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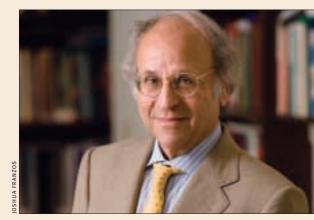
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an we begin to make our lives once more all of a piece? ... When one person taps out a beat, while another leads into the melody, or when three people discover a harmony they never knew existed, or a crowd joins in on a chorus as though to raise the ceiling a few feet higher, then they also know there is hope for the world. —Pete Seeger

Often, when Jonathan Pruitt talks about his research, someone will say, "That's exactly like my workplace!" Jonathan, a behavioral ecologist,



is one of Pitt's assistant professors whom I recently invited to speak in my Friday Senior Vice Chancellor's Research Seminar series. He spends his days peering into the webs of social spiders—creatures that, unlike many of the 43,000-plus species in the order *Araneae*, are not loners; rather, they live in colonies. Jonathan has learned that these arthropods are like us in many respects. The roles that these spiders take on within their groups are not determined by the size of their ovaries or mandibles or other aspects of morphology—as previously assumed and is the case with ants—but by their personalities. The social structures which they build are sophisticated.

I was particularly struck by Jonathan's description of a species of social spider found in the Americas, *Anelosimus studiosus*. The fitness of their colonies is determined by the behavioral diversity within them. Some of the spiders build beneficial relations with otherwise parasitic visitors, some are foraging specialists, some concentrate on brood care, some on defending the colony. Not only do the individuals have a propensity for a given behavior, but they are best at the roles they fill. They build on their aptitudes in life, and the group is better for it.

Medicine has something to learn from *A. studiosus*. In recent times, more than 80 percent of health care has been provided by someone other than a physician. With the advent of the Affordable Care Act, we can expect this number to increase; and though that increase is driven by cost concerns and the rising number of insured patients, it is probably a good thing for patients. Nonphysicians can offer substantial primary care and have more time to spend with a patient than is the case with many physicians. Likewise, the modern biomedical research setting is changing. A realization of the complexity and interconnectedness of human biology (note that we now have a Department of Computational and Systems Biology) has researchers collaborating across disciplines as never before—with a diversity of technologies and habits-of-mind.

Studies of engineers have shown that cognitively diverse teams typically outperform others on tasks requiring innovation and exploration of new ideas. But it can take time for both clinical and research teams to gel, and gelling doesn't always happen (especially if we are antisocial spiders!).

Whether we want to break new scientific ground or provide the very best care for our patients, we need to learn to not just work together but to thrive together. How do you build cohesion among persons with different training, expertise, behavior, and perspectives? As authors of one recent meta-review on team science noted, the ability to reflect—on what we each bring to the table, in terms of ability, personality, and our own filters—can make or break a team.

Speaking of thriving teams, here I congratulate Dan McCoy (a Pitt undergrad featured on p. 7). He was a member of the U.S. men's sledge hockey team that traveled to the Paralympics in Sochi this winter. U.S. beat Russia in the finals and brought home the Gold. Truly inspiring teamwork, and I'm also inspired by the spiders!

Arthur S. Levine, MD Senior Vice Chancellor for the Health Sciences John and Gertrude Petersen Dean, School of Medicine