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, Hirotaka 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 Crișan 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.**

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 – Hirotaka 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.

   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-1α-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
Crystal Deposition Disease Mini Symposium
Lightning Talks of 10 minutes each

Part 1: Moderators: Korng Ea, Tania Crișan

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

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 Crișan and Alex So, Posters; Angelo Gaffo, Minisymposia
1425-1430 Concluding Comments
Live, not pre-recorded
Robert Terkeltaub and Hyon Choi
1430 Meeting adjourns

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