

# Stanford

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## Saverio La Francesca

Clinical Assistant Professor, Cardiothoracic Surgery

### Bio

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#### BIO

##### Clinical Focus

- Heart Transplantation.
- Lung Transplantation
- Organ Perfusion and Preservation.
- Regenerative Medicine

##### Academic Appointments

- Clinical Assistant Professor, Cardiothoracic Surgery. Current
- Asst. Professor of Surgery. Ohio State University. Wexner Medical Center. Columbus-Ohio. 2019 – 2020
- Staff - Department of Cardiovascular Surgery DeBakey Heart and Vascular Center. Houston, Texas. 2010-2013
- Attending Surgeon - Department of Cardiopulmonary Transplantation. Texas Heart Institute at St. Luke's Episcopal Hospital. Houston, Texas. 2018- 2010

##### Industry Experience

- President and Chief Medical Officer, Mar 2017 to Oct 2017 Biostage, Inc. (NASDAQ: BSTG)
- Executive Vice-President and Chief Medical Officer, Aug 2015 to Mar 2017 Biostage, Inc. (NASDAQ: BSTG)
- Chief Medical Officer, Apr 2014 to Jul 2015 Biostage, Inc. (NASDAQ: BSTG) (formerly Harvard Apparatus Regenerative Technology,

#### ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Cardiothoracic Surgery

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Reviewer, Annals of Thoracic Surgery (2019 - present)

#### PROFESSIONAL EDUCATION

- Certificate, Cornell University , Financial management (2018)
- Fellowship, Baylor College of Medicine-Methodist Hospital. Houston, Texas , Aortic Surgery (1994)
- Fellow, Texas Heart Institute at St. Luke's Episcopal Hospital. Houston, Texas , Cardiovascular Surgery (1993)
- Fellow, Texas Heart Institute at St. Luke's Episcopal Hospital. Houston, Texas , Cardiopulmonary Transplantation and Mechanical Circulatory Support (1992)
- Fellow, Texas Heart Institute , Cardiopulmonary Transplantation and Mechanical Circulatory Support (1991)

- Residency, University of Rome "La Sapienza". Rome, Italy , Cardiovascular Surgery (1991)
- Certificate, ECFMG (1989)
- MD, University of Palermo, Italy , Medicine (1985)

## PATENTS

- Saverio La Francesca, Ting A, Deans R. "United States Patent US 9,861,660 B2 Organs for Transplantation", Saverio La Francesca, Houston Methodist Hospital, Athersys, May 9, 2019
- Saverio La Francesca, Sherif Soliman, Matthew Marsh. "United States Patent US10265153B2 Systems and methods for producing gastrointestinal tissues", Biostage, May 18, 2017
- Saverio La Francesca, Sherif Soliman David C. Rice, Ara A. Vaporciyan. "United States Patent WO2017083864A1 Systems and methods for producing gastrointestinal tissues at an anastomosis or other physiological location", Biostage, May 18, 2017

## LINKS

- PubMed: <https://pubmed.ncbi.nlm.nih.gov/?term=saverio+la+francesca>
- linkedin: <https://www.linkedin.com/in/saverio-la-francesca-md-11136646/>
- Esophageal Atresia: <https://www.click2houston.com/news/2017/02/14/new-hope-for-babies-born-without-esophagus/>

## Publications

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### PUBLICATIONS

- **First lung and kidney multi-organ transplant following COVID-19 Infection.** *The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation*  
Guenthart, B. A., Krishnan, A., Alassar, A., Madhok, J., Kakol, M., Miller, S., Cole, S. P., Rao, V. K., Acero, N. M., Hill, C. C., Cheung, C., Jackson, E. C., Feinstein, et al  
2021
- **A multilayer scaffold design with spatial arrangement of cells to modulate esophageal tissue growth** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*  
Soliman, S., Laurent, J., Kalenjian, L., Burnette, K., Hedberg, B., La Francesca, S.  
2019; 107 (2): 324–31
- **Production and transplantation of bioengineered lung into a large-animal model** *SCIENCE TRANSLATIONAL MEDICINE*  
Nichols, J. E., La Francesca, S., Niles, J. A., Vega, S. P., Argueta, L. B., Frank, L., Christiani, D. C., Pyles, R. B., Himes, B. E., Zhang, R., Li, S., Sakamoto, J., Rhudy, et al  
2018; 10 (452)
- **Long-term regeneration and remodeling of the pig esophagus after circumferential resection using a retrievable synthetic scaffold carrying autologous cells** *SCIENTIFIC REPORTS*  
La Francesca, S., Aho, J. M., Barron, M. R., Blanco, E. W., Soliman, S., Kalenjian, L., Hanson, A. D., Todorova, E., Marsh, M., Burnette, K., DerSimonian, H., Odze, R. D., Wigle, et al  
2018; 8: 4123
- **Giving new life to old lungs: methods to produce and assess whole human paediatric bioengineered lungs.** *Journal of tissue engineering and regenerative medicine*  
Nichols, J. E., La Francesca, S. n., Vega, S. P., Niles, J. A., Argueta, L. B., Riddle, M. n., Sakamoto, J. n., Vargas, G. n., Pal, R. n., Woodson, L. n., Rhudy, J. n., Lee, D. n., Seanor, et al  
2017; 11 (7): 2136–52
- **Nanotechnology toward Advancing Personalized Medicine** *HANDBOOK OF CLINICAL NANOMEDICINE: LAW, BUSINESS, REGULATION, SAFETY, AND RISK*  
Sakamoto, J. H., Godin, B., Hu, Y., Blanco, E., van de Ven, A. L., Vellaichamy, A., Murphy, M. B., La Francesca, S., Schuenemeyer, T., Given, B., Meyn, A., Ferrari, M., Bawa, et al  
2016; 2: 1347–1411
- **Silencing of Tumor Necrosis Factor Receptor-1 in Human Lung Microvascular Endothelial Cells Using Particle Platforms for siRNA Delivery.** *Current drug targets*  
Bai, L. n., Andersson, H. A., McConnell, K. I., Chan, D. L., Hernandez, M. n., Gonzalez, J. n., Liu, X. n., La Francesca, S. n., Sakamoto, J. H., Serda, R. E.

2015; 16 (13): 1531–39

- **Multipotent adult progenitor cells decrease cold ischemic injury in ex vivo perfused human lungs: an initial pilot and feasibility study.** *Transplantation research*  
La Francesca, S. n., Ting, A. E., Sakamoto, J. n., Rhudy, J. n., Bonenfant, N. R., Borg, Z. D., Cruz, F. F., Goodwin, M. n., Lehman, N. A., Taggart, J. M., Deans, R. n., Weiss, D. J.  
2014; 3 (1): 19
- **Enhanced gene delivery in porcine vasculature tissue following incorporation of adeno-associated virus nanoparticles into porous silicon microparticles.** *Journal of controlled release : official journal of the Controlled Release Society*  
McConnell, K. I., Rhudy, J. n., Yokoi, K. n., Gu, J. n., Mack, A. n., Suh, J. n., La Francesca, S. n., Sakamoto, J. n., Serda, R. E.  
2014; 194: 113–21
- **Production and assessment of decellularized pig and human lung scaffolds.** *Tissue engineering. Part A*  
Nichols, J. E., Niles, J. n., Riddle, M. n., Vargas, G. n., Schilagard, T. n., Ma, L. n., Edward, K. n., La Francesca, S. n., Sakamoto, J. n., Vega, S. n., Ogadegbe, M. n., Mlcak, R. n., Deyo, et al  
2013; 19 (17-18): 2045–62
- **Nanotechnology and stem cell therapy for cardiovascular diseases: potential applications.** *Methodist DeBakey cardiovascular journal*  
La Francesca, S. n.  
2012; 8 (1): 28–35
- **Experience of sternal secondary closure by means of a titanium fixation system after transverse thoracosternotomy.** *Artificial organs*  
Motomura, T. n., Bruckner, B. n., La Francesca, S. n., Mittelhaus, S. n., Chike-Obi, C. n., Leon-Becerril, J. n., Ngo, U. n., Loebe, M. n.  
2011; 35 (8): E168–73
- **Selective and self-guided micro-ablation of tissue with plasmonic nanobubbles.** *The Journal of surgical research*  
Lukianova-Hleb, E. Y., Koneva, I. I., Oginsky, A. O., La Francesca, S. n., Lapotko, D. O.  
2011; 166 (1): e3–13
- **Techniques and Complications of TandemHeart Ventricular Assist Device Insertion During Cardiac Procedures** *ASAIO JOURNAL*  
Gregoric, I. D., Bruckner, B. A., Jacob, L., Loyalka, P., Kar, B., La Francesca, S., Myers, T., Frazier, O. H.  
2009; 55 (3): 251–54
- **Clinical Experience with the TandemHeart Percutaneous Ventricular Assist Device as a Bridge to Cardiac Transplantation** *TEXAS HEART INSTITUTE JOURNAL*  
Bruckner, B. A., Jacob, L. P., Gregoric, I. D., Loyalka, P., Kar, B., Cohn, W. E., La Francesca, S., Radovancevic, B., Frazier, O. H.  
2008; 35 (4): 447–50
- **Clinical experience with sternotomy versus subcostal approach for exchange of the HeartMate XVE to the HeartMate II ventricular assist device** *ANNALS OF THORACIC SURGERY*  
Gregoric, I. D., Bruckner, B. A., Jacob, L., Kar, B., Cohn, W. E., La Francesca, S., Frazier, O. H.  
2008; 85 (5): 1646–50
- **A less invasive approach to axial flow pump insertion** *JOURNAL OF HEART AND LUNG TRANSPLANTATION*  
Gregoric, I. D., La Francesca, S., Myers, T., Cohn, W., Loyalka, P., Kar, B., Gemmato, C., Frazier, O. H.  
2008; 27 (4): 423–26
- **CentriMag left ventricular assist system - Cannulation through a bight minithoracotomy** *TEXAS HEART INSTITUTE JOURNAL*  
Gregoric, I. D., Cohn, W. E., Akay, M. H., La Francesca, S., Myers, T., Frazier, O. H.  
2008; 35 (2): 184–85
- **The TandemHeart as a bridge to a long-term axial-flow left ventricular assist device (Bridge to Bridge)** *TEXAS HEART INSTITUTE JOURNAL*  
Gregoric, I. D., Jacob, L. P., La Francesca, S., Bruckner, B. A., Cohn, W. E., Loyalka, P., Kar, B., Frazier, O. H.  
2008; 35 (2): 125–29
- **High cardiac output due to fistula after cardiac transplantation.** *Congestive heart failure (Greenwich, Conn.)*  
Palanichamy, N., Letsou, G. V., Cohn, W., La Francesca, S., Kar, B., Gregoric, I. D.  
2007; 13 (4): 237–39
- **Successful resection of a primary left ventricular schwannoma** *ANNALS OF THORACIC SURGERY*

La Francesca, S., Gregoric, I. D., Cohn, W. E., Frazier, O. H.

2007; 83 (5): 1881–82

- **Bedside right ventricular assist device removal in the conscious patient** *ANNALS OF THORACIC SURGERY*  
Cohn, W. E., Gregoric, I. D., La Francesca, S., Frazier, O. H.  
2007; 83 (4): 1556–57
- **Simultaneous insertion of a left ventricular assist system and repair of an ascending aortic dissection** *TEXAS HEART INSTITUTE JOURNAL*  
Gregoric, I. D., Palanichamy, N., La Francesca, S., Smith, R. D., Myers, T. J.  
2007; 34 (4): 463–65
- **Management of air embolism during HeartMate (R) XVE exchange** *TEXAS HEART INSTITUTE JOURNAL*  
Gregoric, I. D., Myers, T. J., Kar, B., Loyalka, P., Reverdin, S., La Francesca, S., Odegaard, P., Gemmato, C. J., Frazier, O. H.  
2007; 34 (1): 19–22
- **Management of multiple left ventricular assist device failures in a patient** *JOURNAL OF HEART AND LUNG TRANSPLANTATION*  
Myers, T. J., Palanichamy, N., La Francesca, S., Odegaard, P. A., Gregoric, I. D., Frazier, O. H.  
2007; 26 (1): 98–100
- **Replacement of a malfunctioning HeartMate II left ventricular assist device in a 14-year-old after a sudden fall** *JOURNAL OF HEART AND LUNG TRANSPLANTATION*  
La Francesca, S., Smith, R., Gregoric, I. D., Kar, B., Myers, T. J., Price, J., Kennedy, D., Frazier, O. H.  
2006; 25 (7): 862–64
- **Mycotic pseudo-aneurysm of the ascending thoracic aorta after cardiac transplantation** *JOURNAL OF HEART AND LUNG TRANSPLANTATION*  
Palanichamy, N., Gregoric, I. D., La Francesca, S., Smart, F. W.  
2006; 25 (6): 730–33
- **First use of the TandemHeart (R) percutaneous left ventricular assist device as a short-term bridge to cardiac transplantation** *TEXAS HEART INSTITUTE JOURNAL*  
La Francesca, S., Palanichamy, N., Kar, B., Gregoric, I. D.  
2006; 33 (4): 490–91
- **Percutaneous tracheostomy after mechanical ventricular assist device implantation** *JOURNAL OF HEART AND LUNG TRANSPLANTATION*  
Gregoric, I. D., Harting, M. T., Kosir, R., Patel, V. S., Ksela, J., Messner, G. N., La Francesca, S., Frazier, O. H.  
2005; 24 (10): 1513–16
- **Left ventricular assist device implantation - in a patient with congenitally corrected transposition of the great arteries** *TEXAS HEART INSTITUTE JOURNAL*  
Gregoric, I. D., Kosir, R., Smart, F. W., Messner, G. N., Patel, V. S., La Francesca, S., Cervera, R. D., Frazier, O. H.  
2005; 32 (4): 567–69
- **Adenosine triphosphate-dependent potassium channel modulation and cardioplegia-induced protection of human atrial muscle in an in vitro model of myocardial stunning** *JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY*  
Monti, F., Iwashiro, K., Picard, S., Criniti, A., La Francesca, S., Ruvolo, G., Papalia, U., Campa, P. P., Marino, B., Puddu, P. E.  
2000; 119 (4): 842–48
- **Effects of bimakalim on human cardiac action potentials: Comparison with guinea pig and nicorandil and use-dependent study** *JOURNAL OF CARDIOVASCULAR PHARMACOLOGY*  
Rouet, R., Picard, S., Criniti, A., Monti, F., Dawodu, A. A., Ruvolo, G., La Francesca, S., Macrina, F., Tonelli, E., Ducouret, P., Puddu, P. E.  
1999; 33 (2): 255–63
- **CONCOMITANT CARDIAC AND PULMONARY OPERATIONS FOR LUNG-CANCER** *TEXAS HEART INSTITUTE JOURNAL*  
LAFRANCESCA, S., FRAZIER, O. H., RADOVANCEVIC, B., DECARO, L. F., REUL, G. J., COOLEY, D. A.  
1995; 22 (4): 296–300