

### MPower Collaboration Retreat

Osprey Point Retreat and Conference Center, May 26-27, 2015 Kathleen Stewart Department of Geographical Sciences (07/2015) stewartk@umd.edu

## About me

### Spatiotemporal GIScience

- Especially interested in analyzing and mapping spacetime change and movement
- Trajectory representation and analysis
- Space-time accessibility
- Geo-social media data analysis
- Big geospatial data

## Geocollaborations with health researchers

- Hotspots and cluster analysis
  - Spatial autocorrelation





Space-time accessibility

Spatial accessibility enhanced with sociodemographic variables for IVF treatment





Accessibility for kidney transplantation (transplant centers plus donor service areas)

02:01

# Longer-term collaborative interests

#### **Movement trajectories**

- paths, routes, zones, life course trajectories
- Geo-social media analysis (Twitter, FourSquare)
- Geographic information retrieval



Text analysis of 2013 drought forecast



Twitter data analysis of vot er behaviors in Atlanta 2014

midterm election



Wildfire potential estimated from Wikipedia August 2014 knowledgebase



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