

**Rutgers Cancer Institute of New Jersey
External Advisory Board Meeting**

**Minutes of the Meeting
March 14, 2018**

A meeting of the External Advisory Board (EAB) of Rutgers Cancer Institute of New Jersey was held on Wednesday, March 14, 2018 in the Auditorium, at 195 Little Albany Street in New Brunswick, NJ.

EAB Members - Present

Cory Abate-Shen, PhD	Candace Johnson, PhD (WebEx)	Marcy Waldinger
Junjie Chen PhD	David M. Livingston, MD	
I. David Goldman, MD	Benjamin Neel, MD, PhD	
Peter Houghton, PhD	Electra Paskett, PhD	

EAB Members – Absent

David Cella, PhD	Peter Glazer, MD, PhD	Stephen Schwartz, PhD
Robert DiPaola, MD	Thomas Lynch, MD	Louis M. Weiner, MD

Invited Participants - Present

Joseph Aisner, MD	Edmund Lattime, PhD	Linda Tanzer
Elisa V. Bander, MD, PhD	Steven Libutti, MD, FACS	Eileen White, PhD
Chang Chan, PhD	Sharon Manne, PhD	X.F. Steven Zheng, PhD
Cristine Delnevo, PhD, MPH	Janice Mehnert, MD	Wei Xing Zong, PhD
Shridar Ganesan, MD, PhD	Paul Novembre	

Call to Order

Dr. Candace Johnson called the meeting to order at 8:10 am. She welcomed the Board and solicited member introductions. The focus of this meeting is the upcoming National Cancer Institute (NCI) Cancer Center Support Grant (CCSG) site visit.

Review and Approval of the Minutes

The minutes of the June 27, 2017 meeting were reviewed. Upon motion duly made, seconded and unanimously carried, the minutes of the meeting were approved.

Introductory Remarks - Brian L. Strom, MD, MPH

Dr. Strom welcomed the Board and introduced himself as the RBHS Chancellor and Executive VP of Health Affairs at Rutgers University. Dr. Strom briefly discussed Rutgers Cancer Institute (CINJ) in the context of well-known regional cancer centers establishing facilities within the State of New Jersey, emphasizing the Rutgers Cancer Institute's ability to thrive under Dr. Steven Libutti's leadership and with the support of Rutgers and RWJBH, the largest hospital system in the State.

Comments/Recommendations:

It was suggested that, at the site visit, Dr. Strom elaborate on his role at Rutgers Cancer Institute as well as his support of Dr. Libutti's leadership. The relationship between Princeton and Rutgers should also be expanded upon, emphasizing its uniqueness.

Director's Overview - Steven K. Libutti, MD, FACS

Dr. Libutti introduced himself as the Director of Rutgers Cancer Institute of New Jersey. Dr. Libutti gave an overview of his strategy for CINJ. As the only NCI-designated comprehensive cancer center in the State of New Jersey, we are obligated to provide the best cancer services, cancer research, and community outreach. The catchment area for the Cancer Center is defined as the State of New Jersey.

New Jersey is the most densely populated State in the United States with a population of approximately 8.9 million. It is also one of the most ethnically diverse States in the nation. There is a high cancer incidence and mortality rate in New Jersey with 50,000 new cases annually and 16,100 cancer deaths. In terms of cancer incidence and mortality in the State, much geographic diversity exists from north to south and east to west. Through various partnerships with health systems, CINJ has been able to more effectively deliver care and conduct research across the State. Significant disparities across racial distinctions exist in a number of counties throughout New Jersey due to limited access to care.

The Center's vision and mission is to become the State's resource for and leader in cancer research, prevention, diagnosis, treatment, surveillance, and survivorship. Rutgers Cancer Institute should: 1) lead in basic science discovery and focus basic science efforts within the programs of the cancer center support grant; 2) translate findings from our laboratories into the clinic leveraging our unique resources (e.g., cGMP facility) and location (industry partnerships); 3) enhance access to cutting edge clinical trials; 4) provide exceptional cancer care in a timely fashion with the patient as the focal point; and 5) educate clinicians and patients, which is a critically important component of the mission.

Dr. Libutti went on to discuss the history of the Cancer Center which was established in 1992 through a P20 planning grant awarded to Dr. Michael Gallo and became New Jersey's first NCI designated cancer center in 1997 under Dr. William N. Hait, and in 2002 achieved Comprehensive Cancer Center designation. In 2013 the cancer center was integrated into Rutgers University as a result of the New Jersey Medical and Health Science Restructuring Act, as an independent unit. Rutgers Cancer Institute of New Jersey is a member of the Big Ten Cancer Research Consortium and a Consortium Cancer Center with Princeton University made up of 227 members. A letter of intent was signed last summer between RWJBarnabas Health and Rutgers University for operational co-management of resources. Rutgers Cancer Institute of New Jersey has essentially become the cancer service line for RWJBarnabas Health.

Dr. Libutti briefly discussed the Center's leadership team. Dr. Sharon Manne was highlighted for her dual appointment; she is currently the Associate Director of Population Research, as well as the Interim Associate Director for Community Outreach and Engagement. A national search for a new Associate Director for Community Outreach and Engagement is underway and an offer has been extended to a national leader.

All of the clinicians that are cancer practitioners within Rutgers Biomedical and Health Sciences are resident faculty within the Cancer Institute. The Cancer Center provides the resources for the resident faculty, including salary. All the clinical revenue that comes from their activities flows back to the Center under an enhanced RVU model. Clinical faculty hold academic appointments at Rutgers Robert Wood Johnson Medical School (RWJMS) in New Brunswick and New Jersey Medical School (NJMS) in Newark. These leaders represent all of the various oncology disciplines (medical, surgical, and radiation oncology). Dr. Peter Cole, a new faculty recruit will be joining the Cancer Institute in July as the Chief of Pediatric Hematology/Oncology to help build the clinical and research activity in that division.

Rutgers Cancer Institute has a number of subspecialty, multidisciplinary clinics that are responsible for clinical care on the New Brunswick campus, other campuses throughout the health system, and all clinics. CINJ's Research Programs are divided into five areas of focus: Cancer Metabolism and Growth; Genomic Instability and Cancer Genetics; Cancer Pharmacology; Clinical Investigations and Precision Therapeutics; and Cancer Prevention and Control. The Cancer Institute of New Jersey also has eight shared resources: Biomedical Informatics; Biometrics; Biorepository and Histopathology; Comprehensive Genomics; Flow Cytometry; Genome Editing; Metabolomics; and Research Pharmacy. There are currently two developing shared resources.

Statewide focus and its consortium relationship with Princeton University affords CINJ significant opportunities to drive research across the State. CINJ has twelve partner hospitals through RWJBarnabas Health, as well as additional statewide partners across New Jersey with whom they collaborate in cancer screening, prevention, and clinical trial activity. Rutgers Cancer Institute of New Jersey is not only a cancer center for a single health system, it is the State's cancer center.

The consortium with Princeton University is a formalized relationship that promises strength in cancer research in New Jersey. CINJ's Steering Committee with Princeton helps to oversee the relationship. The Committee represents individuals at the highest level of both institutions. All members have access to the shared resources. Dr. Libutti, as the Director, has oversight of all shared resources whether they are located at Rutgers or Princeton.

CINJ is a Center of Excellence for Cancer Surveillance and is responsible for the New Jersey State Cancer Registry in conjunction with the Health Commissioner of the State. CINJ is a national resource for other institutions that use the Cancer Registry for science and studies specifically focused on the New Jersey population. The National Cancer Institute's SEER program (Surveillance Epidemiology and End Results Program) provides a unique opportunity for CINJ. This program functions by collecting and disseminating cancer epidemiology data for the patient population in New Jersey, which supports initiatives all across the United States. Through a study of the SEER registry, it was revealed that lung and colon cancer screening in New Jersey is not up to national standards. Working together with the State Health Department and with legislatures, CINJ was successfully lobbied for an additional \$2 million above their \$28 million/year allocation from the State to fund what is now called Screen NJ. Screen NJ is a statewide cancer prevention, education, and detection program with partners that include Health systems, federally qualified health centers and other cancer centers. Screen NJ will ultimately span the entire State and eventually include screening for other types of cancer.

Dr. Libutti discussed the 2011 Cancer Center Support Grant review. In the review, Rutgers Cancer Institute did very well, with an Impact Score of 20-outstanding merit. A number of CINJ's strengths were identified; among them were outstanding science, strong shared resources, and growth in investigator-initiated trials. However, some missed opportunities were identified such as access for all members to and Center Director oversight of CCSG supported shared resources, and increased multi-PI grants. As a result of the review at the 2015 site visit, a five-year strategic plan was created. The Cancer Institute of New Jersey is currently in the middle of operating that strategic plan. Planning for the next five-years will begin this fall. The strategic planning process is an ongoing activity with significant interaction with very involved External and Internal Advisory Boards and the Consortium Steering Committee.

There have been key leadership recruitments over the past two years in basic science as well as medical, surgical, and pediatric oncology (Dr. Howard Hochster, Dr. Wadih Arap, Dr. Renata Pasqualini, Dr. Richard Alexander, Dr. Andrew Evans, Dr. Peter Cole). Additional faculty recruitment has also taken place over the past 24 months with positions being filled in Basic, Clinical, and Population Research. Newly launched initiatives within the Cancer Institute include the Center for Immune Oncology, Precision Medicine, Center for Neuroendocrine Tumors, and Screen NJ.

In summary, the Cancer Institute of New Jersey derives significant strength from realignment within Rutgers University as an independent unit. The Cancer Institute has increased NCI and overall peer-reviewed funding since the prior grant period. There has been an increase in interventional investigator initiated clinical trial accrual and increased collaborative publications across programs. The Cancer Institute of New Jersey has received significant State support and state-wide recognition, authority, and commitment. The Rutgers Cancer Institute has become well positioned to positively impact the catchment area and beyond during the next grant period.

Comments/Recommendations:

The EAB suggested that the Rutgers Cancer Institute should not be modest about the fact that it receives \$68.2M of institutional commitment. Dr. Libutti should highlight the length of his role at the Cancer Institute of New Jersey earlier in the presentation because he has made such great strides in a short length of time.

Clinical revenue is very important to highlight mainly because many other cancer centers do not have access to this revenue. It should be added to the Annual Institutional Commitment slide or the Clinical Trial Accrual slide. The Princeton University consortium is impressive and should be emphasized. The percentage of patient accruals should be included when addressing the increase in trial accruals.

Since the Catchment Area is presented early on in the meeting, the EAB strongly advises that the Community Outreach and Engagement presentation should immediately follow. Doing this would help to set the stage for all the research programs that follow.

The use of pilot funds could be presented more clearly/thoroughly. Screen NJ is spectacular and the implemented policy initiative is an enviable success.

Overview of Consortium Research - Yibin Kang, PhD

Dr. Eileen White, Deputy Director and Associate Director for Basic Research, gave an overview of the Princeton/Rutgers consortium in the absence of Dr. Kang. The Consortium began through mutual recognition concerning the benefit of combining Princeton's cancer basic science with the research portfolio and clinical research program of the Cancer Institute of New Jersey. As Princeton lacks a medical school, the Cancer Institute of New Jersey fulfills Princeton's need to accommodate the translational research aspirations of their faculty. The consortium was formalized in 2009, recognized by NCI in 2011, and renewed in 2015.

There are a total of 19 cancer center members from Princeton, many of whom also have appointments at Princeton's Lewis Sigler Institute of Integrative Genomics. Princeton faculty members belong to three CINJ research programs (CMG, GICG, and CP). Currently, there are 16 cancer-focused, peer-reviewed funded research projects equivalent to an NIH R01 from 11 independent PDs/PIs by Princeton faculty/CINJ members. Princeton not only contributes to the science but also to the infrastructure. Some shared resources are located both at Rutgers and Princeton (Metabolomics, Flow Cytometry, and Small Molecule Screening). Princeton faculty also direct cancer center shared resources (Metabolomics, Genome Editing, and Small Molecule Screening).

The Consortium Steering Committee is made up of the leadership of both Rutgers and Princeton; they provide significant oversight for the activities of the consortium. The Committee advises on programmatic integration of members, conducts strategic planning for programmatic and shared resource development, advances translational research through collaboration, and resolves differences.

Over the last seven years, a total investment of \$450,000 in pilot awards with Princeton University members resulted in a \$1.5 million return on investment of externally awarded grants, plus several high-profile publications. The future direction of the Consortium Steering Committee is to strengthen cancer population research collaborations between CINJ's CPC Program and Princeton's Woodrow Wilson School of Public and International Affairs, integrate Princeton's research excellence in computational biology and genomics into the Precision Oncology efforts, build on success of the joint MD/PhD program to obtain a joint NIH training grant in molecular oncology, and to use CINJ as a focal point for joint faculty recruitments of CINJ's resident faculty who also have academic appointments at Princeton.

Comments/Recommendations:

Princeton adds a level of credibility to the consortium and there is a lot of money on the bottom line. The Committee wanted to know the future financial plans and the chances of CINJ raising money with Princeton.

Overview of Basic Research - Eileen White, PhD

Dr. Eileen White, Deputy Director and Associate Director for Basic Research, gave an overview. One of the goals of the basic research programs is to build on the strengths of cancer biology, metabolism, DNA repair mechanisms, genomics, and pharmacology. Another goal is to engage research and technical strengths across the consortium while promoting research to serve the catchment area.

There are three basic science programs: 1) Cancer Metabolism and Growth (CMG); 2) Genomic Instability and Cancer Genetics (GICG); and 3) Cancer Pharmacology (CP). All of the Basic Science discoveries that emanate from the three programs are translated within the Clinical Investigations and Precision Therapeutics Program (CIPT).

Dr. White's role as Associate Director includes identifying new opportunities for scientific and translational impact, recruiting new members, promoting programmatic collaborations, enabling connections with clinical/population research via collaborations with other Associate Directors, and evaluating, strategically managing, and advocating for the needs of the basic scientists.

There has been extensive progress toward the strategic goals in Basic Research. Increased collaboration and publications, enhanced relationships with Princeton University, multiple scientific retreats, new peer-reviewed funding, and launched developing shared resources such as Immune Monitoring and Small Molecule Screening are some examples of this progress.

Future directions include recruiting additional members, expanding the consortium, and hiring new faculty focused on cancer immunology and neuroendocrine tumors. The AD Basic Research will work to promote translational research throughout the catchment area, expand shared resources use/development, expand training of junior faculty, and increase collaborative grant awards.

Comments/Recommendations:

The Committee suggested that, when explaining the duties of Associate Director, only focus on the responsibilities relevant to that role. More examples should be given regarding translational research relevant to the Catchment Area. The EAB had concerns with the many roles Dr. White has in the Cancer Center.

Cancer Metabolism and Growth Program (CMG) - Eileen White, PhD

Dr. Eileen White, Co-Leader of the Cancer Metabolism and Growth (CMG) program, provided an overview. The overall goal is to determine how oncogenic alterations promote tumor cell metabolism, growth, and survival and alter tumor-host interaction to facilitate disease progression. The ultimate goal is to identify new approaches to improve cancer treatment through innovative biochemical, molecular, and biological research. There are three Program aims: Identify Metabolic Dependencies in Cancer; Identify Mechanisms of Nutrient Scavenging; and Metastasis Mechanisms and Role of Microenvironment. The program has 59 members with peer reviewed grant support that totals \$14.3 million with \$3 million coming from the National Cancer Institute. Dr. Wei-Xing Zong, professor of Chemical Biology at Rutgers University, was added as Co-Leader to CMG. Collaborative funding, impactful science, consortium members, funding cancer focus and publications were all increased.

The program was rated outstanding in the previous review and the members of Cancer Metabolism and Growth have worked to improve the program further. There has been a significant increase in overall publications, most importantly collaborative ones. The increase in multi-PI grants has been a driving force in the collaborative science with most of the grants incorporating the Rutgers-Princeton Consortium.

Comments/Recommendations:

The Committee wanted to know why Dr. Zong was not presenting. The cancer relevance of each grant should be thoroughly explained and the roles of each Program Leader should be expanded on. In addition, they suggested that the future plans be further developed.

Genomic Instability and Cancer Genetics Program (GICG) - Zhiyuan Shen, MD, PhD

Dr. Zhiyuan Shen, Co-Leader of the Genome Instability and Cancer Genetics (GICG), provided an overview of the program. The overall goal and the three aims of the program are: to determine how genomic instability is produced, how genomic instability contributes to tumorigenesis, and to define cancer genome landscapes.

GICG has 44 members and \$8.6 million in cancer-relevant funding. Since scoring outstanding in the previous site visit, there has been more emphasis on the underlying mechanisms applicable to multiple cancer types, expansion in cancer genomics, increased membership, increased collaborative funding, increased collaborative publications, and enhanced translational research.

GICG focuses on three scientific aims: 1) Distinct Roles of BRCAness Genes in Cancer; 2) Novel Mechanisms of p53 Mutations in Tumorigenesis; and 3) New Insights on the Landscapes of Cancer Genomes. In terms of the Translational Pipeline, there is a combination of identification and validation of biomarkers and targets for therapy. Two specific unique aspects of GICG's translational status are 1) the tools for precision medicine and immunotherapy and 2) reverse translational studies.

Relevant to the catchment area, GICG addresses common cancer types that have higher-than-average incidence rates in New Jersey, including breast cancer, leukemia, brain tumors, prostate cancer, and colon cancer. Program members were awarded nine pilot and three new investigator awards which led to \$10 million in external grant funding. All nine shared resources are in use contributing to more than 100 publications and 36 peer-reviewed awards. Training and recruitment include four predoctoral F-awards, 29 NJCCR-funded predocs/postdocs fellowships, 17 new full members and six external recruitments. GICG's vision for the future is to promote synergistic team science and facilitate translational science.

Comments/Recommendations:

It was suggested that the interaction between Princeton investigators and CINJ investigators should be highlighted and an example of inter-program collaborations with Princeton should be shown. Too many contributions were listed and only one example should be highlighted. Breast cancer is not the only focus of the program and that needs to be better represented in the slides. Community outreach needs to be added to a slide.

Cancer Pharmacology Program (CP) - Stephen K. Burley, MD, DPhil

Dr. Stephen Burley, Co-Leader of the Cancer Pharmacology program, gave a brief overview on Cancer Pharmacology. The overall goal of the program is to discover more effective cancer treatments through pharmacology-based preclinical research. The Cancer Pharmacology program has 36 members with peer reviewed grant support totaling \$17.1 million with \$2.6 million coming from the National Cancer Institute. Improvements, such as collaborative publications and multi-PI grants (four R01's, one R21, one R43/R44), have been made in addition to thematic integration and chemistry discovery and development. Since 2011, the program has been reorganized to sharpen the focus on Cancer Pharmacology. Also, two Princeton University chemists have been added and seven new Rutgers faculty members have been recruited. The program has become more productive in terms of collaborations, publications, and Federal grant funding. In partnership with Princeton University, Cancer Pharmacology has established a Small Molecule Screening Eco System that allows program members to take new targets through the entire drug discovery pipeline.

The program has three specific aims: 1) To understand the biology of key molecular targets; 2) To determine the modes of action and mechanisms of resistance to anticancer agents; and 3) To discover and develop novel therapeutics and drug delivery technologies. Under Aim 1, Princeton colleague Dr. Muir has developed a chemical tool box for studying Epigenetics and Drs. Zheng and Burley are collaborating on understanding how alterations in mTOR signaling effect therapeutic outcomes in cancer. These and other accomplishments under Aim 1 have generated high impact publications and significant Federal funding. Under Aim 2, colleague Dr. Suzie Chen collaborating with members of the CIPT and the CMG programs elucidated the mode of action of the USFDA approved Riluzole and Trigriluzole Prodrug which targets GRM1 in metastatic melanoma. The project has led to multiple clinical trials in collaboration with Drs. Mehnert and Silk. Dr. Victor Jin, in

collaboration with Gerry Shulman from Yale University, has discovered that the USFDA approved agent Niclosamide is impacted in both diabetes and cancer. Niclosamide is a weak mitochondrial uncoupler that forces rapidly dividing cancer cells to waste energy in a futile cultivation cycle. These and other accomplishments in Aim 2 have resulted in high impact publications and significant grant funding. Under Aim 3, colleague Dr. Carpizo, in collaboration with Dr. Levine, discovered a series of compounds that act on mutant forms of the p53 protein to restore tumor suppression in human cancers; Dr. Carpizo's contributions have been recognized with a prestigious Herrington Scholar award. Additional major discoveries have been made under Aim 3 by Drs. Moghe and Roth who have pioneered use of new rare earth materials for deep tissue tumor imaging. Another program member, Dr. Minko, is taking a complimentary nano carrier approach that simultaneously supports imaging and drug delivery for metastatic lesions. CINJ's shared resources have played critical roles in the success of all three aims.

Working with clinical investigators in large and small bio pharmaceutical companies, the Cancer Pharmacology program has made significant contributions to the translational pipeline. Going beyond the accomplishments described in the three aims, a novel topoisomerase 1 inhibitor previously developed by Dr. LaVoie and his colleagues has gone through multiple human clinical trials. Work is now progressing on a prodrug form of this compound targeting colorectal cancer and it appears to have great potential as a single agent and in combination with immune checkpoint inhibitors. In addition to Dr. LaVoie, Drs. Sabaawy and Bertino are targeting self-renewing tumor initiating cells, reducing intracellular BMI-1 levels using a novel compound (C209) that selectively inhibits mRNA translation. In research relevant to the catchment area, Cancer Pharmacology members routinely conduct studies using locally sourced patient derived materials to test new agents in cancers with high incidence in the State of New Jersey.

The Consortium provides considerable value to Cancer Pharmacology. The program benefits from development funds, training programs, shared resources, meetings, retreats, and program recruitment. The Cancer Pharmacology program vision for the future is to build on their considerable success and foster multi-disciplinary approaches in target validation and drug discovery. Dr. Burley's personal commitment to the program is to develop the Protein Data Bank as a global resource for oncology. Drs. Libutti and Burley will continue to add new members with program focused recruitment in Medicinal Chemistry, Chemical Biology, and Data Science. As the Director of the Institute for Quantitative Biomedicine in Piscataway, Dr. Burley is planning joint recruitment with CINJ to bring in a data scientist who will pursue large data driven drug discovery.

Comments/Recommendations:

The committee felt that Dr. Burley should emphasize his short tenure in the role of Program Leader. The program has had some negative feedback in the past and a direct response should be given. The slide presentation was well done but the three aims of the program need to include a disease relationship. The Rab1 slides should include clinical implications. The term "added value" needs to be added to the presentation; the program will be scored based on how much added value the program provides to the cancer center.

It should be highlighted that Cancer Pharmacology adds value to Princeton University. In the write-up there is a mention of the use of core facilities but it is not mentioned in the slides; it needs to be included in the presentation.

Overview of Translational Research - Shridar Ganesan, MD, PhD

Dr. Shridar Ganesan, Associate Director for Translational Research, provided an overview of Translational Research and introduced the Clinical Investigations and Precision Therapeutics Program. As Associate Director of Translational Research, Dr. Ganesan's role is to 1) promote the transition of basic science discoveries across the Consortium into clinical/translational studies; 2) promote the translation of important clinical findings into novel basic research projects; 3) foster inter-programmatic collaborations; 4) provide mentorship and support to junior faculty investigators; and 5) maintain and expand research infrastructure to support our clinical and translational investigators. Expansion of resources critical for translational research, expansion of system biology, and development of precision oncology infrastructure are the three translational

initiatives that have been successful during the present grant period. The expansion of resources critical for translational research include the reorganization of the Biospecimen Repository and Histopathology shared resource, the expansion of Comprehensive Genomics shared resource, and the development of patient-derived models. The expansion of Systems Biology involved the recruitment of faculty and the expansion of computational infrastructure. The backbone of the precision oncology infrastructure is the development of a fully consented tumor sequencing protocol in which patients with rare and refractory cancers undergo next generation sequencing and all of the data is collected in a clinical data warehouse; there are over 2,000 specimens that have next generation sequencing and annotated clinical data.

In support of the translational pipeline, program leaders, members, and Associate Directors meet regularly to nominate both basic science discoveries for translation into the clinic and novel clinical observations for reverse translation. Each of these programs try to partner an investigator from a research program with a clinical investigator with institutional funding, as needed. Dr. Ganesan hopes to recruit new physician scientists, broaden precision oncology, expand the data warehouse to partner hospitals, increase small molecule screening capabilities with Princeton, and develop more educational opportunities in translational research.

Comments/Recommendations:

The Translational Pipeline slides should appear in the Director's Overview instead of this presentation. Overall, the science was exciting and should be more of the presentation's focus rather than speaking about roles and responsibilities.

Clinical Investigations and Precision Therapeutics Program (CIPT) - Janice Mehnert, MD

Dr. Janice Mehnert, Co-Leader, Clinical Investigations and Precision Therapeutics program, gave a brief overview. The overarching goal of the CIPT program is to translate science into early phase trials and to new diagnostic, prevention, and therapeutic strategies. The CIPT program fosters inter-programmatic collaborations with the other CCSG Research Programs. The membership within this program is quite diverse; having experts in pathology, radiology, biostatistics, computational imaging, and also experts from multiple clinical disciplines. The diversity of the program members allows the program to foster collaborations with the health program and build strong inter-programmatic collaborations with the other CCSG research programs.

The Clinical Investigations and Precision Therapeutics program aims have been specifically formulated to capitalize on research within each of the basic science programs that is currently primed for translation. In aim 1, the focus is on targeting cell death and survival pathways in cancer; aim 2 focuses on targeting DNA repair cell cycle checkpoint abnormalities in cancer; aim 3 is the development of tumor vaccines and rational combinations of immune-oncology approaches; and, aim 4 concentrates primarily on investigating markers of response and resistance to cancer therapy. The program is composed of 60 members, 22 departments, seven schools, and one university. The peer review grant support funding for this program totals \$5.8 million in annual direct costs and consists of eight fully funded R01 equivalent projects, nine multi-PI grants, and seven PI/PDs. Publications and multi-PI grants have more than doubled since the prior submission period.

There is ongoing significant progress towards strategic goals within this program. Leadership has changed in this program with the appointments of Drs. Mehnert and Ganesan. The program has been reorganized to include Precision Medicine Oncology and focus on translational activities such as development of genomic sequencing trials, the molecular Tumor Board, and mutation directed ISTs. There has been an increase in representation of investigators from surgical and radiation oncology disciplines. Translational immune-oncology focused research has increased, along with team science approaches and collaborative funding.

Very close work is done with the Basic Science Research Programs and the Associate Directors to identify high priority ideas that are feasible for translation. The CIPT program seeks to translationally integrate its research across disease specific groups. The program's impactful advances include practice changing trials, establishment of Precision Oncology Platform, and human phase 1 trials supported by center science. Collaborations with the Cancer Prevention and Control program extend across disease specific groups and

helps CIPT to expand the program's clinical research footprint. Relevant to the catchment area, the program focuses primarily on skin cancer, thyroid cancer, and the south Asian population across New Jersey.

The recruitment of seven new program members, developmental funds, shared resources, and the Clinical Investigations and Precision Therapeutics meetings for translation of discoveries from Basic Science Programs are all examples of CIPT's value to the Cancer Center. The value of the program is also shown through the provided translational opportunities, enhanced inter-programmatic interactions, offered opportunities for National validation of early phase trials, and educational seminars. In looking towards the future, the new partnership with RWJBarnabas Health gives the opportunity to increase the reach of the Phase 1 Program, continue the work with the ET-CTN, and continue the development of first in human trials with Rutgers-developed compounds. Immunotherapy research will be expanding into a program with the further development of a GMP facility for cellular immunotherapy and the recruitment of basic and clinical immunologists. The Clinical Investigations and Precision Therapeutics Program will continue its work on expanding and participating in molecularly targeted trials across multiple mechanisms and will focus on characterization of individual cancer.

Comments/Recommendations:

When speaking about the south Asian population, more should be said to explain who is represented within this population. The low funding for the program should be addressed because it reflects negatively on the program. There was no mention of the support given to junior faculty by the program, this is of high importance. Focus on the catchment area was well done.

Overview of Clinical Research, Clinical Protocol and Data Management, Protocol Review and Monitoring System - Howard S. Hochster, MD and Joseph Aisner, MD

Howard S. Hochster, Associate Director for Clinical Research provided an overview. The mission of Clinical Research is to conduct the latest state-of-the-art trials based on the Cancer Center's science and translation; to train new generations of clinical investigators; and to deliver state-of-the-art trials to the people of New Jersey. The Clinical Research Leadership Team includes the Associate Director for Clinical Research, Howard Hochster, MD; Associate Director for Translational Research, Shridar Ganesan, MD, PhD; Phase 1 Director, Janice Mehnert, MD; OHRS Director, Tracie Saunders, RN, MS; Scientific Review Board Chairs, Joseph Aisner, MD and Rajat Bannerji, MD; Human Research Oversight Committee Chairs, Dirk Moore, PhD, and Anne Silk, MD; and Disease Specific Group Leaders.

Clinical Research Leadership provides infrastructure for a unified and broad clinical research operation while facilitating the development and implementation of translational research through investigator-initiated trials. Leadership continues to organize and support CINJ science-based trials and organizes inter-programmatic meetings. The leadership agenda extends to the development of mechanisms for seed/pilot support and the facilitation of inter- and intra-programmatic collaborations. The Clinical Research Leadership team mentor junior faculty along with the fellows in clinical trial conduct and culture. Working groups such Phase 1, Precision Medicine, and Immunotherapy support Clinical Translational Research. The Clinical Research network has many opportunities to expand its research in the State of New Jersey through the program's collaborative relationship with many other hospitals within the State. The RWJBarnabas Health partnership is an important opportunity in the Clinical Research endeavor. A new organizational structure based on the memorandum of understanding between Rutgers and RWJBarnabas Health has led to a new oncology service line, clinical trial leadership, consolidation of research services, a partner physician research working group, and LAPS submission.

During the prior review, Clinical Protocol and Data Management scored exceptional. Since the previous review, IIT and peer-reviewed trial participation has increased, an increased agenda of new IITs has been developed, the internal RFA process has continued cross-cutting, and interactive themes have been developed, the genomics-based research agenda has been developed, and themes, rather than diseases, are now being emphasized. In the future, Clinical Protocol and Data Management plans to unify and strengthen the research network centered in CINJ and deployed throughout RWJBH.

Joseph Aisner, Chairman of the Protocol Review and Monitoring System briefly explained the flow of review. Studies begin in Disease Specific Groups. They are then submitted to the Scientific Review Board/Protocol Review and Monitoring System for review. After the studies are reviewed, the study is passed on to the IRB. The IRB accepts applications for cancer studies only after the Scientific Review Board has reviewed and approved them. An IRB representative attends the Scientific Review Board and HROC meetings ad-hoc. The Scientific Review Board meets twice monthly and there are primary and secondary reviewers. During the review process, there is a statistical review, an exempt process and an administrative approval of all NCTN, ETC, and externally reviewed trials. The possible outcomes of the Scientific Review Board's review include approved, approved with conditions, deferred, or disapproved. Any amendments that vary from the protocol must first be reviewed by the Scientific Review Board and usually go into administrative review by the co-chairs. The Protocol Review and Monitoring System review activities show that the majority of the trials submitted within the past few years have been investigator initiated or national trials, with industry trials representing a small percentage. Reviews have resulted in a percentage of the trials being either conditionally approved or disapproved.

Howard S. Hochster, Associate Director for Clinical Research emphasized the mechanisms used to stimulate clinical research. Institutional Multidisciplinary Paradigm to Accelerate Collaboration and Translation (IMPACT) is a mechanism which provides money to program leaders to support clinical research and supports the working group meetings. The integration of biomedical informatics, the pipeline seminar series, and the completion of the imaging and response assessment initiative are also mechanisms to stimulate clinical research. There are a number of strategic efforts toward research relevant to the catchment area. Clinical trials are conducted in thyroid cancer, cervical cancer (Newark), and skin cancer. The future direction of the Clinical Research program is to expand their network with RWJBarnabas Health which includes budget, contracting, IRB, EMR, centralized regulatory oversight, centralized operational oversight; improving the clinical trial activation process; expanding OHRS staff by developing a training and retention program; expanding biomedical informatics/ORIEN to support more investigator-initiated research; identifying new drugs in development within the Rutgers-Princeton consortium; fostering closer integration with population sciences; and recruitment and training of new clinical investigators to strengthen the culture of clinical investigations.

Comments/Recommendations:

The clinical trial time frames did not seem realistic to the EAB. Dr. Hochester should elaborate on his reasons for leaving Yale and coming to Rutgers. The relationship between the clinical trials and the Basic Science Program could benefit from a half-day retreat in the next year to see if there are any interesting or new connections that would facilitate the trials. An epi study is not necessarily a clinical trial, an explanation of the type of epi study should be shown on the slides. The women and minorities focused slide should be redone, the point of the slide is not coming across clearly. The catchment area should be mentioned more in the slides, especially involving women and minorities. Some of the metrics for pediatrics were not covered and will be discussed further in the closed session. Opening clinical trials across New Jersey will be very expensive and risky, and the EAB questioned whether the cancer center is equipped for this task. Only current data should be shown in the write up and on the presentation slides. Interventional trials and therapeutic trials should not be conflated but addressed separately.

Cancer Research, Career Enhancement, and Related Activities - Edmund C. Lattime, PhD

Dr. Edmund C. Lattime, Associate Director for Research and Education Affairs gave a brief overview. Drs. Lattime and Chaudhary oversee career enhancement and related activities at the Rutgers Cancer Institute of New Jersey. The overall mission is to develop and implement a comprehensive program of education and career enhancement activities for training the next generation of researchers and students from underrepresented population groups. The focus of the program's activities fall under three aims: 1) to develop and implement programs that leverage the strengths of CINJ in training the next generation of researchers; 2) to provide CINJ seminars, conferences, and retreats to impart the most up-to-date information for the education of trainees, faculty, and the community; and, 3) to provide state-of-the-art career enhancement opportunities to CINJ junior faculty.

A broad portfolio has been developed of established education and training activities that span from middle school to junior faculty. The BioCONNECT program is an example of the training provided for next generation researchers. This program is a week-long experience at Rutgers Cancer Institute of New Jersey for high school students. The success of the BioCONNECT program led to the development of a transportable curriculum that was piloted with 513 science teachers in five states and has reached over 100,000 students. In the undergraduate space, Education Affairs continues to develop programs in conjunction with the consortium departments and institutions such as Rutgers Honors Organic Chemistry and a summer research experience in mathematics. The CURE (Continuing Umbrella for Research Experience) program provides research training and academic and professional enrichment activities for highly motivated local high school and undergraduate underrepresented minority students. In the graduate space, programs such as the Princeton MD/PhD Program, Graduate Training Program in Cancer Biology, Postdoctoral Training Program in Cancer Biology, Postdoctoral Training Program in Translational Research in Cancer, and Career Development for Predoc and Post-doc Trainees are offered. There are also a number of post graduate clinical training programs which are all accredited and have a research period of at least six months.

Center-coordinated conferences, seminars, and retreats are a large part of the Cancer Research, Career Enhancement, and Related Activities Program. The Annual Retreat for Cancer Research in New Jersey, The Governor's Conference, Graduate Student/Fellow Weekly Research Seminar, The Distinguished Lecture Series, Cancer Center Grand Rounds, program meetings, and program retreats all have a statewide reach. In the area of faculty career development, all of the junior faculty are provided with faculty mentoring teams. These teams work with the faculty and have targeted research curriculum. The ACS Junior Investigator Institutional Research Grant has been funded four times in the first year and helps to fund the junior faculty. There are currently 17 faculty members that are on the tenured track, all of the proposed members were granted tenure in the last grant period.

Going forward, the Cancer Research, Career Enhancement, and Related Activities Program plans to leverage strengths to develop and fund institutional research programs across the consortium. The program is hopeful that it will develop more program specific curriculum and short-term training opportunities, and continue to develop innovative programs.

Comments/Recommendations:

The EAB suggested that a slide be incorporated into the presentation to highlight Dr. Lattime's strengths.

Overview of Shared Resources - Eileen White, PhD

Dr. Eileen White, Deputy Director and Associate Director of Basic Research gave a brief overview of Shared Resources. The overall goal of the Shared Resources is to facilitate affordable and priority access to innovative and specialized equipment, services, and expert consultation, in order to provide state-of-the-art technology and meet the members' evolving research needs. There are currently eight shared resources: Bioinformatics; Biorepository and Histopathology Service; Biometrics, Comprehensive Genomics; Flow Cytometry and Cell Sorting; Metabolomics; Genome Editing; and Research Pharmacy. There are currently two developing shared resources, the Immune Monitoring Core and the Small Molecule Screening Program.

Comments/Recommendations:

The EAB suggested that the developing shared resources should not be incorporated into this presentation. The reasons for a facility at both campuses should be explained. There needs to be an appointment of a person who wants to do the job of overseeing all of the shared resources as opposed to oversight by multiple Associate Directors. It needs to be made clear that an Associate Director of Shared Resources will be appointed before next year.

Center Administration - Linda Tanzer

Linda Tanzer, Associate Director for Administration and Planning gave a brief overview. The research mission is central to all activities and operations. Strategic planning, deployment of developmental and philanthropic

funds, optimized facilities and space management, skilled streamlined workforce, support for faculty translational collaborative research, shared resources that support and drive the science, and business planning and budgeting are all part of the integration of the research mission. Center Administration has been consistent across several renewals and has evolved with the needs of the Center.

Center Administration provides administrative oversight such as accurate data and user feedback for annually reviewed Shared Resources. Over the last grant period, Center Administration supported significant growth across the institution from patient volumes to cancer focused research. The plan for the next grant period is to expand the footprint for the New Brunswick campus as well as the Newark campus and to deploy research across the greater catchment area.

Center Administration works within a matrix and a consortium. Offices within the Cancer Center align very closely with their counterparts at Rutgers University. Center Administration is afforded a great deal of autonomy and authority so that they can accomplish the Cancer Center mission. Center Administration has a very close working relationship with Princeton's leadership and administrators. The request for CCSG support is approximately ten percent of the total Center Administration cost that is applicable to the CCSG.

The future direction for Center Administration includes the design and construction of a new facility; incorporation of the Newark campus; and the development of the next strategic plan with a very complex and evolving environment; and a new vision with the new director.

The Leadership Team, a core of very experienced, and dedicated leadership, has been consistent across both the merger with Rutgers University and the transition of directors. Two new leadership positions, Associate Director for Consortium Research and Associate Director for Community Outreach and Engagement have been created to ensure that there are dedicated drivers for deploying research across the consortium and catchment area.

Dr. Libutti empowers Senior Leaders with the resources and authority necessary to accomplish the purpose of leadership roles. There is ample opportunity to meet with Dr. Libutti as a group in various Committees including Research Leadership Council and one-on-one. Every Associate Director of an area of science who is charged with deploying something broader than a cost center, negotiates an annual budget where they can request expenditures such as recruitment of faculty in various departments or enhancements to a shared resource. Every year a budget is negotiated that is tooled toward accomplishing strategic objectives.

Internal and External Advisors meet formally in Boards and *ad hoc*, as necessary. The Internal Advisory Board supports the optimization of organizational capabilities and institutional commitments. The Consortium Steering Committee works to make sure that the value of the consortium to CINJ continues to increase. The External Advisory Board provides guidance and advice on the organization, strategic planning, research programs, etc. EAB guidance has been implemented by using the reports received every year as part of strategic planning. Examples of how EAB guidance has been implemented are shown through the restructuring of research programs, investing in precision medicine research, and expanding the catchment area.

Midway through the current five-year planning cycle, a management platform, Envisio, was deployed. Envisio helps to enhance measures of success by providing greater transparency regarding accountability and responsibility.

The future goals of leadership, evaluation, and planning are to enhance consortium research, develop more translational initiatives, capitalize on catchment area opportunities, continue the integration of the Newark Campus, and to implement the next five-year strategic plan.

Comments/Recommendations:

Linda is to be commended, she is a spectacular asset to the Cancer Center. The EAB felt that certain questions should be clarified in the presentation. How is the cancer relevance of grants determined? The dollar amounts

that are shown on the grants, are they all grants managed by Center Administration? How many grants does Center Administration handle for the Cancer Center? The definition of the title Associate Members should be given. The focus regarding Research Leadership Council should be on what the council does in relation to only CCSG. NCI is not contributing the majority of the funding so what makes the budget relevant to this presentation?

Community Outreach and Engagement - Sharon Manne, PhD

Sharon Manne, Interim Associate Director for Community Outreach and Engagement gave a brief overview. New Jersey is CINJ's catchment area. Rutgers Cancer Institute of New Jersey is the only NCI-designated Comprehensive Cancer Center in the State and the State supports CINJ in providing cancer care to New Jersey. With the expansion of the oncology service line to the RWJBarnabas Health System, oncology services and research have expanded throughout the State.

In terms of identifying catchment area issues such as socioeconomic disparities, data shows that there is a high percentage of minority residents, particularly in the central and northern parts of the State. New Jersey has a higher population density with less access to cancer care in the southern and northwest areas. Global State poverty and education figures in New Jersey are very low compared to other states but do still exist in the southern counties and counties near New York City. Cancer burden is defined by incidence and mortality. New Jersey has the fifth highest incidence of cancer among the 50 states. Southern New Jersey has the highest cancer burden in the State. Cancer screening disparities span across the state with mammography screening and colorectal screening below the national average in many counties within the State. Projects, research, and outreach endeavors address the inequities and disparities involving the high cancer burden and low cancer screening rates in the State. Community Outreach facilitates inclusion of underserved populations in research through outreach to enhance screening, the cancer registry to survey cancer in different communities, Screen NJ to enhance screening, and a CINJ Community Advisory Board.

Community Outreach and Engagement plans to expand the program, create a catchment area survey focusing on southern New Jersey, use big data to study access issues, and enhance partnerships with the New Jersey Cancer Education and Early Detection Screening Program.

Comments/Recommendations:

Cancer incidence on slides should be listed from highest to lowest. The main goals and focus of Community Outreach and Engagement were not presented. An org chart should be included as a slide to show clearly the line of authority and responsibility of each individual. More details need to be provided regarding plans to increase the Community Outreach and Engagement presence in Newark. The future plans for Screen NJ need to be better explained in order to prevent confusion. Two major criteria, such as policy change and assisting with clinical trials, were not included in the presentation. Community Outreach and Engagement should follow the Directors Overview on the agenda.

Overview of Population Research - Sharon Manne, PhD

Sharon Manne, Associate Director for Cancer Prevention, Control, and Population Research gave a brief overview. In Dr. Manne's role as Associate Director she has a number of different functions; most importantly, to set a strategic vision and implement it across the campus and its affiliates. Advances have been made in Population Science in the last seven years. Funded research areas have grown with new faculty and grants, the pilot program has expanded and has a high ROI, and community-based research now engages the entire catchment area. In terms of how Population Science research findings enhance dissemination, the pipeline is very different from basic science and clinical science research. There are three different areas where infrastructure has been built to make sure that the findings get translated on community, state, and national levels. Members have leadership in local and national endeavors. In the future Cancer Prevention, Control, and Population Research would like to grow their tobacco cessation program, develop intra- and inter-programmatic science, and enhance the program's state and national health impact.

Comments/Recommendations:

There is too much information in the presentation. Cancer control, advances in population research, leadership, and implementation are all Community Outreach and Engagement and should not be in this presentation. As Associate Director, the focus should be on integrating cancer prevention across the cancer center, the Program Leaders should be the ones to work with Community Outreach and Engagement. The presentation should focus on justifying the role of the Associate Director. There should be clear delineation that program leaders work vertically and Associate Directors work horizontally.

Cancer Prevention and Control Program (CPC) - Cristine D. Delnevo, PhD, MPH and
Elisa Bandera, MD, PhD

Dr. Cristine Delnevo, Co-Leader of the Cancer Prevention and Control Program, gave a brief overview of the Program's goals. The overall goal is focused on the entire cancer control continuum to reduce the cancer burden in New Jersey and beyond. Cancer Prevention and Control is organized around three specific aims; to develop and evaluate strategies to reduce cancer risk and enhance quality of life through psychological and behavioral interventions; enhance oncology care delivery, with an emphasis on the unique needs of New Jersey's catchment; to understand determinants of cancer risk, treatment and survival and quality of life outcomes through epidemiological investigations with an emphasis on minorities and underserved populations; and to understand tobacco use and implement effective tobacco control strategies at the individual, system, and population level. The program includes 25 members with \$4.6 million of funding coming from the National Cancer Institute. There has been significant progress towards strategic goals. Publications have doubled, intra-programmatic research has grown, cancer epidemiology members have grown from three to seven, there are numerous active grants, and a significant increase in tobacco control funding.

Cancer epidemiology, tobacco control, and cancer care delivery encompass the program's organizational aims. Dr. Llanos, a junior faculty member, made a major discovery in the use of hair products and its association with race and breast cancer. This particular finding generated a lot of press for Rutgers Cancer Institute of New Jersey and was highlighted on television networks, consumer reports, and numerous news articles. The Cancer Prevention and Control (CPC) Program engages members at CINJ other programs at CINJ with three individuals from the Clinical Investigations Program actively collaborating with Cancer Prevention and Control Program members. There have been changes in public health policy, such as indoor tanning regulations, dietary guidelines for cancer prevention, and the sale of flavored cigarettes labeled as cigars.

In regard to the catchment area, priority areas include breast cancer treatment and survival, reducing skin cancer, the use of tobacco in the South Asian population, and the disparities and financial burdens on patients. The value of CINJ to the program extends from the support for programmatic research to shared resources. The most impactful example of the value of CINJ to the program is the robust developmental funds and pilot awards programs. The future vision for the Cancer Prevention and Control Program is focused on targeted faculty recruitment, mentorship of junior members to R01 funding, enhanced research to assess needs of the catchment area, movement of intervention through the translational pipeline, further increase within inter-programmatic collaborations, and to leverage momentum.

Comments/Recommendations:

The EAB liked Dr. Delnevo's delivery of the presentation, they felt that it was very good, clear and energetic. There should be a more detailed focus on cross programmatic collaborations. A slide explaining Drs. Delnevo and Bandera's expertise, as well as their complementary roles should be added to the presentation. On the policy slide, the grants and publications should be added. A story should be told in which the presenter builds upon the findings and shows the impact in terms of policy changes.

Development Funds - Steven K. Libutti, MD, FACS

Dr. Steven K. Libutti, Director of Rutgers Cancer Institute of New Jersey, gave an overview of development funds. The Rutgers Cancer Institute of New Jersey leverages development funds to invest in significant research priorities. Over the prior grant period, development funds were used to enhance interdisciplinary interactions, develop genomics and metabolomics studies, and add population science depth in the Cancer

Prevention and Control Program. The determination of how developmental funds are used is broken up into categories. The most important category is the use of pilot project funds. There is a rigorous peer review effort for proposals that are submitted and this follows NIH scoring guidelines. In the last seven years of CCSG support there have been 151 pilot project applications of which 41 were funded. A new investigator award program was introduced which revolves around the recruitment of new faculty and nonfaculty investigators. The review criteria for this award program includes scientific accomplishments, potential for research program contribution, assessment of current or future research, and the alignment with the strategic vision of Rutgers Cancer Institute of New Jersey. Development funds are also used to fund the developing shared resources and the identification of scientific priorities.

It is critically important when you look at the ROI of the development funds that high risk science generates some reward. There is a \$26.8 million return on investment on new investigator awards and a \$26.6 million in peer-reviewed grant support for pilot projects. 150 publications have resulted from developmental funds which is also a return on investment and helps the advancement of science. The Metabolomics shared resource, which is supported by development funds, was used by 17 CINJ members across three research programs in a 12-month period.

The future goals are to continue the use of pilot funds for the recruitment of investigators in areas of strategic priority, development of a new shared resource in immune monitoring, development of a new shared resource in small molecule screening, and continuing to support the pilot award program.

Comments/Recommendations:

The investment in the new investigator program seems rather small, especially since there is a large amount of discretionary money at CINJ's disposal. The numbers being presented in the ROI should be better explained. It should be noted that, going forward, there should be a large emphasis on collaborative grants, precision medicine grants, and grants that impact the catchment area. Better decisions with the selection of grants and how the money is distributed need to be made. An increase in developmental dollars for Princeton and Rutgers should be requested during the site visit.

Director's Summary - Steven K. Libutti, MD, FACS

Dr. Steven K. Libutti, Director of Rutgers Cancer Institute of New Jersey, gave a closing summary of the activities of Rutgers Cancer Institute of New Jersey both in the last grant period and the plans to move forward. Dr. Libutti thanked all of the EAB members for their attendance. He hoped that the depth and breadth of Rutgers Cancer Institute of New Jersey science was well represented through three basic science programs, the clinical research program, and the population science research program. Transdisciplinary research is evident at CINJ through bench-to-bedside and bedside-to-bench activities.

Rutgers Cancer Institute brings significant value to New Jersey. CINJ research has helped in identifying disparities in cancer incidence and mortality with regard to race, ethnicity, and geographic location. In addition to research, translational projects addressing high incidence cancers and projects focused on populations unique to New Jersey have been created. Every State dollar invested returned \$13 through competitive grants received and benefits delivered to patients, which shows a significant return on investment of State dollars. Training and educational programs such as Molecular Tumor Board, MD/PhD program, residency/fellowship programs, national impact programs, and national workshops geared towards the teaching of science in high schools have all brought added value to the State.

Looking towards the exciting discoveries in the new grant period, Rutgers Cancer Institute of New Jersey is leading the way forward in comprehensive cancer care and research.

Comments/Recommendations:

One thing that has not been emphasized throughout the presentation is the fact that Rutgers Cancer Institute of New Jersey has an incredible tissue facility. The focus should not be so much on what Rutgers Cancer Institute

of New Jersey has done for the State of New Jersey, the focus should be on the National Cancer Institute. In the closing summary there should be some indication that the current director's leadership has had an imprint on the institution and that it will create an even greater trajectory going forward.

Next Meeting

The next meeting of the External Advisory Board is anticipated to take place in the spring of 2019.

Adjournment

Motion to adjourn was made by Dr. Johnson at 3:35 p.m. and was passed unanimously.

Respectfully submitted by,
Jazmun Dotts
Secretary for the meeting