Circuit Completed

The prototype fund in the Faculty Scholar Program embeds two goals of its creator, Vinod K. Agarwal ’77 PhD: to honor his mentor and to recognize the contributions of a junior faculty member in the Whiting School.

By Donna Shoemaker

One year shy of completing his electrical engineering doctorate at the University of Pittsburgh, Vinod K. Agarwal faced a difficult choice in 1975: whether or not to follow his mentor, Gerald M. “Gerry” Masson, who was leaving Pitt for the Johns Hopkins University. Changing programs at that point meant Agarwal would lose valuable time.

He decided to come to Baltimore with Masson. Ever since, from graduate student to academic researcher to global entrepreneur, Agarwal has more than caught up. After earning his PhD in 1977 at the Whiting School of Engineering, Agarwal has stayed in touch with Masson, the mentor who became a friend. Masson for many years chaired the Department of Computer Science at the Whiting School of Engineering, and now directs the Johns Hopkins University Information Security Institute.

The research that Agarwal began with Masson in semiconductor testing launched a lifelong dream and led to Agarwal’s founding of LogicVision, Inc. in 1992. Based in San José, California, LogicVision was the first and is still the largest commercial provider of embedded test technology, from initial design debug all through the life of a computer chip.

The dream Agarwal has lived, he notes, is the idea that from a cell phone to a satellite that isn’t working right, “you extend the concept so that everything becomes self-testing. The idea of self-testing will become so essential to future designs in the multi-trillion industry of electronics worldwide.”

As a young man studying electronics at India’s Birla Institute of Technology and Science in Pilani, Agarwal was fascinated with how innovation changed people’s lives. After coming to America to study at Pitt, he became the first graduate student Masson supervised when Masson himself was a newly minted PhD.

Thinking about Masson, Agarwal says he realizes that one reason “why there is such a strong feeling of gratitude is that like most of us who come from foreign countries,” he found that a mentor could become an invaluable ally. Masson “taught me everything, including my English,” Agarwal recalls. “He’s just one of those amazing individuals, generous, with very little selfish motives.”

After earning his doctorate, Agarwal taught briefly at Wayne State University. Then as a researcher at McGill University in Montreal, Vinod K. Agarwal ’77 PhD went on to become the founder of LogicVision, Inc. Following 16 years as an academic researcher in Montreal, Agarwal honored his mentor in establishing the Masson-Agarwal Faculty Scholar in the Whiting School of Engineering. Agarwal’s son, Atin (right), a senior at the Krieger School of Arts and Sciences, has had a chance to meet his father’s mentor, Gerald M. “Gerry” Masson (left).
Montreal, he was appointed as the Nortel/NSERC Industrial Research Chair Professor, an endowed position created for him. He published 100 technical papers and also consulted for major companies. Agarwal’s research would “put McGill on the global map as the top university for excellence in research and teaching in semiconductor testing,” according to siliconindia, which presented Agarwal with its leadership award for entrepreneurship in 2002.

The tribute came a year after LogicVision went public, the first to do so in the unstable post-9/11 environment.

Without the endowment created to support his position at McGill, Agarwal observes, “I would have moved out,” lured by another university. “It’s a challenge for any academic environment with highly talented individuals,” he explains. “Everyone wants them. It’s a challenge to keep them continuously attracted to the institution, and the best way to do that is to keep offering them the environment that allows them to do the best they can, to make resources available, to recognize them for what they’re doing.”

To meet that challenge, and to provide junior faculty members with discretionary funds to invest in research, the Whiting School in June announced a new initiative, the Faculty Scholars Program, similar in purpose and structure to a professorship. Funded through private support, Faculty Scholars will be selected based on their research achievements and potential. The program will extend an incentive to stay even before tenure is granted.

Agarwal has given a gift to the Whiting School to honor his mentor. The gift establishes the first Faculty Scholar fund, the Masson-Agarwal Faculty Scholar. Agarwal encourages others to consider investing in a Faculty Scholar as a way to help junior faculty members “see Hopkins as a place to mature and grow their capabilities.” He adds, “Professors do a lot for us, and if we can recognize that, to me that’s an extremely positive step.”

Kostos Konstantopoulos has been named as the inaugural Masson-Agarwal Faculty Scholar. Konstantopoulos is assistant professor of Chemical and Biomolecular Engineering. His research seeks to develop molecular-targeted therapies to combat cancer metastasis, thrombosis, and inflammation/infection.

Agarwal hasn’t yet had a chance to meet Konstantopoulos, but says “I’ve heard great things about him from everybody,” including from his son, Atin. A senior Economics and Political Science major, Atin is president of the Student Council at the Homewood campus. Agarwal and his wife, Sujata, have two daughters as well.

Currently, Agarwal serves as executive chairman and chief strategist of LogicVision, a company that has been “global from day one,” he emphasizes. The entrepreneur’s travels take him to Europe, India, China, Korea, and Japan. “I believe in working together across cultures,” he notes. LogicVision’s success, he affirms, offers a symbol for America that “as long as you are able to create innovation, you can still stay in competition with the world.”

“IT JUST MAKES SENSE”

With the fruits of his successful career in finance and banking, George Elder ’51 has a history of making wise investments. He is continuing that tradition by investing in the Whiting School, while receiving benefits in return.

By Billie Walker

George Elder ’51 likes to say his career was “checkered.” Certainly it was somewhat unorthodox, and undoubtedly it was successful. He was not one to squeeze into a mold just because somebody else thought he should.

Take, for instance, what his family had in mind. After he graduated from the Brunswick School in Connecticut, his family sent him to Williams College in Massachusetts, presumably to study science. With the Glee Club, he sang at all the area girls’ schools, but hit a sour note in academics. “I failed miserably,” he admits, and his family brought him home.

The next year, they tried another school for George (and please, call him George, he says). With his typical dry wit, George relates, “My family neglected to research the fact that Syracuse was coed.” He was very popular there, sang in the coed chorus, and loved to...
play the Hawaiian War Chant on the university’s chimes.

George did well enough academically at Syracuse, but his folks perhaps sensed he was having too much fun. Next they enrolled him in Columbia University’s summer chemistry lab, which he had to take before beginning classes there in the fall. However, his commute from Connecticut required train, trolley, and footwork. “On top of that, the class was hot, un-air-conditioned, and a drag,” he says, “so I enlisted.”

The military sent George to several schools as well. He ended up in the new Army Specialized Training Program (ASTP), geared to arming soldiers with a degree before deploying them. ASTP sent him to City College of New York to study civil engineering. When the Allies needed more infantry overseas, George, along with many others, was plucked from ASTP. Following basic training at Fort Carson, Colorado, he served in northern France, Belgium, Holland, and Germany as a rifleman with the 104th Infantry. Later, he taught in the Officer Candidate School at Fontainebleau until V-E Day.

Discharged in 1946, George joined his wife on Maryland’s Eastern Shore, where her father owned a farm. Each day before sunup and sundown, George milked the cows. He was finally able to complete a degree: At Washington College in Chestertown, he earned a bachelor’s in physics in 1948.

By this time, George had taken classes at no fewer than 10 institutions of higher learning. There was one more to come. He enrolled at the Johns Hopkins University in 1948 and three years later received his second bachelor’s degree, this one in Civil Engineering. Living off-campus with his wife, and supported mainly by the G.I. Bill, George had little time for campus activities, although he did assist in putting out the Vector, an Engineering newsletter.

After graduation, George took a job at the State Highway Commission, where he had worked during the summers. “I advanced there as far as I could, politically,” he recalls, “and then went to a water company in suburban Wilmington, Delaware.” What kind of work was this Hopkins engineer doing? Finance and investments. “It was somewhat unusual for a civil engineer to be involved in the financial side,” George admits. “But I found that a technical background is valuable in anything that you do.”

George came back to Baltimore, where he was with the Bank of America and its predecessors through 30 years of mergers and acquisitions. He retired as vice president in 1994, at age 74. Today, George lives near the Homewood campus with his wife, Hazel, a nurse and a descendant of Francis Scott Key.

While George grew up with a mind of his own, he eagerly learned from everyone around him. “I was interested in everything,” he relates, “and I enjoyed a range of constructive influences.” George’s stepfather (a physician) and his mother pursued antiques. As a teenager, George went along on many of their hunts and began to collect old and rare books, purchasing nothing published later than 1850. An uncle had started him on a rock and mineral collection around age 11, and after the war, he became interested in cutting and polishing the stones, as well as enlarging his collection.

A loyal friend to the Whiting School, George has been an annual donor for three decades. In 1993, he created a charitable gift annuity, which he has added to four times. He also has generously included the Whiting School, as well as Washington College, in his Will.

Asked about his philanthropy, George says, “It just makes sense. During my 30 years at the bank, I had lots of stock options and I took advantage of them. So I ended up with a good deal of stock worth far more than its original cost,” he explains. “By using this stock to create and increase the gift annuity, I avoided substantial capital gains tax. Also, the annuity provides me regular income at a favorable rate, and some of that income is tax-free. All this makes my giving sensible.”

“I found that a technical background is valuable in anything that you do.” —George Elder ’51