Date: 27/11/2022

R E S U M E

1. PERSONAL DETAILS

Full Name: Moti Freiman
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2. ACADEMIC DEGREES

2010 PhD, School of Engineering and Computer Science, The Hebrew University of Jerusalem, Israel.
2005 MSc (Magna cum laude), School of Engineering and Computer Science, The Hebrew University of Jerusalem, Israel.
2003 BSc (Cum laude), Department of Mathematics and Computer Science, Bar-Ilan University, Israel.

3. ACADEMIC APPOINTMENTS

2021 – Academic director, Tech-MRC – May, Blum, Dahl Technion's Human MRI research Center.
2019 – Senior Lecturer, Faculty of Biomedical Engineering, Technion – Israel Institute of Technology, Israel
2012 – 2019 Instructor of Radiology, Harvard Medical School/Boston Children's Hospital, Boston, MA, USA

4. RESEARCH INTERESTS

- Medical Imaging, Image Processing, Computer Vision, Machine Learning.

5. RESEARCH GRANTS

- 2023-2026, MOST, $43,000 out of $115,000, "Physically-primed Deep-neural-networks for placental functional assessment in large for gestational age pregnancies with accelerated Diffusion-Weighted MRI", **PI: Moti Freiman**, with Prof. Rinat Gabbai-Benziv (Hillel-Yaffe Medical Center).
- 2023-2026, MOST, $45,000 out of $115,000, "Diagnosis and Monitoring of Crohn's Disease activity in Contrast Enhanced Ultrasound (CEUS) of the bowel, using flow-radiomics machine learning models", **PI: Moti Freiman**, with Dr. Anat Ilivitzki, (Rambam Medical Center).
- 2021-2024, ERA-CVD (EU Horizon 2020), €140,000 out of €785,500, "ENdothelial Retinal function as Indicator for vascular Cognitive Health", **PI: Moti Freiman**, with a group of international researchers.
- 2021-2022, Innovation Authority, 660,000 NIS out of 1,320,000 NIS, "3D processing technique for automatic virtual unfolding and assessing disease extent in Magnetic Resonance Enterography data of Crohn's disease patients", **PI: Moti Freiman**, with Dr. Anat Ilivitzki (Rambam Medical Center)
- 2020-2024, BSF, Total Costs $320,000, "Non-invasive assessment of fetal lung maturation with quantitative Diffusion-Weighted MRI", PIs: Moti Freiman (Technion, Israel), Simon K Warfield and Onur Afacan (Harvard Medical School, Boston, MA, USA)
- 2013-2018, NIH, Total costs: $1,894,256, "Novel MRI Imaging Tools and Software for Assessing Pediatric Crohn's Disease", PI: **Moti Freiman** (Due to the move back to Israel, the role of PI was transferred to Prof. SK Warfield during 2015.)

6. FELLOWSHIPS, AWARDS AND HONORS

2022 Praise for excellence in teaching, spring semester 2022 (for the course "Medical Image Processing") 2022 Best paper award - runner up, Medical Computer Vision workshop, in conjunction with ECCV 2022
2021 European Microwave Association (EuMA) Best paper Award
2019 Taub Fellowship, Technion's program for leaders in Science and technology
2015 ISMRM Special Distinction Reviewer Award for reviewing for Journal of Magnetic Resonance Imaging
2012 Crohn's and Colitis Foundation of America, Research Fellow Award (Total costs: $157,875, "DiffusionWeighted MRI for the assessment of disease activity and progression in pediatric Crohn's disease")

7. PUBLICATIONS (most recent, full list: https://scholar.google.com/citations?user=8Oiqdz0AAAAJ&hl=en)

J1. I. Guez, G. Focht, M.L. Greer, R. Cytter-Kuint, L. Pratt, D. Castro, D. Turner, A.M. Griffiths, **M. Freiman**. Development of a multimodal machine-learning fusion model to non-invasively assess ileal Crohn's disease endoscopic activity, Computer Methods and Programs in Biomedicine, 107207, Oct. 2022, In press.

J2. S. Khawaled, M. Freiman. NPBDREG: Uncertainty Assessment in Diffeomorphic Brain MRI Registration using a Non-parametric Bayesian Deep-Learning Based Approach, Computerized Medical Imaging and Graphics, Vol. 99: 102087, 2022.

J3. P.A. van Diemen, M.J. Bom, R.S. Driessen, S.P. Schumacher, H. Everaars, R.W. de Winter, P.M. van de Ven, M. Freiman, L. Goshen, D. Heitel, E. Langzam, J.K. Min, J.A. Leipsic, P.G. Raijmakers, A.C. van Rossum, I. Danad, P. Knaapen. Pericoronary adipose tissue attenuation leads to improved prognostication beyond atherosclerotic burden and high-risk plaques in patients with suspected coronary artery disease, European Heart Journal, Under Review, May 2020.