

Stanford



Yellappa Palagani

Postdoctoral Scholar, Cardiothoracic Surgery

Bio

BIO

Yellappa Palagani is currently a Postdoctoral Fellow in Cardiothoracic Surgery at Stanford University. In Dr Ma's lab, he is developing an MRI-compatible mock circulatory loop using cardiac phantoms to simulate complex congenital heart defects, an ex-vivo preservation system for pediatric heart transplantation, and an adjustable pulmonary artery band for managing congenital heart diseases. Before joining Stanford, he was a Postdoctoral Associate in Adult Cardiac Surgery at Yale University from April 2021 to March 2023, where he worked under the supervision of Pramod Bonde, MD, on left ventricular assist devices and smart inductive stents. In August 2020, he received his PhD in Electronics Engineering from Kyungpook National University, South Korea, under the supervision of Jun Rim Choi, PhD. During his doctoral program, he worked on wirelessly powered cardiac pacemakers and wearable cardiac arrhythmia indicators.

HONORS AND AWARDS

- Spectrum HealthTech Pilot Grant (Co-I), Stanford Biodesign (Sep 2025 - Jun 2026)
- Post-doctoral Fellowship Award, Stanford Maternal & Child Health Research Institute (MCHRI) (Jan 2025 - Dec 2026)
- CVI Seed Grant Award (Co-I), Stanford Cardiovascular Institute (Sep 2023)
- Best Poster Award, American Society for Artificial Internal Organs (ASAIO) (Jun 2022)
- Best Ph.D. Thesis Award, Kyungpook National University (KNU) (Feb 2021)
- Best Poster Award (Co-Author), ISOCC Chip Design Contest (Nov 2017)
- KNU International Graduate Scholarship (KINGS), Kyungpook National University (KNU) (Sep 2016 - Aug 2018)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Reviewer, IEEE Access (2025 - present)
- Reviewer, Stanford CVI Summer Research Program (2025 - present)
- Reviewer, IEEE Transactions on Industrial Electronics (2020 - present)
- Reviewer, IEEE Biomedical Circuits and Systems (BioCAS) (2019 - 2019)

PROFESSIONAL EDUCATION

- Postdoctoral Fellow, Stanford University , Pediatric Cardiac Surgery (2026)
- Postdoctoral Associate, Yale University , Adult Cardiac Surgery (2023)
- Doctor of Philosophy, Kyungpook National University , Electronics Engineering (2020)

STANFORD ADVISORS

- Michael Ma, Postdoctoral Faculty Sponsor

LINKS

- "Lab Website": <https://med.stanford.edu/cve/lab-members.html>

Research & Scholarship

RESEARCH INTERESTS

- Assessment, Testing and Measurement
- Research Methods
- Technology and Education

Publications

PUBLICATIONS

- **VITALS: an implantable sensor network for postoperative cardiac monitoring in heart failure patients** *npj Biomedical Innovations*
Kight, A., Haidar, M., Shibata, M., Ono, Y., Ikeda, G., Sharir, A., Semproni, F., Palagani, Y., Taheri, S., Han, A., Ma, M., Riemer, K., McElhinney, et al
2025; 2 (15)