



**"New Frontiers in Magnesium Research:
Molecular Mechanisms and Clinical Implications"**
XVIII International Magnesium Symposium
Research Institute of McGill University Health Centre
Mc Gill University, Montreal (Canada)

August, 20-21, 2026

PRELIMINARY PROGRAM
(EST TIME)

Thursday, August 20, 2026

08:00 – 08:30 **Registration**

08:30 - 08:45 **Welcome Remarks**

Rhian M Touyz

*McGill University Health Centre Montréal, Québec, **Canada***

Federica Wolf

*Università Cattolica del Sacro Cuore, Rome, **Italy***

08:45 - 09:10 **KEYNOTE LECTURE - TBD**

SESSION I

Magnesium Homeostasis from Cells to Organs

09:10 - 09:35 **Adriana Girardi**

*Laboratory of Molecular Cardiology and Genetics, **InCor** (Heart Institute), Hospital das Clínicas, Faculty of Medicine, University of São Paulo (FMUSP), São Paulo, **Brazil***

09:35 - 10:00 **Matthias Wolf**

*Department of Pediatrics, Pediatric Nephrology, University of Michigan, Ann Arbor, MI, **USA***

10:00 - 10:25 **New Insights into the Physiological Roles of TRPM6 and TRPM7**

Vladimir Chubanov

*Department of Pharmacology and Toxicology, Walther-Straub Institute, LMU Munich, **Germany***



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10:25 - 11:00 ***Coffee Break around Poster Session***

11:00 - 11:25 **Kalle Gehring**
McGill University, Montreal, Canada

11:25 - 11:50 **Michel L Tremblay**
Department of Biochemistry and Goodman Cancer Institute. McGill University, Montreal, Canada

11:50 - 12:15 **Loren Runnels**
*Department of Pharmacology Rutgers, Robert Wood Johnson Medical School
Piscataway, NJ, USA*

12:15 - 12:40 **Alexey Ryazanov**
*Department of Pharmacology Rutgers, Robert Wood Johnson Medical School
Piscataway, NJ, USA*

12:40 - 13:05 **Alexander Sobolevsky**
Columbia University, New York, USA

13:05 - 14:00 ***Lunch around Poster Session***

SESSION II
Magnesium in the Prevention & Treatment of Diseases

14:00 - 14:25 **TRPM channels in pancreatic islets**
Thomas Gudermann
*Walther Straub Institute of Pharmacology and Toxicology, Faculty of Medicine,
LMU Munich, Germany*

14:25 - 14:50 **María Luz Martínez-Chantar**
Laboratory of Head, Liver Disease, Spanish Carlos III Health Institute, Derio, Spain



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- 14:50 - 15:15** **Chintan V. Shah**
*Division of Nephrology, Hypertension & Renal Transplantation
University of Florida – College of Medicine, FL, USA*
- 15:15 - 15:40** **Eduardo A Groisman**
Yale School of Medicine, Department of Microbial Pathogenesis, New Haven, CT, USA
- 15:40 - 16:05** **Modeling Calcium and Magnesium balance: Regulation by hormones**
Anita T Layton
Department of Applied Mathematics, University of Waterloo, Waterloo, ON, Canada
- 16:05 - 16:30** **Coffee Break around Poster Session**
- 16:30 - 17:00** **Oral Presentations**

Friday, August 21, 2026

SESSION III
Magnesium in Cardiovascular and Renal Disorders: New Insights and Clinical Implications

- 08:30 - 08:55** **Jim McCormick**
*Division of Nephrology & Hypertension at Oregon Health & Science University (OHSU),
Portland, OR, USA*
- 08:55 - 09:20** **The Mechanism whereby Mg treats Atrial Fibrillation and Heart Failure with Preserved Ejection Fraction**
Samuel C Dudley
Lillelei Heart Institute, Minneapolis, MN, USA
- 09:20 - 09:45** **Francisco Rios**
Research Institute of Mc Gill University Health Centre Montreal, Canada
- 09:45 - 10:10** **Jeroen de Baaij**
Department of Molecular Life Sciences, Radboud Institute, Nijmegen, the Netherlands



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- 10:10 - 10:35** **Lixia Yue**
UConn Health (University of Connecticut Health Center), Department of Cell Biology, Pat and Jim Calhoun Cardiology Center, Farmington, CT, USA
- 10:35 - 11:00** **Coffee Break around Poster Session**
- 11:00 - 11:25** **Renal Magnesium Conservation During Lactation**
Evan Ray
Renal-Electrolyte Div., University of Pittsburgh, PA, USA
- 11:25 - 11:50** **Marta Müller**
Department of Nephrology, University Hospital Düsseldorf (Universitätsklinikum Düsseldorf - UKD), Düsseldorf, Germany
- 11:50 - 12:20** **Oral Presentations**
- 12:20 - 13:30** **Lunch around Poster Session**
- SESSION IV**
Unveiling the Immunomodulatory Power of Magnesium: From Cellular Mechanisms to Clinical Impact
- 13:30 - 13:55** **Bebhinn Treanor**
Department of Biological Sciences, University of Toronto Scarborough, ON, Canada
- 13:55 - 14:20** **Hypomagnesemia in lymphoma patients receiving CAR T Therapy correlates with Immune dysfunction and decreased survival**
Thomas Witzig
Mayo Clinic (Department of Hematology, Hematology-Oncology), Rochester, MN, USA
- 14:20 - 14:45** **TBD**
- 14:45 - 15:15** **Oral Presentations**



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SESSION V Magnesium across the lifespan: from conception to old age

15:15 - 15:40

Rafael Fissore

Veterinary Department, University of Massachusset, NJ, USA

15:40 - 16:05

From Petri Dish to Patient: Unraveling the Role of Magnesium in the Biology of Aging

Jeanette A Maier

Dept Biomedical and Clinical Sciences, University of Milan, Italy

16:05 - 16:30

TBD

16:30 - 17:00

Oral Presentations

17:00 - 17:30

Coffee Break around Poster Session

17:30 - 18:30

SESSION VI Challenges in Magnesium Research: still more questions than answers - where we are & where we are going

A Round Table discussion on issues that are still debated or unexplored and suggestions for the future of Mg research

Thomas Gudermann

Walther Straub Institute of Pharmacology and Toxicology, Faculty of Medicine, LMU Munich, Germany

Stefano Iotti

Department of Pharmacy and Biotechnology, University of Bologna, Italy

Jeanette A Maier

Dept Biomedical and Clinical Sciences, University of Milan, Italy

André Mazur

Clermont-Ferrand, France

Rhian M Touyz

McGill University Health Centre Montréal, Québec, Canada

Federica Wolf

Università Cattolica del Sacro Cuore, Rome, Italy

18:30 - 19:00

Awards Nomination and Closing Ceremony