies the host glycolytic metabolite 3-phosphoglycerate
Joshua Black, Baltimore (USA)

09.15-09.30
S09*

Proteomic profiling reveals macrophage bioenergetic responses during mid-to-late *Legionella pneumophila* infection
Jake Ellis, Delaware (USA)

09.30-10.00
M12

Manipulation of the nucleoli by a powerful Dot/Icm T4SS protease effector
Gunnar Schroeder, University of Belfast, UK

10.00-10.15
S10

Using mitochondrial signals and AI to predict *Legionella pneumophila* replication within human macrophages
Pedro Escoll, Paris (FR)

10.15-10.50

Coffee break / Poster viewing / Exhibition

ETZ, E FOYER

10.50-12.35

Session 6 – Microbe – Environment interactions
Part 1: Genetics, conjugation, phages
Chairs

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10.50-11.20
M13

Blame the phage – on the unexpected origins of Legionnaires' disease
Alexander Ensminger, University of Toronto, Canada

11.20-11.35
S11

Global climate gradients structure soil *Legionella* diversity, abundance and pathogen distributions
Hans Singh, Honolulu (USA)

11.35-11.50 S12	Modulation of <i>L. pneumophila</i> biofilm growth through a unique protein conformational switching mechanism <i>James Garnett, London (UK)</i>
11.50-12.20 M14	Mechanistic insights into DNA uptake by natural transformation in <i>Legionella pneumophila</i> <i>Manuela Hospenthal, ETH Zürich, Switzerland</i>
12.20-12.25 PF04 / P004	Targeted degradation of SidJ as a strategy against <i>Legionella pneumophila</i> infection <i>Giulio Giuliani, Frankfurt am Main (DE)</i>
12.25-12.30 PF05 / P005	Elucidating genetics of <i>Legionella micdadei</i> biofilm and amyloid production through transposon mutagenesis screening <i>Christa Chatfield, Cortland (USA)</i>
12.30-12.35 PF06* / P006*	Capsule-mediated lethality in <i>Legionella longbeachae</i> is associated with host immune dysregulation and increased NET formation <i>Pedro Henrique Medeiros Câmara, São Paulo (BR)</i>

12.35-13.35	Lunch break / Poster viewing / Exhibition	ETZ, E FOYER
13.35-15.35	Poster session 2 P039 – P077	ETZ, E FOYER

15.35-17.20	Session 7 – Microbe – Environment interactions BUILDING HAH, PLENARY ROOM Part 2: Natural and artificial reservoirs – protozoa, persistence Chairs
15.35-16.05 M15	<i>Tamara O'Connor, John Hopkins Medicine, Baltimore, USA</i>
16.05-16.20 S13	Impact of amoeba hosts on <i>Legionella</i> effector horizontal gene transfer and evolution <i>Tera Levin, Pittsburg (USA)</i>
16.20-16.35 S14*	Modulation of intercellular tunnelling nanotubes of <i>Dictyostelium discoideum</i> by <i>Legionella pneumophila</i> <i>Luca Langlois, Zurich</i>

16.35-17.05 *Shira Ninio, Kinneret Limnological Laboratory, Migdal, Israel*
M16

17.05-17.20 Do different Legionella strains behave differently
S15 within Pseudomonas biofilms?
Ana Rosa, Porto (PT)

17.20-17.55 Coffee break / Poster viewing / Exhibition

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17.55-18.55 **Session 8 – Prevention, diagnostics and control** BUILDING HAH, PLENARY ROOM
Chairs

17.55 - 18.25 Prevention and Control of Legionella:
M17 Emerging Perspectives from Artificial Intelligence
Maria Luisa Ricci, Istituto Superiore di Sanità, Rome, Italy

18.25-18.55 30 Years of story of Legionella disease in Japan:
M18 Basic science and clinical relevance
Kazuhiro Tateda, Toho University, Tokyo, Japan

19.15 **Free Guided City Tour** (registration mandatory, limited places)

Thursday September 10, 2026

07.45

Registration

BUILDING HAH, FOYER

08.30-10.15

Session 9 - Using Whole Genome Sequencing in Outbreak Investigations: The Good, the Bad and the Puzzling

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Chairs

08.30-09.00

Session introduction and NYS Investigations using WGS

M19

Ursula Lauper and Danielle Wroblewski and
Wolfgang Haas, NYSDOH, New York, USA

09.00-09.20

Epidemiological and Bioinformatic aspects of WGS

M20

Camille Jacqueline, EURL-PH-LEGI,
Hospices Civils de Lyon, France

09.20-09.40

How to consider Legionella diversity and dynamics for source matching

M21

*Michèle Prévost and Sebastien Faucher,
McGill University, Montréal, Canada*

09.40-10.00

Sequence Capture and Enrichment and WGS at the Swiss Reference Centre

M22

Helena Smith & Tim Roloff, University of Zürich, Switzerland

10.00-10.15

Questions

10.15-10.50

Coffee break / Poster viewing / Exhibition

ETZ, E FOYER

10.50-12.35

Session 10 – Type IV secretion system and effectors

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Chairs

10.50-11.20

Cryo-EM analysis of the Legionella T4SS using cryo-EM

M23

Melanie Ohi, University of Michigan, Ann Arbor, USA

11.20-11.35

The Legionella effector MavP targets host cell PMP70 to recruit peroxisomes to the replication vacuole

S16* / P007*

Katerina Romanov, Baltimore (USA)

11.35-11.50 S17*	Legionella pneumophila subverts mitochondrial dynamics and mtDNA quality control to promote intracellular replication <i>Tobias Jäggi, Zurich</i>
11.50-12.20 M24	Legionella pneumophila counteracts vacuole acidification through amino acid antiport <i>Matthias Machner, NIH, Bethesda, USA</i>
12.20-12.35 S18	Beyond Canonical Domains: Legionella Effectors Use Conserved α -Helical Folds to Target Phosphoinositides <i>Ramona Neunuebel, Delaware (USA)</i>

12.35-13.35 Lunch break / Poster viewing / Exhibition

ETZ, E FOYER

13.35-15.20 **Session 11 – Type IV effectors and host response**

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Chairs

13.35-14.05 M25	How to make a home in the ER: Legionella shows the way <i>Shaeri Mukherjee, University of California, San Francisco, USA</i>
14.05-14.20 S19	Post-translational modifications of the conserved Hippo pathway control host defense against pathogenic Legionella <i>Pei-Chung Lee, Detroit (USA)</i>
14.20-14.35 S20*	Caspase-8 mediates host resistance to Legionella longbeachae independently of inflammasome signaling <i>#123, Rhanoica Guerra, São Paulo (BR)</i>
14.35-15.05 M26	Legionella effectors modify the host epitranscriptome <i>Elizabeth Hartland, Hudson Institute, Melbourne, Australia</i>
15.05-15.20 S21	The Legionella effector RidL binds the large fission GTPase Drp1 to promote mitochondrial fragmentation <i>Ana Katic, Zurich</i>

15.20-15.55 Coffee break / Poster viewing / Exhibition

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15.55-17.10	Session 12 – Type IV effectors and posttranslational modifications Chairs	BUILDING HAH, PLENARY ROOM
15.55-16.25 M27	Towards the function of Fic enzymes in posttranslational modifications of Legionella <i>Aymelt Itzen, University of Hamburg, Germany</i>	
16.25-16.40 S22	Structural Basis for Membrane Targeting and Secretion of Legionella SidE Ubiquitin Ligases <i>Mohit Misra, Frankfurt am Main (DE)</i>	
16.40-17.10 M28	Regulation of host mitophagy by Legionella pneumophila <i>Tomoko Kubori, Gifu University, Gidai, Japan</i>	
17.10-19.10	Poster session 3 and aperitive P078 – P101	ETZ, E FOYER
As from 20.00	Conference dinner (registration mandatory)	PLACE TBC

Friday September 11, 2026

08.30

Registration

BUILDING HAH, FOYER

09.00-10.15

Session 13 – Genomics, evolution and surveillance

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Chairs

09.00-09.30

M29

Genome size evolution and dynamics of horizontal gene transfers in 100 *Legionella* species
Lionel Guy, Uppsala University, Sweden

09.30-09.45

S23

From ST154 to ST574: Recombination within Norwegian *L. pneumophila*?
Anne V. Kroevel, Stavanger (NO)

09.45-10.00

S24

What is a cluster? the 6 km / 6 month rule and the challenge of community legionnaires' disease detection
David Howett, London (UK)

10.00-10.15

S25

Strengthening national surveillance of Legionnaires' disease: Evidence from SwissLEGIO
Melanie Bigler, Allschwil

10.15-11.00

Coffee break / Poster viewing / Exhibition

ETZ, E FOYER

11.00-12.45

Session 14 – Microbe interactions Part 4: Cell biology

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Chairs

11.00-11.30

M30

The outer mitochondrial membrane as a platform for effector activity
Hayley Newton, Monash University, Melbourne, Australia

11.30-11.45

S26

The bacterial effector LpDot1 triggers a unique methylation on SFPQ to hijack paraspeckles and alternative splicing
Sonja Nicchi, Paris (FR)

11.45-12.15 Mechanistic Insights into LnaB-Mediated Regulation
M31 of Ubiquitin Signaling and Immunity
Zhao-Qing Luo, Jilin University, Changchun, China

12.15-12.45 Multifaceted strategies for Legionella pneumophila
M32 evasion of host autophagy
Craig Roy, Yale University, New Haven, USA

12.45-13.15 Short break – sandwiches

13.15-14.00 **Short talks and poster awards**

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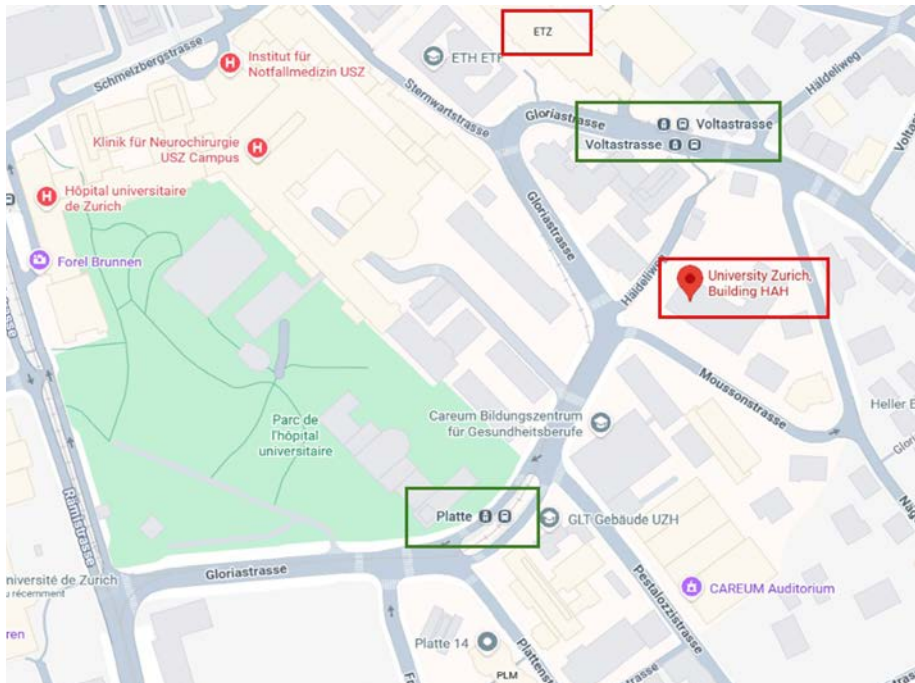
14.00-14.30 **Closing remarks**

Location

Arrival

By train, you can reach the UZH HAH building and the ETH ETZ building by taking the tram nr 6 (from Zürich main station) or nr 8 (from Bellevue) until “Zürich, Platte” or “Zürich, Voltastrasse”. From there, it is 2-3 minutes on foot.

By plane, you can reach Zürich main station from Zürich airport conveniently by train. The trains run frequently, and it takes ca. 10-12 min.



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