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RESEARCH AWARDS 2016-2017

For the 2016 / 2017 funding year, ICRF is supporting 72 grants at a total of \$3,857,000. This is broken down as follows:

- 4
 International Collaboration Grants
 1
 B. S. Goodman Endowed RCDA for Pancreatic Cancer

 1
 L. & S. Mark Initiative for Ovarian/Uterine Cancer
 18
 Project Grants

 3
 Acceleration Grants
 2
 Gesher Awards

 1
 Research Professorships
 1
 Postdoctoral Fellowship

 2
 Clinical Research Career Development Awards
 1
 Booster Grant

 2
 Research Career Development Awards (RCDAs)
 Jacki and Bruce Barron Cancer Research Scholars's First (A Partnership between ICRF and City of Hope)
 - **4** International Collaboration Grants

1 Six-Mo. Sabbatical for an Israeli Scientist at City of Hope

With the 2016 / 2017 grants, ICRF's funding has now reached 2,278 grants totaling \$59,932,000.

Among the areas of cancer research directly sponsored by ICRF in 2016 / 2017 are: studies in bone, brain, breast, colorectal, intestinal, lung, ovarian, pancreatic, pediatric, skin, and vascular cancers; anticancer drug mechanisms, drug resistance, and targeted therapy; development of new diagnostic imaging techniques; leukemia, lymphoma, blood cells, and tumor blood vessel growth (angiogenesis); cancer stem cells and cellular reprogramming; expression, regulation, and mutation of genes; tumor viruses; tumor metastasis; inflammation and cancer; immunology and immunotherapy; oncogenes and tumor suppressor genes, such as p53; cell-cycle regulation, natural killer cells, programmed cell death (apoptosis), and the DNA damage response.

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AWARD	AWARDEE	INSTITUTION	PROJECT TITLE
JACKI & BRUCE BARRON CANCER	Rami Aqeilan, Ph.D. (PI) and Victoria Seewaldt, M.D. (Co-PI)	Hebrew University/ Hadassah Medical School and City of Hope	WWOX Loss Activates Aerobic Glycolysis in TNBC
RESEARCH SCHOLARS' PROGRAM-	Shai Izraeli, M.D. (PI) and Hua E. Yu, Ph.D. (Co-PI)	Chaim Sheba Medical Center and City of Hope	Developing Novel Therapeutic Approaches for High Risk Acute Lymphoblastic Leukemia
(A Partnership between ICRF and City of Hope)	Gad Rennert, M.D., Ph.D. (PI) and Jeffrey Weitzel, M.D. (Co-PI)	Carmel Medical Center and City of Hope	Spectrum of Germline P53 and Somatic Genomic Variants in Israeli Breast Cancer Patients
INTERNATIONAL COLLABORATION GRANTS	Ravid Straussman, M.D., Ph.D. (PI) and Dan Raz, M.D. (Co-PI)	Weizmann Institute of Science and City of Hope	Characterization of the Lung Cancer Microbiome and its Effects on Response to Treatment
SIX-MONTH SABBATICAL at CITY OF HOPE	Abraham Domb, Ph.D. (in the laboratory of Jacob Berlin, Ph.D. at City of Hope)	Hebrew University of Jerusalem	Distribution and Diffusion of Nanoparticles in Tumoral Tissue
INTERNATIONAL COLLABORATION GRANTS	Ittai Ben-Porath, Ph.D. (PI) and Francis Rodier, Ph.D. (Co-PI)* * to begin in 2017-2018	Hebrew University/ Hadassah Medical School and Université de Montréal	Senescence of the Tumor Niche – Effects on Cancer Growth and Drug Response
	Sol Efroni, Ph.D. (PI) and Francisco Quintana, Ph.D. (Co-PI)	Bar-Ilan University and Brigham & Women's Hospital	miR-29b and miR-9 to Target Glioblastoma Multiform via AHR and p38 Network Modulation
	Ephrat Levy-Lahad, M.D. (PI) and Mary-Claire King, Ph.D. (Co-PI)	Shaare Zedek Medical Center and University of Washington	Genomic Analysis of Inherited Breast and Ovarian Cancer for Israeli Women of all Ancestries

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INTERNATIONAL COLLABORATION GRANTS (continued)	Uri Nir, Ph.D. (PI) and Eldad Zacksenhaus, Ph.D. (Co-PI)	Bar-Ilan University and Toronto General Hospital	Studying the Role of Mitochondrial Reprogramming by Fer/FerT in Tumor Metastasis
LEN & SUSAN MARK INITIATIVE FOR OVARIAN AND UTERINE/MMMT CANCERS	Varda Rotter, Ph.D.	Weizmann Institute of Science	Ovarian Cancer Therapeutics Mediated by Modulation of Mutant p53 Protein into Wild Type Conformation
ACCELERATION GRANTS	Nabieh Ayoub, Ph.D.* * to begin in 2017-2018	Technion, Israel Institute of Technology	Why Splicing Factors show Transient Accumulation at DNA Damage Sites: The Example of RBM6 Protein
	Ruth Sperling, Ph.D.	Hebrew University of Jerusalem	Nuclear microRNA in Cancer
	Aviad Zick, M.D., Ph.D.	Hadassah Medical Organization	Tissue Specific Methylation Patterns of Circulating DNAs as Biomarkers for Neurotoxicity
PROFESSORSHIPS	Michal Baniyash, Ph.D.	Hebrew University of Jerusalem	The Role of Immunosuppressive Cells and Gut Microbiota in Inflammatory Bowel Disease and Colorectal Cancer: Clinical Implications
	Yinon Ben-Neriah, M.D., Ph.D.	Hebrew University/ Hadassah Medical School	CKI Regulation in Normal and Malignant Stem Cells
	Yehudit Bergman, Ph.D.	Hebrew University/ Hadassah Medical School	The Role of Epigenetic Regulation in Stem Cells and Cancer
	Howard Cedar, M.D., Ph.D.	Hebrew University/ Hadassah Medical School	Regulation of Gene Expression in Animal Cells

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PROFESSORSHIPS (continued)	Aaron Ciechanover, M.D., D.Sc.	Technion, Israel Institute of Technology	Ubiquitin-Mediated Generation of NF-кВ: Mechanisms and Involvement in Carcinogenesis
	Avram Hershko, M.D., Ph.D.	Technion, Israel Institute of Technology	Roles of the Ubiquitin System in the Control of Cell Division and in Cancer
	Eli Keshet, Ph.D.	Hebrew University/ Hadassah Medical School	Tumor Neovascularization Assisted by VEGF- Recruited and Educated Myeloid Cells
	Martin Kupiec, Ph.D.	Tel Aviv University	Dissecting the Molecular Functions of Elg1/ATAD5
	Ofer Mandelboim, Ph.D.	Hebrew University/ Hadassah Medical School	Learning from Viruses: MicroRNAs Controlling Tumor Cell Attack by NK Cells
	Yosef Shiloh, Ph.D.	Tel Aviv University	The ATM-Mediated DNA Damage Response: Moving between the Forest and the Trees
	Israel Vlodavsky, Ph.D.	Technion, Israel Institute of Technology	Heparanase: From Basic Research to Therapeutic Applications
	Yosef Yarden, Ph.D.	Weizmann Institute of Science	Control Circuits of Growth Factor Signaling: Relevance to Cancer Progression and Therapy
CLINICAL RESEARCH CAREER	Irit Ben-Aharon, M.D., Ph.D.	Rabin Medical Center	Chemotherapy-Induced Vascular Toxicity - unraveling the Mechanisms, Minimizing the Effect
DEVELOPMENT AWARDS (CRCDAs)	Ruth Perets, M.D., Ph.D.	Rambam Health Care Campus	The Role of Fallopian Tube Lineage in Ovarian Cancer Pathogenesis
· · · · /	Amir Sonnenblick, M.D., Ph.D.	Hadassah Medical Organization	Phosphorylated-STAT3 and Responsiveness to Breast Cancer Adjuvant Therapies

AWARD	AWARDEE	INSTITUTION	PROJECT TITLE
BARBARA S. GOODMAN ENDOWED RCDA FOR PANCREATIC CANCER	Moran Amit, M.D.	Rambam Health Care Campus	Roles of the L1 Cell Adhesion Molecule in the Pathogenesis of Pancreatic Cancer
RESEARCH CAREER DEVELOPMENT	Nabieh Ayoub, Ph.D.	Technion, Israel Institute of Technology	Deciphering KDM4C (GASC1) Role in Carcinogenesis via Systematic Mapping of its Non-Histone Substrates
AWARDS (RCDAs)	David Azoulay, Ph.D.	Western Galilee Hospital	BDNF Gene Polymorphism and Protein Levels in Circulating Blood as Biomarkers for CIPN in Cancer Patients
	Michael Blank, Ph.D.	Bar-Ilan University	Investigating the Role of Smurf2 in DNA Damage Response and Anticancer Genotoxic Therapies
	Shay Covo, Ph.D.	Hebrew University of Jerusalem	Revealing the Role of Severe Genome Instability and Mitochondria in Drug Resistant Polyploidy Yeast
	Neta Erez, Ph.D.	Tel Aviv University	The Role of Fibroblasts in the Formation of a Permissive Metastatic Niche in Breast Cancer Metastasis
	Dinorah Friedmann-Morvinski, Ph.D.	Tel Aviv University	Reprogramming in Cancer and Novel Targets for Immunotherapy
	Yaron Fuchs, Ph.D.	Technion, Israel Institute of Technology	Apoptotic Regulation of Cancer Stem Cells
	Roi Gazit, Ph.D.	Ben-Gurion University of the Negev	Novel Models for Leukemias in Immune- Competent Mice

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RCDAs (continued)	Gabi Gerlitz, Ph.D.	Ariel University Center of Samaria	The Role of Global Chromatin Condensation in Melanoma Cell Migration
	Zvi Granot, Ph.D.	Hebrew University of Jerusalem	The Effect of VEGF on Neutrophil Function in the Context of Tumor Growth and Metastatic Progression
	Yoni Haitin, Ph.D.	Tel Aviv University	The Molecular Basis of KCNH Channels Regulation of Cellular Proliferation
	Jacob Hanna, M.D., Ph.D.	Weizmann Institute of Science	Novel Humanized Stem Cell Based Platforms for Modeling Human Disease and Cancer Development
	Ayelet Lamm, Ph.D.	Technion, Israel Institute of Technology	Identifying the Mechanisms by which Intracellular Transport affects Pancreatic Cancer Development
	Nir London, Ph.D.	Weizmann Institute of Science	Covalent Personalized Medicine - Targeting Oncogenic Mutations to Cysteine
	Michael Milyavsky, Ph.D.	Tel Aviv University	Isolation and Characterization of Novel Therapy Resistance Factors in Acute Myeloid Leukemia
	Ariel Munitz, Ph.D.	Tel Aviv University	Molecular Regulation of Eosinophil Activation in Colorectal Cancer
	Vered Padler-Karavani, Ph.D.	Tel Aviv University	Anti-Neu5Gc Antibodies for Cancer Therapeutics
	Niv Pencovich, M.D., Ph.D.	Tel Aviv Sourasky Medical Center	Genome-Wide Characterization of the Escape from Tumor Dormancy
	Meir Shamay, Ph.D.	Bar-Ilan University	Methylation Signature of Herpes Viruses as a Diagnostic Tool for Viral-Associated Malignancies

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RCDAs (continued)	Shiran Shapira, Ph.D.	Tel Aviv Sourasky Medical Center	Humanized Anti-CD24 Antibody; A Potential Biology Tool for Cancer Immunotherapy
	Amit Tzur, Ph.D.	Bar-Ilan University	Elucidating the E2F1-E2F7/8 Circuitry in Single Proliferating- and DNA-Damaged Cells
PROJECT GRANTS	Rami Aqeilan, Ph.D.* * to begin in 2017-2018	Hebrew University of Jerusalem	Role of the WWOX Fragile Gene in the Development of Pancreatic Cancer
	Gilad Bachrach, Ph.D.	Hebrew University of Jerusalem	Colon Cancer Colonizing Fusobacteria and their Anti-Tumor Potential
	Shay Ben-Aroya, Ph.D.	Bar-Ilan University	Understanding the Roles of the Iron-Sulfur Cofactors in Regulating the Function of Proteins Involved in Maintaining Genome Stability
	Ittai Ben-Porath, Ph.D.	Hebrew University/ Hadassah Medical School	Regulation of Heterogeneity in Breast Cancers through Control of Symmetric Divisions
	Dalit Ben-Yosef, Ph.D.	Tel Aviv Sourasky Medical Center	Induction of APC Somatic Mutation in FAP Human Embryonic Stem Cells for Studying Early Stages in Malignant Transformation
	Avri Ben-Ze'ev, Ph.D.	Weizmann Institute of Science	The Role of Intestinal Stem Cell Signature Genes in Colon Cancer Progression
	Cyrille Cohen, Ph.D.	Bar-Ilan University	Development and Study of a Cell-Secreted 'Ligand Trap' to Mitigate TGFb Effects
	Haim Cohen, Ph.D.	Bar-Ilan University	Regulation of Metabolic Decisions by SIRT6 and p53 Under Normal and Stress Conditions
	Amir Eden, Ph.D.	Hebrew University of Jerusalem	EZH2 and ErbB Family Inhibition in Rhabdoid Tumors

AWARD	AWARDEE	INSTITUTION	PROJECT TITLE
PROJECT GRANTS (continued)	Zvi Fridlender, M.D.	Hadassah Medical Organization	The Differential Regulation and Clinical Importance of Circulating Cancer-Related Neutrophil Sub-Populations
	Assaf Friedler, Ph.D.	Hebrew University of Jerusalem	Disordered Proteins As Anti-Cancer Drug Targets
	Asaf Hellman, Ph.D.	Hebrew University of Jerusalem	Understanding Epigenetic Contribution to Cancer Risk and Malignancy Through Targeting the DNA Methylation of Transcriptional Enhancers
	Yifat Merbl, Ph.D.	Weizmann Institute of Science	Elucidating Regulatory Principles of Ubiquitin HECT-Domain E3 Ligases in Mammalian Systems
	Dan Peer, Ph.D.	Tel Aviv University	Harnessing RNAi Nanomedicines for Therapeutic Gene Silencing in Glioblastoma Multiforme
	Rachela Popovtzer, Ph.D.	Bar-Ilan University	Detection of Metabolic Activity using CT
	Ada Rephaeli, Ph.D.	Tel Aviv University	The Advantages of Valproic Acid Prodrug and the Mechanism Involved in its Anticancer and Protective Activities in the Treatment of Triple Negative Breast Carcinoma
	Joel Yisraeli, Ph.D.	Hebrew University of Jerusalem	VICKZ Proteins as Cancer Therapeutics
	Tsila Zuckerman, M.D.	Rambam Health Care Campus	AML Heterogeneity using Single Leukemic Cells; Genomic Analysis and Clonal Hierarchy

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GESHER AWARDS	Lior Mayo, Ph.D.	Tel Aviv University	Role of Astrocytes in Glioblastoma Progression
	Ruth Scherz-Shouval, Ph.D.	Weizmann Institute of Science	The Role of Stress Responses in cancer
POSTDOCTORAL FELLOWSHIP	Maya Olshina, Ph.D.	Weizmann Institute of Science	Regulating Degradation by the 20S Proteasome: Identification of Novel Regulatory Proteins
BOOSTER GRANT	Avi Maimon, M.D.	Hebrew University of Jerusalem	Protein S as a Novel Signaling Molecule Mediating Tumor-Microenvironment Interactions

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