#### Prof. Dan Peer

## **Cell Research and Immunology**

### **Tel Aviv University**

INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
Tel Aviv University, Tel Aviv, Israel	B.S.	10/98	Biology
Tel Aviv University, Tel Aviv, Israel	M.S.	10/00	Biochemistry
Tel Aviv University, Tel Aviv, Israel	Ph.D.	09/04	Biophysics
University of Cambridge, Cambridge, UK	Internship	06/00	Biochemistry
Harvard Medical School, Boston, MA, USA	Postdoctoral	08/08	Immunology

### **Positions and Employment**

- 2015 Full Professor, and Director, Laboratory of Precision NanoMedicine, Tel Aviv University
- 2015 Member, Translational Science Board, Kenneth Rainin Foundation.
- 2014 Member, Israel Young Academy of Science.
- 2013 Scientific Advisory Committee on IBD for the Leona M and Harry B. Helmsley Charitable Trust projects
  - operated by The Broad Institute of MIT and Harvard.
- 2012 Director, Israel National Nanomedicine consortium.
- 2012 Director, Leona M and Harry B. Helmsley Nanotechnology Research Fund
- 2011 Senior Affiliate Member, Dept. of Nanomedicine, The Methodist Hospital Research Institute, Houston, TX.
- 2011 Tenured Assoc. Prof. and head, Laboratory for Nanomedicine, Dept. of Cell Research & Immunology, and the center for Nanoscience and Nanotechnology, Tel Aviv University, Tel Aviv, Israel.
- 2008-2011 Senior Lecturer and head, Laboratory for Nanomedicine, Dept. of Cell Research & Immunology, and the center for Nanoscience and Nanotechnology, Tel Aviv University, Tel Aviv, Israel.
- 2005-2008 Research Fellow, Immune Disease Institute and Harvard Medical School, Boston, MA.

#### **Professional Service**

- 2002 Member, American Association for Cancer Research
- 2008 Member, American Association for the Advancement of Science.
- 2010 Scientific Advisory and Board Member: Quiet Therapeutics
- 2010 Editorial Board Member; Editor, Biology and Medicine (2014-): Nanotechnology
- 2010 Editorial Board Member: Journal of Controlled Release
- 2010 Associate Editor: Journal of Biomedical Nanotechnolgy
- 2012 Editorial Board Member: Biomedical Microdevices
- 2012 Editorial Board Member: Cancer Letters
- 2013 Associate Editor: BMC Biochemistry.
- 2013 Section Editor: Molecular and cellular therapies,
- 2014 Editorial Advisory Board Member: Bioconjugate Chemistry
- 2014 Editorial Board Member: Nanomedicine: Nanotechnology, Medicine and Biology
- 2014 Scientific Advisory and Board Member: SEPL Pharma
- 2015 Associate Editor: Journal of Controlled Release.

2015 - Scientific Advisory and Board Member: ART Biosciences

# Honors and Awards (Selected 11 out of 28)

- 2015: 1st recipient of the UK-Israel Professorship in Science and Technology
- 2014: Innovator Award, Untold News Award, NYC, NY, USA.
- 2014: President: Israeli Controlled Release Society
- 2014: Member and managing committee, Israel Young Academy of Science.
- 2013: Breakthrough Award: Kenneth Rainin Foundation
- 2011: Breakthrough Award: Kenneth Rainin Foundation
- 2010: Innovator Award: Kenneth Rainin Foundation
- 2009: Marie Curie Fellow, European Union.
- 2008: Alon Fellowship for outstanding young researchers. Awarded by the Israeli Ministry of Education.
- 2008: Elected to the AAAS Program for Excellence in Science for young investigators.
- 2006: Pfizer Inc. Postdoctoral Award in Drug discovery and delivery.

#### **B.** Contribution to Science

Overall 90 peer-reviewed publications and more than 45 patent applications (pending and granted) including strategies that were translated into clinical trials (one currently in phase III and another starting phase I). Co-founded 3 companies. Selected papers are listed below:

- 1. **Peer D**, Zhu P, Carman CV, Lieberman J and Shimaoka M (2007). Selective gene silencing in activated leukocytes by targeting siRNAs to the integrin lymphocyte function-associated antigen-1. <u>Proc. Natl.</u> Acad.Sci. USA, 150, 4095-4100. \* *The first activation depended silencing with RNAi in leukocytes*.
- 2. **Peer D.,** Karp JM, Hong S, Farokhzad O, Margalit R, and Langer R (2007). Nanocarriers as emerging platforms for cancer therapy. <u>Nature Nanotechnology</u> 2,751-760. \* *Highest cited paper in nanomedicine* (> 3600)
- 3. **Peer D.,** Park EJ, Morishita Y, Carman CV, and Shimaoka M (2008). Systemic Leukocyte-Directed siRNA Delivery Revealing Cyclin D1 as an Anti-Inflammation Target. <u>Science</u>. 319, 627-630.
- 4. Kedmi R, Ben-Arie N, and **Peer D** (2010). The systemic toxicity of positively charged lipid-nanoparticles and the role of Toll-like receptor 4 in immune activation. <u>Biomaterials</u>.31, 6867-6
- 5. Mohigmi SM\*, **Peer D\***, and Langer R\* (2011). Re-shaping the future of nanopharmaceuticals: *Ad Iudicium*? ACS Nano, 5(11), 8454-8.
- 6. Goldsmith M., Mizrahy S., and **Peer D** (2011). Grant challenges in modulating the immune response with RNAi nanomedicines. <u>Nanomedicine</u> (Lond). 2011 Dec;6(10):1771-85.
- 7. Moyano D., Goldsmith M., Solfiell D., Landesman-Milo D., Miranda O., **Peer D.\*** and Rotello VM\* (2012). Hydrophobicity Dictates Immune response. <u>Journal of American Chemical Society</u> 134(9), 3965-3967. *Highlight in Nature 2013 ("The new gold standard")*.
- 8. Mizrahy S., Goldsmith M., Leviatan-Ben-Arye S., Kisin-Finfer E., Redy O., Srinivasan S., Shabat D. Godin B., and **Peer D.** (2014). Specificity and tumor targeting profiling of hyaluronan-coated lipid based-nanoparticles. Nanoscale. 6, 3742–3752.
- 9. Cohen K., Emmanuel R., Kisin-Finfer E., Shabat D., and **Peer D** (2014). Modulation of drug resistance in ovarian adenocarcinoma using chemotherapy entrapped in hyaluronan-grafted nanoparticle clusters. ACS Nano. 8 (3), 2183-2195
- 10. Goldsmith M., Abramovitz L., and **Peer D** (2014). Precision Nanomedicine in Neurodegenerative Diseases. ACS Nano. 8(3), 1958-1965
- 11. Bogart LK., Pourroy G., Murphy CJ, Puntes VF, Pellegrino T., Rosenblum D., **Peer D**.\* and Levy R\* (2014). Nanoparticles for Imaging, Sensing, and Therapeutic Intervention. <u>ACS Nano</u>. 8 (4), 3107–3122.
- 12. Cohen Z.R., Ramisetty S., Peshes–Yaloz N., Goldsmith M., Vol A., Zibly Z. and **Peer D** (2015). Localized RNAi Therapeutics of Chemo-Resistant Grade IV Glioma using Hyaluronan-Grafted Lipid-

- based Nanoparticles. ACS Nano. 9(2), 1581-1591.
- 13. Ramishetti S, Kedmi R, Goldsmith M, Leonard F, Speague AG, Godin B, Gozin M, Cullis P, Dykxhoorn
  - DM, and **Peer D**. (2015). Systemic Gene Silencing in Primary T lymphocytes using Targeted Lipid Nanoparticles. <u>ACS Nano</u> 9(7):6706-16.
  - 14. Weinstein S., Toker I.A., Emmanuel R., Ramishetti S., Hazan-Halevy I., Rosenblum D., Goldsmith M., Abraham A., Benjamini O., Bairey O., Raanani P., Nagler A., Lieberman J. and **Peer D** (2016). Harnessing RNAi based-Nanomedicines for Therapeutic Gene Silencing in B Cell Malignancies. <u>Proc. Natl. Acad. Sci. USA</u> 113 (1), E17-25.