

PHCO 746

Introduction to Computer Vision Tools for Modern Microscopy

Instructor: Dr. Denis Tsygankov, Department of Pharmacology
For questions and registration contact Kathy Justice – kcj@med.unc.edu

This graduate-level course will introduce the basic principles of computer vision as a high-level image analysis tool, with an emphasis on its practical application to live-cell fluorescence microscopy. Important topics and available techniques will be discussed and demonstrated using examples from current biomedical research.

The course is designed as an introduction to computer vision applications for modern microscopy and will *not* be mathematically or computationally intensive. Students will obtain the very basic knowledge of how to use MATLAB for image analysis, which will provide them with the opportunity to practice with the introduced techniques and expend their toolkit beyond the capabilities of standard software packages as ImageJ.

There are *no* formal prerequisites required for this course and *no* prior experience with MATLAB is expected.

8 lectures

— ● —

January to
March
2014

— ● —

Mondays
10-11 am

— ● —

4007 Genetic
Medicine
Building

— ● —

1 credit hour

**Registration
deadline is
Jan 3, 2014**