

Rep. Nygren, Co-Chair

TO: Member, Joint Committee on Finance
FR: Dr. Howard Baily, Director, UW Carbone Cancer Center
Connie Schulze, Director of Governmental Affairs, UW Health & UW School of Medicine and Public Health
RE: Budget Request to Combat Cancer
DT: April 2017

The UW Carbone Cancer Center (UWCCC) holds the unique distinction of being the only comprehensive cancer center in Wisconsin as designated by the National Cancer Institute – the lead federal agency for cancer research. Every day on the University of Wisconsin campus, thousands of dedicated individuals work meticulously to identify the best ways to prevent, detect, diagnose and treat cancer.

Sadly, more than 32,000 Wisconsin residents will be diagnosed with cancer this year. Treatment plans for cancer patients have changed very little and are often based on what is best for the "average patient" instead of the individual. Fortunately, a personalized solution can be found in Precision Medicine.

Precision Medicine is not a new concept in medicine but it is an emerging approach to cancer treatment that takes into account individual variables such as a person's genetic make-up, environment and lifestyle. The UWCCC launched the Precision Medicine Molecular Tumor Board (PMMTB) in September 2015 to advance Precision Medicine in cancer care. Early collaborators included Gundersen Health System, Aurora Health Care, and Green Bay Oncology. Fox River Hematology/Oncology and ThedaCare joined the board soon thereafter and new partners are anticipated in 2017.

In the first year of operation, the PMMTB reviewed molecular data on patients from Green Bay, La Crosse, Madison, Milwaukee, and Wausau, thereby encompassing the largest oncology practices in the state who together see ~60% of Wisconsin cancer patients. This allowed physicians from throughout Wisconsin to share their expertise and clinical cases, including DNA test results, with experts in pathology, molecular genetics, pharmacology, and medical oncology at the University of Wisconsin. The result was the creation of precision treatment options designed for individual patients, including potential participation in clinical trials of new treatments, for 87% of patients reviewed. With additional resources, more cancer patients in Wisconsin could benefit from Precision Medicine treatment. Therefore, we respectfully request you consider the following request.

Budget Request: Expand Precision Medicine through the PMMTB to reach additional cancer patients by appropriating \$490,000 in each year of the biennium for an ongoing appropriation to accomplish the following. **Please note this request is in addition to the budget request submitted by the Regents and UW System and if granted, would be added to the block grant allocation; thereby benefitting UWCCC.*

1. Increase access to Precision Medicine for more cancer patients in Wisconsin.
2. Provide genomics resources to patients in-need.
3. Develop a Precision Medicine statewide database with the potential to benefit cancer patients across the state and the nation.

Specifically, \$980,000 GPR over the biennium would be used as follows.

Coordinator: The coordinator of the expanded PMMTB will be responsible for aligning the efforts of oncology teams across the state, hiring and managing regulatory and database staff, and organizing meetings and outreach. The coordinator, in conjunction with faculty supervisors, will be responsible for ensuring that the PMMTB is responsive to the needs of cancer patients across the state. (\$70,000 GPR/year including fringe)

Regulatory Specialist: The regulatory specialist will coordinate clinical research efforts and manage required ethical oversight. This will include both a master PMMTB protocol which will collect data on patient outcomes, and clinical trial protocols to enhance access of patients to the latest drugs. The specialist will be responsible for assisting state-wide collaborators with local ethics review (IRB). Additionally, the specialist will be responsible for coordinating resource handling for quality assurance. (\$55,000 GPR/year including fringe)

Database Manager: The manager will be responsible for selecting and maintaining software for database collection and storage. Additionally, the manager will assume responsibility for data entered at research sites to ensure the accuracy and integrity of data by ensuring it is entered in a uniform way by all sites throughout the state. (\$55,000 GPR/ year including fringe)

Software: We request funds to support the acquisition and maintenance of software to house the PMMTB data and to share with physicians across Wisconsin. We seek to identify software that will include custom patient-matching capabilities. (\$50,000 GPR/year)

Patient resources: We seek resources that will allow PMMTB physicians and statewide collaborators to identify patients who would benefit from additional genomics testing. This is necessary because standard testing done for clinical use today is limited in scope. Additional testing on selected patients would greatly enhance the ability to deliver Precision Medicine. Additionally, these resources would be dedicated to providing access to PMMTB for underinsured patients. (\$60,000 GPR/year)

IRB/coordination fees and data collection fees at local sites: Funds are requested for sites around Wisconsin to support staff who prepare applications for obtaining the required regulatory review and enter the clinical outcome data into databases at PMMTB. This will be also used to establish annual state-wide meetings to facilitate coordination. (\$100,000 GPR/year)

Banking collection/storage: "Banking" patient tissue and serum samples serves two purposes: First, it will provide an opportunity for patients across the state to access next-generation genomics technology. Second, it will allow us to rapidly update/populate our database with data from new technology genomics analysis. All banking will occur with IRB oversight following state and federal regulations. (\$50,000 GPR/year)

Enhancing Genomic Tumor Information: Genomics analysis of tumors can be confounded by the mixture of cancer and non-cancer cells that exist within a tumor. To address this, we will purify patient-derived tumor cells through a special technique called spheroid culture. This will provide an additional opportunity to perform drug sensitivity testing. Through these methods, we can improve/verify the quality of genomic analyses and test the sensitivity of tumors to drugs. (\$50,000 GPR/year)

Please contact Connie Schulze at cschulze@uwhealth.org or at 608/516-2552 with any questions.