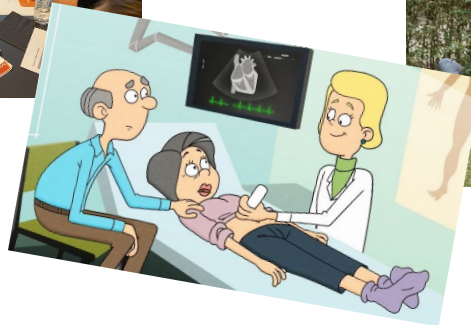# Invitation to PhD Summer school
Transatlantic Telehealth Research Network (TTRN)

Future Digital Technologies in Healthcare: How to design, test and assess the value of digital technologies and services that engage, empower, and motivate patients, August 11-13, 2021

Date   August 11-13, 2021

Format   Online, live and interactive sessions

Aims

1) To give a comprehensive introduction to research methods used in digital technologies in healthcare on how to design, test and assess the value of technologies and services that engage, empower, and motivate patients.

2) To present new digital technologies, theories and research methods in the design, assessment, and implementation of digital health technologies. During the course, the students will examine the possibilities for using the methods in their own Ph.D. project.

3) To give PhD students the possibility to create networks with other Danish and international PhD students and international researchers.

Course chairs

Birthe Dinesen, Professor & Head of Laboratory for Welfare Technologies - Telehealth & Telerehabilitation, Sport Sciences -Performance and Technology, Department of Health Science and Technology, Aalborg University (AAU), Denmark

Kristian Kidholm, Professor, Center for Innovative Medical Technology (CIMT) Odense University Hospital & Southern Danish University (SDU), Denmark.

Cynthia G Matsumoto, PhD, Nurse Informaticist, UC Davis Health, CA, USA

Scientific Committee

- Heather Young, Heather M Young, PhD, RN, FAAN, Professor and Dean Emerita, Betty Irene Moore School of Nursing, UC Davis, USA
- Nancy Albert, PhD, CCNS, FAAN, Associate Chief Nursing Officer, Office of Nursing Research and Innovation, Cleveland Clinic Health System, Kaufman Center for Heart Failure, Cleveland Clinic Main Campus, USA
- Helle Spindler, Phd, Associate Professor, Department of Psychology and Behavioral Sciences, Aarhus University, Denmark
- Lars Dittman, PhD, Professor, Networks Technology and Service Platforms, Technical University of Denmark, Denmark
- Kristian Kidholm, PhD, Professor, Center for Innovative Medical Technology (CIMT) Odense University Hospital & Southern Danish University (SDU), Denmark
- Cynthia G Matsumoto, PhD, Nurse Informaticist, UC Davis Health, CA, USA
- Birthe Dinesen, PhD, Professor & Head of Laboratory for Welfare Technologies - Telehealth & Telerehabilitation, Sport Sciences - Performance and Technology, Department of Health Science and Technology, AAU, Denmark

Course teaching methods

The course is interdisciplinary and relevant for students from medical, technical, and social science faculties. We will combine different methods like online lectures, virtual workshops, live presentation of cases and interactive group discussions online. Participants must submit a five-page conference paper by August 4 2021 about a research question related to their Ph.D. project and feedback will be given after the course (template is provided). It is mandatory to hand in the conference paper in order to get a certificate for participation and the 2 ECTS points. AAU will in collaboration with the TTRN issue a certificate.

Registration & participation fee

Registration will be available at this link by **June 1 2021** https://www.labwelfaretech.com/en/ttrn/phd-courses/dk-2021/

Deadline for registration is **August 4 2021**

Participation fee **2250 Danish kr per person/ 365 USD/ 303 EUR**. After you have registered you will be contacted on how to pay the fee for the course by Aalborg University, access to digital platform with reading list, access to lectures, etc.

Technical Platform

ZOOM video platform

All material and Zoom links will be available online at PhD Moodle at Aalborg University.

Preparations by the students ahead of the course

- Ignite Talks (2 minutes per participants) – a preparation of myself. Please see at this link what is an Ignite talk: https://www.youtube.com/watch?v=yGENcskRGRk
- Literature to be studied – please see list of references
- Conference paper (5 pages)- written feedback. Template is given.

ECTS: 2 ECTS

1 ECTS= 28 hours workload for the individual student

- Preparing ignite talk=2 hour
- Writting conference papers =30 hours
- Reading literature=12 hours
- Lectures and workshops=12 hours

A total of 56 hours workload for the Phd students = 2 ECTS.

Questions can be sent to

- Birthe Dinesen email bid@hst.aau.dk
- Kristian Kidholm email: Kristian.Kidholm@rsyd.dk

About the TTRN

Transatlantic Telehealth Research Network (TTRN) is dedicated to developing cutting-edge research and innovation within telehealth. The research is interdisciplinary (medicine, engineering, nursing, organizational, economic, policy); focuses on developing new diagnostic, preventive care and treatment methods/technologies for patients in their own homes utilizing telehealth. Problem-based, user-driven innovation is a key issue in international and interdisciplinary TTRN. You can read about TTRN here: https://citris-uc.org/research/project/transatlantic-telehealth-research-network/

In 2022 there will be an international conference on: *"Telehealth beyond COVID-19: Lessons learned"* June 2022 supported by the Novo Nordisk Foundation. Please keep update at: https://www.labwelfaretech.com/en/ttrn/

Wednesday August 11

8.30 **Welcome and introduction to the Transatlantic Telehealth Research Network (TTRN) PhD Summer School Program** by Birthe Dinesen & Kristian Kidholm

9.30 **Online sessions**

CET (Danish time)	EST (Ohio)	PST (CA)	Online sessions (prerecorded)
Available 24/7			Online lecture: "**How to design future digitalized service - from idea to product and services**" by Jane Clemensen, PhD, Professor, HC Andersen Children's Hospital, CIMT, Odense University Hospital (60 minutes)
			Online lecture: "**There is nothing so practical as a good theory – the example of implementing self-determination theory to engage and motivate patients through digital services I**" by Helle Spindler, PhD, Associate Professor, Department of Psychology and Behavioral Sciences, Aarhus University, Denmark (60 minutes)
			Online lecture: "**Improving Health with Enabling Technology through Engagement and Empowerment**" By Heather M. Young, PhD, RN, FAAN, Professor, Betty Irene Moore School of Nursing, Founding Dean Emerita, National Director, Betty Irene Moore Fellowships for Nurse Leaders and Innovators, UC Davis, CA, USA (60 minutes)

14.00 CET/ 8.00 am EST/ 5.00 am PST Break

CET (Danish time)	EST (Ohio)	PST (CA)	Interactive live sessions
16.00	10.00 am	7.00 am	**Virtuel workshop: "What is eHealth literacy and how can this concept be used in various stages of innovation – from recruiting for design to individualized health centered implementation and evaluation?"** By Lars Kayser, PhD, Associate Professor, Section of Health Services Research, Department of Public Health, Copenhagen University (lecture 40 minutes and Q & A 20 minutes)
17.00	11.00 am	8.00 am	**Case: "Gamification for Heart Failure Patients – a new way to motivation patients for telerehabilitation?"** by Birthe Dinesen & Helle Spindler (30 minutes presentation and Q & A 30 minutes)
18.00	12.00 am	9.00 am	**Break**
18.30	12.30 am	9.30 am	**Case: "Co-designers Providing Insight"** by Cindi Matsumoto, PhD, RN-BC, CQI Analyst, Heart and Vascular Centers, UC Davis Health, CA, USA (15 minutes and Q & A 15 minutes)
19.00	1.00 pm	10.00 am	**Case: Patient engagement in digital health by** Jane Clemensen, PhD, Professor, HC Andersen Children's Hospital, CIMT, Odense University Hospital (15 minutes and Q & A 15 minutes)
19.30	1.30 pm	10.30 am	**Virtual Plenum**: Lessons learned chaired by Birthe Dinesen & Kristian Kidholm
20.00	2.00 pm	11.00 am	**End of day**

Thursday August 12

8.30 **Introduction to the assessment of the value of digital technologies** and services by Kristian Kidholm

9.00 Online sessions

CET (Danish time)	EST (Ohio)	PST (CA)	Online sessions
Available online 24/7			**Online lecture: "There is nothing so practical as a good theory – the example of implementing self-determination theory to engage and motivate patients through digital services II"** by Helle Spindler, PhD, Associate Professor, Department of Psychology and Behavioral Sciences, Aarhus University, Denmark (60 minutes)
			Online lecture: "Patient Reported Outcome Measures (PROM-data) in Digital Health: Value, Strengths and Opportunities" by Nancy Albert, PhD, CCNS, FAAN, Associate Chief Nursing Officer, Office of Nursing Research and Innovation, Cleveland Clinic Health System, Kaufman Center for Heart Failure, Cleveland Clinic Main Campus, USA (60 minutter)
			Online lecture: "Communities of practice - patients as digital stewards" by Birthe Dinesen (60 minutes)

14.00 CET/ 7.00 am ET/ 4.00 pm PST Break

CET (Danish time)	EST (Ohio)	PST (CA)	Interactive live sessions
16.00	10.00 am	7.00 am	**Virtual workshop: "Assessment of the value of complex digital health technologies"** by Kristian Kidholm, Denmark (40 minutes presentation and Q & A 20 minutes)
17.00	11.00 am	8.00 am	**Case:** "Remote monitoring premature infants" by Kristina Garne Holm, PhD, postdoc, Odense University Hospital. (15 minutes presentation and Q & A 15 minutes)
17.30	11.30 am	8.30 am	**Break**
18.00	12.00 am	9.00 am	**Case: "Robot-mediated engagement for improved well-being"** by Veronica Ahumada-Newhart, PhD, Assistant professor, School of Medicine, UC Davis, CA, USA (15 minutes presentation and Q & A 15 minutes)
18.30	12.30 pm	9.30 am	**Case: "Real-time monitoring of patient. From patient to cloud and back again"** by Lars Dittman, PhD, professor, Department of Photonics Engineering, Technical University of Denmark (15 minutes presentation and Q & A 15 minutes)
19.00	1.00 pm	10.00 am	**Virtual plenum:** Lessons learned chaired by Birthe Dinesen & Kristian Kidholm
20.00	2.00 pm	11.00 am	**End of day**

Looking forward to seeing you!