# **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME	POSITION TITLE		
Dan Peer	Full Professor,		
	Director, Laboratory of Precision NanoMedicine Chair, Tel Aviv University Cancer Biology Research		
	Center.		

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	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 (Cesar Milstein Lab)	Internship	06/00	Biochemistry
MIT (Robert Langer Lab)	Internship	10/03	Biomaterials
Harvard Medical School, Boston, MA, USA	Postdoctoral	08/08	Immunology

### A. Positions

2019 - Vice Dean for Research, George S. Wise Faculty of Life Sciences, Tel Aviv University.

2017 - Founder and Managing Director, SPARK Tel Aviv, Center for Translational Medicine, Tel Aviv University.

2016 - Chair, Cancer Biology Research Center (CBRC), Tel Aviv University

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 - 2016 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 - 2017. Director, Israel National Nanomedicine consortium.

#### Professional Service

2008 - Founder and Board Member, Leuko Biosciences, Boston, MA USA (mAb is developed by Genentech).

- 2010 Editorial Board Member: Journal of Controlled Release
- 2010 Founder and Board Member, Quiet Therapeutics, Boston, MA, USA.
- 2010 Associate Editor: Journal of Biomedical Nanotechnology
- 2012 Editorial Board Member: Biomedical Microdevices
- 2012 Editorial Board Member: Cancer Letters
- 2013 Associate Editor: BMC Biochemistry.
- 2014 Editorial Advisory Board Member: Bioconjugate Chemistry
- 2014 Scientific Advisory and Board Member (co-founder): SEPL Pharma
- 2015 Associate Editor: Journal of Controlled Release.
- 2015 Scientific Advisory and Board Member: ART Biosciences
- 2015 Editorial Board Member: OpenNano
- 2016 Scientific Advisory Member, Genentech, IBD Board, San Francisco, CA, USA
- 2016 Scientific Board Member: International Longevity Alliance.
- 2017 Scientific Advisory Board Member Precision nanosystems Inc., Vancouver, Canada.
- 2017 Scientific Advisory Board Member, Advanced Therapeutics
- 2017 Chair, Scientific Advisory Board, SciCann Therapeutics, Toronto, Canada
- 2018 Scientific Advisory Member, EuroPacific Medical, San Francisco, CA, USA
- 2018 Scientific Advisory Member, New Phase Ltd., Israel
- 2018 Editorial Board Member: Nanomaterials
- 2018 Editorial Board Member: Biomaterials Research
- 2018 Scientific Advisory Member, CX One Inc., Toronto, Canada
- 2018 Founder and Board Member, NeoCure Pharma Inc., Boston, MA, USA.

## Honors and Awards (Selected 5 out of 30)

2017: Nanos Award - World Leader Award for substantial contributions to the field of NanoMedicine, CLINAM Conference, Basel, Switzerland.

2015: 1<sup>st</sup> recipient of the UK-Israel Professorship (Oxford)

2014: Innovator Award, Untold News Award, NYC, NY, USA.

2014- 2016: President: Israel Chapter, Controlled Release Society.

2014 - 2018: Member and managing committee, Israel Young Academy of Science.

#### B. Contribution to Science

Overall > 130 peer-reviewed publications and > 120 patent applications (pending and granted) including strategies that were translated into clinical trials (one currently under registration (new drug in IBD) three under different clinical evaluations). Co-founded of four companies. More than 350 national and international seminars, keynote and plenary talks.

#### <u>Selected papers</u> 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. Acad.Sci.</u> <u>USA</u>, 150, 4095-4100. \* *The first activation depended silencing with RNAi in leukocytes*.
- 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 and cancer (cited > 6200 times).*
- 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. \* The first example for in vivo drug discovery in immune cells using RNA interference. Highlight in Nature, Science, Nature Biotechnology, Nature Cell Biology, and more.
- 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.
- 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").*
- 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. <u>ACS Nano</u>. 8 (3), 2183-2195
- 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. <u>ACS</u> <u>Nano.</u> 9(2), 1581-1591.
- 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.
- 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.
- 10. Kedmi R. and Peer D (2016). Zooming in on selectins in Cancer. SCIENCE Translational Med. 8, 345fs11.
- 11. Mizrahy S, Hazan-Halevy I, Dammes N, Landesman-Milo D, and Peer D (2017). Current Progress in Non-viral RNAi-Based Delivery Strategies to Lymphocytes. <u>Molecular Therapy</u> 25(7):1491-1500.
- Kedmi R., Viaga N. Ramishetti S, Goldsmith M, Rosenblum D, Dammes N, Hazan-Halevy I, Nahary L, Leviatan-Ben-Arye S, Harlev M, Behlke M, Benhar I, Lieberman J, and Peer D (2018). A modular platform for targeted RNAi therapeutics. <u>Nature Nanotechnology</u>. 13(3):214-219. A novel universal platform for RNAi therapeutics.
- 13. Rosenblum D., Joshi N., Tao W., Karp M.\*, and **Peer D\*.** (2018). Progress and Challenges Towards Targeted Delivery of Cancer Therapeutics. <u>Nature Communications</u> Apr 12;9(1):1410. doi: 10.1038/s41467-018-03705-y.
- Veiga N., Goldsmith M., Granot Y., Rosenblum D., Dammes N., Kedmi R., Ramishetti S., and Peer D (2018). Cell Specific Delivery of Modified mRNA Expressing Therapeutic Proteins to Leukocytes. <u>Nature</u> <u>Communications</u> 9(1):4493. doi: 10.1038/s41467-018-06936-1. The first, cell specific targeting of mRNA.