Foundation Success Stories?

Larry W Kraiss, MD - SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08)
Larry Kraiss received a SVS Foundation K08 Award in 1999. Read his testimonial about how it developed his research career.

“It is hard to overestimate the impact of the jointly sponsored SVS/NHLBI K08 award on my career. It was truly transformative. It set the stage for a future R01, an independent laboratory, and a career-long relationship with the NIH. Beyond that, it established credibility with peers in other cardiovascular and scientific disciplines. This award provides vascular surgeons entry to important conversations where healthcare and health-related research policy is made. Maintaining a vibrant cadre of extramurally funded vascular surgeons will be of enormous benefit to our specialty in this era of increased competition for declining resources. This program is a crucial component of the overall SVS Foundation strategy to position vascular surgeons in places of influence where they can advocate effectively for our patients and our specialty.”

Alan Dardik, MD - SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08)

Dr. Alan Dardik received a SVS Foundation K08 Award in 2006. He explains how winning the award has advanced his career.

“The SVS Foundation award was a critical and defining event in my career. The K08 award allowed me to build my laboratory and devote my career to fundamental investigation of vascular disease. It marked the transition from being a junior investigator into a serious scientist with nationally recognized respect from multiple communities, especially those who fund the national programs for science.”

“Before receiving this award, a junior faculty member with a small laboratory is dependent upon the goodwill of mentors and collaborators. However, the SVS Foundation award provides the resources to make the transition to independence. Beyond the respect, this award provides dollar support to conduct science and begin the path to NIH R01 funding. The K08 award shows the commitment of the NIH to the junior investigator; the SVS Foundation award shows the commitment of the vascular surgery community, that the world of vascular surgery stands behind the career of this one person and expects great things to happen in the future.”
"I am very grateful to the SVS Foundation for their support during critical years of faculty career development. I encourage my colleagues to support the SVS Foundation as I have done and will continue to do. The future of our specialty depends on continual innovation and development of leaders. This is the pathway to ensure our collective future." — Luke Brewster, MD, PhD

**?Luke Brewster, MD, PhD - Resident Research Prize**

Dr. Luke Brewster received the SVS Resident Research Prize in 2005 during his General Surgery Residency at Loyola University Medical Center under Howard Greisler, MD, for their work creating and characterizing a combination endothelial cell growth factor and matrix binding protein in stimulating endothelial regeneration after vascular injury.

"The idea was to create a bifunctional protein that would localize the growth factor to exposed matrix proteins at sites of vascular injury and stimulate rapid re-endothelialization," Dr. Brewster said. "I chose this project among many in the Greisler laboratory because it was the newest grant for the lab with the most work to be done and opportunity for novel insights. This work was published in Biomaterials and led to a number of additional projects and publications. Cumulatively, these projects provided me with an excellent introduction to vascular biology which I have used to integrate with biomechanics and tissue engineering for regenerative applications."

Dr. Brewster believes this award and the publications from this and related work allowed him to compete for excellent vascular fellowship opportunities and ultimately to enter Emory's fellowship program under Elliot Chaikof.

"Through Drs. Greisler and Chaikof, I have been able to establish friendships and collaborations with many excellent physician-scientists and scientists at Emory and Georgia Tech," he said. "These friendships have been critical to getting my research off the ground by developing novel approaches to important and interesting problems, such as arterial stiffness and critical limb ischemia."

Dr. Brewster firmly believes that his successes to date are due in large part to his mentors and the opportunities provided by institutions that believe in the surgeon-scientist.

"Without these mentors, many of whom are vascular surgeons, I would never have realized the joy of teaching, learning, and discovery that I derive from academic surgery," said Dr. Brewster. "I am humbled to have such great mentors, and I hope with time to assist the next generation in this 'once in a lifetime opportunity.'"

Dr. Brewster is currently an assistant professor of surgery at Emory University and a staff surgeon at the Atlanta VA
Medical Center with a translational science laboratory investigating the mechanisms of arterial stiffness and the regenerative capacity of mesenchymal stem cells in patients with critical limb ischemia. He is very thankful to SVS for its important role in his success and encourages students and residents invigorated by research to invest their time discovering important information under excellent mentors. The SVS support of these initiatives provides a great opportunity for public recognition to trainees and their mentors, and he strongly encourages interested persons to submit their work for consideration.

“The SVS Foundation and SVS Research Council's support of me and people like me has been fantastic, and it is evident that the successes in my future will be directly related to the rich vascular surgeon-scientist alumni,” Dr. Brewster said. “I am thankful to my department's leadership, the support of my partners at Emory and at Atlanta VA, and very appreciative of SVS support of vascular surgeon-scientists.”

Michael Conte, MD - Mentored Clinical Scientist Development Award (K08)

“The SVS Foundation Mentored Clinical Scientist Development Award (K08) is an outstanding mechanism to develop oneself into a surgeon-scientist at the most critical time in your career - the early junior faculty phase,” said Dr. Michael Conte, the co-director of the Heart and Vascular Center at the University of California at San Francisco.

From July 1999 through June 2004, Dr. Conte’s SVS Foundation award - which is jointly sponsored by the United States National Institutes of Health - funded his research, Genetic Engineering of a Failure Resistant Vein Graft. The research proved to be more than successful.

“The most critical elements for success are the relationship with a well chosen mentor(s), the commitment of the department and division to support the endeavor, and the institutional environment that surrounds you,” said Dr. Conte. Both his research topic and his choice of mentor were extensions of his postdoctoral fellowship training.

“I studied gene transfer and vascular biology as a postdoctoral fellow during my training,” said Dr. Conte. “My primary mentor on the K08 was one of my mentors from postdoctoral fellowship training. The relationship was formative to my...
scientific training and development as an investigator. During the course of my K award, I also developed very important mentoring relationships with other senior collaborators who were also critical in my academic development.”

As a result of Dr. Conte’s K08 research, his subsequent work was influenced in two important ways. “The first was a shift in scientific emphasis from targeting one cell type to another as a direct result of the results we were getting in the lab and the new experimental directions that arose,” he said. “In turn, this led us into an entirely different area of vascular biology that ultimately resulted in R01 funding.

“Secondly, I had the subsequent opportunity to direct a large multicenter clinical trial in the same area of research as my K08. This was a major event in my scientific career. I probably would not have gotten that opportunity had I not been working in this scientific area and supported by the SVS Foundation career development award.”

“Subsequently, I have spent the last decade continuing to characterize the process of vein graft healing and the mechanisms of graft failure both in the lab and in the clinic. This work has led us to exciting new areas, including the recent discovery of genetic and other biomarkers that may predict bypass graft outcomes in patients.”

Dr. Conte acknowledges that his SVS Foundation-funded research provided a positive impact on his career. “This was a transformative award in many ways, translating into an R01 grant and the opportunity to lead a large Phase III clinical trial. I also learned a great deal about career development that has hopefully made me an effective mentor to other young investigators.”

**Peter Henke, MD - SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08)**

When he first began bench research as an undergraduate student, Peter Henke, MD, associate chair of research for the Department of Surgery at the University of Michigan, did not always experience success. “Most of my early research experiences were non-productive in the sense that the primary hypothesis and project did not work out as planned,” Dr. Henke said. “But I always liked research and finally had success at the University of Louisville as a general surgery resident working in a vascular surgical basic science lab on graft infection. At Michigan, Dr. Thomas Wakefield, my mentor, and introduced me to the area of venous biology and deep vein thrombosis. We had a good year in the lab getting several projects completed and providing preliminary data for later research.”

In 2002, Dr. Henke received a K08 Award, supplemented by a grant from the SVS Foundation for his research to study
venous thrombosis resolution and vein wall injury and the role of both chemokines and toll-like receptors.

“DVT is a relatively understudied area and I thought this would be a good niche to be able to make some impactful research,” he said. “The SVS Foundation Award was absolutely critical in allowing me to get a solid head start on my research career. It provided money to, not only offset clinical duties, but to obtain supplies and salary for a technician. As my clinical workload increased, this was critical to allowing research to continue when I was less available in the lab.”

Dr. Henke’s ultimate research goal is to seek ways to medically alleviate much of the vascular disease burden and its clinical manifestations.

“Particularly in vascular surgery, we see much of the end-stage of vascular disease, be it arterial or venous,” Dr. Henke said. “While endoluminal and open surgical procedures have their role, each is associated with its own risk of morbidity, mortality, and the duration of our repairs is limited in many instances. Using knowledge of vascular biology to design medical interventions to either supplant or improve the mechanical repairs is very appealing. I think there are so many patients with vascular disease that it is very important for vascular surgeons to stay involved with basic vascular biological investigation.”

Melina R. Kibbe, MD - SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08)

“As fewer surgeons feel they can afford to conduct research in the face of declining reimbursement, grants from the SVS Foundation are more important than ever,” according to Melina R. Kibbe, MD, associate professor at Northwestern University’s Feinberg School of Medicine and SVS Foundation grant recipient.

“Conducting research is a costly endeavor and as a young surgeon scientist, it is hard to obtain funds for early project development,” Dr. Kibbe said. “The SVS Foundation award, along with the K08 career development award from the National Institutes of Health, provided me with protected time to conduct research and financial support for both my salary and research-related expenses, and I am extremely grateful.”

Dr. Kibbe developed an interest in basic science research as an undergraduate at the University of Chicago. During residency training at the University of Pittsburgh, she spent three years in the lab under Timothy Billiar, MD. She then went on to Northwestern University for a vascular surgery fellowship, after which she stayed on as faculty. Early in her career, she received the SVS Foundation/NIH K08 grant to develop nitric oxide-based therapies to improve patient care. She is currently working on additional therapies for patients with vascular disease, including a drug-eluting vascular graft, a paradigm-shifting technology to stent arteries, a new method to remove atherosclerotic plaque, and a highly-innovative targeted therapy to deliver drugs to the site of an arterial injury.

“I find that my research gets more and more interesting every year, resulting in novel therapies for patients with vascular disease,” Dr. Kibbe said. “I hope that 10 years from now, some of the research I am working on translates to the clinical arena to help patients with vascular disease.”

Among her many achievements, in 2009, Dr. Kibbe received the Presidential Early Career Award for Scientists and Engineers from President Obama. In 2011, she was named the first Deputy Director of the Institute for BioNanotechnology in Medicine at Northwestern University in Chicago.

“Someday I would like to lead a department of surgery,” she said. “In this role, I would hope to be able to foster the career development of other students, residents, and faculty, build and expand clinical programs, and continue to
advance science and develop novel and innovative therapies for patients.

?C. Keith Ozaki, MD - SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08)
“SVS Foundation K08 Award for my research project, Inflammatory Mechanisms of Neointimal Hyperplasia, profoundly affected my personal vascular biology research career,” said Dr. Ozaki. “More importantly, it tremendously accelerated the overall academic activities of Division of Vascular and Endovascular Surgery at the University of Florida.”

Dr. Ozaki states the impact of his SVS award prompted the following positive results:

- Empowered the Division Chief to hire two additional vascular surgeons to address the clinical vascular care needs in Northern Florida.
- Legitimized his vascular research potential and interests to the local academic community.
- Yielded traditional but timeless productivity benchmarks such as original scientific papers.
- Provided scientific and grant training that enabled the lab team to secure more than $2 million in subsequent research grants.
- Provided the ability to enlarge the lab and to mentor several undergraduate and medical students.

Application deadlines for the SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08) are February 12, June 12, and October 12. Complete the online award application, found here.

Gilbert R. Upchurch, Jr., MD - SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08)

To this day, Gilbert R. Upchurch, Jr., MD, appreciates his 2001-2006 SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08). His research project was MMP-9-Dependent Vessel Wall Remodeling is NO-Dependent. “This is the single most transformative award a young vascular surgeon can win,” said Dr. Upchurch now in the Division of Vascular and Endovascular Surgery at the University of Virginia Medical Center, Charlottesville, VA.

“Now - even more so than then - in these ultracompetitive times in which vascular surgeons need to generate large clinical revenues while also competing for scarce research dollars - the combined NIH / SVS Research Award is critical in funding clinician scientists who still want to perform high level basic science research.

“As a byproduct of this program, multiple vascular surgeons have gone on to receive R-level funding from the NIH. Over time, these awards helped to form a core of clinician scientists that play a very active role in directing the multiple research programs the SVS sponsors.”
Application deadlines for the SVS Foundation Mentored Clinical Scientist Research Career Development Award (K08) are February 12, June 12, and October 12. Complete the online award application.

Please donate online or use the donation form.