

Environmental and Geophysical Consulting

Amy at Bulli Beach, Australia



Amy Dougherty
B.S. Geology 1997
M.A. Earth Science, Boston Univ., 2002
Ph.D. Physical Geography, Univ. of Auckland (New Zealand), 2011
Director of Geolights Consulting Honorary Fellow
Univ. of Wollongong and Univ. of New South Wales (Australia)
Wollongong, New South Wales, Australia

"Being a geologist has literally opened up a world of opportunity, enabling me to travel the planet while studying it. The expertise gained has allowed me to volunteer my services for the national good (through AmeriCorp in Maine and Geologist-in-the-Park in Georgia), work in the private sector on natural hazards (in places like New Zealand and Taiwan) and renewable energy (in geothermal fields of the West Coast, US and the Altiplano, Chile), as well as research and teach about the impacts of climate change on coastal evolution (from Australia to Europe). These varied experiences have resulted in a unique career path that has led to me starting a small consulting business where I can continue working for governments, industry and universities."

Stefan at Mount St. Helens National Monument



Stefan Bagnato
B.S. Geology 2000
M.S. Geology/Geochemistry, UAlbany 2003
Senior Geologist
Arcadis U.S., Inc.
Clifton Park, NY

"My job as a geoscience/environmental consultant gives me the opportunity to apply my educational background, interests, and values to help clean up sites that pose a risk to public health and the environment, put abandoned sites back to beneficial reuse, and reduce our client's ongoing financial and legal risk. As a project manager I see less time in the field these days, but every day is still a little different which helps keep it interesting."

Paul and his family at Niagara Falls



Paul D'Annibale
B.S. Geology 2001
M.S. Hydrogeology, Clemson Univ., 2003
Project Hydrogeologist
Ramboll (formerly O'Brien & Gere)
Albany, NY

"I really enjoy my job as a hydrogeologist at Ramboll because I get to work on a variety of clients and find real-world solutions for environmentally impacted sites. I started out doing field work and have worked up to managing my own projects. The most satisfying part of my job is being able to oversee a project from the start of an investigation, using data to understand the nature and extent of environmental impacts, to implementing a remedy that meets the client's needs. I make a difference every day and help make our world a cleaner place!"

Joe and daughter Wells



Joe Wold
B.S. Geology 2010
Geologist and Environmental Compliance Manager
McPhail Associates
Boston, MA

"What I like about my job as a geologist and environmental compliance manager is the ability to work on a wide range of projects. My work at McPhail Associates has been impacted through my geology course work at Union. My position allows for many collaborative and environmental solutions that impact waterways and people in the greater Boston area. I am also working to bring Frog Creek Partners (Gutter Bin) technologies for micro plastic waste and waste water treatment systems to the east coast."



Caitlin McManimon
B.S. Geology 2016
M.S. Geology, University of Connecticut, 2018
Staff Geologist
Langan Engineering & Environmental Services
Trenton, NJ

Josh with California poppies in Antelope Valley, CA



Joshua Dunn
B.S. Geology 2018
Geologist 1
Arcadis
Wilmette, IL

"I majored in geology and minored in environmental engineering, because I wanted to pursue a career path that enabled me to reduce contamination impacting human health and the environment. I now work as an entry-level environmental consultant doing mostly groundwater and soil sampling, oversight of monitoring and remediation well installation, and emergency response. I like that many of my colleagues genuinely want to help clean up environmental contamination and that most of my work is in the field as opposed to in the office. My favorite project so far was helping to clean up the properties that were burned in the Woolsey Hill fire in southern California."

Tara beside a crevasse on Emmons Glacier at Mt. Rainier



Tara Metzger
B.S. Geology 2015
M.S. Geosciences, University of Delaware, 2018
Geologist
Golder Associates
Manchester, NH

"As a geologist for Golder Associates, I really enjoy being able to split my time between the geohazards group and the environmental group in my office, which is allowing me gain a versatile skill set in the field of consulting. Within the geohazards group, I love that I am really able to apply my degrees in geology though mapping, surveying, and assessing hazards in high risk environments. I am very fortunate to be able to do fieldwork, travel, and survey landslides on a regular basis!"

Matt and daughter Rosie at Lake George



Matthew Kissane
B.S. Geology 2010
M.S. Earth Sciences, Syracuse University, 2012
Environmental Geologist
Fuss & O'Neill
Springfield, MA

"I have worked in Environmental Consulting for the past 7 years and the thing I like the most about the field is the diversity of projects and clients. I have worked on active fuel terminals, large Superfund Sites, and even taken part in wildfire cleanup activities in California. Clients range from local businesses to multi-national energy companies, allowing me to interact with a wide array of people throughout the day. Although I miss the days of studying the volcanoes of the High Cascades and watching the eruption of Montserrat during my time at Union, I have been able to gain a passion for my field and look forward to the next chapters of my career."

What can I do with a Geology degree?

Petroleum Industry and Consulting

Mike in the French Pyrenees



Michael Bullen
B.S. Geology 1997
M.S. Geology 1999, Penn State
Field Development Project Manager
Total Exploration and Production
(2006-present), Exxon (1999-2006)
Copenhagen, Denmark

"Working in a big oil company has allowed me to pursue the two things I love - geology and travel. I have a contract which encourages me to move every ~3 years to take on a different job. Together with my nomadic family we've been on the move for 13 years - Pau France (2.5 yr), Angola (2), Paris (5), Houston (3), Denmark (1). I enjoy working in fully international teams, learning local languages, and absorbing the culture aspects of the countries we live in. I've been lucky to follow my passion of studying fold and thrust belts around the world, drill exploration and development wells in different geologic domains, and expand into development engineering and business investment decision making. It's a highly dynamic job, forcing professional and personal adaptation."

Steph and her daughter at Enchanted Rock in Fredericksburg, Texas.



Steph Perry
BS Geology 2004
MS Geology, UAlbany, 2006
PhD, Syracuse University, 2014
Petrophysicist
Anadarko Petroleum Corp. (2014-present)
ExxonMobil Dev. and Exploration (2010-2014)
Conroe, TX

"The foundation that I gained through academics has provided me with endless opportunities in my oil and gas career. I began as a general geologist where I learned additional disciplines such as geophysics, well-planning and design, and reservoir quality, all linking back to structure, stratigraphy, sedimentology plate tectonics, and mineralogy-scale integration that I learned prior to entering the industry. I transitioned into petrophysics where I cover real-time drilling operations and data collection, analyze well log data, determine estimated oil and gas reserves, and run analytical programs on subsurface rock samples. I have worked offshore and onshore assets/projects that require traveling - always exciting. I enjoy the balance of projects with short- and long-term goals, all leading to critical business decisions for the oil and gas industry."

Ed at work as a management consultant



Ed Milde
B.S. Geology 2011
M.S. Geology, Syracuse University, 2014
M.B.A. Rice University, 2017
Energy, Transmission & Distribution Consultant
Accenture
Energy & Utilities Consultant, West Monroe Partners (2017-2019)
Exploration & Prod. Geologist, BHP Billiton (2014-2017)
Mud Logger, Canrig Drilling Technology (2011-2012)
New York, NY

"Studying Geology has given me the opportunity to enjoy a diverse and exciting career since graduating from Union in 2011. As a geologist in the oil and gas industry, I worked on projects and data sets from many locations around the world. I experienced many different aspects of the industry, moving from designing well plans and remotely steering wells, to conducting advanced exploration analyses to risk potential oil plays throughout the world. I even spent a year working on drill rigs in Southern California. I was able to rely on my geologic skillset and professional experiences as I transitioned into the broader consulting world. Now I work with oil and gas producers and utilities, helping them with varying projects that can range from general business process optimizations to large-scale initiatives that will help them prepare for the changing energy mix. My career has been ever-changing, and I have greatly enjoyed the opportunity to continue learning throughout my years in consulting and the petroleum industry."

Will on a petroleum systems field course in Utah



Will Pinkston
B.S. Geology, Economics 2012
M.S. Geoscience, Univ. of Texas at Austin, 2017
Foundation Geologist
Hess Corporation
Houston, TX

"I am finishing up the geoscience development program with Hess Corporation. The past two years have afforded me the opportunity to work on projects of all scales from early stage offshore exploration to infill drilling in a mature unconventional field. Few industries can match oil and gas operators' commitment to developing their employees. Every day, I get to tackle complex problems using cutting edge data and the help of an interdisciplinary team. As was the case in Prof. Garver's Sed Strat course, data integration is key to petroleum geology."

Brandt on board a drillship in the Gulf of Mexico



Brandt Scott
B.S. Geology 2017
M.S. Geology, Utah State Univ. 2019
Foundation Geologist
Hess Corporation
Houston, TX

"Being a geologist in the oil and gas industry aligns perfectly with my interests and work style. I am currently working in an operations role, where my responsibilities include well surveillance, pore pressure prediction, and shallow hazard assessments. What I enjoy most about this role is that I'm learning something new and doing something different almost every day. This position has also allowed me to travel offshore to an active well being drilled in the Gulf of Mexico. Observing the scale of operations and engineering that takes place on a deep-water rig truly gives you an appreciation of the gas you put in your car. Because I'm still early into my career, I'm looking forward to absorbing as much as possible and seeing where my interests take me within the oil and gas industry."

Andres in Dominica during the 2016 Geology Department trip



Andres Gallego
B.S. Geology 2018
Mud Logger
Computerized Mudlogging Services, LLC
Youngstown, OH

"For my job, I'm enjoying learning more about energy industries and how they operate on a daily basis. There are many pieces involved when operators are drilling for oil/gas and seeing that first hand has opened a lot to how complex and in-depth this industry is."

Education



Alex Bartholomew
 B.S. Geology 2000
 M.S. Geology, Univ. of Cincinnati, 2002
 Ph.D., Geology, Univ. of Cincinnati, 2006
Associate Professor
SUNY New Paltz
 New Paltz, NY

"I love my job as a Geology/Paleontology professor at SUNY New Paltz because I get to engage students at all levels and help them become more curious about the world around them. My favorite part is taking students out into the field and seeing them make connections as they collect and synthesize data in the real world."



Beth (Spence) Cook
 B.S. Geology 2007
 M.S.T. Biology (7-12) Fordham Univ.
Teacher – Env. and Biological Sciences
Monument Mountain Reg. High School
 Great Barrington, MA

"I love my job teaching high school environmental and biological sciences. Teaching allows me to work directly with students to help keep them inquisitive about science as well as to foster a strong understanding of how the environment around them and their own bodies work. Teaching affords me a dynamic daily schedule and interactions with young people, as well as the freedom to spend time with my family and travel during the summer."



Nick Belascio
 B.S. Geology 2001
 M.S. Geology, Northern Arizona Univ., 2003
 Ph.D. Geology, Univ. of Mass., 2011
Assistant Professor, Geology
College of William & Mary
 Williamsburg, VA

"I am a professor in the Geology program at William & Mary where I mostly teach climate science and paleoclimatology courses. I enjoy my position because I get to share with students the importance of earth science in understanding a range of current environmental issues. I also like the process of engaging students through classroom and field exercises to help them think critically about environmental systems and develop skills that are useful in a variety of fields."



Jaime L. Toney
 B.S. Geology (& Biology) 2000
 MSc. Northern Arizona Univ., 2004
 Ph.D. Brown University 2011
Professor in Environmental and Climate Science
University of Glasgow,
 Glasgow, Scotland UK

"Being a Professor in Environmental and Climate Science is exciting and rewarding because I lead a research group where my master's students, PhD students, and post-docs are making new discoveries all the time. My group consists of a diverse range of people from international backgrounds. We share, interpret and analyse data together and learn from each other every day."



Chris Moy
 B.A. Geology 1998
 M.S. Geology, Syracuse Univ. 2001
 Ph.D. Geology, Stanford Univ. 2009
Senior Lecturer, Dept. of Geology
University of Otago
 Dunedin, New Zealand

"Greetings from the JOIDES Resolution! We are sailing on IODP Expedition 383 to the Chilean margin and the southernmost Pacific Ocean. We just started and will be out here until the end of July. The Southern Ocean sites will be first (60 hours away) and we are expecting ~6 m swells in the next 24 hours... should be fun!"

What can I do with a Geology degree?

Business and Industry



Dan Ruscitto
 B.S. Geology 2003
 M.S. Geology, Univ. of Minnesota – Twin Cities 2006
 Ph.D. Geology, Univ. of Oregon 2011
Senior Scientist – Microanalysis
GE Research
 Schenectady, NY

"I work in the Materials Characterization organization at GE Research where I use electron microscopy, X-ray tomography, mass spectrometry and UV-VIS-IR spectroscopy — all techniques I learned studying geology — to examine newly developed materials, perform failure analysis, and develop quality control processes for manufacturing. Transitioning projects from the research world into industrial applications is one of the most rewarding experiences of my job. However, the best part of my job is that I'm always learning something new and working with a diverse group of scientists and engineers from all over the world."



Keith Correia
 B.S. Geology 1994
Vice President of Technology Innovation
American Dairy Queen Corporation
 Minneapolis, MN

"In my 23-year career with Dairy Queen, I have been able to hold numerous operations and technology roles. Transitioning to a strategic technology role has been extremely interesting and rewarding. It is clear that technology plays an increasingly important role in any business, in relation to enhancing the experience of customers, improving business efficiencies, etc. Working for the DQ brand is fun and ever changing. People need to eat, and people love treats, and I am proud of the products and experience that we provide to our customers, who we refer to as "fans!"



Christopher Sears
 B.S. Geology, 1996
Partner
PricewaterhouseCoopers
 Hartford, CT



Joel Cooper
 B.S. Geology and Biology 2000
 Ph.D. Toxicology, Rutgers University 2007
Principal Investigator
Neurocrine Biosciences
 Santa Monica, CA



Colleen Kennedy
 B.S. Geology 2012
Global Product Manager - Long Fiber Thermoplastics
Owens Corning
 Columbus, OH

Government Agencies



Jason Lederer
B.S. Geology 2001
M.S. Geology, Indiana University 2004
Senior Resource Specialist
Summit County Government, CO - Open Space and Trails Program
Frisco, CO

"Working in Summit Co. Government, I enjoy a diverse role involving anything from cleaning up century-old abandoned mine sites, to overseeing the planning and development of an extensive regional trails network. I love collaborating with stakeholders and an engaged local community, to facilitate a vision for healthy natural ecosystems, sustainable recreation opportunities, and protected viewsheds of the High Rockies that attract visitors from around the world. Plus, I get to play outside for work a lot!"



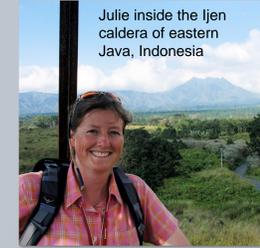
Sarah Shoemaker
B.S. Geology 2000
M.S. Geosciences, Univ. of Arizona, 2003
Geologist
USDA Forest Service, Minerals and Geol. Mgt.
Juneau, AK

"As a geologist with the Forest Service, I work with all things mining and mineral-related on Forest Service lands. I have been a part of so many cool projects: abandoned mine closure; environmental analysis of a mine expansion; inspections and compliance at active mines; assessing the mineral potential of areas to assist with land management decisions. I get to travel by helicopter and float plane, work with dedicated and passionate professionals, travel to amazing places in the west, and play a role in the management of our public federal lands for future generations to enjoy."



Alex Dolcimascolo
B.S. Geology 2017
M.S. Central Washington Univ., 2019
Tsunami Geologist
Washington Geological Survey
WA Department of Natural Resources
Olympia, WA

"I am excited to begin working at the WGS as the Tsunami Geologist because it allows me to continue researching geologic hazards, a field that I am very passionate about. I have also always wanted to play a role within the policy side of hazards and working at a government agency allows me to be directly involved with the planning and mitigation for potential natural disasters. I am glad I found a job opportunity that marries both the science and policy of hazards."



Julie Griswold
B.S. Applied Math and Geology, 1996
M.S. Geology, Portland State Univ., 2004
Geologist
Volcano Disaster Assistance Program
US Geological Survey
Cascade Volcano Observatory
Vancouver, WA

"I work with a wonderful, dynamic group of volcano scientists where we develop and test ideas for tools and techniques to better monitor active volcanoes. I love meeting people around the world who share an interest in understanding eruptions and an urgency to better prepare for the next disaster."



Gregory Brenn
B.S. Geology 2014
M.S. Geological Sciences (focus in Seismology), Univ. of Alabama, 2016
Duty Seismologist
National Earthquake Alerts Centre
Geoscience Australia
Canberra, Australia

"The unpredictability of real-time earthquake monitoring motivates our day-to-day operations. It's thrilling to analyse earthquakes in real-time and to provide rapid and accurate earthquake information to support potential emergency response. The photo is taken in Geoscience Australia's 24/7 earthquake monitoring centre, where we work together with the Bureau of Meteorology as part of the Joint Australian Tsunami Warning Centre to detect potentially tsunamigenic earthquakes that could impact Australia's coastlines."



Isabel McRae
B.S. Geology 2014
Candidate, Master of Urban Planning
NYU Robert F. Wagner Graduate School of Public Service
Program Manager, Clean Soil Bank
New York City Department of Environmental Protection (NYC DEP)
New York, NY

"I work to oversee the cleanup of brownfield redevelopment projects in New York City and also manage a program called the Clean Soil Bank. It is great being a part of the revitalization of formerly-industrial neighborhoods in the city I grew up in! It's also eye-opening to see how many brownfield projects are able to participate in our soil bank once they've removed the "dirty" soil at the surface and uncover the native sediment beneath. Next, I am looking forward to implementing the planning skills I've learned since starting graduate school."

What can I do with a Geology degree?

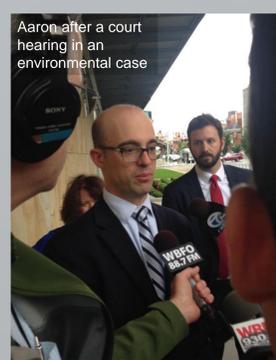
Law, Medicine, and Law Enforcement



Jason Baker, DMD
B.S. Geology 1995
DMD, Nova Southeastern University College of Dental Medicine 2001
Certificate in Oral and Maxillofacial Surgery, 2005
Diplomate, American Board of Oral and Maxillofacial Surgeons, 2007
Oral and Maxillofacial Surgeon, Partner/Co-founder South Bedford Oral and Maxillofacial Surgery (SBOMS)
Mount Kisco, NY

"I am a co-founder and partner at South Bedford Oral and Maxillofacial Surgery (SBOMS). I spend half of my week at SBOMS, where I commonly perform dental extractions, dental implants, bone grafting, biopsies and treatment for temporomandibular disorders. I spend the other half of my week at Montefiore Medical Center/ Albert Einstein College of Medicine in Bronx, NY, where I teach and supervise Oral and Maxillofacial Surgery residents.

On the surface, it may be difficult to show how I use my Geology major in my daily routine as an Oral and Maxillofacial Surgeon. Here is your answer. I learned to write clearly and scientifically, enjoy learning, be a tenacious student, dissect complicated and abstract material, and really study and learn effectively. Last, but certainly not least, I matured as a student. These skills served me very well during dental school, residency, board certification and the life-long learning to which an Oral and Maxillofacial Surgeon commits. I know that my growth as a student during my undergraduate studies laid the foundation to accomplish my long term goals."



Aaron Mango
B.S. Geology 1998
M.S. Geology Florida State Univ., 2001
J. D. Boston Univ. School of Law, 2004
Assistant U.S. Attorney
Department of Justice –
Western District of New York
Buffalo, NY

"I am lucky to have found my dream job. As an Assistant U.S. Attorney, I prosecute a wide variety of white collar federal criminal cases, however, based on my background in geology, I am the point of contact for my office on pollution and wildlife crimes. This includes large scale criminal violations of the Clean Air Act, Clean Water Act, RCRA, and the Lacey Act, to name a few. My training at Union and in grad school helps me to understand the science behind these cases. I feel the work I do has a direct positive impact on my community and individual victims."



Andrew Frisbie
B.S. Geology 1995
President
LCG Applied Science, Inc.
Houston, TX / Syracuse, NY

"As a law enforcement officer and civilian expert witness in computer forensics, I have investigated and supervised hundreds of matters from homicides and child exploitation to complex trade secret misappropriation. The investigative process – discovery, collection, examination and analysis of facts and evidence using reliable methodology for presentation to Judges and Juries – utilizes a process similar to scientific research. My thesis experience at Union, under the direction of Prof. John Garver, was essentially my first complex investigation. The intuition, intellect and determination required to discover evidence-based truth makes great scientists and investigators - both rewarding careers."



Erin Delman
B.S. Geology 2012
M.S. Earth System Science, UC Irvine, 2015
J. D. Candidate at UCLA School of Law
Los Angeles, CA

Jonathan MacDonald
B.S. Geology 2002
Special Agent,
Federal Bureau of Investigation
Jacksonville, FL