Within this edition of Mentoring and Coaching you’ll find important information concerning the upcoming conference. If you plan on attending, consider registering Before June 15th to receive the early bird discount.

Also in this issue you’ll find our exclusive interview with Dr. Diana Northup, scientist, cave enthusiast, and one of the plenary speakers at the 2015 conference. To learn more about Dr. Northup, visit our website, at http://mentor.unm.edu/conference.
The Mentoring Institute develops, coordinates and integrates research and training activities in mentoring best practices at the University of New Mexico (UNM). Through the application of instructional design standards, the Mentoring Institute provides training and certification services for a diverse array of staff, faculty and students, in a centralized effort to recruit, train and develop qualified mentors for the University, the City of Albuquerque and the greater New Mexico community.

The Mentoring Institute does not replace or direct existing mentoring programs. Rather, it provides a variety of services to these programs. The Mentoring Institute aims to build up current mentoring program and enhance the culture of mentoring within the University, and the state it serves.

The Mentoring Institute will assist in stimulating and promoting a mentoring culture within the community. By encouraging the matriculation and graduation of students as well as the retention of faculty and staff at the University of New Mexico, the Institute will also contribute to the development and economic growth of New Mexico.

About Us

Mentoring Institute:
The Mentoring Institute develops, coordinates and integrates research and training activities in mentoring best practices at the University of New Mexico (UNM). Through the application of instructional design standards, the Mentoring Institute provides training and certification services for a diverse array of staff, faculty and students, in a centralized effort to recruit, train and develop qualified mentors for the University, the City of Albuquerque and the greater New Mexico community.

The Mentoring Institute does not replace or direct existing mentoring programs. Rather, it provides a variety of services to these programs. The Mentoring Institute aims to build up current mentoring program and enhance the culture of mentoring within the University, and the state it serves.

The Mentoring Institute will assist in stimulating and promoting a mentoring culture within the community. By encouraging the matriculation and graduation of students as well as the retention of faculty and staff at the University of New Mexico, the Institute will also contribute to the development and economic growth of New Mexico.

Institute Founder & Executive Editor:
Nora Dominguez

Managing Editors:
Emily Wright
Yvonne Gandert

Interview Facilitator:
Holly Caulder

Design:
Steven Guérin

Links to Social Media:
Facebook
Pinterest
Instagram
Google+
Twitter
LinkedIn

Email:
emilyardella@unm.edu

Website:
mentor.unm.edu

Events

Our list of mentoring and coaching related events occurring soon.

The Future of Coaching and Mentoring: Evolution, Revolution or Extinctino?
A Collaborative Inquiry

June 10, 2015
Wheatley Campus, Oxford Brookes University U.K.
Bob Garvey, Julie Hay, David Doughty, Kim Stephenson,
Pauline Willis, Bob MacKenzie

Engage in meaningful dialogue and generate new ideas, knowledge and understanding about the uncertain conditions in which we practice coaching and mentoring. This conference will allow attendees to interact with leading authors and colleagues.

International Coaching Federation Midwest Regional Conference
June 18-20, 2015
Marriott Kansas City Country Club Plaza, Kansas City, Missouri
Simon T. Bailey, Caroline Adams Miller

Getting to the Heart of the Matter: A deep exploration of coaching
The IFC Midwest Regional Conference is a place for professional coaches to network and share best practices.

EMCC 5th Annual Mentoring and Coaching Research Conference
June 23-24, 2015
Warsaw, Poland
Dr. Otto Laske, Wojciech Eichelberger

The 5th Annual Mentoring and Coaching Research Conference will be held in Warsaw. The theme of the Conference is ‘Bridging the gap between research and practice’. With a great line up of two keynotes, over 20 sessions and a pre-conference MasterClass, this conference is sure to have something for everyone.

Last Month in Photos

Photos taken around UNM, from our Instagram feed (@unm_mentoring)
Mentoring Institute News

We would like to extend our congratulations to those whose abstracts were accepted for presentation. We received a record breaking 525 submissions for consideration.

8th Annual Mentoring Conference
New Perspectives in Mentoring
A Quest for Leadership Excellence & Innovation

Tuesday - Friday, October 20-23, 2015

Be an Early Bird...
Register Before June 15 & Save $100

Promotion valid until June 15th.
Discount valid with Standard Registration Fee only.

Important Dates
The following dates will be of particular interest for those presenting at the upcoming conference.

First-Draft of Paper: If your abstract is accepted for a presentation, you are required to submit a 5-7-page paper on the topic of your presentation. The deadline to submit the paper is Tuesday, June 30th.

Peer Review: Papers will be peer reviewed and returned on August 1st with peer review comments. You may choose to accept or reject these suggestions.

Final-Draft of Paper: Final paper submissions are due electronically by August 30th.

“Gratitude is the fairest blossom which springs from the soul.”
- Henry Ward Beecher

“Tomorrow is another day.”
- Rhett Butler

“Out greatest glory is not in never failing, but in rising up every time we fall.”
- Ralph Waldo Emerson
Dr. Northup is a visiting Associate Professor of Biology at the University of New Mexico. She mentors high school through graduate level students. Her plenary session is titled Using Your Enthusiasm and Passion to Enhance Your Mentoring.

How did you get interested in the exploration of caves when you were younger?

Having led a very boring childhood, I joined the Outings Club when I started college at West Virginia University. One of our first trips was to Higgenbotham’s #4, a cave in southeastern WV, with a stream running through it. While hiking through the cave in the stream, I tripped and fell in over my head in the water. I thought that was so much fun! Also, there are a lot of different folks that go caving and I was intrigued by their different perspectives on life.

There’s really something magical about traveling deep below the surface of the Earth into profoundly quiet and dark realms of the Earth. Thus began a lifetime’s love affair with caves and their exploration.

How do you mentor students in the field of biology and cave exploration?

I’ve learned over the years that it’s critical to let students choose to come to me with a desire to do research in Biology, and especially in caves. Once a student expresses an interest in doing biological research, I usually begin by presenting several possibilities of projects that the student could work on. I let them choose what most intrigues them as they much more likely to stick with a project that they choose. If the student is a freshman I may provide more help in the selection so that it’s a project that fits their lack of experience. Getting the students to go to the caves to get their own samples is critical to their understanding of the science behind their project. However, I’ve discovered there are a lot of claustrophobic people in the world who don’t know they’re claustrophobic and I don’t push them to keep doing fieldwork. My lab group generally sorts itself out into those who love fieldwork and those who love lab work. All of this illustrates an essential truth for me—the student needs to take charge of their own interest in Biology and learn to direct their own research. I nudge and give help when it’s needed, but I make a strong effort to let the student make the decisions, some of which lead to failures. But I firmly believe you learn more from your failures than from your successes. Vanessa Svihla, who observes my lab group, noted that I treat students differently than some professors, having the approach of: “come as you are, you are a scientist.” Overall, my lab group is very student oriented.

What changes do you see in these students throughout the process, or at the end of the process, that you believe to be particularly successful?

One of the biggest changes is the gain in self-confidence. I often work with students who are smart, but not in the top 1%. These students may have struggled to get where they are and may have issues in their personal lives that affect how they see themselves. Working within our lab group, these

“For me, being successful is helping students who might not have gotten the opportunity to engage in science to become full-fledge scientists.”

Our interview with Dr. Northup continues on the next page...
students come out of their shells and grow strong. Much of the credit for this belongs to the other students and staff in my group. It’s hard to remain quiet in our lab group, where a lot of good-natured teasing goes on. There’s also a lot of support within the group, with many chances to practice for talks and try out your ideas before going public.

I had one student who came to me from a different department where he was a square peg in a round hole. The mentoring style of his advisor just didn’t fit him and he was slowly going crazy and withering. He’s an incredibly creative scientist who just didn’t fit this mold. Turning him loose, giving him a large arena in which to explore his ideas about science, was what really worked for him.

**You have created a mentoring style with the acronym CARE. What has helped you develop this mentoring style?**

**C** is for caring and I am naturally a caring person with a large capacity for empathy.

**A** is for acceptance. This is the oddest one because for many years it never occurred to me that everyone wasn’t accepting. I may think it’s strange that you want to study the genitalia of camel crickets, but I’ll accept that you do. I think this attitude developed from my not being accepted as a kid because I was a geek.

**R** is for relevance and that developed from learning that my excitement for studying snottites in sulfur caves wasn’t shared by everybody (or even most people).

**E** is for enthusiasm and that’s just who I am—I find the world endlessly fascinating and fun.

*Our interview with Dr. Northup continues on the next page...*

---

**Mentoring Tips**

We regularly post mentoring tips on our website. Here are some of the tips from last month:

**At its worst, failure can be devastating. However, many would say true failure occurs not when success slips from our fingers, but when failure overwhelms us, preventing us from further experimentation. Talk with your mentoring partner today about your most recent success or failure. How can you continue to move forward?**

**When presented with a difficult task we often resort to the most logical solution. Before making a decision, ask yourself “If I had no barriers, how would I solve this problem?” Imagination can often provide an alternative solution that may have originally be overlooked. Speak with your mentor today about out of the box solutions to everyday problems.**
Has CARE been particularly successful in your perspective?

The answer to that depends on how you define success. For me, being successful is helping students who might not have gotten the opportunity to engage in science to become full-fledge scientists. Acceptance can be rarer than you might think and really critical for some students. I think my enthusiasm for my research is particularly successful and hopefully it inspires young people to not settle for “good enough”, but to look for that special part of science that lights the fires of their passion for science.

You have said you want students to work on research that is meaningful and important to them. What do you believe to be meaningful research in this field, and how can this meaningful research enhance the students’ lives and knowledge as they develop through the mentoring relationship?

We work on two projects in my lab that students find especially meaningful. One is the search for new antibiotics in caves. The idea that one of the bacteria that we identified that could inhibit human pathogens could be developed into a new antibiotic inspired one of our students to go to a graduate school with intense research on new secondary metabolite compounds. She’s now working hard to characterize what compounds our successful bacteria are producing. The second project, is the study of white-nose syndrome, the newly emerging disease that has killed over six million bats in North America. We’re working to identify a group of bacteria, Actinobacteria, that live naturally on bats and can inhibit the fungal pathogen that causes white-nose syndrome. Students really like to think (and who doesn’t) that their research could make a big difference and save lives (humans or bats).

In another interview you mentioned you “don’t limit [yourself] to the top 5-10% academically achieving students.” Could you expand on this philosophy and tell us a little bit on how it has guided your mentoring style.

When I was at Woods Hole in a Microbial Diversity course, I had very little background in microbiology and I struggled to do well in this prestigious course. I was in a group of extremely talented scientists and I keenly felt how inadequate I was. But the instructors believed in me and inspired me to do research that led to many publications about microbes in caves, which are read all over the world. That experience made me realize that there are many students like myself that need opportunities such as what I had—opportunities that allow them to find their passion. I figure that the top 1-5% will succeed no matter what you do with them—it’s the other students with whom I feel I can make a difference.

What do you enjoy most about the process of mentoring students?

I love it when they discover something really cool in their data. I especially enjoy looking at data with students and helping them to “find the story” in the jumble of numbers and graphs. I also really enjoy watching one student help another learn something new.

Diana Northup has been studying things that live in caves since 1984. She has a Ph.D. in Biology from the University of New Mexico. She and her colleagues on the SLIME (Subsurface Life In Mineral Environments) Team are investigating how microbes help form the colorful ferromanganese deposits that coat the walls of Lechuguilla and Spider Cave in Carlsbad Caverns National Park; how microbes participate in the precipitation of calcium carbonate formations called pool fingers; and the microbial diversity located in the hydrogen sulfide cave, Cueva de las Sardinas in Tabasco, Mexico and lava caves in the Azores, Hawaii, New Mexico, and California. Across these study environments, she also investigates “microbes that masquerade as minerals,” to help better detect life on extraterrestrial bodies. She has mentored numerous and diverse high school, undergraduate, and graduate students and delivered a TEDxABQ talk about her mentoring philosophy. Diana has been honored by having her work featured on NOVA, CNN, Discovery Channel, National Geographic, and by being named a Fellow of the AAAS. In 2013, she was awarded the Science Award by the National Speleology Society for her achievements in Biospeleology. Currently, she is Professor Emerita in the College of University Libraries & Learning Sciences and a Visiting Associate Professor in the Department of Biology at the University of New Mexico. She is actively researching cave geomicrobiology using geochemical, molecular and microscopy techniques, and teaches Biology 110: Microbes: Friends or Foes, Biology 419/519: Communicating Science to the Public, and co-teaches Geomicrobiology.

Her plenary session is titled Using Your Enthusiasm and Passion to Enhance Your Mentoring