

CURRICULUM VITAE

Gregory D. Bensen

Doctoral Candidate in Geophysics

Center for Imaging the Earth's Interior
University of Colorado at Boulder
Campus Box 390, Boulder, CO 80309
Phone: 303-819-0523
Email: gbensen@colorado.edu
<http://ciei.colorado.edu/~gbensen/>

Education:

University of Colorado at Boulder August 2003 - present
Pursuing a PhD in Geophysics - Seismology
3.78/4.0 current GPA
Expected graduation: Summer 2007

Colorado School of Mines August 1997 - May 2001
B.S.: Geophysical Engineering. Minor: Public Affairs
3.69/4.00 3.88/4.00 in major. High Academic Honors

Professional Experience:

May 2003 - Present

Graduate Research Assistant with UNAVCO, Inc. Boulder, Colorado
Working with the GEON project for the Earth Sciences. Creating integrated 3D visualizations of geophysical data and models, creation of an educational unit, experimentation with new, more versatile methods of data serving.

January 2005 – Present

Graduate Research Assistant – CU Department of Physics Boulder, Colorado
Working with Prof. Mike Ritzwoller to develop technique of using noise cross-correlations as Green's functions between stations. Applied technique to North America to provide a new S-wave tomographic model from the crust down to ~100 km depth.

May 2003 – December 2004

Graduate Research Assistant – CU department of Geology Boulder, Colorado
Worked with Prof. Anne Sheehan to investigate Colorado seismicity using the 1992 Rocky Mountain Front PASSCAL experiment. Created and managed Antelope database and worked to locate events and discriminate blasts.

October 2001 – October 2002

Short term intern – Campus Crusade for Christ Concepción, Chile
Organized and led small and large group meetings at the Universidad de Concepción. Prepared and presented study material. All work done in Spanish.

September 1998 - May 2001

Laboratory technician in CSM Optical Mineralogy Lab Golden, Colorado
Prepared hand samples, core samples, thin sections, and SEM samples.
Administered lab and maintained optical mineralogy and sample preparation equipment.

Summer 1998

Field employee with Western Geophysical New Orleans, Louisiana
Geophysical field surveying work including distribution of seismic transmitters, reviewing and repairing geophones and radio transmitting boxes, GPS location surveying.

Honors:**Graduate:**

AGU Outstanding Student Paper Award – Seismology section Fall 2005

Undergraduate:

Guy T. McBride Honors Program
Frank M. Hershey Memorial Award
Society of Exploration Geophysicists Scholarship
Wickman Memorial Scholarship
Concert Choir Scholarship

Technical and Communication Skills:

- Proficient in C, shell scripting, SAC and Antelope. Experience with FORTRAN, MATLAB, and HTML.
- Field techniques for a variety of geophysical exploration methods (Reflection Seismic, Electrical, EM, Magnetic, Gravity, and others), geologic mapping and outcrop evaluation.
- Laboratory techniques in geologic evaluation of core samples and hand samples, microscopy well log/reservoir analysis, ultrasonic seismic investigations.

Teaching Experience:

- Co-taught short course (in Spanish) in exploration geophysics for graduate students in geotechnical engineering at the Universidad Nacional de Medellín, Medellín, Colombia October 2005.
- Tutored AP Physics for high school students 2004-2005.

Business experience:

- Operate a small freelance web design operation with my wife (Bensen Design).
- Purchase, repair and resell vehicles as a hobby/business.

Publication and Abstracts:

Bensen, G.D., M.H. Ritzwoller, and N.M. Shapiro, Broad-band ambient noise surface wave tomography across the United States, submitted to *J. Geophys. Res.*

Bensen, G.D., M.H. Ritzwoller, M.P. Barmin, A.L. Levshin, F. Lin, M.P. Moschetti, N.M. Shapiro, and Y. Yang, Processing seismic ambient noise data to obtain reliable broad-

band surface wave dispersion measurements, *Geophys. J. Int.*, 169, 1239-1260, doi: 10.1111/j.1365-246X.2007.03374.x, 2007.

Shapiro, N.M., M.H. Ritzwoller, and G.D. Bensen, Source location of the 26 sec microseism from cross correlations of ambient seismic noise, *Geophys. Res. Lett.*, in press.

Ritzwoller, M.H., N.M. Shapiro, M.E. Pasyanos, G.D. Bensen, and Y. Yang, Short period surface wave dispersion measurements from ambient seismic noise in North Africa, the Middle East, and Central Asia, *Proceedings of the 27th Seismic Research Review -- Ground-Based Nuclear Explosion Monitoring*, Palm Springs, CA (Sept. 20 - 22, 2005), 2005.

Fall 2005 AGU Meeting:

Extending Ambient Noise Surface Wave Tomography to Continental Scales: Application Across the United States. Bensen, G.D., Ritzwoller, M.H., Shapiro, N.M., Levshin, A.L.

Broad-Band Ambient Noise Surface Wave Tomography Across Eurasia: Early Results. Ritzwoller, M.H., Yang, Y., Shapiro, N.M., Bensen, G.D.

Locating the Source of the Twenty-Six-Second Microseism by Cross-Correlation Records of Ambient Seismic Noise. Shapiro, N.M., Ritzwoller, M.H., Bensen, G.D.

Spring 2005, AGU/SEG joint assembly:

Broadband Surface Wave Dispersion Measurements Across North America from Ambient Seismic Noise. Bensen, G.D., Shapiro, N.M., Ritzwoller, M.H., Campillo, M., Stehly, L.

Fall 2004 AGU meeting and fall 2004 GSA meeting:

Information Technology Developments for Geodynamics Research. Bensen, G.D., Sheehan, A.F., Meertens, C.M.

Professional Memberships: American Geophysical Union (2003 – present)
Society of Exploration Geophysicists (1998-2001, 2006)

Languages: English and Spanish

Personal Interests: Various outdoor activities including hiking, climbing, mountaineering, snowboarding, mountain biking, woodworking, classic cars and playing and listening to live music.

References furnished upon request.