



THE GEOLOGICAL SOCIETY OF AMERICA

Geology and Health Division

Vol. 2 No. 3

October 2007

Friends of Geology and Health:

I hope that fall finds you all well, after an extended and very hot summer. As a paleoclimatologist in my other life, I am always careful to separate weather (i.e., what we experience in a particular year or season) from climate, which is the multi-annual temperature and precipitation pattern. But it is hard to consider the number of record-breaking days this summer, and even summers this past decade, and not begin to think seriously about local responses to global climate change. As has been highlighted in several recent geology and health-related studies and as recognized by the Nobel Committee in their award for the 2007 Peace Prize, societal and health effects of climate change are emerging as threats to many regions and countries. Most economic analyses reveal that the US is at low general risk of deleterious impacts from climate change--obviously, if Hurricane Katrina is a bellwether of the potential impacts, this statement does not apply in all cases. But access to clean drinking water supplies and food production in developing countries has been highlighted as a profound human health issue and place these countries at very high risk for deleterious effects from climate change. A greater understanding of potential environmental effects of climate change and informed data on mitigating these effects fall clearly in our lap as a Division, and I encourage greater dialog among ourselves and with various international associations to apply our collective skills as geoscientists and human health experts to this global concern. Our Division took some great steps toward this end in a Pardee Symposium last year which featured Cindy Parker and others discussing climate change and health (see this link for recorded versions of the talks from last GSA; [Pardee Talks GSA 2006](#)), and I would like to see this continue in the future.

I am excited about the upcoming GSA meeting. This excitement stems not just from the annual opportunity to see what people are thinking about in the various Geoscience fields, but also from the opportunity to see several excellently organized technical sessions that focus on Geology and Health, and to dialog about just such issues as are raised in the paragraph above. This short Newsletter is aimed at providing some information about various events at the upcoming GSA meeting, including your Geology and Health Division Business Meeting, as well as some news on recent and upcoming events related to geology and health.

As always, I encourage you to continue to engage in the activities sponsored by the Geology and Health Division via proposing and organizing special sessions at meetings and telling your friends about the Division. Even as I complete my stint as Chair of the G&H Division as of this annual meeting, I will continue my involvement under our new Chair Geoff Plumlee and will support our mission to expand opportunities between the geosciences and the health sciences.

See you in Denver,

Gabriel Filippelli
gfilippe@iupui.edu

Geology and Health Division website: <http://rock.geosociety.org/GeoHealth/index.html>.

1. Geology and Health Events at the GSA Annual Meeting Oct. 27-31, Denver, CO

A. We will be holding our

Annual G&H Business Meeting--Monday (Oct. 29) room CCC 501 at 5:45 pm.

At the meeting, you will hear from the current officers about G&H activities and membership details, and will have the opportunity to provide input about future activities of the Division. This input includes discussion of sessions for the GSA 2008 meeting in Houston, which is co-sponsored by several soil science societies, potential utilization of G&H Division dues for student awards/travel grants, and other issues brought up by division members. After the business meeting, feel free to join us for dinner at a downtown restaurant (unfortunately, paying your own way—we don't have THAT much dues money!)

B. Several excellent sessions sponsored by the Geology and Health Division will take place.

Sunday, October 28

8:00 AM-2:20 PM, Colorado Convention Center: 601

T129. Teaching Climate Change and Energy Issues in the Classroom: An Imperative for Educated Citizens and Geoscientists

George T. Stone, Andrew M. Buddington, Presiding

Paper #	Start Time	
	8:00 AM	Introductory Remarks
20-1	8:05 AM	TEACHING A MOVING TARGET : RUDDIMAN, William F. , Environmental Sciences, Univ of Virginia, Clark Hall, Charlottesville, VA 22903, wfr5c@virginia.edu
20-2	8:25 AM	GLOBAL CLIMATE MODELS IN THE CLASSROOM: TOOLS FOR EXPLORING THE IMPACTS OF CLIMATE CHANGE AND ENERGY POLICIES : CHANDLER, Mark A. , Center for Climate Systems Research, Columbia University, NASA/GISS, 2880 Broadway, New York, NY 10025, mac59@columbia.edu, SOHL, Linda E., Center for Climate Systems Research, Columbia University, 2880 Broadway, New York, NY 10025, and MANKOFF, Ken, CCSR, Columbia University, NASA/GISS, 2880 Broadway, New York, NY 10025
20-3	8:45 AM	CLIMATE INSTABILITY: HEALTH PROBLEMS AND HEALTHY SOLUTIONS : EPSTEIN, Paul Robert , Center for Health and the Global Environment, Harvard Medical School, 401 Park Drive, 2nd Floor East, Boston, MA 02215, paul_epstein@hms.harvard.edu
20-4	9:05 AM	UNDERSTANDING THE ECONOMICS OF CLIMATE STABILIZATION : GOODSTEIN, Eban , Economics, Lewis & Clark College, Palatine Hill Road, Portland, OR 97219, eban@lclark.edu
20-5	9:25 AM	KEY CONCEPTS FOR COMMUNICATING THE ESSENCE AND URGENCY OF THE GLOBAL-WARMING CHALLENGE : STONE, George T. , Physical Science, Milwaukee Area Technical College, 700 West State Street, Milwaukee, WI 53233-1443, stoneg@matc.edu
	9:40 AM	Break
20-6	9:55 AM	GLACIERS AND CLIMATE CHANGE EDUCATION : GRANSHAW, Frank Douglas , 1) Physical Science / 2) Geology, 1) Portland Community College / 2) Portland State University, Portland, OR 97213, fgransha@pcc.edu
20-7	10:10 AM	GLACIER SURFACE FIELD EXPERIENCES AND GIS TRAINING PROVIDE ALASKA'S SCIENCE TEACHERS WITH CLIMATE CHANGE ASSESSMENT TOOLS FOR USE IN MIDDLE SCHOOL AND HIGH SCHOOL CLASSROOMS : CONNOR, Cathy L. ¹ , PRAKASH, Anupma ² , BERNER, Logan ¹ , HEAVNER, Matthew ¹ , and HOOD, Eran ¹ , (1) Natural Sciences, University Alaska Southeast, 11120 Glacier Highway, Juneau, AK 99801, cathy.connor@uas.alaska.edu, (2) Geophysical Institute, University of Alaska, Fairbanks,

P.O. Box 757320, Fairbanks, AK 99775

- 20-8 10:25 AM [THE COLUMBIA RIVER AND CLIMATE CHANGE: CONNECTING GEOLOGY WITH SOCIETY ON A REGIONAL SCALE](#): **DAWES, Ralph L.**, Earth Sciences, Wenatchee Valley College, 1300 Fifth Street, Wenatchee, WA 98801, rdawes@wvc.edu
- 20-9 10:40 AM [SHARING THE SCIENCE OF CLIMATE ONLINE AND CONNECTING WITH VARIOUS AUDIENCES THROUGH WINDOWS TO THE UNIVERSE](#): **GARDINER, Lisa**, JOHNSON, Roberta, RUSSELL, Randy, LAGRAVE, Marina, BERGMAN, Jennifer, GENYUK, Julia, FOSTER, Susan, and HENDERSON, Sandra, Office of Education and Outreach, University Corporation for Atmospheric Research, PO Box 3000, Boulder, CO 80307, egardine@ucar.edu
- 20-10 10:55 AM [SUPPORTING CLIMATE CHANGE AND ENERGY IN THE 9TH GRADE CURRICULUM](#): **SCHROEDER, Karen D.** and KOHL, Laurel, CT Energy Education, Institute for Sustainable Energy, 83 Windham Street, Willimantic, CT 06226, schroederk@easternct.edu
- 20-11 11:10 AM [INTERFACING RENEWABLE ENERGY STUDIES WITH THE TRADITIONAL EARTH SCIENCE CURRICULUM AT EASTERN CONNECTICUT STATE UNIVERSITY](#): **LOXSOM, Fred**, SCHROEDER, Timothy, and DRZEWIECKI, Peter, Environmental Earth Science Department, Eastern Connecticut State University, 83 Windham Street, Willimantic, CT 06226, loxsof@easternct.edu
- 20-12 11:25 AM [INTEGRATING CLIMATE CHANGE AND ENERGY ISSUES INTO THE TRADITIONAL EARTH SCIENCE CURRICULUM AT EASTERN CONNECTICUT STATE UNIVERSITY](#): **SCHROEDER, Timothy**, LOXSOM, Fred, and DRZEWIECKI, Peter, Environmental Earth Science Department, Eastern Connecticut State University, 83 Windham Street, Willimantic, CT 06226, schroedert@easternct.edu
- 20-13 11:40 AM [COAL, CHINA & KYOTO: A CASE STUDY ILLUSTRATING THE GEOLOGIC, ECONOMIC AND GLOBAL ASPECTS OF CLIMATE CHANGE AND INTERNATIONAL POLICY](#): **MASSEY, Garth**, International Studies Program, University of Wyoming, Department 3293, 1000 E. University Ave, Laramie, WY 82701, gmmassey@uwyo.edu and MYERS, James D., Geology & Geophysics, University of Wyoming, Department 3006, 1000 E. University Ave, Laramie, WY 82071
- 11:55 AM Concluding Remarks

Note continuation after lunch break...

Paper # Start Time

- 1:30 PM Introductory Remarks
- 50-1 1:35 PM [DOES "TEACHING THE CONTROVERSY" FOSTER CRITICAL THINKING?](#): **LINNEMAN, Scott R.**, Geology Department, Western Washington Univ, Bellingham, WA 98225, scott.linneman@wwu.edu
- 50-2 1:50 PM [AL'S BANDWAGON: AN UNDERGRADUATE CLASS FORUM ON CLIMATE CHANGE](#): **SMAGLIK, Suzanne M.**, Math & Science, Central Wyoming College, 2660 Peck Ave, Riverton, WY 82501, ssmaglik@cwcc.edu
- 50-3 2:05 PM [A COMMUNITY IMPERATIVE: CLIMATE CHANGE ACTIVISM BEYOND THE CLASSROOM AT HIGHLINE COMMUNITY COLLEGE, DES MOINES, WA](#): **LOETTERLE, James**¹, MCDOUGAL, Shawn², BURN, Helen², FRANKS, Dana³, MANGHANI, Ravi⁴, MOSES, Woody⁵, and WRIGHT, Roman⁶, (1) Geology Department, Highline Community College, 2400 S. 240th Street, Des Moines, WA 98198-9800, jloetter@highline.edu, (2) Mathematics Department, Highline Community College, 2400 S. 240th Street, Des Moines, WA 98198-9800, (3) Reference Librarian, Highline Community College, 2400 S. 240th Street, Des Moines, WA 98198-9800, (4) Chemistry Department, Highline Community College, 2400 S. 240th Street, Des Moines, WA 98198-9800, (5) Biology Department, Highline Community College, 2400 S. 240th Street, Des Moines, WA 98198-9800, (6) Speech Department, Highline Community College, 2400 S. 240th Street, Des Moines, WA 98198-9800
- 50-4 2:20 PM [BUILDING STUDENT AWARENESS OF CLIMATE CHANGE VIA A FRESHMAN SEMINAR](#): **MOOSAVI, Sadredin C.**, Earth & Environmental Sciences, Tulane University, 120 Dinwiddie Hall, New Orleans, LA 70118, smoosavi@tulane.edu
- 50-5 2:35 PM [USING THE "LIFESTYLE PROJECT" TO INCREASE ENVIRONMENTAL AWARENESS](#): **EARLE, Steven**, Geology, Malaspina University-College, 900 5th St, Nanaimo, BC V9R 5S5, Canada, earles@mala.bc.ca, KIRK, Karin, Department of Earth

Sciences, Montana State University, Bozeman, Bozeman, MT 59717, and WRIGHT, Paul, Southampton Solent University, Southampton, United Kingdom

2:50 PM Discussion

Monday, October 29

1:30 PM-5:30 PM, Colorado Convention Center: 501

T127. Positive and Beneficial Aspects of Earth Sciences in Public Health

Ulli Limpitlaw and Lynda Williams, Presiding

1:30 PM Introductory Remarks

- 109-1 1:35 PM [HEALTH AND MINERALS](#): **SKINNER, H. Catherine**, GEOLOGY AND GEOPHYSICS, YALE UNIVERSITY, BOX 208109, New Haven, CT 06521-8109, CATHERINE.SKINNER@YALE.EDU
- 109-2 1:55 PM [BENEFICIAL MINERALS IN THE PHARMACEUTICAL INDUSTRY](#): **SMOLIGA, John A.**, Analytical Sciences, Boehringer Ingelheim Pharmaceuticals, Inc, 900 Ridgebury Rd, Ridgefield, CT 06877, jsmoliga@rdg.boehringer-ingelheim.com
- 109-3 2:10 PM [EARTH MATERIALS IN EMERGENCY MEDICINE](#): **LIMPITLAW, Ulli**, Earth Sciences, University of Northern Colorado, Greeley, CO 80639, diamspir@aol.com
- 109-4 2:25 PM [HEALING WITH MINERALS AND INORGANIC SUBSTANCES: MIEDIEVAL TO PRESENT DAY LEVANTINE MEDICINE PRACTICE](#): **LEV, Efraim**, Department of Erets Israel Studies and School of Public Health, University of Haifa, Haifa 31905 Israel, efraiml@research.haifa.ac.il
- 109-5 2:40 PM [BONE APATITE: THE SECRET IS IN THE CARBONATE](#): **PASTERIS, Jill Dill¹**, YODER, Claude H.², ROGERS, Keith D.³, STERNLIEB, Mitchell², and MAN, Shuyi⁴, (1) Dept of Earth & Planetary Sciences and Center for Materials Innovation, Washington University, Campus Box 1169, St. Louis, MO 63130-4899, PASTERIS@LEVEE.WUSTL.EDU, (2) Department of Chemistry, Franklin and Marshall College, Lancaster, PA 17604, (3) Department of Materials & Medical Sciences, Cranfield University, Shrivenham Campus, Swindon, Wiltshire, SN6 8LA, United Kingdom, (4) Dept of Earth & Planetary Sciences, Washington Univ, St. Louis, MO 63130-4899
- 109-6 2:55 PM [MEDICAL APPLICATIONS OF CALCIUM AND OTHER "NON-TRADITIONAL" STABLE ISOTOPE SYSTEMS](#): **SKULAN, Joseph**, Dept. of Geology and Geophysics, University of Wisconsin, 1215 W. Dayton St, Madison, WI 53706, jlskulan@geology.wisc.edu, ANBAR, Ariel D., School of Earth & Space Exploration and Dept. of Chemistry & Biochemistry, Arizona State University, Tempe, AZ 85287-1404, and BULLEN, Thomas D., Branch of Regional Research, Water Resources Division, U.S. Geol Survey, MS 420, 345 Middlefield Rd, Menlo Park, CA 94025
- 3:15 PM Break
- 109-7 3:30 PM [BROAD-SPECTRUM IN VITRO ANTIBACTERIAL ACTIVITIES OF CLAY MINERALS AGAINST ANTIBIOTIC-SUSCEPTIBLE AND ANTIBIOTIC-RESISTANT BACTERIAL PATHOGENS](#): **HAYDEL, Shelley E.**, School of Life Sciences and The Biodesign Institute, Arizona State University, 1001 McAllister Ave, CIDV, Box 875401, Tempe, AZ 85287-5401, Shelley.Haydel@asu.edu and WILLIAMS, Lynda B., School of Earth and Space Exploration, Arizona State University, Box 871404, Tempe, AZ 85287-1404
- 109-8 3:45 PM [CHEMICAL AND MINERALOGICAL CHARACTERISTICS OF FRENCH GREEN CLAYS USED FOR HEALING](#): **WILLIAMS, Lynda B.**, School of Earth and Space Exploration, Arizona State University, Box 871404, Tempe, AZ 85287-1404, lynda.williams@asu.edu, HAYDEL, Shelley E., School of Life Sciences & Biodesign Inst, Arizona State University, Box 875401, Tempe, AZ 85287-5401, EBERL, Dennis D., U.S. Geological Survey, 3215 Marine St, Boulder, CO 80303-1066, and BLUM, Alex E., U.S. Geol Survey, M.S. 964 Box 25046 Denver Federal Center, Denver, CO 80225-0046
- 109-9 4:00 PM [SURFACE PROPERTIES OF SOME ANTIMICROBIAL CLAYS](#): **BANK, Tracy L.** and GIESE, Rossman F., Geology, University at Buffalo, 876 Natural Science Complex, Buffalo, NY 14260-3050, tlbank@buffalo.edu
- 109- 4:15 PM [THE MAN WHO SAVED ONE MILLION LIVES](#): **REINBACHER, W. Rudolf**, Palo Alto, CA

10		94303, chrisrudy@sbcglobal.net and LIMPITLAW, Ulli, Earth Sciences, University of Northern Colorado, Greeley, CO 80639
109-11	4:30 PM	NATURALLY OCCURRING ASBESTOS - A RECURRING PUBLIC POLICY CHALLENGE: LEE, Richard J., STROHMEIER, Brian R. , BUNKER, Kristin L., and VAN ORDEN, Drew R., RJ Lee Group, Inc, 350 Hochberg Road, Monroeville, PA 15146, bstrohmeier@rjlg.com
109-12	4:45 PM	THE YUCCA MOUNTAIN PERFORMANCE CONFIRMATION PROGRAM: HENNING, Roger J. ¹ , HANSEN, Francis ¹ , and BARR, Deborah ² , (1) Lead Laboratory - Performance Confirmation, Yucca Mountain Project, 1180 Town Center Drive, M/S LL 423, Las Vegas, NV 89144, Roger_Henning@ymp.gov, (2) Office of the Chief Scientist - Repository Science & Integration, U.S. Department of Energy, 1551 Hillshire Drive, M/S 523, Las Vegas, NV 89134
	5:00 PM	Concluding Remarks

Tuesday, October 30

1:30 PM-5:30 PM, Colorado Convention Center: 505

T130. Forensic Geoscience: Research and Case Studies

Elisa Bergslien, C.E. Nehru, Presiding

Paper # Start Time

170-1	1:30 PM	SHERLOCK HOLMES GOES TO ANTARCTICA: ANDREWS, Sarah , P.O. Box 1521, Sebastopol, CA 95473, Sarah.Andrews@ebagroup.com
170-2	1:50 PM	FORENSIC GEOLOGY CASE STUDIES FROM THE NORTHWEST: SCHNECK, William , Microanalysis, Washington State Patrol Crime Laboratory, 580 West 7th Street, Cheney, WA 99004, bill.schneck@wsp.wa.gov
170-3	2:10 PM	THE LANDSCAPE AND THE VICTIM: RUFFELL, Alastair , School of Geography, Archaeology, Palaeoecology, Queen's University Belfast, Elmwood Avenue, Belfast BT26 6BJ United Kingdom, a.ruffell@qub.ac.uk
170-4	2:30 PM	EXAMINING EARTH EVIDENCE: IS ENERGY DISPERSIVE SPECTROSCOPY ENOUGH?: HALTERMAN, Don J. Jr and WILLIAMS, Thomas J., Department of Geological Sciences, University of Idaho, Moscow, ID 83844, dhalterman@vandals.uidaho.edu
170-5	2:45 PM	A NEEDLE IN THE X-RAY HAYSTACK: DETECTION LIMITS IN POWDER X-RAY DIFFRACTION OF GEOLOGIC MATERIALS: WILLIAMS, Thomas J. , Department of Geological Sciences, University of Idaho, Moscow, ID 83844, tomw@uidaho.edu, GUNTER, Mickey E., Department of Geological Sciences, Univ of Idaho, Moscow, ID 83844, and SANCHEZ, Matthew S., R.J. Lee Group, 350 Hochberg Road, Monroeville, PA 15146
170-6	3:00 PM	DIFFERENTIATING SOILS IN WESTERN NEW YORK USING XRF AND XRD TO BUILD A DATABASE: BERGSLIEN, Elisa , Earth Sciences and Science Education, Buffalo State College, 1300 Elmwood Ave, 271 Science Building, Buffalo, NY 14222, bergslet@buffalostate.edu and HOVEY, Adam, Great Lakes Center, Buffalo State College, 1300 Elmwood Ave, Buffalo, NY 14222
170-7	3:15 PM	FORENSIC AND ENVIRONMENTAL ANALYSIS OF LEAD DISTRIBUTION IN ERIE AND NIAGARA COUNTY SOILS: GEROVAC, Crystal M. , Earth Sciences and Science Education, Buffalo State College, 415 Baynes Street, Lower Apt, Buffalo, NY 14213, cmgerovac@yahoo.com and BERGSLIEN, Elisa, Earth Sciences and Science Education, Buffalo State College, 1300 Elmwood Ave, 271 Science Building, Buffalo, NY 14222
	3:30 PM	Break
170-8	3:45 PM	FORENSIC GEOLOGY AS A VEHICLE FOR INQUIRY-DRIVE LEARNING: THE CASE OF THE SANDY BODY: EBY, G. Nelson , Department of Environmental, Earth & Atmospheric Sciences, University of Massachusetts, Lowell, MA 01854, Nelson_Eby@uml.edu
170-9	4:00 PM	BROWNFIELD ACTION: VIRTUAL INSTRUCTION IN ENVIRONMENTAL FORENSICS: BOWER, Peter M., Environmental Science, Barnard College, Columbia University, New York, NY 10027, pb119@columbia.edu and LIDDICOAT, Joseph C. , Environmental

- Science, Barnard College, Columbia University, New York, NY 10027,
jliddico@barnard.edu
- 170-10 4:15 PM ["CASE STUDIES" IN FORESIC CLASSES: NEHRU, Cherukupalli E.](#), Geology, Brooklyn College, CUNY, Brooklyn, NY. 11210, Earth and Environmental Sciences, PhD Program, Graduate School, CUNY, New York, NY, 10016, Earth and Planetary Sciences, American Museum of Natural History, New York, NY, 10024, Asian American/Asian Research Institute, New York, NY 10036, Nehru@Brooklyn.CUNY.edu
- 170-11 4:30 PM [A FORENSIC TWIST TO A RUN OF THE MILL ENVIRONMENTAL GEOLOGY LABORATORY COURSE: ASHER, Pranoti M.](#), Department of Geology and Geography, Georgia Southern University, Statesboro, GA 30460-8149, PAsher@GeorgiaSouthern.Edu and RHODES, Dallas D., Department of Geology and Geography, Georgia Southern University, Statesboro, GA 30460-8149
- 170-12 4:45 PM [GEOLOGIC AGENTS AS POISONS: WHAT'S OBVIOUS TO A GEOLOGIST MAY BE NEWS TO EVERYONE ELSE: ANDREWS, Sarah](#), PO Box 1521, Sebastopol, CA 95473, Sarah.Andrews@ebagroup.com
- 170-13 5:00 PM [THE BIOACCESSIBILITY OF METAL AND METALLOID TOXICANTS IN COMPOUNDS USED HISTORICALLY IN MEDICINES, TOILETRIES, AND MURDERS: PLUMLEE, Geoffrey S.¹, MORMAN, Suzette A.², WOLF, Ruth E.², and TODOROV, Todor²](#), (1) Crustal Imaging and Characterization Team, U.S. Geological Survey, MS964 Denver Federal Center, Denver, CO 80225, gplumlee@usgs.gov, (2) Crustal Imaging and Characterization Team, U.S. Geological Survey, MS973 Denver Federal Center, Denver, CO 80225
- 170-14 5:15 PM [ARSENIC AND MEDICAL GEOLOGY-A ROLE FOR THE EARTH SCIENTIST IN THE ASSESSMENT AND PREVENTION OF HEALTH RISK: CENTENO, José A.](#), Chief, Biophysical Toxicology Branch, Armed Forces Institute of Pathology, Dept of Environmental and Toxicological Pathology, 6825 16 NW, Bldg. 54, Washington, DC 20306, centeno@afip.osd.mil

2. G&H Division Sponsoring a Workshop/Training Conference

The G&H Division is sponsoring a workshop/training conference with a focus on geosciences and human health (description below).

Geohealth I: Building Bridges across the Geological and Health Sciences, 4-6 March 2008, Reston, VA

As we connect the dots between the geological and health sciences, we'll be able to communicate more effectively with policy and decision makers on complex environmental health problems. This interactive conference will feature case studies on airborne, soilborne, and drinking water contaminants presented by paired geologists and health scientists. Your input is sought as we develop an emerging needs and research agenda. For more information, visit <http://www.geosociety.org/meetings/08GeohealthI/>, or contact dnelson@geosociety.org.

3. Summary of Geology and Health session at Northeastern GSA meeting

From H. Catherine W. Skinner

The meeting held at University of New Hampshire, Durham Mach 12-14, 2007 was a resounding success for the number of attendees both professional academics and students. Durham and the weather were conducive to gathering in pleasant surroundings and meeting new potential collaborators and old friends. I feel encumbered to comment that the food presented at coffee breaks and receptions (free for participants) was the best I personally have ever experienced at any GSA meetings! Sponsors who made this largess and also donated the funds that permitted

the attendance of so many students must be commended as well as the local committee especially Wally Bothner, Tim Allen and Jo Laird who did a fine job on program.

Nelson Eby, from Dept of Environment, Earth and Atmospheric Sciences, U Mass, Lowell and H. Catherine W. Skinner, Dept. Geology and Geophysics, Yale University, New Haven, CT. were co-conveners of a session sponsored by GSA Geology and Health Division titled "Health and Geology in the Northeast" on Monday, March 12th afternoon.

We solicited input for our session with the following paragraph sent to our LISTSERV and members of GSA on the Society web site as follows:

"This session will focus on the relationship between geological factors (both natural and anthropogenic) and disease, pathology and death in modern and fossil humans, animals and plants. This is an eclectic field and the intent of the session is to bring together researchers with various backgrounds and interests in order to facilitate discussion of the interrelationships between geology and health."

Joe Ayotte opened session #18 with an overview of modeling that combined earth science with epidemiology related to arsenic in New England ground water. This has become a hot topic in water evaluations that USGS personnel have been involved with for some time. Scott Bailey showed that sugar maples and their disease related to the geologic substrate and Benedetto De Vivo discussed the natural radioactivity and harmful element distribution determined in Campania, southern Italy, relative to cancer occurrence and the potential sources of these elements.

An overview of strontium in geological, biological and medical aspects was outlined by Skinner. Smoliga discussed mineralogy in the pharmaceutical industry while Benotti outlined the occurrence and transport of pharmaceuticals in ground water of Suffolk County (Long Island), New York. There were two presentations related to road salt, one in bedrock aquifers by Joshua Katz and the other on mapping the contaminated groundwater discharge of salt into a southern New Hampshire watershed by Harte. Unfortunately two presenters did not arrive, so the audience was treated to another presentation by Benotti, an additional section of his PhD work on groundwater problems and measurement issues. Lively questioning finalized the session and lasted for some while between the audience and presenters.

Other sessions addressed issues directly related to Geology and Health. These included: "Contaminants in Groundwater-Surface Water Systems: sources, pathways and toxicities" and "Elemental Cycling within Terrestrial Environments."

There were clear indications that much work and thought is going into assessing the waters of the New England area because of potential health concerns. These are issues not unique to this region of the US and we should expect continued expansion in geologic research activities as well as hearing such reports in future GSA meetings.

Finally several sessions were devoted to honoring Jim Skehan as teacher, mentor and georesearcher who has been involved in New England geology for 50 years. There were other interesting groups of talks, one that remarked on the revival of State and Provincial Geological Surveys in the NE. This latter group, as one could imagine, engendered lots of talk in the hallways and over lunch or dinner in addition to comparing notes between people on the latest

techniques and applications in geoscience as well as views shared by attendees on where the fields under study were leading to.

All told I am very encouraged to be part of such meetings in order to experience the enthusiasm of so many young people in the geo- fields represented at the meeting, and especially the expanded interest in basic science related to environmental issues and the possible relationship to health problems. I felt privileged to be part of this ‘new’ view and look forward to the next, the annual meeting in Denver in October 2007.

4. Membership and Financial Report

Our division is still new and should be exhibiting normal healthy growth in membership and in its financial base. The following summary shows we are off to a good start. Thank you for your continued participation in the Division.

Membership as of:

Aug 30, 2006	108	
Dec 31, 2006	112	
Mar 20, 2007	183	
Aug 30, 2007	210	48 of the 210 are students

Our current balance is \$ 2321.76

5. Election Result for G&H Second Vice-Chair

I am happy to report that H. Catherine W. Skinner was elected by our Division to serve as the Second Vice-Chair. In this capacity, Cathy will be a member of the Executive Committee, and will follow the succession order outlined in our By-Laws, eventually becoming Chair of the Division in 2009. We welcome Cathy to this position, and will continue to benefit from her experience and be inspired by this “Champion” of geology and health.