הטכניון
מכון טכנולוגי
לישראל

הנדסה ביו-רפואית BME

קורס פרויקטים
בהנדסה ביו-רפואית

334014-335015

2019-2020

הנדסה ביו-רפואית BME

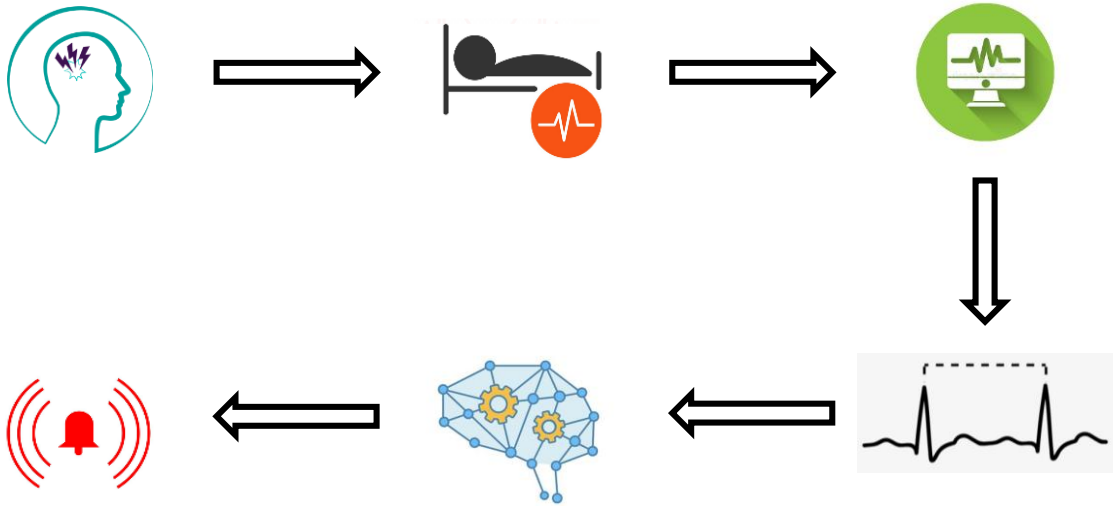
הטכניון
מכון טכנולוגי לישראל

Epileptic Seizures Prediction Based on ECG Signals

Using Machine Learning Methods

Under the supervision of Mr. Noam Keidar and Prof. Yael Yaniv
Bio-electric and Bio-energetic Systems Laboratory

Shlomi Shmuel Galya Segal



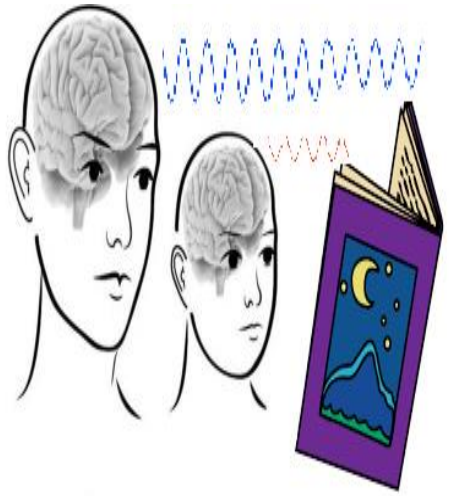
הפקולטה להנדסה ביו-רפואית

Mother-Child Brain to Brain Synchrony During Joint Story-Telling

Under the supervision of Prof. Tzipi Horowitz-Kraus
Educational Neuroimaging Center, Technion IIT, Israel

Wurod Abu Elasal

Elia Khamesy



The Association Between Mother-Child Speech Synchrony During Dialogic Reading and Child's Cognitive Skills

Under the supervision of Prof. Tzipi Horowitz
Faculty of Education in Science and Technology

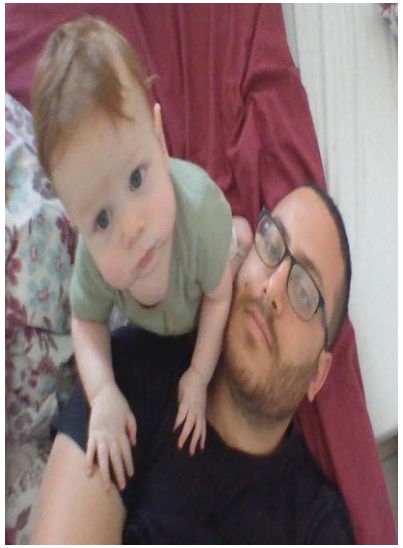
Maysaloon Barasni

Aseel Abdu

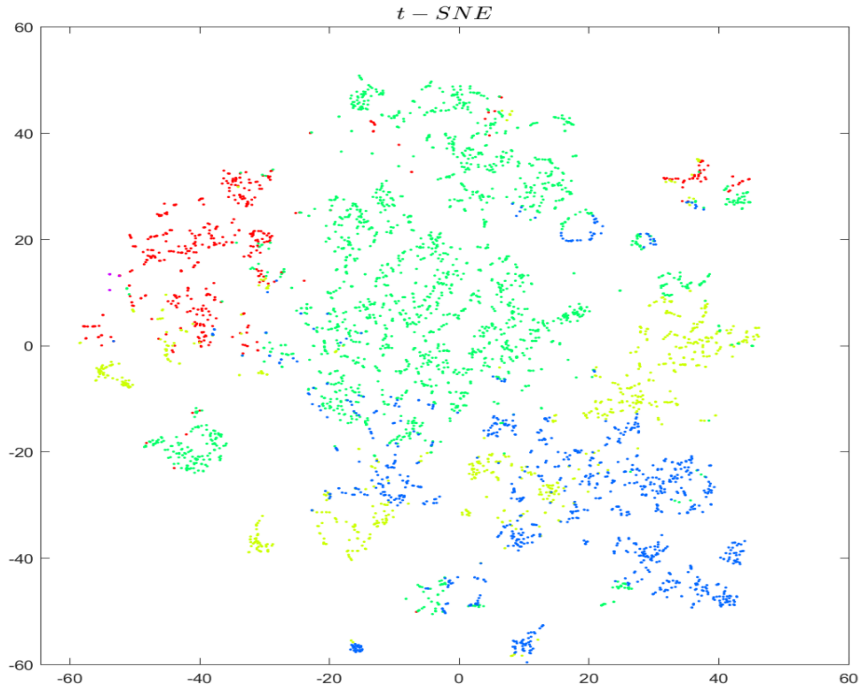
Atrial Blood Pressure Waveform Clustering

Under the supervision of Dr. Danny Eytan
Pediatric Critical Care Unit, Rambam Health Care Campus

Jonathan Horev



Ravid Ashash

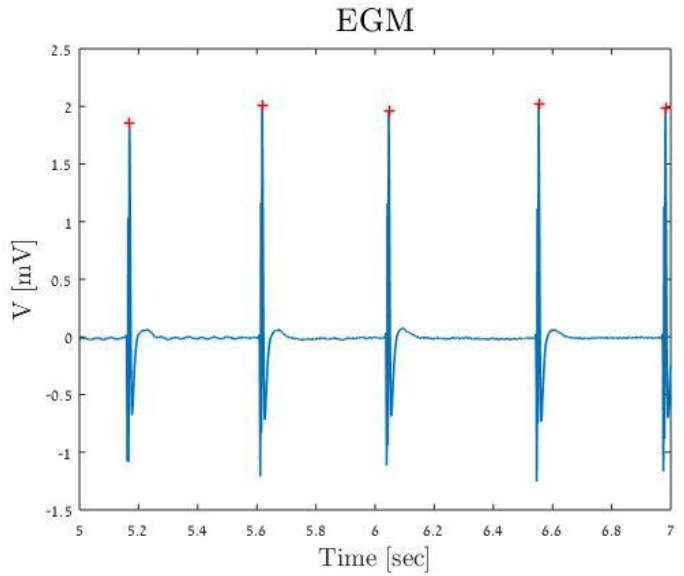


Big-Data based analysis of sinoatrial node rejuvenation attempts

Under the supervision of: Prof. Yael Yaniv
The Technion Bioelectric and Bio-energetic Systems Laboratory

Gal Shofel

Yonat Chen

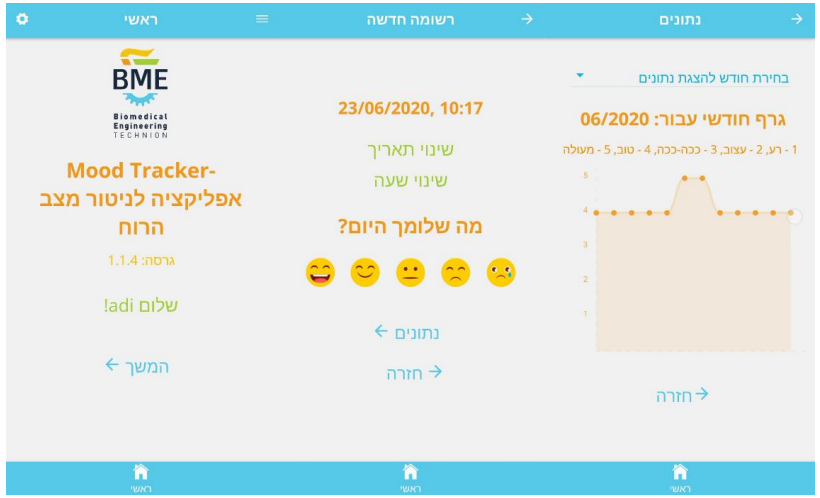


Mood Tracking App for Cancer Patients Undergoing Immunotherapy

Under the supervision of Prof. Yosef Shamay
Cancer Nanomedicine and Nanoinformatics Lab

Adi Waisman

Rachelie Leber

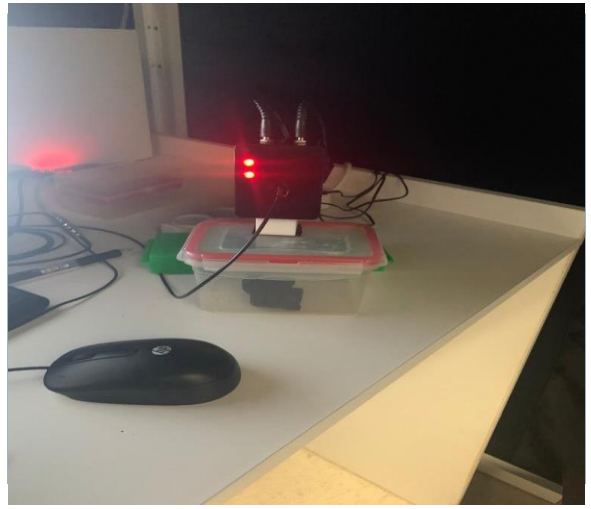


Biosensor for Detecting of Hematuria

Under the supervision of Natali Pesakh
The Laboratory for Synthetic Biology & Bioelectronics

Dima Wakim

Hadeel Abu Assad

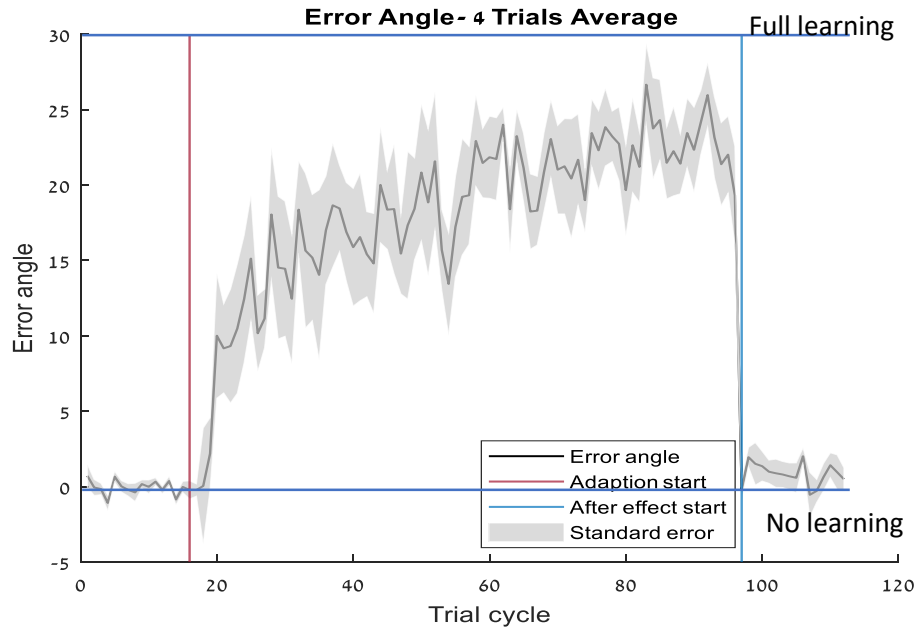


Separation of Multiple Motor Memories through Implicit and Explicit Processes

Under the supervision of: Asst. Prof. Firas Mawase
Neurorehabilitation and Sensorimotor Neuroscience Lab

Yuval Shaine

Gefen Dawidowicz



הנדסה ביו-רפואית BME

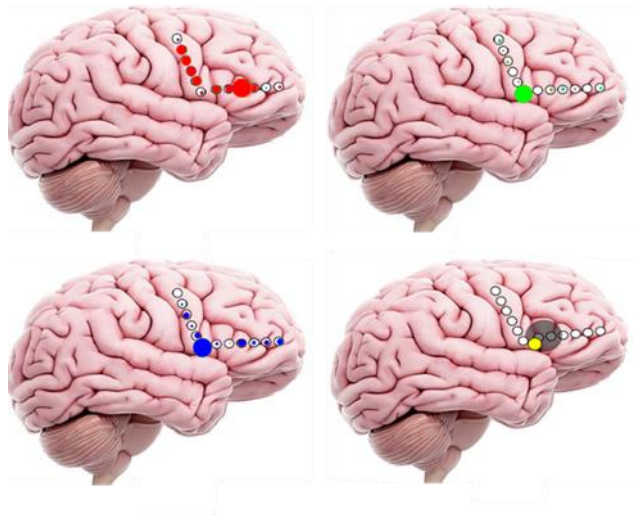
הטכניון
מכון טכנולוגי
לישראל

ECoG-based Intraoperative Functional Mapping of the Cerebral Cortex During Awake Craniotomies

Under the supervision of Prof. Firas Mawase, Dr. Omer Zarchi and Mr. Shaked Ron
Neurorehabilitation and Sensorimotor Neuroscience Lab and Rabin Medical Center

Leen Ileimi

Taima Zoabi

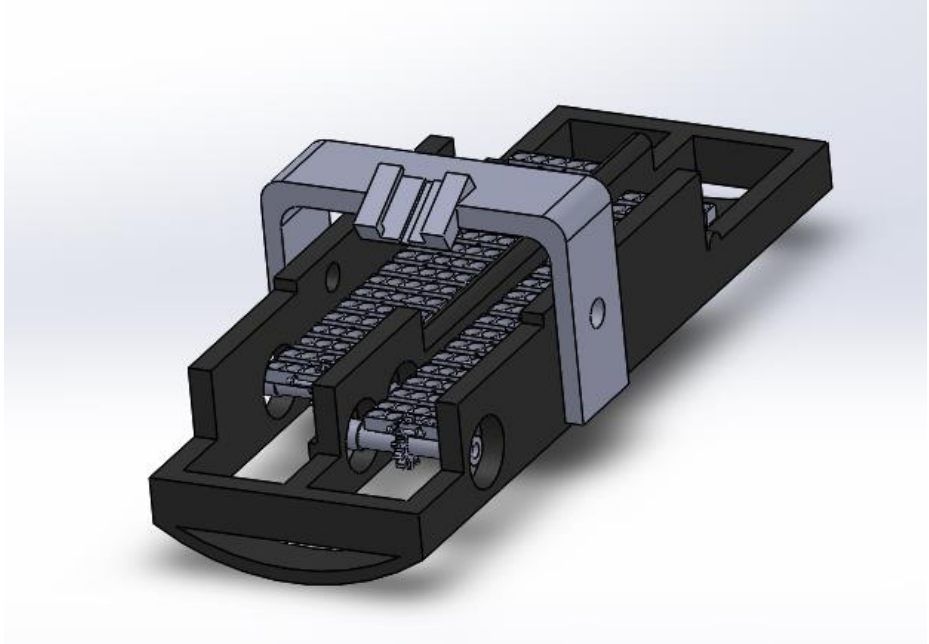


An MRI Compatible 3D Printed Split-belt Treadmill for Motor Neuroscience Research

Under the supervision of: Assist.Prof Firas Mawase
Neurorehabilitation & Sensorimotor Neuroscience Lab

Tania Assaf

Wajdi Nicola

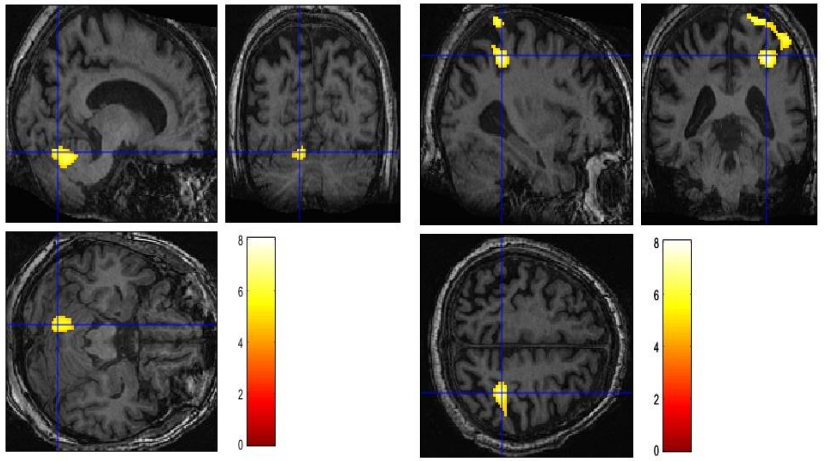


Reorganization of functional networks following MRI-guided focused ultrasound treatment in essential tremor patients

Under the supervision of: Assistant Professor Firas Mawase
Neurorehabilitation & Sensorimotor Neuroscience Lab

Daniel Olshvang

Or Motzary

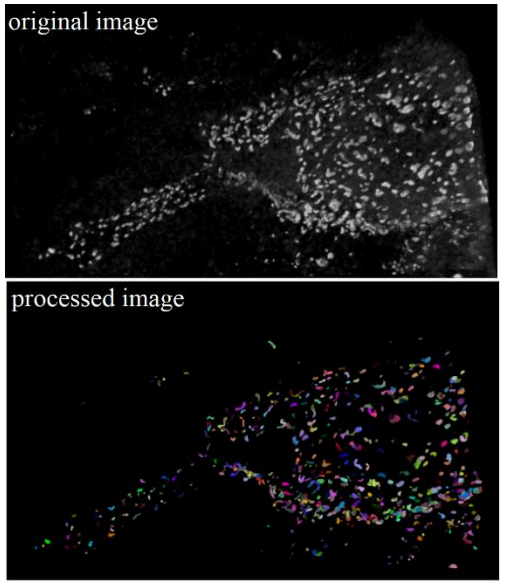


Identification and Quantification of Synapses from Images of Expanded Brain

Under the supervision of: *PhD* Limor Freifeld
Neuro-Engineering Laboratory

Sapir Noah

Tali Marchevsky

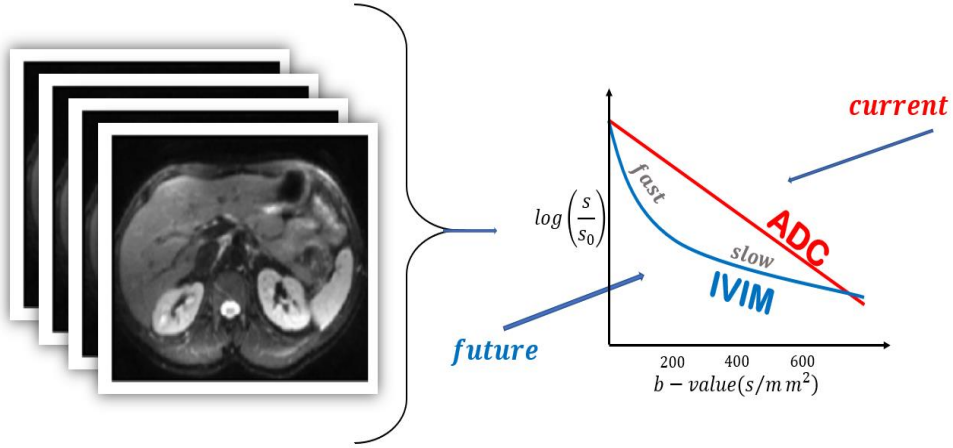


Quantitative DW-MRI analysis algorithms

Under the supervision of: Dr. Moti Freiman
Computational MRI Laboratory

Judit Ben Ami

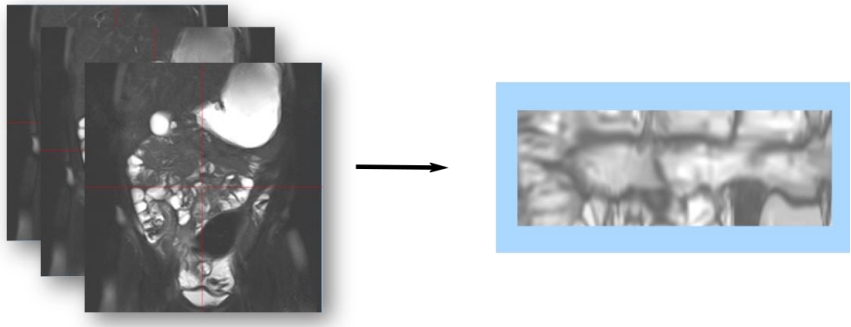
Marina Khizgilov



Visualization Software for Pediatric Crohn's Disease Assessment by Multi Planar Reformation

Under the supervision of: Dr. Moti Freiman
Technion's Computational MRI Laboratory

Yael Zaffrani

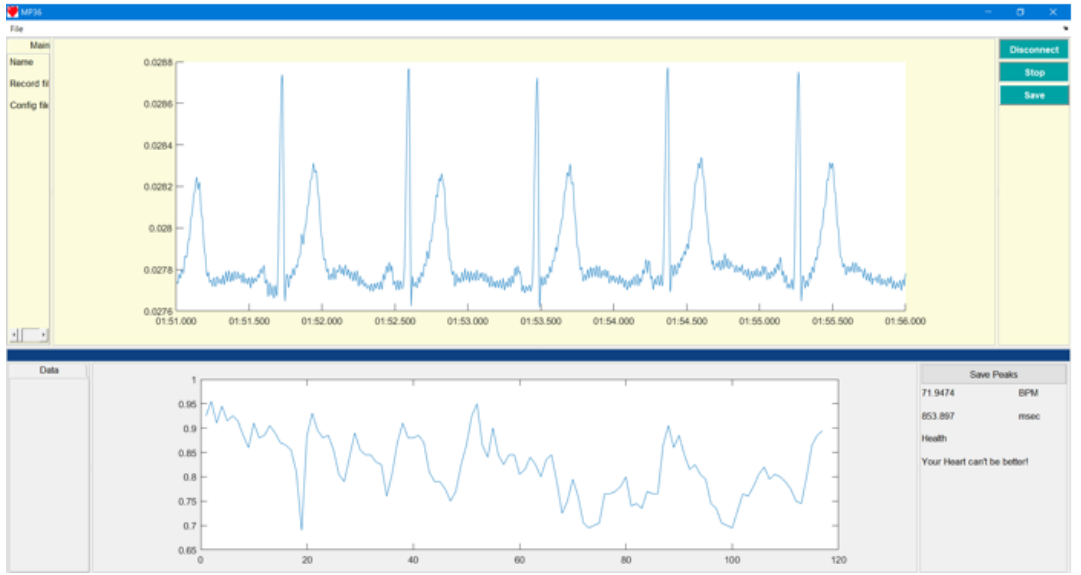


Develop of Diagnostic System for Preventing Sudden Cardiac Death among Athletes

Under the supervision of Mr Ido Weiser-Bitoun, Prof Yael Yaniv

Matti Zeev

Nimrod Baram

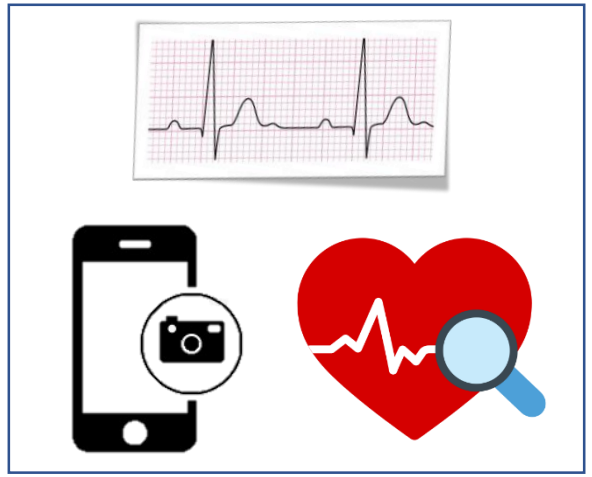


Detecting heart abnormalities using a novel platform of digitized 12-lead ECG

Under the supervision of Prof. Yael Yaniv
Bio-electric and Bio-energetic Systems Lab

May Buzaglo

Nitzan Avidan



הנדסה ביו-רפואית BME

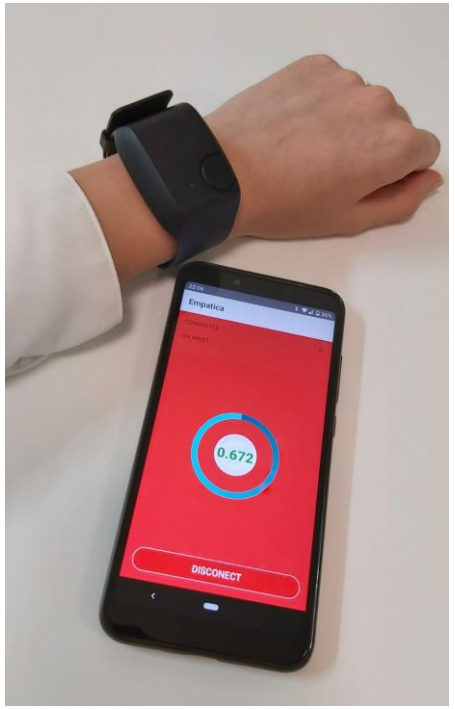
הטכניון
מכון טכנולוגי לישראל

Development of a Non-Invasive Clinical Tool for Analyzing SAN & ANS Function and Identifying Cardiac Pathologies

Under the supervision of Prof. Yael Yaniv
Bioelectric and Bio-energic System Laboratory

Ayelet Lotan

Opal Nimni

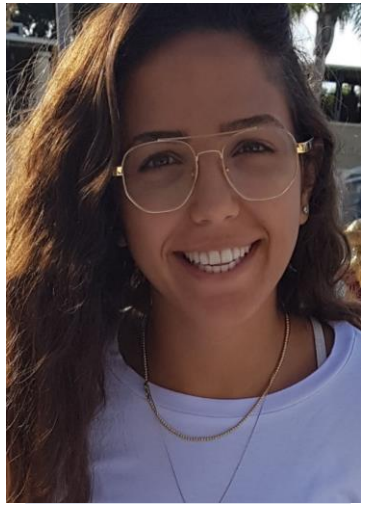


הנדסה ביו-רפואית BME

הטכניון
מכון טכנולוגי לישראל

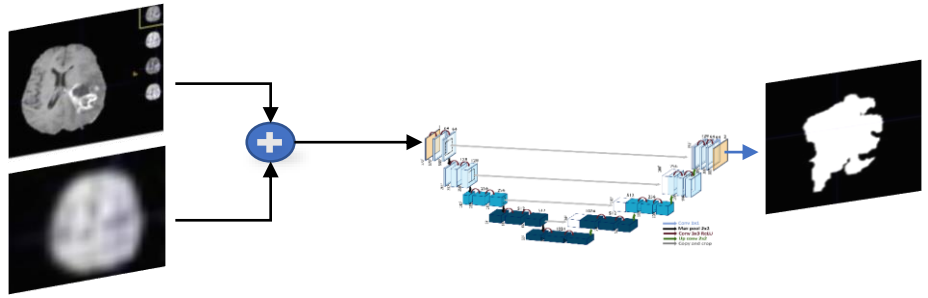
MRI Brain Tumor Segmentation

Under the supervision of Prof. **Moti Freiman**
Technion Computational MRI Laboratory



Zohar Avinoam

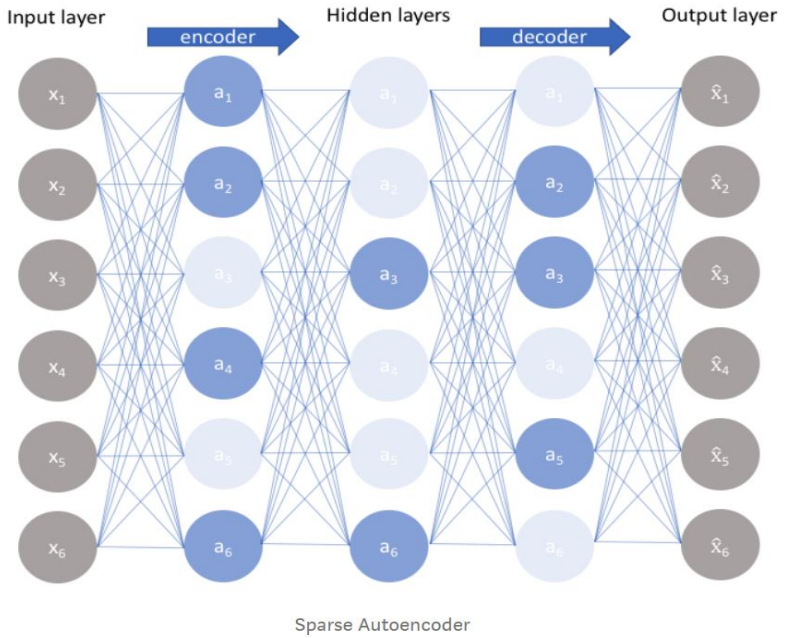
Shany Biton



Brain Tumor MRI Image Segmentation

Under the supervision of Moti Freiman
Technion Computational MRI Laboratory

Michaela Ayoun



Sparse Autoencoder

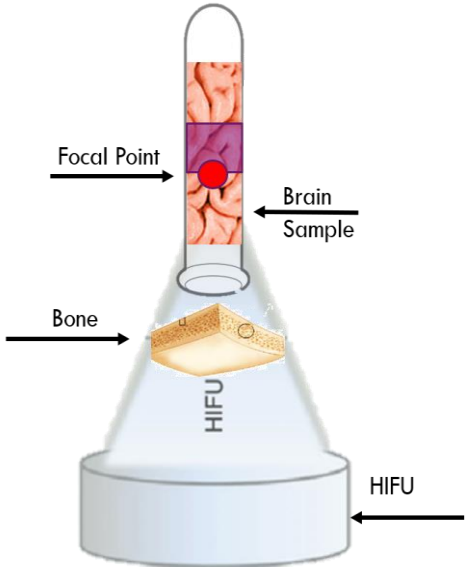
Feasibility of Ultrasonic Thermal Monitoring Using Coded Excitations for Focused Ultrasound Hyperthermia

Under the supervision of: Prof. Haim Azhari And PhD Candidate Daniel Dahis

Medical Imaging Lab- Department of Biomedical Engineering

Noy Parti

Tomer Romano

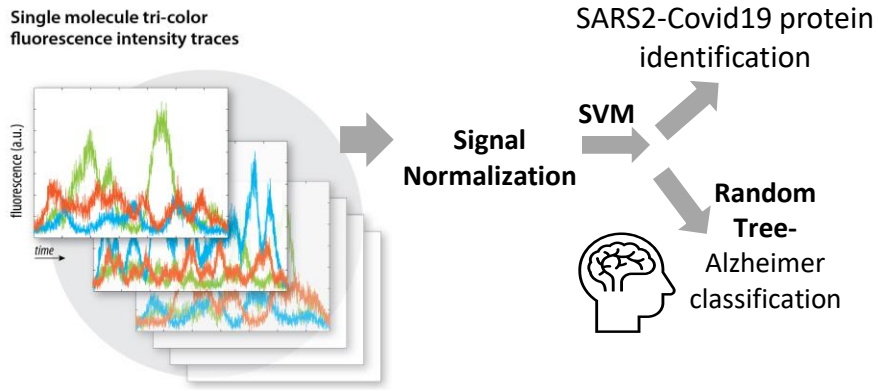


Disease diagnosis based on Bio markers
Using tagged proteins transport through Nano-Pore system and Machine learning

Under the supervision of Prof. Amit Meller
Meller Lab Technion

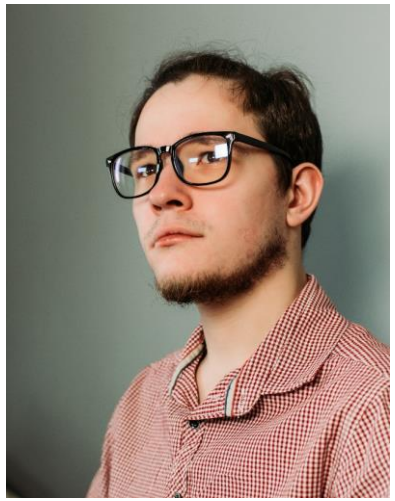
Maya Eytani

Oren Shorr



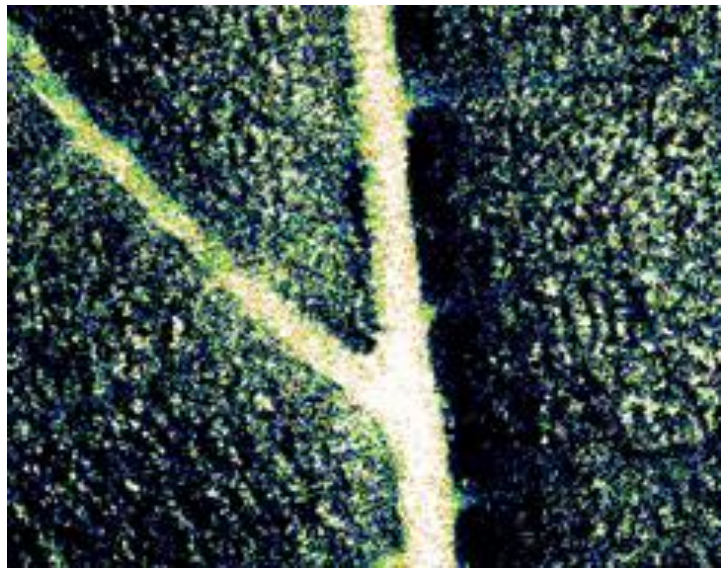
Laser Speckle Contrast Imaging In Biomedical Optics

Under the supervision of: Michal Zivan[1], Yokhai Dan[2], Rami Shinnavi[2]
[1]Biomedical Engineering Faculty, Technion – IIT, Haifa, Israel
[2]AntiShock, MindUP



Arseny Belousov

Dmitry Rudman



Compact spectrally encoded interferometry probe for imaging acoustic vibrations in the human tympanic membrane

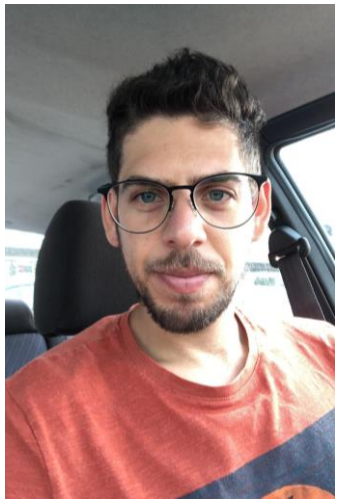
Under the supervision of: Matan Hamra and Prof. Dvir Yelin
Biomedical Optics Laboratory

Lidan Fridman

Illustration

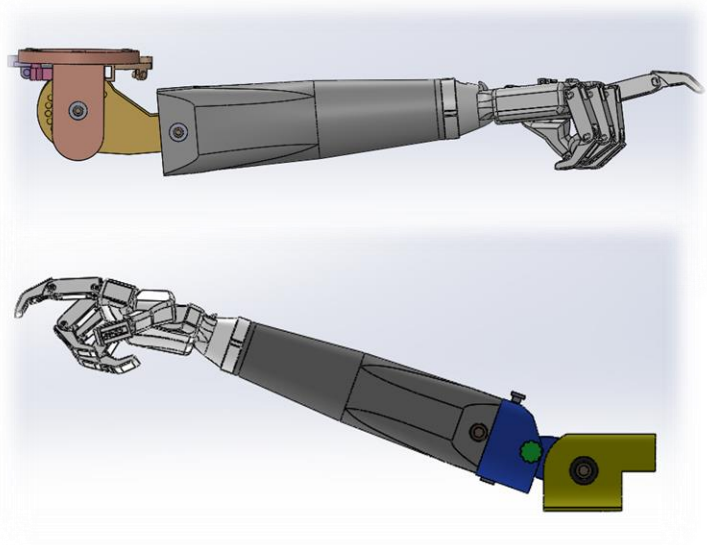
A Low-Cost 3D Printed Prosthetic Hand For Transhumeral Amputations

Under the supervision of: Yoav Medan
Haifa3D



Niv Rebhun

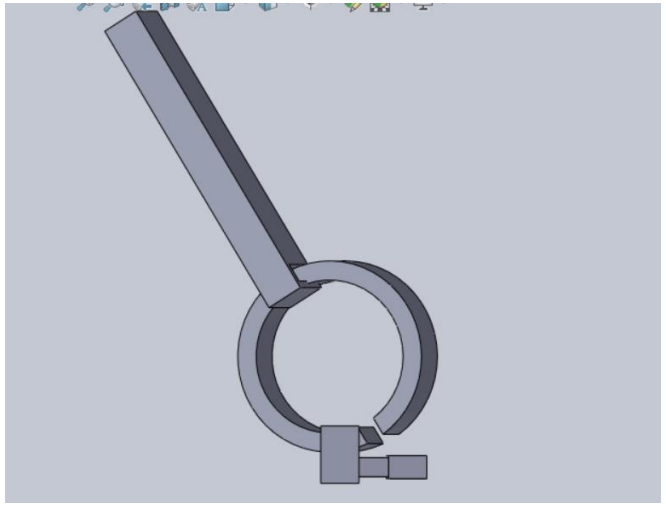
Sofia Rozenberg



A MODULAR, TASK SPECIFIC END EFFECTOR FOR A LOW-COST 3D PRINTED PROSTHETIC HAND

Under the supervision of: Mr. Yair Herbst and Dr. Yoav Medan
Haifa 3D

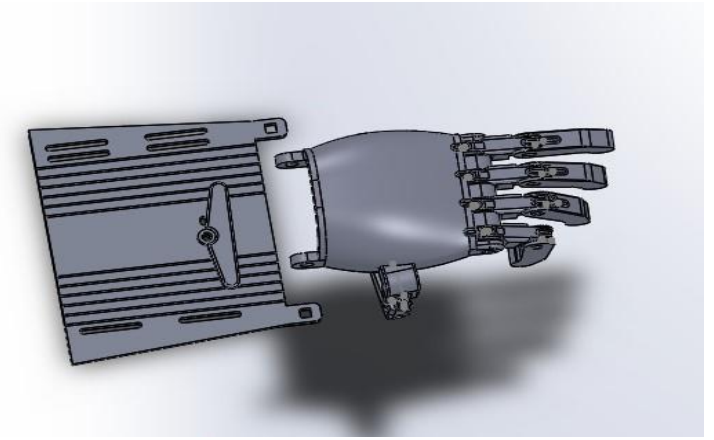
Ayala Goldstein



Fully Automatic Adjustable CAD Model of a Wrist Powered, Low-cost, 3D Printed Prosthetic Hand

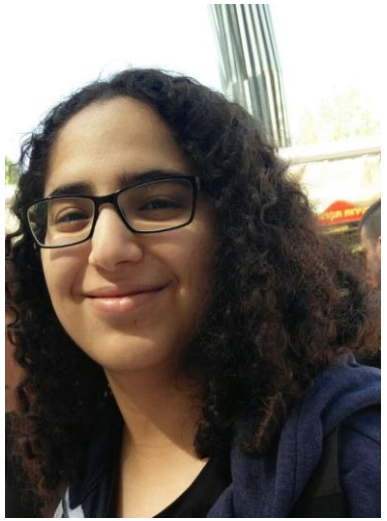
Under the supervision of: Yair Herbst and Dr. Yoav Medan
Haifa 3D

Mark Kels

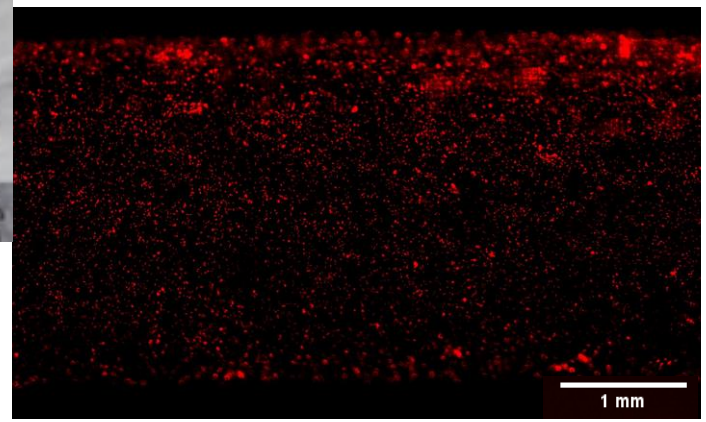


Effect of Drag Reducing Polymers (DRPs) on Recirculation and the Deposition of Nano-Particles in Human Arterial Models

Under the supervision of: Prof. Netanel Korin and Dr. Maria Khoury
Cardiovascular Nanomedicine Engineering Lab

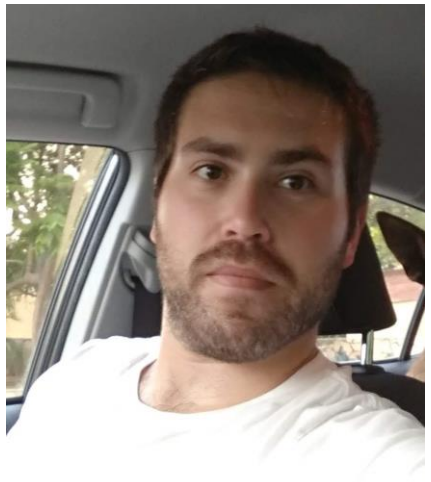


Neta Tuaf



Clot Fibrinolysis in CRAO Models Using Thrombolytic Therapy Triggered by Externally Low Intensity Ultrasound

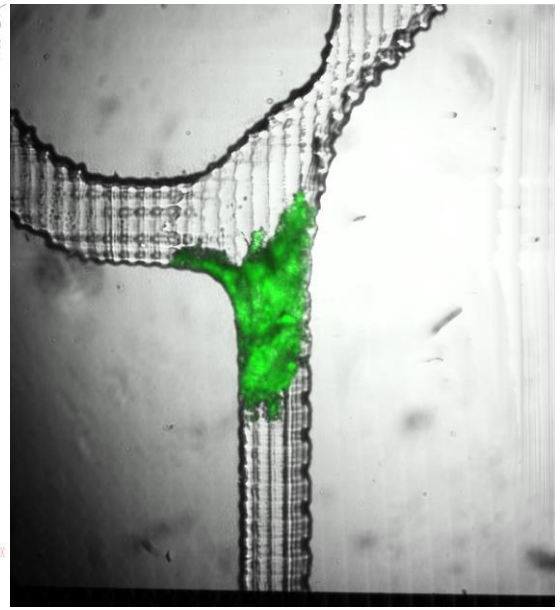
Under the supervision of: Moran Levi and Prof Netanel Kotin



Omer Gottlieb

Or Mizrahi

CFD Model



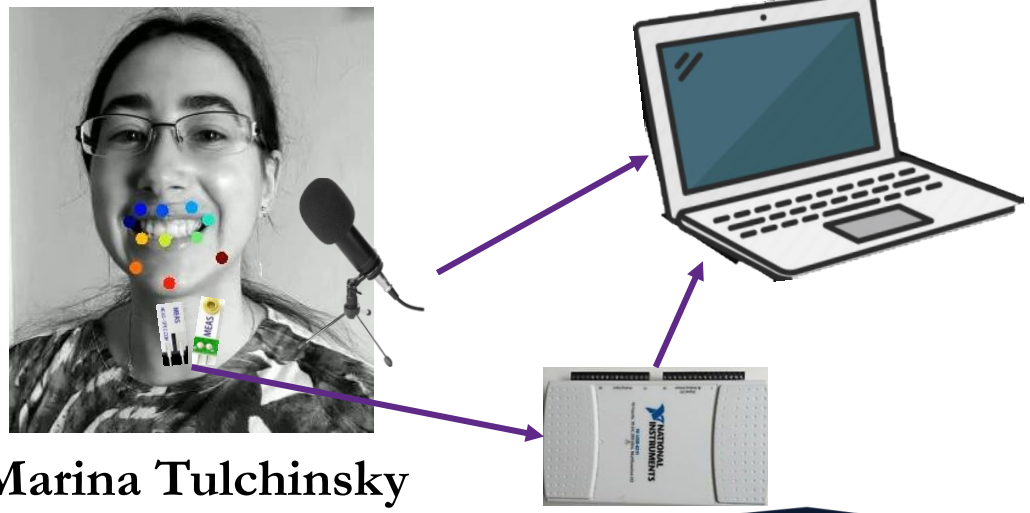
In Vitro Model

Remote Speech Therapy And Self Practice Device

Roni Keshet, Marina Tulchinsky and Ori Shahar
Under the supervision of: Mr. Shaked Ron, Dr. Oscar Lichtenstein

Roni Keshet

Ori Shahar



Marina Tulchinsky

הנדסה ביו-רפואית BME

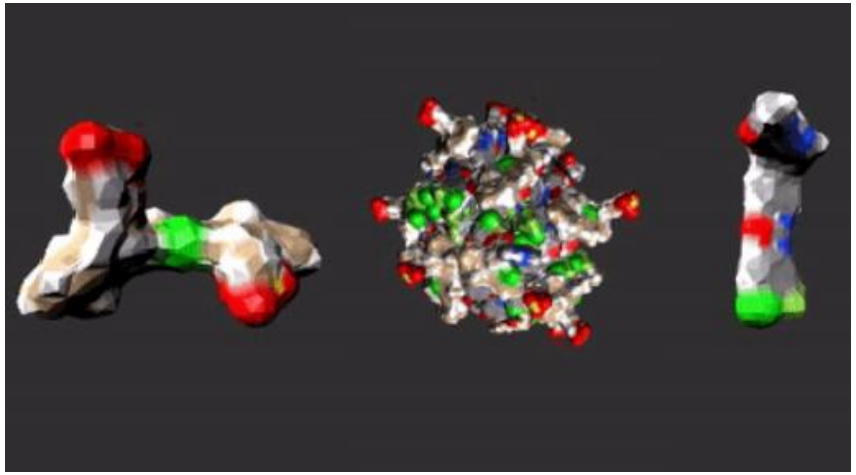
הטכניון
מכון טכנולוגי
לישראל

Optimization of Dual Drug Co-Encapsulation in Cancer Targeted Nanoparticles

Under the supervision of Prof. Yosi Shamay
Cancer Nanomedicine and Nanoinformatics Lab

Sanaa Dallashi

Amjad Marie

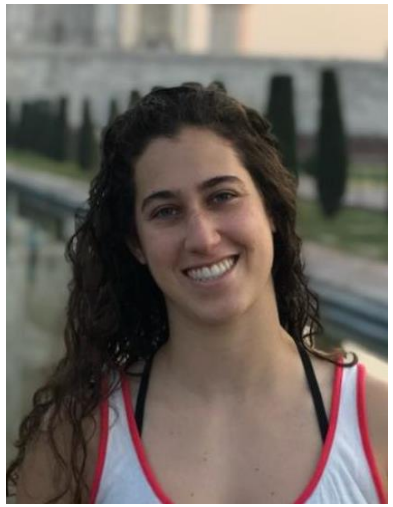


הנדסה ביו-רפואית BME

הטכניון
מכון טכנולוגי לישראל

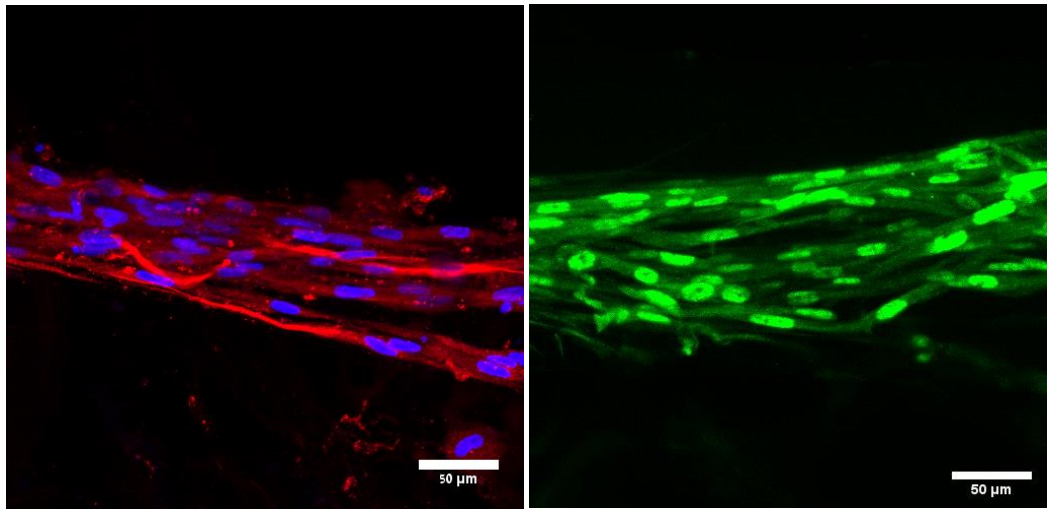
Increased Extracellular Vesicle (EV) Production From 3D Engineered Skeletal Muscle Tissue Under Mechanical Stretching

Under the supervision of: Prof. Shulamit Levenberg
Stem Cell and Tissue Engineering Laboratory



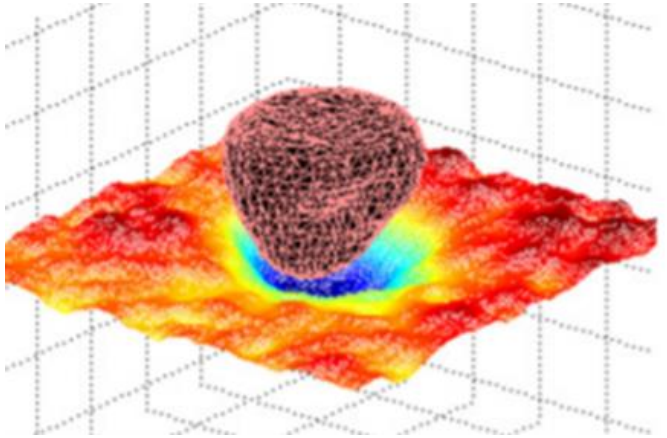
Tahel Carmon

Adina Israel Fried



The effects of natural remedies on the invasiveness of metastatic cancer cell

Under the supervision of prof. Daphne Weihs
Mechano-biology engineering Lab



Stav Elkabetz

Developing an Optimized Method for Efficient Automated NP Preparation and Characterization

Under the supervision of: Prof. Yosi Shamay, Maytal Avrashami and Yuval Harris
Shamay Lab

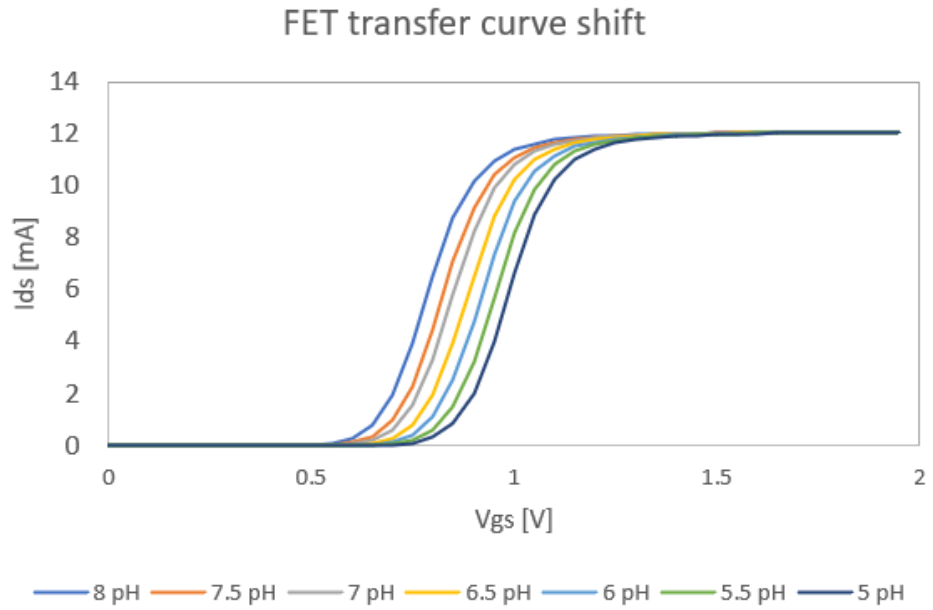
Yarden Roth

Wearable Diagnostic Patch for Monitoring Health Status

Under the supervision of: Dr. Youbin Zheng
Laboratory for Nano-Material Based Devices

Jalil Bishara

Nadi Hathot

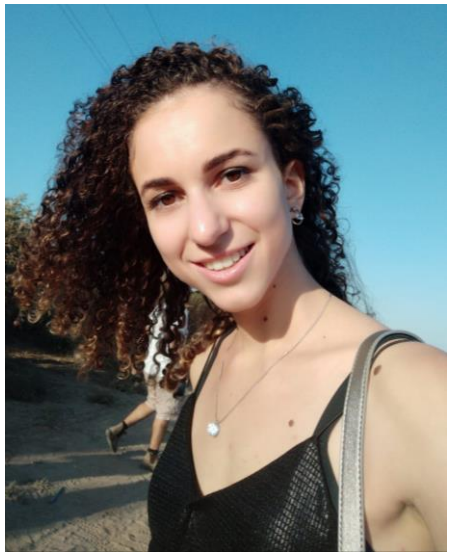


הנדסה ביו-רפואית BME

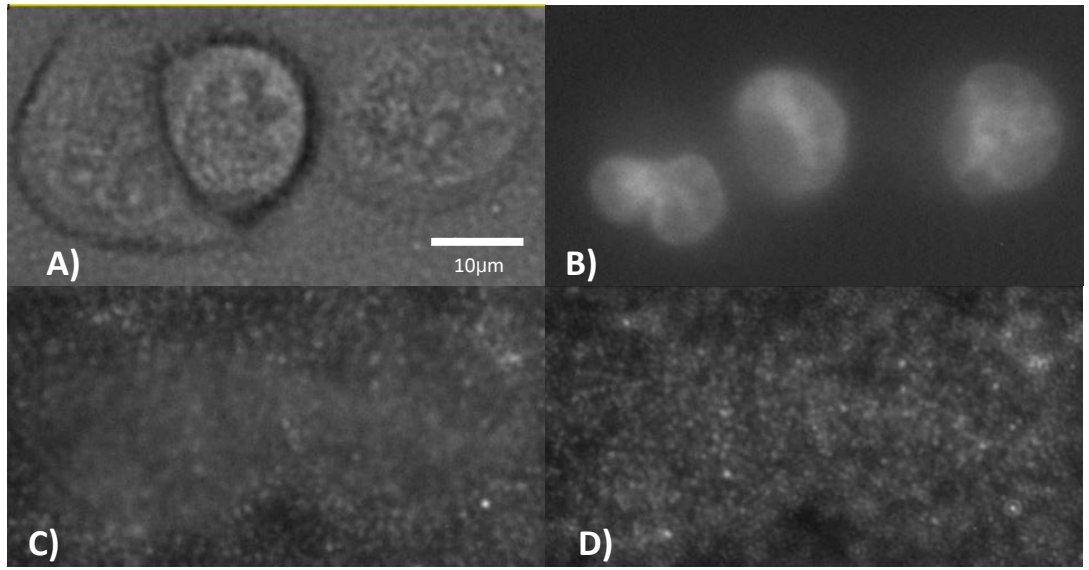
הטכניון
מכון טכנולוגי לישראל

Efects of Cancer Conditioned Medium of High Metastatic Cells on The Invasive Behaviour of low-Metastatic Pancreatic Cancer

Under the supervision of Prof. Daphne Weihs
Mechanobiology of cancer and wounds



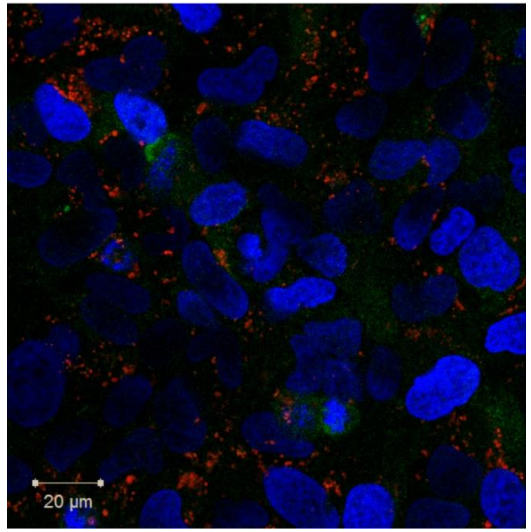
Liubov Akselrod



Recombinant p27 Liposomal Drug

Intended to Inhibit the Uncontrolled Proliferation of Cancerous Cells

Under the supervision of: Prof. Avi Schroeder
Laboratory for Targeted Drug Delivery and Personalized Medicine



Maya Hershko

Course Staff

Prof. Netanel Korin

Dr. Maria Khoury

Dr. Oscar Liechtenstein

Dr. Arbel Artzy -Schnirman

Dr. Anat Grinfeld

Dr. Michal Zivan

Prof. Joachim Behar

The Judges

Prof. Firas Mawase

Dr. Efrat Shimron

Dr. Yaron Blinder

Dr. Amit Livneh

Dr. Michael Plaksin

Prof. Yosef Shamay

Dr. Mark Epshtein

Dr. Shira Nemorovsky-Rotman

Dr. Abed Suleiman

Prof. Tzipi Horowitz-Kraus

Prof. Dan Adam

Prof. Yoav Shechtman

Prof. Limor Freifeld

Prof. Arielle Fischer

Dr. Nasma Mazzawi

Prof. Shulamit Levenberg

Dr. Mouna Habib

Dr. Yael Rozen

Dr. Limor Minai

Prof. Amir Landsberg

Dr. Andrei Yosef

Dr. Eyal Ron

Mr. Doron and Mrs. Liat Adler

בהצלחה לכולם!!!