



TNO@Holst Centre and Israeli Mini-Symposium on Healthcare Solutions for Homecare

25 August 2021 11:00-13:00 IL time 10:00-12:00 NL time

Webinar through zoom

YouTube Live

Registration: <https://www.eventbrite.com/e/tnoholst-centre-and-israeli-symposium-on-healthcare-solutions-for-homecare-tickets-146489061727>

Program

- 11:00-11:05 **Welcome note**
- Dr. Ton van Mol, Managing Director, TNO@Holst Center, The Netherlands
 - Dr. [Racheli Kreisberg](#), Innovation Attaché, Netherlands Embassy in Israel and Israeli Dutch Innovation Center ([IDIC](#))
- 11:05-11:20 **Minimizing Stress and Maximizing Vitality using Smart Clothing**
Dr. [Charlotte Kjellander](#), Team Lead Wearable Electronics, TNO@Holst Centre, The Netherlands
- 11:20-11:35 **A novel digital assisted approach towards managed continuous home care for chronic medical conditions**
Dr. [Asaf Caspi](#), Deputy chairman of Psychiatry, director of telemedicine hub in ARC, Sheba Medical Center, Israel
- 11:40-11:55 **Personalized Therapy by 3D Printed Medication**
[Daniël van der Linden](#), Business Development Manager – Food & Pharma, TNO, The Netherlands
- 11:55-12:10 **Wearable device platform for remote patient monitoring**
Prof. [Arik Eisenkraft](#), MD, MHA, Chief Medical Officer, [BioBeat](#) Technologies Ltd., Israel
- 12:15-12:30 **Health Patch Platform for Customized Wireless Remote Patient Monitoring**
Dr. [Thiru Kanagasabapathi](#), Innovation and Business Leader, Digital Health and Medical Wearables, TNO@Holst Centre, The Netherlands
- 12:30-12:45 **Wearable prescribed digital therapeutic device for non-pharmacological home/office treatment of migraine**
[Alon Ironi](#), CEO and co-founder, Theranica, Israel
- 12:45-13:00 **Discussion and closing remarks**
Dr. [Ashok Sridhar](#), Business executive, TNO@Holst Centre, The Netherlands



Objective:

The overall objective is to showcase TNO@Holst Centre's innovations for digital healthcare to Israeli medical organizations, such as hospitals and Health Medical Organizations (HMOs), and to introduce TNO@Holst Centre to Israeli startup technology in the field. This is foreseen as a solid first step towards future collaboration(s), in the form of one-to-one projects, clinical trials/feedback, joint participation in Horizon Europe funded programs, Israeli venture investments in spin-offs from TNO@Holst Centre, etc.

Background

Holst Centre (www.holstcentre.com) is a leading R&D innovation centre for next-generation wireless electronics systems. It was founded in 2005 by The Netherlands Organization for Applied Scientific Research (TNO) and Interuniversity Microelectronics Centre (IMEC) of Belgium. TNO@Holst Centre is innovating to solve societal challenges in healthcare. Under the "human-centric healthcare" umbrella program, innovative solutions are being developed for the three pillars of healthcare: **prevention, diagnosis and therapy**. These solutions include, but are not limited to, smart clothing and sensors to promote an active lifestyle, wearable health patches and non-contact sensing surfaces for remote patient monitoring, large-area flexible NIR and ultrasound imagers, and 3D printed medication for personalized therapy. These innovations are highly complementary to Israeli innovations in software, AI, and healthtech in general. At the same time, Israel's progressive healthcare system and the strong start-up ecosystem can inspire and positively influence TNO@Holst Centre's innovation roadmap, and consequently benefit its partnering companies.

Target audience

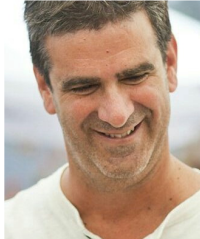
Israel has a highly developed start-up ecosystem. TNO@Holst Centre aims to attract CXOs from healthcare start-ups to actively participate in this symposium. Furthermore, the following target audience is of interest:

- Decision-makers at medical device companies and pharmaceutical companies
- Digital transformation specialists and medical doctors that perform clinical trials at leading hospitals



Biosketches

Dr. Asaf Caspi



Dr. Asaf Caspi MD graduated the Sackler school of medicine of Tel- Aviv University. He serves as the director of Psychiatry department A and the deputy chairman of Psychiatry and director of telemedicine hub in ARC- the medical innovation center in Sheba medical center. Dr. Caspi led the development of a unique computerized tool for the assessment of body image disturbances. Dr. Caspi founded and is still leading a group of unique services within Sheba medical center including an online Psychiatric hospitalization, a unique simulator for the treatment of flight phobia, an early psychosis clinic, a clinic for adults suffering from developmental disorders and borderline personality disorder clinic. Dr. Caspi served as a senior psychiatrist at the IDF medical corps. Author and co-author of papers on schizophrenia, psychiatric epidemiology and eating disorders.

Prof. Arik Eisenkraft, MD, MHA



Prof. Arik Eisenkraft retired from the IDF Medical Corps in 2016 as a LTC after 20 years of service in R&D units, mainly focusing on acute trauma care, CBRN Medicine, and medical response to mass casualty events. In 2013, he established the Institute for Research in Military Medicine, a joint research institute to the Hebrew University Faculty of Medicine, Jerusalem, and the IDF Medical Corps, where he still conducts research on acute care. Prof. Eisenkraft has joint Biobeat Technologies LTD. as the Chief Medical Officer, leading its pre-clinical and clinical efforts.

Alon Ironi



Alon Ironi is an Electrical Engineer (BSEE from the Technion, MSEE from the university of Santa Clara, CA) who spent 25 years developing digital signal processing and digital wireless communication chips for consumer electronics, in various positions – engineer, team leader, VP of engineering, CEO and founder. In 2015 he decided to devote his knowhow and experience to healthcare, focusing on non-pharmacological treatments for idiopathic pain diseases. Together with 3 other co-founders coming from similar backgrounds, Ironi founded in 2016 Theranica, a prescribed digital therapeutics company developing advanced home-use medical devices. Based in Israel and the USA, Theranica already has an FDA-cleared wearable device for treating migraine, available in the USA market. Ironi is an inventor of several patents and co-author of several peer-reviewed scientific papers.



Dr. Thiru Kanagasabapathi



Thiru Kanagasabapathi has a background in electrical engineering (Univ of Calgary, CA) and a PhD in Neuroscience from University of Amsterdam, NL. He has more than 15 years of experience in medical device development and of which, 10+ years in Philips Research and Philips Medical systems. Most recently, he has led the interventional Oncology business within Philips Healthcare and had launched several products successfully in the market. He has 5 patents and 15+ scientific publications to his credit. At TNO@Holst Centre, Thiru is responsible for leading innovation program for smart wearables for medical and connected health solutions.

Dr. Charlotte Kjellander



Charlotte Kjellander received her MSc in Chemical Technologies in 2001 from Lund University, Sweden, including education at EPFL, Switzerland, and her PhD in Materials Sciences in 2006 from Eindhoven University of Technology (TUE), the Netherlands. The research interests during Charlotte's career have included research in material properties of organic and polymeric materials for optical and electronics applications at TUE, Philips and the Holst Centre, as well as industrial development of large area coating technologies and development of smart IoT materials for the building and construction market. Her work has resulted in several patents and peer reviewed articles. At TNO@Holst Centre Charlotte leads the technical team developing smart patches and garments.

Dr. Racheli Kreisberg, Israeli Dutch Innovation Center, Netherlands Embassy in Israel



Dr. Racheli Kreisberg serves since January 2016 as the Innovation Attaché of the Holland Innovation Network, Ministry of Economic Affairs, at the Netherlands Embassy in Israel. She is responsible for developing R&D and business collaborations between Dutch and Israeli companies, Universities and research institutions. Her work is focused on the High-Tech Systems and Materials (HTSM) top-sector, i.e., photonics, robotics, cyber, agro-tech as well as the Life Science and Agro&Food top sectors. Prior to this position she managed her own consultancy company that specialized in the initiation and management of collaborative EU research projects and she serves as an evaluator of the EU. Dr. Kreisberg was the Head of the Bioinformatics Unit of Tel Aviv University between 1998-2005. Dr. Kreisberg holds a PhD in Biotechnology and Molecular Microbiology from Tel Aviv University (TAU), an Executive MBA from TAU, an MSc in Chemistry (summa cum laude) from the Technion Israel Institute of Technology.

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Innovation Attaché
Netherlands Innovation Network
Ministry of Economy and Climate Policy

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Netherlands Embassy in Israel
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Daniël van der Linden



Daniel van der Linden is trained as Aerospace Engineer and has over 14 years' experience in business development at TNO with a focus on 3D Printing developments for use in Food and Pharma application. Together with renowned companies like Barilla and Mondelez in the food space and Merck and Phoenix in the pharma space TNO is showing its capabilities to the world. Health, Personalization and sustainability are massive drivers for the ongoing research at TNO in the Printing domain and will have a big impact on future business opportunities.

Dr. Ton van Mol



Ton van Mol graduated with honors from Eindhoven University of Technology in Chemical Technology in 1997, and received his PhD in the area of Thin Film Technology in 2001. He worked at Sandia National Laboratories (Livermore) as visiting scientist and joined TNO in 2003 as senior scientist in the area of flexible solar cells. In 2005, Ton helped set-up the open innovation initiative between TNO and IMEC called Holst Centre, where he had various roles, such as Program Manager and Business Development Director, before he took the role as Managing Director in 2013.

Dr. Ashok Sridhar, Business executive, Holst Centre, The Netherlands



Ashok Sridhar responsible for the global business development of TNO@Holst Centre's wearable devices platform and smart sensing systems. Additionally, he is involved in the creation of start-up companies based on technologies and innovations at TNO@Holst Centre. Since 2010, Ashok has worked in various technical as well as commercial roles in the field of printed electronics and 3D printing at different companies. In 2019, he also setup the first full-fledged printed electronics manufacturing facility in India. Ashok has an Executive MBA (cum laude) from the TIAS School for Business and Society (the Netherlands), a PhD in printed electronics from the University of Twente (the Netherlands), a Master's degree in production technologies from the Aachen University of Technology (Germany), and a Bachelor's degree in mechanical engineering from the University of Madras (India).