

# G-CAN 2022 Eighth Annual Research Symposium AGENDA

# In-person and Virtual <u>Hilton Alexandria Old Town</u> 1767 King St, Alexandria, VA 22314 US

#### **SYMPOSIUM OVERVIEW OCTOBER 21-22, 2022**

#### Friday October 21, 2022:

- Pre meeting "Speed Dating"/Meet the G-CAN leadership
- General Session: Crystal Arthropathy Clinical and Basic Research: The Year in Review;
   Presidential Emerging Career Investigator Awards Lectures; G-CAN Early Career Investigator
   Abstract Presentation Session; G-CAN Lifetime Achievement Awards Lectures and Award
   Presentations; G-CAN 2022 H. Ralph Schumacher Memorial Early Career Investigator Award
   Lecture and Award Presentations
- Focus Group Network Session Breakouts: CPPD and BCP Crystal Arthropathies, Imaging of Crystal Arthropathies, and Genetics of Crystal Arthropathy
- Reception

#### Saturday October 22, 2022

- Breakfast Mentor Networking Session
- General Session 2: Mini symposia: CPP and BCP Crystal Arthropathy; Featured Lecture; G-Can Gold Medal Investigator Award Lecture; Early Career Investigator Select Awardee (SPARK) Lectures; Gout and Hyperuricemia Mini symposium part 1; Hyperuricemia and Gout Genomics, and Hyperuricemia-Independent Gout Phenotypes; Gout and Hyperuricemia Mini symposium Part 2
- Group Dinner followed by Karaoke party (\$75 per person)

#### Notes on this year's hybrid platform:

- All presentations will be live and streamed, (except for those labeled as #, which were prerecorded). Those speakers who are not able to attend in person will present in real time via
  the internet from their location. If they are not able to speak at the scheduled time,
  arrangements will be made to record their presentation ahead of time to be played back at
  the live session.
- Recorded presentations for the Year in Review talks and the Special Lecture will be posted to the G-CAN website indefinitely for on-demand viewing.
- There will not be physical posters; Abstracts selected for the Early Career Investigator Abstract Presentation Session will be live presentations.
- Questions and responses on individual talks will be visible and available during the live session by downloading the chat app.
- All presentations will be recorded during the symposium as it is streamed and will remain accessible for viewing until December 31.

#### **MEETING AGENDA**

## Thursday, October 20, 2022: All times are Eastern Time Zone USA

#Special Lecture Available for Viewing

Content to be available on demand only on the symposium website starting October 20. After October 23, the recorded talk will be moved to G-CAN website.

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

- Arrivals, check in to hotel
- Dinner on your own

## LIVE, "FACE-TO-FACE" AND VIRTUAL SYMPOSIUM SCHEDULE

## Friday October 21, 2022: All times are Eastern Time Zone USA

Presentations will be made either live from the meeting venue or virtually via streaming if the speaker is not attending in person. Breakout sessions also will be live streamed so that those who are unable to travel can participate virtually.

6:30 Registration Opens

7:00-8:00 Breakfast for Meeting Attendees

8:00-9:45 Pre-Meeting "Speed Dating"/Meet the G-CAN Leadership Circle of Participants

3 minutes with each meeting participant: live only, not streamed

9:45-10 Break

#### **General Session 1**

10:00-10:20 Welcome and Introduction to G-CAN, Recognition of Industry Sponsors

**G-CAN President Robert Terkeltaub** 

**G-CAN Vice President and Treasurer Hyon Choi** 

**Meeting Chair:** Tony Merriman

Slido Chat Function Demonstration – Rebecca Snyders Hill

10:20-11:20 Crystal Arthropathy Clinical and Basic Research: The Year in Review

**Session Chair:** Tony Merriman

Four 15-minute presentations (recordings to remain on the G-CAN website indefinitely). This session will not have a question and answer period

- The Year in Review: #Gout Basic Research Korng Ea, Paris, France
- The Year in Review: Urate Biology 2022 Eric Kelley, Morgantown, USA
- The Year in Review: Gout Clinical Research Angelo Gaffo, Birmingham, USA
- The Year in Review: #CPP and BCP Crystal Arthritis Geraldine McCarthy, Dublin, Ireland

#### 11:20-12:00 G-CAN Presidential Emerging Career Investigator Award

Moderators: Robert Terkeltaub, Hyon Choi

15-minute talks with 5-minute question period for each

#### **Honorees:**

- Fabio Becce, Lausanne, Switzerland
   Lecture Title: Towards quantitative crystal-specific imaging
- Jessica Bertrand, Magdeburg, Germany
   Lecture Title: Different effects of calcium crystals on the joint cells in calcifying joint diseases

#### 12:00-12:45 Lunch

#### 12:45-14:15 G-CAN Early Career Investigator Abstract Presentation Session

Moderators: Pascal Richette, Ann Rosenthal

Five-minute live and pre-recorded presentations streamed during the live session, including two minutes for talks.

#### **ABSTRACT PRESENTERS**

- Florian A. Huber, MD Zurich, Switzerland; Jürg Hodler, Mentor
   Increased sensitivity and specificity of crystal detection in novel photon-counting-detector computed tomography compared to energy-integrating-detector computed tomography.
- Georgiana Cabău, MD, Cluj-Napoca, Romania; Leo Joosten, Mentor
   Serum proteome profiling in gout and asymptomatic hyperuricemia reveals common and persistent inflammatory alterations.
- 3. **Antonella Adinolfi, MD** Milan, Italy; *Georgios Filippou, Mentor*Assessing relevant joints for monitoring CPPD diseases by imaging: A systematic literature review and a meta-analysis by the OMERACT Ultrasound CPPD subgroup.
- 4. **Silvia Sirotti, MD** Milan, Italy; *Georgios Filippou*; *Mentor*The OMERACT validation process of Ultrasound for assessment of CPPD: What's next? A scoring for CPPD extent!
- 5. **Tate Johnson, MD** Omaha, US; *Ted Mikuls, Mentor*Poor serum urate control is a driver of excess cardiovascular risk in patients with gout.
- Medeea Badii Cluj-Napoca, Romania; Leo Joosten, Mentor
   Comparison of IL1 receptor antagonist and interferon inducible gene signatures of urate-treated
   PBMCs and primary cells from patients with hyperuricemia and gout.
- 7. Tom Niessink, Enschede, The Netherlands; Tim Jansen, Mentor Integrating Raman spectroscopy with polarized light microscopy leads to a higher certainty of diagnosis in crystallopathies.
- 8. **Giovanni Pacini, MD** Florence, Italy; *Georgios Filippou, Mentor*Sonoanatomy of CPPD: correlation of ultrasonographic and anatomical findings in CPP
  Deposition. A study of the EULAR "anatomy for imaging" study group.
- 9. **Kaifeng Guo, PhD** Shanghai, China; *Haibing Chen, Mentor*Serum metabolomics study of patients with asymptomatic hyperuricemia and gout using liquid chromatography—mass spectrometry.
- Dorsa Maher, Adelaide, Australia; Michael Wiese, Mentor
   #Urate-lowering therapy induced gout flares: a systematic review and network meta-analysis.

- 11. **Lesley Jackson, MD** Birmingham, US; *Maria Danila, Mentor*Outpatient follow-up after an emergency department visit for acute gout flare.
- 12. Rachael Flood Dublin, Ireland; Ronan Mullen, Mentor

Pulmonary vascular dysfunction occurs in association with hyperuricaemia: Assessment by a novel non-invasive measurement of pulmonary pulse wave transit time.

#### 14:15-14:30 Break

#### 14:30-15:30 G-CAN Lifetime Achievement Award Lecture

**Moderators:** Robert Terkeltaub, Fred Lioté 10-minute talks with 5-minute question period

#### **Honorees:**

- #McCarthy, Dublin, Ireland
- #Alexander So, Lausanne, Switzerland
- Thomas Bardin, Paris, France and Ho Chi Minh City, Vietnam
- Ann Rosenthal, Milwaukee, USA

#### 15:30-15:50 G-CAN 2022 H. Ralph Schumacher Memorial Early Career Investigator Award Lecture

Moderators: Nicola Dalbeth, Hyon Choi 10-minute talk with 5-minute question period Introduction by Robert Terkeltaub (5 minutes)

#### **AWARDEE:**

**Concepcion Sanchez** San Diego, US; *David Gonzalez, Robert Terkeltaub, Mentors* Sustained xanthine oxidase inhibitor (XOI) treat to target (T2T) urate lowering therapy (ULT) rewires a tight inflammation protein interactome detected by quantitative multiplex serum proteomics.

#### 15:50-17:00 Breakout Sessions

**Focus Group Network Sessions:** Three separate, sessions live and via Zoom led by G-CAN members. All times are USA Eastern Time.

- 1. **CPPD and BCP Crystal Arthropathies:** Discussion Leaders: Ann Rosenthal (Chair), Geraldine McCarthy, Abhishek Abhishek, Sara Tedeschi, Jessica Bertrand
- 2. **Imaging of Crystal Arthropathies:** Discussion Leaders: Fabio Becce, (Chair), Savvas Nicolaou, Nicola Dalbeth, Tristan Pascart, Georgios Filippou, Hyon Choi
- 3. **Genetics of Crystal Arthropathy:** Discussion Leaders: Tony Merriman (Chair), Owen Woodward, Hirotaka Matsuo, Yongyong Shi

# 17:00-18:30 Reception with wine and hors d'oeuvres for all general meeting attendees Dinner on your own, for general meeting attendees

**19:00** Board Dinner for 14 invitees, to honor award recipients, offsite All other attendees, dinner on your own

# Saturday, October 22, 2022: All times are Eastern Time Zone USA

6:45 Registration Opens

7:00-8:00 Continental Breakfast and Breakfast Mentoring Network Breakout Session:

Mentor Leaders: Jas Singh, Robert Terkeltaub, Tony Merriman, Hyon Choi

Mentee Discussion Leaders: Youssef Roman and Chio Yokose

#### **General Session 2**

#### 8:00-8:50 CPP and BCP Crystal Arthropathy Mini-symposium

Moderators: Ann Rosenthal, Fred Lioté

Lightning talks, 10 minutes maximum each, 3 minutes for questions per talk

- G-CAN nomenclature of CPPD project Georgios Filippou, Florence, Italy
- ACR/EULAR classification update Abhishek Abhishek, Nottingham, UK
- Outcome measures in CPPD Sara Tedeschi, Boston, USA

#### 8:50-9:10 Featured Lecture

15-minute talk, 5 minutes for questions

Moderators: Ann Rosenthal, Robert Terkeltaub

New model of arthritis due to BCP crystals – Leo Joosten, Nijmegen, Netherlands

#### 9:10-9:45 G-CAN Gold Medal Investigator Award Lecture

**Moderators:** Robert Terkeltaub, Tony Merriman 20-minute talk with 5-minute question period

Honoree: Hyon Choi, MGH, Harvard Medical School, Boston, USA

9:45-10:00 Break

#### 10:00-11:30 G-CAN Early Career Investigator SPARK\*\* Session

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

Moderators: Leo Joosten, Angelo Gaffo

#### **SPARK PRESENTERS**

1. Sandy ElSayed, Irvine, US; Khaled Elsaid Mentor

Protein Phosphatase-2A regulates xanthine oxidase activity in macrophages and influx of inflammatory monocytes in a murine gout model.

#### 2. **Isidoro Cobo, PhD** San Diego, US; *Christopher Glass, Mentor*

Epigenetic activation of the lysosomal biogenesis program by collaborative binding with TFEB is required for appropriate response of macrophages to monosodium urate crystals.

- 3. **Edoardo Cipolletta, MD** Nottingham, UK; *Abhishek Abhishek, Mentor* 
  - Risk of venous thromboembolism after gout flares.
- 4. **Orsolya Gaal, PhD** Cluj-Napoca, Romania; *Leo Joosten, Mentor*

Gout-associated SNP at the IL1RN-IL1F10 region is functionally linked to altered cytokine production in PBMCs of patients with gout and controls.

- 5. **Panagiota Drivelegka, MD, PhD** Gothenburg, Sweden: *Lennart Jacobsson, Mentor* Allopurinol use and risk of acute coronary syndrome in patients with incident gout: a population-based study in Sweden.
- 6. **Jean Liew, MD** Boston, US; *Tuhina Neogi, Mentor*The association of intra-articular mineralization on CT and radiographic chondrocalcinosis with location-specific cartilage loss on MRI in knee OA: The Multicenter Osteoarthritis Study.

7. **Leanne Chen,** Auckland, NZ; *Nicola Dalbeth, Mentor*Changes in tophus composition during urate-lowering therapy: A dual energy CT study.

**11:30-12:00** Lunch (pick up box lunch and return to meeting room by 12:00 for program)

#### 12:00-12:30 Gout, Urate and Crystal Deposition Disease Journal Update

Moderators: David Mount, Hyon Choi

30 minutes

**Tony Merriman and Tristan Pascart** 

#### 12:30-14:00 Gout and Hyperuricemia Mini-symposium, Part 1:

Moderators: Pascal Richette, John Fitzgerald

Lightning talks, 10 minutes maximum each, 3 minutes for questions per talk

- The gut microbiome consumes uric acid and modulates hyperuricemia in uricasedeficient mice – *Dylan Dodd, Stanford, USA*
- Gene-environmental interaction in gout Natalie McCormick, Boston, USA
- Inflammatory pathways in gout and hyperuricemia Tania Crişan, Cluj-Napoca, Romania
- Gout Mega-GWAS results Megan Leask, Birmingham, USA
- Personalized Medicine in Gout Care Chio Yokose, Boston, USA
- Gout in people diagnosed with COVID-19 Kanon Jatuworapruk, Bangkok, Thailand

#### 14:00-14:15 Break

#### 14:15--14:55 Hyperuricemia and Gout Genomics, and Hyperuricemia-Independent

**Gout Phenotypes** 

Moderators: Hyon Choi, Owen Woodward

Two 15-minute talks followed by 10-minute question and answer period in this session

- Identification of new genes involved in gout –*Tony Merriman*
- Erosive gouty arthritis <u>without</u> hyperuricemia: An experiment of nature informs a new approach to studying incident gout and disease phenotypes – *Robert Terkeltaub, La Jolla, USA*

#### 14:55-17:00 Gout and Hyperuricemia Mini-symposium, Part 2:

Lightning talks, 10 minutes maximum each, 3 minutes for guestions per talk

Moderators: Nicola Dalbeth, Tania Crișan

- Adiposity Genes and Gout Hanieh Yaghootkar, Exeter, UK
- Reflections on a Randomized Clinical Trial of Intensive Serum Urate Lowering for Erosive Gout – Nicola Dalbeth, Auckland, New Zealand
- #Gout and Metabolism Huiyong Yin, Shanghai, China

- Insulin signaling and urate transport David Mount, Boston, USA
- Gout Comorbidities and Sex Nick Sumpter, Birmingham, USA

17:00-17:15 Concluding Comments and Adjourn Meeting

**Tony Merriman, Robert Terkeltaub** 

18:00-20:45 Group Dinner for All Meeting Attendees\*

Landini Brothers, 115 King St, Alexandria, VA

21:00 Post-Meeting Karaoke Party

at Landini Brothers

# **Sunday Oct 23: Checkout/Departures**



Scan to Download Question and Answer App



Join the Conversation! #GCAN2022

<sup>\*</sup>Requires advance reservation and fee of \$75, sign up when registering for conference

<sup>\*\*</sup>SPARK – Select Presentations of Abstracts Keynotes, formerly called Emerging Career Investigator Oral presenters

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