

CURRICULUM VITAE



DR. MED. IOANNIS TZANAVAROS

CARDIAC SURGEON, CERTIFIED CONGENITAL CARDIAC SURGEON,
PAEDIATRIC CARDIAC SURGEON

PERSONAL DATA:

- First and last name Ioannis Tzanavaros
- Date and place of birth October 31, 1974 / Cyprus
- Citizenship of Cyprus
- Marital status non-marital cohabitation, 4 children
- Telephone (mobile) 0049172-3264269
- E-Mail dr.tzanavaros@gmail.com
- Current Job Director Cardiac Innovation Center of Apollonion

SCHOOL EDUCATION:

- 1980-1986 Elementary School Polis / Cyprus
- 1986-1989 Gymnasium School Polis / Cyprus
- 1989-1992 Lyceum Polis / Cyprus. Graduated with excellent 19 7/11

MILITARY SERVICE

- 1992-1994 Compulsory Military Service, Cyprus

MEDICAL SCHOOL

- 1994-2000 Medical faculty of the National and Kapodistrian University of Athens / Greece. Scholarship from the Greek government. Graduation with very good.

PROFESSIONAL EXPERIENCE

- 07/2001-08/2001 Internship, Sana Heart Center Cottbus/Germany
09/2001 License to practice medicine in Germany
09/2001 Resident in cardiac surgery, Sana Heart Center Cottbus
03/2004-10/2004 Intensive medical training
11/2007 Board certification in cardiac surgery
11/2007-08/2009 Attending surgeon, Sana Heart Center Cottbus
- 09/2009 Attending surgeon, Sana Heart Surgery Stuttgart (academic teaching hospital of the University of Tübingen)
07/2010 Senior consultant in Sana Heart Surgery Stuttgart
02/2012 Board certification in surgery for congenital heart defects
01/2013-03/2016 Deputy Head of the Department of surgery of congenital heart defects, Sana Heart Surgery Stuttgart
- 04/2016-09/2016 Senior consultant and deputy head of the department for surgery of congenital heart defects, MHH-University of Hanover
- 10/2016-06/2021 Head of the department for surgery of congenital heart defects / pediatric cardiac surgery, Sana Heart Surgery Stuttgart.
From 07/2021 Director Cardiac Innovation Center of Apollonion

DOCTORATE

- 07/11/2007 Charité / University Medicine Berlin
Topic "Unipolar temperature-controlled radio-frequency ablation as an accompanying procedure in cardiac surgery for the treatment of atrial fibrillation"
<https://refubium.fu-berlin.de/handle/fub188/1145>
Magna cum laude after a public disputation

MEMBERSHIPS

- German Society for Thoracic, Cardiac and Vascular Surgery
- European Association for Cardio-Thoracic Surgery (EACTS)
- CTS Surgery Network

LANGUAGES

- Greek
- Fluently spoken and written German and English

LIST OF PUBLICATIONS

1. **5 years experience with unipolar radiofrequency ablation for the surgical treatment of atrial fibrillation.** Thorac cardiovasc Surg 2006; 54 DOI: 10.1055/s-2006-925887. I. Tzanavaros, S Saenger, V Herwig, R Meyer, JM Knörig.
2. **Temperature-controlled unipolar and irrigated bipolar radiofrequency ablation for the treatment of chronic atrial fibrillation: Results of six years experience.** The Heart Surgery Forum, Volume 9, Supl. 2, 2006;39. I Tzanavaros, H Manus, Y Finkbeiner, S Saenger, V Herwig, J Knörig.
3. **Epicardial irrigated radiofrequency ablation for the treatment of chronic atrial fibrillation in CABG and aortic valve patients.** Thorac cardiovasc Surg 2007; 55DOI: 10.1055/s-2007-967374. I Tzanavaros, V Herwig, H Manus, Y Finkbeiner, J Knörig.
4. **Paroxysmal atrial fibrillation. The surgical solution through ablation procedures for a serious clinical problem of heart surgery patients.** Interact CardioVasc Thorac Surg 2007;6:S1-S172; Suppl. 1 to Vol. 6. I.Tzanavaros, A. Bauer, H. Manus,V. Herwig, Y Finkbeiner, J Knoerig.
5. **Sternal wire removal to treat persistent chest wall pain after median sternotomy. Results of 10 years experience.** Interact CardioVasc Thorac Surg 2007;6:S1-S172; Suppl. 1 to Vol. 6 . I Tzanavaros, A Rajca, H Manus,V Herwig, Y Finkbeiner, J Knoerig.
6. **Reduction plastic of the posterior left atrial wall and endocardial radiofrequency ablation in patients with giant left atrium, mitral valve disease and chronic atrial fibrillation (AF). Long term results of a single center.** Thorac cardiovasc Surg 2008; 56DOI: 10.1055/s-2008-1037862. I Tzanavaros, A Bauer, A Heyde, K Pytlik, Y Finkbeiner, S Sängner, H Manus, V Herwig, J Knörig.
7. **Persistent chest wall pain after median sternotomy due to sternal wires. Who is suffering and how effective is wire removal?** Thorac cardiovasc Surg 2008; 56DOI: 10.1055/s-2008-1038072. I Tzanavaros, Y Finkbeiner, J Puttke, H Manus, S Sängner, V Herwig, J Knörig.
8. **Is concomitant ablation of paroxysmal atrial fibrillation justified?** The Heart Surgery Forum;Volume 11, Supplement 1 / April 2008. I Tzanavaros, V Herwig, S Sängner, H Manus, Y Finkbeiner, J Knoerig.

9. **Incidence of preoperative atrial fibrillation in cardiac surgery patients and impact of concomitant rhythm surgery on outcome.** The Heart Surgery Forum;Volume 11, Supplement 1 / April 2008. I Tzanavaros, V Herwig, S Sanger, H Manus, Y Finkbeiner, J Knoerig.

10. **Long-term results of radiofrequency ablation used for the surgical treatment of atrial fibrillation associated with rheumatic mitral valve disease.** Thorac cardiovasc Surg 2008; 56DOI: 10.1055/s-2008-1037862. I Tzanavaros, A Rajca, V Herwig, A Heyde, H Manus, Y Finkbeiner, J Knoerig.

11. **The effect of preoperative atrial fibrillation on survival following mitral valve repair for degenerative mitral regurgitation.** Alexiou, Doukas, Oc, et al. Eur J Cardiothorac Surg 2007;31:586-591. doi:10.1016/j.ejcts.2006.12.039

12. **Impact of preoperative medication on postoperative bleeding, blood transfusion and on reoperation as a result of bleeding in CABG patients. Influence of intraoperative and postoperative management.** Thorac cardiovasc Surg 2007; Volume 57, Supplement 1 / February 2009. I Tzanavaros, J Knoerig, A Smechowski.

13. **Prevention of atrial fibrillation after coronary artery bypass grafting via atrial electromechanical interval and use of amiodarone prophylaxis.** Roshanali, Mandegar, Yousefnia, et al Interact CardioVasc Thorac Surg 2009;8:421-425/icvts.2008.191403

14. **Mitral valve surgery plus concomitant atrial fibrillation ablation is superior to mitral valve surgery alone with an intensive rhythm control strategy.** von Oppell UO, Masani N, O'Callaghan P, et al.Eur J Cardiothorac Surg. 2009 Apr;35(4):641-50. Epub 2009 Feb 23.

15. **Surgical ablation in patients with impaired systolic function.** Tzanavaros I, Horke A, Doll N, Herwig V, Knoerig J, Grauhan O. Thoracic and Cardiovascular Surgeon Jahr:2010; Ausgabe:58(Suppl 1): Seiten:S147.

16. **Mid-term outcome of patients with atrial fibrillation prior to cardiac surgery with and without concomitant ablation.** Tzanavaros I, Herwig V, Grauhan O, Knoerig J, Finkbeiner Y, Horke A, Doll N. Thoracic and Cardiovascular Surgeon Jahr:2010; Ausgabe:58(Suppl 1): Seiten:S106.

17. **Postoperative extra-corporeal mechanical support in neonates and infants. Impact of residual lesions on outcome.** A. Horke, L. Meschenmoser, I. Tzanavaros, J. Rein. February 2010, The Thoracic and Cardiovascular Surgeon 58(S 01), DOI: 10.1055/s-0029-1246772

18. **Novel pulmonary valve reconstruction technique using autologus pulmonary artery wall.** I. Tzanavaros, A. Narr, N. Doll, A. Horke. February 2011, The Thoracic and Cardiovascular Surgeon 59(S 01), DOI: [10.1055/s-0030-1269153](https://doi.org/10.1055/s-0030-1269153)

19. **Single patch repair of complete atrioventricular septal defect in neonates within the first three months of age suffering from therapy refractory heart failure. Is it feasible?.** A. Horke, I. Tzanavaros, ..., N. Doll. February 2011, The Thoracic and Cardiovascular Surgeon 59(S 01), DOI: [10.1055/s-0030-1269155](https://doi.org/10.1055/s-0030-1269155)

20. **CoSeal reduces the severity of pericardial adhesions and the operation time in pediatric cardiac surgery patients.** A. Narr, I. Tzanavaros, N. Doll, ..., A. Horke. February 2011, The Thoracic and Cardiovascular Surgeon 59(S 01), DOI: [10.1055/s-0030-1269148](https://doi.org/10.1055/s-0030-1269148)

21. **Quo vadis pulmonary autograft--the ross procedure in its second decade: a single-center experience in 645 patients.** Weimar T, Charitos EI, Liebrich M, Roser D, Tzanavaros I, Doll N, Hemmer WB. Weimar T, et al. Ann Thorac Surg. 2014 Jan;97(1):167-74. doi: 10.1016/j.athoracsur.2013.07.078. Epub 2013 Sep 29. Ann Thorac Surg. 2014. PMID: 24083796

22. **RVOT Replacement with the Novel Vascutek RVOT ELAN Biplex (TM) Conduit: Initial Results in the First 12 Patients.** Ioannis Tzanavaros. January 2014, Cardiology 128(2):154-154

23. **Mid-term results after repair of Anomalous Origin of Left Coronary Artery from the Pulmonary Artery (ALCAPA): Takeuchi repair vs coronary transfer.** A. Neumann, D. Böthig, D. Bobylev, ..., I. Tzanavaros, ..., A. Horke. February 2014, The Thoracic and Cardiovascular Surgeon 62(S 01), DOI: [10.1055/s-0034-1367188](https://doi.org/10.1055/s-0034-1367188)

24. **Hybrid endovascular prosthesis in complex thoracic aortic disease: A tool that really matters or just a toy?** M. Liebrich, D. Röser, C. Maletskidis, ..., I. Tzanavaros, ..., W. Hemmer. February 2014, The Thoracic and Cardiovascular Surgeon 62(S 01), DOI: [10.1055/s-0034-1367280](https://doi.org/10.1055/s-0034-1367280)

25. **[Prevention and treatment of cardiac arrhythmia in patients with congenital heart defects: surgical aspects].** Horke A, Tzanavaros I. Horke A, et al. Herzschr. 2014 Sep;25(3):188-97. doi: 10.1007/s00399-014-0334-6. Epub 2014 Aug 28. Herzschr. 2014. PMID: 25164600 German.

26. **The David procedure for salvage of a failing autograft after the Ross operation.**
 Liebrich M, Weimar T, Tzanavaros I, Roser D, Doll KN, Hemmer WB. Liebrich M, et al.
 Ann Thorac Surg. 2014 Dec;98(6):2046-52. doi: 10.1016/j.athoracsur.2014.06.065.
 Epub 2014 Oct 3. Ann Thorac Surg. 2014. PMID: 25282166

27. **Valve-Sparing Reimplantation Technique for Treatment of Neo-aortic Root Dilatation Late after the Arterial Switch Operation: Raising the Bar.** Markus Liebrich^{1,2} Michael Scheid^{1,2} Frank Uhlemann³ Wolfgang B. Hemmer^{1,2}. Address for correspondence Ioannis Tzanavaros, MD. Thorac Cardiovasc Surg Rep 2014;3:16–18.

28. **Aortic valve/root procedures in patients with an anomalous left circumflex coronary artery and a bicuspid aortic valve: anatomical and technical implications.**
 Liebrich M, Tzanavaros I, Scheid M, Voth W, Doll KN, Hemmer WB. Interact Cardiovasc Thorac Surg. 2015 Mar 27. pii: ivv063. [Epub ahead of print]

29. **A Novel Designed Valved Conduit for RVOT Reconstruction in Grown-up Congenital Heart Patients: a Glimpse Down the Road.** Liebrich M, Hemmer W, Uhlemann F, Merz C, Voth W, Scheid M, Tzanavaros I. Liebrich M, et al. Thorac Cardiovasc Surg. 2016 Jan;64(1):36-43. doi: 10.1055/s-0035-1564930. Epub 2015 Oct 16. Thorac Cardiovasc Surg. 2016. PMID: 26474008

30. **Secundum atrial septum defect closure in neonates and infants - scrutinizing three different surgical approaches closely**
 Markus Liebrich¹, Anita Narr¹, Brigitte Stäbler¹, Alexander Horke², Frank Uhlemann³, Michael Scheid¹, Ioannis Tzanavaros¹. ISMICS Annual Meeting 2016. Book of Abstracts

31. **Impact of a Polymeric Matrix Referring the Occurrence of Pericardial Adhesions/Operation Time in Neonates/Infants Scheduled for Staged Corrective Surgery.** I. Tzanavaros, A. Narr, B. Stäbler, ..., M. Scheid. January 2016, The Thoracic and Cardiovascular Surgeon 64(S 01), DOI: [10.1055/s-0036-1571523](https://doi.org/10.1055/s-0036-1571523)

32. **Long-term results after repair of anomalous origin of left coronary artery from the pulmonary artery: Takeuchi repair versus coronary transfer.** Neumann A, Sarikouch S, Bobylev D, Meschenmoser L, Breyman T, Westhoff-Bleck M, Scheid M, Tzanavaros I, Bertram H, Beerbaum P, Haverich A, Boethig D, Horke A. Neumann A, et al. Eur J Cardiothorac Surg. 2017 Feb 1;51(2):308-315. doi: 10.1093/ejcts/ezw268. Eur J Cardiothorac Surg. 2017. PMID: 28186291 No abstract available.

33. **25 Years of Experience in Pediatric Pacing: Is There an Achilles Heel?** C. Merz, D. Böthig, M. Liebrich, ..., I. Tzanavaros, February 2017, The Thoracic and Cardiovascular Surgeon 65(S 02):S111-S142, DOI: 10.1055/s-0037-1598999

34. **Endokarditis nach Aorta-ascendens-Ersatz: Inzidenz, klinische Präsentation und perioperatives Outcome.** M. Liebrich, V. Voth, I. Tzanavaros, W. Hemmer. Zeitschrift für Herz- Thorax- und Gefäßchirurgie 31(4)DOI: 10.1007/s00398-017-0149-y

35. **Influence of the Preoperative AV Valve Insufficiency and Surgical Anatomy on the Results of Single-patch Repair in Complete Atrioventricular Septal Defect.** V. Sheytanov, A. Narr, H. Schaefer,..., I. Tzanavaros. The Thoracic and Cardiovascular Surgeon 66(S 01):S1-S110

36. **Minimal-invasiver Verschluss von Ventrikelseptumdefekten in der Kinderherzchirurgie.** Liebrich, M., Uhlemann, F., Röhl, T., Doll, N., Tzanavaros, I. (2018): in: Zeitschrift für Herz-,Thorax- und Gefäßchirurgie 32, 1, S. 14–20.

37. **Modified Norwood stage I operation. Possible operative technique for hypoplastic left heart syndrome.** M. Liebrich¹, M. Schweder¹, A. Diegeler¹, A. Narr¹, A. Gomes de Sena^{1,2}, T. Eberle³, S. Dähmlow³, U. Schweigmann³, V. Ocker³, F. Uhlemann³, C. Schepp⁴, T. Röhl⁴, N. Doll¹, I. Tzanavaros¹, Zeitschrift für Herz-,Thorax- und Gefäßchirurgie volume 32, pages459–470(2018)

38. **Performance of the Labcor Stentless Valved Pulmonary Conduit in Patients with congenital heart Disease.** Ioannis Tzanavaros, Markus Liebrich. Sana Herzchirurgie Stuttgart, Stuttgart, Germany. Heart Valve Society Annual Meeting 2018. Book of Abstracts

39. **Pulmonary valve insufficiency 12 years after high-velocity blunt chest trauma.** Sheytanov V, Wehbe MS, Doll N, Tzanavaros I. Eur J Cardiothorac Surg. 2019 Jun 1;55(6):1234-1235. doi: 10.1093/ejcts/ezy353.

40. **Mode of Failure of a Composite Stentless Conduit for RV-PA Connection in Infant Heart Surgery: Histomorphological and Surgical Considerations.** M. Liebrich, A. Degler, A. Narr, M. Schweder, C. Schepp, T. Röhl, F. Uhlemann, N. Doll, I. Tzanavaros
a. Thorac Cardiovasc Surg 2019; 67(S 01): S1-S100. DOI: 10.1055/s-0039-1678836

42. **Aortic Valve Replacement With a Custom Made 15 mm Mechanical Prosthesis in Pediatric Patients.** Ioannis Tzanavaros & Markus Liebrich. Structural Heart . The Journal of the Heart Team. Volume 3, 2019 - Issue sup1: 2019 Heart Valve Society Annual Scientific Meeting. <https://doi.org/10.1080/24748706.2019.1590064>

43. **The David procedure for surgical management of neo-aortic root dilatation following the arterial switch operation: Technical aspects.** Liebrich M, Tzanavaros I, Doll N, Hemmer W. Multimed Man Cardiothorac Surg. 2019 Apr 16;2019. doi: 10.1510/mmcts.2019.013.

- 44. Repeated rapid regression of two cardiac rhabdomyoma in a newborn with Everolimus.** Mitt S., Eberle T., Tzanavaros I., Uhlemann F. AEPC Annual Meeting. Book of Abstracts
- 45. Twelve Years of Complete Atrioventricular Septal Defect Repair.** Sena A, Sheytanov V, Liebrich M, Narr A, Schweigmann U, Uhlemann F, Doll N, Tzanavaros I. Sena A, et al. Rev Port Cir Cardiotorac Vasc. 2019 Jul-Sep;26(3):187-193. Rev Port Cir Cardiotorac Vasc. 2019. PMID: 31734969
- 46. Surgical Treatment of a Neuromucoepidermoid Carcinoma of the Left Main Bronchus via Posterolateral Thoracotomy in a 4-Year-Old Boy.** Liebrich M, Friedel G, Amrhein P, Tzanavaros I. Liebrich M, et al. Thorac Cardiovasc Surg Rep. 2020 Jan;9(1):e1-e3. doi: 10.1055/s-0039-3400533. Epub 2020 Jan 16. Thorac Cardiovasc Surg Rep. 2020. PMID: 31956469
- 47. Triple-Arterial Cannulation for Whole-Body Perfusion during Complex Aortic Arch Reconstruction in Newborns Improves Clinical Outcome: A Matched-Pair Analysis.** M. Liebrich, M. Schweder, A. Degler, A. Narr, T. Röhl, V. Ocker, U. Schweigmann, F. Uhlemann, N. Doll, I. Tzanavaros. Thorac Cardiovasc Surg 2020; 68(S 01): S1-S72 DOI: 10.1055/s-0040-1705305
- 48. Prediction of prognosis in patients with tetralogy of Fallot based on deep learning imaging analysis.** Gerhard Paul Diller # ¹, Stefan Orwat # ², Julius Vahle ², Ulrike M M Bauer ^{3 4}, Aleksandra Urban ⁴, Samir Sarikouch ⁵, Felix Berger ^{6 7}, Philipp Beerbaum ⁸, Helmut Baumgartner ², German Competence Network for Congenital Heart Defects Investigators . 2020 Jul;106(13):1007-1014. doi: 10.1136/heartjnl-2019-315962. Epub 2020 Mar 11.
- 49. Paediatric aortic valve replacement using decellularized allografts.** Horke A, Bobylev D, Avsar M, Meyns B, Rega F, Hazekamp M, Huebler M, Schmiady M, Tzanavaros I, Cesnjevar R, Ciubotaru A, Laufer G, Zimpfer D, Jashari R, Boethig D, Cebotari S, Beerbaum P, Tudorache I, Haverich A, Sarikouch S. Horke A, et al. Eur J Cardiothorac Surg. 2020 Oct 1;58(4):817-824. doi: 10.1093/ejcts/ezaa119.
- 50. Carney complex featuring giant intracardiac biatrial myxoma in an adolescent girl.** Sheytanov V, Schaefer H, Hitzle P, Nossal R, Uhlemann F, Tzanavaros I, Spoehr F, Seeburger J. Eur Heart J. 2020 Dec 28;ehaa1047. doi: 10.1093/eurheartj/ehaa1047.
- 51. Clinical Impact of Residual Shunts after Septal Defect Closure: Do Small Residual Defects under 2 mm Really Matter?** H. Schaefer, V. Sheytanov, A. Narr, I. Tzanavaros. Thorac Cardiovasc Surg 2021; 69(S 01):S1-S85 DOI: 10.1055/s-0041-1725807

52. The Evolution of a Residual Insufficiency of the Left AV Valve after Correction of a Complete AV Canal. V. Sheytanov, A. Sena, A. Narr, I. Tzanavaros. Thorac Cardiovasc Surg 2021; 69(S 01): S1-S85
DOI: 10.1055/s-0041-1725699