

# Introduction to Video Bioinformatics

## September 13-17, 2010

### Schedule

### Room

#### Monday, September 13, 2010

- 10:00am – 12:00pm
  - Video Bioinformatics Overview, Bhanu (2)
- 12:00pm – 1:00pm
  - Lunch
- 1:00pm – 3:00pm
  - The structure and function of cells from all major groups of organisms, Talbot (2)
- 3:00pm - 3:30pm
  - Break
- 3:30pm – 5:30pm
  - Overview of microscopic techniques used to study cells, Talbot (1)
  - Stem Cells, Talbot (1)

#### Tuesday, September 14, 2010

- 9:00am – 12:00pm
  - Live imaging, confocal microscopy, spatiotemporal dynamics, cellular structures, green fluorescence proteins, the cytoskeleton, Yang (3)
- 12:00pm – 1:00pm
  - Lunch
- 1:00pm – 2:00PM
  - Live imaging, confocal microscopy, spatiotemporal dynamics, cellular structures, green fluorescence proteins, the cytoskeleton, Yang (1) Continue
- 2:00pm – 2:30pm
  - Break
- 2:30pm – 5:30pm
  - Image and Video Computing, Bhanu (3)

#### Wednesday, September 15, 2010

- 8:00am – 10:00am
  - Multi-scale analysis and dynamic cellular response to action potential, Rodgers (2)
- 10:00am – 10:30am
  - Break
- 10:30am – 12:30pm
  - Multi-scale analysis and dynamic cellular response to action potential, Rodgers (2)

- 12:30pm – 1:30pm
  - Lunch
- 1:30pm – 3:30pm
  - Analysis of microscopic and genomic data, biology of cancer, Parvin (2)
- 3:30pm – 4:00pm
  - Break
- 4:00pm – 6:00pm
  - Analysis of microscopic and genomic data, biology of cancer, Parvin (2) Continue

#### **Thursday, September 16, 2010**

- 10:00am – 12:00pm
  - Relational database systems; relational model; disks and data storage; query languages; indexing and hashing; query processing, Tsotras (2)
- 12:00pm – 1:00pm
  - Lunch
- 1:00pm – 3:00pm
  - Relational database systems; relational model; disks and data storage; query languages; indexing and hashing; query processing, Tsotras (2) Continue
- 3:00pm – 3:30pm
  - Break
- 3:30pm – 4:30
  - Image and video databases, Bhanu (1)

#### **Friday, September 17, 2010**

- 1pm – 3pm
  - Computed tomography and positron emission tomography: overview, Obenaus (1)
  - Magnetic Resonance Imaging -fundamentals, applications and opportunities, Obenaus (1)
- 3:00pm – 3:30pm
  - Break
- 3:30pm – 5:30pm
  - Magnetic Resonance Imaging -fundamentals, applications and opportunities, Obenaus (2) Continue