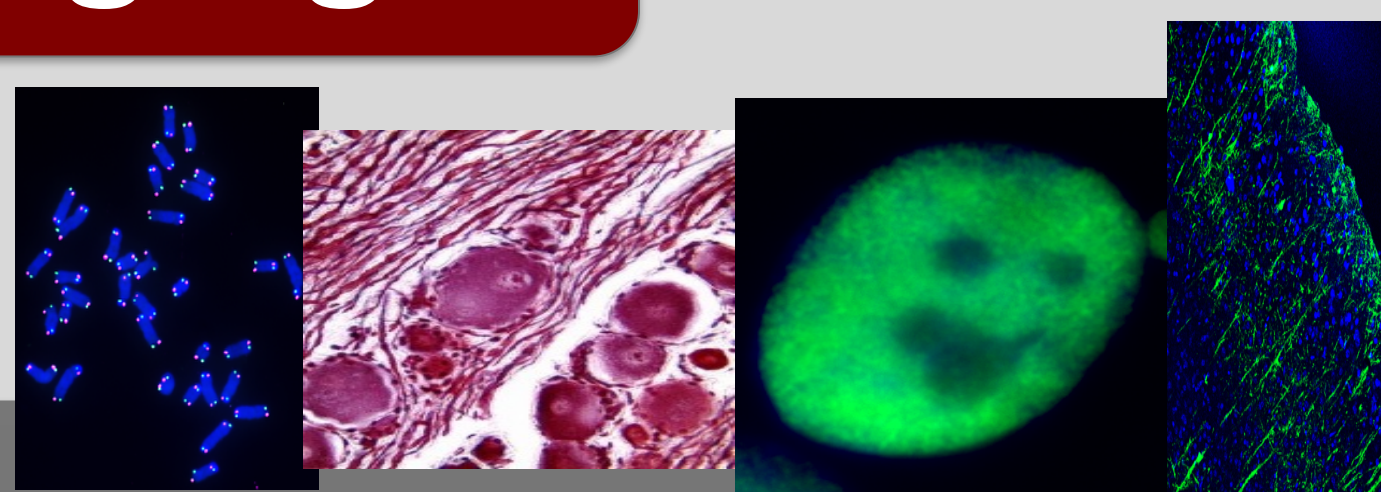




## Imaging

### Services

- Live cell imaging
- Optical sectioning of thick biological samples (tissues or cells)
- 3- and 4-D reconstruction of images
- 3-D mosaic imaging
- Multi-area time-laps and spectral scanning



### Equipment

- Olympus FluoView 1000 laser scanning confocal/IX81 motorized inverted microscope with deconvolution
- Zeiss Axiovert A1 inverted fluorescence microscope
- Zeiss AxioImager M2 upright microscope

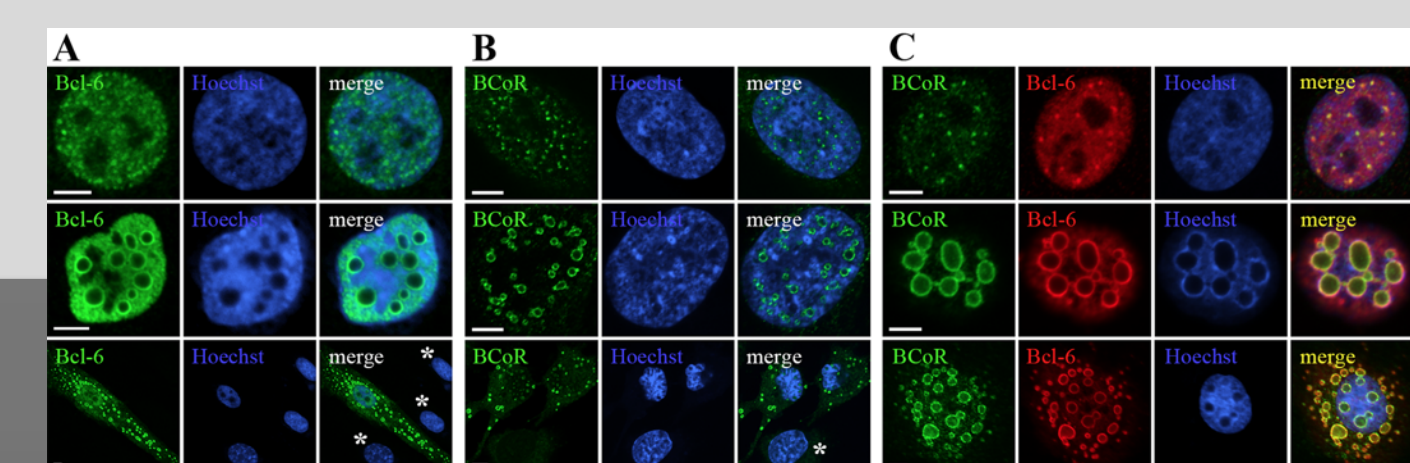


For more information, contact Kit Hayworth, [c.hayworth@wsu.edu](mailto:c.hayworth@wsu.edu)

## Flow Cytometry

### Services

- Cell sorting
- Able to analyze multiple fluorescent probes simultaneously
- Live cell imaging



### Equipment

- Beckman Coulter Gallios 6 flow cytometer
- BD Accuri C6 flow cytometer
- Bio-Rad S3 cell sorter



For more information, contact Diana Browning, [diana.browning@wsu.edu](mailto:diana.browning@wsu.edu)

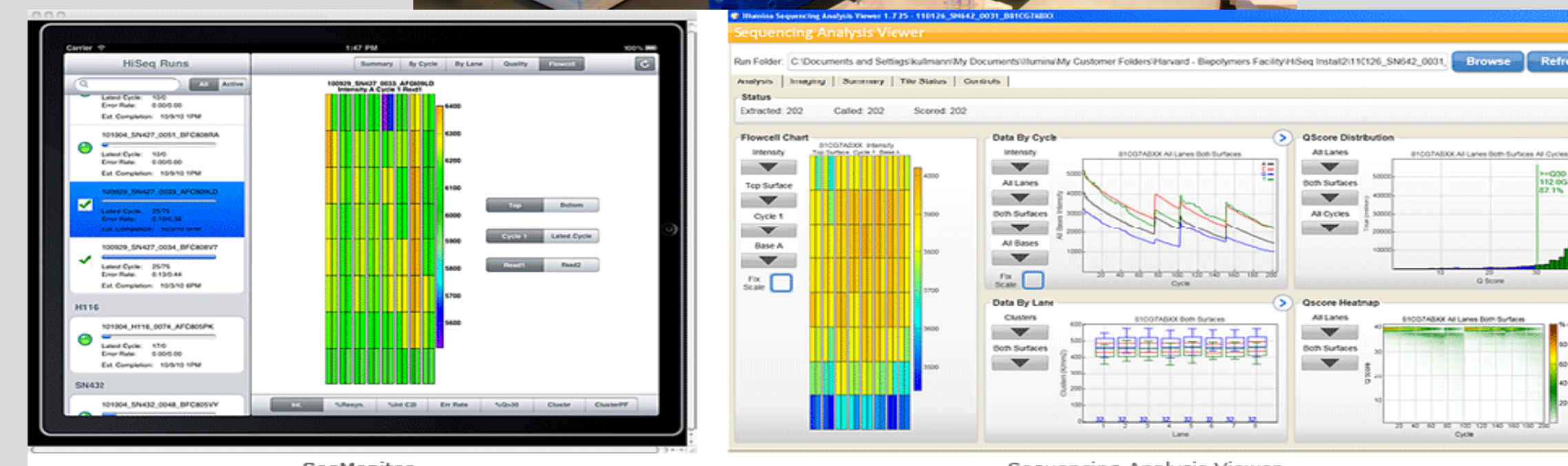
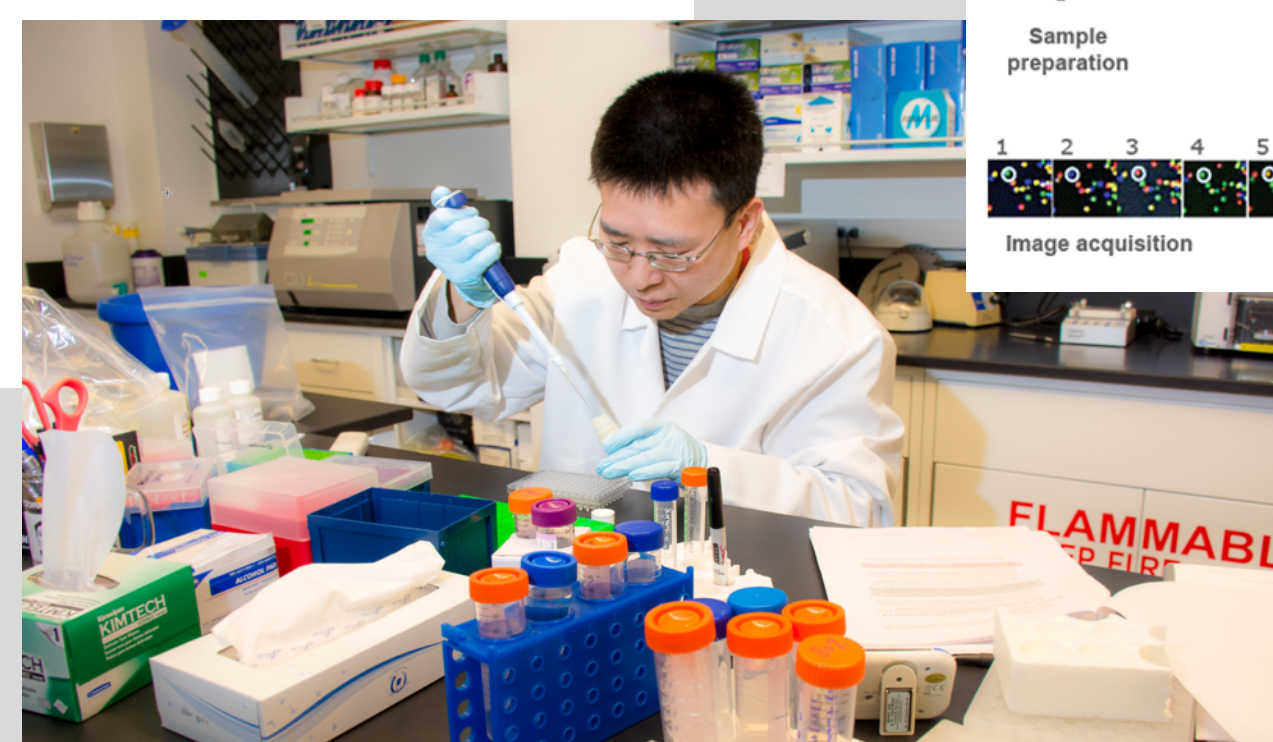
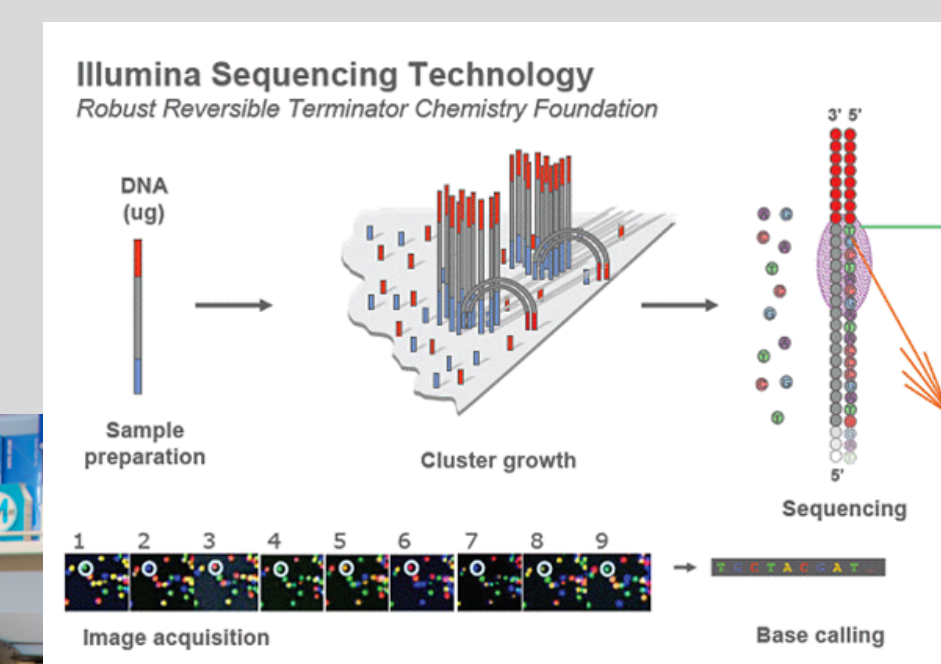
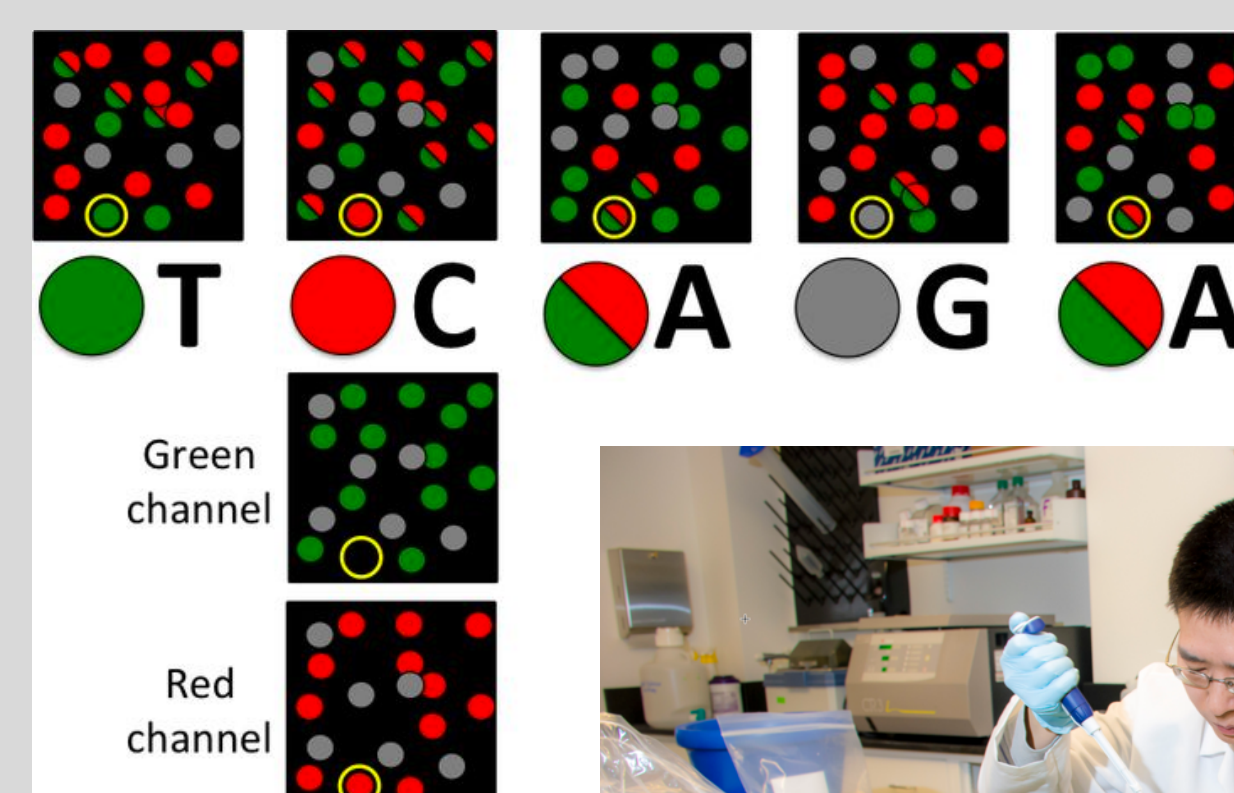
## Genomics

### Services

- Human/mouse whole genome sequencing
- Human/mouse whole exome sequencing
- Human/mouse mRNA-Seq
- Human/mouse ChIP-Seq
- Library preparation
- QC/QA of libraries and nucleic acids
- Amplicon sequencing
- Customized sample preparation

#### WORKFLOW

Workflow of Typical Sequencing Projects Performed at the Core



### Equipment

- Illumina HiSeq 2500
- Illumina NextSeq 500
- Covaris M220 Focused ultrasonicator
- StepOnePlus qPCR machine
- Qigen TissueLyser II

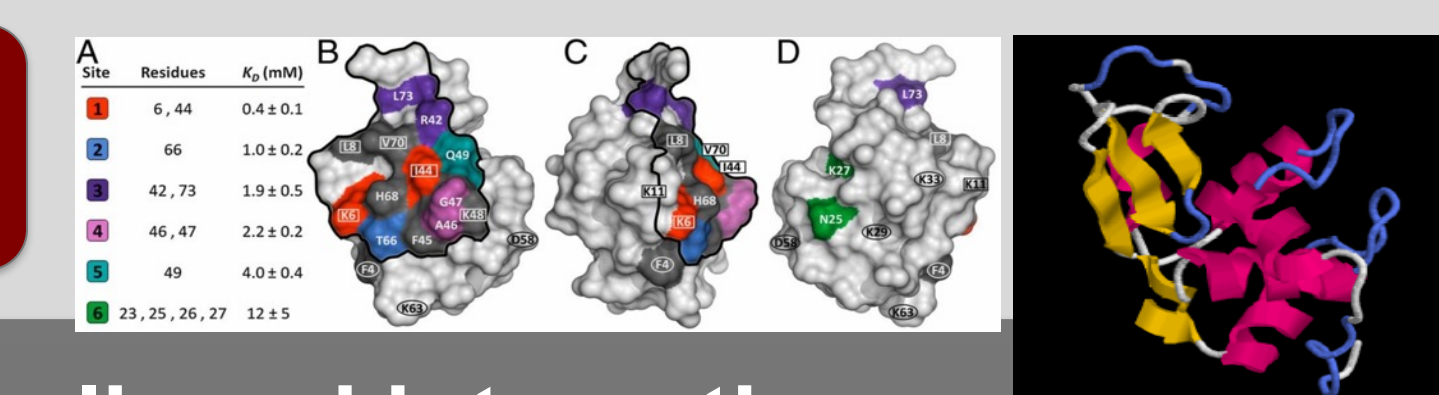


For more information, contact Ben Liu, [liyong.liu@wsu.edu](mailto:liyong.liu@wsu.edu)

## Nuclear Magnetic Resonance

### Services

- Analysis of protein-ligand interactions
- Determination of peptide or protein 3D structure
- Identification of relative location of atoms within a molecule
- Resolution of stereoisomer structures



### Equipment

- Bruker 500 MHz AVANCE II NMR used for routine  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{19}\text{F}$  1D and 2D experiments

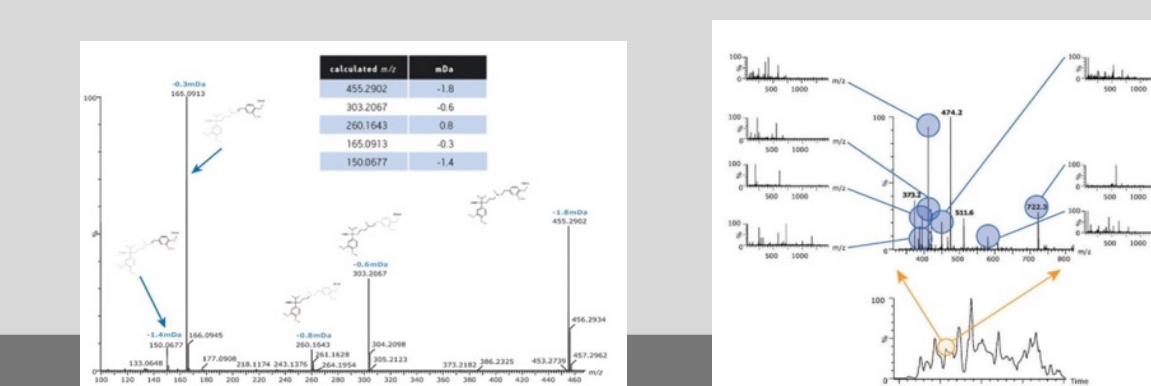


For more information, contact Zuping Xia, [zuping.xia@wsu.edu](mailto:zuping.xia@wsu.edu)

## Mass Spectrometry

### Services

- Quantitative analysis of small molecules
- Identification of unknown metabolites
- Protein /peptide identification and quantification
- Structural characterization of unknown compounds



### Equipment

- Waters XEVO G2-S QTOF/UPLC System
- AB SCIEX Qtrap 6500 LC/MS/MS-Shimadzu Nexera UFLC



For more information, contact Gang Chen, [gang8.chen@wsu.edu](mailto:gang8.chen@wsu.edu)