

POSTER 37

**DO ULTRASTRUCTURAL CHANGES IN AGED PERITONEUM
CONTRIBUTE TO OVARIAN CANCER METASTASIS?**

Kim Ingersoll (M2)

Yueying Liu (Lab Supervisor)

(M. Sharon Stack, PhD)

Department of Pathology and Anatomical Sciences

Epithelial ovarian cancer (EOC) will affect 1 in 69 women born in the United States today. Currently, 80% of women newly diagnosed with EOC already have metastatic disease, thus early intervention during the metastatic process will improve the long-term survival rates of women with EOC. Metastasis in EOC occurs through a unique process where cells are shed from a primary tumor and form multicellular aggregates (MCA) that disseminate intraperitoneally in the ascites fluid. Once the MCA reach the mesothelium, the MCA implant and disseminate [Figure 1]. EOC displays an age-specific incidence that increases and peaks in the eighth decade of life. Epithelial tumors, unlike stromal or germ cell tumors, are uncommon before the age of 40. These epidemiologic factors form the basis of the current hypothesis, that the aging of the mesothelium alters the receptivity to implantation of metastatic cells.

