G-CAN 2020 Sixth Annual Research Symposium
AGENDA for “Virtual Meeting”

October 30, 2020: On-demand, pre-recorded video/audio webcasts made available, and questions and answers are posted in the G-CAN chat room.

November 4, 2020: 12:00 noon-16:30 USA Pacific Time: Live streaming session comprised of pre-recorded video/audio webcasts and live question and answer.

October 30 – November 13: On Demand Webcasts Available Online
G-CAN Chat Room: questions and responses on individual webcast talks for this year’s virtual meeting will be available online in the chat room for review by all attendees.
Chatroom Moderators: Tania Crisan and Alex So

60 minutes I. Gout and Hyperuricemia Clinical and Basic Research: The Year in Review
Three, 20-minute webcasts (to remain on the G-CAN website indefinitely)

- The Year in Review: Gout Pathophysiology – Nicola Dalbeth, New Zealand
- The Year in Review: Urate Biology and Comorbidities – David Mount, USA
- The Year in Review: Gout Clinical Research – Catherine Hill, Australia

10 minutes II. Special Lecture
Gout Research Opportunities and Current Portfolio at NIAMS – Heiyoung Park, National Institutes of Health, USA.

95 minutes III. G-CAN Early Career Investigator Virtual Poster Session
19 five-minute presentations of digitally-posted material available October 30 – November 13.

The Protective Impact of Physical Activity on the Risk of Gout in Women: Prospective Cohort Study of 82,351 Women Over 30 Years.

2. Kanon Jatuworapruk, Wellington, New Zealand; William Taylor, Mentor.
Prediction Rule for Inpatient Gout Flare in People with Comorbid Gout: Derivation and External Validation.

3. Lindsay Helget, Omaha, US; Ted Mikuls, Mentor.
Cause-specific Mortality in Patients with Gout in the Veteran’s Health Administration: A Matched Cohort Study.

The Association Between Gout and Cardiovascular Disease Outcomes: Assessment and Recalibration of Individual-Level Primary Prevention Risk Prediction Equations in Approximately 450,000 New Zealanders.

5. Ana Beatriz Vargas-Santos, Boston, US; Tuhina Neogi, Mentor.
Sodium-Glucose Co-Transporter-2 Inhibitors and the Risk for Gout: A Comparison Among Canagliflozin, Dapagliflozin and Empagliflozin.

Analysis of Common Gout Comorbidities in The UK Biobank Cohort Reveals Sex-Specific Effects and Genetic Differentiation.
7. **Natalie McCormick**, Boston, US; **Hyon Choi, Mentor.**
   Prospective Study of The Patterns of Joint Involvement for Sequential Gout Flares.

8. **Rachael Flood**, Tallaght, Ireland; **Ronan Mullan, Mentor.**
   Metatarsophalangeal Joint Medial Collateral Ligament Measurement: A Novel Ultrasound Feature of Monosodium Urate Deposition in the Joint.

9. **Michael Toprover**, New York, US; **Michael Pillinger, Mentor.**
   Initiating Gout Treatment Improves Arterial Function and Reduces Intercritical Inflammation.

10. **Rachel Murdoch**, Auckland, New Zealand; **Nicola Dalbeth, Mentor.**
    “An Apple Pie a Day Does Not Keep the Doctor Away.” Fictional Depictions of Gout in Contemporary Film and Television.

11. **Youssef Roman**, Richmond, US; **Elvin Price, Mentor.**
    Genetic Perspective on the Prevalence of Hyperuricemia and Gout Across Major Racial Groups.

12. **Lindsay Helget**, Omaha, US; **Ted Mikuls, Mentor.**
    Risk Factors for Mortality Among Patients with Gout in the Veteran’s Health Administration.

13. **Michael Toprover**, New York, US; **Michael Pillinger, Mentor.**
    Gout and Serum Urate Levels Are Associated with Lumbar Spine Monosodium Urate Deposition and Chronic Low Back Pain: A Dual-Energy CT Study.

14. **Irene Calabuig**, Alicante, Spain; **Mariano Andrés, Mentor.**
    Cardiovascular and Renal Outcomes During the First Year of Urate-Lowering Therapy in Naïve-Gout According to Sonographic Joint Deposits: Data From the Lille-Alicante Inception Cohort.

15. **Evan Dombrosky**, Richmond, US; **Nehal Shah, Mentor.**
    Assessing Patterns of Inpatient Gout Management with Focus on Urate-Lowering Therapy and Discharge Instructions.

16. **Fatima Alduraibi**, Birmingham, US; **Jasvinder A. Singh, Mentor.**
    Role of Inflammatory and Oxidative Stress Pathway Biomarkers in Renal Disease in Gout.

17. **Josh Gavin**, Richmond, US; **Nehal Shah, Mentor**
    A Survey Comparing Gout Management Practice Patterns of G-CAN Members to Other Rheumatologists.

18. **Margarita Gromova**, Moscow, Russia; **Vladimir Tsurko, Mentor.**
    Complex Scintigraphic Evaluation of Renal and Urinary Tract Dysfunction in Patients with Arterial Hypertension and Gout.

19. **Stephanie Kulhawy-Wibe**, Calgary, Canada; **Paul MacMullan, Mentor.**
    Development of A Provincial Adult Inpatient Gout Management Clinical Decision-Making Tool and Order Set.
100 minutes

**IV. CPP and BCP Crystal-Associated Arthritis Mini Symposium**

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

- The Year in Review: CPP Crystal Deposition Disease – *Abhishek Abhishek, UK*
- Should We Think Differently About the Pathogenesis of CPP Crystal Deposition Disease? – *Ann Rosenthal, USA*
- OA, Calcium Crystal Deposition and Pain – *Tuhina Neogi, USA*
- CPPD Classification Criteria Update – *Sara Tedeschi, USA*
- CPPD Advanced Imaging – *Georgios Filippou, Italy*
- CPPD and Outcome of Knee OA – *Pascal Richette, France*
- BCP Crystal Effects on Inflammatory Cells – *Geraldine McCarthy, Ireland*
- BCP Crystals, Wnt Signaling and Chondrocyte Differentiation in OA – *Jessica Bertrand, Germany*
- BCP, Chondrocytes and the Circadian Clock – *Raewyn Poulsen, New Zealand*
- Hydrogen Sulfide in BCP Crystals Deposition in Osteoarthritis – *Sonia Nasi, Switzerland*

70 minutes

**V. Advances in Urate and Gout Basic Translational Biology Mini Symposium**

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

- Urate, XDH, and Vascular Oxidative Stress – *Eric Kelley, USA*
- The Effect of SLC2A9 and SLC22A12 Polymorphisms in Urate Homeostasis – *Sung Kweon Cho, NIH/NCI, USA*
- The Big Gout GWAS – *Tony Merriman, USA*
- Epigenomics of Gouty Inflammation – *Leo Joosten, Netherlands*
- Circulating and Ex-Vivo Cytokine Profiles in Patients with Gout and Hyperuricemia – *Tania Crișan, Romania*
- Common Statistical Myths in Basic Translational Biology – *Yuqing Zhang, USA*
- Complement Activation by Urate Crystals – *Konstantin Neumann, Hanover, Germany*

**November 4 Live Virtual Session**

12:00 p.m. – 16:30 (4:30 p.m.) Pacific Time US

*To receive credit for attendance please be sure to log in to both the November 4 event, as well as the poster sessions, year in review and Special Lecture by Heiyoung Park, using the link provided on October 30.*

12:00-12:15 Welcome and Introduction to G-CAN, Recognition of Industry Sponsors

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

12:15-14:15 G-CAN Presidential and Gold Medal Awards and Early Career Investigator Lectures

12:15-12:30 G-CAN Gold Medal Investigator Award Lecture

**Moderators: Tony Merriman and Nicola Dalbeth**

The Genomic Landscape of Hyperuricemia and Gout – *Anna Köttgen, Germany*

12:30-12:35 5-minute question period


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

**Moderators: Frédéric Liôté and Tuhina Neogi**

1. **Nick Sumpter,** Birmingham, US; **Tony Merriman,** Mentor.

Genomic Regions Jointly Associated with eGFR and Serum Urate: Implications for Shared Genetic Etiology of Hyperuricemia and Chronic Kidney Disease.
   Assessing the Causal Relationships Between Insulin Resistance and Hyperuricemia Using Bi-Directional Mendelian Randomization.

3. **Melissa Meyer**, La Jolla, US; **Catherine Hedrick**, Mentor. 
   Mass Cytometry Analysis Reveals a Role for Nonclassical Monocytes in Resolution of Model Gouty Inflammation.

   Sex Differences in Expression of Renal Urate Transporters.

   Translating the Multi-Trait Regulatory Landscape at SLC2A9.

   Effects of Low-Fat, Mediterranean, or Low-Carbohydrate Weight Loss Diets on Serum Urate and Cardiometabolic Risk Factors Over 24 Months: A Secondary Analysis of a Randomized Trial.


   Brief Introduction by Dr. Tuhina Neogi
   Sustained Xanthine Oxidase Inhibitor Treat to Target Urate Lowering Therapy (XOIT2T) Coordinately Re-Wires IL-8 and the Blood Mononuclear Leukocyte Mitochondrial and Inflammation Proteome in Gout.

13:50-13:55 5-minute question period

13:55-14:10 **G-CAN Presidential Emerging Career Investigator Award Lecture**

   **Moderators: Tony Merriman and Nicola Dalbeth**
   Epigenome-Wide Association Study of Serum Urate Levels – **Adrienne Tin**, USA

14:10-14:15 5-minute question period

14:15-14:20 **Highlights, Questions and Answers from Poster Session**

   **Moderators: Tania Crişan and Alex So**

14:20-16:20 **Gout Clinical Mini Symposium**

   Lightning Talks of 10 minutes each, with two 10-minute question periods
   **Moderators: Sarah Stewart and Hyon Choi**

14:20-14:30 **GoutSMART Feasibility Trial Update** – **Philip Riches**, Scotland

14:30-14:40 Real World Data for Gout Risk Related to SGLT2 inhibitors – **Seoyoung Kim**, USA

14:40-14:50 Gout Management in Primary Care Practice – **Stephen Juraschek**, USA

14:50-15:00 The 2020 ACR Gout Guidelines – **John Fitzgerald**, USA

15:00-15:10 G-CAN Gout Management in CKD Project Final Report – **Angelo Gaffo**, USA

15:10-15:20 Question Period

15:20-15:30 Urate Deposits in Coronary Arteries – **Savvas Nicolaou**, Canada

15:30-15:40 Implications of PERL and CV-Renal Trials in Hyperuricemia and Gout Care – **Hyon Choi**, USA

15:40-15:50 Optimization of Gout Flare Reporting – **Nicola Dalbeth**, New Zealand

15:50-16:00 Update on G-CAN Common Language Description – **Rachel Murdoch**, New Zealand

16:00-16:10 Social Media in Crystal Arthritis – **Phil Robinson**, Australia

16:10-16:20 Question Period

16:20-16:30 **Concluding Comments**
Thank you to G-CAN’s 2020 industry supporters!

**Roundtable Sponsor and Sponsor of Young Investigator Session**

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Gout, Hyperuricemia and Crystal-Associated Disease Network, [www.g-can.org](http://www.g-can.org)