We're here to thank Donna Jurdy for her contributions to the department. Her science, teaching, hard work, responsibility, and decency have helped make our community what it is.

Like other departments, we try to do good science, educate good students, and help them go on to successful careers. The challenge is that we're much smaller than most geoscience programs. So we try to get around that by being a very collaborative community. Rather than working in isolation, faculty and students work together, coauthoring papers, and sharing ideas and credit. Students often have multiple advisors. Faculty view students as colleagues. Donna's contributed a lot to this spirit.

When I came to Northwestern 40 years ago, the department leadership was incredibly supportive of my goal to build a strong geophysics program. In the next few years, we hired Richard Gordon and Emile Okal, whom I had worked with and knew well. We also hired Donna, who I knew only from her papers and discussions at AGU meetings. Still, it was clear that she'd be a real asset.

While in graduate school at Michigan, she'd had the courage to take on Dan McKenzie, one of the discoverers of plate tectonics, in an argument about continental drift and true polar wander. She'd then gone to Princeton as a postdoc, working with Jason Morgan, another leader in discovering plate tectonics.

At Northwestern, Donna did pioneering studies using plate reconstructions to study the dynamics of plate tectonics. Her approach was to test hypotheses proposed using the present plate geometry and velocities by using past plate motions. She looked at the rotation of the lithosphere with respect to hotspots, correlations of plate speeds with latitude, speeds of continental versus oceanic plates, and motions between hotspots. She also showed that episodes of back arc spreading were often triggered by changes in plate motions. Hence she played a major role in developing an approach that is now a standard and powerful tool in geodynamic studies. These had a lot of impact and led to her election as a GSA Fellow. She also won a NSF award for distinguished woman scientists and served as an AAPG Distinguished Lecturer.

Later, she did intriguing studies in comparative planetary science, looking at different planets and moons. These show her typical style: asking interesting questions and approaching them in imaginative ways. For example, showing that true polar wander may be occurring on Io in response to its extensive volcanism. Also, she looked at magnetic lineations on Mars, suggested to have been formed by plate tectonics, and found strong evidence against this attractive hypothesis. Her accomplishments led NASA to repeatedly ask her for advice on proposed planetary missions.

Most recently, she's been part of our studies of how continents rift apart to form new oceans, starting with studies of the failed billion year old Midcontinent Rift, and extending the results to study continental margins remaining from successful rifts.

But Donna did a lot more than just good science. In addition to being a caring and helpful teacher and advisor, with excellent rapport with students, she's done many things that helped made our department what is. To name just a few -

She's been an active member of the geoscience community, serving in leadership roles with AGU, GSA, NSF, NASA, AWG, the Illinois Board of Natural Resources, and other organizations.

She regularly taught a freshman seminar which introduced many undergrads to geoscience. Her commitment to students led to her being named an Outstanding Freshman advisor.

Her courses on the solar system and on the possibility of extraterrestrial life - which nicely integrated science and science fiction - made her a "go-to" person for students from many departments interested in space science. She advised students - including one who went quite far in the difficult astronaut selection process - and a team of students who did very well in a NASA competition to design a Mars habitat.

She used what she learned serving on the panel that awards NSF graduate Fellowships to help students apply for them, working closely with them on their applications.

Her biggest such impact affected every grad student at NU. For years, finishing a Ph.D. here felt like collapsing across a finish line after a tough long race. Many graduates didn't bother coming to graduation. Donna suggested a graduation ceremony in which faulty advisors put the academic hoods on their graduating students. The grad school didn't think this would have much effect, but agreed to try. The ceremony was an instant success, with families coming from far away to join the celebration. So many people want to come that tickets are carefully rationed. Ph.D. graduation has become an exciting, special, event. In fact a parent who serves on another university's board of trustees was so impressed that he's urging that school to do the same.

There's lots more to say about Donna's contributions. I could go on, but I won't. Instead, let's all thank her for everything she's done and wish her the best for the future.

Seth Stein 10/12/2019