

## **Current Graduate Students:**

**Biniam Asmerom (Fall 2006 - Present)**

### **Research topics:**

- **San Juan region of Argentina:** (a) receiver function profiles from short-period receiver function analysis of intermediate-depth earthquakes occurred at almost constant depth  $\sim$ 100 km, (b) crust and upper mantle structure from receiver function profiles and 3-D Vp and Vs tomographic inversion, (c) earthquake relocations using 3-D models, and (4) regional tectonic evolution model
- **Upper Mississippi Embayment in the central USA:** (a) high-resolution 3-D Vp and Vs structural models for the sedimentary basin from converted waves and seismic reflection/refraction lines, (b) Pn tomography beneath the NMSZ from seismic array analysis, (c) high-resolution 3-D Vp and Vs crust structure study using direct P and S waves and may be additional PmP, Pn, SmP, PmS, and SmS phases, (d) earthquake relocations for the NMSZ using 3-D structural models, and (e) regional tectonic models by summarizing results obtained from (a) to (d).