

# Danish-Israeli Scientific Workshop: The Future of AI Health

## September 10-11, 2019, at the Steinhardt Museum of Natural History, Tel Aviv University

**Scientific organizers: Prof. Mads Nielsen, Prof. Saharon Rosset (co-chairs), Prof. Meir Feder, Prof. Ron Shamir , the Scientific Attaché Dr Ann-Christina Lange and the office of TAU VP for R&D**

A collaboration between The Danish Innovation Centre in Tel Aviv, Copenhagen HealthTech Cluster, Copenhagen University and Tel Aviv University .

The workshop explores the future of AI health within three selected topics including Electronic Medical Records (EMRs), imaging and genomics.

### Preliminary Program (subject to change)

	Tuesday Sept. 10	Wednesday Sept. 11
	Tel Aviv University	Tel Aviv University
<b>Morning</b>	<p><b>8:30-8:45 Welcome and Introduction</b> Speakers: Raanan Rein, Vice President of TAU</p> <p><b>8:45-10:15 Presentations: Deep Dive Research : Exploring AI research within imaging</b></p> <ul style="list-style-type: none"> <li><b>Mads Nielsen , Copenhagen University:</b> Unets for pathology detection in brain MRI</li> <li><b>Lior Wolf, TAU:</b> Microvascular dynamics from 4D microscopy using deep active contours</li> <li><b>Bulat Ibragimov, Copenhagen University:</b> AI for radiation oncology</li> </ul> <p><b>10:15-10:45 Coffee Break</b></p> <p><b>10:45 -11.45 Continued Presentations: Deep Dive Research : Exploring AI research within imaging</b></p> <ul style="list-style-type: none"> <li><b>Martin Lillholm, Copenhagen University:</b> Breast Cancer Risk by deep learning</li> <li><b>Hayit Greenspan, TAU:</b> AI in medical imaging</li> </ul>	<p><b>9:00-10:00 Presentations: Research and medical use of patient data Exploiting EMR data in AI application development</b></p> <ul style="list-style-type: none"> <li><b>Yoav Benjamini, TAU:</b> Selective model searching in big data health research</li> <li><b>Eran Segal, Weizmann Institute:</b> Harnessing big data for personalised medicine</li> </ul> <p><b>10:00-10:30 Coffee Break</b></p> <p><b>10.30-11.30 Continued Presentations: Research and medical use of patient data Exploiting EMR data in AI application development</b></p> <ul style="list-style-type: none"> <li><b>Andrew Schork, Copenhagen Regional Hospital:</b> TBC</li> <li><b>Malka Gorfine, TAU:</b> Novel illness-death model with application to the UK biobank survival data</li> </ul> <p><b>11:30-11:45: Q&amp;A</b></p>
	<b>11:45-13:00 Lunch break</b>	<b>11:45-13:00 Lunch break</b>
<b>Afternoon</b>	<p><b>13:00-14:00 IBM as a player in AI Health Introduction to IBM's research and development of applications within imaging</b></p> <p>Speakers:</p> <ul style="list-style-type: none"> <li><b>Dr. Efrat Hexter, IBM Research Israel</b></li> <li>TBC</li> </ul> <p><b>14:00-14:30 Coffee Break</b></p>	<p><b>13:00- 14:30 Presentations: Basic research on Machine Learning, Exploring joint research projects and research funding opportunities</b></p> <ul style="list-style-type: none"> <li><b>Christian Igel, Copenhagen University:</b> Random Forests and PAC-Bayesian bounds</li> <li><b>Ro'i Livni, TAU:</b> Passing Tests Without Memorizing: Theoretical Models for Generative Learning</li> <li><b>Amir Globerson, TAU:</b> Deep Architectures for semantics</li> </ul> <p><b>14:30-15:00 Coffee Break</b></p> <p><b>15:00- 16:30 Continued Presentations: Basic research on Machine Learning, Exploring joint research projects and research funding opportunities</b></p> <ul style="list-style-type: none"> <li><b>Raja Giryes, TAU:</b> Jacobian based regularization for neural networks</li> <li><b>Koen van Lemput, Danish Technical University:</b> Towards medical image analysis in the clinic using generative models</li> <li><b>Shie Mannor, Technion:</b> Local Analysis for the Combinatorial Multi-Armed Bandit Problem</li> </ul>
	<p><b>14:30-16:00 Presentations: Data-driven approaches to genomics</b></p> <ul style="list-style-type: none"> <li><b>Simon Rasmussen, Copenhagen University:</b> Exploring medical research in genomics</li> <li><b>Elhanan Borenstein, TAU:</b> Model-Based Analysis of Microbiome Big Data</li> <li><b>Roded Sharan, TAU:</b> A systematic approach to orient the human protein-protein interaction network</li> </ul> <p><b>16:00-16:30 Coffee Break</b></p> <p><b>16:30-17:30 Continued Presentations: Data-driven approaches to genomics</b></p> <ul style="list-style-type: none"> <li><b>Irit Gat, TAU:</b> Cell composition analysis of bulk genomics using single cell data</li> <li><b>Rani Elkon, TAU:</b> Enhancing functional interpretation of GWAS data</li> </ul>	<p><b>16:30-17:00 Coffee Break</b></p> <p><b>17:00-18:00 Joint session on funding opportunities and future collaborations</b></p> <p>Leaders: Mrs. Ann-Christina Lange, scientific attaché, Innovation Centre Denmark; Mads Nielsen, Copenhagen University; Saharon Rosset, Tel Aviv University</p>

To register: <https://forms.gle/eALaAaczM4BRWVJX8>