

CURRICULUM VITAE: YUVAL SHAKED, Ph.D.**1. PERSONAL DETAILS****Yuval Shaked**

Nationality: Israeli, Canadian.

Born in Israel, 12/03/1973.

Cell Biology and Cancer Science, 11th floor, Rappaport Faculty of Medicine, Israel Institute of Technology (Technion), Haifa, Israel, 31096.

Office: 972-4-829-5215. Lab: 972-4-829-5238.

e-mail: yshaked@technion.ac.il

2. ACADEMIC DEGREES

10/1994-10/1997: B.Med.Sc., Faculty of Medicine, Hebrew University, Jerusalem, Israel.

10/1997-08/2002: Ph.D. in Biochemistry (Prion disease). Supervisor: Prof. Ruth Gabizon. Faculty of Medicine, Hadassah University Hospital, Jerusalem, Israel.

09/2002-07/2008: Postdoctoral training (Cancer Research). Supervisor: Prof. Robert S. Kerbel. Medical Biophysics, Sunnybrook Health Sciences Centre, University of Toronto, Canada.

3. ACADEMIC APPOINTMENTS

01/2021 The Annie Chutick Chair in Medicine.

07/2018- Head of the Technion Integrated Cancer Center, Technion, Israel.

05/2018- Full Professor, Rappaport faculty of Medicine, Technion, Israel

12/2015-11/2017: Vice Dean for Research, Rappaport Faculty of Medicine, Technion, Israel.

10/2013-05/2018: Associate Professor, Department of Cell Biology and Cancer Science, Rappaport Faculty of Medicine, Technion, Haifa, Israel.

09/2014-08/2015: Visiting Professor, Sunnybrook Research Institute, University of Toronto, Canada. Sabbatical in the laboratory of Prof. David Andrews.

08/2008-10/2013: Assistant Professor and Senior Lecturer, Department of Molecular Pharmacology, Rappaport Faculty of Medicine, Technion, Haifa, Israel.

4. PROFESSIONAL EXPERIENCE (OUTSIDE ACADEMIA)**Consultant and/or board activity for the following pharmaceutical companies:**

05/2021-present Nanoghost (Israel)

04/2020-present RemedyCell (Israel, Co-founder and CSA).

01/2020-present Antapodia (Taiwan)

09/2017-present OncoHost (Israel, Co-founder and CSA).

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| <i>10/2012-01/2013</i> | <i>BioLine (Israel)</i> |
| <i>03/2012-04/2014</i> | <i>Sanofi Aventis (France)</i> |
| <i>04/2012-04/2013</i> | <i>Tiltan Pharm (Israel)</i> |
| <i>02/2011-01/2014</i> | <i>Pluristem therapeutics (Israel)</i> |
| <i>09/2010-10/2011</i> | <i>Sensit Science (Israel, consultant and co-founder)</i> |
| <i>11/2009-01/2013</i> | <i>Hoffman La Roche (Switzerland)</i> |
| <i>03/2009-06/2012</i> | <i>TEVA Pharmaceutical (Israel)</i> |
| <i>07/2007-07/2008</i> | <i>OXiGENE (USA-UK)</i> |
| <i>11/2006-12/2009</i> | <i>TTY Biopharm (Taiwan)</i> |

5. RESEARCH INTERESTS STATEMENT

One of the major obstacles in clinical oncology is that tumors may often relapse, resist therapy and sometimes even spread despite an initial successful treatment. While tumor relapse is mainly attributed to tumor cell intrinsic resistance, we have pioneered the idea that host effects generated in response to therapy are substantially involved in tumor resistance and could even lead to metastasis spread. We termed this phenomenon as “host response to anti-cancer therapy” (please see Wikipedia). In fact, we demonstrated that almost any type of anti-cancer treatment including chemotherapy, radiation, surgery, targeted drugs and immunotherapy, induces such host effects which involve a rapid induction in cytokines and growth factors followed by acute mobilization and tumor homing of various bone marrow-derived cells which contribute to tumor re-growth and spread. Our lab studies the possible cross-talks between tumor and host cells at the tumor microenvironment. We demonstrate how host cells exposed to anti-cancer drugs can change the tumor microenvironment to the tumor advantage, and how therapy-educated host cells can dictate a pro-tumorigenic tumor microenvironment, even in naïve (untreated) tumors. Based on such studies we also develop possible new therapeutic strategies which primarily inhibit host pro-tumorigenic response effects as well as new ways to predict clinical outcomes therefore effectively advance their personalized treatment. These studies have made a paradigm shift in understanding tumor growth, spread and resistance to commonly used therapies. Collectively, our findings provide a larger view of the balance between anti-tumorigenic and pro-tumorigenic effects of cancer treatments, and therefore can pave the way for the development of novel treatment strategies against cancer.

6. TEACHING EXPERIENCE

Course teaching:

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| <i>2009-2014:</i> | <i>”Basic Pharmacology” for Israeli Medical students (undergraduate)</i> |
| <i>2009-2012:</i> | <i>”Basic Pharmacology” for American Medical students (undergraduate)</i> |
| <i>2009-present:</i> | <i>“Principles of Flow Cytometry” (graduate students)</i> |
| <i>2009-2012:</i> | <i>”Basic Pharmacology” for nursing (undergraduate)</i> |
| <i>2010-present:</i> | <i>”Advanced Molecular Pharmacology” (graduate students)</i> |
| <i>2010-2018:</i> | <i>“Mechanisms of tumor growth regulation” (graduate students)</i> |
| <i>2011-2015:</i> | <i>”The Cell (B)” for Israeli medical students (undergraduate)</i> |
| <i>2013-2015:</i> | <i>“The Cell” for American medical students (undergraduate)</i> |

- 2016-present: “Tumor biology” for Israeli medical students (undergraduate)
- 2016-2021: “Introduction for biomedical research” for Israeli medical students (undergraduate)
- 2017-2019: “New technologies in medical biosciences” for medical research students (undergraduate)
- 2019-present: “Stem cell and organogenesis” for graduate students.
- 2019-2020: Immunotherapy course for laboratory employees, Rambam, Haifa.

Course directing:

- 2009-2012: “Basic Pharmacology” for nursing (undergraduate)
- 2009-present: “Principles of Flow Cytometry” (graduate students)
- 2017-2019: “New technologies in medical biosciences” for medical students (undergraduate)

7. TECHNION ACTIVITIES

- 2009-2014: Member of the Technion’s animal ethic committee.
- 2018-2021: Member of Technion senate committee for promotion, Technion.

8. FACULTY ACTIVITIES

- 2010-2014: Member of the research committee, Faculty of Medicine, Technion.
- 2011-2014: Director of Biomedical core facility, Faculty of Medicine, Technion.
- 2012-2014: Member of the search committee, Faculty of Medicine, Technion.
- 2013-2014: Member of the “selected employee of the year” committee, Faculty of Medicine, Technion.
- 2015-2017: Vice Dean for Research, Faculty of Medicine, Technion.
- 2019-2020: Member of the graduate student committee, Faculty of Medicine, Technion.
- 2018-present: Member of search committee, Faculty of Medicine, Technion.
- 2019-present: Member of faculty management, Faculty of Medicine, Technion.
- 2020-present: Member of the Biomedical core facility, Faculty of Medicine, Technion.

9. PUBLIC PROFESSIONAL ACTIVITIES

Editorial board

- 05/2021-10/2022 Guest Editor in *Frontiers in Immunology*.
- 10/2019-present Associate Editor in *International Journal of Cancer*.
- 08/2017-present Associate Editor in the journal of *Molecular and Clinical Medicine*
- 01/2016-present Section Editor in the journal of *BBA Reviews on Cancer*
- 04/2016-present Associate Editor in the journal of *Clinical & Experimental Metastasis*

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| 01/2014-present | Associate Editor in the journal of <i>Pharmacologia</i> |
| 01/2014-present | Associate Editor in the journal of <i>Tumour</i> |
| 05/2013-present | Associate Editor in the journal of <i>Cancer Microenvironment</i> . |
| 04/2012-04/2016 | Chief Editor of <i>Clinical Cancer Drugs</i> . |
| 12/2011-present | Associate Editor in the <i>Journal of International Scholarly Research Network</i> . |
| 04/2010-present | Associate Editor in the <i>American Journal of Translational Research</i> . |
| 02/2010-present | Associate Editor in the <i>American Journal of Cancer Research</i> . |
| 08/2008-08/2009 | Guest Editor in <i>Biochemica et Biophysica Acta (BBA) Reviews on Cancer</i> . |

Conference Organizing Committee

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| 10/2021 | <i>The annual meeting of the Israel Association for Cancer Research (05/2022) in Bar Ilan university.</i> |
| 05/2021 | <i>Immunity Cancer and the Microenvironment, Faculty of Medicine, Technion (co-organizer and chairman). The Israeli Immunological Society. February 2022.</i> |
| 09/2020 | <i>When nanomedicine meets the tumor microenvironment, Twente, The Netherlands (co-organizer and chairman). The meeting was rescheduled to Sep/2021 due to the COVID-19.</i> |
| 05/2020 | <i>The International congress on molecular targeting therapy. Kibbutz Hagoshrim, Israel. The meeting was rescheduled to 2021 due to the COVID-19.</i> |
| 11/2019 | <i>Organizer of the TICC-Rambam-Azrieli retreat in Oncology, Goshrim.</i> |
| 09/2018 | <i>Organizer of TICC-MICC research day meeting, Technion.</i> |
| 12/2017 | <i>Organizer of angiogenesis sessions at the AACR annual meeting, 2018, Chicago, USA.</i> |
| 04/2017 | <i>The International congress on molecular targeting therapy. Kibbutz Hagoshrim, Israel.</i> |
| 12/2015 | <i>Organizer of 2 minisymposiums and 9 poster sessions at the AACR annual meeting, 2016, New Orleans, USA (served as a chairperson).</i> |
| 10/2015 | <i>The 7th International Tumor microenvironment conference. Tel Aviv, Israel.</i> |
| 06/2015 | <i>Israel Society for Cancer Research, Tel Aviv University, Israel.</i> |
| 06/2014 | <i>The 4th metronomic antiangiogenic chemotherapy meeting. Milan, Italy.</i> |
| 05/2014 | <i>The International congress on molecular targeting therapy. Kibbutz Hagoshrim, Israel.</i> |
| 05/2014 | <i>Israel Society for Cancer Research, Technion, Haifa (Chairman).</i> |
| 05/2013 | <i>Israel Society for Cancer Research, Ben Gurion University, Be'er Sheva.</i> |
| 05/2012 | <i>The International congress on molecular targeting therapy. Kibbutz Hagoshrim, Israel.</i> |
| 03/2012 | <i>The 3rd metronomic antiangiogenic chemotherapy meeting. Haifa, Israel (Chairman).</i> |

Faculty Opponent for PhD thesis (only abroad):

02/2022 Fabienne Tschanz, University of Zurich, Switzerland.

08/2021 Arata Matsuyama, Guelph University, Guelph, Canada.

07/2019 Aris Doukatas, University of Athens, Athens, Greece.

10/2016 Francesca Reggiani, European School of Molecular Medicine, Milan, Italy.

05/2013 Paula Di Matteo, San Raffaele University, Milan, Italy.

11/2012 Sarah Cunja, Karolinska Institute, Stockholm, Sweden.

Promotion committee (external – non-Technion committees):

2019 Haifa University

2020-2021 Tel Aviv University

2020 Ben Gurion University

2021 Bar Ilan University

Grant Committee

06/2022: Horizon Europe, HEALTH, European commission CANCER (study section).

10/2021: Horizon 2020, HEALTH, European Commission (study section)

09/2021: Interim Review panel for progress report EU HEALTH grant call.

11/2020: ISF annual grant in theranostics (for the 2021 call).

07/2020: Horizon 2020, Digital health grant calls, European Commission (Study section)

11/2019: ISF annual grant in Cancer Research (for the 2020 call).

06/2019: Horizon 2020, Health grant calls, European Commission (study section)

04/2019: Committee on Cancer recommending to the EU regarding Horizon Europe

07/2018-present: Member of the scientific committee of Dalia Gridiner to support the research of young researchers.

06/2018: Horizon 2020, Health grant calls, European Commission (study section)

04/2017: ERC starting grant (2nd stage – grant reviewing, awaiting panel decision)

05/2015: Horizon 2020, Health grant calls, European Commission (2nd stage – study section).

11/2014: Horizon 2020, Health grant calls, European Commission (1st stage).

03/2014: Horizon 2020, Health grant calls, European Commission (1st stage).

03/2014: Ministry of Science, Technology & Space: Personalized Medicine Grant.

03/2014: The Israel-China ISF grant committee in Medical Sciences

06/2011: Marie Curie FP7-EU Greek post-doctoral grant program.

Other academic and professional activities

02/2022: Leader of Work Group in eCost action Mye-InfoBank.

12/2021: Member of the committee for outstanding Resident Physician-Researchers.

12/2021: Advisory committee to Rambam for academic research steering committee.

05/2020-present: Board of directors in Remedy Cell.

04/2020: Advisory committee to Rambam for academic research steering committee.

02/2020: Advisory Board of Division of Oncology, Rambam health care campus.

10/2019: Fund raising and collaboration with International Technion Society, Italy.

03/2019: Member of the transgenic mouse committee – VATAT.

11/2018: Advisory Board of Division of Oncology, Rambam health care campus.

06/2018-present: Serve as the president of the International Cancer Microenvironment Society (ICMS).

04/2018: Fund raising, American Technion Society, USA.

09/2017-present: Board of directors in OncoHost.

06/2017- present: Member of the “Dahlia Greidinger Anti-Cancer Fund” committee.

11/2016- present: Member of the “Young Forum” of the Israel Academy of Sciences and Humanities

05/2014: Setting the collaboration with Shantou University Medical College, China.

02/2013: Fund raising, American Technion Society, USA.

05/2012: Fund raising, American Technion Society, USA.

02/2003-present: ad-hoc external reviewer of many scientific journals (journals with IF 0-45).

10. MEMBERSHIP IN PROFESSIONAL SOCIETIES

International:

ICMS (International Cancer Microenvironment Society) – serve as a president (2018-present)

MRS (Metastasis Research Society).

EACR (European Association for Cancer Research).

AACR (American Association for Cancer Research).

IIBMST (International Institute of Biomedical Sciences and Technology).

SUNY-Upstate Cancer Institute, Upstate medical university, New York, USA.

AROME (Association of Radiotherapy and Oncology of the Mediterranean Area).

ESMO (European society of medical oncology).

ASCO (American association for clinical oncology).

National:

ISCR (Israel Society for Cancer Research) – on the executive committee.

11. HONORS AND AWARDS

10/1995: Hebrew University Scholarship for outstanding undergraduate achievements.

06/1999: Best poster award from the Biennial Doris Cecilia Levy Memorial Seminar in Brain Research, Jerusalem, Israel.

10/2001: Hebrew University Scholarship for outstanding graduate achievements.

04/2003-04/2006: CIHR (Canadian Institutes of Health Research) postdoctoral fellowship award.

04/2003-04/2006: Awarded Leukemia Research Fund fellowship.

02/2004: Travel Award for the 6th International Symposium on Anti-Angiogenic Agents. San Diego, USA.

06/2005: AACR scholar-in-training Award for the Anti-Angiogenic and Drug Delivery to Tumors: Bench to Bedside and Back. Boston, USA.

02/2006: Travel Award for the 8th International Symposium on Anti-Angiogenic Agents. San Diego, USA.

04/2006: AACR scholar-in-training Award for the 97th AACR Annual Meeting. Washington D.C., USA.

02/2007: Travel Award for the 9th International Symposium on Anti-Angiogenic Agents. San Diego, USA.

04/2008: AACR scholar-in-training Award for the 2008 AACR Annual Meeting. San Diego, CA, USA.

10/2008-10/2011: Yigal Allon Fellowship for outstanding starting junior faculty awarded by the Israeli Council for Higher Education.

10/2008-10/2010: Landau Fellow. Leaders in Science and Technology. Awarded by the Taub Foundation at the Technion.

03/2011: Krill prize for excellence in scientific research, awarded by the Wolf Foundation.

05/2011: Nominated as the faculty excellent lecturer for 2010.

05/2012: Nominated as the faculty excellent lecturer for 2011.

10/2014: Youdim Family Prize for Excellence in Cancer Research, awarded by the Youdim Family, hosted by Rambam Health Care Campus.

03/2020: Hershel Rich Technion Innovation Award (along with Dr. Michael Timaner).

12. SUPERVISION

Visiting professors

01/2019-01/2020: David Rumschitzki, Full professor, Department of Chemical Engineering, The city college of New York. NY, USA.

Post graduate studies

10/2008-04/2011: Svetlana Gingis-Velitsky, postdoctoral fellow, Technion, Israel

10/2011-01/2014: Ella Fremder, postdoctoral fellow, Technion, Israel

10/2013-04/2014: Erez Hasnis, Medical postdoctoral fellow, Rambam, Haifa

02/2015-08/2015: Dror Alishekevitz, post-doctoral fellow, Technion, Israel

02/2017-04/2020: Michael Timaner, post-doctoral fellow, Technion, Israel

01/2020-present: Timothy Cooper, post-doctoral fellow, Technion, Israel (Primary supervisor, Prof. Shai Shen-Orr Co-Sup).

04/2021-12/2021: Ksenia Magidey, post-doctoral fellow, Technion, Israel.

10/2021-present: Abhilash Deo, post-doctoral fellow, Technion, Israel.

PhD and MSc students

In progress

10/2017-present: Irena Khononov, PhD, Technion, Israel. “The analysis of the host effects generated in response to immunotherapy”.

10/2017-present: Josephina Haj, PhD, Technion, Israel. “The remodeling of the extracellular matrix in response to chemotherapy”.

01/2019-present: Madeleine Benguigui, PhD, Technion, Israel. “The role of bone marrow derived cells in responsive and non-responsive tumors to immunotherapy”.

03/2019-present: Avital Vorontsova, PhD, Technion, Israel. “The contribution of hematopoietic stem cells to tumor growth in response to chemotherapy”

10/2019-present: Rotem Menachem, direct to PhD, Technion, Israel. “Drug design for multiple myeloma” (Primary supervisor, Prof. Avi Schroeder – Co-Sup).

10/2021-present: Sapir Levi, MSc, Technion, Israel. “The role of intra-tumor heterogeneity in immune cells infiltration and its impact on drug resistance.” (Primary supervisor, Prof. Keren Yizhak, Co-Sup).

20/2021-present: Bar Manobla, MSc, Technion, Israel. “Bone Morphogenetic Protein-1 (BMP1) inhibition as a potential anti-cancer therapy”.

Thesis completion

10/2008-05/2012: Liat Benayoun, PhD, Technion, Israel. “Tumor-initiating cells: Angiogenic aspects and therapeutic implications”

10/2009-02/2012: Michal Munster, M.Sc, Technion, Israel. “Role of microparticles in tumor growth and angiogenesis following cytotoxic drug therapy”

10/2010-12/2012: Rotem Bril, M.Sc, Technion, Israel. “Host response to local radiotherapy may enhance metastatic spread in mice”

10/2009-12/2014: Tali Voloshin, PhD, Technion, Israel. “Analysis of Host Molecular Responses to Cancer Therapy as Possible Contributors to Tumor Angiogenesis and Metastases Growth”

09/2012-10/2014: Chen Rachman, M.Sc, Technion, Israel. “Host response to tumor resection and its impact on metastasis”

06/2012-01/2015: Dror Alishekevitz, PhD, Technion, Israel. “The impact of VEGF pathways blockade on tumor re-growth and metastasis following chemotherapy”

01/2013-01/2015: Hila Berkovich, MSc, Technion, Israel. “The role of platelet-derived factors promoting tumorigenesis following anti-cancer drug therapy”

10/2013-10/2015: Yelena Barbarov, MSc, Technion, Israel. “Host JDP2 expression in the bone marrow contributes to metastatic spread” (Co-supervisor; Prof. Ami Aronheim Primary-Sup)

10/2014-10/2016: Shiri Davidi, MSc student, Technion, Israel. (Primary supervisor) “The role of IL-31 in tumorigenesis” (Primary Supervisor; Prof. Ami Aronheim Co-Sup).

10/2014-11/2016: Ruslana Kotsofruk, MSc student, Technion, Israel. “The role of microparticles in radiation-induced metastasis”

07/2012-01/2017: Michael Timaner, PhD student, Technion, Israel. “Analysis of the role of accessory host cells in maintaining Cancer Stem Cells following anticancer therapy”

10/2012-06/2018: Ofrat Beyar-Katz, MD intern on a PhD route, Technion, Haifa. “Analysis of the reactive host in response to bortezomib therapy on the outgrowth of multiple myeloma”

02/2015-09/2018: Madeleine Benguigui, Technion, Israel. “Investigation of Copper Oxide (CuO) Nanoparticles Therapeutic Effects on Cancer Cells after Exposure to Ultrasound” (Primary supervisor; Prof. Haim Azhari, Co-Sup).

03/2016-02/2020: Shimrit Avraham, PhD student, Technion, Israel. “The role of bZIP repressors in tumorigenesis” (Co-supervisor; Prof. Ami Aronheim Primary-Sup)

10/2014-08/2020: Dvir Shechter, MD/PhD student, Technion, Israel. “The role of tumor derived micro-particles in metastasis following chemotherapy”.

11/2015-05/2020: Tal Kan, direct to PhD student, Technion, Israel. (Primary supervisor; Prof. Ami Aronheim Co-Sup) “Interleukin-31 (IL-31) as a possible anti-tumorigenic immune modulator”

03/2016-05/2020: Ksenia Magidey, PhD student, Technion, Israel. “Analysis of the role of hematopoietic stem and progenitor cells in tumor microenvironment”.

MD theses/Student (BSc) theses

09/2001-09/2002: Dana Berger, medical student, Hebrew University (ad-hoc)

09/2007-07/2008: Laura Daenen, medical student, Utrecht University, The Netherlands (ad-hoc)

05/2004-05/2005: Armen Parghamian, B.Sc. student, University of Toronto

05/2005-09/2005: Robert Coke, B.Sc student, McGill University

03/2010-10/2010: Rotem Bril, B.Sc student, Ort Brauda (college), Haifa, Israel

03/2012-09/2012: Fadi Atrash, MD intern in oncology, Rambam hospital, Haifa

07/2013-02/2014: Corinne Maurice-Dror, MD intern in internal medicine, Rambam hospital, Haifa.

03/2014-10/2014: Ruslana Kotsofruk, B.Sc student, Ort Brauda (college), Haifa, Israel.

05/2014-12/2014: Orit Kaidar Person, MD intern in oncology, Rambam hospital, Haifa

10/2017-07/2018: Michal Amrani, B.E student, Shenkar College, Ramat Gan

10/2017-07/2018: Shiran Tabachnik, B.E |Student, Shenkar College, Ramat Gan

01/2018-03/2019: Shoval Menashe, MD student, Technion

02/2018-03/2019: Maisan Abboud, MD student, Technion

02/2018-03/2019: Mary Nash, MD student, Technion

10/2018-10/2019: Rotem Menachem, B.E student, Shenkar College, Ramat Gan.

08/2019-05/2020: Avigail Berger-Norden-Zfoni, MD student, Technion.

10/2020-09/2021: Bar Manobla, B.E student, Shenkar College, Ramat Gan.

10/2020-09/2021: Sapir Levi, B.E. student, Shenkar College, Ramat Gan.

Technicians and research associates

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| <i>05/2011-01/2013</i> | Svetlana Gingis-Velitzki (Ph.D) |
| <i>06/2011-11/2016</i> | Valeria Miller (B.Sc; MBA) |
| <i>03/2013-07/2013</i> | Pazit Oren Giladi (Ph.D) |
| <i>04/2013-10/2014</i> | Neta Ben Tsedek Vaknin (B.Sc) |
| <i>07/2013-10/2014</i> | Shiri Davidi (B.Sc) |
| <i>03/2014-present</i> | Ziv Raviv (Ph.D) |
| <i>07/2014-10/2015</i> | Tal Kan (B.Sc) |
| <i>02/2015-09/2016</i> | Madeleine Benguigui (M.Sc) |
| <i>08/2015-02/2016</i> | Ksenia Magidey (M.Sc) |
| <i>03/2017-09/2017</i> | Iren Khononov (M.Sc) |
| <i>06/2017-09/2017</i> | Josaphina Haj (M.Sc) |
| <i>01/2018-06/2018</i> | Hagar Cohen (B.Sc) |
| <i>03/2018-12/2018</i> | Yasmin Cohen (M.Sc) |
| <i>10/2018-03/2019</i> | Avital Vorontsova (M.Sc) |
| <i>10/2018-06/2020</i> | Avishag Shkedy (M.Sc) |
| <i>10/2018-04/2020</i> | Reema Jacob (B.Sc) |
| <i>10/2018-07/2019</i> | Noga Barak (B.Sc) |
| <i>07/2019-06/2020</i> | Nadin Sabbah (M.Sc) |
| <i>07/2019-05/2021</i> | Svetlana Milrud (B.Sc) |
| <i>07/2021-11/2021</i> | Rotem Link (B.Sc) |
| <i>12/2021-present</i> | Yanai Wadjsbrot (B.Sc) |
| <i>01/2022-present</i> | Rawan Qasem (M.Sc) |

Awards and scholarships received by my students and post-doc fellows

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| Liat Benayoun: | ISEF, Fin, and Jakob studentships (2009-2010). AACR scholar in training award (03/2010). ISEF student award (06/2011). |
| Svetlana Gingis | Brain Power for Israel fellowship (2009). Lady Davis fellowship (2009-2010). AACR scholar in training award (03/2010). |
| Tali Voloshin | AACR scholar in training award (03/2010). The best presentation in the faculty research day (06/2010). FEBS Transcontinental Fellowships (05/2011). FIN and Jakob studentships (2011). |

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| Chen Rachman | Faculty scholar award (2013-2014). |
| Erez Hasnis | ATIDIM fellowship (Rambam health care campus) (05/2012). |
| Ofrat Beyar-Katz | ATIDIM fellowship (Rambam health care campus) (05/2013). Gassner Fund for medical research (10/2016). VATAT post doctoral fellowship (07/2018). |
| Michael Timaner | Lyon Sachs scholarship for a project between the Technion and the University of Toronto (2015-2016). Hershel Rich Technion Innovation Award (2020). |
| Ksenia Magidey | Lyon Sachs scholarship for a project between the Technion and the University of Toronto (2016-2017). Lyon Sachs scholarship for a project between the Technion and the University of Toronto (2017-2018). |
| Michal Amrani | Best Project Award (2018) |
| Shiran Tabachnik | Best Project Award (2018) |
| Josephina Haj | Adrian De Rothchild Scholarship for PhD students (2018-2021). Faculty excellence award (2022) |
| Dvir Shechter | Best post award in the international conference on inflammation and cancer (05/2019) |
| Shimrit Avraham | FIN and Jakob studentship (2019) |
| Rotem Greenberg | Best Project Award (2019) |
| Madeleine Benguigui | Adrian De Rothchild Scholarship for PhD students (2020-2023). Early Career Leadership Council (ECLC) of the Metastasis Research Society (MRS). |
| Tim Cooper | Rubinstein fellowship (2020-2022). |
| Tal Kan | Faculty excellence award (2020). |
| Irena Khononov | Faculty excellence award (2021). |
| Jozaphine Haj | Faculty excellence award (2021). |
| Rotem Greenberg | Rubinstein fellowship (2021-2024). |
| Abhilash Deo | Lady Davis fellowship (2022-2023). |

13. RESEARCH GRANTS AND SPONSORED RESEARCH AGREEMENTS

09/2022-03/2024 ERC Proof of concept

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Total: € 150,000

Yuval Shaked (PI)

02/2022-01/2025 Deutsche Forschungsgemeinschaft (DFG)

“VEGF-C-dependent host-tumor interactions that promote metastasis in response to chemotherapy”

Total: € 150,000

Jonathan Sleeman (PI) Yuval Shaked (Co-PI)

06/2021 RAKIA Space mission Ramon foundation grant (granted but I declined my participation due to lack of funds)

“Space travel induced immune dysfunction”

Yaacov Richard Lawrence (PI), Adam Dicker (Co-PI), Yuval Shaked (Co-PI), Michal Harel (Co-PI).

04/2021-05/2023 Soref foundation

The contribution of the tumor microenvironment to tumor fate.

Total: \$250,000

Karl Skorecki (PI), Yuval Shaked (Co-PI).

09/2020-08/2024 Binational Science foundation (BSF)

Total: \$320,000

“The contribution of chemotherapy-induced extracellular matrix remodeling to tumor metastasis” (PI – Yuval Shaked, Co-PI – Shay Soker).

04/2020-10/2020 Ministry of Science and Technology (MOST, Israel)

Total: NIS 750,000

“Clinical development of product derived from activated cell therapy to reduce corona virus-related cytokine storm syndrome and prevention of acute respiratory damage in patients”.

I declined the signature of this grant due to legal issues associated with COVID-19 regulations.

04/2019-03/2020 Rosenblatt foundation for cancer research

Total: \$25,000

“Chemotherapy induced tumor-microparticles: contributions to the pro-metastatic cancer microenvironment and therapeutic implications” (PI – Daphne Weihs, Co-PI Yuval Shaked).

01/2019-12/2022 Ministry of Science and Technology (MOST, Israel)

Total: \$400,000

“The combined role of the microbiota, and tumor associated immune cells in patient response to Neoadjuvant Chemoradiotherapy in Locally Advanced Rectal Cancer” (PI-Naama Geva Zatorsky, Co-PI Yuval Shaked, Co-PI Elizabeth Half).

10/2018-09/2022 Israel Science Foundation

Total: \$300,000

“Analysis of the host response effects generated in response to immune checkpoint inhibitors and their therapeutic implications”

09/2018-08/2020 Israel Cancer Research Fund

Total: \$100,000

“Mechanisms underlying cancer resistance and hyperprogressive responses to immunotherapy”

04/2018-03/2023 European Research Council (Consolidator grant)

Total: €2,000,000

“Phenotype switching: the plasticity of hematopoietic stem cells in the tumor microenvironment”

01/2018-12/2020 Rappaport foundation

Total: \$540,000 (PI- Raz Palti, Co-PI- Haguy Wolfenson, Co-PI- Yuval Shaked)
“Physiological aspects of cellular heterogeneity: from in vitro to in vivo and back”

03/2017-02/2020 NIKOH foundation (donation)
Total: \$50,000
“Study lymphoma research”

11/2017-10/2018 Applebaum Foundation (donation)
Total: \$100,000
“Study of Contributing Factors to Acute Myeloid Leukemia Repopulation Following Conventional Cytotoxic Therapy”

01/2017-06/2018. ERC-PoC (proof of concept)
Total: €150,000
“The development of Personalised Host Response Diagnostic kit”

01/2015-01/2018. Rappaport Institute
Total: \$150,000
“Developing an IL-31-based therapy for cancer”.

01/2015-01/2017. ISCORT-14 Grant Competition.
Total: NIS 100,000 (PI- Orit Kaidar-Person; Co-PI - Yuval Shaked)
“The contribution of the host response to chemotherapy-induced lymphangiogenesis and its role in the clinical setting”.

01/2014-01/2017. Israel Ministry of Health
Total: NIS 198,000 (PI-Yuval Shaked; Co-PI – Ofra Beyar-Katz).
“Analysis of the reactive host in response to bortezomib therapy on the outgrowth of multiple myeloma”

01/2014-01/2017. German Israel Foundation
Total: €180,000 (PI-Yuval Shaked; Co-PI – Jonathan Sleeman).
“The role of VEGF-C in the mobilization of immune cells following anti-cancer drug therapy, and their impact on tumor re-growth and metastasis”

01/2014 – 01/2019. Israel Cancer Research Fund (Buckstein Family).
Total: \$500,000 (PI-Yuval Shaked; Co-PI – Robert Kerbel).
“Metronomic Chemotherapy: An Analysis of Tumor versus Host Dependent Mechanisms”

05/2013 – 05/2014. Itay Sharon Rambam Atidim Fund
Total: \$36,000
“Host effects of bortezomib therapy on Multiple Myeloma growth”

10/2012 – 10/2016. Israel Science Foundation
Total: \$180,000
“The impact of IL-1 β on tumor growth, angiogenesis, and metastasis following anti-cancer drug therapy”

09/2012 – 09/2015. Israel Cancer Research Fund.
Total: \$95,000
“Developing an approach to identify new factors promoting cancer resistance to therapy”

05/2012 – 05/2013. Itay Sharon Rambam Atidim Fund

Total: \$36,000

“Targeting Bv8 to Inhibit Post-Chemotherapy Pancreatic Cancer Progression and Metastasis In a Metronomic Vs. Maximal Tolerated Dose Regimens”

03/2012. The Gateway for Cancer Research (USA).

Total: \$10,000

“Low-dose metronomic chemotherapy as a strategy to ‘blunt’ acute pro-tumorigenic effects of conventional anti-cancer drug treatments”

01/2012-12/2014. Rappaport family foundation

Total: \$90,000

“The development of a new approach for the identification of factors promoting tumor resistance to therapy”

04/2011 - 04/2016. The FP7 – European Research Commission (ERC).

Total: €1,500,000.

“Host Cellular and Molecular Response to anti-cancer drug treatment as a biomarker for treatment outcome”.

03/2011 – 03/2012. Ministry of Justice – inheritance foundation.

Total: NIS 100,000

“Host response to neoadjuvant chemoradioation as a predictive biomarker for successful treatment in rectal cancer patients”

Principal investigators: Drs. Yuval Shaked and Mark Shilkrot

09/2010 - 09/2012. Israel Cancer Research Fund.

Total: \$60,000.

“Role of microparticles mediating rebound tumor angiogenesis following chemotherapy”.

Principal investigator: Dr. Shaked Yuval. Co-PI: Prof. Benjamin Brenner.

08/2010 - 08/2011. Sensit Science - sponsored research agreement.

Total: \$35,000.

“Evaluation of the therapeutical impact of radiosensitizing agents on cancer stem cells”.

03/2010 - 03/2012. Israel Ministry of Health.

Total: NIS 300,000.

“The role of tumor initiating cells on angiogenesis and repopulation of tumor cells following chemotherapy drug treatment”.

01/2010 - 01/2013. Hoffmann La Roche – sponsored research agreement.

Total: \$300,000.

“Analyses of chemotherapy and antiangiogenic drug combination in a long term adjuvant treatment of cancer”.

01/2010 - 01/2012. Israel Cancer Association.

Total: NIS 75,000.

“The regulator role of SDF-1 and bone marrow derived CXCR4+ cells on metastatic spread following chemotherapy treatment”.

10/2009 - 10/2012. Israel Science Foundation.

Total: NIS 352,000.

“Impact of cytotoxic drug-induced host bone marrow responses on tumor growth, angiogenesis and metastasis”.

03/2009 - 03/2013. The FP7- Marie Curie – International Reintegration Grant.

Total: €100,000

“The impact of bone-marrow derived cells on tumor growth and metastasis after cytotoxic anti-cancer drug treatment”.

01/2009 - 01/2010. Brain Power for Israel.

Total: \$25,000.

A grant given to Dr. Yuval Shaked to support a postdoctoral fellowship in my laboratory

01/2009 - 01/2012. The Rappaport Family Foundation.

Total: \$60,000.

“The impact of tumor initiating cells on bone marrow derived proangiogenic cell-mediated angiogenesis”.

10/2008. Yigal Alon Fellowship.

Total: \$29,000 (unlimited).

Awarded by the Israeli Council for Higher Education

14. PUBLICATIONS (Current h index 54, by google scholar)

Basic research (peer-reviewed):

1. **Shaked, Y.***, Rosenmann, H.*, Talmor, G. and Gabizon, R. A C-terminal truncated PrP isoform is present in mature sperm. **J. Biological Chemistry**. 1999 ;274:32153-8.[* equal contribution].
2. **Shaked, Y.**, Rosenmann, H., Hijazi, N., Halimi, M. and Gabizon, R. Copper binding to PrP Isoforms: A putative marker of their conformation and function. **J. Virology**. 2001; 75:7872-4.
3. Shaked, G.M., **Shaked, Y.**, Kariv, Z., Halimi, M., Avraham, I. and Gabizon, R. A protease resistant PrP isoform is present in urine of animals and humans affected with prion diseases. **J. Biological Chemistry**. 2001; 276:31479-82.
4. **Shaked, Y.**, Engelstein, R. and Gabizon, R. The binding of prion proteins to serum components is affected by detergent extraction conditions. **J. Neurochemistry**. 2002; 82:1-5.
5. **Shaked, Y.**, Hijazi, N. and Gabizon, R. Doppel and PrP^C do not share the same membrane microenvironment. **FEBS letter** 2002; 530:85-8.
6. Hijazi, N., **Shaked, Y.**, Rosenmann, H., Ben-Hur, T. and Gabizon, R. Copper binding to PrP(C) may inhibit prion disease propagation. **Brain Research**. 2003; 1993:192-200.
7. Bertolini, F., Paul, S., Mancuso, P., Monestiroli, S., Gobbi, A., **Shaked, Y.** and Kerbel, R.S. Maximum tolerable dose and low-dose metronomic chemotherapy have opposite effects on the mobilization and viability of circulating endothelial progenitor cells. **Cancer Research**. 2003; 63:4342-6.
8. Pak, B.J., Lee, J., Thai, B.L., Fuchs, S.Y., **Shaked, Y.**, Ronai, Z., Kerbel R.S. and Ben-David, Y. Radiation resistance of human melanoma analyzed by retroviral insertional mutagenesis reveals a possible role for dopachrome tautomerase. **Oncogene**. 2004; 23:30-38.

9. Emmenegger, U., Man, S., **Shaked, Y.**, Francia, G., Wong, J.W., Hicklin, D.J. and Kerbel, R.S. A comparative analysis of low-dose metronomic cyclophosphamide reveals absent or low-grade toxicity on tissues highly sensitive to the toxic effects of maximum tolerated dose regimens. **Cancer Research**. 2004; 64:3994-4000 (Cited in Cancer Research Highlights of the same issue).
10. **Shaked, Y.**, Bertolini, F., Man, S., Rogers, M.S. Cervi, D., Foutz, T., Rawn, K., Voskas, D., Dumont, D.J., Ben-David, Y., Lawler, J., Henkin, J., Huber, J., Hicklin, D.J., D'Amato, R.J. and Kerbel, R.S. Genetic heterogeneity of the vasculogenic phenotype parallels angiogenesis: Implications for cellular surrogate marker analysis of antiangiogenesis. **Cancer Cell**, 2005, 7: 101-111.(Editorial in the same issue of Cancer Cell – 2005; 7 :3-4).
11. **Shaked, Y.**, Cervi, D., Neuman, M., Chen, L., Klement, G., Michaud, C.R., Haeri, M., Pak, B.J., Kerbel, R.S. and Ben-David, Y. The splenic microenvironment is a source of pro-angiogenesis / inflammatory mediators accelerating the expansion of murine erythroleukemic cells. **Blood**, 2005; 105:4500-7. (Cover of Blood).
12. **Shaked, Y.***, Emmenegger, U.*, Francia, G., Chen, L., Lee, C., Man, S., Paraghamian, A., Ben-David, Y. and Kerbel, R.S. Intermittent bolus dose combined with low-dose metronomic cyclophosphamide as an effective regimen for delaying relapse in both solid and hematologic malignancies. **Cancer Research**. 2005 ;65:7045-51. (Commentary in Cancer Research Highlights of the same issue and on the cover of the same issue) [* equal contribution].
13. **Shaked, Y.**, Emmenegger, U., Man, S., Cervi, D., Bertolini, F., Ben-David, Y. and Kerbel, R.S. The optimal biological dose of metronomic chemotherapy regimen is associated with maximum antiangiogenic activity. **Blood**. 2005 ;105:4500-7. (Commentary in Nature Clinical Practice Oncology. 2005 2, 489).
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17. Munoz, R., Man, S., **Shaked, Y.**, Lee CR., Wong, J., Francia, G., Kerbel, RS. Highly efficacious non-toxic preclinical treatment for advanced metastatic breast cancer using oral combination UFT-Cyclophosphamide metronomic chemotherapy. **Cancer Research**. 2006;66(7):3386-91.
18. Mancuso, R., Colleoni, M., Calleri, A., Orlando, L., Maisonneuve, P., Pruneri, G., Agliano, A., Goldhirsch, A., **Shaked, Y.**, Kerbel, R.S., and Bertolini, F. Circulating endothelial cell kinetics and viability predict survival in breast cancer patients receiving metronomic chemotherapy. **Blood**. 2006; 108(2):452-9. (Commentary in Nature Reviews Cancer (May 2006), and Editorial in the same issue of Blood).
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28. Donate, F., Parry G.C., **Shaked, Y.**, Hensley, H., Guan, X., Beck, I., Tel-Tsur, Z., Plunkett, ML., Shaw, DE., Kerbel, RS and Mazar, AP. Pharmacology of the novel anti-angiogenic peptide, ATN-161 (Ac-PHSCN-NH₂): observation of a U-shaped dose response in several preclinical models of angiogenesis and tumor growth. **Clinical Cancer Research**. 2008; 14(7):2137-44.
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32. Glade-Bender, JL., Adamson, PC., Reid, JM., Xu, L., Baruchel, S., **Shaked, Y.**, Kerbel, RS., Cooney, E., Stempak, D., Chen, HX., Nelson, MD., Krailo, MD., Ingle, AM., Blaney, SM., Kandel, JJ. and Yamashiro, DJ. "Phase I trial and pharmacokinetic study of bevacizumab in pediatric patients with refractory solid tumors: A Children's Oncology Group Study. **J. Clinical Oncology**. 2008; 26(3):399-405.
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34. Calleri, A., Bono, A., Quarna, J., Mancuso, P., Rabascio, C., Bagnardi, V., **Shaked, Y.**, Goldhirsch, A., Colleoni, M. and Bertolini, F. Long-term patterns and predictive potential of angiogenic growth factors and circulating endothelial cells in advanced breast cancer patients receiving metronomic chemotherapy plus bevacizumab. **Clinical Cancer Research** 2009;15(24):7652-7657.
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36. Folkens, C., **Shaked, Y.**, Man, S., Tang, T., Lee, CR., Hoffman, RM, and Kerbel, RS. Glioma tumor stem-like cells promote tumor angiogenesis via VEGF- and SDF1-mediated promotion of endothelial cell activity and recruitment of bone marrow-derived endothelial progenitor cells. **Cancer Research** 2009;69(18):7243-51.
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Books and book chapters:

125. Kerbel, R.S., Bertolini, F., Man, S., Hicklin, D.J., Emmenegger, U. and **Shaked Y.** Antiangiogenic drugs as broadly effective chemosensitizing agents. Book Title: Angiogenesis: From Basic Science to Clinical Applications. Editor: Napoleone Ferrara. CRC press, Taylor & Francis Group, Boca Raton, FL, USA, 181-198 (2006).
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132. Alishekevitz, D., and **Shaked Y.** Therapy-induced tumor angiogenesis and vasculogenesis can be blocked by various targeted therapies. Book Chapter, Proceedings of Dusseldorf meeting, Germany. Klinische Onkologie 2011/2012. Stephan L. Roth (Ed.). Dusseldorf University Press. pp.104-110 (2011).
133. Fremder, E., and **Shaked, Y.** Mechanisms of action of low-dose metronomic chemotherapy. Metronomic chemotherapy: pharmacology and clinical implications. Guido Bocci and Guilio Francia (Eds). Springer. pp.23-38 (2014).
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135. Dahan, N., Magidey, K. and **Shaked Y.** Resistance to Inhibitors of Angiogenesis. Book chapter. Editors: Joseph Yarden and Moshe Elkabets, Springer. pp. 211-236. (2018).

Letters to the Editor and Invited Editorials:

136. **Shaked, Y.**, Bertolini, F., Emmenegger, U., Lee, C.R. and Kerbel, R.S. On the origin and nature of elevated levels of circulating endothelial cells (CECs) after treatment with a vascular disrupting agent. **J. Clinical Oncology** 2006; 24(24):4040.
137. Kerbel, RS., Benezra, R., Lyden, DC., Hattori, K., Heissig, B., Nolan, DJ., Mittal, V., **Shaked, Y.**, Dias, S., Bertolini, F. and Rafii, S. Endothelial progenitor cells are cellular hubs essential for neoangiogenesis of certain aggressive adenocarcinomas and metastatic transition but no adenomas. **PNAS** 2008; 105(34):E54.
138. Voloshin, T., Gingis-Velitski, S., and **Shaked, Y.** The angiogenic profile of colorectal cancer patients following open versus laparoscopic surgery. **Cancer Biology and Therapy**. 2010, 10;10(7):686-8.
139. Bertolini, F., Mancuso, P., and **Shaked, Y.** Endothelial precursor cells as biomarkers for patients receiving bevacizumab. **Lancet Oncology**. 2011; 12(3):217-8.
140. Bertolini, F., **Shaked, Y.**, and Mancuso, P. On the clinical relevance of circulating endothelial cells and platelets in prostate cancer. **British Journal of Cancer** 2013; 2;108(6):1387.
141. Koren, L., **Shaked, Y.**, and Aronheim, A. ATF3: a promoter or inhibitor of cardiac maladaptive remodeling. **International Journal of Cardiology** 2015;15;201:692.
142. Kerbel, RS, and **Shaked, Y.** Therapy-Activated Stromal Cell Can Dictate Tumor Fate. **J. of Experimental Medicine**. 2016;213(13):2831-2833.
143. Timaner, M.* and **Shaked, Y.*** A new screening method for ATP-independent kinase inhibitors identifies repurposed anti-cancer drugs. **EBioMedicine** 2018; 37:21-22. [* Co-corresponding authors].
144. Andre, N., Corradini, N., **Shaked Y.** Metronomic maintenance therapy for rhabdomyosarcoma. **Trends Cancer**. 5(12):756-759.
145. Timaner, M.* and **Shaked, Y.*** Elucidating the roles of ASPM isoforms reveals a novel prognostic marker for pancreatic cancer. **J. of Pathology** 2020. 250(2); 123-125. [* Co-corresponding authors].

Patents:

2008: patent on “Methods for enhancing the efficacy of vascular disrupting agents” (filed on 04/2009). WO 2009/129333 A1. Publication date: 10/2009.

Inventors: Robert Kerbel, **Yuval Shaked**.

PCT/US2009/040706

2009: Patent on “Anthraquinone derivatives for use as radiosensitizers in radiotherapy” (filed on 11/2009). WO 2012081022 A1. Publication date: 06/2012.

Inventors: Benjamin Ehrenberg, Moshe Schaffer, **Yuval Shaked**

2014: Patent on “Compositions comprising IL-31 and uses thereof” (filed on 05/2014). Application number: 61991641.

Inventors: Ella Fremder, Ami Aronheim, **Yuval Shaked**

2017: Patent on “Personalized Host Response Diagnostic Kit”

PCT/US/62/514,851

Inventors: **Yuval Shaked**, Ziv Raviv, Dror Yeger.

2018: Patent on “Method of Predicting Personalized Response To Cancer Treatment With Immune Checkpoint Inhibitors And Kits Therefor”

PCT/US/62/564,392

Inventor: **Yuval Shaked**

2018: Patent on “A method to activate cells inducing tissue repair”

P-579310-USP (submitted)

Inventors: **Yuval Shaked**, Michael Timaner.

2018: Patent on “Blocking IL-1 β to Improve Anti-Cancer Therapy”

P-62/677,267

Inventors: **Yuval Shaked**, Eyal Jacob, Ella Fremder

2019: Patent on “Activated cell-based therapy for regenerative medicine”

Provisional no. 62/854,367

Inventors: **Yuval Shaked** and Michael Timaner

2020: Patent on “Anti-cancer therapy-activated cell therapy for treating acute respiratory inflammatory conditions and cytokine storm syndrome”

Provisional no. 63/049,663

Inventors: **Yuval Shaked** and Michael Timaner

2020: Patent on “Predicting immunotherapy response”

Provisional no.

Inventors: Timothy Cooper, **Yuval Shaked**, Madeleine Benguigui

15. MEDIA COVERAGE

1. Several Israeli enews and newspaper: Host response to chemotherapy and its impact on tumor metastasis (11/2011).
2. “Orli and Guy” (TV: channel 2 – Israel): Chemotherapy: the pros and cons (04/2012).
3. *ecancer*: Continual low-dose metronomic chemotherapy as potentially preferable to aggressive strategies (07/2014).
4. “Orli and Guy” (TV: channel 10 – Israel): When anti-cancer drug treatments promote tumor growth. (10/2016).
5. “Prof. Karaso – Live Healthy” (TV: channel 10 – Israel): When anti-cancer drug treatments promote tumor growth. (11/2016).
6. Menta Magazine of Health “Why does the tumor relapse?” [translation from Hebrew] (08/2017).
7. The cancer day 2020 “Reshet Gimel, Radio” - two hours interview (02/2020).

16. CONFERENCES

Invited speaker: Plenary Sessions**International:**

1. The 15th Javits meeting, UCSF, San Francisco, CA, USA, (05/2002).
2. Hinterzartener Kreis for Cancer Research, Cadenabbia, Italy (05/2006).
3. The 2nd Joint American-Israeli Conference on Cancer, Jerusalem, Israel (06/2006).
4. The first bevacizumab antiangiogenic diagnostic summit; Washington DC. USA (05/2007).
5. The XXIII Symposium of the IACRLRD. Freiburg, Germany (09/2007).
6. The 9th international symposium of Biological Therapy of Cancer, Munich, Germany (03/2008).
7. The Comparative Oncology Program, National Cancer Institute. NIH, NCI, Bethesda, MD, USA (06/2008).
8. The 2nd workshop on metronomic antiangiogenic chemotherapy in pediatric oncology. Marseille, France (04/2010). *Also served as a session chairman.*
9. Klinische Onkologie 2011/2012. Dusseldorf, Germany (03/2011).
10. The 2nd AROME 2011 radio-oncology meeting. Istanbul, Turkey (05/2011).
11. The 3rd AROME 2012 radio-oncology meeting. Istanbul, Turkey (06/2012).
12. The 3rd international conference: cancer immunotherapy and immunemonitoring (CITIM). Krakow, Poland (04/2013).
13. Challenges in Biomarker Discovery and Implementation. Athens, Greece (05/2013).
14. University of Michigan – Israel Partnership for Research. Scientific Symposium. Michigan, USA (10/2013)
15. The 1st European Young Scientists meeting on Cancer Research. Lund, Sweden (12/2013).
16. European organization for research and treatment of cancer, radiotherapy oncology group. Bristol, England (3/2014). *KEYNOTE lecture.*
17. The 4th metronomic antiangiogenic meeting: from the bench to bedside. Milan, Italy (04/2014). *Also served on the organizing committee.*
18. Milan Breast Cancer Conference. Milan, Italy (04/2014).
19. The 15th International Biennial Congress of the Metastasis Research Society. Heidelberg, Germany (06/2014).
20. The 17th Annual Symposium on Anti-angiogenesis and Immune Therapies for Cancer. San Diego, CA, USA (02/2015).
21. Second Border Biomedical Research Center Symposium Health Disparities: From Molecules to Disease, El-Paso, USA (09/2015). *KEYNOTE lecture.*
22. Keystone symposia on Cancer Pathophysiology: Integrating the Host and Tumor Environments, Colorado, USA. (03/2016).
23. Annual AACR meeting 2016, New Orleans, Louisiana, USA (04/2016). *Served a session chairman and conference organizer of several sessions.*
24. The 5th biennial international metronomic and anti-angiogenic meeting. Mumbai, India (5/2016).
25. Novel Concepts in Biology and Treatment of Metastatic Cancer Conference, Paphos, Cyprus (11/2016). *KEYNOTE lecture*

26. 2016 East-West Alliance Global Symposium, University of California, Berkeley, USA (11/2016).
27. International symposium of metronomic chemotherapy: Update on multimodality mechanisms including Immunotherapeutic aspects. Taipei, Taiwan (03/2017).
28. International forum on cancer patient empowerment. Milan, Italy (05/2017).
29. 10th International symposium on translation research in oncology. Dublin, Ireland (10/2017).
30. The New Zealand Breast Cancer Symposium: united for a cure through research. Auckland, New Zealand (11/2017).
31. The 8th International Conference on Tumor Microenvironment; Progression, Therapy and Prevention. Lisbon, Portugal (06/2018).
32. Mini-symposium on cancer intervention and therapy. Guiyang, China (08/2018)
33. 11th International symposium on translation research in oncology. Dublin, Ireland (09/2018).
34. International symposium of metronomic chemotherapy: Update on multimodality mechanisms including Immunotherapeutic aspects. Grand Rapids, USA (10/2018).
35. Seminars in Oncology, Center for Biomedicine and Medical Technology, Mannheim, Germany (02/2019).
36. International symposium on cancer invasion and metastasis. Taipei, Taiwan (09/2019).
37. 11th International symposium on translation research in oncology. Dublin, Ireland (10/2019).
38. International conference on cancer metastasis. Seefeld, Austria (12/2019).
39. Anakoinosis, an innovative anticancer therapy targeting the aberrant cancer tissue homeostasis, Rome, Italy (05/2020). *Cancelled due to the COVID19 pandemics.*
40. The virtual conference on lung cancer: Bioevents sharing biomed knowledge. *Due to COVID19 this conference was online (09/2020).*
41. ESMO- 2020 Molecular analysis of precision medicine. Due to COVID19 this conference was online (10/2020).
42. IPEN PNOC scientific meeting. Due to COVID 19 this conference was online (04/2021).
43. FoReCaST conference. Porto, Portugal (10/2021). **KEYNOTE lecture**
44. Mye-InfoBank eCost conference. Lisbon, Portugal (02/2022).
45. IMIM Industry & Innovation Days 2022 University of Mannheim, Germany (03/2022). **KEYNOTE lecture (given virtually due to COVID).**
46. The 15th international symposium on translation research in oncology. Dublin, Ireland (09/2022).

Plenary Session:

National:

47. The 8th Israel Society for Clinical Oncology and Radiation Therapy meeting. Eilat, Israel (01/2009).
48. The 2nd German-Israeli Summer School Program. DKFZ-MOST, Ein Gedi, Israel (10/2009).
49. The 2nd annual meeting of the Israeli society for cancer research, Weizmann, Rehovot, Israel (05/2010).
50. The annual meeting of Israeli Cancer Association, Tel Aviv, Israel (10/2010).

51. Scientific Frontiers in Cancer Medicine: Genes and Stem Cells. Israeli Italian convention. Tel Hashomer, Israel (11/2010).
52. The 6th FISEB 2011 meeting. Eilat, Israel (02/2011).
53. The 3rd metronomic antiangiogenic meeting: from the bench to bedside. Haifa, Israel (03/2012). ***Served on the organizing committee (chairman).***
54. International congress on molecular targeting therapy. Kibbutz Hagoshrim, Israel (05/2012). ***Served on the organizing committee.***
55. Aspects of Ovarian Cancer: The annual meeting of the Israeli society of gyneco-oncology. Maalot, Israel (07/2012).
56. Optimizing Treatment Strategies through Multiple Lines in mCRC: The Israeli Society for Clinical Oncology and Radiation Therapy. Yitzhak Rabin Center (09/2012).
57. The Annual Meeting of The Israel Association for Medical Genetic; Hilton hotel, Tel Aviv (04/2013).
58. 5th Annual Meeting of The Israel Society for Cancer Research: Host response to paclitaxell chemotherapy promotes metastasis via the secretion of VEGF-C by macrophages. Beer Sheva (5/2013). ***Served on the organizing committee.***
59. The 6th German-Israeli Summer School Program. DKFZ-MOST, Mitzpe Ramon, Israel (11/2013).
60. The 7th FISEB 2014 meeting. Eilat, Israel (02/2014).
61. The international conference on innovations in hematology. Haifa, Israel (07/2014).
62. A research day for angiogenesis, cancer and drug delivery. Jerusalem, Israel (07/2016).
63. Recent Progress in Cancer Research and Development of Novel Therapies. Haifa, Israel (11/2016).
64. The 6th FISEB 2017 meeting. Eilat, Israel (02/2017). ***Session's Chairman.***
65. The 3rd International congress on molecular targeting therapy, Kibbutz HaGoshrim, Israel (04/2017).
66. The 3rd Meeting of the Israeli Breast Cancer Translational Research Group, Weizmann, Israel (01/2018).
67. The Youdim Prize research day, Rambam Health Care Campus, Haifa. (11/2018).
68. Stress and inflammation in tumor progression and metastasis, Weizmann institute of Science, Rehovot (05/2019).
69. Tissue engineering and Regenerative Medicine, Technion, Haifa (06/2019).
70. ISCORT in Oncology, Eilat (01/2020).
71. Israel-wide worlds cancer day, Tel Aviv University, Tel Aviv (02/2020).
72. International congress on molecular targeting therapy. Kibbutz Hagoshrim, Israel (05/2020). ***Served on the organizing committee. Rescheduled due to COVID-19 pandemics.***
73. Israel Society for Cancer Research – annual meeting. Virtual (due to COVID-19). (05/2021).
74. Immunity Cancer and the Microenvironment. The Israel Immunology Society – annual meeting (02/2022).
75. Bridging basic cancer research with innovative therapies, Weizmann, Rehovot (03/2022).

Invited speaker in special events or by various institutions:**International:**

1. The annual meeting of the Friends of Weizmann Institute in Canada, Toronto, Canada (09/2003).
2. The Children's Hospital Los Angeles, CA, USA. (12/2004).
3. The Prostate Centre, Vancouver General Hospital, University of British Columbia, Canada (04/2006).
4. The Faculty of Medicine, Loyola University, Chicago, IL, USA (07/2006).
5. Medical Biophysics, University of Toronto annual meeting; Geneva Park, Ontario, Canada (09/2006).
6. Mount Sinai Hospital, Samuel Lunenfeld Research Institute, University of Toronto, Toronto, Canada. (10/2006).
7. TTY Biopharm headquarters Taipei, Taiwan (11/2006).
8. National Taiwan University, Taipei, Taiwan (11/2006).
9. The Ontario Cancer Institute, Princess Margaret Hospital, Toronto, Canada (04/2007).
10. Clinical Advisory board meeting OXiGENE, London, UK (07/2007).
11. Genentech Seminar Series. San-Francisco, CA, USA (08/2007).
12. Scientific Advisory board meeting OXiGENE, Boston, USA. (01/2008).
13. Avastin Advisory board meeting, Roche, Paris, France. (11/2008).
14. Avastin Advisory board meeting, Roche, Athens, Greece. (11/2008).
15. Centre Georges-François Leclerc, Dijon, France (09/2011).
16. Cornell University, Medical School, New York City, NY, USA (01/2012).
17. Sickkids hospital, University of Toronto, Toronto, Canada (01/2012).
18. Sunnybrook Health Sciences Centre, University of Toronto, Toronto, Canada (01/2012).
19. San Raffaele University, Milan, Italy (04/2012).
20. Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany (04/2012).
21. Ontario Cancer Institute (OCI), Toronto, Canada (08/2012).
22. Karolinska Institute, Stockholm, Sweden (11/2012).
23. Shantou University Medical College, Shantou, China (05/2014).
24. New York University, New York, USA (09/2014).
25. North Carolina University, North Carolina, USA (04/2016).
26. SEMM European school of molecular medicine, Milan, Italy (10/2016).
27. National Health Research Institute, Taipei, Taiwan (03/2017).
28. Sanford Burnham Prebys Medical Discovery Institute, San Diego, CA, USA (10/2017).
29. European Institute of Oncology, Milan, Italy (12/2017).
30. Einstein College Medical School, NYC, USA (10/2018).
31. Philadelphia University, Pennsylvania, USA (10/2018).

32. Yale University, New Haven, USA (03/2019).
33. Memorial Sloan Kettering Cancer Center, NY, USA (03/2019).
34. National Health Research Institute, Taipei, Taiwan (04/2019).
35. University of Rome, Tor Vergata, Rome, Italy (10/2019).
36. University of Rome, Sapienza, Rome, Italy (10/2019).
37. University of Northeastern, Boston, USA (11/2019).
38. Nobel Laureate event: Chemistry for the Life Sciences, Taipei Medical University, Taipei, Taiwan (04/2020). *Rescheduled due to COVID-19 pandemics.*
39. Memorial Sloan Kettering Cancer Center with NY College, NY, USA (04/2022).
40. Yale University, Cancer Center, New Heaven, USA (04/2022).
41. STSM meeting (eCOST) Mye-InfoBank, Essen, Germany (07/2022).

National:

42. The Sapir Medical Center, Kfar-Saba (03/2002).
43. The Hebrew University, Jerusalem (04/2004).
44. The Sapir Medical Center, Kfar Saba (04/2004).
45. The Shaarey Zedek Medical Center, Jerusalem (04/2004).
46. The Hebrew University, Faculty of Medicine, Jerusalem (04/2005).
47. The Ben-Gurion University, Beer Sheva (04/2005).
48. The Weizmann Institute, Rehovot (04/2005).
49. The Tel-Aviv University, Tel-Aviv (04/2005).
50. The Faculty of Medicine, Technion, Haifa (06/2006).
51. The Weizmann Institute of Science. Rehovot (12/2006)
52. The Rappoport Institute of Medicine, Haifa (12/2006),
53. Teva Inc., Natanya (12/2006).
54. Hadassah University Hospital, Jerusalem (12/2006).
55. Rabin Campus medical center, Petah Tiquva (12/2008).
56. Hoffaman La Roche, Petah Tiquva, Israel (02/2009).
57. Weizmann Institute; Vascular Club (03/2009).
58. Israel neuro-oncology meeting, Tel-Aviv (04/2009).
59. Mayer children hospital. Haifa (05/2010).
60. Pluristem Ltd, MATAM, Haifa (04/2011).
61. Hoffaman La Roche, Petah Tiquva, Israel (03/2012).
62. Department of Surgery, Rambam Health Care Campus, Haifa, Israel (07/2012).
63. Weizmann Institute of Science, Department of Biological chemistry, Rehovot, Israel (04/2013).
64. Department of Oncology, Tel Hashomer Medical Campus, Tel Aviv, Israel (12/2013).

65. Department of development and cancer, Faculty of Medicine, Hebrew University (12/2013).
66. Weizmann Institute of Science, Department of Biological Regulation, Rehovot, Israel (12/2013).
67. Department of Hematology Oncology, Tel Hashomer Medical Campus, Tel Aviv, Israel (03/2014).
68. The SUMC-Technion allegation. Rappaport Faculty of Medicine, Technion, Haifa, Israel. (01/2015).
69. Sackler faculty of Medicine, Tel Aviv University, Tel Aviv, Israel (11/2015).
70. Faculty of Life Sciences, Tel Aviv University, Tel Aviv, Israel (01/2016).
71. Department of Oncology, Rambam medical center, Haifa, Israel (01/2017).
72. Davidson Center for Cancer, Belinson medical center, Petach Tikva, Israel (01/2017).
73. Department of hematology, Rambam medical center, Haifa, Israel (02/2017).
74. Department of immunology, Faculty of Medicine, Hebrew University, Jerusalem, Israel (03/2017).
75. Department of Radiation Oncology, Rambam Health Care Campus, Haifa (07/2018).
76. School of Medicine, Tel Aviv University, Tel Aviv (02/2019).
77. Department of Immunology, Weizmann institute, Rechovot (03/2019).
78. Faculty of Medicine, Technion, Haifa (04/2019).
79. Rambam Health Care Campus, research day (06/2019).
80. Sourasky Medical Center, Department of Oncology, Tel Aviv (07/2019).
81. Rabin medical center (retreat), Department of Oncology, Jerusalem (12/2019).
82. Haemek medical center (seminar), Department of Oncology, Afula (05/2020).
83. Shamir medical center (seminar), Department of Oncology, Beer Yaakov (01/2021).
84. Ben Gurion University (seminar), Faculty of Health Sciences, Beer Sheva (05/2021).
85. Rambam Health care campus, Division of Oncology (seminar), Haifa (06/2021).
86. Rappaport Technion Integrated Cancer Center, Technion (seminar), Haifa (07/2021).

Invited speaker (to the public)

87. The 17th Hi-Technion, Technion, Haifa (12/2016).
88. Reut, Cathedra 10-100, Lectures of advances in science and technology, Haifa (01/2017).
89. General lecture series, Rambam Health Care Campus, Haifa (05/2018).
90. ATS – USA, lecture on RTICC and personalized medicine in oncology, Virtual (due to COVID-19) (11/2020).
91. ICRF-CANADA-ATS, lecture on host response to cancer therapy, Virtual (due to COVID-19) (03/2021).

Oral mini-symposium presentations:

1. The 6th International Symposium on Anti-Angiogenic Agents, San Diego, CA, USA (01/2004).
Travel Award.

2. The 3rd International Conference on Tumor Microenvironment: Progression, Therapy and Prevention. Prague, Czech Republic (10/2004).
3. The 8th International Symposium on Anti-Angiogenic Agents, San Diego, CA, USA (02/2006). **Travel award.**
4. The 97th AACR annual meeting, Washington D.C., MA, USA (04/2006). **Scholar in-training award.**
5. The 9th International Symposium on Anti-Angiogenic Agents, San Diego, CA, USA (02/2007). **Travel award.**
6. The 99th AACR Annual Meeting 2008, San Diego, CA, USA (04/2008). **Scholar in-training award.**
7. The 3rd European Conference on Tumor Angiogenesis and Antiangiogenic Therapy. Padova, Italy (11/2008).
8. The annual ASCO meeting 2020, Chicago, IL, USA (05/2020). Poster (oral) presentation. Virtual, due to COVID-19 pandemic.
9. The annual ESMO congress 2020, Poster (oral) presentation (09/2020). Virtual due to COVID-19 pandemic.

Abstracts and Poster Presentations: Records were not kept.