**Graduate Program:** Anatomy & Cell Biology, Biochemistry, Epidemiology and Biostatistics, Family Medicine, Microbiology & Immunology, Pathology & Lab Medicine, Physiology & Pharmacology, Neuroscience, Surgery

**Research Cluster(s):** Cancer Biology & Biochemistry

**Supervisor(s):** Dr. Gabriel DiMattia Ph.D

**Keywords:** Clear cell cancer of the ovary, epigenetics, hypoxia, transcription

**Vacancies:** 2

**MSc/PhD Available?:** PhD (4 years) & MSc (2 years)

**Description:** Our primary focus is on epigenomic changes associated with autonomous spheroid formation in ovarian clear cell cancer (OCCC). Spheroids are 3D avascular structures responsible for metastasis of all epithelial ovarian cancers. Our goal is to uncover the key H3 epigenetic marks which accompany spheroid formation and which presumably contribute to the transcriptional program that facilitates survival of OCCC spheroids. OCCC spheroids that proliferate in suspension will be used in ChIPseq and RNAseq studies. Our goal is to identify ‘epigenome-based drugs’ which will kill spheroids.

**To Apply:** Applicants must independently apply to the Biochemistry program using the online Western application portal, including a clear reference to the supervisor

**Application Deadline:** None at this time

**Contact Information:** Questions regarding the application process, or inquiries about the program may be addressed to the Academic Programs Coordinator, for more information about the description/design of the project, you may contact Dr. DiMattia directly: dimattia@uwo.ca