

**Rutgers Cancer Institute of New Jersey
Internal Advisory Board**

**Minutes of Meeting
Tuesday, October 12, 2021
5:30pm – 7:30pm**

Attendees

Joseph Barone, Pharm D (Chair)	Linda Flynn, PhD, RN, FAAN	Gina Londino-Greenberg
Andy Anderson, MD	David Foran, PhD	Gwendolyn Mahon, MSc, PhD
Adam Berger, MD	Shridar Ganesan, MD	Maral Mouradian, MD
Martin J. Blaser, MD	Vicente Gracias, MD	Bishr Omary, MD, PhD
Suzie Chen, PhD	Bruce Haffty, MD	Reynold Panettieri, Jr., MD
Kevin Coyle	Christian Hinrichs, MD	Arnold Rabson, MD
Cristine Delnevo, PhD, MPH, FAA	Haejin In, MD	Brian Strom, MD, MPH
Karla Ewalt, PhD	Anita Kinney, PhD	Linda Tanzer
Thomas Farris, PhD	Edmund Lattime, PhD	Eileen White, PhD
Patricia Fitzgerald-Bocarsly, PhD	Laura Lawson, PhD	Helmut Zarbl, PhD
Valerie Fitzhugh, MD	Steve Libutti, MD	Michael Zwick, PhD

Absent

Wadih Arap, MD, PhD	Perry Halkitis, PhD	Sangeeta Lamba, MD, MS-HPed
Bill Arnold	Howard Hochster, MD	Jonathan Potter, PhD
Kenneth Breslauer, PhD	Robert Johnson, MD	Jay Tischfield, PhD
Andrew Evens, DO, MSc, FACP	Yibin Kang, PhD	

Call to Order

The meeting of the Internal Advisory Board (IAB) of Rutgers Cancer Institute of New Jersey (CINJ) was held virtually on Tuesday, October 12, 2021 and opened at 5:35pm by Dr. Joseph Barone, Chair.

Review and Approval of Minutes

The minutes of the October 1, 2020 IAB meeting were reviewed. Upon motion duly made, seconded, and unanimously carried, the minutes were approved.

Internal Advisory Board Chair

Dr. Barone welcomed everyone. He turned the floor over to Director, Dr. Steven Libutti, who provided a Director's Report on behalf of Rutgers Cancer Institute of New Jersey.

Director's Report - Steven Libutti, MD, FACS

Dr. Steven Libutti, Director and Vice Chancellor of Rutgers Cancer Institute, welcomed the members and spent a few minutes to recognize the immense contributions of Joseph Bertino in cancer pharmacology. A moment of silence followed. Dr. Libutti emphasized the importance of having this Internal Advisory Board (IAB) meeting remotely, however, hopes to meet in-person next year. The commitment and expectations of IAB members were outlined for new members, including meeting convenings. This meeting will include the Director's Report and the Overview of the Cancer Institute.

The State of New Jersey is the most densely populated state in the United States. It is the fourth most ethnically diverse and has the fifth highest cancer incidence. There are significant racial, ethnic, and socioeconomic disparities in cancer incidence, mortality, and access to care. These are some of the things CINJ focuses on to bring more value. The Cancer Institute of New Jersey (CINJ) was established in 1991, it became NCI designated in 1997, and in 2002 achieved comprehensive status. CINJ is the state's only national cancer institute designated comprehensive cancer center. In 2013, CINJ was integrated into Rutgers University as an independent institute and because of the integration, became a

member of the Big 10 Cancer Research Consortium. CINJ's partnership with RWJBarnabas Health System began in 2017. CINJ currently has close to 267 members that represent both Rutgers and Princeton University, accelerating cancer research and its translation to patient care.

Dr. Libutti defined CINJ's research programs, shared resources and developing resources. CINJ is defined by five research programs: Cancer Metabolism and Growth (CMG), Genomic Instability and Cancer Genetics (GICG), Cancer Pharmacology (CP), Clinical Investigations and Precision Therapeutics (CIPT); and Cancer Prevention and Control (CPC). Shared Resources include: Biomedical Informatics, Biostatistics, Biorepository and Histopathology, Genome Editing, Metabolomics, and Research Pharmacy. There are three developing shared resources which include: Population Sciences Research Support, Immune Monitoring, Advanced Genomics and Flow Cytometry/Cell Sorting, and Small Molecule Screening Center. Many of the Shared Resources are shared across the two campuses of Rutgers and Princeton. Some of the Shared Resources, most notably, the Genome Editing Facility, are co-sponsored by the University and by the Cancer Institute.

The Rutgers Cancer Institute's statewide impact drives cancer research in the state of New Jersey. CINJ is a Consortium Cancer Center (designated by NCI) with Princeton University. The Consortium relationship is driven by a Steering Committee, and ongoing, tangible institutional (Princeton University) commitment in the form of integrated recruitment and shared resources. Another example of statewide cancer impact is the ScreenNJ Program which focuses on cancer screening for both lung and colon cancer. ScreenNJ was launched during the 2018 fiscal year. A new line item from the State of \$2M was provided to help CINJ expand cancer screening for lung and colon cancer. ScreenNJ began with only three counties, 17 sites, and six clinical outreach partners. Currently, under the leadership of Dr. Anita Kinney, ScreenNJ has expanded to all 21 counties in the State. ScreenNJ has 189 clinical and outreach partners at 313 sites, including a mobile unit that provides education and health measures to reduce the burden of cancer throughout the state.

The results of the prior CCSG (Cancer Center Support Grant) site visit yielded an Impact Score of 28 and an excellent to outstanding rating for the Cancer Institute. Numerous strengths were noted but there were also some areas of opportunity noted as well. In late 2019, CINJ launched their 2021-2025 Strategic Plan. The first area of the strategic plan focuses on how CINJ can improve translation. To stimulate activities across the translational spectrum, disease specific groups, and various programs, the Committee for Expediting Translational Initiatives (CETI) was formed. CETI is co-chaired by Drs. Ganesan (CIPT) and Pasqualini (CP). Another opportunity to drive translation was a recently funded multi-PI, U01 award, Research Enhancement and Commercialization Hub (REACH). These Hubs disperse NIH funds through a rigorous process reviewed by the REACH committee and funded up to \$250,000 to translate discoveries in laboratories (cancer and non-cancer) towards commercialization. GMP process development and product manufacturing capabilities (focusing on cell therapy) are also a highlight of CINJ with plans to be fully operational at the beginning of 2022.

To address another area of opportunity regarding health system partnership and clinical research, CINJ collaborated with system wide partners to develop a robust clinical trial network. The greatest metric CINJ has for measuring the success of translation is the conduct of interventional clinical trials, especially investigator initiated interventional clinical trials. Under the leadership of Dr. Howard Hochster, CINJ has increased interventional accrual totals and investigator initiated interventional accrual totals. In terms of interventional therapeutic trial accrual, 2020 data show that CINJ was just under 500 accruals, and eight accruals within system affiliates. In 2021, data may not be as high as there was a noticeable delay in trial accruals due to COVID. Another measure of collaboration is cancer relevant collaborative publications. CINJ's various programs have grown with respect to intra- and inter-programmatic collaborations.

Collaborative program and training grants were identified in the last CCSG review as other areas of opportunity. Thus, in the past 2.5 years, Dr. Libutti reports that seed funding from the RWJ Foundation has supported the Genomic Instability and Cancer Genetics program in securing a P01 (May 2021). With respect to training grants, highlights/updates since June 2020 include a Diversity Focused R25 training grant called Rutgers Youth Enjoy Science Program (RUYES), and a T32 training grant awarded in cancer metabolism and tumor-host interactions. An additional T32 application was just submitted in the fall cycle.

Joint educational/mentoring activities with Princeton include a Consortium Cancer Research Symposium, Rutgers Cancer Institute/Princeton Summer Research Internships, and other activities through the Center of Excellence in Cancer Immunology and Metabolism, and Ludwig Institute for Cancer Research - Princeton Branch. The Cancer Institute's Cancer Metabolism efforts are recognized internationally among the top centers for discovery in Cancer Metabolism. These efforts are ably driven by Drs. Eileen White of Rutgers, and Josh Rabinowitz of Princeton. Through a strategic planning process, the goal is to merge the studies of cancer metabolism and cancer immunology (joint center of excellence). CINJ's new Center of Excellence was selected by Rutgers as a "Big Idea" and has raised over \$25M through a generous gift from Nancy and Duncan Macmillan. The goal is to raise \$50M to fully resource the Center of Excellence. A national search is ongoing for additional faculty to populate this new center. This center will focus on the interplay between Cancer Immunology and Cancer Metabolism. CINJ welcomed Dr. Christian Hinrichs as the Co-Director of the Duncan and Nancy Macmillan Cancer Immunology and Metabolism Center of Excellence. CINJ also welcomed Dr. Cristina Montagna, Professor of Radiation Oncology, who will also join the faculty. Finally, the Ludwig Institute for Cancer Research launched its newest grant at Princeton University and exemplifies the true collaboration between Princeton, Rutgers Cancer Institute, and RWJBH. This branch is focused on developing and translating new discoveries in cancer metabolism to the clinic. Scientific highlights in the work of research programs were recognized, as well as the leadership of Dr. Eileen White — newly elected as a member of the national academy of sciences.

Dr. Libutti went on to discuss the six essential characteristics that define a comprehensive cancer center. The first, physical space, is under the direction and responsibility of the Cancer Center's Director, is managed and allocated towards the mission of CINJ. Currently in New Brunswick, CINJ is on a 225,000 square foot primary clinical and research facility. There is also an additional 36,000 square feet of space in the East Tower of Robert Wood Johnson University Hospital dedicated to hematologic malignancies and CINJ's Bone Marrow Transplant Program. There are 45,000 square feet of leased administrative space across New Brunswick, mostly located on Albany Street. Located in the Robert Wood Johnson University Hospital, there are approximately 100 cancer dedicated beds in the North Tower and CINJ's Radiation Oncology facility. 195 Little Albany Street will be converted into a primary research and administrative facility, allowing CINJ to move the 45,000 square feet of leased administrative space into this primary CINJ building. CINJ's 36,000 square feet at the East Tower and the Robert Wood Johnson University Hospital space will move into this new freestanding Cancer Pavilion. In June, CINJ broke ground in a 515,000 square foot inpatient/outpatient Cancer Pavilion also located in New Brunswick. The new pavilion will eventually house clinical and research activities, connected by a sky bridge. Outpatient care at the new Cancer Pavilion will include 84 infusion bays, 86 exam rooms, advanced radiology with linear accelerators, CT equipment, MRI equipment, mammogram equipment, core laboratory facilities, pharmacy facilities, and an outpatient urgent care facility. The inpatient care area of the Cancer Pavilion will include 96 inpatient beds over 3 floors, 11 surgical/procedure rooms, a central sterile processing area, and inpatient support spaces. The research area of the Cancer Pavilion will include wet lab facilities, research equipment, clinical trial offices, and faculty offices.

The second essential characteristic, organizational capabilities, encompasses several robust committees and boards that are important to the day-to-day functions of the Cancer Institute. These include the External Advisory Board, the Research Leadership Council, the Officer's Cabinet, the Internal Advisory

Board, and the Consortium Steering Committee (between Princeton and Rutgers). Advice and counsel are implemented via CINJ's Strategic Plan by their Program and Shared Resource Leaders. The Director of the Cancer Institute reports to the highest levels of both the University and the health system. This is incredibly important in terms of both receiving strategic direction from the highest levels but also playing a role in advising and giving counsel to those leaders in terms of implementing the Cancer Program more broadly. The Community Cancer Action Board (CCAB), led by Community Outreach and Engagement (COE) program, represents a diverse group of members of the broader New Jersey community that gives input on matters relevant to catchment area. CINJ continues to increase the number of cancer programs and there are Associate Directors in: Basic Research, Clinical Research, Translational Research, Administration & Planning, Population Science and Community Outreach, Shared Resources, Education and Training, Consortium Research, and (newest addition) Diversity, Equity, & Inclusion. Dr. Libutti then outlined the oncology service line organizational structure that oversees clinical research protocols across the health system.

Transdisciplinary Collaboration and Coordination is the third essential characteristic scored by the site visit team. As mentioned, there are five robust cancer programs highly collaborative within their programs and across programs. Dr. Libutti presented a chart of total publications with a breakdown of inter-programmatic and intra-programmatic collaborations. Many publications are in high-impact journals, with an impact factor >10. Increased multi-PI awards (NIH) are evident over the past years. Being a member of the Big 10 Cancer Research Consortium allows for many collaborations conducted across partner sites and Rutgers.

The fourth essential characteristic, Cancer Focus, is measured by how focused CINJ's Programs are in relation to the grant support that they receive for their members and the science that their members are driving forward. There are five CCSG programs from prevention and control to basic science. Every year CINJ Program Leaders review their individual programs, and the members of their programs to determine what percentage of the grants held by those members are cancer relevant. If a grant is funded by the National Cancer Institute, it is considered 100% cancer relevant. Non-NCI funded projects are assigned 100%, 75%, 50%, or 25% cancer relevance using standardized guidelines. Each Program needs to provide brief justifications in writing for each of the grants assigned a percentage. All assignments are reviewed and approved by CINJ's Research Leadership Council. In overall cancer focused research, there was a 12% increase in funding to \$52.4 M (287 projects to 338 projects), and in relation to NCI research, there was a 17% increase in funding to \$25M (117 projects to 148 projects).

The fifth essential characteristic, Institutional Commitment, has been provided through the RBHS (Rutgers Biomedical and Health Sciences) Chancellor's Office, Rutgers University-grant indirects, CINJ Rutgers Foundation support, the State of New Jersey, RWJBarnabas Health and Princeton University. In total, there has been approximately \$111M in annual institutional support. In addition to that support, there has also been a commitment of \$750M for construction of the new Cancer Pavilion and renovations of the existing building. Annual state commitment increases stably year-to-year, and these funds are used to support research infrastructure, clinical research activities, recruitment/pilot funds, and shared resources.

Finally, the Cancer Center Director, Dr. Steve Libutti is a surgical oncologist, who spent time at the NCI and at the Albert Einstein College of Medicine before joining CINJ. He has a background and experience in peer-reviewed funding, publications, and a record of accomplishment in research, clinical activity, and cancer center administration. He continues to have an active research laboratory that is currently funded by a Multi-PI R01 grant and a Peterson Accelerator Award from the Neuroendocrine Tumor Research Foundation. The Center Director reports to the highest levels of the University and the health system and has authority over resources (state funds, institutional support, indirect funds for resident faculty and foundation funds). As Senior VP for Oncology Services, Dr. Libutti is also responsible for the budgeting of cancer services at all CINJ's facilities.

Questions/Comments/Recommendations/Answers:

The IAB commends Dr. Libutti for a wonderful presentation. While entering a year of record, the IAB asks what the major needs/areas that CINJ should be looking to support. Dr. Libutti advised that, despite challenges of the pandemic, from a science perspective, Rutgers Cancer Institute is in good shape. There are developments to come with the Ludwig center, and outreach efforts have been phenomenal. One area of concern is clinical trial accruals for 2022. In support of this, a sub-committee of the EAB is further investigating the clinical trial operations and Dr. Libutti plans to review their report on recommendations/action items for the next several months. Resources and new faculty members have been added to drive clinical trial accruals at CINJ and satellite sites. The IAB asks if the clinical trial groups considered decentralized processes and what is developing in this space. Libutti advised that six key sites have been established throughout the RWJBH system that can accomplish this. The key has been to identify clinical investigator champions; physicians passionate about driving cancer research and staffing these sites. For standard of care infusion, there has been remote modeling and other innovative ways to make clinical trials possible. The IAB also mentions that during the growth in the past years, there is uncertainty in how disparities and support of underrepresented populations have been addressed. Dr. Libutti advised there was a re-launch of an RFA where a key area is Diversity, Equity, and Inclusion. Dr. Libutti and the team recruited the new DEI Director. Currently, several leadership and faculty positions are represented well as far as gender, but CINJ needs to do a better job recruiting populations of color. This is a major focus moving forward within training programs and educational spaces.

Meeting Adjourned at 7:30 pm.

Respectfully submitted by,
Dominique Graham
Secretary for the meeting