CURRICULUM VITAE

Yakov Elgudin, M.D., Ph.D., F.A.C.S.
Assistant Professor of Surgery
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CERTIFICATION AND LICENSE

American Board of Thoracic Surgery; Board Certified (#7166)
American Board of Surgery; Board Certified (#049 532)
Medical License, State of Ohio: 35-082495 (Current)
Medical License, State of California: A83178 (Current)
Medical License, State of Nebraska: 25098 (Current)
Medical License, State of Colorado: 38898 (Inactive)
ECFMG Certificate: 0-548-537-0 (Permanent)

EDUCATION

1995	Ph.D. Degree: Institute of Transplantation and Artificial Organs Moscow, Russia
1991	M.S. - Institute of Transplantation and Artificial Organs Moscow, Russia
1983-1989	M.D. Degree, School of Medicine of Kemerovo State Medical Institute, Kemerovo, Russia

PROFESSIONAL MEMBERSHIPS

American College of Surgeons
Society of Thoracic Surgeons
International Society for Heart and Lung Transplantation
European Association for Cardiothoracic Surgery
American Heart Association
American Medical Association
Cardiothoracic Surgery Network
Russian American Medical Association

GRADUATE TRAINING AND PROFESSIONAL POSITIONS

2014 – present Director, Cleveland VA Medical Center LVAD and Mechanical Circulatory Support Program

2013 – present Chief, Division of Cardiothoracic Surgery
Louis Stokes Cleveland VA Medical Center
Cleveland, Ohio

2006 – 2013 Assistant Professor of Surgery
Staff Cardiothoracic Surgeon
Louis Stokes Cleveland VA Medical Center
Department of Surgery
Case Western Reserve University School of Medicine
Cleveland, Ohio

2004–2006 Fellow in Congenital Heart Surgery/ Thoracic Transplantation
University Hospitals Case Medical Center
Cleveland, Ohio
UCLA Medical Center
Los Angeles, California

2003- 2004 Cardiothoracic Surgery Chief Resident
UCLA Medical Center
Los Angeles, California

2002-2003 Cardiothoracic Surgery Resident
Case Western Reserve University School of Medicine
University Hospitals of Cleveland
Cleveland, Ohio

1997-2002 Resident and Chief Resident, General Surgery Residency
Exempla-Saint Joseph Hospital
Denver, Colorado

1996-1997 Clinical Fellow, Cardiothoracic Surgery
St. Luke/Roosevelt Hospital Center
New York, New York

1991-1995 Surgeon in Training, Dept. of Cardiovascular Surgery
Kemerovo Center of Cardiology
Kemerovo, Russia

1989-1991 Resident in Surgery
Kemerovo Regional Hospital
Kemerovo, Russia

AWARDS

2002	Outstanding Resident Award Exempla-Saint Joseph Hospital, Denver, Colorado
1992	Award for a Best Research Paper. XXIV Congress of Polish Surgical Society, Forum of Thoracic and Cardiovascular Surgery, Poznan, Poland
1986-1989	State Award and Stipend for Excellence in Medical School

PATENTS

1994 Russian Federation Patent No. 2008767, " Method of Conservation of Tissue for Bioprostheses of the Heart Valves and Vessels"
1993 USSR Patent No. 17885625, "Pretreatment Method for Bioprostheses"
1990 USSR Patent No. 156896, "Method of Conservation of Bioprostheses of the Heart Valves and Vessels"

MAIN ABSTRACTS, PUBLICATIONS AND PRESENTATIONS

1. S. Madhwal, J.Goldberg, J.Barcena, A.Guha, P.Gogate, B.Cmolik, and **Y.Elgudin.** An Unusual case of Acute Mitral Regurgitation: Idiopathic Hypereosinophilic Syndrome. Ann Thorac Surg 2012;93:974-977

2. **Y. Elgudin**, M. Smith, B. Cmolik, D. Golovaty, N. Greco, M. Laughlin, G. Wnek. Scaffold manufacturing for Heart Valve Tissue Engineering. The international Society for Heart and Lung Transplantation 29thAnnual Meeting and Scientific Sessions. Paris, France. April, 2009. Suppl. J of Heart and Lung Transplantation, V.28, S2, 2009; p.S205.

3. M. Smith, **Y. Elgudin**, O. Arnoult, N. Greco, M. Laughlin, S. Emancipator, B. Cmolik, and G. Wnek. Development of a Novel Heart Valve Tissue Engineering Scaffold with Incorporated Cykotine Delivery. American Heart Association annual meeting, New Orleans. November, 2008. Circulation 118, 18, Suppl.2, p.S280

4 M.Smith, **Y. Elgudin**, O. Arnoult, N. Greco, M. Laughlin, S. Emancipator, B. Cmolik, and G. Wnek. Development of Polymer-Based Heart Valve Tissue Engineering Scaffolds with Growth Factor Delivery**.** Presented at Material Research Society Fall Meeting, Boston. December 2, 2008.

5. O.Arnault, **Y. Elgudin**, Meghan E Smith, Nicholas Greco, Mary Laughlin, Steven Emancipator, Brian Cmolik and Gary E Wnek. Bio-inspired Tissue Engineering Scaffolds for Heart Valves. Presented at Material Research Society Fall Meeting, Boston. December 4, 2008.

6. M. Smith, O. Arnoult, N. Greco, M. Laughlin, S. Emancipator, B. Cmolik, G. Wnek and **Y. Elgudin.** Evaluation of Mechanical Properties of Electrospun Scaffolds for Heart Valve Tissue Engineering. Case Western Reserve University, School of Medicine, Department of Surgery. 2008 Research Abstract p13.

7. **Y. Elgudin**, H. Singh, R. Bengur, E. Siwik, K. Zahka, and H. Hennein. Aortic coarctation with anomalous origin of the left main coronary artery from the right pulmonary artery. Two stage repair. Book of Research Abstracts. Department of Surgery, Case School of Medicine, Cleveland, Ohio, 2006, p.1.
8. S. Schomisch, J. Andrews, H. Hennein, A. Aharon, and **Y.Elgudin.** Diamine extension of glutaraldehyde crosslinks attenuates aortic wall calcification in rat subcutaneous model. Book of Research Abstracts. Department of Surgery, Case School of Medicine, Cleveland, Ohio, 2006, p. 2.
9. **Y. Elgudin**, E.Siwik, S.Seshadri, and H.Hennein. Supravalvular aortic and pulmonary artery stenoses complicated by left main coronary artery stenosis. Case report. Book of Research Abstracts. Department of Surgery, Case School of Medicine, Cleveland, Ohio, 2006, p.3.
10. E. Montague, M. Henderson, J. Ostrowsky, **Y. Elgudin**, H. Hennein. Mechanical efficiency of the centrifugal pumps used in ECMO and ventricular assist. Proceedings of the Second International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion. Toronto, Canada, May 18-20, 2006, p.125.
11. **Y.Elgudin**. Single ventricle physiology. Understanding and perioperative management. Pediatric Intensive Care Unit Annual Lecture Course. Rainbow Babies and Children's Hospital, Case Western Reserve University School of Medicine, Cleveland, Ohio, 2006.
12. **Y.Elgudin**. Congenital bronchopulmonary anomalies. Grand Rounds. Department of Pediatrics, Case Western Reserve University School of Medicine, Cleveland, Ohio, 2006.
13. **Y.Elgudin**. Embryology and physiology of congenital heart disease. Medical students IV course of lectures. Case Western Reserve University School of Medicine, Cleveland, Ohio, 2006.
14. **Y.Elgudin**. Basic techniques in cardiothoracic surgery. Grand Rounds. Division of Cardiothoracic Surgery, Department of Surgery, Case Western Reserve University School of Medicine, Cleveland, Ohio, 2005.
15. **Y. Elgudin**, J. Myers, A. R. Bengur, E. Siwik, S. Deleon, S. Seshadri, H. Hennein. High Incidence of Heparin-Induced Thrombocytopenia with Thrombosis in Patients Undergoing Fontan Operation. IV World Congress of Pediatric Cardiology and Cardiac Surgery, Buenos Aires, Argentina, 2005
16. S. Seshadri, **Y. Elgudin**, S. Schomisch, J. Ostrowsky, M. Henderson, H.Hennein. Determinants of Cerebral Saturation as Measured by Near Infrared Spectroscopy in an Animal Model of Cardiopulmonary Bypass. IV World Congress of Pediatric Cardiology and Cardiac Surgery, Buenos Aires, Argentina, 2005
17. S.Seshadri, **Y. Elgudin**, E. Siwik, H.Hennein. Supra valvular Aortic Stenosis and Pulmonary Artery Stenosis Complicated by the Left Main Coronary Artery Stenosis. Annual Meeting of ODICH, Dayton, Ohio, 2005

15. **Y.Elgudin**. Mechanical circulatory support in pediatric cardiac surgery. Grand Rounds. Division of Cardiothoracic Surgery, Department of Surgery, Case Western Reserve University School of Medicine, Cleveland, Ohio, 2004.

18. **Y. Elgudin.** Xenobioprostheses in a surgical treatment of heart valve defects. Clinical and experimental evaluation of new models of the heart valve Bioprostheses. PhD. Thesis, Moscow, Russia, 1995.

20. **Y. Elgudin**, B. Fyodorov. Clinical results of the use of heart valve Bioprostheses. In LS Barbarash, NA Barbarash, I. Zhuravleva (eds): Heart Valve Bioprostheses – Problems and Perspectives. Kemerovo, Russia, 1995, pp. 135-143.

21. **Y. Elgudin.** Methods of evaluation of the function of bioprostheses. In LS Barbarash, NA Barbarash, I. Zhuravleva (eds): Heart Valve Bioprostheses – Problems and Perspectives. Kemerovo, Russia, 1995, pp. 151-189.

22. I. Zhuravleva, **Y. Elgudin.** First clinical experience of use of bioprostheses pretreated with bisphosphonates and epoxy compounds. In LS Barbarash, NA Barbarash, 20. I. Zhuravleva (eds): Heart Valve Bioprostheses – Problems and Perspectives. Kemerovo, Russia, 1995, pp. 370-377.

23. L. Barbarash, A. Krikovtsov, S. Ivanov, A. Luchankin, **Y. Elgudin**, I. Zhuravleva. New bovine internal thoracic artery Bioprostheses treated with epoxycompounds in arterial reconstructions. Angiologia and Sosudistaya Chirurgia (Angiology and Vascular Surgery) 2:43, 1995

24. V. Abalmasov, **Y. Elgudin**, S. Kockorin, et al. Doppler evaluation of function of different types of Bioprostheses of the heart valves. Scientific Conference, "Contemporary Problems in Cardiology", Tomsk, Russia, 1995.

25. S. Kockorin, **Y. Elgudin**, V. Abalmasov. Clinical results of implantation of the bioprostheses protected from calcification. Scientific Session of Russian Academy of Medical Science, "Modern Surgical Correction of Heart Defects", Novosibirsk, Russia, 1995.

26. **Y. Elgudin**, V. Abalmasov. Primary dysfunction of the heart valve bioprostheses. Scientific Session of Russian Academy of Medical Science, "Modern Surgical Correction of Heart Defects", Novosibirsk, Russia, 1995

27. L. Barbarash, B. Nechoroshev, **Y. Elgudin**. New generation of the heart valve bioprostheses. Experimental and first clinical data. The 42nd Annual Meeting of the Scandinavian Association for Thoracic and Cardiovascular Surgery. Tampere, Finland, 1993.

28. L. Barbarash, B. Nechoroshev, S. Novickova, V. Popov, **Y. Elgudin**. Heart valve bioprostheses of a new generation – experimental development and first clinical experience. 2nd All Russian Congress of Cardiovascular Surgeons. St. Petersburg, Russia, 1993.

29. L. Barbarash, A. Krickovstov, S. Novickova, A. Luchankin, I. Zhuravleva, **Y. Elgudin**. Experimental evaluation of vascular Bioprostheses pretreated with epoxy compound. 2nd All Russian Congress of Cardiovascular Surgeons. St. Petersburg, Russia, 1993.

30 **Y. Elgudin**, B. Nechoroshev, L. Barbarash. New approach to the prevention of calcification of heart valve Bioprostheses. XXIV Congress of Polish Surgical Society, Forum of Thoracic and Cardiovascular Surgery, Poznan, Poland, 1992.

31. L. Barbarash, A. Krikovtsov, T. Shraer, **Y. Elgudin**. Vascular biological prostheses: Evaluation of implications and approaches to conservation. IX Congress of the M. DeBakey International Surgical Society. Frankfurt/Main, Germany, 1992.
32. **Y. Elgudin.** New approaches to pretreatment of the heart valve Bioprostheses. MS Thesis, Moscow, Russia, 1991
33. L. Barbarash, S. Novickova, B. Nechoroshev, S. Kockorin, V. Popov, **Y. Elgudin**, et al. Ten year results of heart valve bioprostheses. Present status and future development. Grudnaya and Serdechno-Sosudistaya Chirurgia (Thoracic and Cardiovascular Surgery) 7:21-25, 1991.
34. B. Nechoroshev, A. Burago, I. Zhuravleva, **Y. Elgudin**, et al. First clinical experience of mitral valve replacement with Bioprostheses of a new model. International Symposium, "Experimental Cardiovascular Surgery", Suzdal-Moscow, Russia, 1991.
35. A. Shaposhnikov, A. Burago, **Y. Elgudin** et al. Prevention of calcification of the bioprostheses of the heart valves by modification of tissue. International Symposium, "Experimental Cardiovascular Surgery", Suzdal-Moscow, Russia, 1991.
36. L. Barbarash, B. Nechoroshev, A. Shaposhnikov, **Y. Elgudin** et al. Clinical and experimental evaluation of new approaches to the creation of heart valve bioprostheses. All-Union Congress of Cardiovascular Surgeons, Moscow, USSR, 1990.
37. L. Barbarash, B. Nechoroshev, V. Popov, **Y. Elgudin** et al. Current status and prospective of development of the heart valve bioprostheses in Kemerovo Center of Cardiology. All-Union Congress of Cardiovascular Surgeons, Moscow, USSR, 1990.
38. I. Zhuravleva, N. Dobrova, S. Novickova, G. Derckatch, L. Kosterinla, A. Offengenden, B. Nechoroshev, **Y. Elgudin**, and L. Barbarash. New approach to the creation of heart valve Bioprostheses resistant to calcification. Grudnaya Chirurgia (Thoracic Surgery) 5:25-30, 1989.
39. L. Barbarash, I. Zhuravleva, I. Alferyev, I. Kotlyarevsky, N. Michalin, B. Nechoroshev, and **Y. Elgudin**. Prevention of calcification of the heart valve Bioprostheses by fixation of bisphosphonates. Grudnaya Chirurgia (Thoracic Surgery) 6:38-42, 1988.

POSTGRADUATE COURSES AND WORKSHOPS

1. **INDICATIONS AND TECHNICAL ASPECTS OF THE IMPLANTATION OF THE HEARTMATE II LVAD. CHICAGO, IL 2006.**

2. **BASIC SCIENCE AND CLINICAL APPLICATION OF CO2 LASER IN TMR. LAS VEGAS, 2006.**

3. **MITRAL VALVE REPAIR FOR DEGENERATIVE AND ISCHEMIC MITRAL REGURGITATION. MISSOULA, MN 2006.**

4. **NEW DIMENSIONS IN CARDIAC SURGERY – TREATMENT OF ATRIAL FIBRILLATION AND USE OF THE BIOCOR TISSUE VALVE. PHOENIX, AZ, 2007.**

5. **HEART VALVE SURGERY UPDATE. TORONTO, CANADA, 2007**

6. **ENDOGRAFTING OF THORACIC AORTA. PHILADELPHIA, 2008**

7. **"ROSS" SUMMIT. ATLANTA, 2008**

8. **TRAINING SEMINAR : "CLINICAL APPLICATIONS AND BEYOND", NEW YORK, 2008**

9. **TANDEMHEART REFRESHER COURSE – HOUSTON, 2010**

10. **MINIMALLY INVASIVE CORONARY BYPASS SURGERY – LEFT ANTERIOR THORACOTOMY APPROACH - STATEN ISLAND, NY 2011**

SPECIAL PROFESSIONAL INTERESTS

Adult Cardiac Surgery
Mitral Valve Repair
Complex Aortic Surgery
Valve Sparing Aortic Root Surgery
Complex Redo Cardiac Surgery
Minimally Invasive CABG Surgery
Mechanical Circulatory Support
Heart and Lungs Transplantation
Tissue Engineering and Regenerative Medicine in Cardiovascular Surgery

OTHER SPECIAL INTERESTS

President of Russian American Medical Association (www.russiandoctors.org)
Medical Missions to Siberia for Adult and Pediatric Cardiac Surgery (2008 – present)
Classic and Contemporary American and Russian Literature