



LEFT: Bezak  
RIGHT: Schenker



TOM ALTANY/UNIVERSITY OF PITTSBURGH

## Overheard

### Palliative Care in the Time of COVID

Working with a patient's care team, palliative care specialists base their treatment on the person, not a prognosis. Their focus is to provide relief from symptoms and the stress of an illness, while also comforting the families. Relatives often play a role in the treatment plan, but COVID-19 safety protocols have prevented many family members from even entering hospitals. This fall, we spoke with **Yael Schenker**, director of Pitt Med's Palliative Research Center, and **Karl Bezak**, clinical assistant professor of medicine and medical director for palliative care at UPMC Presbyterian, to learn more about how their teams offered support despite the challenges of the pandemic.

#### How did you adjust to the COVID-19 safety measures last spring?

**Karl Bezak:** Initially, we would try to describe a patient's condition to their family over the phone. It wasn't until we were able to do video conferencing that the family could really see just how sick their relatives were. People who had been saying they wanted everything done [to keep the patient alive] really saw how this was not an acceptable quality of life. It was challenging, but helpful, in terms of painting a picture for those who were making decisions on behalf of the patient.

#### Aside from family not being there in person, what was the biggest challenge you have faced because of the pandemic?

**Yael Schenker:** The degree of uncertainty—that was particularly acute back in the early spring when we really didn't know what we were dealing with. That in itself caused a lot of suffering and fear. What we're trained to do in palliative care is really walk with people who are suffering and sit with that uncertainty. Being sick in the hospital is scary in usual times, but even more so now. I think a really important role for us was being that glue to bring people together who weren't able to be together in the physical space.

#### Was there a particular situation that stood out for you?

**Karl Bezak:** We had a patient who had chosen to stop receiving treatment for pneumonia. Her best friend was able to be at her bedside via iPad as she died. It was really a magical moment. The flexibility and willingness of patients and families to work around the restrictions and policies, to be there as much as possible, especially in a person's last moment, was just absolutely heartening. —Christina Frank

## Faculty Snapshots

**W**hen someone sustains severe muscle damage—as a result of a combat injury, for example—the tissue often can't regenerate. Instead, the damaged muscle is replaced with scar tissue, which can lead to a significant loss of limb function.

**Stephen Badylak**, deputy director of Pitt's McGowan Institute for Regenerative Medicine, leads a team of researchers from eight institutions who are developing an implantable device that would regrow functional muscle tissue, even after a drastic loss from something as severe as a motorcycle accident. The team was awarded a \$22 million grant from the Defense Advanced Research Projects Agency (DARPA) to pursue the project.

The implantable patch contains microelectrodes, hydrogels (polymer chains that create a moist healing environment) and cell factories. It will monitor key molecular signals at each stage of healing, from shortly after the injury occurs to the days and weeks that follow. An artificial intelligence component will direct the delivery of specific molecules at specific times.

"The hydrogels we contribute will serve as the covering for the wounds and the physical support for the electrodes," says Badylak, a professor of surgery at Pitt. "I think of it a little bit like a mini Manhattan Project, and it's fun."



Badylak



Wagner

**Amy Wagner and Toren Finkel joined 29 current and former Pitt Med professors this fall when they were elected to the National Academy of Medicine.**

A professor of physical medicine and rehabilitation and neuroscience at Pitt, **Wagner** uses biomarkers and statistical modeling to predict how well patients will recover from brain injury. The data she collects guide clinical decisions along the way—a strategy she calls "personalized rehabilitation medicine." Her clinical work, in turn, informs her research studies of in vivo preclinical models aimed at identifying intervention strategies that promote neurorecovery.

**Finkel**, a professor of cardiology and director of the Aging Institute, researches how oxidative stress and the function of mitochondria alter the rate of aging. His long-term goal is to uncover the molecular basis of aging and age-related diseases through the study of a variety of different cellular pathways.

Election to the Academy is considered one of the highest honors in the fields of health and medicine. —CF



Finkel