2017 Fall Semester Schedule

GMS6647 **Transcriptional and Translational Control of Cell Growth and Proliferation**

Course Directors: Drs. Yi Qiu (qiuy@ufl.edu) and Daiqing Liao (dliao@ufl.edu)

Room: DG-41, Tuesday and Thursday 2PM-3:30PM

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Lecturer and lecture title** | **Student Presenter** | **Paper for presentation/further reading** |
|  |  |  |  |
| Tuesday Sept 26 | Dr. Jorg Bungert (Introduction to transcription and translation) | Fields Christopher J; [chr21711@ufl.edu](mailto:chr21711@ufl.edu) |  |
| Thursday Sep. 28 | No class |  |  |
| Tuesday Oct 3 | Dr. Yi Qiu (Histone modifications in gene expression and cancer) | Noble Jerald D  [jnoble333@ufl.edu](mailto:jnoble333@ufl.edu) | Jin L, Vu T, Yuan G, Datta PK. STRAP promotes stemness of human colorectal cancer via epigenetic regulation of the NOTCH pathway. Cancer Res. 2017 Aug 21. pii: canres.0286.2017. doi: 10.1158/0008-5472. CAN-17-0286. [Epub ahead of print] |
| Thursday Oct. 5 | Dr. Satya Narayan  (Tumor suppressor p53 in the control of cell proliferation) | Osking Zachary B  [zosking@ufl.edu](mailto:zosking@ufl.edu) |  |
| Tuesday Oct 10 | Dr. Suming Huang (Long Noncoding RNA in development and cancer) | Venugopal Kartika  [kartikav@ufl.edu](mailto:kartikav@ufl.edu) |  |
| Thursday Oct. 12 | Dr. Rene Opavsky (DNA methylation in cancer) | Waddell Aaron Richard  [aawaddell@ufl.edu](mailto:aawaddell@ufl.edu) | TBA |
| Tuesday Oct 17 | Dr. Daiqing Liao (Translational control and Cancer) | Fields Christopher J; [chr21711@ufl.edu](mailto:chr21711@ufl.edu) | Chio II et al, NRF2 Promotes Tumor Maintenance by Modulating mRNA Translation in Pancreatic Cancer. [Cell. 2016 Aug 11; 166(4): 963–976.](https://www.ncbi.nlm.nih.gov/entrez/eutils/elink.fcgi?dbfrom=pubmed&retmode=ref&cmd=prlinks&id=27477511) |
| Thursday Oct. 19 | Dr. Shuang Huang (role of miRNA in cell proliferation and survival) | Noble Jerald D  [jnoble333@ufl.edu](mailto:jnoble333@ufl.edu) | TBA |
| Tuesday Oct 24 | Dr. William Dunn (Transcriptional Control of Autophagy-mediated Cell Survival/Death) | Osking Zachary B  [zosking@ufl.edu](mailto:zosking@ufl.edu) |  |
| Thursday Oct. 26 | Dr. Jianrong Lu (Epigenetic regulation of EMT) | Venugopal and Waddell |  |
|  |  |  |  |
|  |  |  |  |

**Summary**: The course covers latest development in our understanding of the mechanisms that regulate gene expression at the transcriptional and translational levels. Phenotypic impact of gene regulation at the molecular and epigenetic levels on cell growth especially in relation to cancer and other diseases is emphasized. Topics related to cellular and viral systems are covered.

**Grading scale**: letter grade

Grades will be based on oral presentation, group discussion and attendance--A selected published paper will be presented and discussed in the class. The presenter will introduce background and rationale for the study, show the data that support the author's point of view and summarize the major conclusions of the paper. The presenter is also encouraged to critique the paper, point out weakness and offer points for improvement. Students are expected to attend all lectures and participate in paper discussion.

**Textbook**: No specific textbook is assigned. Journal articles or handouts will be distributed.

**Select past student comments**: This course was very useful to me. Most of the papers were appropriate and the course was set up in a way where we could easily discuss things as a group.