

Subject: Application for ISBF Board of Director



Dear ISBF Members,

It is with great enthusiasm that I submit this letter in support of my nomination for the International Society for Biofabrication (ISBF) Board of Directors. I am currently Group Leader at the AO Research Institute Davos (ARI), CH.

I have over 15 years' experience in the field of Biofabrication with a heavily international-oriented career track, starting with my Master in Material Engineering (Italy), two years of biomaterial research in the private sector, followed by a PhD (*cum laude*) in additive manufacturing for tissue engineering (IBEC, Spain), and several stays at EU research institutions. Then, I joined Royal Free Hospital (UCL, UK) as a postdoctoral fellow to dig into more translational approaches. For my expertise in the Biofabrication field, I was the recipient of the ISBF Young Investigator Award (2018), BRIDGE Fellowship from SNSF-Innosuisse (2017), and the Julia Polak European Doctoral Award from the European Society of Biomaterials (2015).

To date, my group is focusing on the development of contactless biofabrication technologies, based on extrinsic fields, for modelling and regeneration. We are also very active in engineering novel stimuli-responsive bio-inks and processes to create anisotropic cell-instructive materials and remotely controlled soft robots.

Recently, I have developed and patented Sound Induced Morphogenesis (SIM), a gentle, fast, and easy method to generate multi-cellular, spatially orchestrated tissue constructs using sound waves. The technology has led to a new spin off company, mimiX Biotherapeutics (mimixbio.com), which commercializes a platform for multiple applications, ranging from organoids manufacturing to clinical intraoperative procedures.

My approach to Biofabrication is through a creativity-driven process, with passion and desire to break the rules of conventional research by imagining innovative strategies to push further the frontiers of this field. I believe that my research experience has prepared me to serve the ISBF Board of Directors, and I would be honoured to give my support to our dynamic community.

In the last few years, ISBF has undertaken huge steps in different aspects, such as creating an excellent web platform, an active interplay with the biotech industry world, and a strong community of prolific young researchers. My mission will be to encourage even more these efforts and to connect with the excellent Swiss healthcare biotech hub.

Being part of several EU projects and actively involved in the organization of international conferences (eCM conferences, TERMIS-EU 2017, ESB 2023), I am regularly working in multidisciplinary, international teams and I will contribute to strengthening the relationship with these communities.

Finally, as member of ARI, a clinical-oriented research center, I will advocate for our Society to strengthen even more the link between our scientists and a well-connected global network of surgeons, triggering fruitful interactions by setting up a forum for discussions.

For all these reasons I would like you to give me the chance to be part of the ISBF Board.

Your Sincerely,

Tiziano Serra

