



## 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.*

1. **Chio Yokose**, Boston, US; *Hyon Choi, Mentor.*  
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.
4. **Ken Cai**, Auckland, New Zealand; *Nicola Dalbeth, Mentor.*  
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.
6. **Nick Sumpter**, Birmingham, US; *Tony Merriman, Mentor.*  
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 Crişan, 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

#### 12:35-13:35 **G-CAN Early Career Investigator Symposium Session**

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

**Moderators: Frédéric Lioté 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.*

2. **Natalie McCormick**, Boston, US; *Hyon Choi, Mentor.*  
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.
4. **Victoria Halperin Kuhns**, Baltimore, US; *Owen Woodward, Mentor.*  
Sex Differences in Expression of Renal Urate Transporters.
5. **Megan Leask**, Dunedin, New Zealand; *Tony Merriman, Mentor.*  
Translating the Multi-Trait Regulatory Landscape at *SLC2A9*.
6. **Chio Yokose**, Boston, US; *Hyon Choi, Mentor.*  
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.

13:35-13:50 **G-CAN 2020 Ralph H. Schumacher Memorial Early Career Investigator Lecture**  
**Jacob M. Wozniak, PhD**, *University of California San Diego US; Robert Terkeltaub, Mentor.*  
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!***

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