Rutgers Cancer Institute of New Jersey Reporting Date: 03/31/2023 Program Area: Cancer Pharmacology Data Table 2A – Active Funded Projects

Peer-Reviewed Research

PI	Specific Funding Source	Project Number	Project Start Date	Project End Date	Project Title	Annual Project Direct Costs	Cancer- Relevant Annual Project DC	Program Code	Program Percent	Annual Program Direct Costs
Baker T	NCI	5R21CA262491-02	7/5/21	6/30/23	CANDIDATE MECHANISMS FOR CHEMOTHERAPY-INDUCED NEUROCOGNITIVE DEFICITS IN PEDIATRIC SOLID NON-CNS TUMOR PATIENTS	\$137,445	\$137,445	03	100	\$137,445
Baker T	NIDA	1UG3DA054787-01A1	9/30/22	8/31/24	RECOVERY OF REWARD FUNCTION IN NICOTINE USE DISORDER USING A COMBINATION OF ROBOTICS, ELECTROPHYSIOLOGY, AND TMS	\$242,501	\$242,501	03	50	\$121,251
Burley S	NIGMS/NIAID/NCI	5R01GM133198-04	8/1/19	7/31/24	PDB MANAGEMENT BY THE RESEARCH COLLABORATORY FOR STRUCTURAL BIOINFORMATICS	\$2,252,900	\$1,126,450	03	100	\$1,126,450
Burley S	NIGMS	3R01GM133198-04S1	8/1/22	7/31/23	PDB MANAGEMENT BY THE RESEARCH COLLABORATORY FOR STRUCTURAL BIOINFORMATICS (SUPPLEMENT)	\$545,860	\$272,930	03	100	\$272,930
Cartegni L	NCI	7R01CA219689-06	12/8/17	11/30/23	THERAPEUTIC POTENTIAL OF ANTITUMORIGENIC SOLUBLE MET VARIANTS INDUCED BY SPLICING INTERFERENCE	\$254,506	\$254,506	03	100	\$254,506
Cartegni L	NCI	7R01CA233897-05	12/1/18	11/30/24	TARGETING REFRACTORY EGFR-DRIVEN TUMORS BY INDUCTION OF DOMINANT-NEGATIVE EGFR SPLICING VARIANTS	\$249,306	\$249,306	03	100	\$249,306
Chen S	VA	2I01BX003742-04A1	4/1/21	3/1/25	TRANSLATIONAL APPLICATION OF MOUSE MODELS OF MELANOMA BRAIN METASTASES	\$308,139	\$308,139	03	100	\$308,139
Glytsou C	NCI	4R00CA252602-03	3/3/23	2/28/26	TARGETING MITOCHONDRIAL DYNAMICS IN DRUG-RESISTANT ACUTE MYELOID LEUKEMIA	\$249,000	\$249,000	03	100	\$249,000
Gormley A Khare S	NSF	2118860	10/1/21	9/30/25	COLLABORATIVE RESEARCH: DMREF: MACHINE LEARNING AND ROBOTICS FOR THE DATA-DRIVEN DESIGN OF PROTEIN-POLYMER HYBRID MATERIALS	\$599,911	\$299,956	03	100	\$299,956
Groves J	NSF	1900048	6/1/19	5/31/23	METAL-OXO AND METAL-PEROXO COMPLEXES IN OXIDATIVE CATALYSIS	\$105,177	\$52,589	03	100	\$52,589
Hatefi A	NCI	5R01CA251438-02	4/1/21	3/31/26	STEM CELL-BASED PLATFORM FOR TARGETED ENZYME/PRODRUG THERAPY OF RECURRENT OVARIAN CANCER	\$244,022	\$244,022	03	100	\$244,022
Herranz Benito D	ACS (National)	133916-RSG-19-161-01- TBE	1/1/20	12/31/23	THE ROLE OF SIRT1 IN T-CELL ACUTE LYMPHOBLASTIC LEUKEMIA	\$165,000	\$165,000	03	100	\$165,000
Herranz Benito D	NCI	5R01CA236936-04	7/1/19	6/30/24	THE ROLE OF GLUTAMINOLYSIS AS A THERAPEUTIC TARGET IN T- ALL	\$228,750	\$228,750	03	100	\$228,750
Herranz Benito D	Leukemia & Lymphoma Society	1386-23	7/1/22	6/30/27	THERAPEUTIC EXPLOITATION OF NOVEL MOUSE MODELS AND METABOLIC INTERVENTIONS IN LEUKEMIA	\$114,286	\$114,286	03	100	\$114,286
Hou P	AACR	920002	7/1/22	6/30/25	ANTI-KRAS THERAPY RESISTANCE AND PANCREATIC TUMOR IMMUNE MICROENVIRONMENT	\$100,000	\$100,000	03	50	\$50,000
Jang M	NCI	7R01CA242158-05	8/8/19	7/31/24	PQ#12; TARGETING NAMPT-MEDIATED NAD+ METABOLISM IN CHEMOBRAIN	\$246,076	\$246,076	03	100	\$246,076
Jang M	NCI	3R01CA242158-05S1	8/1/22	7/31/23	PQ#12; TARGETING NAMPT-MEDIATED NAD+ METABOLISM IN CHEMOBRAIN (SUPPLEMENT)	\$86,636	\$86,636	03	100	\$86,636
Javanmard M	NSF	1846740	2/15/19	1/31/24	CAREER: RECONFIGURABLE ELECTRO-FLUIDIC PRESCRIPTIONS (REFRX): DATA-DRIVEN BIOSENSORS FOR DETECTION AND TREATMENT OF MULTIDRUG-RESISTANT CANCERS	\$66,880	\$66,880	03	100	\$66,880
Kaelber J	NIGMS	5R21GM140345-02	9/1/21	8/31/23	IMPROVING CRYOEM AND CRYOFIB PERFORMANCE THROUGH AMELIORATION OF MECHANICAL STRESS IN VITREOUS ICE	\$125,000	\$62,500	03	100	\$62,500
Kleiner R	NIGMS	5R01GM132189-04	4/1/19	3/31/24	CHEMICAL APPROACHES TO ILLUMINATE THE EPITRANSCRIPTOME	\$200,000	\$100,000	03	100	\$100,000
Kleiner R	NSF	1942565	12/6/19	11/30/24	CAREER: A CHEMOPROTEOMIC STRATEGY TO DECIPHER EPITRANSCRIPTOMIC PYRIMIDINE MODIFICATIONS	\$72,000	\$36,000	03	100	\$36,000
Minko T	NCI	5R01CA209818-05	4/21/17	3/31/24	TUMOR-TARGETED NANOPARTICLE-BASED DELIVERY SYSTEM FOR IMAGING AND TREATMENT OF CANCER	\$284,976	\$284,976	03	100	\$284,976
Minko T	NCI	7R01CA238871-05	2/4/19	1/31/24	BIONANOTECHNOLOGY APPROACH FOR TREATMENT OF LUNG CANCER	\$370,943	\$370,943	03	100	\$370,943
Minko T	NCI	1R01CA269513-01	6/3/22	5/31/27	NANOTECHNOLOGY-BASED PERSONALIZED TREATMENT OF METASTATIC OVARIAN CANCER	\$393,630	\$393,630	03	100	\$393,630
Moghe P Pierce M	NIBIB	5R01EB018378-08	4/15/14	5/31/23	RARE EARTH NANOPROBES FOR OPTICAL IMAGING AND DISEASE TRACKING	\$434,109	\$434,109	03	50	\$217,055
Moghe P Pierce M	NIBIB	3R01EB018378-08S1	9/12/22	5/31/23	RARE EARTH NANOPROBES FOR OPTICAL IMAGING AND DISEASE TRACKING (C3I) (SUPPLEMENT)	\$98,579	\$98,579	03	50	\$49,290
Muir T	NIGMS	2R01GM086868-25	9/25/22	8/31/26	STRUCTURE, FUNCTION AND APPLICATIONS OF INTEINS	\$414,775	\$414,775	03	100	\$414,775
Muir T Allis C (Rockefeller U.)	NCI Rockefeller U.	5P01CA196539-08 (6476)	9/9/15	8/31/25	ROLE OF HISTONE AND HISTONE-LIKE MUTATIONS IN THE ONCOGENESIS OF HUMAN CANCERS: PROJECT 3: MECHANISMS OF METHYLTRANSFERASE DYSREGULATION BY ONCOHISTONES (6476)	\$245,984	\$245,984	03	100	\$245,984
Muir T Kadoch C (Dana-Farber Cancer Inst.)	NCI Dana-Farber Cancer Inst.	1R01CA259365-01	4/1/21	3/31/26	STRUCTURE-ACTIVITY RELATIONSHIPS GOVERNING MAMMALIAN SWI/SNF CHROMATIN REMODELING ACTIVITY AS A FUNCTION OF CHROMATIN STATE	\$207,500	\$207,500	03	100	\$207,500

Panettieri R Libutti S Pasqualini R Pasqualini R	NHLBI/NCATS/NIAMS/ NINR/NIAAA/NIAID	7U01HL150852-04	9/23/19	8/31/23	RUTGERS OPTIMIZES INNOVATION (ROI) PROGRAM	\$636,942	\$318,471	03	50	\$159,236
Pasqualini R Arap W Brinker C (UNM) Cristini V	NCI	5R01CA226537-05	8/1/18	7/31/23	A TARGETED NANOMEDICINE PROTOTYPE AGAINST ENZALUTAMIDE- RESISTANT PROSTATE CANCER	\$537,486	\$537,486	03	50	\$268,743
Pasqualini R Arap W Libutti S	NCI	5R01CA240516-03	3/15/20	2/28/25	DESIGNING A TRANSCRIPTOME-BASED, TARGETED THERANOSTIC PLATFORM FOR PROSTATE CANCER	\$224,175	\$224,175	03	50	\$112,088
Pasqualini R Staquicini F	NCI	5R01CA218853-05	6/4/18	5/31/23	FUNCTIONAL TARGETING OF THE TYROSINE KINASE EPHA5 IN RADIATION-RESISTANT LUNG CANCER	\$224,175	\$224,175	03	100	\$224,175
Sadoshima J	NHLBI	5R01HL138720-06	8/15/17	6/30/25	REMOVAL OF DAMAGED MITOCHONDRIA BY ALTERNATIVE AUTOPHAGY	\$364,040	\$91,010	03	100	\$91,010
Тао Ү	NINDS	7R01NS111553-04	7/15/19	4/30/24	ROLE OF DORSAL ROOT GANGLION FTO, A RNA DEMETHYLASE, IN NEUROPATHIC PAIN	\$320,682	\$240,512	03	100	\$240,512
Tao Y Davidson S (U. of Cincinnati)	NINDS	1RF1NS113881-01 (NCE)	9/30/19	3/31/24	DISCOVERY AND VALIDATION OF A NEW LONG NONCODING RNA AS A NOVEL TARGET FOR NEUROPATHIC PAIN	\$463,632	\$347,724	03	100	\$347,724
Tyagi S	NCI	5R01CA227291-05 (NCE)	2/16/18	1/31/24	BACKGROUND FREE AMPLIFIED SINGLE-MOLECULE FISH FOR IN SITU AND FLOW CYTOMETRIC APPLICATIONS	\$71,000	\$71,000	03	100	\$71,000
Vallat B	NSF	2112966	9/1/21	8/31/24	COLLABORATIVE RESEARCH: CREATING MECHANISMS TO MAKE INTEGRATIVE STRUCTURES OF LARGE MACROMOLECULAR ASSEMBLIES AVAILABLE FROM THE PROTEIN DATA BANK	\$152,866	\$114,650	03	100	\$114,650
Wang J	NIAID	7R01AI157046-04	9/22/20		DRUG TARGET VALIDATION OF THE ENTEROVIRUS D68 2A PROTEASE	\$533,083	\$266,542	03	100	\$266,542
Wang J	NIAID	5R01AI158775-03	1/4/22		DEVELOPMENT OF DUAL INHIBITORS TARGETING THE VIRAL MAIN PROTEASE AND THE HOST CATHEPSIN L AS SARS-COV-2 ANTIVIRALS	\$557,315	\$278,658	03	100	\$278,658
Wuhr M	NIGMS	5R35GM128813-05	7/1/18	6/30/23	DEVELOPMENT OF NEW PROTEOMICS TECHNOLOGY AND ITS APPLICATION TO STUDY CELLULAR ORGANIZATION	\$249,968	\$187,476	03	100	\$187,476
You G	NIGMS	5R01GM127788-04	6/1/18	3/31/24	NEW TARGETS FOR REGULATING DRUG/XENOBIOTIC TRANSPORTER OAT	\$192,000	\$144,000	03	100	\$144,000
Zheng X	NIDDK	7R01DK124897-03	9/18/20	7/31/24	AMINO ACIDS-RAB1A NUTRIENT SIGNALING IN THE REGULATION OF GLUCOSE HOMEOSTASIS	\$250,000	\$250,000	03	100	\$250,000
Zheng X	NCI	5R01CA260006-02	7/1/21	6/30/26	METABOLIC CONTROL AND ANTICANCER MECHANISM	\$224,175	\$224,175	03	100	\$224,175
Peer-Reviewed Research Subtotals							\$10,613,522		\$9,635,864	