

Professional Development DC Pilot Trip Report

Committee Co-Chairs: Emily Egginton and William Goldsmith
Trip Lead: Alex Renaud

On Tuesday, January 7th 2014, 13 VIMS students participated in the Graduate Student Association Professional Development Committee (PDC) pilot professional development trip to Washington, DC. The itinerary consisted of four different stops that included meetings with individuals within the federal government, NGOs, and the private sector. The following report consists of career and trip lessons learned by trip participants that we would like to share with the entire VIMS graduate student community.

A. Key Lessons Learned

Overall, a tremendous amount was learned regarding important skills for successfully joining the workforce, job-hunting tips, networking advice, and grant/fellowship application advice. Some key lessons that were highlighted by the individuals we met were:

- Communication skills are essential
 - Being able to communicate complex scientific research to nonscientists is critical. There are training programs such as COMPASS and workshops in conflict resolution, negotiation, and facilitation that are helpful
 - Practice speaking to the press, policymakers, public etc.
- Business/Project Management skills are an asset
 - Project management i.e. PMP certification
 - Business courses or MBA
- Focus on broadening your skill set in any way possible
- Other important skills:
 - Networking – join professional societies
 - GIS/modeling training
 - Grant-writing
 - Group facilitation/coordination
 - Practice interviews with peers
 - Listening
 - Fast general research skills

B. Meeting Minutes

Barry Stamey, Founder and President of Ocean Results Group, LLC

College of Charleston- majored in Marine Science focused on coastal issues

Joined the Navy. Traveled internationally mapping the ocean floor. Completed a MS at the Naval Monterey Institute in Meteorology and Oceanography. Moved to DC in 1988. Working in DC is all about communicating the information along to a more senior staffer because everyone below the President is a staffer. Communication is huge in DC because the only way to do anything is to convince Congress why it should be funded. He worked for the Secretary of the Navy - staff on environmental cooperation issues. Worked on marine mammals and acoustics. He worked for Nobilis, a 501c3 commercial group (works with for-profit companies and government). FFRDC federally funded research development contracts are drying up so there is more competition among

the big firms. He spent 4 years preparing for the 2005 international ocean conference in DC. He started his own consulting firm; working with the ocean observatory system on the acquisition of the instruments for the ships. He has worked with Harry Wang from VIMS.

Ocean Results Group projects include:

- Chesapeake Inundation Prediction System
- Algae turf scrubbers; looking to merge with small sensors to improve monitoring. Meeting with the Naval Weapons station in Yorktown. Working with VIMS.
- Renewable energy on ships, putting windmills on old ships. Energy (solar, wind, geothermal, wave generated power) is the new buzzword.

If you want to take the civilian path in the Navy, it is important to keep in mind that there is no biology in the Navy but the following entities exist:

- Oceanographic forecasting
- Navy Task on Climate Change
- SERDP
- Chief of Naval operations
- Environmental program side of the Navy
- NAVFAC responsible for cleanup, marine mammal protection
- Installations will eventually have to deal with climate change but he doesn't think new jobs will be created. Facilities first had to deal with energy conservation.
- Office of Naval research in DC.
- Naval research laboratories in:
 - DC
 - Mississippi- Naval Oceanographic Office (1,000 staff) hydrographic surveys, bio, modeling
 - Monterey, CA (atmospheric monitoring, numerical monitoring).

Ocean community is very complex and disjointed.

NOAA is a collection of authorized programs. They don't have statutory authority. NOAA has a strong field presence but the branches are very decentralized.

Every time there is a change in administration, there is a change in leadership, which takes roughly 2 years. In the interim, roles are filled by staff, which further fragments the leadership. But being a staff member is a good job he thinks.

The marine science field doesn't currently line up with any one agency either! Agencies include:

- NOAA is mostly in Silver spring, MD
- USGS- water supply
- USACE
- EPA
- National Science Foundation- Integrated Ocean Observing System (IOOS) run by NOAA. Academics are running a \$750 million dollar budget for the Ocean Observing System through NSF.

Lessons Learned:

- Helpful to join professional societies because it allows you to reach out to anyone:
 - Marine Technology Society- look at the various committees

- Capitol Hill Oceans week
- Ocean Leadership's Public policy forum
- See what SeaWeb has out there
- Develop more business skills. Many consulting firms are looking for people with a MBA, Professional Engineers license or project management/system engineering experience. He likes to call it "systems science and engineering" because engineering relies on the science.
- Along with the technical academic skills it is important to gain project management skills. It is important to broaden your skills and be able to work in an interdisciplinary team. Teams succeed, individuals don't.
- Energy is still the buzzword these days.

Interview suggestions:

- Understand the organization you are interviewing for and what they need.
- Show that you have a broad set of skills and can provide what they need.
- You have to sell yourself as the solution to their problem.
- Show that you want the team to win and work well together.
- Don't try to grab what you want professionally all at once. Just try to get on the inside of an organization you want to work for and once you are in, make yourself indispensable.
- Explore different opportunities. Send your resume (1 or 2 page most) when requesting to meet with someone. Tailor your resume (no such thing as one size fits all). Use the words of a job description in your resume. Cast yourself as the solution to their need.

Barry's Top Advice:

- Join professional societies- VIMS might cover American Association for the Advancement of Science (AAAS) membership fee
- Team work and bringing together diverse experts
- Be a generalist by broadening your skill-set
- Try to pick up business experience and lingo
- Work on project management
- Commercial side is cutthroat.
- Don't try and grab it all at once for jobs and projects; just get in the door

Consortium for Ocean Leadership (COL) supports ocean science and technology. COL contains 100 member institutions primarily academic institutions along with some industry.

- Advocate for ocean science on behalf of its members
 - Tried to secure post Sandy funding for research institutions/equipment that was damaged. They have the view that a rising tide raises all ships.
 - Clearinghouse of information. They do not attempt to earmark money on Capitol Hill. Due to their nonpartisan efforts, they get frequent call to staff hearings/panels with scientists from their membership allowing them to advance the goals of the consortium.
 - Trying to bring together the atmospheric and oceanographic community for extreme weather events to find out where ocean science fits into adaptation.
- Research
 - Ocean science experts from the membership

- Education
 - National ocean science bowl
- Manage large government infrastructure programs:
 - Ocean observatory system, ocean infrastructure
- Coordinate and facilitate
 - Work on issues such as DOE methane hydrates
 - Manage the review process for BP oil spill recovery funding
 - Host other organizations in their office
- Communication
 - Newsletter, which includes job postings
 - Communication training workshop for PhD and post docs. Limited to marine geoscientists.
 - Public policy forum on March 9. Topic is “urban oceanography”

Robert Gagosian, President of the Consortium for Ocean Leadership

Nicholas Rome, Program Specialist

Works in the research department. Runs the interagency committee on enhancing ocean-observing systems. Helps integrate data and coordinate strategy. He is a riparian ecologist, completed the Monterey Institute of Studies in environmental policy and did a project in graduate school that led him to COL.

Hannah Dean, Program Associate

Hannah started out as a policy intern. She has a law degree, master’s in environmental policy, Knauss fellow (congressional), PhD at UMass Boston in coastal marine. Looks at legal documents to figure out how different agencies interact with each other.

Kassandra Cerveny, Senior Policy Manager (was not present) came from Coastal State Organizations

Jenny Hauser, Gulf of Mexico Research Initiative (GOMRI) Project Administration Manager

Jenny works on grant administration for the Gulf of Mexico research initiative. Her husband is in the navy so she has worked to develop transferable skills. She has experience working on navy contracting. She has always looked for broad experience.

Matt Wright, Communications Manager

Matt works with oceanography, geologists, and paleoclimatologists. His background is in marine biology. He reaches out to the media. Completed a one-year program for science writing at UC Santa Cruz. Worked at COMPASS on communication strategies. Compass training helps scientists communicate with their colleagues, write better abstracts, and improve their presentation skills.

Melissa Brodeur, Program specialist for National Ocean Science bowl (NOSB)

NOSB lost funding from NOAA due to sequestration. Looking for corporate sponsorship. Hopefully private funding will strengthen the program so that students are trained in areas that are needed by future employers.

Gina Davenport, Policy Intern. Background in grassroots movement building. Worked with Bluefrontier campaign. Organized the Blue Vision summit and lobby day.

Defining NGO roles

- communications
- education and outreach
- policy and advocacy
- program and management
- science advisors
- operations

NGO skill sets to develop

- communication, confidence, patience, organization, analytical analysis coupled with creativity

Advice:

- Practice grant writing- Make sure your title forecasts what your proposal is about. There are grant writing foundations in DC to assist in constructing grants
- Gain project management experience
- Practice job interviews or practice talking before talking to press, policymakers
- USA job site – more information is better. Put in as much text as you can and use the “key” words.
- Build your resume by looking for jobs where you can gain transferable skills
- GIS and modeling experience is a boon to your resume.
- develop Program management, as its something that doesn’t always get taught
- Sign up for the COL newsletters. Many different organizations use this publication to advertise employment opportunities.
- Network, network, network. Introduce yourself and ask people about THEIR work.

Coastal State Organization represent the Governors of the nation’s thirty-five coastal states, commonwealths and territories on legislative and policy issues relating to the sound management of coastal, Great Lakes and ocean resources.

Abby Schneider – PhD from University of MD- Chesapeake Biologic Lab, former AAAS fellow, works for the Association of California Water. She found that if you want to advance in policy you need a PhD or law degree. She is an expert in western water policy. Doesn’t do policy but works on consensus building and education. Represents agricultural and urban members. She emphasized writing, communication, and science translation skills.

Rebecca Jablonski-Diehl – MA in Marine Policy and Affairs from the University of Washington, former Knauss fellow, works as a Government Affairs consultant for the National Marine Sanctuary Foundation. She emphasized the importance in utilizing your local sea grant officers when applying for sea grant fellowships. Talk to them, get advice from them, make sure they know who you are. She now works on congressional outreach for the President of National Marine Sanctuary Foundation. Working on a rule to designate new marine sanctuary areas. Works on Capitol Hill Oceans week (13 panels with over 50 panelists) June 10-14. Knauss fellow (legislative). Worked on:

- Sea otters and military readiness
- Illegal and unreported fishing act HR 69

Fern Tolley Gibbons – PhD degree from MIT/WHOI, former Knauss (legislative- Senate committee), Marine and Freshwater Policy Associate for The Nature Conservancy. Works on integrated ocean management for marine spatial planning. Emphasized the work of listening to constituents and trying to find ways to help them.

Emily Susko – MS from Virginia Tech (fisheries simulation modeling), former Knauss (executive branch with National Sea Grant office in NOAA), works as a communication contractor at NOAA-National Marine Fisheries Service. Works on the Teacher at Sea program to get teachers out on research vessels.

Lenny Pace – MS (fisheries) from VIMS '07 working with Jack Musick, former Knauss fellow (executive branch with DOI and NOAA), Program Coordinator at Schmidt Ocean Institute. Worked as a contractor at the National Sea Grant office, BAD systems (defense contractor) and National Science Foundation (Geologic and Ocean Division). Now works for the Schmidt Ocean Institute as the Program coordinator overseeing the selection process for scientists who want to do research on the Schmidt Ocean Institute's research vessel. He emphasized the importance of putting yourself out there, meeting everyone you can, asking for informational interviews. Tips for cold emails: short, passion, ask for something specific, show that you know what they do. Email and then follow up with a phone call. Don't badger. Sometimes emails won't be followed up upon for months. Ask for help when you need it, as sometimes people have no idea you need it.

Alyson Azzara – Phd from Texas A&M University, former Knauss (executive with DOT), Marine Program Coordinator at The International Council on Clean Transportation. PhD in marine biology studied the impact of noise from large vessels on sperm whales. Emphasized the importance of translating science language into language that is useful for policymakers.

Mary Munson, Executive Director of Coastal State Organizations
LL.M., Public Int'l Law from University of London
JD from College of William and Mary Law School
M.P., M.A., Environmental Science, Planning from UVA
Worked with Greenpeace, National Parks Conservation Association etc.
Working for a small nonprofit you have to do everything: program areas, management, fundraising, budget, working with the Board and members. Emphasized that fact that career trajectories are not as linear as you would think. Said to think of them as a "sine curve."

Lindsey Kraatz – PhD from VIMS, former Knauss fellow (legislative branch- Science and Technology committee), Legislative Representative at Coastal States Organizations.

Tips for a successful Knauss essay

- 1) Find a niche that helps your essay stand out: describe your "ah-ha" moment
- 2) Demonstrate your versatility
- 3) Explain why Knauss is important to YOU not everyone else but specifically YOU
- 4) DO NOT USE THE PHRASE "nexus/crossroads of science & policy"

Additionally make sure the things they requested for your resume can be found with a quick skim. If they are not there or are hidden in a bunch of other text it will seriously count against you.

Overall important skills

- Conflict management and facilitation--how to run a meeting; communication; project management.
 - Having Hill experience is critical to a DC career.
 - The best soft skill is being a good listener and learning from people's stories, etc.
 - Put yourself out there, meeting everyone you can, asking for informational interviews.
 - Tips for cold emails: short, passion, ask for something specific, show that you know what they do. Email and then follow up with a phone call. Don't badger. Sometimes emails won't be followed up upon for months. Ask for help when you need it, as sometimes people have no idea you need it.
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National Oceanic and Atmospheric Administration

Susan Holmes, MS from Oregon State University, Marine Resources Planning Specialist at National Ocean Service, NOAA

Worked for 10 years in academia in west coast, including PISCO.

EPA is regulatory focused while NOAA is more stewardship oriented.

Advice: Gain experience in facilitation and conflict management.

Lora Clarke, PhD from SUNY Stonybrook, former Knauss fellow, Fisheries Scientist at National Marine Fisheries Service, NOAA

Overall advice:

Gain experience in facilitation and conflict management. Be aware that getting jobs through USA jobs is not easy, especially for NOAA. There are a lot of contractors and temporary based gigs. Don't necessarily count on retirement of baby boomers creating openings. Pursue a number of fellowships out there, such as ORISE with EPA. Both mentioned that their jobs at NOAA allowed for a good life-work balance.

C. Student Feedback on Logistics

1. The mix of meetings on the itinerary included professionals from a variety of sectors and disciplines within the DC marine science professional community.

Evaluation: There were a variety of sectors represented, though perhaps there could've been more from the researcher side.

Feedback:

- Overall, there was a very positive response regarding exposure to professionals from the private, non-profit, and government sectors. There was a broad array of roles demonstrated: Education, communication, program management, advocacy, etc.
- It was nice to have a broad array of ages/career paths/ stages to understand the challenges and opportunities at all stages of one's career. By talking with lots of people with similar age ranges, it meant that we could easily relate to their experiences. You can do a lot of research

online, but nothing beats talking to one/several people who have lived a given experience, e.g. the Knauss fellowship. It would be useful to talk with recipients of other fellowships (e.g. AAAS and Presidential Management Fellowships) in the future.

- The day was more policy/physical oceanography-focused rather than biology-focused; may have been nice to have had a career researcher who works in DC, e.g. from NOAA/NMFS or possibly a consulting firm. In general, may be nice to have some more science-y folks in addition to those more interested in policy. Whereas others enjoyed meeting individuals that were not necessarily researchers. It was nice to see individuals with PhDs in successful careers outside of academia.
- Barry talked a lot about the Navy. In the future, speaking with someone from the Navy (e.g. Environment branch) may be worthwhile.

2. Professional hosts provided a satisfactory amount of unique information and advice specific to their positions and tailored to the VIMS students in the room

Evaluation: All professionals had a degree in marine science or marine policy so they were able to provide excellent advice tailored to VIMS students regardless of their position.

Feedback:

- Barry Stamey was, for some, the most productive meeting. We were just starting the day and were fresh, and he was straightforward while leaving plenty of time for questions. His approach was simple and effective: “What I’m doing; what you’re doing; your questions.” He freely offered advice regarding job-seeking strategies and skills that he would recommend.
- In general, students received a good deal of valuable information regarding contacts for specific fellowships, how to get your foot in the door, and approaches to job/fellowship/grant applications.
- Our meeting with the Consortium for Ocean Leadership was excellent—very professional with a wide range of employees ranging from an intern to the President! Participants enjoyed the broad range of professionals because they brought in a diversity of experiences and advice. It was good to hear their career trajectories, stories, and day-to-day life. The panel format, with 5-minute bios followed by Q&A, was an ideal. There was plenty of emphasis on DC as a hotspot for marine policy. Was very informative to hear Bob Gagosian’s (President/CEO) 10-minute overview of COL.
- Our third meeting, with the Coastal States Organization and a few other groups, provided a lot of good information, though it could have been a bit better organized. We packed eight speakers into two hours. Presenters spoke for varying amounts of time and didn’t leave a great deal of time for students to ask questions. We should provide better guidance for content, timing, and number of professionals next time. Students did learn a great deal about what it’s like to be a young professional working on marine policy in DC, learned about the Knauss fellowship, and also heard from a more senior perspective i.e. the Executive Director of Coastal States Organization, Mary Munson. A panel format, with each professional speaking for five minutes, followed by a collective Q&A, may have been more efficient for the meeting at the Coastal State Organization (CSO).

3. The itinerary, timing, and number of participants allowed the student group to arrive at meetings on time and represent VIMS well.

Evaluation: The itinerary was ambitious but we arrived to all of our meetings on time. Everyone we met with was so engaging that all buffer time in our schedule was easily taken up.

Feedback:

- 10-12 grad students should probably be the maximum number of participants, rather than the 13 we had today. 10 may be ideal. It took a long time for everyone to introduce themselves and some students may not have had the opportunity to ask their questions. Also, logistically, in some settings (e.g. Panera, McGinty's), the number of us made it difficult for all participants to hear the professionals.
- It was good to have Alex as a “moderator”—when others didn't have questions, he filled in the gaps. While Alex did inform most DC professionals about goals and the day's timeline in advance, perhaps further guidance for the meeting so that they don't get off track or go overtime. Granted there is only so much you can do when you are handing the reigns to someone to hear about their and their colleagues' experience, when they are giving up their time. At the same time, having a moderator/facilitator to ensure we stay on-topic is a good idea.
- The broad diversity of speakers was great, but in the future we may want to think about arranging themed visits to reflect the interests of certain VIMS students (e.g. fisheries, energy, climate)—different PDC members could take the lead on different trips. When organizing the next trip, hopefully we can email the theme/list of potential speakers to the VIMS students so that they can gauge whether or not they want to attend.
- It was a very long day—3 meetings, rather than 4, may have been sufficient.
- It seems that the “sweet” spot for the number of professionals may be in the 3-5 range; that allows students to hear a variety of perspectives within a relatively short time frame. One thing we may want to consider in the future is bringing individuals from different organizations together in a given panel (e.g. from different non-profits of government sectors), like what happened at CSO. It was interesting to compare/contrast. Give each person 5 minutes to speak, then do Q&A.
- Another suggestion instead of a formal panel, would have been to break the VIMS students into smaller groups that would rotate from each speaker after a specified amount of time. This would have allowed the students more time for questions and to make a direct connection with each speaker.
- Another option would be a larger panel (6 or so) give an 8-10-minute spiel each, then move into a “mixer” when students can network with professionals. This had been the hope for an end of the day gathering, but the timing and interests of DC professionals didn't come together on this occasion.
- In terms of settings, students enjoyed visiting the offices of certain organizations, both in terms of getting a feel for where the professionals worked and to make talking/listening easier than, for example, at a restaurant. Granted, in certain cases when the restaurant/general space option is required (for example as requested to minimize the security hassle with NOAA).

4. Students are able to take lessons home and effectively share them with other members of the VIMS student community.

Evaluation: Participants took advantage of a unique opportunity to learn numerous key lessons about marine science careers in DC. We are preparing a ~12-page report which will be disseminated to the VIMS community

Feedback:

- Overall, a tremendous amount learned regarding important skills for the workforce, job-hunting tips, networking advice, and grant/fellowship application advice.
- Perhaps the most common advice was that communication skills are essential—translating complex scientific research into easily digestible format is critical. A lot of policy work in DC involves either conveying scientific information to the public or to policymakers, most of whom don't have a science background.
 - COMPASS training is an excellent opportunity to improve communication skills.
- In the policy world, listening is also a critical skill to have—need to show people that you're willing to help them and that you care.
- GIS/modeling skills can be helpful—can be used in a variety of settings.
- Business skills, especially project management skills, are key—PMP certification
- Group facilitation/coordination and conflict management skills can be helpful for teamwork-oriented positions. There's been an increasing emphasis on teams, not individuals, for getting things done.
- Grant-writing skills—tailor your proposal to what an RFP is asking for. Make sure the title is descriptive but straightforward. In addition, use keywords in the RFP within the proposal.
- Professional societies are an excellent tool for networking and improving communications skills.
- Networking and persistence are keys to getting the job you want in the DC policy realm—or in any other field, for that matter. Cold emails are sometimes necessary—short, show passion, knowledge of the organization, and ask for something e.g. to meet someone. Getting your foot in the door is critical. It is important to try to maintain connections after a cold email, but do not hassle. Sometimes it is best to use that motivation to email a new potential employer.
- To get a policy job in DC, experience on the Hill is a huge benefit. Knauss, Knauss, Knauss: a great opportunity for anyone interested in pursuing a policy career.
- Capitol Hill Ocean Week (CHOW) is a great opportunity to network.

D. Next Steps

1. Research Fellowship opportunities to include on the PDC website:
 - Presidential Management fellowship in to be a federal employee
 - Knauss fellowship
 - American Association for the Advancement of Science (AAAS)
 - EPA's Oak Ridge Institute for Science and Education (ORISE) fellowship (2 year)
 - Office of Naval Research and Naval Research Laboratory
 - National Research Council (NRC)
2. Research Opportunities:
 - Project management professional accreditation
 - ESRI GIS certification
 - Water Words that Work- Combat Communication for Conservationists
 - Compass Training- Emily sent an inquiry to find out more about cost, logistics etc.
 - Research professional societies that VIMS students might want to join e.g. Marine Technology Society
3. Promote events
 - Ocean Leadership Public policy forum on March 9, 2014

- Capitol Hill Oceans Week
- Blue Vision summit

4. Organization and rollout of future PDC site visits

Specific themes: military, consulting, fisheries, private industry, career researcher, coastal management, education, government, foreign researchers that work in the U.S etc. Locations: Norfolk, VA; Annapolis, MD; Research Triangle, NC; NY, NY; Boston, MA?