The National Cancer Institute’s Physical Sciences - Oncology Network

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In 2009, the NCI launched the Physical Sciences - Oncology Centers (PS-OC) initiative with 12 Centers (U54) funded through 2014. The current phase of the Program includes U54 funded Centers with the added feature of soliciting new Physical Science - Oncology Projects (PS-OP) U01 grant applications through 2017; see NCI PAR-15-021. The PS-OPs, individually and along with other PS-OPs and the Physical Sciences-Oncology Centers (PS-OCs), comprise the Physical Sciences-Oncology Network (PS-ON). The foundation of the Physical Sciences-Oncology initiative is a high-risk, high-reward program that promotes a ‘physical sciences perspective’ of cancer and fosters the convergence of physical science and cancer research by forming transdisciplinary teams of physical scientists (e.g., physicists, mathematicians, chemists, engineers, computer scientists) and cancer researchers (e.g., cancer biologists, oncologists, pathologists) who work closely together to advance our understanding of cancer. The collaborative PS-ON structure catalyzes transformative science through increased exchange of people, ideas, and approaches. PS-ON resources are leveraged to fund Trans-Network pilot projects to enable synergy and cross-testing of experimental and/or theoretical concepts. This session will include a brief PS-ON overview followed by a strategic discussion with the APS community to exchange perspectives on the progression of trans-disciplinary physical sciences in cancer research.