April - June 2018

Seattle Institute for Biomedical and Clinical Research

Spotlight Feature

BRUCE MONTGOMERY, MD

Bruce Montgomery, MD, is a Staff Physician in Medical Oncology at the VA Puget Sound, Professor of Medicine in the Department of Medicine and Adjunct Professor in Urology at the University of Washington (UW). His focus has been translational research evaluating mechanisms of sensitivity and resistance in genitourinary malignancies using tissue based hormonal and sequencing platforms. Through collaborations at the UW, Fred Hutchinson Cancer Research Center (FHCRC) and the VA, he and the group have evaluated tumoral upregulation of tissue androgens and the androgen receptor as relevant mechanisms of resistance to hormonal therapy. Multiple neoadjuvant studies of next generation agents have provided insights into the potential and limitations of targeting the androgen receptor. Through the VA Cooperative Studies Program (CSP) mechanism, he and members of the Urology Department have worked to improve cures for men with high risk prostate cancer using adjuvant chemotherapy (CSP553).

The most exciting current effort is leveraging the recent discovery that both prostate and bladder cancer have a much higher frequency of DNA repair deficiency than previously recognized. Work from the UW/VA group has also discovered that approximately half of somatic deficiency in DNA repair in prostate cancer arises from inherited "germline" lesions such as BRCA in ~ 15% of patients. Community and clinic focused efforts are underway both at VA and UW to provide access to germline and somatic sequencing for all men with advanced prostate cancer and to provide clinical studies evaluating the efficacy of DNA damaging therapies such as platinum and PARP inhibitors, which can provide these men with the potential for "exceptional responses" to nonstandard therapies. The current germline screening studies were an outgrowth of a VA supported pilot study, which generated the data that led to successful funding of multiple studies of tumor sequencing and therapeutic studies.

Dr. Montgomery serves as Principal Investigator (PI) of a number of clinical studies and is a PI of the Northwest Prostate Cancer Specialized Program of Research Excellence (SPORE) through the National Cancer Institute at UW/FHCRC. He is a co-PI of the VA specific DOD proposal "Targeting the Subtype of Metastatic Prostate Cancer Deficient in DNA Repair Capacity" and three VA specific/SIBCR administered projects through the Prostate Cancer Foundation: a) a collaboration with the Greater Los Angeles VAMC "A Phase 2 Study of Docetaxel and Carboplatin for treatment of patients with metastatic, castration resistant prostate cancer and germline or somatic DNA repair deficiency"; b) a study of metastasis biopsy and sequencing "POPCaP Precision Oncology Biopsy Program – VA Puget Sound"; and, c) a POPCaP Network Center of Excellence award, which supports a consortium of six VA medical centers, all performing precision oncology studies in prostate cancer. These projects are focused on defining and leveraging molecular targets in veterans with advanced prostate cancer and are collaborative efforts with the Urology Department, GRECC and the other GU oncology members Steve Plymate, MD, and Elahe Mostaghel, MD, PhD. When not in the VA Prostate clinic, Bruce tries to keep up with his colleagues on biking expeditions around Vashon island and torturing his family with adventures in the great outdoors.

SAVE THE DATE!

May 31, 2018 - Annual Members' Meeting
Building 1, Room 240 at Noon

June 6, 2018 - Employee Appreciation
Building 1, Room 240 at 10 AM

June 18, 2018 - Research Seminar Series
Elizabeth Phelan, MD, MS
"Prevention of Falls Among Older Adults"
Building 1, Room 236b at Noon