

Computer Assisted Orthopedic Surgery 2024



WELCOME TO
CAOS 2024
NETHERLANDS

SEE YOU IN GRONINGEN
19-22 JUNE 2024

WWW.CAOS2024.ORG





Paul Jutte
Chair of local committee
CAOS 2024 Groningen

www.CAOS2024.org



Welcome to CAOS 2024 in Groningen

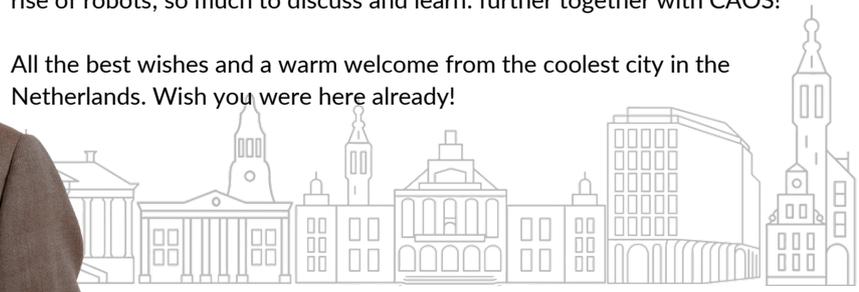
a vibrant and old city in the North of the
Netherlands in the Western part of Europe

Surrounded by the natural, flat grazing grounds, lakes and forest-rich nature close to the sea, Groningen became city rights in 1040. The university was founded in 1614 and due to its successful curricula over 400 years, it now hosts 50.000 students from all over the world. And that brings the interesting mix of young and old, of tech and med that proved to be such a great fruitful soil for innovation. It is a field lab full of innovators living and working together to improve health by technology.

CAOS2024 will provide a wonderful event to meet old & make new friends and be enlightened into the newest developments in your field during interactive workshops, presentations and coffee breaks, where you can stroll by numerous industry displays whilst having good coffee and healthy local food.

We live in an era of an explosive rise of integration of technology in our daily lives. The world is 3D and so are we. Apps for daily support, computers to navigate, AI to predict, analyze and provide feedback, the rise of robots; so much to discuss and learn: further together with CAOS!

All the best wishes and a warm welcome from the coolest city in the Netherlands. Wish you were here already!



Who is at CAOS 2024 Groningen

www.caos2024.org



Who will attend:

- We expect 150-200 participants from all over the world
- We aim for a cross-fertilization between delegates and corporate partners
- Target group:
 - orthopedic surgeons
 - trauma surgeons
 - researchers
 - Delegates from clinical and technical backgrounds and corporate partners
 - Biomedical engineers

Organizing committee

Prof.dr. Paul Jutte, Chairman, orthopedic surgeon
Dr. Hugo van der Veen, Treasurer, orthopedic surgeon
Dr. Jasper Gerbers, orthopedic surgeon
Prof.dr. Job Doornberg, orthopedic surgeon
Sander Tabernée Heijmeijer, MSc technical physician
Dr. Frank IJpma, trauma surgeon
Dr. Peter Pijpker, technical physician
Dr. Joris Ploegmakers, orthopedic surgeon
Odette C.M. de Beer - Kock, PCO Excel Congressservice



About CAOS 2024 Groningen

www.caos2024.org



Congress Venue

The conference takes place at the
University Medical Center Groningen (UMCG)
Hanzeplein 1
Groningen, The Netherlands



Social Events

Wednesday June 19th:

Welcome Reception at Stach

for Board, Organizing committee, Delegates and sponsors

Thursday June 20th:

Presidents Dinner (Invitation only)

for Board, Organizing committee, Keynote speakers and Platinum Sponsors

Young Investigators Pub Crawl

Friday June 21st:

CAOS 2024 Dinner Party at NOK

(open invitation - ticket purchase necessary)



CAOS 2024 Dinner Party Groningen

Friday 21 June 2024

www.caos2024.org



Venue:

NOK Groningen

Nieuwe Markt 1 Groningen

18.30 Drinks

19.30 Dinnerparty & entertainment

23.00 End of the Social events CAOS 2024

Tickets, including acces, drinks and dinner:

Tickets € 90

Student-ticket € 50



Keynote Lecturers

"Further Together"



Prof.dr. Ruurd Jaarsma
Head of orthopedic surgery dept.
Flinders University Adelaide, Australia
*Optimizing Education and Training using
your Network: Reversed Perspectives from
the Southern Hemisphere*



Prof.dr.ir. Stefano Stramigioli
**Head of Advanced robotics &
mechatronics**
University of Twente the Netherlands
*Clinical Applications of Robotics and
Mechatronics: Innovation by Technical
Intuition*



Prof.dr. Sarthak Misra
Head of Surgical Robotics Lab
University of Twente & UMC Groningen
the Netherlands
Surgical Robotics: A Journey Across Scales



Dr. Prakash Jayakumar
Orthopedic surgeon
University of Texas Austin, Dell Medical
School, USA
*A.I.: Accelerating Personal Health Data Beyond
Hype to Hope and New Horizons*



Dr. Frank Ypma
Trauma Surgeon
University Medical Center Groningen
the Netherlands
*3D Surgical Planning and Patient-Specific
Implants in Orthopaedic Trauma Surgery*



Elvis Chui Chun Sing
**Assistant Professor of Orthopaedics and
Traumatology**
Chinese University of Hong Kong
*AI in Orthopaedics: Advancing Planning and
Prediction Systems*

"Further Together"



WEDNESDAY 19 JUNE 2024: WORKSHOPS

13.00 - 14.00 hrs

- 1A: Workshop MDR: Patient specific prostheses, plans and workflows, managing conformity under MDR
Prof. dr. Gabrielle Tuijthof
- 1B: Workshop: Hands-on AI image recognition: How to use complex neural networks for detection and classification of radiographs. Where do you start? - dr. Rik Wisselink-Bijker

14.15 - 15.45 hrs

- 2A: Workshop medCAD: hands-on digital planning using Materialise mimics/3matic. From case and CT to self made PSLs and plate planning + guide. Also using hololens. - Ir. Miriam Oldhoff
- 2B: Workshop CAS: hands-on digital planning and execution using the Brainlab CAS system: imagebased for spine, trauma, oncology or complex orthopedics. - Dr. Jasper Gerbers
- 2C: Focusgroup Robotics
- 2D: Focusgroup SOPS for DOR

16.15 - 17.30 hrs Round 3

- 3A: Focus group Oncology: AI, algorithms and assisted planning: a new frontier
- 3B: Focus group Applied Biomechanics: Collaboration through shared databases and challenges
- 3C: Focus group Ultrasound & AI



"Further Together"



Preliminary program CAOS 2024:

THURSDAY 20 JUNE 2024: KEYNOTE LECTURES & ABSTRACTS

08.30 Fundamental technology innovations

10.00 Coffee & Networking

10.45 Optimizing Education and Training using your Network:
Reversed Perspectives from the Southern Hemisphere

Keynote: Prof.dr. Ruurd Jaarsma

11.30 Optimal supervision for training surgeons in the OR

Patrick Nieboer & Mike Huiskes

12.15 Lunch & Networking

13.15 Surgical Robotics: A Journey Across Scales

Keynote: Prof.dr. Sarthak Misra

14.45 Tea & Networking

15.30 3D surgical planning and patient-specific implants in
orthopaedic trauma surgery

Keynote: Dr. Frank Ypma

17.00 End of program

17.15 Board meeting CAOS at UMCG

Social events:

19.00 Presidents Dinner

21.00 Pubcrawl Young Investigators



"Further Together"



Preliminary program CAOS 2024:

FRIDAY 21 JUNE 2024: KEYNOTE LECTURES & ABSTRACTS

08.30 Clinical outcome

10.00 Coffee & Networking

10.45 AI in Orthopaedics: Advancing Planning and Prediction Systems

Keynote: Elvis Chui Chun Sing

12.15 Lunch, Visit Exhibition & Networking

13.15. Clinical Applications of Robotics and Mechatronics: Innovation by Technical Intuition

Keynote: Prof.dr. Stefano Stramigioli

14.45 Tea & Networking

15.30 A.I: Accelerating Personal Health Data Beyond Hype to Hope and New Horizons

Keynote: Dr. Prakash Jayakumar

17.00 General assembly CAOS

Social events:

18.00 CAOS Dinner Party



"Further Together"



Preliminary program CAOS 2024:

SATURDAY 22 JUNE 2024: KEYNOTE LECTURES & ABSTRACTS

Saturday 22 June 2024

08.30 Computer Assisted Surgery developments

10.00 Coffee

10.45 Collaborative interdisciplinary studies

11.30 Podium presentations & award ceremony

12.00 Closing ceremony





Registration & Information

From May 1st

CAOS member	€ 650
CAOS student member	€ 300
Non member	€ 750
Student	€ 350
Workshops Wednesday	€ 80

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www.CAOS2024.org