## 531<sup>st</sup> ASRC Seminar

Date: 13:30 ~15:00, 18 September Location: Meeting room 302, ASRC Building Speaker: Prof. Daniel Scott Wilbur (University of Washington) Title: Alpha-Emitting Radiopharmaceuticals for Radiotherapy

The concept of using alpha-emitting radionuclides for cancer therapy was promoted over a century ago, shortly after radioactivity was discovered. However, only recently has the knowledge of biological systems, biological effects of radiation and cancer cell targeting become sufficient that the use of alpha-emitting radiopharmaceuticals in therapy of cancer is becoming a reality. In the presentation, the radiochemical and radiobiological properties that make alpha-emitters attractive for radiotherapy will be discussed, as will the factors that must be considered when choosing an alpha-emitter for radiotherapy. There will also be a brief discussion of the types of treatments that will (likely) be most effective when using alpha-emitting radiopharmaceuticals, and the types of agents that can be used to effectively target the cancer in patients. Some examples of preclinical studies being conducted in our laboratories will be presented, along with an overview of clinical studies that have been conducted, or are being planned, by other research groups.



<Contact> Ichiro Nishinaka(81-5451) Advanced Science Research Center

