

**Board of Directors Nominations : Entry # 1305****Name**

Prof. Avihu Gazit

**Credentials**

MD, FAAP

**Institution**

Washington University in St. Louis

**Email**[gazit\\_a@wustl.edu](mailto:gazit_a@wustl.edu)**Mobile Phone**

3146164937

**Biography (1000 character limit)**

Thank you for considering my application for nomination as a member of the PCICS Board of Directors.

I am a Professor of Pediatrics at Washington University in St Louis, Medical Director of the CICU at Saint Louis Children's Hospital and Section Chief of Pediatric Cardiac Critical Care within the Pediatric Critical Care Division at Washington University School of Medicine. I have dedicated all my professional life since graduating from Medical School in the Technion, Israel in 1996 to the care of critically ill children and their families. After 26 years of service I am still providing active care to these children, and still passionate about these wonderful children and families that I have the privilege of serving. Other than providing clinical care I take proud in teaching our Critical Care and Cardiology fellows, as well as our advanced nurse practitioners and staff. In spite of my heavy clinical and administrative duties I invest in research to improve our patients' outcomes.

**How Do You Envision Advancing PCICS as a Member of the Board of Directors?(1000 character limit)**

Again thank you for the opportunity to apply. As a senior and highly experience member of our community, my goal would be to share my experience in the clinical, education, and translational research arena to advance the care of children and adults with congenital and acquired heart disease. I envision helping PCICS to continue to grow nationally and internationally and help connect our community and hopefully bring about many multicenter trials that would help us to establish evidence base practices. I would like to help establishing strong links between PCICS and other Critical Care, Cardiothoracic, and Cardiology Societies. I would like to continue to invest in Cardiac Networks United, as well as in establishing an international shared high definition data repository that would allow robust analysis of the complex physiology of our patients and lead to creation of predictive analytics algorithms that will help our providers and staff to anticipate changes in patients' clinical state

**Previous Contributions to PCICS (1000 character limit)**

1. (Current)I am an active member of the PCICS foundation steering committee and have been instrumental in reviving the foundation concept.
2. (2010) I have participated in Consensus statement on monitoring hemodynamics and tissue oxygenation: Emerging technologies. Pediatric Cardiac Intensive Care Society Annual Meeting. Miami, FL.
3. (2018) I was invited by dr. Almodovar to participate in the 2018 PCICS meeting to discuss: Integration of real-time, high frequency physiologic data to support optimal patient assessment and decision-making.

**Please upload the Nominee's CV here:**

## Board of Directors Nominations : Entry # 1305

- [Gazit-2022-CV-2.docx](#)
- [Gazit-2022-CV-21.docx](#)

Please upload the Nominee's headshot here:

- [Avihu-gazit-April-2021.pdf](#)
- [Avihu-gazit-April-2021.jpg](#)
- [Avihu-gazit-April-20211.jpg](#)

### Notes



#### Admin Notification (ID: 5f0477b61b998)

added June 6, 2022 at 10:45 am

WordPress successfully passed the notification email to the sending server.

## Curriculum Vitae

Avihu Z. Gazit, MD, FAAP

Date: 04/4/2022

### Personal Information

Birthplace: Israel

Citizenship: USA

### Address and Telephone Numbers

University: Washington University in St. Louis  
School of Medicine  
Department of Pediatrics  
Critical Care Medicine  
660 S. Euclid Ave.  
St. Louis, MO 63110  
Campus Box 8116

Phone: 314-286-1246

Fax: 314-361-0733

email: Gazit\_A@wustl.edu

### Present Positions

Professor of Pediatrics, Critical Care Medicine

### Education and Training

- 1997 MD, Technion-Israel Institute of Technology, Haifa, Israel
- 1997 - 2001 Residency in Pediatrics, Bnai-Zion Medical Center, Haifa, Israel
- 2002 - 2005 Fellow, Pediatric Critical Care Medicine, Washington University School of Medicine, St. Louis, Missouri
- 2005 - 2007 Fellow, Pediatric Cardiology, Washington University School of Medicine, St. Louis Children's Hospital

### Academic Positions and Employment

- 2007 - 2010 Instructor in Pediatrics, Critical Care Medicine, Washington University in St. Louis, St. Louis, MO
- 2010 - 2015 Assistant Professor of Pediatrics, Critical Care Medicine, Washington University in St. Louis, St. Louis, MO
- 2015 - 2020 Associate Professor of Pediatrics, Critical Care Medicine, Washington University in St. Louis, St. Louis, MO
- 2020-Present Professor of Pediatrics, Critical Care Medicine, Washington University in St. Louis, St. Louis, MO

## **Appointments and Committees**

### Hospital Affiliations

- 2011 - Pres Co-leader Unit Based Team-Cardiac Critical Care Unit, St. Louis Children's Hospital
- 2011 - Pres Medical director, Cardiac Intensive Care unit, Saint Louis Children's Hospital.
- 2011 - Pres Chief, Pediatric Critical Care Medicine Cardiac Critical Care Section.

### Scholarship Oversight Committees

- 2011 - 2013 Brian Birnbaum (Advisor: Avihu Z. Gazit)
- 2011 - 2013 Ryan Majcina (Advisor: Avihu Z. Gazit)
- 2011 - 2013 Shilpa Vellore (Advisor: Avihu Z. Gazit)
- 2012 - 2013 Joshua Sparks (Advisor: Avihu Z. Gazit)
- 2012 - 2014 Arun Saini (Advisor: Philip Spinella)
- 2012 - 2014 Marco Quispe (Advisor: Jose Pineda)
- 2014 - 2016 Erin Barker (Advisor: Philip Spinella)
- 2015 - 2017 Jonah Attebery (Advisor: Avihu Z. Gazit)

### National/International Societies Committees

- 2021 - Pres Pediatric Cardiac Intensive Care Society-Foundation Steering Committee Member
- 2021 - Pres Society of Critical Care Medicine/Midwest Chapter-Research Committee Vice Chair

## **Licensure and Certifications**

- 1997 Israel Health Ministry license to practice medicine #29525
- 2001 General Pediatrics – Israel Health Ministry, license #19097
- 2002 Educational Commission for Foreign Medical Graduates #0-551-424-5
- 2007 State of Missouri Medical License #2007012445
- 2018 Approval to enter the board certification process via the ABP Alternative Pathway for Academic Faculty (Signed by the Executive VP of the ABP on 10/4/2018).
- 2018 American Board of Pediatrics/General Pediatrics Certification # 126338
- 2020 American Board of Pediatrics/Critical Care Medicine Certification # 3080
- 2022 Plan to take the American Board of Pediatrics/Cardiology Examination (first available examination following the ABP Alternative Pathway for Academic Faculty approval).

## **Military Service**

- 1984 - 2002 Major, Israeli Defense Forces: Israel Defense Force, Paratrooper Division

## **Honors and Awards**

- 1997 Award of Excellence (cum laude) for graduate M.D. thesis
- 2015 - Pres Best Doctors in America
- 2015 - Pres Best Doctors in Saint Louis

## **Editorial Responsibilities**

- 2019-Pres Associate Editor, Pediatric Critical Care Medicine Editorial Board, Frontiers Pediatrics
- 2021-Pres Member, Pediatric Critical Care Medicine Editorial Board, SCCM

## **Editorial Ad Hoc Reviews**

- 2012 - Pres Circulation research
- 2014 - Pres Journal of Cardiothoracic Surgery
- 2014 - Pres Annals of Thoracic Surgery
- 2014 - Pres Journal of Pediatric Intensive Care

## **Professional Societies and Organizations**

- 2004 - Pres Society of Critical Care Medicine
- 2010 - Pres Pediatric Cardiac Intensive Care Society
- 2022- Pres American Academy of Pediatrics (Fellow)

## **Major Invited Professorships and Lectures**

- 2007 Mechanical support of the failing Pediatric heart Grand Rounds Lecture, Rambam Medical Center, Israel.
- 2009 Navigating the cardiac conduction system: Insights into AV Node physiology Grand Rounds Lecture, Pediatric Department, Washington University School of Medicine, St. Louis, MO.
- 2010 Consensus statement on monitoring hemodynamics and tissue oxygenation: Emerging technologies. Pediatric Cardiac Intensive Care Society Annual Meeting. Miami, FL.
- 2011 Current concepts in pediatric critical care: Advanced cardiac monitoring and cardiac failure treatment. Society of Critical Care Medicine Congress; San Diego, CA.
- 2011 Use of a paracorporeal lung assist device (PLAD) in three children with refractory pulmonary hypertension. Pediatric Cardiac Intensive Care Society annual international meeting, Cambridge, UK.
- 2012 Moving forward: Unresolved issues in pediatric VAD support. VAD Vs. BiVAD follow-up. Mechanical Cardiac Support in Pediatric Heart Disease: State of the Art. St. Louis, MO.
- 2016 A bridge over troubled water: Bridging children to thoracic transplantation Grand Rounds Lecture, Pediatrics Department, Washington University School of Medicine. St. Louis, MO.
- 2017 Bridging to thoracic transplantation/Lung transplant: Which device for whom? 9th Congress of the International Pediatric Transplant Association, World Trade Center Barcelona, Spain.
- 2018 A novel surgical approach to mechanical circulatory support in univentricular infants Professor Avraham Lorber's Retirement Event. Rambam Medical Center, Haifa Israel.
- 2018 Using the novel IDO<sub>2</sub> index to predict CICU cardiac arrest in neonates following cardiopulmonary bypass operations. Visiting Professorship-Pediatric Heart Center, University of Texas South Western. Dallas, TX.

- 2018 An increase in T3-IDO<sub>2</sub> index is associated with an increase in probability of cardiac arrest in neonates following CPB operations 6th Scientific Meeting of the World Society for Pediatric and Congenital Heart Surgery. Orlando, FL.
- 2018 Integration of real-time, high frequency physiologic data to support optimal patient assessment and decision-making. 14th Annual International Meeting of the Pediatric Cardiac Intensive Care Society. Miami, FL.
- 2020 Management of Critical Care Patient with Acute Heart Failure. Heartcare International, II international course (Virtual) – Update in Cardiology, surgery, and postoperative cardiovascular management
- 2021 Integration of Real-time, High Frequency Physiologic Data to Support Optimal Patient Assessment and Decision-making. PCICS Advanced Pediatric Practitioners Group Meeting (Virtual).

## Research Support

### Governmental Support

R44 (Gazit - Principal Investigator) 4/1/2018- 3/31/2021  
 NIH  
 Risk-based Patient Monitoring for Pediatric Cardiac Patients

### Non-Governmental Support

PCM Normal PCM-001 (Gazit - Principal Investigator)

Entegion, Inc.

Reference Range Analysis of the Entegion Point of Care Coagulation Monitor (PCM) in Healthy Volunteers

(Gazit - Co-Principal Investigator)

Hokusai

VTE Pediatrics Study

This is a Phase 3, open-label, randomized, multi-center, controlled trial to evaluate the pharmacokinetics and pharmacodynamics of edoxaban and to compare the efficacy and safety of edoxaban with standard of care anticoagulant therapy in pediatric subjects from birth to less than 18 years of age with confirmed venous thromboembolism (VTE).

### Completed Support

R43 (Gazit - Principal Investigator) 4/1/2015- 3/31/2017  
 NIH  
 Risk assessment using noninvasive measurements in postoperative pediatric patients

## Other:

- 1 Site PI Phase III, double blind, placebo-controlled, multi-center, dose titration study to assess the efficacy, safety and pharmacokinetics of intravenous Conivaptan (Vaprisol<sup>®</sup>) in pediatric subjects with euvolemic or hypervolemic hyponatremia [ISN/Protocol 087-CL-096].
- 2 Site PI Phase Ib single blind, randomized, placebo controlled clinical trial to determine the pharmacokinetics and safety of a revised protocol of intravenous L-Citrulline (Citrapress<sup>®</sup>) versus placebo in children undergoing cardiopulmonary bypass.
- 3 Sub PI and a member of the THAPCA trial investigators group. Therapeutic Hypothermia After Cardiac Arrest (THAPCA) multi-center trial.
- 4 Site Co-PI Multicenter, open-label, dose escalation study to evaluate safety, tolerability and pharmacokinetics of RLX030 in addition to standard of care in pediatric patients from birth to <18 years of age, hospitalized with acute heart failure.

## Clinical Responsibilities

- 2007 - Pres Faculty member: Divisions of Critical Care Medicine and Cardiology, Department of Pediatrics, Washington University School of Medicine
- 2011 - Pres Chief: Pediatric Cardiac Critical Care Section, Department of Pediatrics, Washington University School of Medicine
- 2011 - Pres Co-leader: St. Louis Children's Hospital Heart Center Unit Based Joint Practice Team, Department of Pediatrics, Washington University School of Medicine
- 2011 - Pres Leader: Heart Center Clinical Pathways work group, Department of Pediatrics, Washington University School of Medicine
- 2011 - Pres Leader: Paracorporeal Lung Assist Device work group, Department of Pediatrics, Washington University School of Medicine
- 2011 - Pres Medical Director: St. Louis Children's Hospital 16-bed Pediatric Cardiac Intensive Care unit, Department of Pediatrics, Washington University School of Medicine
- 2011 - Pres Member: ECMO steering committee, Department of Pediatrics, Washington University School of Medicine
- 2011 - Pres Member: ECMO transfusion and anticoagulation work group, Department of Pediatrics, Washington University School of Medicine
- 2011 - Pres Member: Heart Center Operational Group, Department of Pediatrics, Washington University School of Medicine

## Teaching Responsibilities

- 2009 - 2015 Assistant Professor, Mentor of Critical Care and Cardiology Fellows
- 2015 - 2020 Associate Professor of Pediatrics, Mentor of Critical Care and Cardiology Fellows
- 2020 - Pres Professor of Pediatrics, Mentor of Critical Care and Cardiology Fellows

## Publications

1. Netzer D, **Gazit A**, Suaad S, Milo S, Rozenberg B, Bomzon A, Katz Y. [Carbon monoxide: an essential modulator of blood vessel tone]. *Harefuah*. 1997;132(7):494-9. PMID:[9153923](#)
2. Lorber A, **Gazit AZ**, Khoury A, Schwartz Y, Freudental F. Percutaneous transaortic occlusion of patent ductus arteriosus using a new versatile angiographic and delivery catheter. *Pediatr Cardiol*. 2003;24(5):482-3. doi:[10.1007/s00246-002-0235-z](#). PMID:[14627318](#)
3. Lorber A, **Gazit AZ**, Khoury A, Schwartz Y, Mandel H. Cardiac manifestations in thiamine-responsive megaloblastic anemia syndrome. *Pediatr Cardiol*. 2003;24(5):476-81. doi:[10.1007/s00246-002-0215-3](#) PMID:[14627317](#)
4. Shaoul R, **Gazit A**, Weller B, Berman S, Jaffe M. Neurological manifestations of an acute abdomen in children. *Pediatr Emerg Care*. 2005;21(9):594-7. PMID:[16160664](#)
5. **Gazit AZ**, Singh GK, Shumway J, Johnson MC, Ludomirsky A. Fetal cardiac rhabdomyoma: a sheep or a wolf? *J Matern Fetal Neonatal Med*. 2007;20(4):343-8. doi:[10.1080/14767050601158297](#) PMID:[17437243](#)
6. **Gazit AZ**, Avari JN, Balzer DT, Rhee EK. Electrocardiographic diagnosis of myocardial ischemia in children: is a diagnostic electrocardiogram always diagnostic? *Pediatrics*. 2007;120(2):440-4. doi:[10.1542/peds.2007-0170](#) PMID:[17671071](#)
7. **Gazit AZ**, Gandhi SK. Pediatric primary cardiac tumors: diagnosis and treatment. *Curr Treat Options Cardiovasc Med*. 2007;9(5):399-406. PMID:[17897569](#)
8. McBride ME, Huddleston CB, Balzer DT, Goel D, **Gazit AZ**. Hypoplastic left heart associated with scimitar syndrome. *Pediatr Cardiol*. 2009;30(7):1037-8. doi:[10.1007/s00246-009-9479-1](#) PMID:[19495846](#)
9. **Gazit AZ**, Oren PP. Pharmaceutical management of decompensated heart failure syndrome in children: current state of the art and a new approach. *Curr Treat Options Cardiovasc Med*. 2009;11(5):403-9. PMID:[19846039](#)
10. **Gazit AZ**, Gandhi SK, C Canter C. Mechanical circulatory support of the critically ill child awaiting heart transplantation. *Curr Cardiol Rev*. 2010;6(1):46-53. doi:[10.2174/157340310790231617](#) PMID:[21286278](#)
11. **Gazit AZ**, Huddleston CB, Checchia PA, Fehr J, Pezzella AT. In brief. *Curr Probl Surg*. 2010;47(3):182-3. doi:[10.1067/j.cpsurg.2009.11.005](#) PMID:[20159188](#)
12. **Gazit AZ**, Huddleston CB, Checchia PA, Fehr J, Pezzella AT. Care of the pediatric cardiac surgery patient--part 1. *Curr Probl Surg*. 2010;47(3):185-250. doi:[10.1067/j.cpsurg.2009.11.006](#) PMID:[20159189](#)
13. Basnet S, Schneider M, **Gazit A**, Mander G, Doctor A. Fresh goat's milk for infants: myths and realities--a review. *Pediatrics*. 2010;125(4):e973-7. doi:[10.1542/peds.2009-1906](#) PMID:[20231186](#)
14. **Gazit AZ**, Huddleston CB, Checchia PA, Fehr J, Pezzella AT. Care of the pediatric cardiac surgery patient--part 2. *Curr Probl Surg*. 2010;47(4):261-376. doi:[10.1067/j.cpsurg.2009.12.003](#) PMID:[20207257](#)
15. **Gazit AZ**. Dexmedetomidine and pulmonary artery pressure in the pediatric cardiac surgery patient--A new insight. *Pediatr Crit Care Med*. 2010;11(5):634-5. doi:[10.1097/PCC.0b013e3181d505e3](#) PMID:[20823739](#)
16. **Gazit AZ**, Singh GK, Johnson MC. To-and-fro murmur in the young due to major congenital cardiac defects: is cardiac auscultation obsolete? *Cardiol Young*. 2010;20(6):707-8. doi:[10.1017/S1047951110001393](#) PMID:[20887646](#)



17. **Gazit AZ**, Canter CE. Impact of pulmonary vascular resistances in heart transplantation for congenital heart disease. *Curr Cardiol Rev.* 2011;7(2):59-66. doi:[10.2174/157340311797484213](https://doi.org/10.2174/157340311797484213) PMID:[22548028](https://pubmed.ncbi.nlm.nih.gov/22548028/)
18. **Gazit AZ**, Sweet SC, Grady RM, Huddleston CB. First experience with a paracorporeal artificial lung in a small child with pulmonary hypertension. *J Thorac Cardiovasc Surg.* 2011;141(6):e48-50. doi:[10.1016/j.jtcvs.2011.02.005](https://doi.org/10.1016/j.jtcvs.2011.02.005) PMID:[21420104](https://pubmed.ncbi.nlm.nih.gov/21420104/)
19. **Gazit AZ**, Cooper DS. Emerging technologies. *Pediatr Crit Care Med.* 2011;12(4 Suppl):S55-61. doi:[10.1097/PCC.0b013e3182211c2b](https://doi.org/10.1097/PCC.0b013e3182211c2b) PMID:[22129551](https://pubmed.ncbi.nlm.nih.gov/22129551/)
20. **Gazit AZ**, Fehr J. Perioperative management of the pediatric cardiac transplantation patient. *Curr Treat Options Cardiovasc Med.* 2011;13(5):425-43. doi:[10.1007/s11936-011-0143-8](https://doi.org/10.1007/s11936-011-0143-8) PMID:[21773731](https://pubmed.ncbi.nlm.nih.gov/21773731/)
21. Hoganson DM, **Gazit AZ**, Sweet SC, Grady RM, Huddleston CB, Eghtesady P. Neonatal paracorporeal lung assist device for respiratory failure. *Ann Thorac Surg.* 2013;95(2):692-4. doi:[10.1016/j.athoracsur.2012.05.128](https://doi.org/10.1016/j.athoracsur.2012.05.128) PMID:[23336880](https://pubmed.ncbi.nlm.nih.gov/23336880/)
22. Boston US, Fehr J, **Gazit AZ**, Eghtesady P. Paracorporeal lung assist device: an innovative surgical strategy for bridging to lung transplant in an infant with severe pulmonary hypertension caused by alveolar capillary dysplasia. *J Thorac Cardiovasc Surg.* 2013. doi:[10.1016/j.jtcvs.2013.06.014](https://doi.org/10.1016/j.jtcvs.2013.06.014) PMID:[23871141](https://pubmed.ncbi.nlm.nih.gov/23871141/)
23. Hoganson DM, **Gazit AZ**, Boston US, Sweet SC, Grady RM, Huddleston CB, Eghtesady P. Paracorporeal lung assist devices as a bridge to recovery or lung transplantation in neonates and young children. *J Thorac Cardiovasc Surg.* 2014;147(1):420-6. PMID:[24199759](https://pubmed.ncbi.nlm.nih.gov/24199759/)
24. **Gazit AZ**, Li A, Choi JS, Miquerol L, Jay PY. Ex vivo, microelectrode analysis of conduction through the AV node of wild-type and Nkx2-5 mutant mouse hearts as guided by a Cx40-eGFP transgenic reporter. *Physiol Rep.* 2014;2(4):e00285. doi:[10.14814/phy2.285](https://doi.org/10.14814/phy2.285) PMID:[24771692](https://pubmed.ncbi.nlm.nih.gov/24771692/)
25. **Gazit AZ**, Kemp JS. Cerebral tissue oxygenation index and SIDS. *Pediatrics.* 2014;134(3):598-9. doi:[10.1542/peds.2014-1875](https://doi.org/10.1542/peds.2014-1875) PMID:[25157009](https://pubmed.ncbi.nlm.nih.gov/25157009/)
26. Saini A, Hartman ME, Gage BF, Said A, **Gazit AZ**, Eghtesady P, Boston US, Spinella PC. Incidence of Platelet Dysfunction by Thromboelastography-Platelet Mapping in Children Supported with ECMO: A Pilot Retrospective Study. *Front Pediatr.* 2015;3:116. doi:[10.3389/fped.2015.00116](https://doi.org/10.3389/fped.2015.00116) PMID:[26779465](https://pubmed.ncbi.nlm.nih.gov/26779465/)
27. Hoganson DM, Boston US, **Gazit AZ**, Canter CE, Eghtesady P. Successful bridge through transplantation with berlin heart ventricular assist device in a child with failing Fontan. *Ann Thorac Surg.* 2015;99(2):707-9. doi:[10.1016/j.athoracsur.2014.04.064](https://doi.org/10.1016/j.athoracsur.2014.04.064) PMID:[25639417](https://pubmed.ncbi.nlm.nih.gov/25639417/)
28. **Gazit AZ**, Sweet SC, Grady RM, Boston US, Huddleston CB, Hoganson DM, Shepard M, Raithel S, Mehegan M, Doctor A, Spinella PC, Eghtesady P. Recommendations for utilization of the paracorporeal lung assist device in neonates and young children with pulmonary hypertension. *Pediatr Transplant.* 2016;20(2):256-70. PMID:[26899454](https://pubmed.ncbi.nlm.nih.gov/26899454/)
29. **Gazit AZ**, Petrucci O, Manning P, Shepard M, Baltagi S, Simpson K, Castleberry C, Canter C, Eghtesady P. A Novel Surgical Approach to Mechanical Circulatory Support in Univentricular Infants. *The Annals of Thoracic Surgery.* 2017. PMID:[28720202](https://pubmed.ncbi.nlm.nih.gov/28720202/)
30. Neumayr TM, Gill J, Fitzgerald JC, **Gazit AZ**, Pineda JA, Berg RA, Dean JM, Moler FW, Doctor A. Identifying Risk for Acute Kidney Injury in Infants and Children Following Cardiac Arrest. *Pediatric Critical Care Medicine.* 2017. PMID:[28737594](https://pubmed.ncbi.nlm.nih.gov/28737594/)
31. Ryan A. Romans, MD ; Steven M. Schwartz, MD ; John M. Costello, MD, MPH ; Nikhil K. Chanani, MD ; Parthak Proadhan, MBBS ; **Avihu Z. Gazit, MD** ; Andrew H. Smith, MD, MSCI, MMHC ; David S. Cooper, MD, MPH ; Jeffrey Alten, MD ; Kshitij P. Mistry, MD ; Wenying Zhang ; Janet E. Donohue ; Michael Gaies, MD, MPH, MS . Epidemiology of Noninvasive Ventilation in Pediatric Cardiac Intensive Care Units *Pediatric Critical Care Medicine.* 2017. PMID:[28742724](https://pubmed.ncbi.nlm.nih.gov/28742724/)

32. Ahmed Said, Mary McBride, **Avihu Z. Gazit**. Successful pre-operative bridge with ECMO in 3 neonates with D-TGA and pulmonary hypertension. *Pediatric Cardiology*. 2018;28(9):1175-1177. PMID:[29991376](#)
33. **Avihu Z. Gazit**. Outcome prediction following complex congenital heart disease operations- The intensivists perspective *Pediatric Critical Care Medicine*. 2018;19(11):1083-1084. PMID:[30395109](#)
34. Katie L. Mowers, Kathleen E. Simpson, **Avihu Z. Gazit**, Pirooz Eghtesady, Charles E. Canter, Chesney D. Castleberry. Moderate-severe primary graft dysfunction after pediatric heart transplantation. *Pediatric transplantation*. 2019. PMID:[30609166](#)
35. Futterman C, Salvin JW, McManus M, Lowry AW, Baronov D, Almodovar MC, Pineda JA, Nadkarni VM, Laussen PC, **Gazit AZ**. Inadequate oxygen delivery index dose is associated with cardiac arrest risk in neonates following cardiopulmonary bypass surgery. Resuscitation. 2019 Jul 17. pii: S0300-9572(19)30522-2. doi:=10.1016/j.resuscitation.2019.07.013. [Epub ahead of print] PMID:31325555
36. Erin Barker, Arun Saini, **Avihu Z. Gazit**, Sirine Baltagi, Brian F. Gage, Philip C. Spinella. TEG Platelet Mapping and Impedance Aggregometry to Predict Platelet Transfusion during Cardiopulmonary Bypass in Pediatric Patients. *Frontiers in Pediatrics*. 2019 Dec 12.
37. Barron, L.M, Vogel, A.M, Spinella, P.C., Colvin, R.M. Baltagi, S.A., CreveCoeur, T, Doctor, A, **Gazit, A.Z.**, Lukas, K, Mehegan, M, O'Connor, N, Said, A.S. Shepard, M, Wallendorf, M, Zarate Rodriguez, J, Lin, J.C. Comprehensive Context-Responsive Anticoagulation Guideline Use Is Associated With Reduced Bleeding and Thrombotic Complications and Less RBC Transfusion In Neonatal And Pediatric Extracorporeal Membrane Oxygenation. *Journal of Intensive Care Medicine*. *Frontiers in Cardiovascular Medicine*. 2021 June 10. <https://doi.org/10.3389/fcvm.2021.637106>.
38. Merritt T, **Gazit AZ**, Carvajal H, Montgomery BK, Shepard M, Mehegan M, Canter M, Miller J, Eghtesady P, Nath DS. Evolution of Ventricular Assist Device Support Strategy in Children with Univentricular Physiology. *Ann Thorac Surg*. 2021 Oct 25: S0003-4975(21)01758-6. doi: 10.1016/j.athoracsur.2021.09.043.
39. Michael P Goldsmith, Vinay M Nadkarni, Craig Futterman, **Avihu Z Gazit**, Dimitar Baronov, Adam Tomczak, Peter C Laussen, Joshua W Salvin. Use of a Predictive Analytic Algorithm to Inform Vasoactive Medication Weaning in Patients Following Cardiac Surgery. *Critical Care Explorations*. 2021 November Volume 3 Issue 11: pe0563. doi: 10.1097/CCE.0000000000000563.
40. Adam W. Lowry, Craig Futterman, **Avihu Z. Gazit**. Loss of Important Physiologic Data in Critically Ill Patients: Comparison of a Conventional Electronic Health Record to an Automated Patient Monitoring Platform. *J Am Med Inform Assoc*. 2022 Mar 18:ocac033. doi: 10.1093/jamia/ocac033. Epub ahead of print. PMID: 35301538.
41. Nikoleta S. Kolovos, **Avihu Z. Gazit**. Early Extubation Following Congenital Heart Surgery: Time to move on. (PCCM Editorial, accepted for publication).

**Peer review publications as an investigator for the Therapeutic Hypothermia after Paediatric Cardiac Arrest (THAPCA) Trial Investigators. Listed investigator, WUSM Site PI, selected.**

1. Moler FW, Silverstein FS, Holubkov R, Slomine BS, Christensen JR, Nadkarni VM, Meert KL, Browning B, Pemberton VL, Page K, Gildea MR, Scholefield BR, Shankaran S, Hutchison JS, Berger JT, Ofori-Amanfo G, Newth CJ, Topjian A, Bennett KS, Koch JD, Pham N, Chanani NK, Pineda JA, Harrison R, Dalton HJ, Alten J, Schleien CL, Goodman

- DM, Zimmerman JJ, Bhalala US, Schwarz AJ, Porter MB, Shah S, Fink EL, McQuillen P, Wu T, Skellett S, Thomas NJ, Nowak JE, Baines PB, Pappachan J, Mathur M, Lloyd E, van der Jagt EW, Dobyms EL, Meyer MT, Sanders RC Jr, Clark AE, Dean JM; THAPCA Trial Investigators.. Therapeutic Hypothermia after In-Hospital Cardiac Arrest in Children. *NEJM*. 2017;376(4):318-329. PMID:[28118559](#)
2. Slomine BS, Silverstein FS, Christensen JR, Holubkov R, Telford R, Dean JM, Moler FW; Therapeutic Hypothermia after Paediatric Cardiac Arrest (THAPCA) Trial Investigators. Neurobehavioural outcomes in children after In-Hospital cardiac arrest. *Resuscitation*. 2018;124:80-89. PMID:[29305927](#)
  3. Ichord R, Silverstein FS, Slomine BS, Telford R, Christensen J, Holubkov R, Dean JM, Moler FW; THAPCA Trial Group. Neurologic outcomes in pediatric cardiac arrest survivors enrolled in the THAPCA trials. *Neurology*. 2018;91(2): e123-e131. PMID:[29884735](#)

### Manuscripts in preparation/submitted

1. Andres Herrera-Camino, Stuart C. Sweet, Rebecca Pendino, Kristen Brill Chod, Pirooz Eghtesady, **Avihu Z. Gazit**, John C. Lin. Lung Re-transplantation After Prolonged Venovenous Extracorporeal Membrane Oxygenation (ECMO) in a Child with Chronic Lung Allograft Dysfunction (In preparation).
2. Sarah A. Teele, **Avihu Z. Gazit**, Craig Futterman, Dimitar V. Baronov, David S. Cooper, Peter C Laussen, Joshua W Salvin. Validation of a novel noninvasive risk analytics algorithm with laboratory venous-oxygen saturation measurements in critically ill pediatric patients (in preparation).
3. Kwaku D Tawiah, Caroline E. Franks, Jessica Tang, **Avihu Z. Gazit**, Dennis Dietzen, Christopher W. Farnsworth. Comparison between BNP and NT-proBNP in pediatric populations (In preparation).

### Book Chapters (most recent editions)

1. **Avihu Z. Gazit**, Susan N. Foerster and Patrick Y. Jay. NKX2-5 and congenital heart disease. In: Charles J. Epstein, Robert P. Erickson and Anthony Wynshaw-Boris, eds. *Inborn errors of development, the molecular basis of clinical disorders of metabolism*. Oxford University Press 2008.
2. **Avihu Z. Gazit**. Advanced cardiac monitoring and cardiac failure treatment. In: Philip S. Spinella, Thomas A. Nagakawa, eds. *Current Concepts in Pediatric Critical Care Medicine* Society of Critical Care Medicine 2011:85-100.
3. Shilpa Vellore, Jennifer L. York, and **Avihu Z. Gazit**. Acute decompensated heart failure. In: Derek S. Wheeler, Hector R. Wong, Thomas P. Shanley, eds. *Pediatric Critical Care Medicine, Basic Science, Clinical Evidence* London: Springer-Varlag; 2014:497-508.

### Book Chapters in preparation

1. Guy Hazan, **Avihu Z. Gazit**, James S. Kemp. Pulmonary embolism and thromboembolic diseases. *Kendig's Disorders of the Respiratory Tract in Children*, 10<sup>th</sup> Edition.

### Abstracts

1. **Gazit AZ**, Li A, Choi JS, Jay PY. Ex vivo, microelectrode analysis of conduction through the AV node of wild-type and Nkx2-5 mutant mouse hearts as guided by a Cx40-eGFP transgenic reporter. Washington University School of Medicine, Department of Pediatrics, Annual Research Retreat. St Louis, MO; 2007.
2. **Gazit AZ**, Huddleston CB, Sweet SC, Grady RM, Doctor A, Egtesady P. Use of a paracorporeal lung assist device (PLAD) in three children with refractory pulmonary hypertension. PCICS Annual International Meeting; Cambridge, UK; 2011
3. Birnbaum B, **Gazit AZ**. Comparison of bioimpedance with Fick measurement for determining cardiac output in single ventricle patients undergoing cardiac catheterization. PCICS Annual International Meeting; Miami, FL; 2012
4. Byrge MM, Raithel SC, **Gazit AZ**. Paracorporeal Lung Assist Device (PLAD): Nursing's Early Experience. Mechanical Cardiac Support in Pediatric Heart Disease: State of the Art, 2012
5. Govardhan SV, Doctor A, Sharma A, **Gazit A**. Utilization of dynamic near-infrared spectroscopy to determine early changes in oxygen consumption in children undergoing cardiopulmonary bypass. The Society of Critical Care Medicine Congress; San Diego, CA; 2012
6. David M. Hoganson, **Avihu Z. Gazit**, Umar S. Boston, Stuart C. Sweet, R. Mark Grady, Charles B. Huddleston, Pirooz Egtesady. Paracorporeal lung assist devices as a bridge to recovery or lung transplant in neonates and young children. AATS Annual Meeting; Minneapolis, MN; 2013.
7. Patricia Kieffer, Alexis Elward, **Avihu Z. Gazit**, Kym Galbraith, Kathleen Gase, Hilary M. Babcock, and Raya Khoury. Beyond the bundle: Decreasing central line associated blood stream infections in a pediatric cardiac intensive care unit. IDSA International Conference; Chicago, IL; 2013.
8. Sparks J, Stein PK, **Gazit AZ**. Heart rate variability as a pre-operative risk stratifier for infants with critical congenital heart disease: A pilot study. PCICS Annual International Meeting, Miami, FL; 2014.
9. Barron, L M, Rodriguez, J, CreveCoeur, T, Lukas, KT, Shepard, M, O'Connor, N, Mehegan, M, Wallendorf, M Baltagi, SA, **Gazit, AZ**, Lin, JC, Spinella, PC, Vogel, AM. A tiered systemic anticoagulation and transfusion guideline is associated with reduced major bleeding in neonatal and pediatric extracorporeal life support. 32nd Annual Children's National Symposium/ECMO and Advanced Therapies for Respiratory Failure; Keystone, Colorado, USA; 2016.
10. Jonah E. Attebery, **Avihu Z. Gazit**, Phyllis K Stein. Critically ill children undergoing extubation show inconsistent patterns of heart rate variability. Pediatric Academic Societies Meeting; San Francisco, CA; 2017.
11. Herrera-Camino A, Sweet SC, O'Connor N, Shepard M, Pendino R, **Gazit AZ**, Egtesady P, Lin JC. Lung retransplantation after prolonged veno-venous extracorporeal membrane oxygenation in a child with chronic lung allograft dysfunction. ATS Conference; San Diego, CA; 2018.
12. Ahmed S. Said, Jeff Gill, Dimitar Baronov, Zeke Oakley, **Avihu Z. Gazit**, Philip C., Allan Doctor. Transfusion response prediction by integrated measure of oxygen delivery (ido2 index) 9th Congress of the world federation of Pediatric Intensive & Critical Care Societies; Singapore, Singapore; 2018.
13. Futterman C, Salvin JW, McManus M, Lowry AW, Baronov D, Almodovar MC, Pineda JA, Nadkarni VM, Laussen PC, **Gazit AZ**. An increase in T3-IDO<sub>2</sub> index is associated with an increase in the probability of cardiac arrest in neonates following cardiopulmonary bypass operations. 6th Scientific Meeting of the World Society for Pediatric and Congenital Heart Surgery; Orlando, FL; 2018.
14. Adam Lowry, **Avihu Z. Gazit**, Craig Futterman, Dimitar Baronov. Information Loss of Vital Physiologic Data in Critically Ill Patients: Comparison of the conventional electronic health

record to an automated high definition monitoring platform. PCICS Annual International Meeting; Miami, FL USA; 2018.

15. William B. Orr, Joseph Moen, Michael Wallendorf, **Avihu Z. Gazit**, Chesney Castleberry. Orthotopic heart transplant mortality in tracheostomy and non-tracheostomy ventilator dependent patients. Washington University School of Medicine, Department of Pediatrics, Annual Research Retreat. St Louis, MO; 2019.
16. Erin Barker, Arun Saini, **Avihu Z. Gazit**, Sirine Baltagi, Brian F. Gage, Philip C. Spinella. TEG and Impedance Aggregometry to Predict Platelet Transfusion during Cardiopulmonary Bypass in Pediatric Patients. 49<sup>th</sup> Society of Critical Care Medicine Congress; Orlando FL USA; 2019. *Critical Care Medicine*. 2020;48(1):238.
17. Michael Goldsmith, Joshua W. Salvin, Craig Futterman, **Avihu Z. Gazit**, Vinay M. Nadkarni, Dimitar Baronov, Adam Tomczac, Peter C. Laussen. Prediction of successful inotropic infusion weans using a continuous predictive algorithm. WFPICCS; Mexico, City Mexico; 2020.
18. Horacio G. Carvajal, Dilip S. Nath, **Avihu Z. Gazit**, R. Mark Grady, Stuart C. Sweet, Pirooz Eghtesady. Combining Two Devices to Create a New Application: The Paracorporeal Lung Assist as a Bridge to Lung Transplant in an Infant. American academy of pediatrics national conference 2020.
19. Arun Saini, Erin E. Barker, Susan M. Shea, **Avihu Z. Gazit**, Philip C. Spinella. Comparison of TEG<sup>®</sup> and Multiplate<sup>®</sup> values in children with cyanotic and acyanotic heart defect. 50<sup>th</sup> Society of Critical Care Medicine Congress. *Critical Care Medicine*. 2021;49(1):304.
20. Adam W. Lowry, **Avihu Z. Gazit**, Craig Futterman. Missing the Point: The Electronic Health Record Incompletely Represents Physiologic Data in Critically Ill Pediatric Patients. 16<sup>th</sup> PCICS Annual International Meeting.
21. Merritt, Taylor, **Gazit, Avihu Z**, Montgomery, Brock, Carvajal, Horacio, Canter, Matthew, Shepard, Mark, Mehegan, Mary, Abarbanell, Aaron, Eghtesady, Pirooz, Nath, Dilip. Evolution of Ventricular Assist Device Support Strategies in 18 Consecutive Children with Single Ventricle Physiology: A Single Center Experience. STS 57th Annual Meeting.

## Digital Media

1. Laura laird. "Happy Halloween from Dr. Avihu Gazit and...Dr. Gazit Jr. aka our #hearthero Ryan Laird. Ryan surprised him with his awesome costume." Blog post. <https://www.facebook.com/hashtag/guardiansofchildhood?epa=HASHTAG>
2. First experience with a paracorporeal artificial lung in a small child with pulmonary hypertension. <http://www.youtube.com/watch?v=dfM05jjTw4I>.

**3. Families gather to remember children lost to congenital heart disease FOX 2 NEWS (2018)**

WEBSTER GROVES, MO - St. Louis Children's and Washington University Heart Center honored local families with an annual remembrance event. Families who lost children to congenital heart disease gathered at that Olive + Oaks Restaurant in Webster Groves Sunday. One of the couples who helped lead the event has formed a group called Eden's Army. Eden Elizabeth died weeks after birth. The group lends support to families going through similar situations. Adrienne and Jared Neville also launched the Beads of Courage Program at the Heart Center. The couple gave parents a string of beads with each bead representing a procedure, a milestone or a moment in each child's journey. "It's a reminder that they're story doesn't have to end because their child passed away," said Jared Neville. One of the mothers who received the beads said they will forever carry special meaning. Terran Brown's daughter Nicole passed away after 4 months in the hospital. "Each bead signifies something she went through, so it's something tangible that I can look at, that I can hold and touch and still have a part my daughter with us," she said. Doctors and families say much more research is needed to help unlock the mystery behind children born with heart problems. "Improving that will actually help significantly to improve the survival of those children," said Dr. Avihu Gazit, St. Louis Children's Hospital. Allison Faron is a staff nurse who attended Sunday's remembrance event. She found it inspiring to see families drawing strength from each other as they remembered their children. Faron said, "It's amazing to have their stories be told and share their story with everyone and honor them for how courageous they are."

**4. "Baby Jack" (Radio interview on a patient with HLHS and intact atrial septum s/p heart and lung transplantation) Big 55 KTRS Radio-The Guy Philips Show (2018)**

**5. The new Element in ICU Decisions**

<https://www.etiometry.com/2019/02/05/the-new-element-in-icu-decisions/>

Dr. Avihu Gazit, Cardiac CCM, Section Chief at St. Louis Children's, gave an insightful presentation on *Integration of Real-Time, High Frequency Physiologic Data to Support Optimal Patient Assessment and Decision Making*. Dr. Gazit described the limitations of electronic health records and how the Etiometry Software fills those voids and beyond. "The benefit of this display is not just the high frequency, it's also the ability to get all of the data together in such a way that will help us to understand what happened to that patient in real time," Dr. Gazit explained. During the presentation, Dr. Gazit also talked about the latest research which associates elevations of Etiometry's IDO2 index with adverse events.

**5. Application of T3 in the Heart Center Fox 2 news St. Louis (2020)**

ST. LOUIS - February is heart month and when it comes to newborns, 1 out of 100 babies are born with a heart defect in the United States each year. Jen Hinkle with the Ollie Hinkle Heart Foundation along with a pediatric cardiologist with St. Louis Children's Hospital joined Fox 2 to discuss a new technology that is helping. The Ollie Hinkle Heart Foundation is an organization dedicated to fighting congenital heart defects by raising funds for the most promising research, spreading awareness of the deadly disease, and showing love and support to the children and families impacted by CHDs.



 Washington  
University in St. Louis  
Physicians

Avihu Z. Gazit, MD