

Stanford



Rabin Gerrah

Clinical Assistant Professor, Cardiothoracic Surgery

Bio

BIO

Dr. Rabin Gerrah is a cardiothoracic surgeon and specializes in surgical treatment of heart diseases such as ischemic, valvular, structural and congenital heart diseases. He has been trained at Harvard University and Columbia University Hospitals. Dr. Gerrah has been involved in multiple medical research projects and has patented and developed innovative surgical devices and technologies.

ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Cardiothoracic Surgery
- Member, Cardiovascular Institute

HONORS AND AWARDS

- Co-investigator on OCTRI winner project, Oregon Health and Science University (May 2015)
- Co-author on the Winning Congenital Poster, Society of Thoracic Surgeons (STS) (January, 2014)
- Joseph Sushchin's Award of Medical Faculty, Outstanding Resident in Cardiothoracic Surgery, Hadassah Medical School, Hebrew University (2001)
- Awards of Outstanding Instructor in Cardiothoracic Surgery, Hebrew University (1999, 2000, 2001, 2002)

PROFESSIONAL EDUCATION

- Fellowship, Columbia University , Pediatric Cardiac Surgery (2011)
- Fellowship, Harvard Medical School , Adult Cardiac Surgery (2007)
- Residency, Hebrew University Hadassah Medical School , Cardiothoracic Surgery (2003)
- Internship, Hebrew University , Surgery Medicine (1995)
- MD, Hebrew University , Medicine (1994)

COMMUNITY AND INTERNATIONAL WORK

- Medical Mission, El Salvador

PATENTS

- Rabin Gerrah. "United States Patent 8753365 Device for harvesting a blood vessel", Jan 8, 2009
- Rabin Gerrah. "United States Patent 826268 Device and method for performing endoluminal anastomosis", Nov 24, 2008

LINKS

- Good Samaritan Medical Center: www.samhealth.org/bio/rgerrah

Publications

PUBLICATIONS

- **Characterization of Surgical Movements As a Training Tool for Improving Efficiency.** *The Journal of surgical research*
Grewal, B., Kianercy, A., Gerrah, R.
2024; 296: 411-417
- **Chest wall reconstruction after sternectomy with preservation of sternoclavicular joint function.** *JTCVS techniques*
Gerrah, R.
2023; 22: 337-342
- **Localization of coronary bypass targets in hard-to-see coronary arteries.** *Journal of cardiothoracic surgery*
Gerrah, R., Lipe, K., Vlahakes, G. J.
2023; 18 (1): 290
- **Concentration of insufflated carbon dioxide during open cardiac surgery.** *JTCVS techniques*
Kamal, R., Gerrah, R.
2023; 21: 115-117
- **A Universal Device to Convert a Continuous Flow Assist Device to a Pulsatile Flow Device to Simulate Normal Blood Flow and Pressure Patterns.** *Surgical innovation*
Gerrah, R.
2022: 15533506221140534
- **Effect of Blood Flow on Cardiac Morphogenesis and Formation of Congenital Heart Defects.** *Journal of cardiovascular development and disease*
Trinidad, F., Rubonal, F., Rodriguez de Castro, I., Pirzadeh, I., Gerrah, R., Kheradvar, A., Rugonyi, S.
2022; 9 (9)
- **Utilizing the Fourth Dimension for Patient Education in Cardiovascular Surgery.** *The Annals of thoracic surgery*
Gerrah, R., Haller, S. J.
2021
- **Computational fluid dynamics: a primer for congenital heart disease clinicians.** *Asian cardiovascular & thoracic annals*
Gerrah, R., Haller, S. J.
2020: 218492320957163
- **Towards virtual surgery planning: the modified Blalock-Taussig Shunt** *AIMS BIOPHYSICS*
Haller, S., Gerrah, R., Rugonyi, S.
2020; 7 (3): 169–88
- **The Cavoatrial Anastomosis Procedure in Anomalous Connection of Superior Vena Cava to Left Atrium** *WORLD JOURNAL FOR PEDIATRIC AND CONGENITAL HEART SURGERY*
Gerrah, R., Escalante, E., Gorenflo, M., Loukanov, T.
2019; 10 (6): 803–5
- **Mechanical Concepts Applied in Congenital Heart Disease and Cardiac Surgery.** *The Annals of thoracic surgery*
Gerrah, R., Haller, S. J., George, I.
2017; 103 (6): 2005-2014
- **Repair of Tetralogy of Fallot in Children Less Than 4 kg Body Weight** *PEDIATRIC CARDIOLOGY*
Gerrah, R., Turner, M. E., Gottlieb, D., Quaegebeur, J. M., Bacha, E.
2015; 36 (7): 1344–49
- **Pretreatment of synthetic vascular grafts with heparin before implantation, a simple technique to reduce the risk of thrombosis** *VASCULAR*
Gerrah, R., Sunstrom, R., Hohimer, A. R.
2015; 23 (5): 513–18
- **A Defined Management Strategy Improves Early Outcomes After the Fontan Procedure: The Portland Protocol** *ANNALS OF THORACIC SURGERY*
Sunstrom, R. E., Muralidaran, A., Gerrah, R., Reed, R. D., Good, M. K., Armsby, L. R., Rekito, A. J., Zubair, M., Langley, S. M.

2015; 99 (1): 148–55

- **Adjustment of the surgical plan in repair of congenital heart disease: the power of cross-sectional imaging and three-dimensional visualization.** *Congenital heart disease*

Gerra, R., Bardo, D. M., Reed, R. D., Sunstrom, R. E., Langley, S. M.
2013; 9 (1): E31-6

- **The neonatal hypoplastic aortic arch: decisions and more decisions.** *Seminars in thoracic and cardiovascular surgery. Pediatric cardiac surgery annual*
Langley, S. M., Sunstrom, R. E., Reed, R. D., Rekito, A. J., Gerra, R.
2013; 16 (1): 43-51

- **In vivo quantification of clot formation in extracorporeal circuits.** *Studies in health technology and informatics*
Gerra, R., David, O.
2013; 184: 148-50

- **Hypoplastic right cervical aortic arch.** *The Annals of thoracic surgery*
Gerra, R., Shah, A., Langley, S. M., Quaegebeur, J. M.
2012; 94 (6): 2127-9

- **Biventricular pacing improves left ventricular function by 2-D strain in right ventricular failure.** *The Journal of surgical research*
Wong, C., Cabreriza, S. E., Nugent, M., Wang, D. Y., Gerra, R., Rusanov, A., Yalamanchi, V., Wang, A., Cheng, B., Spotnitz, H. M.
2012; 178 (2): 571-7

- **Management of intracranial hemorrhage in a child with a left ventricular assist device.** *Pediatric transplantation*
Haque, R., Wojtasiewicz, T., Gerra, R., Gilmore, L., Saiki, Y., Chen, J. M., Richmond, M., Feldstein, N. A., Anderson, R. C.
2012; 16 (5): E135-9

- **Single dose myocardial protection technique utilizing del Nido cardioplegia solution during congenital heart surgery procedures.** *Perfusion*
Charette, K., Gerra, R., Quaegebeur, J., Chen, J., Riley, D., Mongero, L., Corda, R., Bacha, E.
2012; 27 (2): 98-103

- **The first successful use of the Levitronix PediMag ventricular support device as a biventricular bridge to transplant in an infant.** *The Journal of thoracic and cardiovascular surgery*
Gerra, R., Charette, K., Chen, J. M.
2011; 142 (5): 1282-3

- **Developing and optimizing a chronic cyanotic swine model.** *The Journal of surgical research*
Gerra, R., Cabreriza, S. E., Rusanov, A., Romanov, A., Khan, A. R., Spotnitz, H. M.
2011; 171 (1): 170-4

- **Left ventricular pacing lead insertion via the coronary sinus cardioplegia cannula: a novel method for temporary biventricular pacing during reoperative cardiac surgery.** *The Journal of thoracic and cardiovascular surgery*
Wang, D. Y., Gerra, R., Rusanov, A., Yalamanchi, V., Cabreriza, S. E., Spotnitz, H. M.
2011; 142 (1): 73-6

- **Validation of automated monitoring of cardiac output for biventricular pacing optimization.** *ASAIO J*
George, E. M., Cabreriza, S. E., Quinn, T. A., Rusanov, A., Gerra, R., Broyles, J. M., Weinberg, A. D., Spotnitz, H. M.
2010; 56 (3): 265-9

- **Platelet Function Changes in Different Cardiac Surgery Subgroups as Evaluated With an Innovative Technology INNOVATIONS-TECHNOLOGY AND TECHNIQUES IN CARDIOTHORACIC AND VASCULAR SURGERY**
Gerra, R., Brill, A., Varon, D.
2007; 2 (4): 176–83

- **Using cone and plate(let) analyzer to predict bleeding in cardiac surgery.** *Asian cardiovascular & thoracic annals*
Gerra, R., Brill, A., Tshori, S., Lubetsky, A., Merin, G., Varon, D.
2006; 14 (4): 310-5

- **Stuck bioprosthetic aortic valve - A new entity? A case report** *HEART SURGERY FORUM*
Gerra, R., Pappof, M., Shatz, Pollak, A., Gilon, D.
2005; 8 (6): E447–E448

- **Preoperative aspirin administration improves oxygenation in patients undergoing coronary artery bypass grafting** *CHEST*
Gerrah, R., Elami, A., Stamler, A., Smirnov, A., Stoeger, Z.
2005; 127 (5): 1622–26
- **Beneficial effect of aspirin on renal function in patients with renal insufficiency postcardiac surgery**
Gerrah, R., Ehrlich, S., Tshori, S., Sahar, G.
EDIZIONI MINERVA MEDICA.2004: 545–50
- **Pericardial fluid and serum VEGF in response to different types of heparin treatment** *INTERNATIONAL JOURNAL OF CARDIOLOGY*
Gerrah, R., Tshori, S., Gilon, D.
2004; 94 (2-3): 193–96
- **Aspirin decreases vascular endothelial growth factor release during myocardial ischemia** *INTERNATIONAL JOURNAL OF CARDIOLOGY*
Gerrah, R., Fogel, M., Gilon, D.
2004; 94 (1): 25–29
- **Platelet function changes as monitored by cone and plate(let) analyzer during beating heart surgery** *HEART SURGERY FORUM*
Gerrah, R., Snir, E., Brill, A., Varon, D.
2004; 7 (3): E191–E195
- **Beneficial effect of aspirin on renal function post-cardiopulmonary bypass.** *Asian cardiovascular & thoracic annals*
Gerrah, R., Izhar, U.
2003; 11 (4): 304–8
- **Cardiac surgery in octogenarians - A better prognosis in coronary artery disease** *ISRAEL MEDICAL ASSOCIATION JOURNAL*
Gerrah, R., Izhar, U., Elami, A., Milgalter, E., Rudis, E., Merin, G.
2003; 5 (10): 713–16
- **The surgical approach to infective endocarditis: 10 year experience** *ISRAEL MEDICAL ASSOCIATION JOURNAL*
Gerrah, R., Rudis, E., Elami, A., Milgalter, E., Izhar, U., Merin, G.
2003; 5 (9): 641–45
- **Impaired oxygenation and increased hemolysis after cardiopulmonary bypass in patients with glucose-6-phosphate dehydrogenase deficiency** *ANNALS OF THORACIC SURGERY*
Gerrah, R., Shargal, Y., Elami, A.
2003; 76 (2): 523–27
- **Traumatic memory: A cause for postoperative delirium - A diagnostic dilemma** *ISRAEL MEDICAL ASSOCIATION JOURNAL*
Gerrah, R., Abramovitch, Y., Elami, A.
2001; 3 (11): 858–59

PRESENTATIONS

- The Cavoatrial Anastomosis Procedure for Treatment of Anomalous Connection of Superior Vena cava to Morphologic Left Atrium. - Joint Meeting of the European Congenital Heart Surgeons Association (ECHSA) and the World Society for Pediatric and Congenital Heart Surgery (WSPCHS), (6/20/2019 - 6/22/2019)
- A Defined Management Strategy Improves Early Outcomes Following the Fontan Procedure - Society of Thoracic Surgeons (STS) (1/2014 - 1/2014)
- The Utility of Cross Sectional Imaging in the Management of the Neonatal Hypoplastic Aortic Arch - Presented at Western Thoracic Surgical Association (June 2013 - June 2013)
- Complex Reconstruction of Aorta in Norwood - Congenital Heart Surgeon's Society, (CHSS) (October 2011 - October 2011)
- Optimization of a Chronic Cyanosis Model in Piglets - 55th ASAIO-IFAO Annual Conference (May 2009 - May 2009)
- Application of minimally invasive approach in emergency procedures, when is the right time to convert to conventional approach? - International Society of Minimally Invasive Cardiothoracic Surgery (ISMICS) (May 2012 - May 2012)
- Pediatric Ventricular Assist Device Strategies Before and Late After Cardiac Transplantation – Which Device? What Approach? How Successful? - 91st Annual Meeting of American Association of Thoracic Surgery (AATS) (May 2011 - May 2011)