

To Lift All Boats, Row Together

When **Fran Weisberg** '75 stepped into the role of president and CEO of the United Way of Greater Rochester last March, the region was reeling from news that Rochester topped one of the last lists any community wants to lead.

Following up on a report it had completed in 2013, the Rochester Area Community Foundation looked more deeply into Rochester's high poverty rate to discover that Rochester had the highest rate of extreme poverty of any comparably sized city in the nation. Nearly a third of Rochester residents lived in poverty, and half of those lived in extreme poverty, defined as less than half the poverty level.

The dismal statistics stood in contrast to the general economic health of the metropolitan area, all things considered, given years of massive layoffs from Rochester's "Big 3" of yesteryear, Kodak, Bausch & Lomb, and Xerox. In the past two decades, high-tech spin-offs, and universities such as Rochester and RIT, have helped maintain a critical mass of skilled and well-compensated workers who've fueled new developments, kept schools well-funded, and attracted high-end retail—but largely in the suburbs.

Weisberg finds the contrast troubling. "If we have a community in which we accept that we have the second-highest child poverty rate in the U.S. and there are a bunch of high-tech folks who live in [the suburbs], I don't think that's a community we would want to be and have."

A week after her appointment, she stood with New York State Assembly Majority Leader Joseph Morelle, Rochester Mayor Lovely Warren, and Monroe County Executive Maggie Brooks as the three political leaders announced the formation of the Rochester-Monroe Anti-Poverty Initiative, a broad-based alliance under the umbrella of the United Way. The initiative brings together representatives from academia,

UNITING THE COMMUNITY: Weisberg, named president and CEO of the United Way of Greater Rochester last spring, says the Rochester region is a caring place. But to make progress requires everyone "rowing in the same direction."



private industry, and labor, and is seeking substantial input from people living in poverty in order to gauge how best to use community resources.

"I feel very honored to be here at the head of United Way, right now, to really figure this out," Weisberg says. "We have a very committed community, but internally and externally, everybody's all over the map. And what I'm going to try to do is truly get us rowing in the same direction."

Weisberg has a long history in the area of bringing disparate groups together in the service of community-wide goals, as well as prioritizing the needs of marginalized populations. She's the former CEO of Lifespan, a nonprofit organization that serves the aging, the frail elderly, people with disabilities, and their caregivers. Before she was selected for the top job at the United Way, she led the Finger Lakes Health Systems Agency, one of more than 200 such agencies created after passage of a federal law in 1974 to encourage regional health planning, but one of only a few still in existence today.

Kathy Mulholland Parrinello '75N, '83N (MS), '90W (PhD), chief operating officer of the University's Strong Memorial Hospital, represented the Medical Center on the board of the agency during Weisberg's tenure as executive director.


"They probably wanted to kill me sometimes," Weisberg says of Parrinello and other Medical Center administrators. The Medical Center was among three health systems in the county at the time, and all three had plans for expansion. All three plans would be reviewed by the agency.

As Parrinello recalls, "The Medical Center at the time hadn't historically had to go through a community-wide process quite like this." But she says the process helped the Medical Center in the end, and offers insight into how Weisberg addresses challenges.

Nearly everyone agreed that there was a shortage of hospital beds in Rochester. "They were all, in themselves, appropriate requests," Parrinello says of the plans of then Strong Health, Unity Health, and Rochester General. "But instead of trying to look at those applications one by one, [Weisberg] said, 'Hey, they're all similar, we have three of them from the three systems, let's look at them collectively.'" Whereas the hospitals might have competed with one another for a new market, leading to higher costs and risking overcapacity, "we worked through a process to determine what was the right number of beds. And in fact, we walked away with a significant increase to our capacity that was endorsed by the region. So I think in many ways it gave a lot more credibility to us in the community."

Parrinello and Weisberg were classmates at Rochester, though they did not know each other at the time. Parrinello says she was "one of those library rats." Weisberg was deeply involved in a number of causes, including helping mobilize students to support union drives among campus workers. "I worked in Danforth Dining Hall," Weisberg says. "I loved those women. I was close to them." She helped found a group to connect students to community service. "We just started mobilizing people to become volunteers out in the community," she says.

Born and raised in Baltimore, Weisberg elected to stay in Rochester following graduation. Her first job was at the Peace and Justice Education Center, which eventually folded into the organization Metro Justice. She worked with the federal program, Vista, as well as Action for a Better Community. She's fond of saying "I came to Rochester for college and I never left."

"I believed it was a small enough, and an open enough, community that you could really make a difference. And that's what I've done my whole time here."  —KAREN MCCALLY '02 (PHD)

In the News

The Met's New Voice

The Metropolitan Opera began showcasing a new voice this fall. A radio voice, that is.

Mary Jo Heath '88E (PhD), a Met senior producer for the past nine seasons, was named Metropolitan Opera radio host in September. Heath succeeds the late Margaret Juntwait.

Heath started at the Met just as it was launching Metropolitan Opera Radio on Sirius XM satellite radio. As senior producer, she put together the expanded coverage, including backstage interviews and commentary.

Now, as the Met's radio host, her voice will be broadcast on public radio stations around the country each week from December through May during the Saturday matinee live broadcasts the Met has been doing since 1931.

In an interview with Rochester's National Public Radio affiliate,



LIVE FROM THE MET: Heath, a longtime producer at the Metropolitan Opera, has been named host of Met Radio.

WXXI, Heath recounted her first experience in radio, at that station. Responding to a call for Eastman School of Music students to become classical music announcers, she passed her audition and, because she listened to the Met broadcasts anyway, took Saturday afternoons.

In that same interview, she recalled taking voice lessons at Eastman. Because she wasn't a voice major, she was assigned to a graduate student instructor. "I thought, OK, it will be some 22-year-old soprano who has never taught before, and I'll be her guinea pig," she said. "So

I walked up to her studio, and I knocked on the door, and I opened the door and I said, 'Hi. My name is Mary Jo Heath, and I am looking for my new voice teacher. Are you Renée Fleming?'"


Renée Fleming '83E (MM), who this fall was appointed as a distinguished visiting artist at Eastman, is now an internationally renowned soprano and a regular performer at the Met.

White House Honors Evelyn Brooks Higginbotham '84 (PhD)

Evelyn Brooks Higginbotham '84 (PhD), the Victor S. Thomas Professor of History and African and African-American History at Harvard, received a National Humanities Medal in a White House ceremony in September. Managed by the National Endowment for the Humanities, the medal has been awarded to no more than 12 individuals or organizations annually since 1997.

Higginbotham is the author of *Righteous Discontent: The Women's Movement in the Black Baptist Church, 1880–1920*, which won multiple scholarly awards and was named a *New York Times* Notable Book in 1993 and 1994.

Jeff Beal '85E Wins Emmy Award

Jeff Beal '85E won an Emmy Award for Outstanding Music Composition for a Series for his score for the Netflix series *House of Cards*. The award was Beal's fourth Emmy. Previously, he won Emmys for his score on *Nightmares and Dreamscapes*, *The Company*, and the theme for the series *Monk*. 

Pluto Fever

Stewart Bushman '95 nervously watched his computer screen one evening last July. An engineer at Johns Hopkins University's Applied Physics Laboratory, Bushman leads the propulsion system that has guided NASA's *New Horizons* mission since its launch nine years ago.

Now, would the craft send data back from Pluto as it whizzed past the dwarf planet?

Just after 8 p.m., information began to stream across their consoles. The thousands of scientists huddled in a nearby auditorium gave Bushman and his team a standing ovation.

"At 41 years old, that's the highlight of my career," says Bushman, who lives in Silver Spring, Maryland, with his wife and two sons.

This came just months after Bushman and his team used leftover helium to propel NASA's *Messenger* spacecraft for an extra month, gaining bonus photos and data from low orbit over Mercury.

Bushman had wanted to work in space since he was a child, and the telescope he received as a gift the year he turned 12—1986, when Halley's comet was visible from Earth—cemented that interest.

Back then, the *Voyager 2* mission was just cruising past Uranus and Neptune. "It didn't seem fathomable that we'd have a mission to Pluto," Bushman says.

A guidance counselor advised that he pursue mechanical engineering before specializing in aerospace engineering. So Bushman took advantage of a Bausch & Lomb scholarship and enrolled at Rochester.

After graduation, Bushman earned a master's degree in aerospace engineering at the University of Illinois at Urbana-Champaign, studying electric propulsion. He worked at Lockheed Martin and with the U.S. Air Force as a research scientist. Then, the Applied Physics Laboratory, which tackles projects for the U.S. Department of Defense, NASA, and other government agencies, recruited him to be the propulsion lead on a mission to Pluto.

New Horizons was launched in 2006, and the mission was billed as "the first mission to the last planet." Shortly afterward, Pluto's planetary status was downgraded to dwarf by the International Astronomical Union, and that took a little of the grandeur away, Bushman says.

But it didn't decrease public interest in the underdog planetary system nearly a decade later. "This year rolls along and it's like the entire world has Pluto fever," he says. "I didn't realize how much the world would really care."

Where does Bushman stand on the issue of Pluto's status? With the caveat that he is neither an astronomer nor a planetary geologist, "any definition that tries to include both Earth and Jupiter as the same class of object is going to have to stretch and contort itself," he says. "Try to throw Pluto into that, it gets even worse."

Thanks to *New Horizons*, scientists determined that Pluto is probably the largest of the ice dwarfs, and that it's red—"all cool to know," Bushman says. And because the launch and flyby went so well, requiring few "trajectory correction maneuvers," the craft, the size of a baby grand piano, has plenty of fuel to explore other objects in the Kuiper Belt.

With *Messenger*, Bushman was able to help coax a little extra life out of the doomed spacecraft. The propellant used to guide the spacecraft into Mercury orbit had been pressurized by helium. After all its fuel had been exhausted, Bushman and his team theorized that the helium itself could be used as a propellant, too.

It was an approach that no one had ever tried before, because they hadn't had a chance. Usually, something else on the spacecraft breaks down before running out of propellant, Bushman says. But thanks to such inventiveness, researchers gained even more information about Mercury before its planned crash on the surface.

The mission extension left the team far less time than usual to plan and execute maneuvers.

"We had to compress weeks' worth of work into days and had to do it over and over again," Bushman says. "We basically squeezed every last drop of utility out of that spacecraft."

The *Messenger* team praises Bushman's contribution to the mission.

"His in-depth understanding of spacecraft propulsion systems and operations in micro-gravity maximized our time in orbit and optimized our science return," says Helene Winters, *Messenger* project manager. She also credits his "quick-witted humor."

Bushman also is the propulsion lead on *Stereo*—two probes in orbit around the sun, taking 3-D images of solar flares—and held the job on the *Van Allen* probes, two Earth orbiters studying how the sun affects the planet's magnetosphere, from inception through launch.

Now, most of his attention is on *Solar Probe Plus*, which is scheduled to be launched in 2018 for the first tour of the solar corona, a million miles from the sun. **Mary-Kae Lockwood** '84, who also studied mechanical engineering at Rochester, is the spacecraft systems engineer for that project.

But it will be difficult to top 2015 for Bushman.

"New exploration does not come very often, especially transformative exploration," he says. 

—LIZ F. KAY '00



ON COURSE: As lead propulsion engineer, Bushman offers a behind-the-scenes view of NASA's *New Horizons* mission to Pluto and other high profile explorations.