Speakers Today:

**Misato Araki** (AB’01 Grade School teacher at Kaiser Elementary School, Oakland)  
“The Path To Me Becoming a Primary School Teacher”

**George Brimhall** (AB’69, PhD’72) Prof of Geology  
“Surviving the Economic Storm”

Sources of Geoscience Information:

“Status of the Geoscience Workforce 2009”  
American Geological Institute (AGI)  
http://www.agiweb.org/workforce/reports.html

Corresponding alumni:  
Kathy Ehri (BHP-Billiton, Adelaide, Australia) PhD  
Peter Yen (Bechtel, San Francisco, CA) AB  
Nick Walchuk (Environ, Emeryville, CA) AB  
Aric Cunningham (Vostok Energy, London, UK) AB MSc  
Tim Mote (ARUP, Sydney, Australia) PhD  
Diane Wolfgram (Montana Tech, Butte MT) PhD  
Charlie Paradis (Parsons, Boston, MA)- Started GeoOlympics, Charter member of GAB  
George Brimhall (UCB)

Illustrate AGI general trends with words of experiences and wisdom
Alumni Student Careers Forum

2008/2009 Program

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<th>Date</th>
<th>Time</th>
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<th>Speaker(s) and Title</th>
<th>Affiliation</th>
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<tr>
<td>Tuesday Mar 17</td>
<td>5-6 pm</td>
<td>365 Mc Conor</td>
<td>George Brimhall “Surviving the Current Job Market”</td>
<td>Miraora Acord “My Path to Becoming a Primary School Teacher” First grade teacher at Kaliou Elementary School, Oakland Unified School District</td>
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<td>Tuesday Mar 27</td>
<td>5-6 pm</td>
<td>365 Mc Conor</td>
<td>Jack Graham “Environmental Consulting in tough economic times”</td>
<td>Geological ARCADIS</td>
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<td>Tuesday Mar 31</td>
<td>5-6 pm</td>
<td>365 Mc Conor</td>
<td>Peter McIntyre</td>
<td>Geologist AEI and MBA Student UCB</td>
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<td>Tuesday Apr 14</td>
<td>5-6 pm</td>
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<td>Troy Apel</td>
<td>Geophysicist GEOMATRIX</td>
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<td>Tuesday Apr 28</td>
<td>5-6 pm</td>
<td>365 Mc Conor</td>
<td>Lu M. “Why Consulting? Why ‘Nah!’”</td>
<td>Atmospheric scientist ENVIRON</td>
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US Dept. of Labor

The Employment Challenge is Global

New York Times
The bad news:

Unemployment

Truman, Eisenhower, Kennedy, Johnson, Nixon, Ford, Carter, Reagan, Bush, Clinton, Bush?

The good news:

President Obama: restoring the role of science in government

Congress agrees on stimulus bill

The House and Senate negotiators announced an agreement on a $789 billion stimulus bill, which was billions less than the original House and Senate bills.

Spending and tax credits in selected areas

<table>
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<tr>
<th>Area</th>
<th>Amount</th>
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<tr>
<td>Health care</td>
<td>$137 billion</td>
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<tr>
<td>New tax credit</td>
<td>110-115</td>
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<tr>
<td>Education</td>
<td>Doubling of Budget</td>
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<td>Infrastructure</td>
<td>Green Industry</td>
</tr>
<tr>
<td>Alternative minimum tax</td>
<td>70</td>
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<tr>
<td>Aid to poor and unemployed</td>
<td>63</td>
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Associated Press
More good news:
AGI “Status of the Geoscience Workforce 2009” “Great Crew Change”, of an “aging workforce at a time when there is an anemic supply of qualified and trained scientists and engineers.”
Expect to re-apply your skills from one field to the next as workforce demands change and society’s needs shift.

Working on reservoir characterization for oil today, may become carbon sequestration in the future, or may utilize the principles of fluid dynamics learned from oil exploration to locate and characterize water resources.

Geoscientists need a strong set of fundamental skills in geoscience and mathematics that can be transferred across industrial sectors and applied to different challenges in water resources, energy, minerals, hazards and climate issues, or training the next generation of geoscientists (K-12, college)
Dr. Kathy Ehrig (BHP-Billiton)

Be **passionate** and **convey** that **passion** to those around you. **If you are** “faint hearted”, stay out of geology. **Technical brilliance** always helps. For new employees this really means, being capable of “critical” thinking' and being willing to continue to learn.

In the business world, **geology for the sake of geology has no place**, but **geology which adds value** to the business will be rewarded. As a geologist working in a **mining company**, you must learn **what is important to metallurgists and mining engineers**. You must learn to 'speak' their language because it is rare to find a metallurgist or mining engineer who understands geology.
Dr. Diane Wolfgram (MT Tech): Develop a solid foundation of basic knowledge to build upon first including math, chemistry, and Physics plus engineering fundamentals. If you do that, then you can adopt to change. Don’t believe that what they do on your first job will continue for the rest of their life. Major career changes happens every seven years, on average.
Aric Cunningham (Vostok Energy) CEO:

The key to succeeding is to be flexible, in terms of mobility, skill set, and attitude. A Masters degree is optimum, and if targeting a school, look to Texas/Oklahoma (possibly even Stanford). Begin to enter the industry early by taking any opportunity to work at any level, e.g. on rigs, in operations, but preferably as an intern in the office. Learn a foreign language (Russian, Spanish, Chinese). If just exiting with a AB now, I would strongly suggest going to graduate school, or if not possible, find an entry level job in the oil industry to get experience before going on to graduate school. In the end, the industry is very interesting, challenging, and fun, so I would highly recommend it to students looking for a career.
Peter Yen (Bechtel) Geo-Technical:
The way we improve ourselves is by facing adversity.
Some industries are going down (mining) and some are still doing well (LNG development, power, telecoms).
Government will be funding a massive infrastructure refurbishment, most of which was built just after WWII. This will include highways, bridges, tunnels, schools and other large public works projects. It is important for students to prepare for these opportunities.

Sustainable development: CO2 Sequestration into deep underground chambers, managing waste, building smarter and more efficiently, lower operating cost and etc.

Have modicum of intelligence and be personable- these could take you a long way!
Start at the entry level, but learn your lessons well. Someday you will become an invaluable part of the company and provide wise counsel based on years of training both in the office and in the field. The foundational elements of this experience are the first jobs that will shape your career. Ask questions, involve yourself, and go beyond your job description. Be prepared to tell people your professional opinion when asked. Learn everything you can and look for good mentors to guide you in the years ahead.
**Tim Mote** (ARUP):  
Although the economy is slow, there is a huge amount of money pumped into **infra-structure projects**. All of these need **engineering geologists**. I know **Arup** in Australia **Infrastructure** is very busy with government funded infrastructure projects: **Railroads and tunnels** are especially active in Indonesia, Singapore, Mongolia, Kalahari, Brazil, Sydney, and **High Speed Rail in CA**.

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**Charlie Paradis** (Parsons): If you are a 22 year old student who is **single** and **mobile** then maybe **mining or petroleum** would be your best bet. The **risk** of getting **laid off is high** but the **reward of earning top dollar** is there as well.

If you are a 28 year old student who is **married** and **ready to settle down** then I'd prepare to get into **environmental consulting**.

It is important to remember that when you are in the consulting business **you are only as stable as your client**.  
I work for **commercial clients, ExxonMobil, Chevron, Con Edision**, (petroleum and energy suppliers mostly) and my division has felt the negatives of the market downturn because the stock prices of these entities has fallen. For example, merit increases in my division have been frozen and will be reevaluated in July 2009.
However, we have a division of Parsons that works for government entities like the Army Corps of Engineers. This division is doing better than us because the client is not feeling the market downturn.

For government employers like the EPA, Army Corps of Engineers, USGS, etc. the pay is considerably less, the benefits are better, and your job is much more stable.

Nick Walchuk (Environ):
Site assessments for real estate and cleanup, is quite slow with the state of the economy (and especially credit and lending) the way it is, but health risk, air toxics, and ecology-related areas are busy and may still be hiring.

So if you don’t want to go back to school immediately and has a background where there is an active market for entry-level/recent grads, they should do their homework and prepare for a job search. The student just needs to be realistic as to what kind of a hiring market is out there. A new grad interested in doing environmental due diligence and soil/ground water investigations, should think hard about going back to school to get an advanced degree and make myself more marketable, or to obtain another degree/more coursework in an area where future hiring prospects are strong.
George Brimhall (UC Berkeley):
Take as many courses as possible to prepare for a life time of change. Assemble the best scientific record you can including your transcript, grades, and update a 1-page resume that tells who you are, your work experience, and what you want to do. Include a list of Faculty who know you well enough to write a recommendation for you. If you don’t distinguish yourself, their letters can’t be specific enough to help much.
Appreciate the value of recommendations to land you a job or get you into Grad school, but they are expected to be candid appraisals of your scientific prowess, practical intelligence and skills of working with other people and transcends a GPA to include service. Graduate school is worth considering now as a chance to invest in yourself but make sure that you have a passion for a field as it will take 1 to 6 years. Once there, make the most of the opportunity.
When you do land a job, be the best employee you can to make yourself indispensible. This means attention to both science and caring about other people.