

Dear colleagues,

The Center for Healthcare Operations Improvement and Research (**CHOIR**) at the University of Twente announces the 27th talk in the **ORAHS International Seminar Series**.

The ORAHS International Seminars are planned monthly via MS Teams in the late afternoon (Europe), morning (US), or evening (Asia/Pacific) and are part of the [EURO Online Seminar Series](#).

On **29 April 2025**, at **16:00 (CEST)**, Professor **Henrik Andersson** (Trondheim, Norway) will talk about *“Daily Surgical Case Scheduling with Upstream and Downstream Units”*.

Please save the date and register for this seminar here:

<https://events.teams.microsoft.com/event/9071eb3b-b547-496a-aab6-bfff1552bfc3@723246a1-c3f5-43c5-acdc-43adb404ac4d>

Abstract: On the day of surgery, patients require multiple activities across different units before and after their surgical procedures, referred to as Upstream and Downstream Units (UDUs). We present the Surgical Case Scheduling Problem with Up- and Downstream Units (SCSPUDU), a problem that integrates UDUs in the daily surgical planning. We have worked with Oslo University Hospital (OUS) and analyze the activities and associated resources along the surgical patient flows at the hospital. Currently, schedules are developed in a decentralized manner across surgical specialties, which can lead to delays and cancellations when schedules misalign. Addressing these challenges in daily scheduling decisions is essential for optimizing patient care, supporting staff well-being, and ensuring the efficient use of financial resources. To enhance coordination between units and reduce delays and cancellations at OUS, we explore the effect of integrating UDUs into their daily surgery scheduling, leading to the SCSPUDU.

Bio: **Henrik Andersson** is a professor of Optimization at the Norwegian University of Science and Technology (NTNU). In 2006, he defended his doctoral thesis in Infra Informatics, entitled “Coordinated routing – applications in location and inventory management”. Three different applications within waste management, pulp distribution, and school relocation were analyzed. He joined NTNU in 2007 as a postdoctoral fellow and is since 2014 full professor. Andersson has a diverse research background and has worked in maritime and road-based transportation, micromobility, emergency response, and healthcare among other areas. Within healthcare, he has for example worked on rostering of nurses and surgeons focusing on cyclic scheduling, reactive/proactive strategies and integrating master surgery and outpatient clinic scheduling. He has collaborated closely with St Olavs hospital in Trondheim where he also has had a position as Researcher working with nurse rostering.

More information about Henrik Andersson can be found here:

<https://www.ntnu.edu/employees/henrik.andersson>

For more information about our seminar presentations, please follow this link:

<https://www.utwente.nl/en/choir/research/ORAHS-International-Seminar-Series/>

We look forward to seeing you soon and often in the ORAHS International Seminar Series.

CHOIR Group
University of Twente