Program Schedule

The 2016 Annual Retreat on Cancer Research in New Jersey
Rutgers College Avenue Student Center, 126 College Avenue, New Brunswick, NJ

May 26, 2016

8:30 A.M. - 10:00 A.M. **Breakfast and Registration (Main Lounge)**

8:30 A.M. - 9:30 A.M. **All posters set up (Main Lounge)**

9:00 A.M. - 11:15 A.M. **Public Forum - *Cancer Survivors: Advancing Care through Research* (Graduate Student Lounge)**

9:30 A.M. - 11:15 A.M. **Poster Session (All Authors Present; Main Lounge)**

11:15 A.M. - 11:30 A.M. **Welcome (Multi-Purpose Room)**

Bruce G. Haffty, MD
Chair, Radiation Oncology
Rutgers Robert Wood Johnson Medical School and Rutgers New Jersey Medical School
Interim Director
Rutgers Cancer Institute of New Jersey

Cathleen D. Bennett
Acting Commissioner
New Jersey Department of Health

11:30 A.M. - 12:30 P.M. **Keynote Address (Multi-Purpose Room)**

Evolution of Resistance to Targeted Therapies

Jeffrey Engelman, MD, PhD
Professor of Medicine
Harvard Medical School

12:30 P.M. - 1:30 P.M. **Lunch (Food Court)**

1:30 P.M. - 4:30 P.M. **Poster Session Continues**

1:30 P.M. - 4:30 P.M. **Focus Session A (Multi-Purpose Room)**

- **1:30 P.M. - 2:30 P.M.** **Cancer Metabolism and Growth**
- **2:30 P.M. - 3:30 P.M.** **Genome Instability and Cancer Genetics**
- **3:30 P.M. - 4:30 P.M.** **Cancer Pharmacology**

1:30 P.M. - 3:30 P.M. **Focus Session B (411 A, B, C)**

- **1:30 P.M. - 2:30 P.M.** **Clinical Investigations and Precision Therapeutics**
- **2:30 P.M. - 3:30 P.M.** **Cancer Prevention and Control**

4:30 P.M. **End of Program**

Program Schedule
Public Forum
Graduate Student Lounge, Rutgers College Avenue Student Center

Cancer Survivors: Advancing Care through Research

9:00 a.m. – 11:15 a.m.

9:00 a.m. – 9:05 a.m. **Welcome & Introduction**
Sharon L. Manne, PhD
Professor of Medicine
Division of Medical Oncology, Section of Population Science
Rutgers Robert Wood Johnson Medical School
Associate Director for Cancer Prevention, Control and Population Science
Rutgers Cancer Institute of New Jersey

9:05 a.m. – 10:00 a.m. **Keynote Lecture**
Alfred I. Neugut, MD, PhD
Associate Director for Population Sciences
Herbert Irving Comprehensive Cancer Center
Myron M. Studner Professor of Cancer Research
Columbia University, New York, NY

10:00 a.m. – 11:00 a.m. **Expert Perspectives**
Couple-Focused Group Therapy For Women Diagnosed With Breast Cancer
Sharon L. Manne, PhD

Prostate Cancer Follow-up: Promoting Self-Care After Cancer Treatment Ends
Shawna V. Hudson, PhD
Associate and Chief of Family Medicine and Community Health
Rutgers Robert Wood Johnson Medical School

A Vision for Personalized Care in Cancer Survivorship
Brian D. Gonzalez, PhD
Assistant Professor of Medicine
Rutgers Robert Wood Johnson Medical School
Division of Medical Oncology, Section of Population Science
Rutgers Cancer Institute of New Jersey

11:00 a.m. – 11:15 a.m. **Question and Answer Session**

12:30 p.m. **Lunch (Food Court)**

Program Sponsor:
Rutgers Cancer Institute of New Jersey

Program Schedule

Focus Session A - Multi-Purpose Room

Cancer Metabolism and Growth

1:30 p.m. – 2:30 p.m.

Co-Chairs: **Lisa Denzin, PhD**, Associate Professor of Pediatrics, Rutgers Robert Wood Johnson Medical School, Child Health Institute of New Jersey, New Brunswick, NJ
Justin M. Drake, PhD, Assistant Professor of Medicine, Rutgers Robert Wood Johnson Medical School, Division of Medical Oncology, Cancer Biology, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(A1) THE PI3-KINASE P110B REGULATES GLUCOSE METABOLISM AND ONCOGENESIS

Jennifer L. DeLeon[1], Yu Sun[5], Hua Zhong[5], Wu Song[2], Laura Hogan[3], Richard Lin[4], Wei-Xing Zong[2].
[1]Department of Biochemistry, [2]Applied Mathematics & Statistics, [3]School of Medicine and [4]Physiology and Biophysics, Stony Brook University, Stony Brook, NY; [5]Department of Chemical Biology, Rutgers, The State University of New Jersey, Piscataway, NJ

(A2) MANIPULATING MITOCHONDRIAL DYNAMICS TO SENSITIZE CANCER CELL LINES TO CHEMOTHERAPEUTIC AGENTS.

Jan Jezek[1], Vidyaramaman Ganesan[1], Amogh Joshi[2], Antonios Di Cristofano[3], Randy Strich[1].
[1]Department of Molecular Biology, and [2]Department of Medicine, Rowan School of Medicine, Stratford, NJ; [3]Albert Einstein Medical School, Bronx, NY

(A3) THE GENOMIC LANDSCAPE OF RENAL ONCOCYTOMA IDENTIFIES A METABOLIC BARRIER TO TUMORIGENESIS

Shilpy Joshi[1†], Denis Tolkunov[1†], Hana Aviv[2], Abraham A. Hakimi[3], Ming Yao[1], James J. Hsieh[4], Shridar Ganesan[1,5], Chang S. Chan[1,5*], Eileen White[1,6*].
[1]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ; [2]Department of Pathology & Laboratory Medicine, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ; [3]Department of Surgery, Urology Service, Memorial Sloan Kettering Cancer Center, New York, NY; [4]Human Oncology and Pathogenesis Program, Memorial Sloan Kettering Cancer Center, New York, NY; [5]Department of Medicine, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ; [6]Department of Molecular Biology and Biochemistry, Rutgers, The State University of New Jersey, Piscataway, NJ; [†]Drs. Joshi and Tolkunov contributed equally to this work.[*]Co-corresponding Authors

(A4) DIVERGENT TAM RECEPTOR ACTIVATION CONTROLS NON-REDUNDANT TRANSFORMING ATTRIBUTES IN EPITHELIAL CELLS

Canan Kasikara, Sushil Kumar, Wen-I Tsou, Sergei Kotenko, Raymond B. Birge.
Department of Microbiology, Biochemistry and Molecular Genetics, Rutgers New Jersey Medical School Cancer Center, Newark, NJ

(A5) ADAPTATION TO HISTONE DEACETYLASE INHIBITORS REDUCES CMYC PROTEIN EXPRESSION, REPROGRAMING OF CANCER CELL GENE EXPRESSION AND ATTENUATION OF THE MALIGNANT PHENOTYPE

HsinChing Lin[1], George Wei1, Diana Vengsarkar[1], Reid Singer[1], Elke Markert[2], Arnold Rabson[1,2].
[1]Child Health Institute of New Jersey, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ; [2]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

Program Schedule
Focus Session A - Multi-Purpose Room

Genome Instability and Cancer Genetics

2:30 p.m. – 3:30 p.m.

Co-Chairs: **Bing Xia, PhD**, Associate Professor of Radiation Oncology, Rutgers Robert Wood Johnson Medical School, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
Michael L. Gatza, PhD, Assistant Professor of Radiation Oncology, Rutgers Robert Wood Johnson Medical School, Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(A6) DEDIFFERENTIATION OF MATURE INTESTINAL EPITHELIAL CELLS INTO STEM CELLS AND ADENOMAS

Ansu O. Perekatt, Alex Wu, Nick Patel, Vishal Gandhi, Pooja Shah, Lei Cheng, Namit Kumar, Kevin Tong, Siddharth Murali, Qiang Fang, Nan Gao, Michael P. Verzi.
Rutgers Cancer Institute of New Jersey, and Human Genetics Institute of New Jersey, New Brunswick, NJ

(A7) FUNCTIONAL CHARACTERIZATION OF PALB2 N-TERMINAL VARIANTS OF UNCERTAIN SIGNIFICANCE (VUSS) IDENTIFIES TWO LOSS-OF-FUNCTION MUTATIONS AFFECTING THE BRCA1-PALB2 INTERACTION

Tzeh Keong Foo[1], Srilatha Simhadri[1], Marc Tischkowitz[2], William Foulkes[3], Bing Xia[1].
[1]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ; [2]Department of Medical Genetics, University of Cambridge, Cambridge, UK; [3]Department of Oncology and Human Genetics, McGill University, Montreal, Canada

(A8) ALTERED EPIGENETIC STATE OF CENTROMERIC CHROMATIN PROMOTES ESCAPE FROM MITOTIC ARREST IN SCHIZOSACCHAROMYCES POMBE CELLS WITH MICROTUBULE DYSFUNCTION

Anuja A. George[1], Nancy C. Walworth[1,2].
[1]Department of Pharmacology, Rutgers Robert Wood Johnson Medical School, Piscataway, NJ; [2]Member, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(A9) ROLE OF PALB2-BRCA1 INTERACTION IN TUMOR SUPPRESSION

Amar Mahdi[1,2,3], Yanying Huo[1,2], Bing Xia[1,2].
[1]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ; [2]Department of Radiation Oncology, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ; [3]Graduate Program in Physiology and Integrative Biology, Graduate School of Biomedical Sciences, Rutgers, The State University of New Jersey, Piscataway, NJ

(A10) THE ROLE OF G9A METHYLTRANSFERASE IN THE DNA REPAIR PATHWAY

Lizahira Rodriguez-Colon[1,2], Vasudeva Ginjala[1], Atul Kulkarni[1], Shridar Ganesan[1].
[1]Rutgers Cancer Institute of New Jersey and [2]Cellular and Molecular Pharmacology Program, Rutgers, The State University of New Jersey, New Brunswick, NJ

Program Schedule
Focus Session A - Multi-Purpose Room

Cancer Pharmacology

3:30 p.m. – 4:30 p.m.

Co-Chairs: **Suzie Chen, PhD**, Professor of Chemical Biology, Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey, Piscataway, NJ
Darren R. Carpizo, MD, PhD, Associate Professor of Surgery, Rutgers Robert Wood Johnson Medical School, Division of Surgical Oncology, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(A11) PREVENTING AND TREATING HEPATIC METASTATIC COLON AND PANCREATIC CANCERS BY TARGETING CELL METABOLISM
Amer Alasadi, Jingjing Guo, Hanlin Tao, Shengkan Jin.
Department of Pharmacology, Rutgers Robert Wood Johnson Medical School, Piscataway, NJ

(A12) GLUTAMATE RELEASE INHIBITOR REDUCES EXOSOME RELEASE IN METABOTROPIC GLUTAMATE RECEPTOR 1 (GRM1) EXPRESSING MELANOMA
Allison L. Isola[1,2], Suzie Chen[1,2,3].
[1]Susan Lehman Cullman Laboratory for Cancer Research, Ernest Mario School of Pharmacy and [2]Joint Graduate Program of Toxicology, Rutgers, The State University of New Jersey, Piscataway, NJ; [3]Rutgers, Cancer Institute of New Jersey, New Brunswick, NJ

(A13) THE ROLE OF CELLULAR ZINC ION HOMEOSTASIS IN THE MECHANISM OF ZINC METALLOCHAPERONES AS MUTANT P53 REACTIVATORS
Samuel Kogan[1,2], Xin Yu[1,3], Darren Carpizo[1,3].
[1]Rutgers Cancer Institute of New Jersey, [2]Rutgers Robert Wood Johnson Medical School and [3]Department of Surgery, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ

(A14) IN VIVO EFFICACY OF THE PAK4 ALLOSTERIC MODULATOR, KPT-9274, AGAINST A TRIPLE NEGATIVE BREAST CANCER MODEL
Chetan K. Rane[1], William Senapedis[2], Erkan Baloglu[2], Sharon Shacham[2], Audrey G. Minden[1].
[1]Rutgers, The State University of New Jersey, Piscataway, NJ; [2]Karyopharm Therapeutics, Newton, MA

(A15) DEVELOPMENT OF A THERAPY PROTOCOL FOR DRUG RESISTANT OVARIAN CANCER
Siddik Sarkar, Obeid M Malekshah, Arash Hatefi.
Department of Pharmaceutics, Rutgers, The State University of New Jersey, Piscataway, NJ

Program Schedule

Focus Session B - 411 A, B, C

Clinical Investigations and Precision Therapeutics

1:30 p.m. – 2:30 p.m.

Co-Chairs: **Rajat Bannerji, MD, PhD**, Associate Professor of Medicine, Rutgers Robert Wood Johnson Medical School, Division of Hematology Oncology, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
Andrew Zloza, MD, PhD, Assistant Professor of Surgery, Rutgers Robert Wood Johnson Medical School, Section Chief of Surgical Oncology Research, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(B1) PATIENT STEM CELL (SC)-DERIVED PROSTATE CANCER (PC) ORGANOIDS (ORG) RECREATE CLONAL HETEROGENEITY OF PC FOCI AND MEASURE THERAPEUTIC RESPONSE POTENTIAL

Monica Bartucci, Anna Ferrari, Isaac Kim, Mark Stein, Joseph Bertino, Hatem Sabaawy.
Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(B2) TUMORS HARBORING SUFFICIENTLY HIGH NON-SYNONYMOUS MUTATION BURDEN ARE LIKELY TO BE SENSITIVE TO IMMUNE CHECKPOINT THERAPY USING PD1 OR CTLA4 BLOCKADE IN 9 SOLID CANCER TYPES

Anshuman Panda[1,2,3], Anil Betigeri[6], Kalyanasundaram Subramanian[6], Janice M Mehnert[1,4], Kim Hirshfield[1,4], Lorna Rodriguez-Rodriguez[1,4], Gyan Bhanot[1,3,5*], Shridar Ganesan[1,2,4*].
[1]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ; [2]Rutgers Institute for Quantitative Biomedicine, Piscataway, NJ; [3]Rutgers Department of Physics and Astronomy, Piscataway, NJ; [4]Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ; [5]Department of Molecular Biology and Biochemistry, Rutgers, The State University of New Jersey, Piscataway, NJ; [6]Strand Life Sciences, Bangalore, India; [*]Corresponding authors

(B3) ASSESSMENT OF THE ALBUMIN-BILIRUBIN (ALBI) GRADE AS A PROGNOSTIC INDICATOR FOR HEPATOCELLULAR CARCINOMA PATIENTS TREATED WITH RADIOEMBOLIZATION

Bin Gui[1], Ashley Weiner[2], John Nosher[3], Shou-en Lu[4], Parag J. Parikh[2], Salma K. Jabbour[1].
[1]Department of Radiation Oncology, Rutgers Cancer Institute of New Jersey, New Brunswick NJ; [2]Department of Radiation Oncology, Washington University School of Medicine, St. Louis, MO; [3]Department of Radiology, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ; [4]Department of Biostatistics, Rutgers School of Public Health, Piscataway, NJ

(B4) INTRATUMORAL VACCINATION CAN OVERCOME LOCAL TUMOR BARRIERS TO INTRATUMORAL IMMUNE CELL RECRUITMENT IN A MURINE MODEL OF PANCREATIC DUCTAL ADENOCARCINOMA

Kristen Donohue[1], Crissy Dudgeon[1,2], Claude Monken[2], Edmund Lattime[1,2], Darren Carpizo[1,2,3]
[1]Department of Surgery, and [3]Department of Pharmacology, Rutgers, Robert Wood Johnson Medical School, New Brunswick, NJ; [2]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(B5) PULMONARY SARCOMATOID CARCINOMA: CLINICAL CHARACTERISTICS AND SURVIVAL

Miguel Gonzalez Velez[1], Narjust Duma[1], Martin Gutierrez[2].
[1]Department of Internal Medicine, Rutgers New Jersey Medical School, Newark, NJ; [2]John Theurer Cancer Center, Hackensack University Medical Center, Hackensack, NJ

Program Schedule
Focus Session B - 411 A, B, C

Cancer Prevention and Control

2:30 p.m. – 3:30 p.m.

Co-Chairs: **Nanjoo Suh, PhD**, Professor of Chemical Biology, Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey, Piscataway, NJ
Katie Devine, PhD, MPH, Assistant Professor of Medicine, Rutgers Robert Wood Johnson Medical School, Division of Medical Oncology, Section of Population Science, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(B6) BMP PATHWAY INHIBITORS MAY PREVENT NEOPLASTIC PROGRESSION OF BARRETT'S EPITHELIUM

Manisha Bajpai[1,4], Carlos Minacapelli[1], Anshuman Panda[3], John Langenfeld[2,4], Gyan Bhanot[3,4], Kiron M. Das[1,4].
[1]Division of Gastroenterology, Department of Medicine and [2]Department of Surgery, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ; [3]Department of Physics, School of Arts and Sciences, Rutgers, The State University of New Jersey, New Brunswick, NJ; [4]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

(B7) UNDERSTANDING THE EFFECTS OF AN INFLAMMATORY MILIEU ON THE DEVELOPMENT OF MESENCHYMAL STEM CELLS: IMPLICATION FOR TREATING DORMANT CANCER STEM CELLS

Lauren S. Sherman[1,2], Oleta A. Sandiford[1], Nicholas M. Ponzio[2,3], Pranela Rameshwar[1,2].
[1]Department of Medicine, Hematology & Oncology, Rutgers New Jersey Medicine School, Newark, NJ; [2]Rutgers Graduate School of Biomedical Sciences and [3]Department of Pathology and Laboratory Medicine, Rutgers New Jersey Medical School, Newark, NJ

(B8) FETAL ALCOHOL EXPOSURE INDUCES MICRORNA MIR-9 AND ALTERS DOPAMINE 2 RECEPTOR EXPRESSION BY TARGETING ITS 3' UTR IN THE PITUITARY GLAND

O. Gangisetty, D.K. Sarkar.
Endocrine Research Program, Department of Animal Sciences, Rutgers, The State University of New Jersey, New Brunswick, NJ

(B9) DISPARITIES IN CERVICAL CANCER INCIDENCE AMONG UNINSURED/ UNDERINSURED WOMEN SCREENED THROUGH THE NEW JERSEY CANCER EDUCATION AND EARLY DETECTION PROGRAM

J. Tsui[1], A.A. Llanos[1,2], D. Rotter[1], L. Toler[1,2], S. Vasanthan[3], C. Africa[4], A.M. Stroup[1,2,3].
[1]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ; [2]Rutgers School of Public Health, Piscataway, NJ; [3]New Jersey State Cancer Registry and [4]New Jersey Cancer Education and Early Detection Program, New Jersey Department of Health, Trenton, NJ

(B10) WHY ARE WOMEN UNDER 40 BEING SCREENED FOR BREAST CANCER?

S.A. Navarro Silvera[1], E.V. Bandera[2,3], M. Gardner[1], M. Rodriguez[1], K. Demisse[2,3].
[1]Department of Health and Nutrition Sciences, Montclair State University, Montclair, NJ; [2]Rutgers Cancer Institute of New Jersey, New Brunswick, NJ; [3]Department of Epidemiology, Rutgers School of Public Health, Piscataway, NJ

(B11) ARE WORLD TRADE CENTER RESPONDERS AT INCREASED RISK OF HEAD AND NECK CANCER?

C. Ward[1], J.M. Graber[1,2], K. Black[1], G. Harris[3], S. German[3], I. Udasin[1,2].
[1]Rutgers Robert Wood Johnson Medical School, [2]Rutgers Environmental and Occupational Sciences Health Institute and School of Public Health, Piscataway, NJ; [3]New Jersey State Cancer Registry and Rutgers Cancer Institute of New Jersey, New Brunswick, NJ