Overview of the Department of Geographical Science
Department Composition

32.5 State-Funded employees
- 13 T/TT
- 1 Lecturer
- 5.5 staff
- 12 Grad Asst’s

128.5 External/Soft funded employees
- 8 Lecturers
- 36 Research Professors
- 10 Research Associates
- 30 Faculty Research Assistants
- 38 Graduate Assistants
- 6.5 Staff
- 17 Adjuncts
- 5 Emeritus

Students
- 80 Ph.D. Students
- 126 Master of Professional Studies in Geospatial Information Sciences (MPS/GIS)
- c. 200 Bachelors (Majors)
  - Minors
    - GIS Minor,
    - Remote Sensing of Environmental Change Minor

GEOG ranked by NRC as #3 in the nation for PhD granting Universities
Key Research Themes
and example research projects

Human Dimensions of Global Change – Coupled Human - Natural Systems
• Studies of linkages between socio-economic systems, environment and climate change
  – E.g. Spatial Aspects of Environment and Human Health

Land Cover – Land Use Change
• Studies key interface between human and natural systems
  – E.g. Global Forest Monitoring using Remote Sensing

Carbon, Vegetation Dynamics and Landscape-Scale Processes
• Studies monitoring and modeling global vegetation dynamics and carbon
  – E.g. Modeling the Impacts of major Disturbances on the Earth’s Coupled Carbon-Climate System

Geospatial-Information Science and Remote Sensing
• Studies utilizing big data, geospatial data mining, analysis and visualization
  – E.g. Global Satellite Algorithms and Products
Research Statistics

• Externally funded research volume passed $12.5 million
  – FY15 research volume to date (3 quarters) $12.3 million
  – 3 year total (FY12-FY14) $38,275,948
  – 5 year total (FY10-FY14) $57,986,871

• $6.15 dollars in grant income for every $1.00 in state funding
• 3rd highest externally funded academic department on campus

Primary External Funding Sources
  – NASA, NOAA, DOE, USGS, USAID, USDA
  – Gates Foundation, Moore Foundation
New BSOS Center for Geographic Information Science

- Building GIS
  - Spatial computing
  - Spatial engineering
  - Software development

- Data fusion
  - Big data
  - Deep data
  - Data-mining and KD

- Visualization
  - AR and VR
  - Geovizualization
  - Decision support

- Applications
  - Behavioral science
  - Public health
  - Intelligence

New Facilities
- Spatial data hub
- Geocomputation facility
= Advanced R&D

New Learning Space
- Studio-based classrooms
- Situation room
= Advanced education