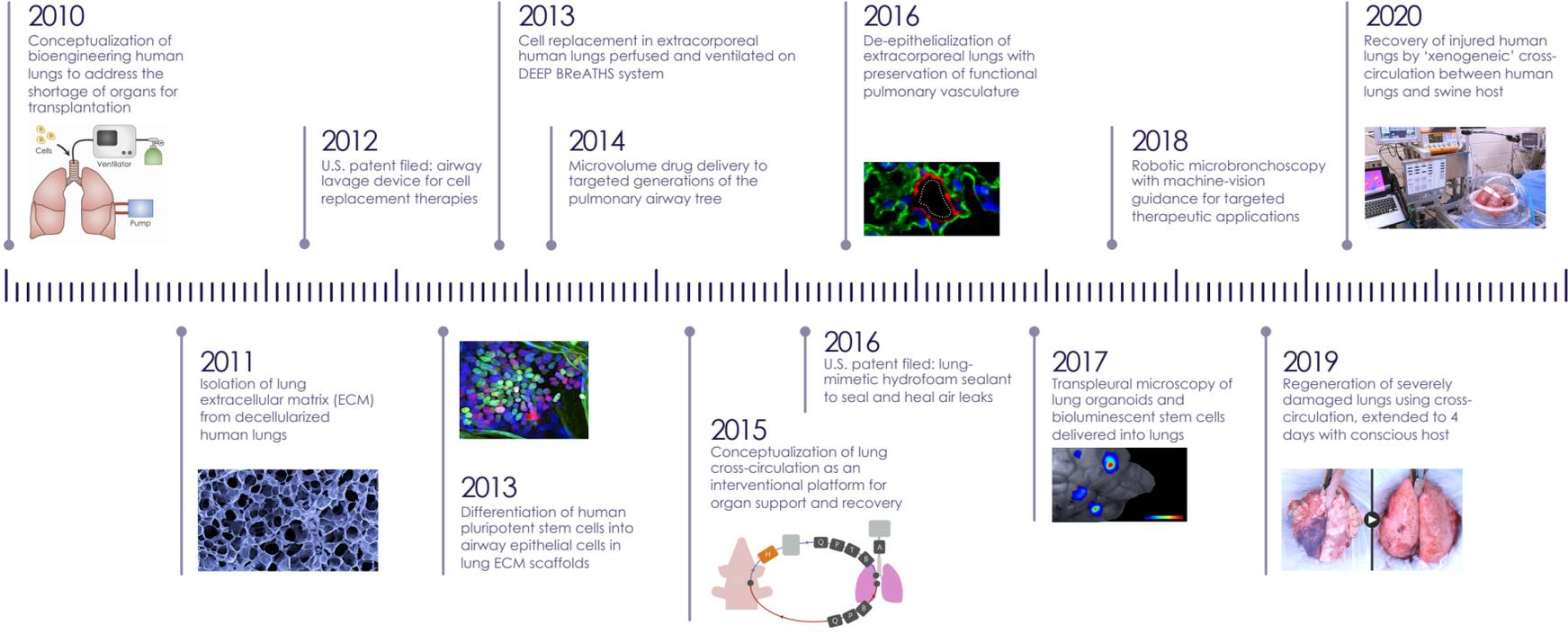


A DECADE OF INNOVATION

LUNG BIOENGINEERING TEAM

MILESTONES



INTELLECTUAL PROPERTY

Focused on the development of innovative techniques and technologies, the Lung Bioengineering Team established a diverse portfolio of intellectual property that spans novel biomaterials, medical devices, and technical methodologies. Innovation was driven by unmet needs in lung assessment, support, and repair.



Assess

- Thermographic diagnostic device and methods
- Environmental module and light-tight device
- Acoustic system to locate pulmonary air leak



Support

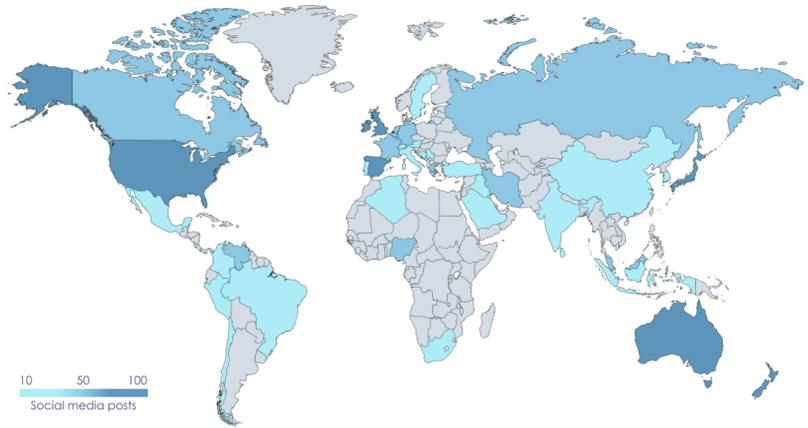
- Cross-circulation systems (multi-organ, multi-day)
- Plasma exchange systems
- Device to provide patient with whole-organ function



Repair

- Airway lavage device
- Interventions for ex-vivo lungs
- Hydrofoam lung sealant
- Airway cell and fluid removal system
- Robotic intrathoracic delivery system

GLOBAL REACH



Media coverage: 6 continents, 45 countries

The Lung Bioengineering Team achieved global recognition, repeatedly making headlines around the world. Video clips showcasing the Team's groundbreaking work went viral, amassing more than 10 million views across social media platforms. Engagement was highest among scientists, healthcare practitioners, science communicators (journalists, bloggers, editors), and members of the public.

PUBLICATIONS

The Lung Bioengineering Team published a series of primary research papers in world-renowned peer-reviewed scientific and medical journals, including: *Annals of Thoracic Surgery*, *Journal of Heart and Lung Transplantation*, *Journal of Thoracic and Cardiovascular Surgery*, *Nature Biomedical Engineering*, *Nature Biotechnology*, *Nature Communications*, *Nature Medicine*, *Nature Scientific Reports*, *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, and *Science Advances*.



The Lung Bioengineering Team integrated complementary skill sets via close interdisciplinary collaboration between bioengineers, surgeons, and domain experts across biomedical science and clinical care. Through coordinated teamwork and a bold collective vision, the Team established a high-impact publication record that includes six papers in the top 5% of all research outputs *scored by Altmetric.

SPOTLIGHTS

