

G-CAN 2023 Ninth Annual Research Symposium and Workshops

NOVEMBER 7-8, 2023

In-Person and Virtual

Estancia La Jolla Hotel & Spa

9700 N Torrey Pines Rd · La Jolla, CA 92037

CONFERENCE REGISTRATION: https://g-can.swoogo.com/

SYMPOSIUM OVERVIEW 2023

Meeting Dedicated to the Memory of <u>Philip Robinson</u>, MBChB, PhD, FRACP, MAICD General Sessions:

- The Year in Review (Five Lectures: Gout Clinical Research, Gout Basic Research, Urate Biology, Gout and Hyperuricemia Genetics, CPP and BCP Crystal Arthritis)
- Crystal Arthropathy Clinical and Basic Research Mini Symposia
- G-CAN Early Career Investigator Abstract Presentation Session (SPARK and MAPS Awardees)
- G-CAN 2023 H. Ralph Schumacher Memorial Early Career Investigator Award Lecture
- Japanese Society of Gout and Uric and Nucleic Acids Research Mini Symposium
- G-CAN Master Awards Lectures and Award Presentations
- Presidential Emerging Career Investigator and Rising Leader Award Presentations
- Philip Robinson Memorial Lecture
- "The Great Debate: Does Urate-Lowering Therapy Slow CKD Progression?"
- Networking Workshops on Approaches to Clinical Studies, Trial Design and Basic Translational Research in Crystal Deposition Disease
- Update on the G-CAN Journal: Gout, Urate, and Crystal Deposition Disease (GUCDD)
- Day 1 Reception Following Day's Sessions
- Day 2 Post-Meeting Gala Dinner Followed by Optional Karaoke Party (*Fee is required to attend dinner; Karaoke party is free)

Notes on this Year's Hybrid Platform:

- All presentations, including workshops, will be live and streamed. Those speakers who are not able to attend in person will present in real time via the internet from their location. If they are not able to speak at the scheduled time, arrangements will be made to record their presentation ahead of time to be played back at the live session.
- Presentations and workshops are recorded during the symposium and will remain accessible for video on-demand viewing until December 31, 2023; recorded presentations for the Year in Review talks and the Special Lecture will be posted to the G-CAN website indefinitely for on-demand viewing.
- There will not be physical posters; abstracts selected for the Early Career Investigator MAPS (Mini-Lecture Abstract Presenters Session) lectures will be live presentations.
- Questions and responses on individual talks will be available in the chat window of each presentation during the live session. Scan the QR code to open the chat function on your phone:



Scan to open Slido Q&A in your web browser. Or join via <u>slido.com</u> and enter code #g-can to submit questions

LIVE, "FACE-TO-FACE" AND VIRTUAL SYMPOSIUM AGENDA

All times are Pacific Time Zone USA

Presentations will be made either live from the meeting venue or virtually via streaming if the speaker is not attending in person. Breakout sessions also will be live streamed so that those who are unable to travel can participate virtually.

Monday, November 6, 2023

- Arrivals, check in to hotel
- Dinner on your own

Tuesday, November 7, 2023

6:30 Registration Opens (Location: Foyer near Theater Room)

7:00-8:00 Breakfast for Meeting Attendees (Location: Grande Room)

8:00-15:45 Plenary Session 1 (Location: The Theater)

8:00-8:20 Welcome and Introduction to G-CAN, Recognition of Industry Sponsors (Location: The

Theater)

G-CAN President: Robert Terkeltaub

G-CAN Vice President and Treasurer: Hyon Choi Meeting Co-Chairs: Tristan Pascart, Nicola Dalbeth SLIDO Chat Function Demonstration: Rebecca Hill

8:20-9:35 Crystal Arthropathy Clinical and Basic Research: The Year in Review

Session Chair: Lisa Stamp, Abhishek Abhishek

Five 15-minute presentations (recordings to remain on the G-CAN website indefinitely). This session will not have a question-and-answer period.

- The Year in Review: Gout Clinical Research Chio Yokose, Boston
- The Year in Review: Gout Basic Research Tania Crișan, Cluj-Napoca
- The Year in Review: Urate Biology David Mount, Boston
- The Year in Review: Gout and Hyperuricemia Genetics Richard Reynolds, Birmingham
- The Year in Review: CPP and BCP Crystal Arthritis Augustin Latourte, Paris

9:35-10:00 Philip Robinson Memorial Lecture

Introduction and Moderators: Nicola Dalbeth 15-minute lecture, five-minute question period

The COVID-19 Pandemic and Gout – *Nicola Dalbeth, Auckland; Tony Merriman, Birmingham*

10:00-10:15 Break (Location: Mariposa Lawn)

10:15-11:40 G-CAN Early Career Investigator SPARK (Select Presentations of Abstracts Research

Keynotes) Session (Location: The Theater)

Moderator: Fred Lioté

Seven oral presentations, 10 minutes each, followed by two minutes for questions

SPARK AWARDEES

- Orsolya Gaal, Cluj-Napoca, Romania; Leo Joosten, Mentor
 Interleukin 1 Receptor Type I and II Variation in Patients with Gout and Hyperuricemic Individuals.
- Dansoa Tabi-Amponsah, Auckland, New Zealand; Nicola Dalbeth, Mentor
 Dual Energy Computed Tomography (DECT) Urate Volume Predicts Fulfillment of Gout
 Remission After Two Years of Intensive Urate-Lowering Therapy.
- Tom Niessink, Enschede, Netherlands; Cees Otto, Mentor
 Automated Classification of Raman Spectra for an Objective Diagnosis of Crystal Arthropathies.
- 4. **Nick Sumpter,** Birmingham, United States; *Tony Merriman, Mentor* Why 6.8?
- Brenda Kischkel, Nijmegen, the Netherlands; Leo Joosten, Mentor
 Differences in the Inflammatory Proteome of Gout Patients During Flare, Inter-Critical and T2T Conditions Reveals New Biomarkers for the Disease.
- Panagiota Drivelegka, Gothenburg, Sweden; Lennart Jacobsson, Mentor
 In-Hospital Treatment, Secondary Prevention, and Mortality After First-Ever Acute
 Myocardial Infarction in Patients with Gout.
- 7. **Chesca Barrios,** Los Angeles, United States; *John Fitzgerald, Mentor*Using a New Engineering Method, Single-Shot Computational Polarized Light Microscopy (SCPLM), in Identifying Crystals in Synovial Fluid.
- 11:40-12:05 Special Lecture

Moderators: Nicola Dalbeth, Tony Merriman 20-minute lecture, five-minute question period

New Insights into the Genetics of Urate Metabolism – Anna Köttgen, Freiburg

- 12:05-12:45 Lunch (Location: Grande Room)
- 12:45-13:15 G-CAN Presidential Emerging Career Investigator Award (Location: The Theater)
 Moderators: Robert Terkeltaub, Nicola Dalbeth, Tristan Pascart
 Two 10-minute talks with five-minute question period for each

Honorees:

- Unmet Goals in Crystal-related Arthritis Mariano Andrés, Alicante
- Ultrasound for the Assessment of CPPD: From the Ground Up *Georgios Filippou*, *Milan*
- 13:15-14:35 <u>Mini Symposium 1: Japanese Society of Gout and Uric and Nucleic Acids Research</u>
 Chairs: Hirotaka Matsuo, Tappei Takada
 15-minute talks each, five minutes each for questions
 - Statistical Genetics Elucidates Disease Biology and Drug Discovery Yukinori Okada, Tokyo
 - ABCG2-Mediated Transport of Urate and its Interaction with Urate-lowering

Drugs – Tappei Takada, Tokyo

- ABCG2, Asymptomatic Hyperuricemia, CKD Kimiyoshi Ichida, Tokyo
- Recent Genetic Analyses of Gout and Dysuricemia Hirotaka Matsuo, Saitama

14:35-14:50 Break (Location: Mariposa Lawn)

14:50-15:10 G-CAN 2023 H. Ralph Schumacher Memorial Early Career Investigator Award Lecture (Location: The Theater)

Moderators: Robert Terkeltaub, Hyon Choi, Tuhina Neogi

10-minute talk with five-minute question period Introduction by Tuhina Neogi (five minutes)

Awardee: Riku Takei, Birmingham, *Tony Merriman, Mentor* Genetic Colocalization of Gout with Plasma and Urine Metabolites.

15:10-15:45 G-CAN Master Award for Career Achievement Lectures (Location: The Theater)

Moderators: Robert Terkeltaub, Nicola Dalbeth 10-minute talks with three-minute question period

Honorees:

- Why Gout and Not Lupus? Fernando Perez-Ruiz, Vizcaya
- From Bench to Bedside in Paris, and Beyond Fred Lioté, Paris
- Subclinical Inflammation in Gouty Joints at Inter-critical Periods Eliseo Pascual, Alicante

15:45-17:15 Workshop/Networking Breakout Sessions

Workshop 1: Clinical Study and Trial Design for Hyperuricemia, Gout and Crystal

Deposition Disease (Location: Theater Room blue dot)

Moderators: Nicola Dalbeth, Lisa Stamp

Four sessions, 20 minutes each

- ULT Trial Study Design Lisa Stamp, Christchurch
- Crystal Arthritis Flare Reporting and Patient Reported Outcomes Angelo Gaffo, Birmingham
- Imaging and Tophus Monitoring Outcomes Nicola Dalbeth, Auckland
- Renal Damage and CKD Progression Biomarkers and Outcomes in ULT Trials David Mount, Boston

Workshop 2: Calcific Crystalline Arthritis (Location: Pacifica B yellow dot)

Moderators: Tristan Pascart, Ann Rosenthal

Three sessions, 25 minutes each

- CPPD Clinical Study Considerations and Design *Tristan Pascart, Lille, Abhishek Abhishek, Nottingham*
- CPPD Imaging in Clinical Studies Georgios Filippou, Milan, Lene Terslev, Copenhagen
- Modeling Studies of CPPD and BCP Crystals In Vitro and In Vivo Sonia Nasi, Lausanne

17:30-18:30 Reception with wine and hors d'oeuvres for all general meeting attendees

(Location: Grande Room)

*one free drink ticket per attendee, additional drinks from bar are cash only, no credit.

18:30 Dinner on your own, for general meeting attendees

Wednesday, November 8, 2023

7:00-8:00 Continental Breakfast (Location: Grande Room)

8:00-18:05 Plenary Session 2 (Location: The Theater)

Plenary Session on Gout, Hyperuricemia and Chronic Kidney Disease

8:00-8:30 Special Lecture (Location: The Theater)

20-minute lecture, 10-minute question period Moderators: David Mount, Tony Merriman

The Systems Biology of Urate Transporters – Sanjay Nigam, La Jolla

8:30-9:15 "The Great Debate: Does Urate-Lowering Therapy Slow CKD Progression?"

Moderators: David Mount, Lisa Stamp

15 minutes for each presenter, followed by five minutes for each rebuttal and five minutes for audience vote

Yes: Claudio Borghi

No: Tuhina Neogi

Rebuttals

Final audience vote

9:15-9:35 Concluding Lecture of the Session

Moderators: David Mount, Lisa Stamp 15-minute talk, five minutes for questions

SGLT2 Inhibitors for Hyperuricemia in Gout: A Position Statement – Chio Yokose, Boston

9:35-10:00 G-CAN Gold Medal Investigator Award Lecture

Moderators: Robert Terkeltaub, Lisa Stamp, Tony Merriman, Hyon Choi

20-minute talk with five-minute question period

Honoree: Nicola Dalbeth, Auckland

Research to Improve Outcomes for People with Gout

10:00-10:15 Break (Location: Mariposa Lawn)

10:15-11:45 Summit Session: Immunometabolism in Crystal Deposition Disease

(Location: The Theater)

Moderators: Robert Terkeltaub, Ru Liu-Bryan, Isidoro Cobo

15-minute talks, three minutes each for questions

Purines, Urate, the Gut Microbiome, and Atherosclerosis – Federico Rey, Madison

• The Metabolome, Hyperuricemia and Gout – Huiyong Yin, Shanghai

Metabolome Biomarkers and Gout – Natalie McCormick, Boston

 AMPK and Nucleotide Metabolic Regulation of Gouty Inflammation – Ru Bryan, La Jolla

Linkages Between the Metabolome and Epigenome in Crystal Arthritis – Isidoro

11:45-12:05 Special Lecture

Moderators: Nicola Dalbeth, Robert Terkeltaub, Tony Merriman

15-minute talk, five minutes for questions

Lessons Learned from Adolescent-Onset Gout – Changgui Li, Qingdao

12:05-13:00 Lunch (Location: Grande Room)

13:00-14:15 G-CAN Early Career Investigator MAPS (Mini-Lecture Abstract Presenters Session)

Awardees (Location: The Theater)

Moderators: Tristan Pascart, Nicola Dalbeth

Three-minute presentations followed by two minutes for questions

1. Lindsay Helget, United States; Ted Mikuls, Mentor

Gout: A Gateway to Chronic Opioid Use?

2. **Allyson Covello,** New York, United States; *Michael Pillinger, Mentor*

Skeletal Muscle Mass and Quality in Gout Patients Versus Non-Gout Controls: A Computed Tomography Imaging Study.

3. Vicky Tai, Dunedin, New Zealand; Nicola Dalbeth, Mentor

An Updated Systematic Review and Meta-Analysis of Randomized Controlled Trials on the Effects of Urate-Lowering Therapy Initiation During a Gout Flare.

4. Medeea Badii, Romania; Leo Joosten, Mentor

Sex-Specific Differences in Cytokine Levels in Patients with Gout Compared to Controls.

5. **Elizabeth Lopez,** Birmingham, United States; *Maria Danila, Mentor*

Socioeconomic Disadvantage and Outpatient Follow-Up After an Emergency Department Visit for Acute Gout Flare.

6. **Silvia Sirotti,** Milan, Italy; *Georgios Filippou, Mentor*

Could the Extent of CPP Deposition Provide Novel Insights In The Pathogenetic Mechanisms Of CPPD? Preliminary Results of An Ultrasound Study.

7. **Liu Shuang,** Shanghai, China; *Haibing Chen, Mentor*

Clustering of Gout-Related Comorbidities and their relationship with Gout Flares: A Data-Driven Cluster Analysis of Eight Comorbidities.

8. **Silvia Sirotti** Milan, Italy; *Georgios Filippou, Mentor*

Histological Characterization of Menisci in Patients with Osteoarthritis and Calcium Pyrophosphate Deposition (CPPD).

- 9. **Nick Sumpter,** Birmingham, United States; *Tony Merriman, Mentor* Sex Ratios in Gout.
- 10. **Dansoa Tabi-Amponsah,** Auckland, New Zealand; *Nicola Dalbeth, Mentor* The Patient Experience of Gout Remission: A Qualitative Study.
- 11. **Tom Niessink,** Enschede, the Netherlands; *Cees Otto, Mentor*Identification of Calcium Crystals in Pre-Operative Synovial Fluid Samples from Patients with End-Stage Knee Osteoarthritis.
- 12. **Ellen Prendergast,** Dunedin, New Zealand; *Lisa Stamp, Mentor*Adherence to the Gout and Crystal Arthritis Network (G-CAN) Consensus Statements for Gout Nomenclature.
- 13. **Silvia Sirotti,** Milan, Italy; *Georgios Filippou, Mentor*The Impact of the 2011 EULAR Recommendations for the Nomenclature of CPPD In the Terminology Used in the Literature.
- 14. **Nicole Leung,** New York, United States; *Michael Pillinger, Mentor*Peripheral Arterial Disease and Sequelae in Individuals with Gout, Diabetes, or Both:
 A US Veterans Population-based Study.
- 15. **Gao, Yining** Shanghai, China; *Haibing Chen, Mentor*Evaluation of Early-Life Factors and Future Gout: A Prospective Cohort Study.

14:15-15:55 Crystal Arthropathy Mini Symposium 2: Part A

14:15-14:35 G-CAN Rising Leader Award

Moderators: Tuhina Neogi, Hyon Choi, Robert Terkeltaub 15-minute lecture, five minutes for questions

Honoree: Standing on the Shoulders of Giants – Abhishek Abhishek, Nottingham

14:35-15:55 Lightning Talks

Moderators: Ann Rosenthal, Fred Lioté

10 minutes each, followed by three minutes for questions per talk

- CPPD Nomenclature Project: Result of the SLR and Next Steps Charlotte Jauffret, Lille
- Lysyl Oxidases and Pathologic Cartilage Calcification Sonia Nasi, Lausanne
- The Acute Flare of CPP Crystal Arthritis *Tristan Pascart, Lille*
- Extra-articular Outcomes in CPPD— Sara Tedeschi, Boston
- Ultrasound Criteria for CPPD Lene Tersley, Copenhagen
- Pyrophosphate: What's New? Ann Rosenthal, Milwaukee

15:55-16:10 Break (Location: Mariposa Lawn)

16:10-18:05 Crystal Arthropathy Mini Symposium 2: Part B (Location: The Theater)

Moderators: Tuhina Neogi, Tristan Pascart

16:10-17:40 Lightning Talks

10 minutes each, followed by three minutes for questions per talk

- EULAR Crystal Arthritis Imaging Guidelines Peter Mandl, Vienna
- Studies in Zebrafish Model of Gouty Inflammation Chris Hall, Auckland
- Circadian Rhythm and Gouty Inflammation Raewyn Poulsen, Auckland
- Osmolarity Regulation of Crystal-Induced Inflammation Hang Korng Ea, Paris
- Animal Models of Hyperuricemia Owen Woodward, Baltimore
- Lightning in a Vessel: Three Quick Stories about Gout and Cardiovascular Disease Michael Pillinger, New York
- Hyperuricemia Subtyped by Renal Urate Handling Mingshu Sun, Qingdao

17:40-17:50 Special Session:

The New G-CAN Journal: *Gout, Urate, and Crystal Deposition Disease* (*GUCDD*) – *Tony Merriman, Tristan Pascart*

17:50-18:05 Adjourn and Final Comments:

Hyon Choi, Robert Terkeltaub, Tristan Pascart, Nicola Dalbeth

18:30-20:30 Gala Dinner for the Entire Group of Meeting Attendees* (Location: Grande Room)

*Requires advance reservation before November 1 and fee of \$75. Cash bar.

20:30-23:00 Free Optional Post-Gala Dinner Karaoke Party – Open to All (Location: Grande Room)

All Attendees and Guests are invited, no reservations needed.

Thursday, November 9, 2023

Checkout/Departures



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