ALROV CENTER for DIGITAL MEDICINE
TEL AVIV UNIVERSITY & TEL AVIV SOURASKY MEDICAL CENTER (ICHILOV)

Announcing the awardees of

# THE ALROV CENTER FOR DIGITAL MEDICINE 2024 RESEARCH GRANTS

The Alrov Center for Digital Medicine is a joint initiative of Tel Aviv University (TAU) and Tel Aviv Sourasky Medical Center, Ichilov (TASMC). The Center strives to advance innovative, ground-breaking research in the field of digital medicine, drawing upon the extensive expertise and capabilities of the two institutions – TAU & TASMC – and promoting the digital medicine research community.

Earlier this year, the Alrov Center for Digital Medicine announced a call for grants with the intention to support collaborative and translational research in digital medicine. Each proposal was reviewed by independent reviewers and by the Center's Grant Committee, and final funding decisions were made by the Center's Steering Committee.

Many thanks to all the applicants and the reviewers - we appreciate your participation. We are especially grateful to the members of the Grant Committee for their hard work and dedication.

## WE ARE EXCITED TO ANNOUNCE THE AWARDEES:

### FLAGSHIP PROJECTS
(each with total funding of up to 500,000 NIS, for 2-year projects).

- **Galit Aviram**, MD, Department of Radiology, **TASMC**
  **Hayit Greenspan**, Faculty of Engineering, **TAU**
  Research title: "***PE detection and delineation using multimodal fusion and generative AI***"

- **Riva Tauman**, MD, The Sieratzki-Sagol Center for Sleep Medicine, **TASMC**
  **Yuval Nir**, Faculty of Medical and Health Sciences, **TAU**
  Research title: "***Breaking the code of sleep in children with autism: Machine learning-based detection of deep invisible interictal epileptiform discharges***"

- **Alexis Mitelpunkt**, MD, Division of Pediatric Rehabilitation and Division of Intensive Outpatient Rehabilitation, **TASMC**
  **Lior Wolf**, School of Computer Science, **TAU**
  Research title: "***Unlocking the clinical notes vault: Using LLMs to turn unstructured data to structured data***"

- **Amit Benady**, MD, Orthopedic Department, Levin Center of Surgical Innovation and 3D Printing, **TASMC**
  **Hila May**, Faculty of Medical and Health Sciences, **TAU**
  Research title: "***Predicting hip fractures from proximal femoral shape: Developing a new diagnostic tool***"

### PROOF-OF-CONCEPT PROJECTS
(each with total funding of up to 100,000 NIS, for 1 year projects).

- **Anat Mirelman**, Laboratory for Early Markers of Neurodegeneration, Center for the study of Movement Cognition and Mobility; Department of Neurology, **TASMC**
  **Yael Hanein**, Faculty of Engineering, **TAU**
  Research title: "***Home-based testing and automated detection of REM sleep behaviour disorder (RBD)***"

- **Shir Azrielant**, MD, Division of Dermatology, **TASMC**
  **Irit Gat-Viks**, Faculty of Life Sciences, **TAU**
  Research title: "***Comprehensive histological atlas of inflammatory skin diseases***"

- **Neomi Singer**, Department of Neurosurgery & Sagol Brain Institute, **TASMC**
  **Noam Ben Eliezer**, Faculty of Engineering, **TAU**
  Research title: "***Predicting diffuse glioma spread trajectories from resting state and structural connectivity patterns***"

- **Genela Morris**, Neurosurgery Unit, **TASMC**
  **Inbal Maidan**, Neurological Institute, **TASMC**
  **Anatoly Khina**, Faculty of Engineering, **TAU**
  Research title**:** "***Patient-centric DBS programming tool for Parkinson's disease: Minimizing adverse events, preserving function***"

- **Nidal Muhanna**, The Head and Neck Cancer Research Laboratory, The Department of Otolaryngology, Head and Neck Surgery and Maxillofacial Surgery, **TASMC**
  **Natan Tzvi Shaked**, Faculty of Engineering, **TAU**
  Research title: "***Liquid-biopsy cancer detection: Saliva sampling for early diagnosis of head and neck squamous cell carcinoma using novel quantitative imaging and AI***"

- **Amir Sonnenblick**, MD, The Oncology Division, **TASMC**
  **Roded Sharan**, School of Computer Science, **TAU**
  Research title: "***Bootstrapping gene panel sequencing data for predicting response to therapy***"

- **Hadar Kolb**, MD, Department of Neurology, **TASMC**
  **Or Perlman**, Faculty of Engineering, **TAU**
  Research title: "***Quantitative and rapid characterization of multiple sclerosis lesions using AI boosted biophysics guided molecular MRI***"

- **Yifat Alcalay**, Laboratory of Clinical Immunology, Division of clinical Laboratories, **TASMC**
  **Reut Noham**, Faculty of Engineering, **TAU**
  Research title: "***Facilitating rapid and cost-effective diagnosis using a data-driven approach***"

- **Amir Sternheim**, MD, Orthopedic Oncology Department, **TASMC**
  **Moran Artzi**, Pre-surgical Brain Mapping Service, Sagol Center, **TASMC**
  **Zohar Yosibash**, Faculty of Engineering, **TAU**
  Research title: "***Towards a fully autonomous system for high-fidelity identification of risk of femoral fractures in the elderly and in cancer patients using CT-scans***"

## CONGRATULATIONS TO THE AWARDEES!

**Alrov Center for Digital Medicine Grant Committee:**
Prof. Ron Shamir (TAU), Prof. Gil Ast (TAU), Prof. Dov Hershkovitz (TASMC), Prof. Hagit Baris Feldman (TASMC)

**Alrov Center for Digital Medicine Steering Committee:**
Prof. Elhanan Borenstein (TAU), Prof. Karen Avraham (TAU), Prof. Eli Sprecher (TASMC), Ms. Liat Nadai Arad (TASMC)