



G-CAN 2019 Fifth Annual Meeting AGENDA

November 8, 2019

Crowne Plaza Midtown Hotel
590 West Peachtree Street Northwest
Atlanta, GA 30308

CONFERENCE REGISTRATION: www.123signup.com/g-canmeeting

Breakfast and sign-in at 7:30 am; meeting 8:00 am to 4:30 pm

- 8:00 – 8:15 Welcome and Introduction to G-CAN, Recognition of Industry Sponsors**
Founding G-CAN Co-Directors: Robert Terkeltaub (President) and Hyon Choi (VP and Treasurer)
- 8:15 – 10:00 Core Issues in Gout and Hyperuricemia**
Moderators: Fred Lioté and Robert Terkeltaub
- 8:15 – 8:30 Nature vs Nurture or Nature Plus Nurture in the Pathogenesis of Gout. *Yuqing Zhang, Boston*
8:30 – 8:45 Impact of CVD Diet on Comorbidity of Gout and Serum Urate Levels. *Stephen Juraschek, Baltimore*
8:45 – 9:00 Mendelian Randomization Update: Serum Urate and Chronic Kidney Disease. *Hyon Choi, Boston*
9:00 – 9:15 Mendelian Randomization Update 2. Gout and Comorbidities. *Tanya Major, New Zealand*
9:15 – 9:30 Planning a Clinical Trial to Resolve the Gout Guideline Conflicts and Comorbidity Endpoints. *Dan Solomon, Boston*
9:30 – 9:45 Critical Review of Latest Trial Data and Study Methodologies for Gout Management. *Tuhina Neogi, Boston*
9:45 – 10:00 OA and Gout. *Michael Pillinger, New York*
- 10:00 – 10:15 Break**
- 10:15 – 11:35 Basic-Translational Gout Research**
Moderators: Tony Merriman and David Mount
- 10:15 – 10:35 New Developments in Xanthine Oxidoreductase Biology. *Alex So, Lausanne*
10:35 – 10:55 Monocyte Inflammatory Training and Histone Modification in Gout. *Leo Joosten, Nijmegen*
10:55 – 11:15 Novel Markers of the Inflammatory State in Gout. *Robert Terkeltaub, La Jolla*
11:15 – 11:35 Special Lecture: 2019 G-CAN President's Award for Asian-Based Emerging Investigator: A Novel Unifying Approach to Uricase Biology and Modulation of Inflammation for Tophaceous Gout. *Jennifer Lee, Seoul*
- 11:35 – 12:15 G-CAN Young Investigator Poster Session**
From 11:35 to 12:15 a guided poster tour led by Michael Pillinger is offered as an option; starts at Poster #1 and ends at Poster #20.
- Jie Lu**, Qingdao, China; *Changgui Li, Mentor.*
Hyperuricemia predisposes to the onset of diabetes via promoting pancreatic β -Cell death in uricase deficiency mice.
 - Natalie McCormick**, Boston, US; *Hyon Choi, Mentor.*
From a potential solution to part of the problem: Analysis of public-payer spending and price trends for brand-name and generic colchicine and other gout medications.
 - Ken Cai**, Auckland, New Zealand; *Nicola Dalbeth, Mentor.*
The relationship between gout and cardiovascular disease outcomes: A health data linkage study of approximately 1 million New Zealanders using population-level cardiovascular risk prediction equations.
 - Ravi Narang**, Auckland, New Zealand; *Nicola Dalbeth, Mentor.*
Do serum urate-associated genetic variants influence gout risk in people on diuretics? Analysis of the UK Biobank.
 - Nick Sumpter**, Dunedin, New Zealand; *Tony Merriman, Mentor.*
Association of a gout polygenic risk score with disease severity phenotypes amongst Caucasian gout patients in three independent cohorts.
 - Chio Yokose**, Boston, US; *Hyon Choi, Mentor.*
Subtypes of gout based on comorbidity patterns among black adults in the US general population: Cluster analysis of the National Health and Nutrition Examination Survey 2007-2016.

7. **Medeea Badii**, Cluj-Napoca, Romania; *Leo Joosten, Mentor*.
Downregulation of type 1 interferon signaling pathway by uric acid exposure in primary human mononuclear cells.
8. **Sarah Stewart**, Auckland, New Zealand; *Nicola Dalbeth, Mentor*.
 - a. Article placement order in rheumatology journals: A content analysis focusing on crystal arthritis articles.
 - b. How are flares reported in long-term gout clinical trials? A content analysis of randomized controlled trials.
9. **Philip Robinson**, Brisbane, Australia; *Nicola Dalbeth, Mentor*.
 - a. Colchicine prophylaxis of gout flares when commencing allopurinol is very cost effective: A health economic analysis.
 - b. Adverse events during colchicine use: A systematic review and meta-analysis of randomised controlled trial events.
10. **Vicky Tai**, Auckland, New Zealand; *Nicola Dalbeth, Mentor*.
Do serum urate-associated genetic variants differentially contribute to gout risk according to body mass index? Analysis of the UK Biobank.
11. **Orsolya Gaal**, Cluj-Napoca, Romania; *Leo Joosten, Mentor*.
The role of *IGF1R* in urate-induced inflammation.
12. **Andrew Shaffer**, Birmingham, US; *Angelo Gaffo, Mentor*.
Longitudinal variation in repeat serum urate levels: Relationship with hyperuricemia classification.
13. **Loredana Peca**, Cluj-Napoca, Romania; *Leo Joosten, Mentor*.
Interleukin-1 receptor antagonist 86-bp VNTR gene polymorphism and circulating IL-1Ra concentrations in Romanian patients with gout.
14. **Fatima Tahzeeb**, Gothenburg, Sweden; *Mats Dehlin, Mentor*.
The association between urate and CSF markers of Alzheimer's disease in a population-based sample of 70-Year-Olds.
15. **Mike Frecklington**, Auckland, New Zealand; *Nicola Dalbeth, Mentor*.
The effects of worn and new footwear on plantar pressure in people with gout.
16. **Youssef Roman**, Hilo, US; *Deborah A. Taira, Mentor*.
Prevalence of rs2231142 in *ABCG2* parallels the reported higher prevalence of hyperuricemia and gout in Filipinos than non-Filipinos.
17. **Ioana Hotea**, Cluj-Napoca, Romania; *Leo Joosten, Mentor*.
Alpha-1-antitrypsin and IL-1 receptor antagonist in relation to serum urate and inflammatory markers in patients: Comparison between patients with gout, asymptomatic hyperuricaemia and healthy controls.
18. **Ritch te Kampe**, Maastricht, The Netherlands; *Tim Jansen, Mentor*.
Sex differences in the clinical profile among gout patients: Cross-sectional analyses of an observational study.
19. **Ying Chen**, Qingdao, China; *Changgui Li, Mentor*.
Prevalence and trends of hyperuricemia among residents aged 18 to 40 years old in coastal areas of Shandong Province, China 2004-2014.
20. **Lindsay Helget**, Omaha, US; *Ted R. Mikuls, Mentor*.
The prevalence, incidence, and burden of gout in the Veterans Health Administration from 2005-2014.

12:15 – 12:30 Lunchboxes Become Available to be Picked Up

Participants will pick up their lunches and return for the Young Investigator Oral Presentations.

12:30 – 13:30 G-CAN Young Investigator Symposium Working Lunch Session

Five Oral Presentations moderated by Alex So and Tuhina Neogi, 12 minutes each

1. **Gabriela Sandoval-Plata**, Nottingham, UK; *Abhishek Abhishek, Mentor*
Asymptomatic monosodium urate crystal deposition associates with increased expression of pro-inflammatory genes.
2. **Patricia Gnieslaw de Oliveira**, LaJolla, US; *Ru Liu Bryan, Mentor*
A novel ecto-enzymatic macrophage metabolic regulation system in monosodium urate crystal-induced inflammation.
3. **Gabriela Angélica Martínez-Nava**, Mexico City, Mexico; *Carlos Pineda, Mentor*
Gut dysbiosis in patients with gout and individuals with asymptomatic hyperuricemia.
4. **Chio Yokose**, Boston, US; *Hyon Choi, Mentor*
The effects of a low-fat, Mediterranean or low-carbohydrate diet on serum urate.
5. **2019 Ralph H. Schumacher Memorial Young Investigator Lecture**
Introduction by Dr. Tuhina Neogi
Kensuke Nishimiya, Miyagi, Japan; *Guillermo Tearney, Mentor*
A novel approach for uric acid crystal detection in human coronary plaques ex-vivo with cross-polarized micro-OCT.

13:30 – 14:00 Core Issues in Gout and Hyperuricemia: Asia-based Perspective

Moderators: Abhishek Abhishek and Hyon Choi

13:30 – 13:50 2019 G-CAN Clinical Research Distinguished Lecture: Gout in China and a Center-based Treatment Model. *Changgui Li, Qingdao, China*

13:50 – 14:00 Contemporary Epidemiology of Gout in Korea. *Jung-Soo Song, Korea*

14:00 – 14:30 New Developments in CPPD

Moderators: Fred Lioté and Tuhina Neogi

14:00 – 14:15 CPPD Arthritis Flare Update. *Tristan Pascart, France.*

14:15 – 14:30 CPPD: The ACR/EULAR Classification Project. *Abhishek Abhishek/Hyon Choi*

14:30 – 15:00 Update on selected G-CAN Projects

Moderators: Robert Terkeltaub and Alex So

14:30 – 14:45 Update on G-CAN Nomenclature and Language Projects: *David Bursill*

14:45 – 15:00 Management of Gout in CKD: *Lisa Stamp and Angelo Gaffo, with Jessica Pisaniello and Hamish Farquhar*

15:00 – 15:10 Break

15:10 – 16:10 Core Issues in Gout and Hyperuricemia and Crystal Arthropathy

Moderators: Hyon Choi and David Mount

15:10 – 15:25 Perspective on Advances in Genetics of Gout. *Tony Merriman, New Zealand*

15:25 – 15:40 Further Perspective on Advances in Genetics of Gout. *Hiro Matsuo, Japan*

15:40 – 15:55 Comorbidity Clusters in Gout: Implications for Gout Prognosis and Future Comorbidity. *Ed Roddy, UK*

15:55 – 16:10 Predicting Development of Gout in Individuals with Hyperuricaemia: The TIGER Study. *Nicola Dalbeth, Auckland*

16:10 – 16:25 Discussion Time

16:25 – 16:30 Concluding Comments and Discussion

Robert Terkeltaub and Hyon Choi

16:30 Meeting Adjourns

Thank you to G-CAN's industry supporters

Roundtable Sponsor and Sponsor of Young Investigator Session



Sponsors



Affiliate Sponsors



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

Oral Presentation Abstracts

- 1. Gabriela Sandoval-Plata**
Sandoval-Plata, G., Morgan, K., Guetta-Baranes, T., Valdes, A., Doherty, M., Abhishek, A. [Asymptomatic monosodium urate crystal deposition associates with increased expression of pro-inflammatory genes.](#) University of Nottingham.
- 2. Patricia Gnieslaw de Oliveira**
de Oliveira, P., Alabarse, P., Marinho, Y., Nuygen, N., Terkeltaub, R., Bryan, R. L. [A novel ecto-enzymatic macrophage metabolic regulation system in monosodium urate crystal-induced inflammation.](#) UCSD School of Medicine.
- 3. Gabriela Angélica Martínez-Nava**
Martínez-Nava, G.A., Méndez Salazar, E.O., Vázquez-Mellado Cervantes, J., Zamudio Cuervas, Y., Francisco Balderas, A., Martínez Flores, K., Fernández Torres, J., Lozada Pérez, C., Pineda Villaseñor, C., Sánchez González, A., Silveira Torre, L., Burguete García, A.I., Orbe Orihuela, C., Lagunas Martínez, A., Palacios González, B., López Reyes, A. [Gut dysbiosis in patients with gout and individuals with asymptomatic hyperuricemia.](#) Laboratorio de Líquido Sinovial, Instituto Nacional de Rehabilitación “Luis Guillermo Ibarra Ibarra.”
- 4. Chio Yokose**
Yokose, C., Rai, S., McCormick, N., Lu, N., Curhan, G., Hyon, H.K. [The effects of a low-fat, Mediterranean or low-carbohydrate diet on serum urate.](#) Massachusetts General Hospital/Harvard Medical School.
- 5. Kensuke Nishimiya**
Nishimiya, K., Sharma, G., Singh, K., Osman, H., Gardecki, J.A., Tearney, G.J. [A novel approach for uric acid crystal detection in human coronary plaques ex-vivo with cross-polarized micro-OCT.](#) Massachusetts General Hospital/Harvard Medical School.

Poster Presentation Abstracts

- 1. Jie Lu**
Lu, J., He, Y., Cui, L., Li, C. [Hyperuricemia predisposes to the onset of diabetes via promoting pancreatic \$\beta\$ -Cell death in uricase deficiency mice.](#) The Affiliated Hospital of Qingdao University.
- 2. Natalie McCormick**
McCormick, N., Wallace, Z.S., Yokose, C., Jorge, A., Sacks, C., Hsu, J., Choi, H.K. [From a potential solution to part of the problem: Analysis of public-payer spending and price trends for brand-name and generic colchicine and other gout medications.](#) Massachusetts General Hospital /Harvard Medical School.
- 3. Ken Cai**
Cai, K., Wu, B., Mehta, S., Dalbeth, N., Jackson, R., Poppe, K. [The relationship between gout and cardiovascular disease outcomes: A health data linkage study of approximately 1 million New Zealanders using population-level cardiovascular risk prediction equations.](#) University of Auckland.
- 4. Ravi Narang**
Narang, R.K., Gamble, G., Phipps-Green, A.J., Topless, R., Cadzow, M., Stamp, L.K., Merriman, T.R., Dalbeth, N. [Do serum urate-associated genetic variants influence gout risk in people on diuretics? Analysis of the UK Biobank.](#) University of Auckland.
- 5. Nick Sumpter**
Sumpter, N., Lupi, A., Vazquez, A., Reynolds, R., Abhishek, A., Andres, M., Doherty, M., Jacobsson, L., Janssen, M., Jansen, T., Joosten, L.A.B., Kapetanovic, M., Liote, F., Matsuo, H., McCarthy, G.,

Perez-Ruiz, F., Riches, P., Richette, P., Roddy, E., Stiburkova, B., So, A., Tausche, A., Torres, R.J., Uhlig, T., Dalbeth, N., Stamp, L.K., Merriman, T. R. [Association of a gout polygenic risk score with disease severity phenotypes amongst Caucasian gout patients in three independent cohorts.](#) University of Otago.

6. **Chio Yokose**

Yokose, C., Lu, N., Chen-Xu, M., Zhang, Y., Choi, H.K. [Subtypes of gout based on comorbidity patterns among black adults in the US general population: Cluster analysis of the National Health and Nutrition Examination Survey 2007-2016.](#) Massachusetts General Hospital/Harvard Medical School.

7. **Medeea Badii**

Badii, M., Crişan, T.O., Klück, V., Novakovic, B., Stunnenberg, H., Netea, M.G., Popp, R.A., Joosten, L.A.B., HINT Consortium. [Downregulation of type 1 interferon signaling pathway by uric acid exposure in primary human mononuclear cells.](#) Radboud University Medical Center.

8. **Sarah Stewart**

a. Stewart, S., Gamble, G., Grey, A., Dalbeth, N. [Article placement order in rheumatology journals: A content analysis focusing on crystal arthritis articles.](#) University of Auckland.

b. Stewart, S., Tallon, A., Taylor, W., Gaffo, A., Dalbeth, N. [How are flares reported in long-term gout clinical trials? A content analysis of randomized controlled trials.](#) University of Auckland.

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Gaal, O., Badii, M., Marginean, D., Cabau, G., Hotea, I., Pamfil, C., Rednic, S., Crişan, T.O., Popp, R.A., Joosten, L.A.B., HINT Consortium. [The role of *IGF1R* in urate-induced inflammation.](#) Iuliu Haţieganu University of Medicine and Pharmacy.

12. **Andrew Shaffer**

Shaffer, A., Rahn, E.J., Saag, K., Mudano, A., Gaffo, A. [Longitudinal variation in repeat serum urate levels: Relationship with hyperuricemia classification.](#) University of Alabama at Birmingham.

13. **Loredana Peca**

Peca, L., Hotea, I., Nica, V., Mărginean, D.H., Gaal, O., Pamfil, C., Rednic, S., Crişan, T.O., Popp, R.A., Joosten, L.A.B. [Interleukin-1 receptor antagonist 86-bp VNTR gene polymorphism and circulating IL-1Ra concentrations in Romanian patients with gout.](#) Iuliu Haţieganu University of Medicine and Pharmacy.

14. **Fatima, Tahzeeb**

Tahzeeb, F., Jacobsson, L.T.H., Johansson, L., Dehlin, M., Skoog, I. [The association between urate and CSF markers of Alzheimer's disease in a population-based sample of 70-Year-Olds.](#) University of Gothenburg.

15. **Mike Frecklington**

Frecklington, M., Dalbeth, N., McNair, P., Vandal, A.C., Gow, P. [The effects of worn and new footwear on plantar pressure in people with gout.](#) AUT University.

16. Youssef Roman

Roman, Y., Tiirikainen, M., Riel, J. Prevalence of rs2231142 in *ABCG2* parallels the reported higher prevalence of hyperuricemia and gout in Filipinos than non-Filipinos. University of Hawaii.

17. Ioana Hotea

Hotea, I., Crisan, T.O., Pamfil, C., Badii, M., Gaal, O., Peca, L., Mirea, A., Popp, R.A., Rednic, S., Joosten, L.A.B. Alpha-1-antitrypsin and IL-1 receptor antagonist in relation to serum urate and inflammatory markers in patients: Comparison between patients with gout, asymptomatic hyperuricaemia and healthy controls. Iuliu Hatieganu University of Medicine and Pharmacy.

18. Ritch te Kampe

te Kampe, R., Janssen, M., van Durme, C., Jansen, T.L., Boonen, A. Sex differences in the clinical profile among gout patients: Cross-sectional analyses of an observational study. Maastricht University, the Netherlands.

19. Ying Chen

Chen, Y., Lu, J., Yang, M., Wang, Y., Wang, C., Sun, R., Wang, Z., Wang, F., Li, C. Prevalence and trends of hyperuricemia among residents aged 18 to 40 years old in coastal areas of Shandong Province, China. 2004-2014. The Affiliated Hospital of Qingdao University.

20. Lindsay Helget

Helget, L.N., England, B.R., Roul, P., Ruckstuhl, A., Mikuls, T.R. The prevalence, incidence, and burden of gout in the Veterans Health Administration from 2005-2014. University of Nebraska Medical Center.