

## Curriculum vitae

### Personal information

**Name, surname: Martins Kalejs**  
**Birth date: 20th December 1981**  
**Address: 13 Pilsonu Str., Riga,**  
**Latvia, LV-1002**  
**e-mail: m.kalejs@gmail.com**

### Education

2009. – 2014. Doctoral programme (PhD studies) - Riga Stradins University (RSU), 16 Dzirciema str., Riga, Latvia.  
Thesis defended on 14th of May 2014: „Optimal Mechanical Parameters for Structural Components of Heart Valve Bioprostheses and Selection of a Matching Substitute Material”.
2006. –2011. Residency in cardiac surgery - University of Latvia, 3 Skolas str., Riga, Latvia. (site of training – Pauls Stradins Clinical University Hospital).
2000. – 2006. M.D. - Riga Stradins University, Faculty of Medicine. - 16 Dzirciema str., Riga, Latvia.

### Additional long term training (>1 month)

- 01.04.2008. – 30.09.2008. Fellowship in clinical and experimental cardiac surgery. Centre Hospitalier Universitaire Vaudois (CHUV), 46 rue du Bugnon, Lausanne, Switzerland.
- 02.07.2003. – 04.08.2003. Research work and training in molecular cytogenetics under tutorship of Prof. H. Scherthan. Max Plank Institute for Molecular Genetics, Berlin, Germany.
- 01.07.2002. – 30.08.2002. Research work and training under tutorship of Dr. J. Arribas. Project: “Identification of proteases involved in the generation of soluble growth factors”, Laboratori de Recerca Oncologica, Hospital Universitari Vall d’Hebron, Barcelona, Spain.

### Professional experience

2014. - ongoing Principal investigator – Laboratory of Biomechanical Research, Riga Stradins University, 5 Ratsupites str., Riga, Latvia
2011. – ongoing Staff cardiac surgeon - Centre of Cardiac surgery, Pauls Stradins Clinical University hospital, 13 Pilsonu str., Riga, Latvia.

2006. – 2011. Resident in cardiac surgery - Centre of Cardiac surgery, Pauls Stradins Clinical University hospital, 13 Pilsonu str., Riga, Latvia.
- 01.04.2008. – 30.09.2008. Clinical consultant during development of Symetis ACURATE valve - Symetis SA, Chemin de la Venoge 11, Ecublens, Switzerland.
- 01.04.2008. – 30.09.2008. Resident - Department of Cardiovascular surgery, Centre Hospitalier Universitaire Vaudois (CHUV), 46 rue du Bugnon, Lausanne, Switzerland.
2006. – 2007. Consultant in molecular diagnostics - J.I.M. Ltd., 45 Ilukstes str., Riga, Latvia.
2003. – 2006. Assistant – Laboratory of Tumour Cell, Latvian Biomedical Research and Study Centre, 1 Ratsupites str., Riga, Latvia.

**Practical/  
theoretical  
courses  
attended**

Except scientific conferences and their satellite workshops

- The European Valve Repair Group: Aortic and Mitral Valve Repair Workshop, 30-31May, 2014, Kaunas, Lithuania;
- The European Valve Repair Group: Aortic and Mitral Valve Repair Workshop, June 29, 2012, Kaunas, Lithuania;
- European School Cardiac Level B, June 13-18, 2011, Bergamo, Italy;
- The European Valve Repair Group: Aortic and Mitral Valve Repair Workshop, June 10-11, 2011, Kaunas, Lithuania;
- European School Cardiac Level A, May 17-22, 2010, Bergamo, Italy;
- CoreValve Training Programme November 30 – December 1, 2009, Lausanne, Switzerland;
- EDWARDS Sapien Training Programme, September 8-9, 2009, Rouen, France;
- EACTS Academy: Open and endovascular aortic treatment, March 25-27, 2009, Bergamo, Italy;
- „Radiation – security and quality in medicine”, certificate #0640, Riga Technical University, 2009;
- Heart Valves, MV Repair and Atrial Fibrillation,

November 15, 2008, Budapest, Hungary;

- Heart Lab workshop, October 18-20, 2007, Zurich, Switzerland;
- Applied Science for Cardio-Thoracic Surgeons, April 19-21, 2007, Prague, Czech Republic.

**Research activities**

**Research projects**

2014. – ongoing. State research programme in medicine „Research on personalized monitoring, diagnostics and treatment of processes caused by atherosclerosis”, principal investigator.

2013. – ongoing. Grant of Latvian Science Council: „Research of cardiotropic viruses”, investigator.

2010. – 2014. State research programme in medicine “Research on stem cells and biomaterials. Research on pathogenesis and clinical manifestations of atherosclerosis”, investigator, coordinator.

2010. – 2012. ESF research project: “Creation of a new interdisciplinary scientific group for development of nanotechnology based approaches in cell biology with application in medicine”, investigator.

State research programme in medicine 2006. - 2009. Project ”Advancement of cardiac surgery in Latvia – development of new treatment methods and optimization of existing ones”, investigator, coordinator.

Grant of Latvian Academy of Sciences Nr. 05.1634/05.1634.1 - „Signalling and repair of DNA double strand breaks and their relation to apoptosis in limfoblastoid cell lines with different radiation sensitivity”, assistant.

Grant of Latvian Academy of Sciences Nr. 01.0245 - „Natural genotoxic resistance of tumours: mechanisms and prognosis”, assistant.

**Patents**

Method to create spatially ordered cell structures from adult living cells. Vladimirs Kozlovs, Andrejs Karpovs, Viktoija Priedite, Dace Avotiņa, Pēteris Stradiņš, Martiņš Kalejs, Vladimirs Kasjanovs, Vladimirs Mironovs. Latvian Patent Nr. P-12-78, Int. Cl. B01D 35/06, B03C 1/025.

**Awards** 2012 - Award of Latvian Academy of sciences to young researchers in cardiology for the work: „Studies of the mechanical properties of heart valve bioprotheses”.

Award of Latvian Academy of sciences - “Best young scientist of the year 2005”, for the work: “Study of mitotic catastrophe and it’s consequences in radioresistant tumours, it’s putative link with expression of meiotic genes after genotoxic treatment”.

**Languages spoken** Latvian- native language;  
Russian- fluent;  
English- fluent (TOEFL iBT score 116; IELTS – 7.5);  
German- fluent (Goethe-Zertifikat B2);  
French- basic knowledge.

**26th June 2015**