

## MEET A SEAMASS MEMBER:

### Patrick McCafferty

*Patrick McCafferty is the Structural Engineering Leader, the Education Business Leader, and a Project Director for Arup in Boston; a member of the AISC 370 Structural Stainless Steel Committee; a Trustee of the Boston Society for Architecture's BSA Foundation; and is a member of faculty in Harvard University's Graduate School of Design. He has more than 23 years of multinational experience in structural engineering design and engineering design management. He earned both his Bachelor of Science and Master of Civil Engineering degrees in structural engineering from Cornell University. He has answered the questions below, so we may get to know him better.*



#### **Q: Why did you join SEAMASS?**

**A:** I joined SEAMASS because I felt it was important to personally and actively contribute to this very important organization to our profession. The structural engineering community has a tremendous responsibility as society's stewards of safe, durable, efficient, and sustainable building and infrastructure design. And through our technical prowess and design ingenuity, we are likewise the linchpin that can unlock beautiful works of architecture that our society so rightly deserves.

Few other professions command such tremendous responsibility and authority. Unfortunately, the vast majority of the same society we serve has precious little appreciation for what it is we do and the role that we play to keep our communities safe, durable, and vibrant. SEAMASS is uniquely poised to better promote our profession both within the AEC community and throughout society at large; and to celebrate the art of structural engineering that we all enjoy. I am both excited and honored to help raise the profile of the structural engineering community through my active participation with SEAMASS.

#### **Q: What are your goals as an engineer?**

**A:** Throughout my professional career at Arup, I have enjoyed the distinct pleasure and privilege of having had a direct hand in the realization of some fantastic projects across the globe. I spent the first two years of my career working in London on some particularly wonderful buildings, including as the structural engineering analyst for Renzo Piano's Padre Pio Cathedral in Foggia, Italy and Arup Associate's Manchester City Etihad Stadium in Manchester, England. Later, when my career brought me to New York City, I was tasked with leading the structural engineering design of Pei Cobb Freed's US Air Force Memorial in Washington D.C. and Bernard Tschumi's New Acropolis Museum in Athens, Greece.

Since coming to Boston 15 years ago, I have proudly co-led the structural engineering design of Moshe Safdie's Marina Bay Sands Integrated Resort in Singapore; Safdie's recently opened Raffles City Chongqing Development in Chongqing, China; and Atkins' design for the new King Abdulaziz International Airport in Jeddah, Saudi Arabia. My team and I also had loads of fun collaborating with Janet Echelman on the design of her 300ft aerial sculpture, "As If It Were Already Here" which soared high above Boston's Rose Kennedy Greenway during the spring and summer of 2015. And I am especially proud of having led Arup's multi-disciplinary engineering design for the recently opened Northeastern University ISEC Pedestrian Bridge. But perhaps my greatest professional accomplishment, and the thing that has made me most proud professionally, has been the growth and development of Arup's tremendously talented team of structural engineers in Boston whom I have had the privilege of leading since 2005.

**Q: Describe a project that you're involved with.**

**A:** My team and I are currently working with Machado Silvetti Architects on the design of a modern new museum for the Alamo in San Antonio, Texas. The history of the site is truly fascinating. This hallowed ground was the site of a diverse array of culturally significant events for a wide spectrum of peoples – so much so that multiple groups lay traditional claim to the site to this day. The design team is working among all of these disparate groups to create a beautifully crafted, contextually sensitive building that respects the land, the history of the Alamo Mission, and the lives of the many and diverse peoples and cultures who lived, worked, and died on this plot of land steeped in history and hemmed-in by the confines of modern day San Antonio. What a fantastic design challenge!

**Q: How do you spend your free time?**

**A:** In my free time I enjoy woodworking and spending time with my wife, our three growing sons (aged 12, 15, and 17), two cats, dog, and horse(!) in the relative quiet of our rural Chelmsford neighborhood. While my wife is the real equestrian in the family, over the years she has taught me to ride our 15 year-old standardbred former race horse with modest success -- although I am strictly forbidden from jumping anything higher than 2.5ft (unless she's not looking!).