



G-CAN 2021 Seventh Annual Research Symposium AGENDA for “Virtual Meeting”

CONFERENCE REGISTRATION: <https://avp.swoogo.com/g-can2021/begin>

SYMPOSIUM OVERVIEW OCTOBER 18-27

October 18, 2021: *On-demand, pre-recorded video/audio webcasts made available, questions and answers posted in chat.*

October 20: Focus Group Network Sessions: 1-hour sessions

Three separate, live sessions via Zoom led by G-CAN members. All abstract submitters from the past 4 years will be invited to sign up for a session and participate. All times are USA Pacific Time (PDT).

1. CPPD and BCP Crystal Arthropathies: 1300-1400 PDT

Discussion Leaders: Ann Rosenthal, Geraldine McCarthy, Abhishek Abhishek

2. Imaging of Crystal Arthropathies: 1400-1500 PDT

Discussion Leaders: Hyon Choi, Nicola Dalbeth, Savvas Nicolaou

3. Genetics of Crystal Arthropathy: 1300-1400 PDT

Discussion Leaders: Tony Merriman, Owen Woodward, Anna Köttgen, Hiroataka Matsuo, Yongyong Shi

October 21: Mentoring Network Sessions: 1-hour session

1300-1400 PDT

Discussion agenda/structure to be determined by mentee leaders in collaboration with mentors. All abstract submitters from the past 4 years will be invited to sign up for a session and participate via Zoom. All times are USA Pacific Time. (PDT)

Mentor Leaders: Nicola Dalbeth, Tony Merriman, Jas Singh, Hyon Choi

Mentee Discussion Leaders: Youssef Roman and Chio Yokose

October 22 - Friday 2021: 1000 (10:00 AM)-1500 (3:00 PM) USA Pacific Time: *Live streaming session comprised of pre-recorded video/audio webcasts and live question and answer.*

October 27: Sponsor Roundtable with G-CAN Directors Robert Terkeltaub, Hyon Choi

Roundtable (\$70,000 and above) sponsors will be invited to a one-hour discussion with the G-CAN President and VP/Treasurer. Affiliate sponsors (\$10,000) will be invited to a 15 minute session.

SYMPOSIUM SCHEDULE

October 18: On-Demand Webcasts Available Online

Recorded presentations will be posted to the Symposium website for on-demand viewing. Questions and responses on individual talks will be available in the chat window of each presentation for review by all attendees from October 18 – October 22. Presentations will remain accessible for viewing until December 31. Presenters to monitor and answer questions from October 18-22. Chatroom moderators will review chatroom discussions and select 2-4 to be answered live by presenters at the October 22 Virtual Live Session.

Chatroom Moderators:

Poster Presentations, Year in Review: *Tania Crişan and Alex So*

Hyperuricemia, Gout and Crystal-Associated Mini Symposia: *Lisa Stamp and Angelo Gaffo*

60 minutes I. Crystal Arthropathy Clinical and Basic Research: The Year in Review

Four 15-minute webcasts (to remain on the G-CAN website indefinitely)

- The Year in Review: Gout Pathophysiology – *Pascal Richette, Paris, France*
- The Year in Review: Urate Biology 2021 – *Owen Woodward, Baltimore, USA*
- The Year in Review: Gout Clinical Research – *Seoyoung Kim, Boston, USA*
- The Year in Review: CPP- and BCP-Associated Arthritis – *Ann Rosenthal, Milwaukee, USA*

10 minutes II. Special Lecture

Gout Research Opportunities and Current Portfolio at National Institutes of Health – *Heiyoung Park, National Institutes of Health, USA.*

80 minutes III. G-CAN Early Career Investigator Virtual Poster Session

Five-minute presentations of digitally-posted material with Q&A in chat window.

1. **Cipolletta, Edoardo**, *Università Politecnica delle Marche, Ancona, Italy; Emilio Filippucci, Mentor.*
[Ultrasonography in the Prediction of Gout Flares: A 12-Month Prospective Observational Study.](#)
2. **Sumpter, Nicholas**, *University of Alabama at Birmingham, Birmingham, USA; Tony Merriman, Mentor.*
[Genetic Effects on the Transition from Hyperuricemia to Gout.](#)
3. **Lu, Jie**, *Affiliated Hospital of Qingdao University, Qingdao, China; Changgui Li, Mentor.*
[Association of Acidic Urine pH with Impaired Renal Function in Gout Patients.](#)
4. **Stücker, Sina**, *Otto-von Guericke University, Magdeburg, Germany; Jessica Bertrand, Mentor.*
[The Role of Calcium Crystals in Osteoarthritis and Chondrocalcinosis.](#)
5. **Leask, Megan**, *University of Alabama at Birmingham, Birmingham, USA; Tony Merriman, Mentor.*
[Polynesian-Specific Missense Variants Associate with Gout Risk.](#)
6. **McCormick, Natalie**, *Harvard Medical School, Boston, USA; Hyon Choi, Mentor.*
[Inflammatory Potential of Diets and Risk of Incident Gout in US Women and Men: Three Prospective Cohort Studies.](#)
7. **Dickerson, Rachel**, *University of Pennsylvania, Philadelphia, USA; Tony Merriman, Mentor.*
[Gout and Mitochondrial DNA Copy Number in People of European Ancestry.](#)
8. **Kawamura, Yusuke**, *National Defense Medical College, Tokorozawa, Japan; Hirotaka Matsuo, Mentor.*
[Proposal of More Practical Diagnosis of Renal Hypouricemia: Revealed by Genetic Studies of Nonfunctional Variants of URAT1/SLC22A12 Among 30,685 Japanese Individuals.](#)
9. **Sirotti, Silvia**, *Università degli Studi di Milano, Milan, Italy; Georgios Filippou; Mentor.*
[Ultrasound and Conventional Radiography of the Knee in Calcium Pyrophosphate Deposition Disease, Alone or Combined?](#)
10. **Jackson, Lesley**, *University of Alabama at Birmingham, Birmingham, USA; Kenneth Saag, Mentor.*
[Development and Validation of an Emergency Department Electronic Medical Record Gout Flare Alert.](#)
11. **Holyer, Jeremy**, *The University of Auckland, Auckland, New Zealand; Sarah Stewart, Mentor.*
[What Represents Treatment Efficacy in Long-Term Studies of Gout Flare Prevention? An Interview Study of People with Gout.](#)
12. **Yang, Min**, *The Affiliated Hospital of Qingdao University, Qingdao, China; Changgui Li, Mentor.*
[Correlation Between the Urinary Glucose Excretion and Hyperuricemia in the Male Patients with Type 2 Diabetes: A Cross-Sectional Study.](#)

13. **Clavijo-Cornejo, Denise**, *National Institute of Rehabilitation-Luis Guillermo Ibarra Ibarra Mexico City, Mexico; Marwin Gutierrez, Mentor.*
[Association of NLRP3 Inflammasome Gene Polymorphisms with the Susceptibility of Gout.](#)
14. **Gromova, Margarita**, *Pirogov Russian National Research Medical University, Moscow, Russian Federation; Vladimir Tsurko, Mentor.*
[Evaluation of a 12-Week Allopurinol-Lowering Therapy in Combination with the Non-Steroidal Anti-Inflammatory Drug Meloxicam in Patients with Chronic Gout.](#)
15. **Cowley, Sharon**, *Mater Misericordiae University Hospital, Dublin, Ireland; Geraldine McCarthy, Mentor.*
[CPPD Versus Septic Arthritis – Getting the Diagnosis Right.](#)
16. **Jenkins, Christopher**, *Connecticut University School of Medicine, Farmington, USA; Sungkweon Cho Mentor.*
[Urate Lowering Therapeutics; Past and Future.](#)

100 minutes IV. Hyperuricemia, Gout, and Crystal-Associated Arthritis Mini Symposium 1

10-minute “lightning talks” via webcast; questions on each talk to be submitted in the chat window and answered by authors at the end of the live session.

Calcific Crystal Disease:

- Hydroxyapatite Arthropathy – *Geraldine McCarthy, Dublin, Ireland*
- Hydrogen Sulfide and Pathologic Calcification – *Sonia Nasi, Lausanne, Switzerland*
- OMERACT CPP Crystal Arthropathy Projects – *Sara Tedeschi, Boston, USA*

Gout and Uric Acid Biology:

- Complement Activation by Urate and CPPD Crystals – *Konstantin Neumann, Hanover, Germany*
- Lubricin and CD44 Dynamics in Gouty Inflammation – *Khaled Elsaid, Orange, USA*
- Dietary Trials – *Steven Juraschek, Boston, USA*
- Metabolic Aspects of Crystal Arthropathy – *Hang Korng Ea, Paris, France*
- Serum Urate and Cardiovascular Disease Mechanism – *Angelo Gaffo, Birmingham, USA*
- The Potential Effects of Sodium-Glucose Cotransporter-2 Inhibitors in Gout – *Ana Beatriz Vargas-Santos, Rio de Janeiro, Brazil*
- Cardiovascular Findings in Swedish Gout Cohorts – *Mats Dehlin, Gothenburg, Sweden*

80 minutes V. Hyperuricemia, Gout, and Crystal-Associated Arthritis Mini Symposium 2

10-minute “lightning talks” via webcast; questions on each talk to be submitted in the chat window and answered by selected within the chat.

Gout and Uric Acid Biology

- Metabolomics of Gout and Hyperuricemia – *Huiyong Yin, Shanghai, China*
- Genetics of Gout/Hyperuricemia and Hypouricemia – *Hirotsuka Matsuo, Tokorozawa, Japan*
- Trajectories of Gout Flares and Clusters of Gout Disease Patterns – *Ed Roddy, Keele, UK*
- Predicting Gout Flare During Hospitalization – *Kanon Jatuworapruk, Bangkok, Thailand*
- Can an App Improve Adherence in Gout Patients? – *Ric Day, Sydney, Australia*
- Factors Important to Patients When Considering Gout Flare Burden Over Time – *Sarah Stewart, Auckland, New Zealand*
- Serum Urate as a Surrogate for Gout Flares – *Lisa Stamp, Christchurch, New Zealand*
- Gout and Inflammatory Genes: Genetics and Epigenetics – *Tanya Major, Dunedin, New Zealand*

October 22, 2021: Live Virtual Session

1000 – 1430 Pacific Time USA (10:00 a.m. – 3:00 p.m.)

**To receive credit for attendance please be sure to log in to both the October 22 event, as well as the on-demand Poster Sessions, Year in Review and Special Lectures, using the link provided prior to the meeting.*

1000-1015 Welcome and Introduction to G-CAN, Recognition of Industry Sponsors

G-CAN Co-Directors: Robert Terkeltaub (President) and Hyon Choi (VP and Treasurer)

1015-1200 G-CAN Gold Medal, Early Career Investigator, Ralph H. Schumacher, and Presidential Emerging Career Award Lectures

1015-1030 G-CAN Gold Medal Investigator Award Lecture

Moderators: Hyon Choi and Nicola Dalbeth

10-minute talk with 5-minute question period

Michael Doherty, University of Nottingham, Nottingham, UK

Crystallisation of Thought

1030-1130 G-CAN Early Career Investigator Symposium Session

Five Oral Presentations 10 minutes each, with 2 minutes for questions

Moderators: Alex So and Tuhina Neogi

1. **Cobo, Isidoro**, University of California, San Diego, USA; Christopher Glass, Mentor
Monosodium Urate Crystals Regulate a Unique JNK-Dependent Macrophage Metabolic and Inflammatory Response.
2. **McCormick, Natalie**, Harvard, Boston, USA; Hyon Choi, Mentor.
Novel Causal Metabolomic Predictors of Incident Gout: A Population-Based, Prospective Study of UK Biobank Participants.
3. **Liang, NingNing**, University of China Academy of Sciences, Shanghai, China; Huiyong Yin, Mentor.
High Fat Promotes Hepatic Uric Acid Synthesis Primarily Activating HIF-1 α -NT5/XDH Pathways.
4. **Helget, Lindsay**, University of Nebraska Medical Center, Omaha, USA; Ted Mikuls, Mentor.
Mortality in Patients with Undertreated Gout in the Veteran's Health Administration: A Retrospective Cohort Study.
5. **Chen, Xiaoting**, Shanghai Jiao Tong University Affiliated Sixth People's Hospital, Shanghai, China; Haibing Chen, Mentor.
Thyroid Hormone-Regulated Expression of Period2 Promotes Liver Urate Production.

1130-1145 G-CAN 2021 Ralph H. Schumacher Memorial Early Career Investigator Award Lecture Introduction by Tuhina Neogi

10-minute talk with 5-minute question period

Halperin Kuhns, Victoria, University of Maryland, Baltimore, USA; Owen Woodward, Mentor
A Novel Model of Hyperuricemia via Inducible Uricase Knock-Out.

1145-1200 G-CAN Presidential Emerging Career Investigator Award Lecture

Moderators: Robert Terkeltaub and Frédéric Lioté

10-minute talk with 5-minute question period:

Tristan Pascart, Lille Catholic University, Lille, France; Frédéric Lioté, Mentor

Dual-energy CT for Crystal-Related Arthropathies: Tool or Gimmick?

1200-1210 Break

1210-1450 Crystal Deposition Disease Mini Symposium

Lightning Talks of 10 minutes each

Part 1: Moderators: Korng Ea, Tania Crişan

- 1210-1220** Global Burden of Gout: *Hyon Choi, Boston, USA*
1220-1230 Murine Urate Nephropathy – *Stefanie Steiger, Munich, Germany*
1230-1240 Human Gouty Nephropathy – *Thomas Bardin, Paris France*
1240-1250 Human FAM214 Homolog *medusa* Acts in a Conserved Manner to Enhance Hyperuricemia-Driven Pathologies by Modulating Purine Metabolism and the Inflammatory Response–*Tyler Hilsabeck, Novato, USA*
1250-1300 Monocyte Populations in Gout Linked to Trained Immunity – *Leo Joosten, Nijmegen, Netherlands*
1300-1310 Gout Pathophysiology is Not Simple – *Robert Terkeltaub, San Diego, USA*
1310-1320 **10-minute question period**

Part 2: Moderators: Sarah Stewart and Hyon Choi

- 1320-1330** Colchicine: New Lessons on an Ancient Drug – *Michael Pillinger, New York, New York*
1330-1340 ACR/EULAR CPP Crystal Arthropathy Classification Project – *Abhishek Abhishek, Nottingham, UK*
1340-1350 CPP and BCP Crystal Convergence and Divergence in Chondrocalcinosis – *Jessica Bertrand, Magdeburg, Germany*
1350-1400 Ultrasound in CPP Crystal Arthropathy – *Georgios Filippou, Florence, Italy*
1400-1410 **10-minute question period**
1410-1425 **Q and A from October 18 On-Demand Presentations**
Moderators: Tania Crişan and Alex So, Posters; Angelo Gaffo, Minisymposia
1425-1430 **Concluding Comments**
Live, not pre-recorded
Robert Terkeltaub and Hyon Choi
1430 **Meeting adjourns**

Thank you to G-CAN's 2021 industry supporters!

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Gout, Hyperuricemia and Crystal-Associated Disease Network, www.g-can.org