December 22, 2017

Dear Friends of Hydrology and Atmospheric Sciences,

Greetings from the (mostly) sunny desert southwest! We hope you and your family are in good health and enjoying a winter respite before the new year arrives. We have great news to share with you!

Welcome New Colleagues

After a rigorous one and a half year search and interview process, we are pleased to announce that three new faculty members will join our department in 2018.

This spring we will welcome JPL Scientist Ali Behrangi (PhD from UC Irvine) and this fall we will welcome Syracuse Assistant Professor Laura Condon (PhD Colorado School of Mines), and Stanford Postdoctoral Fellow Bo Guo (PhD Princeton).

These new faculty members will help shape the future of our current programs in

- Terrestrial hydrology, especially multi-sensor/multi-spectral remote sensing applications in hydroclimatolgy, including extreme weather and climate analysis,
- Robust numerical modeling and system dynamics of groundwater-surface water interactions, especially the effect of managed systems on climate change and sustainability, and the
- Physics of fluid flow in permeable earth materials and development of computational models to address practical problems in subsurface energy and environmental systems, including shale gas/oil production and geological CO₂ storage.
Harshbarger Remodeling Project

With the merger of the Hydrology and Atmospheric Sciences departments last year, our faculty size and student population instantly doubled, so co-location was a top priority this year.

We are pleased to report that Dean Joaquin Ruiz approved a $250K renovation of office and lab space in the Harshbarger building which will be complete when everyone returns from the winter break.

Photo, left to right: Before and After—Office space in demolition mode (do you recognize that wall, Jim S?) and office space after remodeling, replete with new walls, new ceiling and lighting, new flooring, updated WiFi and electrical, and lots of fresh paint. (Photos courtesy of Tim Corley)

In January 2018, you will find our stalwart administrative associates, Erma Santander and Sarah Warren, and business managers, Thomas Alvarez and Sandy Holford, in the newly expanded room 122. Our amazing program administrators--BAS manager, Brittany Ciancarelli, graduate coordinators, Lupe Romero and Terrie Thompson, and faculty directors of graduate study, Chris Castro and Martha Whitaker—will be located in close proximity on the second floor. All of our current and new faculty members, research scientists (resident, visiting, and postdoc), IT staff, and graduate students will take up residence in the remaining space on the second and third floors.

We now comprise a group of 160 individuals which includes 22 core faculty, 4 emeriti, 12 research and instructional faculty, 11 administrative and support staff, 2 postdocs, 3+ visiting scholars, 76 graduate students, and 30 undergraduates.
Tim Corley has been doing a magnificent job coordinating this major project, from the preliminary planning and time/space management (so as not to interfere with classes) and coordination of multiple work crews’ schedules, to the herculean task of getting people, furniture, equipment, plants, permanent records, and decades’ worth of department memorabilia moved across the UA mall from PAS on Sixth Street to Harshbarger on Second Street. Kudos to Tim!

We’re Always Ready to Celebrate

As an example of just how large we have grown, just two weeks ago (December 7) we temporarily commandeered our dedicated Student Computer Lab in Harshbarger 110 to celebrate the season with our annual Holiday Potluck with nearly 100 attendees.

As you can see, there was an abundance of good food, good times, and good cheer! On Monday, December 11, the room promptly resumed its normal configuration so that students could finish their end-of-semester computer modeling projects and class reports.

UA On the World Stage

The University of Arizona’s water resources program was recently honored with a Top 3 world ranking among the Top Global Universities from the Center for World University Rankings (CWUR), the only ranking system that measures the quality of education and training of students, as well as the prestige of the faculty members and the quality of their research, without relying on surveys and university data submissions.

You can read more about all CWUR World University Rankings, either by country or by subject, here.
More good news! A recent Gallup study showed that UA alumni are happier, healthier, and more successful than peers nationally—but you may already know that from your own experience.

The work of our students and faculty continues to impact our community, the state of Arizona, and the world. Some important activities included:

- Meixner and Niraula published a major study of groundwater in the west…and [here](#)
- Galarneau and Zeng predicted an extreme hurricane season…and [here](#)
- Vic Baker featured on NOVA’s “Killer Floods” program
- Yiyi Huang selected as 2018 UA Carson Scholar (Rachel Carson Scholars Program)
- Eric Betterton toured the Salt River Project by helicopter
- Martha Whitaker won the College of Science Distinguished Advising Award
- Xiquan Dong’s students dazzled at AMS summer conferences
- Eyre and Zeng working to figure out how fast Greenland is melting
- Hoshin Gupta appointed UA Regents Professor and won the AMS Horton Award
- Jennifer McIntosh won the University of Arizona Distinguished Scholar Award
- And [more](#)

We’ve come to expect that our graduates will go out into the world and do great things. Still, your achievements continue to amaze us! Just a few highlights from the past year:

Photo, left to right, Victor Gomez (BS 2014) working on issues of water sustainability with the Ministry of Environment, Panama. Dan Stephens (PhD 1979) receiving the Groundwater Resources Association of California Lifetime Achievement Award at the annual meeting in Sacramento this year. That’s fellow UA alum, Graham Fogg, on Dan Stephens’ left.

- Alum [Victor Gomez](#) works for water sustainability in Panama’s Ministry of Environment
- Alum [Dan Stephens](#) wins the Groundwater Resources Association of California Lifetime Achievement Award
Photo, left to right, Dongxiao Zhang, elected to US National Academy of Engineering. Ewan Crosbie introduces a new cloud water collector as part of NASA’s NAAMES program.

- Alum Dongxiao Zhang elected to the US National Academy of Engineering
- Alum Ewan Crosbie, now at NASA, introduces AC3, a new cloud water collector
- Photos of UA Alums attending last week’s AGU meeting in New Orleans are on Facebook!

On a more somber note, we are ending the year without some of our wonderful colleagues. This year saw the passing of too many friends, both alumni and faculty. Among them was Richard Kassander, one of our founders, who you can read about here and here.

**Going Forward**

Mark your calendars for Monday, April 9, 2018 and join us for another amazing El Día del Agua y la Atmósfera! You can now pay for your registration and become a sponsor online! Catch up with old friends and meet some of our best undergraduate and graduate students as they present their research and compete for prizes.

We have some fantastic speakers on board: Lieutenant Colonel Stephen Maile, Commander of the 25th Operational Weather Squadron at Davis-Monthan AFB, will join us for lunch, and Sherri Goodman, Senior Advisor for International Security, The Center for Climate and Security, and former Undersecretary of Defense (Environmental Security), will present our afternoon keynote.

Photo, Never fear—the HASSA students are in charge! Front row, left to right, Ángel Briseño, Jeffrey Klakovich, Katarena Matos, Neha Gupta, Tiffani Canez. Back row, left to right, Tom Meixner, faculty advisor, Joel Atwood, Joshua Welty, Victoria Hermosilla, and Jack Anderson.
After the oral and poster presentations, you won’t want to miss the much anticipated awards ceremony which will see some new faces collecting the Montgomery Prize and the Hargis Awards, to name a few, plus the faculty awards for “excellence at the student interface”—better known as the Storm, Aqua Man, and Captain Planet Awards! Our day will end with a casual pub social at No Anchovies on University Boulevard.

Goals for the New Year

As 2017 comes to a close, we look forward to achieving even bigger and better things in 2018. With the increase in faculty size, we’re working hard to grow the department’s course offerings—both on campus and online, increase student enrollment, and provide internship and research opportunities for all of our students. These are also key elements in the university’s “Fourth Industrial Revolution ‘Bigger, Bolder’ Campaign.” Our shared mission is to increase private and industrial partnerships with a greater emphasis on translational research, innovation, and solution.

We hope you’ll help us meet our goals of growing and strengthening our John Harshbarger Memorial Fund, as well as our many other endowments and scholarship funds. The HAS Advisory Board will be sending you updated information on this in the very near future. These programs help us:

- Recruit exceptional domestic and international graduate students
- Recognize the superior achievement of our rising juniors and seniors and recruit them to our Accelerated Master’s Programs
- Reward students in specialty areas
- Support graduate students’ travel to present research at regional and national conferences

We’d Love to Hear From You

Whether it’s news about an award or honor, promotion, retirement, or a great adventure that you’d like to share, we would love to hear about what’s happening in your life and in your part of the world. Please drop us a line by contacting me directly (better@email.arizona.edu) or by contacting one of our staff. Don’t be shy!

To keep up-to-date with what’s happening in the department, you can subscribe to our News feed, follow us on Facebook, or check the Alumni section of the HAS website.

In all your personal and professional endeavors, thank you for representing the HAS department in such fine fashion. We are proud to call you UA HAS alums and grateful for your continued friendship and support.

On behalf of the faculty, students, and staff, all the best to you in the New Year!

Eric

Eric A. Betterton
University Distinguished Professor and Head
Hydrology and Atmospheric Sciences