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

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

**October 22 - Friday 2021: 10:00 (10 AM)-15:00 (3:00 PM) USA Pacific Time:** Live streaming session comprised of pre-recorded video/audio webcasts and live question and answer.

**CONFERENCE REGISTRATION:** TBD

**October 18 – December 31: On-Demand Webcasts Available Online**

**October 19, 2021**
Sponsor Networking Sessions: To be announced
Rebecca will inquire on availability of sponsors and with whom sponsors want to talk and meet, and vice versa for attendees who request to meet with sponsors. Sign-up lists will be compiled for both types of sessions.

**October 20, 2021**
Focus Group Network Sessions: 1-hour sessions
Topics:
1. CPPD and BCP crystal arthropathies: *Discussion Leaders:* Ann Rosenthal, Geraldine McCarthy, Abhishek Abhishek
2. Imaging of crystal arthropathies: *Discussion Leaders:* Fabio Becce, Hyon Choi, Nicola Dalbeth, Savvas Nicolau
3. Genetics of crystal arthropathy: *Discussion Leaders:* Tony Merriman, Owen Woodward, Anna Köttgen, Hirotaka Matsuo, Yongyong Shi

**October 21, 2021**
Mentoring Network Sessions: 1-hour sessions
*Mentor Leaders:* Tuhina Neogi, Nicola Dalbeth, Tony Merriman, Jas Singh, Hyon Choi
*Mentee Discussion Leaders:* Youssef Roman, and Chio Yokose

**October 27, 2021**
Sponsor Roundtable: Robert Terkeltaub, Hyon Choi
Rebecca will schedule a roundtable with all Roundtable ($70,000 and above) sponsors for after the meeting, with the G-CAN President and VP/Treasurer

**October 18: 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 from October 18 – December 31.

Chat rooms will be conducted for some mini symposia

**Chatroom Moderators:**
Chatroom 1: Tania Crisan and Alex So
Chatroom 2: Lisa Stamp and Angelo Gaffo
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
- The Year in Review: Urate Biology – Owen Woodward
- The Year in Review: Gout Clinical Research – Seoyoung Kim
- The Year in Review: CPPD and Hydroxyapatite Arthropathies – Ann Rosenthal

II. Special Lecture

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

III. G-CAN Early Career Investigator Virtual Poster Session

Five-minute presentations of digitally-posted material.

1. Cipolletta, Edoardo, Jesi, Italy; Emilio Filippucci, Mentor.
   Ultrasonography in the Prediction of Gout Flares: A 12-Month Prospective Observational Study.

2. Sumpter, Nicholas, Birmingham, US; Tony Merriman, Mentor.
   Genetic Effects on the Transition from Hyperuricemia to Gout.

3. Lu, Jie, Qingdao, China; Changgui Li, Mentor.
   Association of Acidic Urine pH with Impaired Renal Function in Gout Patients.

4. Stücker, Sina, Magdeburg, Germany; Jessica Bertrand, Mentor.
   The Role of Calcium Crystals in Osteoarthritis and Chondrocalcinosis.

5. Leask, Megan, Birmingham, USA; Tony Merriman, Mentor.
   Polynesian-Specific Missense Variants Associate with Gout Risk.

   Inflammatory Potential of Diets and Risk of Incident Gout in US Women and Men: Three Prospective Cohort Studies.

   Gout and Mitochondrial DNA Copy Number: No Evidence of Association in People of European Ancestry.

8. Kawamura, Yusuke, Tokorozawa, Japan; Hirotaka Matsuo, Mentor.

9. Sirotti, Sylvia, Milan, Italy; Georgios Filippou; Mentor.
   Ultrasound and Conventional Radiography of the Knee in Calcium Pyrophosphate Deposition Disease, Alone or Combined?

    Development and Validation of an Emergency Department Gout Flare Electronic Medical Record Alert.

11. Holyer, Jeremy, 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**, 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**, Mexico City, Mexico; **Marwin Gutierrez**, Mentor.
Association of NLRP3 Inflammasome Gene Polymorphisms with the Susceptibility of Gout.

Evaluation of a 12-Week Allopurinol-Lowering Therapy in Combination with the Non-Steroidal Anti-Inflammatory Drug Meloxicam in Patients with Chronic Gout.

Septic Arthritis Versus CPPD – Getting the Diagnosis Right.

16. **Jenkins, Christopher**, Farmington, US; **Sungkweon Cho** Mentor.
Urate Lowering Therapeutics; Past and Future.

**~120 minutes**  
**IV. Hyperuricemia, Gout, Crystal-Associated Arthritis Mini Symposium 1**
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.

**Calcific Crystal Disease:**
- Hydroxyapatite Arthropathy – **Geraldine McCarthy**
- Hydrogen Sulfide and Pathologic Calcification – **Sonia Nasi**
- OMERACT CPP Crystal Arthropathy Projects – **Sara Tedeschi**

**Gout and Uric Acid Biology:**
- Complement activation by urate and CPPD crystals – **Konstantin Neumann**
- Lubricin and CD44 Dynamics in Gouty Inflammation – **Khaled Elsaid**
- Immunometabolism in Gout – **Ru Liu-Bryan**
- Dietary Trials – **Steven Juraschek**
- Metabolic Aspects of Crystal Arthropathy – **Kornq Ea**
- Serum urate and cardiovascular disease mechanism – **Angelo Gatto**
- The potential effects of sodium-glucose cotransporter-2 inhibitors in gout – **Ana Beatriz Vargas-Santos**
- Cardiovascular Findings in Swedish Gout Cohorts – **Mats Dehlin**

80 minutes  **V. Hyperuricemia, Gout, Crystal-Associated Arthritis Mini Symposium 2**
10-minute “lightning talks” via webcast; questions on each talk to be submitted by chat room mechanism and answered by authors within the chat.

**Gout and uric acid biology**
- Metabolomics of Gout and Hyperuricemia – **Huiyong Yin**
- Genetics of Gout/Hyperuricemia and Hypouricemia – **Hirotaka Matsuo**
- Trajectory of Gout Flares and Clusters of Gout Disease Pattern – **Ed Roddy**
- Predicting Gout Flare During Hospitalization – **Kanon Jatuworapruk**
- Can an App Improve Adherence in Gout Patients? – **Ric Day**
- Factors Important to Patients When Considering Gout Flare Burden Over Time – **Sarah Stewart**
- Serum Urate as a Surrogate for Gout Flares – **Lisa Stamp**
- Gout and Inflammatory Genes: Genetics and Epigenetics – **Tanya Major**
October 22, 2021: Live Virtual Session
10:00 AM – 15:00 Pacific Time USA

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

10:00-10:15 Welcome and Introduction to G-CAN, Recognition of Industry Sponsors
G-CAN Co-Directors: Robert Terkeltaub (President) and Hyon Choi (VP and Treasurer)

10:15-12:15 G-CAN Gold Medal, Early Career Investigator, Ralph H. Schumacher, Emerging Career and Presidential Award Lectures

10:15-10:30 G-CAN Gold Medal Investigator Award Lecture
Moderators: Hyon Choi and Nicola Dalbeth
10-minute talk with 5-minute question period
Michael Doherty, Nottingham, UK

10:30-11:30 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, San Diego, US; 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, Shanghai, China; Huiyong Yin, Mentor.
   High Fat Promotes Hepatic Uric Acid Synthesis Primarily through Up-regulating Purine Salvage Pathways.

4. Helget, Lindsay, Omaha, US; Ted Mikuls, Mentor.
   Mortality in Patients with Undertreated Gout in the Veteran’s Health Administration: A Retrospective Cohort Study.

5. Chen, Xiaoting, Shanghai, China; Haibing Chen, Mentor.
   Thyroid Hormone-Regulated Expression of Period2 Promotes Liver Urate Production.

11:30-11:45 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, Maryland, US; Owen Woodward, Mentor
A Novel Model of Hyperuricemia via Inducible Uricase Knock-Out.

11:45-12:00 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, France

12:00-12:45 Break

12:45-15:00 Crystal Deposition Disease Mini Symposium
Lightning Talks of 10 minutes each
Part 1: Moderators: Korng Ea, Tania Crisan

12:45-12:55 Global Burden of Gout: Hyon Choi

12:55-13:05 Murine Urate Nephropathy – Stefanie Steiger

13:25-13:35 Single cell monocyte populations in trained innate immunity in gout – Leo Joosten
13:35-13:45 Gout pathophysiology is not simple—Robert Terkeltaub
13:45-13:55 Association of acidic urine pH with impaired renal function in gout patient – Jie Lu
13:55-14:05 10-minute question period

Part 2: Moderators: Sarah Stewart and Hyon Choi
Lightning Talks of 10 minutes each

14:05-14:15 Colchicine: New lessons being learned on an ancient drug – Michael Pillinger
14:15-14:25 ACR/EULAR CPP crystal arthropathy classification project – Abhishek Abhishek
14:25-14:35 CPP and BCP crystal convergence and divergence in chondrocalcinosis – Jessica Bertrand
14:35-14:45 Ultrasound in CPP crystal arthropathy – Georgios Phillipou
14:25-14:35 Differentiating CPP from BCP crystals by advanced imaging – Fabio Becce
14:35-14:45 G-CAN Projects Update – Speakers to be announced
14:45-14:55 10-minute question period
14:55-15:00 Concluding Comments: Live, not pre-recorded

Robert Terkeltaub and Hyon Choi
15:00 Meeting adjourns

Thank you to G-CAN’s 2021 industry supporters!
Roundtable Sponsor and Sponsor of Young Investigator Session

Roundtable Sponsor

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