Arrow Project: incorporating research into medical studies

Project director: Prof. Anat Achiron, MD, PhD

Project assistant: Ms. Yafit Rot

Sheba MC, Tel-Hashomer, Israel

October

2015

http://www.medical-students.tau.sheba.co.il/482/

Arrow project

פרויקט ח"ץ = חוקר צעיר

- **A targeted young students research program.**
- Initiated in 2007 in Sheba Medical Center, Tel Hashomer, Israel.

Aims:

- Create young and multidisciplinary research teams; a combination of motivated and exceptional students in their early years of education in medicine.

- Develop a platform that will strengthen students' knowledge and practice, and train them to be research-related physicians.

Arrow project: Rational

- Today, with the extreme overflow of information, more and more research questions in the various fields of medicine require deep understanding of various aspects related to the clinics, therapy, epidemiology, imaging, immunology, rehabilitation and quality of symptom management.

- To face this abundance of information, the Arrow Project approach is targeted at building specialized and flexible teams, working together in order to address complicated interdisciplinary research issues.

Arrow project: Concept

- The designed concept of the Arrow Project is to incorporate medical students from the 2nd year and forward into clinical & basic research.

- Accordingly, students are offered to participate in varying research studies, from the very beginning with formation of an idea or a query, to the presentation of the results in medical conferences and international publications.

- Students are paid by a designated grant from Sheba MC, Tel-Hashomer.

Arrow project: The process

- A targeted research project is designed for each student according to his/her interests.
- Accepted students are required to spend 10 hours/week in the project.
- Students participate in lectures once monthly and present their progress over the year.

Arrow project: The process

- Special emphasis is made to teach and educate students in issues like:
  - Study design
  - Literature review
  - Statistical methods

- In addition to being involved in clinical research, "wetting the hands and mind" from the early steps of research work, students
  - Practice lectures & presentations
  - Present data in scientific meetings
  - Involved in writing scientific papers

AP 2015

Students 2015

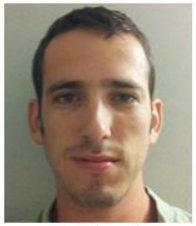
Noam Savion
Dr. Adrian Duek

Ophir Segal
6th year, 6 year program
Blood -Brain-Barrier permeability in Parkinson-desease patients suffering from Levodopa induced dyskinesia

Ronen Shavit
4th year, 4 year program
Metabolic Modifications and Mitochondrial Activation as a potential therapy in Lung Cancer

Carolina Legrada
5th year, 6 year program
Primary Progressive Muliple Sclerosis - Gwne Expression Study

Lior Or-bach
5th year, 6 year program
Quantitative Neuroimaging-Cortical gray matter atrophy in Multiple Sclerosis



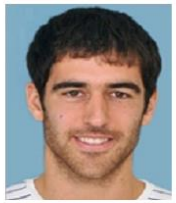
Nir Livneh
3th year, 6 year program
Biomarkers For Verifying And Predicting Multiple Sclerosis Relapse

Noa Rozendorn
4th year, 6 year program
Developing an algorithm to predict relapse in Crohn's disease patients

Ori Liran
6th year, 6 year program
Nano analysis of exhaled breath for lung cancer early detection

Sirley Maman
Dr. Batya Vais, Dr. Amir Vardi, Pediatric Gastroenterology

Nitsan Landau
Dr. Uriel Katz, Dr. Shai Tejman-Yarden, Pediatric Cardiology, Dr. Gal Goldstein, Pediatric Oncolog



Elad Zvi
Dr. Eldad Katorza The Joseph Buchman Gynecology and Maternity Center
Saftey of fetal MRI neonetal and devlopmental outcome

Shayel Berkovitz
Dr. Andreea Nissenkorn, Pediatric Neurology
EEG power spectral analysi in Dravet Syndrome

David Matias
,Dr. Galia Tsarfaty Diagnostic Imaging
When the Right ('Wrong') Hemisphere Kicks in: Re-Reading Words in The Context of a Memory Task Activates the Non-Dominant Inferior Frontal Gyrus

Daniel Ben-Ner
Dr.Ygal Rotenshtreich-Director, Electrophysiology Clinic Goldschleger Eye Research Institute
Objective Chromatic Pupillometer-Based Perimetry in patients with Retinal Dystrophys

Tali Bar-0n
Prof.Yehuda Shoenfeld, Dr Nancy Agmon-Levin, Zabludowicz Center for Autoimmune Diseases

Yael Brantz
Prof. Elon Pras- The Danek Gertner Institute of Human Genetics
Are mutations in POLG1 involved in MS

Liran Ziber
Prof. Joab Chapman,Dr. Efrat Shavit-Neurology
3th year, 4 year program
Development of novel PAR-1-based therapeutic compounds

Maayan Maor
Dr. Eylon Lahat,Dr Rony ,Eshkenazy,Dr.Arie Ariche Hepatobiliary surgical department

Nicholas Keddel
+ Dr. Michal Amitai Head of Abdominal Imaging Department of Diagnostic Imaging-LC
Automated Liver Lesions Classification Using Dictionary Bag Of Visual Words (BoVW) Model

Britain Baker+ Dr. Nancy Agmon-Levin, Research Center for Autoimmune-LC
Narcolepsy and Autoimmunity in mice

Jaron Tepper+ Dr. Michael Gurevich- Neurogenomic Lab, Multiple Sclerosis Center -NY
Biomarkers for JC Virus Infection in Multiple Sclerosis

Halevy Noy
Dr. Chen Hoffmann Division of Diagnostic and Interventional Imaging -NY
Evaluating Hippocampal Size in Embryos and Setting A Standard Average for Further Evaluation

Vainer Sivan
Prof. Howard Amital, Head of Internal Medicine B -NY

Samuel Rose+ Dr. Gadi Abebe Campino, Hemato-oncology department, Dr.Tima Davidson, Dr. Shai Shrot, Nuclear Medicine Department -NY
Chemotherapy and the child brain

Andreea Cojocaru
Dr. Michael Gurevich-Neurogenomic Lab, Multiple Sclerosis Center

Athos Katelaris + Dr. Chen Hoffmann- Division of Diagnostic and Interventional Imaging-LC

Timothy Lai + Dr. Chen Hoffmann- Division of Diagnostic and Interventional Imaging-LC

Thanks to all Arrow project teachers:

You are the bows from
which your children as living
arrows are sent forth.

On Children by Kahlil Gibran