Sarah Heilshorn is the Lee Otterson Faculty Scholar and Associate Professor with tenure of Materials Science & Engineering at Stanford University. She received her PhD in Chemical Engineering in 2004 from Caltech and completed postdoctoral training at the University of California Berkeley in Cell Biology before joining the Stanford faculty in 2006. As a Bass Education Fellow, Heilshorn has received campus-wide honors for her excellence in teaching, mentorship, and curriculum development. She is a fervent supporter of diversifying the broader science and engineering community and serves in multiple leadership roles to help achieve this goal. Her research team specializes in integrating concepts from polymer physics and protein engineering to design materials for medical applications. This interdisciplinary approach to biomimetic materials design has enabled several new technologies including the development of injectable materials for cell transplantation and printable materials for regenerative medicine. She has authored more than 100 peer-reviewed publications with over 6,000 citations. Among other recognitions, she received the New Innovator Award from the US National Institutes of Health and was elected as a Fellow of the American Institute for Medical and Biological Engineering and the Royal Society of Chemistry in the United Kingdom. As service to the biomaterials science community, she is currently serving on the Board of Directors for the Materials Research Society and as an Associate Editor for Science Advances. She previously served on the editorial board of Biomaterials Science and was guest editor for recent issues of Acta Biomaterialia and Current Opinion in Solid State and Materials Science.

Candidate's Statement

If elected to the Board of the International Society for Biofabrication, I would work to further strengthen the society's commitments to three key areas: international scientific cooperation, diversity and inclusion, and advocacy for partnerships between academia, government and industry.

First, the society must continue to emphasize the importance of international scientific cooperation as a requirement to advancing scientific knowledge and to developing impactful biofabrication technologies. This focus on international cooperation begins internally with our own members by promoting geographic diversity in our meetings, encouraging volunteers from across all regions, and advancing a global perspective within the biofabrication community. We can further promote international cooperation by nurturing partnerships with other international societies and regional societies in Europe, Asia, Australia, Africa, and the Americas.

Second, the scientific challenges of the next decade demand the creativity and innovation that can only be achieved when a diverse set of skills and views are brought together. Thus, as a society we must commit ourselves to diversifying participation throughout all of our events. The society can support this ideal by promoting an inclusive mindset within our leadership, staff, and volunteers. We can further cultivate this culture of inclusivity through the support of mentorship programs to connect young scientists across different career stages.

Third, to translate fundamental advances in biofabrication technology to new industrial products and clinical therapies, there must be tight coupling between academia, government, and industry. As a global organization, ISBF is uniquely positioned to champion the critical need of private/public cooperation to encourage sustainable funding for biofabrication research that spans from basic science through to development of enabling technologies. Investing in biofabrication innovation is an engine for economic growth and a catalyst for breakthrough technologies that address our global health needs.