

Healthcare Operations Research Summer School in Twente

July 21 – 25, 2017

University of Twente, Enschede, the Netherlands

Deadline extended, apply before April 10th!

Below please find the summer school announcement with updated tentative program and participation fees.

We are excited to announce a special summer school on Healthcare Operations Research this summer at the University of Twente, the Netherlands! The event targets PhD students working on OR applications focused on improving healthcare. Participants will learn state-of-the-art OR techniques taught by renowned international professors, learn about how to successfully engage with the healthcare practice, and meet other PhD students from around the world. The program includes a wide variety of components including technical lectures, tutorials, inspiring seminars, interactive activities and a design competition of a serious game that demonstrates a healthcare OR/OM concept to healthcare professionals. The total workload of the summer school is 2 European Credits (2 ECs = 56 hours), consisting of preparation and contact hours.

Where and when?

The event will take place on University of Twente's campus in *Enschede, the Netherlands*, from *July 21st to July 25th 2017*, right after the IFORS conference in Quebec City, Canada (July 17 – 21) and before the [INFORMS Healthcare 2017](#) meeting in Rotterdam, the Netherlands (July 26 – 28) and the [ORAHS meeting in Bath, UK](#) (July 31 – August 4). The INFORMS Rotterdam conference can be easily reached by train from Enschede, immediately following the summer school.

Contributing professors

- [Dr. Sally Brailsford](#) (University of Southampton) – Chair, [EURO-ORAHS working group](#)
- [Dr. Timothy Chan](#) (University of Toronto) – Director, [Centre for Healthcare Engineering](#)
- [Dr. Brian Denton](#) (University of Michigan) – President, [INFORMS](#)
- [Dr. Eva Lee](#) (Georgia Institute of Technology) – Director, [Center for Operations Research in Medicine and Healthcare](#)
- [Dr. Richard Boucherie](#) (CHOIR, [University of Twente](#)) – Organizer
- [Dr. Derya Demirtas](#) (CHOIR, [University of Twente](#)) – Organizer
- [Dr. Erwin Hans](#) (CHOIR, [University of Twente](#)) – Organizer

Tentative Program

Time	Activity	Speaker
Friday, July 21 st		
Before 18:00	Arrival of participants	
18:00 – 23:00	Dinner, getting to know each other and forming groups	

Saturday, July 22 nd		
9:00 – 9:15	Opening	
9:15 – 10:30	You're Wanted! - We look back at the history of OR in Healthcare, and give an overview of what has and has not been accomplished so far. Also, we outline the great challenges that current and near future healthcare faces	Dr. Sally Brailsford
10:30 – 12:30	Game on! - Participants team up and design a prototype serious game that demonstrates a healthcare OR/OM concept to healthcare professionals/students.	Dr. Derya Demirtas Dr. Erwin Hans
12:30 – 14:00	Lunch and brainstorming session on the assignment	
14:00 – 16:45	System Dynamics and Hybrid Simulation	Dr. Sally Brailsford
16:45 – 18:15	Queueing theory in healthcare	Dr. Richard Boucherie
18:15 – 20:15	Dinner	
20:15 – 22:45	Group activity	
Sunday, July 23 rd		
9:00 – 11:30	Markov Decision Processes for Medical Decision Making	Dr. Brian Denton
11:30 – 12:30	Free time to work on assignment	
12:30 – 14:00	Lunch	
14:00 – 16:30	Inverse Optimization	Dr. Timothy Chan
16:30 – 19:00	BBQ	
19:00 – 21:30	Making an impact?! - We address how to engage practice, how to organize your research to maximize impact. We also address the tension between consultancy and research, "easy solutions" and "fancy (but too complex for practice) OR".	Dr. Timothy Chan Dr. Eva Lee Dr. Erwin Hans
21:30 – 23:00	Group activity	
Monday, July 24 th		
9:00 – 11:30	Machine learning and mathematical programming	Dr. Eva Lee
11:30 – 19:00	Day trip including lunch & dinner	
19:00 – 21:00	Game Demonstrations (Part 1)	
21:00 – 22:30	Return to Enschede	
Tuesday, July 25 th		
9:00 – 11:00	Game Demonstrations (Part 2)	

Who can apply?

- PhD students working on an OR/OM in Healthcare project.
- Attendees are expected to have a MSc-level knowledge in deterministic & stochastic OR.
- Post-docs have a lower priority than PhD students. They may apply, but are only accepted if there are places left.

When and how to apply?

You must apply before April 10th (extended deadline). Admission will be on a competitive basis. Approximately 30 participants will be admitted: in addition to overall quality of CV, factors such as personal motivation, progress towards the PhD degree and institutional/geographical representation will be taken into account.

- Send your Curriculum Vitae including information about education, research projects, publications, awards and other pertinent experiences (pdf format) by email to: summerschool-choir@utwente.nl
- A max. 1 page motivation statement outlining your perspective and motivation to participate

Participation fee, accommodation, traveling, and catering

We are happy to report that the participation is only € 50 for PhD students, thanks to our generous sponsors! Catering and accommodation are included in the participation fee. Traveling costs will be paid by the participant. Accommodation is on-campus in shared cabins. The cabins are cozy and are nicely located between sports facilities, and a short walking distance to the summer school and various amenities. A very nice place to be in summer time – very fitting for a summer school. They are shared (gender separated) by at most 10 people. If you prefer to have a hotel room for yourself, you can stay at your own expense at the on-campus Hotel Drienerburgh, where rooms are approx. €70 per night.

Our sponsors

Thanks to our wonderful sponsors, without whom our summer school would not be possible:

- [STAR \(Stochastics-Theoretical and Applied Research\) Eurandom](#)
- [Centre for Telematics and Information Technology \(CTIT\) Univ. of Twente](#)
- [4TU Applied Mathematics Institute \(4TU.AMI\)](#)
- [Graduate Program Operations Management & Logistics](#)
- [Dutch Society of Operations Research \(NGB\)](#)

For updates see the website: <https://www.utwente.nl/en/choir/SummerSchool/>

Looking forward to seeing you in Twente!

Richard Boucherie

Derya Demirtas

Erwin Hans