#### **BIOGRAPHICAL SKETCH**

NAME	POSITION TITLE		
Shiran Shapira			
·	Lecturer, Research	ner	

INSTITUTION AND LOCATION	<b>DEGREE</b> (if applicable)	YEAR(s)	FIELD OF STUDY
Tel-Aviv University, Tel-Aviv	B.Sc with Summa cum laude	2001-2004	Biology
Tel-Aviv University, Tel-Aviv	B.Sc with Summa cum laude	2001-2004	chemistry
Tel-Aviv University, Tel-Aviv	M.Sc. with Excellence	2004-2007	Neuro-biochemistry
Tel-Aviv University, Tel-Aviv	PhD	2007-2011	Cancer Research

## **Personal Statement**

I am the head of laboratory of molecular biology at the Integrated Cancer Prevention Center (ICPC) at the Tel Aviv Sourasky Medical Center, a leading academic hospital in Israel. The ICPC has diverse and broad experience in translational cancer research, particularly in tumors of the gastrointestinal tract. The main objectives of our center are to reduce the morbidity and mortality of cancer by means of early detection, prevention, and the development of new therapeutic approaches. Since my M.Sc. studies I have devoted myself to cancer research in the fields of early detection, prevention, and cancer therapy. I completed two degrees with summa cum laude. During my studies I was on the Dean's List every year and received numerous travel awards to international conferences where my work was listed as the best top works. I had received numerous awards including the most prestigious ones e.g. Wolf foundation award, Yafa Keydar prize for cancer research, internal award of Tel-Aviv Sourasky medical center for excellence. During the last year I also received the lecturer position in the department of molecular human genetics and biochemistry, medical faculty. I have experience in wide range of biology areas with focusing on cancer therapy. My interests are focused on antibody engineering, molecular biology, protein expression and purification, phage display technique, gene delivery and cell biology.

#### A. Positions and Honors.

#### **Positions and Employment**

2011- 2016: Senior Scientist, Integrated Cancer prevention Center, Tel-Aviv Sourasky Medical Center, Tel Aviv, Israel.

2016-present: Head of Laboratory, Integrated Cancer prevention Center, Tel-Aviv Sourasky Medical Center, Tel Aviv, Israel.

2017-present: Lecturer, Department of Human Molecular Genetics and Biochemistry, Tel-Aviv University

### Honors (past 10 years only)

Year	Name of Institution and award
2007	Tel Aviv University - Research and instruction achievement award.
2007	,
	klodin Gali and Abraham Grinbaum scholarship
2009	Travel grant award to Gastro 2009 congress in London
2010	Claire and Amda scholarship
2010	Cancer Biology Research Center (CBRC) scholarship
2011	Best two poster presentations awards at the joint conference of the Israeli Association of Gastroenterology and liver
	diseases
2011	Best poster presentation awards in the conference of the Cancer Biology Research Center (CBRC)
2012	BPG Award for Top Oral and Poster presentation on at DDW 2012
2012	Internal awards to promote excellence in Tel Aviv Medical Center
2014	CBRC Travel grant award to DDW 2014 congress in USA
2015	UEG Travel Grant Award to UEG 2015 Congress in Barcelona
2015	Two Champ poster awards (Poster of Excellence) in the UEG 2015 Congress in Barcelona
2015	Excellent presentation award in the Department of Internal Medicine day
2015	Participation in the Falling Walls Lab competition in the TCE
2016	Distinguished employee of Tel-Aviv medical center award

# B. List of Publications (Past 5 years only)

### Articles Published

- 1. <u>Shapira S</u>, Shapira A, Starr A, Kazanov D, Kraus S, Benhar I, Arber N. An immunoconjugate of anti-CD24 and Pseudomonas exotoxin selectively kills human colorectal tumors in mice. *Gastroenterology*. 2011 Mar;140(3):935-46.
- Aroch I, Kraus S, Naumov I, Ron E, <u>Shapira S</u>, Kazanov D, Giladi N, Litvak A, Lev-Ari S, Hallak A, Dotan I, Shpitz B, Arber N. Chemopreventive effects of Coltect, a novel dietary supplement, alone and in combination with 5aminosalicylic acid in 1,2-dimethylhydrazine-induced colon cancer in rats. *Therap Adv Gastroenterol*. 2010 Sep;3(5):281-9.
- 3. Sagiv E, Sheffer M, Kazanov D, <u>Shapira S</u>, Naumov I, Kraus S, Domany E, Arber N. Gene Expression following Exposure to Celecoxib in Humans: Pathways of Inflammation and Carcinogenesis Are Activated in Tumors but Not Normal Tissues. *Digestion*. 2011 May 5;84(3):169-184.
- 4. **Shapira S**, Kazanov D, Weisblatt S, Starr A, Arber N, Kraus S.
  - The CD24 protein inducible expression system is an ideal tool to explore the potential of CD24 as an oncogene and a target for immunotherapy in vitro and in vivo. *J Biol Chem.* 2011 Nov 25;286(47):40548-55.
- Naumov I, Kazanov D, Lisiansky V, Starr A, Aroch I, <u>Shapira S</u>, Kraus S, Arber N.
   Novel approach to abuse the hyperactive K-Ras pathway for adenoviral gene therapy of colorectal cancer. *Exp Cell Res*. 2012 Jan 15;318(2):160-8.
- 6. Shapira A, <u>Shapira S</u>, Gal-Tanamy M, Zemel R, Tur-Kaspa R, Benhar I. Removal of hepatitis C virus-infected cells by a zymogenized bacterial toxin. *PLoS One*. 2012;7(2):e32320. Lisiansky V, Naumov I, <u>Shapira S</u>, Kazanov D, Starr A, Arber N, Kraus S. Gene therapy of pancreatic cancer targeting the K-Ras oncogene.
  Cancer Gene Ther. 2012 Dec;19(12):862-9.

- 7. <u>Shapira S</u>, Newman H, Spierer O, Kraus S, Rosner M, Pri-Chen S, Loewenstein A, Arber N, Barak A. Involvement of CD24 in Angiogenesis in a Mouse Model of Oxygen-Induced Retinopathy. *Current Eye Research*. 2012 Jun;37(6):532-9
- 8. Miller E, <u>Shapira S</u>, Gur E, Naumov I, Kazanov D, Leshem D, Barnea Y, Meshiach Y, Gat A, Sion D, Arber N, Kraus S. Increased expression of CD24 in nonmelanoma skin cancer. *Int J Biol Markers*. 2012 Dec 27;27(4):e331-6.
- 9. Naumov I, Zilberberg A, <u>Shapira S</u>, Avivi D, Kazanov D, Rosin-Arbesfeld R, Arber N, Kraus S. CD24 knockout prevents colorectal cancer in chemically induced colon carcinogenesis and in APC(Min)/CD24 double knockout transgenic mice. *Int J Cancer*. 2014 Sep 1;135(5):1048-59.
- 10. Boursi B, Sella T, Liberman E, <u>Shapira S</u>, David M, Kazanov D, Arber N, Kraus S. The APC p.I1307K polymorphism is a significant risk factor for CRC in average risk Ashkenazi Jews. *Eur J Cancer*. 2013 Nov;49(17):3680-5.
- 11. Kraus S, Naumov I, <u>Shapira S</u>, Kazanov D, Aroch I, Afek A, Eisenberg O, George J, Arber N, Finkelstein A. Aspirin but not meloxicam attenuates early atherosclerosis in apolipoprotein E knockout mice. *Isr Med Assoc J*. 2014 Apr;16(4):233-8.
- 12. Dolkart O, Amar E, <u>Shapira S</u>, Marmor S, Goryainov P, Weinbroum AA. Temporal determination of lung NO system and COX-2 upregulation following ischemia-reperfusion injury. *Exp Lung Res.* 2014 Feb;40(1):22-9.
- 13. Dolkart O, Amar E, <u>Shapira S</u>, Marmor S, Steinberg EL, Weinbroum AA. Protective effects of rosuvastatin in a rat model of lung contusion: Stimulation of the cyclooxygenase 2-prostaglandin E-2 pathway. *Surgery*. 2015 Feb 24.
- 14. Kraus S, <u>Shapira S</u>, Naumov I, Kazanov D, Moshkowitz M, Santo E, Galazan L, Geva R, Shmueli E, Hallack A, Arber N.Predictive Levels of CD24 in Peripheral Blood Leukocytes for the Early Detection of Colorectal Adenomas and Adenocarcinomas. *Disease Markers*. 2015.
- 15. Leshno A, <u>Shapira S</u>, Liberman E, Kraus S, Sror M, Harlap-Gat A, Avivi D, Galazan L, David M, Maharshak N, Moanis S, Arber N, Moshkowitz M. The APC I1307K allele conveys a significant increased risk for cancer. Int J Cancer. 2015 Sep 30.
- 16. <u>Shapira S</u>, Ben-Amotz O, Sher O, Kazanov D, Mashiah J, Kraus S, Gur E, Arber N. Delayed Wound Healing in Heat Stable Antigen (HSA/CD24)-Deficient Mice. PLoS One. 2015 Oct 6;10(10).
- 17. <u>Shapira S</u>, Pleban S, Kazanov D, Tirosh P, Arber N. Terpinen 4-ol: A Novel and Promising Therapeutic Agent for Human Gastrointestinal Cancers. PLoS One. 2016 Jun 8;11(6):e0156540.
- 18. Shapira S, Shapira A, Kazanov D, Hevroni G, Kraus S, Arber N. Selective eradication of cancer cells by delivery of adenovirus-based toxins. Oncotarget. 2017 Apr 7.

## Ongoing Research Support

Years	Investigator	Granted by Institute/Company	Total Amount
	(Principal/,other)		

## Applicant Name: SHAPIRA SHIRAN

2011-2014	Co-Investigator	Kamin Grant, The Industry Academy Programs of the Chief Scientist (OCS)Israeli Ministry of Industry and Trade	1,000,000 NIS
2015-2016	Principal Investigator	CBRC- Oncology Research Grant	100,000 NIS
2015	Principal Investigator	Djerassi-ELIAS- oncology research grant	50,000 NIS
2015-2016	Principal Investigator	ICRF	35,000 \$
2016-2018	Co-Investigator	Kamin Grant, The Industry Academy Programs of the Chief Scientist (OCS)Israeli Ministry of Industry and Trade	880,000 NIS
2016	Principal Investigator	Dotan, The Varda and Boaz Dotan research center in Hemato-Oncology, Tel-Aviv University,	100,000 NIS
2016	Principal Investigator	Djerassi-ELIAS- oncology research grant	50,000 NIS
2017-2018	Co-Investigator	The Varda and Boaz DOTAN research center in hemato-oncology	740,000 NIS