

4th Annual International Conference on  
MINIMALLY INVASIVE CARDIAC SURGERY AND SURGICAL  
ARRHYTHMOLOGY (AMICS2018)

**Program**  
**15-17 November 2018**

**Venue:** Vishnevsky National Medical Research Center of Surgery  
Address: 27 Bolshaya Serpukhovskaya Str., Serpukhovskaya Metro Station, Moscow

**Co-chairs:**

Academician Amiran Revishvili, MD, PhD (Moscow, Russia)  
Professor James Cox, MD (Chicago, USA)

**Executive Secretary:**

Professor Vadim Popov, MD, PhD (Moscow, Russia)

**Coordinators:**

Assoc. Prof. Olga Kislitsina, MD, PhD (Chicago, USA)  
Egor Malysenko, MD, PhD (Moscow, Russia)

**Russian Expert Committee:**

Acad. Renat Akchurin, MD, PhD, Russian Academy of Sciences, Moscow  
Acad. Bagrat Alekyan, MD, PhD, Russian Academy of Sciences, Moscow  
Acad. Yury Belov, MD, PhD, Russian Academy of Sciences, Moscow  
Acad. Aleksandr Karaskov, MD, PhD, Russian Academy of Sciences, Novosibirsk  
Acad. Yury Ostrovsky, MD, PhD, Belarusian Academy of Medical Sciences, Minsk (Belarus)  
Acad. Anatoly Pokrovsky, MD, PhD, Russian Academy of Sciences, Moscow  
Acad. Gennady Khubulava, MD, PhD, Russian Academy of Sciences, Saint Petersburg  
Elena Artyukhina, MD, PhD, Moscow  
Prof. Vladlen Bazylev, MD, PhD, Penza  
Prof. Karapet Davtyan, MD, PhD, Moscow  
Prof. Kirill Barbukhatti, MD, PhD, Krasnodar  
Nikolay Bayandin, MD, PhD, Moscow  
Aleksandr Bogachev-Prokofyev, MD, PhD, Novosibirsk  
Prof. Mikhail Gordeev, MD, PhD, Saint Petersburg  
Prof. Aleksey Evtushenko, MD, PhD, Tomsk  
Prof. Igor Zhbanov, MD, PhD, Moscow  
Prof. Vyacheslav Zakharevich, MD, PhD, Moscow  
Prof. Eduard Idov, MD, PhD, Yekaterinburg  
Timur Imaev, MD, PhD, Moscow  
Prof. Boris Kozlov, MD, PhD, Tomsk  
Prof. Oleg Lukin, MD, PhD, Chelyabinsk

Farkhad Rzaev, MD, PhD, Moscow  
Prof. Rinat Saitgareev, MD, PhD, Moscow  
Dmitry Tarasov, MD, PhD, Astrakhan  
Prof. Roman Komarov, MD, PhD, Moscow  
Prof. Sergey Kovalev, MD, PhD, Voronezh  
Aleksandr Romanov, MD, PhD, Novosibirsk  
Evgeny Rosseykin, MD, PhD, Penza  
Prof. Eduard Charchyan, MD, PhD, Corresponding Member of the Russian Academy of Sciences,  
Moscow  
Igor Chernov, MD, PhD, Astrakhan  
Prof. Aleksandr Chernyavsky, MD, PhD, Novosibirsk  
Prof. Yury Shneyder, MD, PhD, Kaliningrad  
Prof. Dmitry Shumakov, MD, PhD, Corresponding Member of the Russian Academy of Sciences,  
Moscow

**International Expert Committee:**

Prof. Niv Ad, MD (Morgantown, WV, USA)  
Prof. Stefano Benussi, MD, PhD (Brescia, Italy)  
Prof. Michael Borger, MD, PhD (Leipzig, Germany)  
Prof. Patrick McCarthy, MD (Chicago, IL, USA)  
Assoc. Prof. Manuel Castellà, MD (Barcelona, Spain)  
Prof Joseph Coselli, MD (Houston, TX, USA)  
Vadim Fedorov, PhD (Columbus, OH, USA)  
Prof. Mark La Meir, MD (Brussels, Belgium)  
Prof. Bruce Lytle, MD (Dallas, TX, USA)  
Assoc. Prof. Chris Malaisrie, MD (Chicago, IL, USA)  
Prof. Konstandinos Plestis, MD (Wynnewood, PA, USA)  
Prof. David Taggart, MD (Oxford, UK)  
Prof. James Thomas, MD (Chicago, IL, USA)

# Thursday, 15 November 2018

**08.30 – 09.00 Conference registration**

**09.00 – 09.10 Conference opening**

**Welcome Speech:**

Ministry of Health of the Russian Federation Dr. Skvortsova Veronika

Academician Amiran Revishvili, MD, PhD, Director of Vishnevsky National Medical Research Center of Surgery under the Ministry of Healthcare of Russia, President of the Russian Society of Arrhythmology, Chief External Expert in Surgery of the Ministry of Healthcare of Russia

**09.10 – 09.20 Discussion of the upcoming live operation**

**09.00 – 14.00 Demonstration: live surgical broadcast**

Mitral valve repair - Prof. Patrick McCarthy

## Session 1

**Mecanisms and Surgical Treatment of Atrial Fibrillation: A Glimpse into the Future**

**09.20 – 11.30**

*Moderators: Revishvili A.Sh., Cox J.L., and Fedorov V.V.*

**Basic Science Research Lecture**

- Fundamental Mechanism of Atrial Fibrillation by **Vadim Fedorov** (20 min)

**Agenda:**

- Implications of the Maze Surgery for Arrhythmology and Cardiac Surgery by **James Cox** (20 min)
- The Maze Procedure and Its Modifications Yesterday and Today by **Amiran Revishvili** (20 min)
- How Do You Spell Maze? A Dialogue on Definitions and Outcomes by **Niv Ad** (20 min)

**Debate (15 min)**

## Session 2

**Atrial Fibrillation: Electrophysiological Mechanisms and Interventional Technologies**

**11.30 – 13.30**

**Agenda:**

- Pathophysiology of Atrial Fibrillation by **James Cox** (20 min)
- 3D Mapping for the Diagnosis and Treatment of Arrhythmias by **Elena Artyukhina** (15 min)
- A New Concept of Electrophysiological Mapping by **Evgeny Pokushalov and Aleksandr Romanov** (15 min)

- Strategies for Atrial Fibrillation Treatment after CABANA: Interventional or Medical Treatment? by **Evgeny Mikhaylov** (15 min)
- Epicardial Interventions for the Treatment of Heart Rhythm Disorders by **Dmitry Lebedev** (15 min)

### **Debate (15 min)**

### **13.30 – 14.00 Lunch**

### **14.00 – 14.10 Discussion of the upcoming live operation**

### **14.00 – 18.30 Demonstration: live surgical broadcast**

Minimally invasive Maze Procedure – Prof. Niv Ad

## **Session 3**

### **Multidisciplinary Approaches to the Treatment of Atrial Fibrillation (I)**

#### **14.10 – 16.00**

*Moderators: Benussi S., Manuel Castellà M.P., Davtyan K.V.*

#### **Agenda:**

- Updated Outcomes for AF Ablation by **Manuel Castellà** (15 min)
- Guidelines Today: Common Trials and Missing Evidence by **Stefano Benussi** (15 min)
- Interventional Strategies for the Treatment of Atrial Fibrillation: Fire or Ice? by **Farkhad Rzaev** (15 min)
- Interventional Approaches to Left Atrial Appendage Occlusion: Advantages and Disadvantages by **Karapet Davtyan** (15 min)

### **Debate (15 min)**

## **Session 4**

### **Multidisciplinary Approaches to the Treatment of Atrial Fibrillation (II)**

#### **16.00 – 18.30**

*Moderators: La Meir M.I., Shneyder Yu.A., Benussi S., Bogachev-Prokofyev A.V.*

#### **Agenda:**

- Clinical Outcomes of a Joint Thoracoscopic/Catheter Hybrid Procedure for Long-Standing Persistent Atrial Fibrillation by **Mark La Meir** (20 min)
- Current Indications and Results of Thoracoscopic Closure of the Left Atrial Appendage by **Stefano Benussi** (20 min)
- Thoracoscopic Treatment of Atrial Fibrillation with the Gemini® System: Short-Term and Long-Term Outcomes by **Aleksandr Bogachev-Prokofyev and Dmitry Elesin** (15 min)
- Hybrid Surgery for Atrial Fibrillation by **Oleg Sapelnikov** (15 min)
- Thoracoscopic Treatment of Atrial Fibrillation with an Original Technique for Left Atrial Appendage Isolation by **Yury Shneyder and Pavel Shilenko** (10 min)
- Long-Term Results of the Maze Procedure for Isolated Atrial Fibrillation by **Niv Ad** (20 min)

### **Debate (15 min)**

# Friday, 16 November 2018

**09.00 – 09.10 Discussion of the upcoming live operation**

**09.00 – 14.00 Demonstration: live surgical broadcast**

Ross procedure - Prof. Karaskov

## Session 5

**Cardiology in Cardiac Surgery**

**09.10 – 10.30**

*Moderators: Matskeplishvili S.T., Thomas J.D., Kislitsina O.N.*

### Agenda:

- The Importance of 3D Echocardiography in Cardiac Surgery and Arrhythmology by **Simon Matskeplishvili** (15 min)
- Echocardiographic and strain analysis of left atrial function by **Olga Kislitsina** (15 min)
- Echocardiography during the Maze Procedure and Predictors of the Development of Recurrent Atrial Fibrillation by **James Thomas** (15 min)

**Debate (15 min)**

## Session 6

**Transcatheter Procedures for Structural Heart Disease**

**10.30 – 12.00**

*Moderators: Alekyan B.G., Akchurin R.S., McCarthy P.M.*

### Agenda:

- Endovascular Treatment of Structural Heart Disease by **Bagrat Alekyan** (15 min)
- Cardiovascular Outcomes of the Mitraclip in Patients with Heart Failure and Secondary Mitral Regurgitation by **Patrick McCarthy** (15 min)
- Transcatheter Procedures for Valvular Heart Disease by **Renat Akchurin and Timur Imaev** (15 min)
- Current Status of TAVR for Aortic Stenosis by **Chris Malaisrie** (15 min)

**Debate (15 min)**

## Session 7

**Surgical Treatment of Heart Failure: New Horizons**

**12.00 – 13.30**

*Moderators: Idov E.M., Shumakov D.V., Malaisrie S.Ch.*

### Agenda:

- The Use of Mechanical Circulatory Assistance for the Treatment of Heart Failure by **Chris Malaisrie** (15 min)
- Heart Transplantation Today by **Dmitry Shumakov** (15 min)
- Heart Transplants in the Urals by **Eduard Idov, Tatyana Chumarnaya** (15 min)

## **Debate (15 min)**

**13.30 – 14.00 Lunch**

**14.00 – 14.10 Discussion of the upcoming live operation**

**14.00 – 18.30 Demonstration: live surgical broadcast**

Thoracic aorta repair Prof. Konstandinos Plestis

## **Session 8**

### **Coronary Artery Surgery**

**14.10 – 15.30**

*Moderators: Lytle B.W., Zhbanov I.V., Kovalev S.A., Rosseykin E.V., Taggard D.P.*

### **Presidential Lecture**

- History and Perspective of Coronary Artery Bypass Surgery by **Bruce Lytle** (30 min)

### **Agenda:**

- Summary of Recent Clinical Trials Relating to Coronary Artery Disease by **David Taggard** (20 min)
- How Are We Conducting CABG Today? Selecting the Optimal Surgical Approach by **Igor Zhbanov** (15 min)
- Is It Possible to Optimize CABG Surgery Today? by **Evgeny Rosseykin** (15 min)
- Atrial Fibrillation Treatment with Concomitant CABG by **Sergey Kovalev** (15 min)

## **Debate (15 min)**

## **Session 9**

### **Coronary Surgery: Where Are We Going?**

**15.30 – 18.30**

*Moderators: Akchurin R.S., Shneyder Yu.A., Taggard D.P., Popov V.A.*

### **Agenda:**

- Arterial Revascularization after ART (Arterial Revascularization Trial) by **David Taggard** (20 min)
- Is Arterial Revascularization the Gold Standard of Coronary Surgery Today? by **Renat Akchurin and Vladislav Vasilyev** (15 min)
- Internal Mammary Coronary Artery Bypass Surgery via a Left Anterior Mini-Thoracotomy: Isolated and Hybrid Myocardial Revascularization by **Yury Shneyder and Men Tsoy** (15 min)
- Minimally Invasive Multivessel Coronary Bypass via a Left Thoracotomy. Advantages and Limitations by **Igor Chernov and Maksim Isaev** (15 min)
- Minimally Invasive Endoscopically-Assisted CABG by **Vadim Popov and Egor Malysenko** (15 min)

## **Debate (15 min)**

# Saturday, 17 November 2018

**09.00 – 09.10 Discussion of the upcoming live operation**

**09.00 – 14.00 Demonstration: live surgical broadcast**

Thoracoscopic treatment of long-standing persistent atrial fibrillation Prof. Mark La Meir

## Session 10

**Mitral Valve Repair**

**09.10 – 11.30**

*Moderators: Gordeev M.L., Borger M.A., Thomas J.D. Bogachev-Prokofyev A.V.*

**Mitral State-of-Art Lecture:**

- Structure, Function and Annular Dynamics of the Mitral Valve by **Michael Borger** (30 min)

**Agenda:**

- Structure, Function and Annular Dynamics of the Mitral Valve: Mitral State-of-the-Art lecture by **Michael Borger** (30 min)
- Perioperative Assessment of the Mitral Valve by **James Thomas** (15 min)  
Mitral Valve Repair in the Barlow Syndrome by **Aleksandr Bogachev-Prokofyev** (15 min)
- Current Views on Ischemic Mitral Insufficiency by **Mikhail Gordeev** (15 min)
- Chordal Replacement and Transposition in the Surgical Treatment of Mitral Valve Prolapse by **Aleksey Evtushenko and Vladimir Evtushenko** (15 min)

**Debate (15 min)**

## Session 11

**Concomitant Atrial Fibrillation Surgery**

**11.30 – 13.30**

*Moderators: McCarthy P.M. , Ad N. , Castellà M.P., Bogachev-Prokofyev A.V.*

**Agenda:**

- An Anatomic Evaluation of Lesions of the Maze Procedure by **Manuel Castellà** (20 min)
- Outcomes after Concomitant AF Surgery and MV repair for DMR by **Patrick McCarthy** (20 min)
- Varying Approaches to AF Treatment in Patients with Cardiac Comorbidities by **Vagram Arutunyan** (15 min)
- Special Aspects of AF Treatment in Patients with Hypertrophic Obstructive Cardiomyopathy by **Aleksandr Bogachev-Prokofyev** (15 min)
- Atrial Fibrillation Treatment with Concomitant Mitral Valve Replacement by **Vladislav Aminov** (15 min)

**Debate (15 min)**

**13.30 – 14.00 Lunch**

**14.00 – 14.10 Discussion of the upcoming live operation**

**14.00 – 18.30 Demonstration: live surgical broadcast**

Aortic valve repair-Chris Malaisrie



## Session 12

### Aortic Root and Aortic Valve Repair

14.10 – 16.30

Moderators: *Karaskov A.M., Ostrovsky Yu.P., Borger M.A., Plestis K.A.*

#### Agenda:

- State-of-the-Art of Aortic Root Repair by **Konstandinos Plestis** (15 min)
- Minimally Invasive Aortic Valve Surgery in the TAVI Era by **Michael Borger** (15 min)
- History of the Ross Procedure in Russia by **Aleksandr Karaskov** (15 min)
- Valve-Sparing Surgeries for Thoracic Aorta Dissection by **Yury Ostrovsky** (15 min)
- Aortic Valve Replacement in Patients with Significant LV Dysfunction by **Kirill Barbukhatti** (10 min)
- Aortic Valve Replacement via Mini-Sternotomy by **Yury Shneyder and Men Tsoy** (10 min)
- Non-Standard Procedures for Aortic Root Repair by **Evgeny Rosseykin** (10 min)
- Possibilities of Aortic Root Repair by **Roman Komarov** (10 min)

#### Debate (15 min)

## Session 13

### Thoracic Aorta Repair

16.30 – 18.50

Moderators: *Coselli J.S, Belov Yu. V., Khubulava G.G., Chernyavsky A.M.*

#### Presidential Lecture

- The Surgical Treatment of Thoracoabdominal Aortic Aneurysm by **Joseph Coselli** (30 мин)

#### Agenda:

- Surgery of Aortic Arch. The Present and the Future by **Yury Belov and Eduard Charchyan** (20 min)
- System of Surgical Care for Patients with Acute Aortic Syndrome in Saint Petersburg by **Gennady Khubulava and Andrey Peleshok** (15 min)
- The Hybrid Approach for Thoracic Aorta Disease by **Aleksandr Chernyavsky** (15 min)
- Should We Develop Minimally Invasive Surgery of the Thoracic Aorta? by **Konstandinos Plestis** (15 min)
- Five-Year Results of the Frozen Elephant Trunk Procedure by **Boris Kozlov** (10 min)
- Surgical Treatment of Thoracic Aortic Aneurysms at Sukhanov Federal Center for Cardiovascular Surgery by **Andrey Marchenko** (10 min)
- Experience of Surgical Treatment in Patients with Acute Coronary Syndrome by **Petr Lepilin** (10 min)
- Selection of an Optimal Surgical Treatment for Acute Type A Aortic Dissection by **Nikolay Bayandin and Kyaw Koko Latt**

#### Debate (15 min)

#### 18.50 Closing Ceremony

Closing Comments: **James Cox, Amiran Revishvili**