

# PIONEERS IN BIOMEDICAL RESEARCH SEMINAR

Presented by the Fralin Biomedical Research Institute at VTC and co-sponsored by the institute's Cancer Research Group



## *Virtual Seminar: Tumor Intrinsic and Extrinsic Mechanisms Promoting Brain Metastasis*

Brain metastases have emerged as an unmet clinical need in cancer research. Recent advances show that cancer cells adapt to unique features and cells within the brain microenvironment, and that paracrine mechanisms initiated in the brain niche are critical for metastatic colonization and outgrowth. With a focus on breast-to-brain metastasis, this seminar will show how estradiol acts on estrogen-receptor positive (ER+) astrocytes leading to the upregulation of growth factors and chemokines than in a paracrine manner, promote brain metastatic traits in breast cancer cells lacking ERs (or triple-negative breast cancer). This seminar will explore a novel function of ovarian and brain-derived estrogens in the modulation of neuroinflammatory responses during brain metastatic progression.

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FRIDAY, JAN. 28 at 11:00 a.m.

Watch live via Zoom at <https://virginiatech.zoom.us/j/82722436593> or at <https://fbri.vtc.vt.edu/events/live-webcast.html>.



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