Or Perlman, PhD

375 Harvard St, Cambridge, MA 02138 operlman@mgh.harvard.edu \$\displays 1-617-643-4854

https://mri-ai.github.io \(\phi \) he/him

EDUCATION

PhD, Biomedical Engineering

November 2013 - March 2018

 ${\it Technion - Israel\ Institute\ of\ Technology,\ Haifa,\ Israel}$

Mentor: Prof. Haim Azhari (Dean, Biomedical Engineering)

MSc (Cum Laude), Biomedical Engineering

October 2011 - November 2013

Ben-Gurion University of the Negev, Beer-Sheva, Israel

Mentors: Dr. Yaniv Zigel and Prof. Amos Katz (Dean of Medicine)

BSc (Cum Laude), Biomedical Engineering

November 2008 - October 2012

Ben-Gurion University of the Negev, Beer-Sheva, Israel

PROFESSIONAL EXPERIENCE

Senior Lecturer (Assistant Professor Equivalent)

July 2022 (expected)

Department of Biomedical Engineering

Faculty of Engineering

Tel Aviv University, Tel Aviv, Israel

Postdoctoral Research Fellow

June 2018 - June 2022 (expected)

Athinoula A. Martinos Center for Biomedical Imaging

Harvard Medical School & Massachusetts General Hospital

Mentors: Profs. Christian T. Farrar and Matthew S. Rosen

Research Assistant January 2018 - June 2018

Faculty of Biomedical Engineering

Technion - Israel Institute of Technology

Visiting Scholar (Graduate Student)

March 2015

Gorter Center for High Field MRI, Department of Radiology

Leiden University Medical Center, The Netherlands

Host: Prof. Andrew Webb

Preclinical MRI Operator and Consultant

September 2014 - June 2018

Biomedical Core Facility

Rappaport Faculty of Medicine

Technion - Israel Institute of Technology

HONORS AND AWARDS

Marie Skłodowska-Curie Global Fellowship

November 2019 - June 2023

European Union's Horizon 2020 Research and Innovation Programme

Overall Budget: €269,998.08

https://cordis.europa.eu/project/id/836752

Molecular & Cellular Study Group Competition, 1^{st} Place

March 2022

International Society for Magnetic Resonance in Medicine (ISMRM)

Travel Award January 2022

Ministry of Aliyah and Integration, Israel

DAAD AI-Net Fellowship September 2021 German Academic Exchange Service **Educational Stipend Award** May 2021 ISMRM Annual Meeting & Exhibition Poster Award, 3rd Place September 2020 The 11th Scientific Symposium on Ultrahigh Field MR Magna Cum Laude Award August 2020 International Society for Magnetic Resonance in Medicine (ISMRM) Trainee Abstract Award, 3rd Place August 2020 ISMRM MR in Drug Research Study Group Meeting **Educational Stipend Award** August 2020 ISMRM Annual Meeting & Exhibition **Cloud Computing Grant** May 2020 CERN openlab Magna Cum Laude Award May 2019 International Society for Magnetic Resonance in Medicine (ISMRM) **Educational Stipend Award** May 2019 ISMRM Annual Meeting & Exhibition International Travel Award December 2018 The 7th International Workshop on CEST Imaging Travel Scholarship November 2017 Ministry of Science, Technology & Space, Israel Society Award for Excelling PhD Candidates March 2017 Israel Society for Medical and Biological Engineering (ISMBE) Russell Berrie Scholarship in Nanotechnology October 2016 - September 2017 The Russell Berry Nanotechnology Institute JSPS Hope Fellow March 2016 Japan Society for the Promotion of Science Selected to participate in the 8th HOPE Meeting with Nobel Laureates Travel Scholarship February 2015 Ministry of Science, Technology & Space, Israel

Russell Berrie Scholarship in Nanotechnology October 2014 - September 2015

The Russell Berry Nanotechnology Institute

Poster Award, 2nd Place February 2013

Israel Society for Medical and Biological Engineering (ISMBE) Annual Conference

November 2008 Zlotowski Admission Award for Outstanding Students

Ben-Gurion University of the Negev, Israel

PEER-REVIEWED JOURNAL PAPERS

1. O. Perlman*, B. Zhu*, M. Zaiss, M. S. Rosen, C. T. Farrar, "An End-to-End AI-Based Framework for Automated Discovery of Rapid CEST/MT MRI Acquisition Protocols and Molecular Parameter Quantification (AutoCEST)," Magnetic Resonance in Medicine, Vol. 87, pp. 2792-2810, 2022. *Equal contribution.

- 2. O. Perlman[⊠], H. Ito, K. Herz, N. Shono, H. Nakashima, M. Zaiss, E. A. Chiocca, O. Cohen, M. S. Rosen, C. T. Farrar[⊠], "Quantitative imaging of apoptosis following oncolytic virotherapy by magnetic-resonance fingerprinting aided by deep learning," *Nature Biomedical Engineering*, 2021. https://doi.org/10.1038/s41551-021-00809-7
 [™]Corresponding authors.
- 3. K. Herz, S. Mueller, O. Perlman, M. Zaitsev, L. Knutsson, P. Sun, J. Zhou, P. van Zijl, K. Heinecke, P. Schuenke, C. Farrar., M. Schmidt, K., A. Dorfler, K. Scheffler, and M. Zaiss, "Pulseq-CEST: Towards multi-site multi-vendor compatibility and reproducibility of CEST experiments using an open source sequence standard," *Magnetic Resonance in Medicine*, Vol. 86, No. 4, pp. 1845-1858, 2021.
- 4. I. S. Weitz, **O. Perlman**, H. Azhari, S. S. Sivan, "In vitro evaluation of copper release from MRI-visible, PLGA-based nanospheres," *Journal of Materials Science*, Vol. 56, pp. 718-730, 2021.
- 5. O. Perlman, H. Ito, A. A. Gilad, M. T. McMahon, E. A. Chiocca, E. H. Nakashima, C. T. Farrar, "Redesigned reporter gene for improved proton exchange-based molecular MRI contrast," *Scientific Reports*, Vol. 10, 20664, 2020. https://doi.org/10.1038/s41598-020-77576-z.
- O. Perlman, K. Herz, M. Zaiss, O. Cohen, M. S. Rosen, C. T. Farrar, "CEST MR-fingerprinting: Practical considerations and insights for acquisition schedule design and improved reconstruction," Magnetic Resonance in Medicine, Vol. 83, pp. 462-478, 2020.
- 7. O. Perlman, A. Borodetsky, Y. Kauffmann, Y. Shamay, H. Azhar, I. S. Weitz, "Gold/copper@ polydopamine nanocomposite for contrast-enhanced dual modal computed tomography-magnetic resonance imaging," *ACS Applied Nano-Materials*, Vol. 2, No. 10, pp. 6124-6134, 2019.
- 8. M. Benguigui, I. S. Weitz, M. Timaner, T. Kan, D. Shechter, **O. Perlman**, S. Sivan, Z. Raviv, H. Azhari, Y. Shaked, "Copper oxide nanoparticles inhibit pancreatic tumor growth primarily by targeting tumor initiating cells," *Scientific Reports*, Vol. 9, No. 1, pp. 1-10, 2019.
- 9. O. Perlman, I. S. Weitz, and H. Azhari, "Target visualization and microwave hyperthermia monitoring using nanoparticle-enhanced transmission ultrasound (NETUS)," *International Journal of Hyperthermia*, Vol. 34, No. 8, pp. 773-785, 2018.
- 10. **O. Perlman**, I. S. Weitz, S. S. Sivan, H. Abu-Khalla, M. Benguigui, Y. Shaked, and H. Azhari, "Copper oxide loaded PLGA nanospheres: towards a multifunctional nanoscale platform for ultrasound based imaging and therapy," *Nanotechnology*, Vol. 29, No. 18, pp. 185102-185112, 2018.
- 11. **O. Perlman** and H. Azhari, "Ultrasonic computed tomography imaging of iron oxide nanoparticles," *Physics in Medicine and Biology*, Vol. 62, No. 3, pp. 825-842, 2017.
- 12. O. Perlman, A. Katz, G. Amit, and Y. Zigel ,"Supraventricular tachycardia classification in the 12-Lead ECG using atrial waves detection and a clinically based tree scheme," *IEEE Journal of Biomedical and Health Informatics*, Vol. 20, No. 6, pp. 1513-1520, 2016.
- 13. **O. Perlman**, I. S. Weitz, and H. Azhari, "Copper oxide nanoparticles as contrast agents for MRI and ultrasound dual-modality imaging," *Physics in Medicine and Biology*, Vol. 60, pp. 5767-5783, 2015.
- 14. **O. Perlman**, A. Katz, N. Weissman, G. Amit, and Y. Zigel, "Atrial electrical activity detection using linear combination of 12-lead ECG signal," *IEEE Transactions on Biomedical Engineering*, Vol. 61, No. 4, pp. 1034-1043, 2014.

REVIEW PAPERS

1. O. Perlman[⊠], C. T. Farrar, and H. Y. Heo[⊠], "MR Fingerprinting for Semisolid Magnetization Transfer and Chemical Exchange Saturation Transfer Quantification," NMR in Biomedicine, 2022,

JOURNAL PAPERS UNDER REVIEW

1. O. Cohen, R. Young, **O. Perlman**, C. T. Farrar, R. Otazo, "Development of a Clinical Chemical Exchange Saturation Transfer MR fingerprinting (CEST-MRF) Pulse Sequence and Reconstruction for Brain Tumor Quantification", arXiv preprint: https://arxiv.org/abs/2108.08333

REFEREED PAPERS IN CONFERENCE PROCEEDINGS

- 1. **O. Perlman**, I. S. Weitz, and H. Azhari, "Preliminary study of copper oxide nanoparticles acoustic and magnetic properties for medical imaging," in *SPIE Medical Imaging, International Society for Optics and Photonics*, Orlando, Florida, 2015, pp. 9412041-9412046. **Oral presentation**.
- 2. O. Perlman, A. Katz, and Y. Zigel, "Noninvasive fetal QRS detection using linear combination of abdomen ECG signals," in *Computing in Cardiology*, Zaragoza, Spain, 2013, pp. 169-172. Oral presentation.
- 3. O. Perlman, A. Katz, N. Weissman, and Y. Zigel, "Atrial electrical activity detection in 12-lead ECG using synthetic atrial activity signal," in *Computing in Cardiology*, Krakow, Poland, 2012, pp. 665-668.
- 4. **O. Perlman**, A. Katz, G. Amit, and Y. Zigel, "Cardiac arrhythmia classification in 12-lead ECG using synthetic atrial activity signal," in *IEEI 27th Convention of Electrical Electronics Engineers*, Eilat, Israel, 2012, pp. 1-4. **Oral presentation.**

REFEREED CONFERENCE ABSTRACTS

- 1. O. Perlman, B. Zhu, M. Zaiss, N. Shono, H. Nakashima, E. A. Chiocca, M. S. Rosen, C.T. Farrar, "Automatic Design of Quantitative and Rapid Molecular MRI Protocols using an AI-Based Approach," World Molecular Imaging Congress (WMIC), Virtual, Oct., 2021. Oral presentation.
- 2. **O. Perlman**, B. Zhu, M. Zaiss, N. Shono, H. Nakashima, E. A. Chiocca, M. S. Rosen, C.T. Farrar, "AI-Based Automatic Design of Quantitative and Rapid CEST/MT Protocols at 7.0 T and 9.4 T," 12th Symposium on Ultrahigh Field MR, Virtual, September, 2021.
- 3. O. Perlman, B. Zhu, M. Zaiss, N. Shono, H. Nakashima, E. A. Chiocca, M. S. Rosen, C.T. Farrar, "In-Vivo Sub-Minute rNOE Mapping Using AutoCEST: a Machine-Learning Approach for CEST/MT Protocol Invention and Quantitative Reconstruction," *ISMRM Annual Meeting*, Virtual, May, 2021.
- 4. J. Coll-Font, **O. Perlman**, S. Chen, R. Eder, C. T. Farrar, C. T. Nguyen, "Evaluating the Effects of Motion Compensation to IVIM Fitting in In-Vivo DW-MRI of the Muscle.," *ISMRM Annual Meeting*, Virtual, May, 2021.
- 5. O. Cohen, **O. Perlman**, C. T. Farrar, O. Ricardo, "Development of a Clinical CEST-MR Fingerprinting (CEST-MRF) Pulse Sequence and Reconstruction Methods," *ISMRM Annual Meeting*, Virtual, May, 2021.
- 6. **O. Perlman**, H. Ito, K. Herz, N. Shono, H. Nakashima, M. Zaiss, E. A. Chiocca, O. Cohen, M. S. Rosen, C.T. Farrar, "Deep CEST MR fingerprinting reveals tumor apoptotic response to oncolytic virotherapy in vivo," *The 8th International Workshop on Chemical Exchange Saturation Transfer Imaging*, Virtual, Nov. 2020. **Oral presentation.**
- 7. O. Perlman, B. Zhu, M. Zaiss, N. Shono, H. Nakashima, E. A. Chiocca, M. S. Rosen, C.T. Farrar, "Automated multi-pool CEST/MT optimal experiment design and deep quantitative mapping (AutoCEST)," The 8th International Workshop on Chemical Exchange Saturation Transfer Imaging, Virtual, Nov. 2020. Oral presentation.

- 8. O. Perlman, H. Ito, K. Herz, N. Shono, H. Nakashima, M. Zaiss, E. A. Chiocca, O. Cohen, M. S. Rosen, C. T. Farrar, "Deep CEST MR Fingerprinting Reveals Tumor Apoptotic Response to Oncolytic Virotherapy In Vivo," World Molecular Imaging Congress (WMIC), Virtual, Oct., 2020. Oral presentation.
- 9. O. Perlman, H. Ito, A. A. Gilad, M. T. McMahon, E. A. Chiocca, E. H. Nakashima, C. T. Farrar, "Redesigned LRP reporter improves CEST MRI contrast in LRP-expressing mouse tumor," World Molecular Imaging Congress (WMIC), Virtual, Oct., 2020.
- 10. O. Perlman, H. Ito, K. Herz, H. Nakashima, M. Zaiss, E. A. Chiocca, O. Cohen, M. S. Rosen, C. T. Farrar, "Deep CEST MR fingerprinting at 7T reveals tumor apoptotic response to oncolytic virotherapy in vivo," 11th Symposium on Ultrahigh Field MR Virtual, September, 2020. Poster award, 3rd place.
- 11. **O. Perlman**, B. Zhu, M. Zaiss, M. S. Rosen, C. T. Farrar, "AutoCEST: a machine-learning approach for optimal CEST-MRI experiment design and quantitative mapping," *ISMRM 28th Annual Meeting*, Virtual, August, 2020.
- 12. **O. Perlman**, C. T. Farrar, O. Cohen, "Deep learning global schedule optimization for chemical exchange saturation transfer MR fingerprinting (CEST-MRF)", *ISMRM 28th Annual Meeting*, Virtual, August, 2020.
- 13. O. Perlman, H. Ito, K. Herz, H. Nakashima, M. Zaiss, E. A. Chiocca, C. Nguyen, O. Cohen, M. S. Rosen, C. T. Farrar, "Early detection of tumor apoptotic response to oncolytic virotherapy using deep CEST MR fingerprinting," *ISMRM 28th Annual Meeting*", Virtual, August, 2020. Oral presentation. *Magna Cum Laude* Award.
- 14. K. Herz, S. Mueller, O. Perlman, R. Strinberg, T. Stoecker, K. Scheffler, C. T. Farrar, M. Zaiss, "Towards clinical CEST-MRF: whole brain snapshot CEST MR Fingerprinting at 3T using spin-lock saturation and a centric 3D-EPI readout," ISMRM 28th Annual Meeting," Virtual, August, 2020. Summa Cum Laude Award.
- 15. O. Perlman, H. Ito, K. Herz, H, Nakashima, M. Zaiss, E. A. Chiocca, O. Cohen, M. S. Rosen, C. T. Farrar, "Early detection of tumor apoptotic response to oncolytic virotherapy using deep learning based CEST molecular MRI," BWH/Harvard Computational Neuroscience Outcomes Center Symposium, Boston, MA, USA, Oct, 2019.
- 16. **O. Perlman**, O. Cohen, S. Huang, H. Ito, H, Nakashima, E. A. Chiocca, M. S. Rosen, C. T. Farrar, "Deep learning neural network for CEST magnetic resonance fingerprinting of GBM mouse tumor models," *The future of molecular MR*, Newfoundland, Canada, July, 2019
- 17. O. Perlman, O. Cohen, S. Huang, H. Ito, H, Nakashima, E. A. Chiocca, M. S. Rosen, C. T. Farrar, "Sequential and deep multi-pool CEST MR fingerprinting in in-vivo tumor bearing mice," ISMRM 27th Annual Meeting", Montreal, Canada, May, 2019. Oral presentation. *Magna Cum Laude* Award.
- 18. I. S. Weitz, S. S. Sivan, **O. Perlman**, and H. Azhari, "Preparation of PLGA nanospheres as carriers for copper oxide nanoparticles based imaging contrast agent," BioNanoMed, Graz, Austria, 2019.
- 19. **O. Perlman**, O. Cohen, S. Huang, I. Mulder, C. Ayata, T. W. Kimberly, M. S. Rosen., and C. T. Farrar, "Proton exchange rate, volume fraction, T1, and T2 MR fingerprinting using an optimized acquisition schedule and a deep reconstruction network (DRONE)," *The 7th International Workshop on Chemical Exchange Saturation Transfer Imaging*, Beijing, China, 2018.
- 20. O. Perlman, O. Cohen, S. Huang, I. Mulder, C. Ayata, T. W. Kimberly, M. T. McMahon, M. S. Rosen., and C. T. Farrar, "MR fingerprinting deep reconstruction network (DRONE) for stroke reperfusion quantitative imaging," *ISMRM Workshop on Machine Learning Part II*, Washington D.C., USA, 2018.

- 21. O. Cohen, **O. Perlman**, S. Huang, M. T. McMahon, Y. R. Kim, M. S. Rosen, C. T. Farrar, "Deep learning neural network for CEST fingerprinting of MCAO rat stroke models," *Imaging in 2020*, Wyoming, USA, 2018.
- 22. I. S. Weitz, **O. Perlman**, S. S. Sivan, and H. Azhari, "Synthesis and characterization of copper oxide based polymeric nano-systems for biomedical imaging," 8th Forum on New Materials (CIMTEC), Perugia, Italy, 2018.
- 23. O. Perlman, I. S. Weitz, and H. Azhari, "Microwave ablation planning and monitoring using nanoparticle enhanced through-transmission ultrasound," *IEEE 39th Annual International Conference of the Engineering in Medicine and Biology Society (EMBC)*, Jeju Island, Korea, 2017.
- 24. **O. Perlman**, I. S. Weitz, and H. Azhari, "Potential medical applications of ultra small copper oxide nanoparticles," *NanoBio&Med*, Barcelona, Spain, 2017.
- 25. **O. Perlman**, I. S. Weitz, and H. Azhari, "Multimodal magnetic resonance and through-transmission ultrasound imaging of nanoparticles," 8th HOPE Meeting with Nobel Laureates, Tsukuba, Japan, 2016.
- 26. **O. Perlman**, I. S. Weitz, and H. Azhari, "Copper oxide nanoparticles as contrast agents for medical imaging: a phantom study," *Technion RBNI Nanotechnology Fall Symposium*, Yad-Hanadiv, Israel, 2014. **Oral presentation.**
- 27. **O. Perlman**, A. Katz, G. Amit, and Y. Zigel, "A novel method for atrial electrical activity detection and arrhythmia classification in 12-lead ECG," *Annual Conference of the Israeli Society for Medical and Biological Engineering (ISMBE)*, Haifa, Israel, 2013. **Poster Award, 2nd place**.
- 28. **O. Perlman**, A. Katz, G. Amit, and Y. Zigel, "A method for atrial activity detection and arrhythmia classification in 12-lead ECG," *The 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, San-Diego, USA, 2012.

CHAPTERS IN BOOKS

O. Perlman and H. Azhari: "MRI and ultrasound imaging of nanoparticles for medical diagnosis," *In:* Nanotechnology characterization tools for medical diagnosis, Editor. Challa, SSR Kumar, Publisher: Springer, Berlin, Heidelberg. pp.333 – 365, 2018.

PATENTS

Y. Zigel, A. Katz, O. Perlman, N. Weissman, "Separating clinically relevant sources of electrical activity in ECG signals," U.S. Patent No. 9,597,001, 2017.

INVITED TALKS

- 1. "Quantitative Imaging of Apoptosis using AI Boosted Molecular Magnetic Resonance Fingerprinting," *Medical Imaging and Case Reports (MICR) 2022*, Virtual, March 2022. Invited by the organizing team.
- 2. "Machine learning-driven design and acceleration of quantitative molecular imaging methods," World Molecular Imaging Congress (WMIC), Virtual, Oct. 2021. Invited by the organizing committee (Dr. Iris Zhou).
- 3. "AI boosted molecular MRI," *Insightec Research Division*, Israel, Oct. 2020. (Virtual). Host: Dr. Yoav Levy.
- 4. "Early detection of tumor apoptotic response to oncolytic virotherapy using deep CEST MR fingerprinting", ISMRM MR in Drug Research Study Group Meeting, Aug. 2020. Host: Dr. Rob Janiczek.

- 5. "Deep CEST MR fingerprinting," Edmond & Lily Safra Center for Brain Sciences, Hebrew University of Jerusalem, Israel, Mar. 2020. Host: Assoc. Prof. Aviv Mezer.
- 6. "Deep CEST MR fingerprinting," *Tel-Aviv University*, Israel, Mar. 2020. Hosts: Prof. Gil Navon & Assis. Prof. Noam Ben-Eliezer.
- 7. "Deep CEST MR fingerprinting," Cardiovascular Bioengineering and Biomedical Imaging (CABBI) Seminar Series, Martinos Center for Biomedical Imaging, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA, Feb. 2020. Host: Assoc. Prof. David Sosnovik.
- 8. "Nanoparticles for noninvasive imaging, diagnosis, and therapy," *Nanomedicine Seminar Series*, Northeastern University, Boston, MA, USA, Feb. 2020. Host: Prof. Srinivas Sridhar.

TEACHING EXPERIENCE

Faculty of Biomedical Engineering, Technion - Israel Institute of Technology

TA & Lab Instructor

Principles of Magnetic Resonance Imaging (undergraduate and graduate) March 2014 - August 2017 Biomedical Engineering Lab (undergraduate) November 2013 - August 2017

Rappaport Faculty of Medicine, Technion – Israel Institute of Technology

In Vivo Imaging (graduate)

September 2015

Biomedical Engineering Department, Ben-Gurion University of the Negev, Israel

TA & Lab Instructor

Introduction to Signal Processing (undergraduate)

Medical Instrumentation (undergraduate)

October 2012 - February 2013

Physiological Signal Processing Lab (undergraduate)

October 2012 - February 2013

Lachman (Kidum) Company, Israel

Psychometric Entrance Test Teacher (Israel equivalent of the SAT)

July 2008 - August 2011

MENTORSHIP

Jonah Weigand-Whittier (BSc in Physics)

April 2020 - Present

Massachusetts General Hospital

Rohith Maraka (High School Research Intern)

October 2020 - February 2021

Massachusetts General Hospital

Venkata Macha (MD student)

April 2020 - October 2020

Massachusetts General Hospital

ORGANIZATION OF SCIENTIFIC SESSIONS AT INT. CONFERENCES

P. R. Delgado, N. Nystrom, and **O. Perlman** (session organizers), "New innovations and alternatives to conventional contrast agents," Member Initiated Symposium, *International Society of Magnetic Resonance in Medicine (ISMRM)*, Virutal, August. 2020.

STUDENT EDITOR

IEEE Journal of Translational Engineering in Health and Medicine

January 2016 - March 2018

JOURNAL PAPERS REVIEW

[&]quot;Generative adversarial networks (GAN) for rapid CEST-MRI analysis"

[&]quot;Exploring machine-learning-based methods for accelerating molecular MRI"

[&]quot;Deep neural networks for multi-metabolite CEST imaging"

Public reviewer profile (Publons): https://publons.com/researcher/1378058/or-perlman/

- · NeuroImage
- · Scientific Reports
- · Magnetic Resonance in Medicine
- · Journal of Magnetic Resonance Imaging (JMRI)
- · NMR in Biomedicine
- · Tomography
- · IEEE Reviews in Biomedical Engineering
- · IEEE Transactions on Biomedical Engineering (TBME)
- · IEEE Journal of Biomedical and Health Informatics (J-BHI)
- · IEEE Transactions on Automation Science and Engineering (T-ASE)
- · Journal of Nanobiotechnology
- · Journal of Biomedical Informatics (JBI)
- · SN Applied Sciences (Springer)
- · Neural Computing and Applications (Springer)

GRANT REVIEW

UK Research and Innovation, Medical Research Council

May 2021

CONFERENCE REVIEW

Int. Soc. for Magnetic Resonance in Medicine (ISMRM) Annual Meeting $\,$

Nov. 2021 - Dec. 2021

World Molecular Imaging Congress (WMIC), Miami, Florida

May 2021 - August 2021

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- · World Molecular Imaging Society (WMIS), Member
- · Institute of Electrical and Electronics Engineers (IEEE), Member
- · Japan Society for the Promotion of Science (JSPS), HOPE Fellow
- · International Society for Magnetic Resonance in Medicine (ISMRM), Trainee Member

WORKING GROUPS

Standard Operating Procedures for the Creation and Sharing of Phantoms February 2022 - Present Reproducible Research Study Group

International Society for Magnetic Resonance in Medicine (ISMRM)

OUTREACH ACTIVITIES

· Lecturing about molecular imaging for cancer treatment monitoring Beacon Hills Seminars, Beacon Hill, MA, USA

February 2022

 \cdot Engaging with and lecturing preschool children about science, magnets & MRI Cambridge, MA, USA

August 2020

· Lecturing senior citizens on the physics behind ultrasound, MRI & CT Shomrat, Israel

July 2018

· Lecturing high school students on medical imaging Technion - Israel Institute of Technology January 2015 - January 2018