When imaging meets biomaterials and living tissue properties in vascular surgery

- Durability of vascular and endovascular devices
- Latest trends in per-operative imaging technologies
- Tissue, plaque and vessel wall properties and endovascular technologies
- Expert updates on latest endovascular technologies

The official language of the meeting is English

For more information, please visit us at: www.esvnb.net
WELCOME
IN STRASBOURG
The main idea of the European Symposium on Vascular Biomaterials was established out a strong desire to bring together in a same place people from different backgrounds: research, clinical or industry to discuss, share ideas, collaborate on different topics related to vascular biomaterials. The first event was organised in 2001, in the city of Mulhouse, high place of the textile industry, with communication and collaborations as first objectives.

Editions after editions, the European Symposium of Vascular Biomaterials evolved, bringing together even more scientists, medical doctors, young researchers and industries to share and discuss together. Since 2005, this event had been taking place in the capital of Alsace and high place of the vascular surgery in the beginning of the 20th century with René LERICHE and René FONTAINE.

This tenth edition is focusing on hot topics in the field as the durability of vascular and endovascular devices, the latest trends in per-operative imaging technologies, the tissue, plaque, vessel wall properties and endovascular technologies as well as expert’s updates on latest endovascular technologies. For this special edition we came with innovation with the first INNOV’illage and INNOV’Contest which promote the startups in the field of vascular technology. During the past edition, we were celebrating the inauguration of our Vascular Surgery Simulation Training Center; this year, we would like to introduce you the Club ESVB. This social club ESVB will act as a very restricted social network in order to help us on keeping an active communication between each ESVB edition and reinforce collaboration in the field.

We wish you a fruitful European Symposium on Vascular Biomaterials in term of discussion, networking, ideas sharing and collaborations beginning. We hope you will enjoy this anniversary edition in a friendly scientific atmosphere and get the chance to discover Strasbourg.

We would like to thank our institutional partners who supported this symposium through their advices, guidance, logistics and financial support: Alsace BioValley, the University of Strasbourg, the University of Upper Alsace, the Strasbourg Eurométropole, the regional Council of the region Grand-Est, Access Alsace as well as the brand Alsace but also you, participants and faculty who by their involvement and presence make each edition of this event a success.

Strasbourg, October 13, 2017

Nabil CHAKFÉ
Professor MD, PhD
Chief of Vascular surgery and transplantation kidney department
University Hospital of Strasbourg - France

Frédéric HEIM
Professor PhD
Full Professor in Mechanical Engineering
Université de Haute Alsace
Mulhouse - France

Wolfgang MEICHELBOECK
Dipl. - Ing.
Pentenried - Germany

President’s Forewords
Scientific Committee

The ESVB 2017 is pleased to receive the support of a prestigious Scientific Committee composed of 8 renowned international experts in their fields. The ESVB 2017 Scientific Committee ensures the relevance of the conference program and contributes to the recruitment of speakers:

- Jean BISMUTH
  Houston, USA
- Yann GOUÉFFIC
  Nantes, France
- Ulf HEDIN
  Stockholm, Sweden
- Frédéric HEIM
  Mulhouse, France
- Lars LÖNN
  Copenhagen, Denmark
- Francesco MIGLIAVACCA
  Milano, Italy
- Jason T. LEE
  Stanford, USA
- Fabien THAVEAU
  Strasbourg, France

Main Program

Chairmen

- Jean-Marc ALSAC
  Paris, France
- Stéphane AVRIL
  St Etienne, France
- Scott BERCELI
  Houston, USA
- Jean BISMUTH
  Houston, USA
- Gert de BORST
  Utrecht, The Netherlands
- Nabil CHAKFÉ
  Strasbourg, France
- Hans Henning ECKSTEIN
  Munich, Germany
- Jean-Pierre FAVRE
  St Etienne, France
- Yann GOUÉFFIC
  Nantes, France
- Markus KOLEMAJ
  Amsterdam, The Netherlands
- Francois KOTIAN
  Buc, France
- Anne LEJAY
  Strasbourg, France
- Lars LÖNN
  Copenhagen, Denmark
- Wolfgang MEICHELBOECK
  Pentenried, Germany
- Luc MERTZ
  Strasbourg, France
- Francesco MIGLIAVACCA
  Milano, Italy
- Philippe NICOLINI
  Lyon, France
- Janet POWELL
  London, United Kingdom
- Carlo SETACCI
  Sienna, Italy
- Murray SHAMES
  Tampa, USA
- Malachi SHEAHAN
  New-Orleans, USA
- Henrik SILLESEN
  Copenhagen, Denmark
- Andrea STELLA
  Bologna, Italy
- Fabien THAVEAU
  Strasbourg, France
- Santi TRIMARCHI
  Milan, Italy
- Renu VIRMANI
  Gaethesburg, USA
- Jason T. LEE
  Stanford, USA
- Florian DICK
  Saint Gallen, Switzerland
- Philippe KOLH
  Liège, Belgium
- Lars LÖNN
  Copenhagen, Denmark
- Wolfgang MEICHELBOECK
  Pentenried, Germany
- Francesco MIGLIAVACCA
  Milano, Italy

Young Researcher Prize Jury

- Jean BISMUTH
  Houston, USA
- Gert de BORST
  Utrecht, The Netherlands
- Florian DICK
  Saint Gallen, Switzerland
- Philippe KOLH
  Liège, Belgium
- Lars LÖNN
  Copenhagen, Denmark
- Wolfgang MEICHELBOECK
  Pentenried, Germany
- Francesco MIGLIAVACCA
  Milano, Italy
ESVB 2017

Durability of vascular and endovascular devices

Frederico BASTOS GONÇALVES
Lisbon, Portugal

Nabil CHAKFÉ
Strasbourg, France

Frédéric HEIM
Mulhouse, France

Martin KING
Raleigh, USA

Markus KOLEMAIJ
Amsterdam, The Netherlands

Jason T. LEE
Stanford, USA

Alan PELTON
San Francisco, USA

Lorenza PETRINI
Milano, Italy

Latest trends in per-operative imaging technologies

Jean BISMUTH
Houston, USA

Gerd BRUNNER
Houston, USA

Ponraj CHINNADURAI
Houston, USA

Zsolt GARAMI
Houston, USA

Pierre GUNTZER
Strasbourg, France

Daniel van den HEUVEL
Utrecht, The Netherlands

Markus KLEEMAN
Lübeck, Germany

Francois KOTIAN
Buc, France

David RIGBERG
Los Angeles, USA

Prakash SAHA
London, UK

Malachi SHEAHAN
New-Orleans, USA

Henrik SILLESEN
Copenhagen, Denmark

Dirk SUNDERBRINCK
Forchheim, Germany

Dan WALLACE
San Francisco, USA

Tissue, plaque and vessel wall properties and endovascular technologies

Stéphane AVRIL
St Etienne, France

Christopher CHENG
Stanford, USA

Nenad FILIPOVIC
Belgrade, Serbia

Christian GASSER
Stockholm, Sweden

Yannick GEORG
Strasbourg, France

George HAMILTON
London, UK

Ulf HEDIN
Stockholm, Sweden

Massimiliano MARROCCO-TRISCHITTA
Milano, Italy

Gianandrea PASQUINELLI
Bologna, Italy

Vincent SCHOLTES
Utrecht, The Netherlands

Paolo SPADA
Milano, Italy

Santi TRIMARCHI
Milano, Italy

Expert updates on latest endovascular technologies

Arindam CHAUDHURI
Bedford, UK

Rombout KRUSE
Zwolle, The Netherlands

Michael LICHTENBERG
Aarsberg, Germany

Jörg TESSAREK
Lingen, Germany

Renu VIRMANI
Gathesburg, USA

Thomas ZELLER
Bad Krozingen, Germany

Satellite events

Medical Textile Workshop

Giuseppeppino FORTUNATO
St Gallen, Switzerland

Valentine GESCHE
Aachen, Germany

Frédéric HEIM
Mulhouse, France

Martin KING
Raleigh, USA

Petra MELA
Aachen, Germany

Radiation protection Workshop

Ponraj CHINNADURAI
Houston, USA

Hervé GARFAGNI
Paris, France

Adrien HERTAULT
Lille, France

Lars LÖNN
Copenhagen, Denmark

Luc MERTZ
Strasbourg, France

Timothy RESCH
Malmö, Sweden

Cécile SALVAT
Paris, France

Claire STEINVILLE
Paris, France

Vascular Tissue Biobanking Workshop

Seiamak BAHRAM
Strasbourg, France

Scott BERCHELI
Houston, France

Ulf HEDIN
Stockholm, Sweden

Renu VIRMANI
Gathesburg, USA

Endovascular Simulation Bootcamp

Frederico BASTOS GONÇALVES
Lisbon, Portugal

Jean BISMUTH
Houston, USA

Mohamed BOUAYED
Oran, Algeria

Nabil CHAKFÉ
Strasbourg, France

Yannick GEORG
Strasbourg, France

Jason T. LEE
Stanford, USA

Murray SHAMES
Tampa, USA

Malachi SHEAHAN
New-Orleans, USA

Claudie SHEAHAN
New-Orleans, USA

Fabien THAVEAU
Strasbourg, France
Exhibition hall  Visit our exhibitors booths and INNOV’illage

Exhibition Hours:  Friday 13\textsuperscript{th} | 7:30 am > 6:30 pm • Saturday 14\textsuperscript{th} | 8:00 am > 3:30 pm

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18 | TAKEDA  
19 | MACOPHARMA  
20 | KCI MEDICA  
21 | ASHEN PHARMA  
22 | THERENVA

INNOV’illage:

23 | VYGON  
24 | EMEDICA  
25 | EUROFLEX  
26 | CISTEO  
27 | NITIFRANCE  
28 | GEPROVAS  
29 | TA INSTRUMENT  
30 | MECASEM  
31 | MTS  
32 | SIMBIONIX  
33 | SIMFORHEALTH  
34 | VEIN SOUND  
35 | NIMESIS TECHNOLOGY  
36 | LIMFLOW  
37 | ID-NEST  
38 | CMI’NOV  
39 | PARTNER
### Program at a glance

**Thursday October 12**

<table>
<thead>
<tr>
<th>Time</th>
<th>Vascular Simulation Bootcamp</th>
<th>Time</th>
<th>Satellite Workshops</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.45 am</td>
<td>Welcome &amp; Coffee</td>
<td>2.00 pm</td>
<td>Medical Textile</td>
</tr>
<tr>
<td>8.00 am</td>
<td>Lectures in VSSTC</td>
<td>4.15 pm</td>
<td>Radiation Safety</td>
</tr>
<tr>
<td>9.00 am</td>
<td>Practical session on simulators</td>
<td>4.30 pm</td>
<td>Workshop</td>
</tr>
<tr>
<td>12.45 pm</td>
<td>On site Lunch</td>
<td>6.15 pm</td>
<td>Vascular Tissue</td>
</tr>
<tr>
<td>1.30 pm</td>
<td>Practical session on simulators</td>
<td>6.15 pm</td>
<td>BioBanking Workshop</td>
</tr>
<tr>
<td>5.00 pm</td>
<td>Coffee break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.30 pm</td>
<td>Conclusions &amp; Debriefing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.00 pm</td>
<td>End of the Bootcamp</td>
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</tbody>
</table>

**Satellite Workshops**

Strasbourg • Pavillon Leriche • 2nd Floor

- Medical Textile Symposium
- Radiation Safety Workshop
- Vascular Tissue BioBanking Workshop
- Alsatian Gastronomy

**Friday October 13**

**ESVB Day 1** • Main conferences • Palais de la Musique et des Congrès, Strasbourg

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Details</th>
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</thead>
<tbody>
<tr>
<td>7.30 am</td>
<td>Opening Registration at Palais de la Musique et des Congrès</td>
</tr>
<tr>
<td>8.15 am</td>
<td>Opening Remarks</td>
</tr>
<tr>
<td>8.45 am</td>
<td>Durability of vascular and endovascular devices - 1 and 2</td>
</tr>
<tr>
<td>10.40 am</td>
<td>Coffee break and Poster session</td>
</tr>
<tr>
<td>11.10 am</td>
<td>Expert updates on latest endovascular technologies - 1</td>
</tr>
<tr>
<td>11.25 am</td>
<td>Industry Symposium #1</td>
</tr>
<tr>
<td>11.45 am</td>
<td>Young researcher Prize - Session 1</td>
</tr>
<tr>
<td>12.30 am</td>
<td>Expert updates on latest endovascular technologies - 2</td>
</tr>
<tr>
<td>12.55 am</td>
<td>On site Lunch, Networking and Poster session</td>
</tr>
<tr>
<td>2.05 pm</td>
<td>What are the future industry innovations?</td>
</tr>
<tr>
<td>2.20 pm</td>
<td>Latest trends in per-operative imaging technologies - 1 and 2</td>
</tr>
<tr>
<td>3.50 pm</td>
<td>Young researcher Prize - Session 2</td>
</tr>
<tr>
<td>4.30 pm</td>
<td>Coffee break and Poster session</td>
</tr>
<tr>
<td>4.50 pm</td>
<td>Industry Symposium #2</td>
</tr>
<tr>
<td>5.15 pm</td>
<td>Latest trends in per-operative imaging technologies - 3</td>
</tr>
<tr>
<td>6.15 pm</td>
<td>Conclusion Remarks</td>
</tr>
<tr>
<td>6.30 pm</td>
<td>Time off</td>
</tr>
<tr>
<td>7.15 pm</td>
<td>Transportation to the conference dinner</td>
</tr>
<tr>
<td>7.30 pm</td>
<td>Conference dinner - YRP award – Let’s party together</td>
</tr>
</tbody>
</table>

**Saturday October 14**

**ESVB Day 2** • Main conferences • Palais de la Musique et des Congrès, Strasbourg

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.00 am</td>
<td>Registration</td>
</tr>
<tr>
<td>8.30 am</td>
<td>Opening Remarks</td>
</tr>
<tr>
<td>8.35 am</td>
<td>Tissue, plaque and vessel wall properties and endovascular technologies - 1</td>
</tr>
<tr>
<td>9.40 am</td>
<td>Alsatian coffee break</td>
</tr>
<tr>
<td>10.20 am</td>
<td>Expert updates on latest endovascular technologies - 3</td>
</tr>
<tr>
<td>10.45 am</td>
<td>Industry Symposium #3</td>
</tr>
<tr>
<td>11.10 am</td>
<td>Tissue, plaque and vessel wall properties and endovascular technologies - 2</td>
</tr>
<tr>
<td>12.15 am</td>
<td>Industry Symposium #4 and #5</td>
</tr>
<tr>
<td>12.55 am</td>
<td>On site Lunch, Networking</td>
</tr>
<tr>
<td>1.35 pm</td>
<td>INNOV’Contest Prize</td>
</tr>
<tr>
<td>1.50 pm</td>
<td>Expert updates on latest endovascular technologies - 4</td>
</tr>
<tr>
<td>2.15 pm</td>
<td>Tissue, plaque and vessel wall properties and endovascular technologies - 3</td>
</tr>
<tr>
<td>3.15 pm</td>
<td>Conclusion remarks</td>
</tr>
<tr>
<td>3.30 pm</td>
<td>End of the meeting</td>
</tr>
</tbody>
</table>
Satellite events | Thursday October 12th

Vascular Simulation Bootcamp > Full day

Organizer: Nabil CHAKFÉ Strasbourg, France - Yannick GEORG Strasbourg, France
Venue: Vascular Surgery Simulation Training Center (VSSTC)
UNISIMES Building - 2nd floor - Nouvel Hôpital Civil
1 Place de l’Hôpital - 67000 Strasbourg. (More information on how to get there page 20)

Meeting point

7:00 am  Faculty: Taxi transfer to the Vascular Simulation Center: meeting point in the HILTON Hotel lobby with Prof. Nabil CHAKFÉ
7:30 am  Participant: Vascular Simulation Center - UNISIMES building
2nd Floor - Nouvel Hopital Civil - 1 place de l’hôpital - 67000 Strasbourg
How to get there, page 20

7:45 am  Welcome & coffee at the VSSTC

8:00 > 8:40 am  Lectures
• Needs for education starting endovascular programs procedure
  Mohamed BOUAYED Oran, Algeria
• Role of hands-on models to improve surgical skills in vascular surgery
  Malachi SHEAHAN New Orleans, USA
• Presentation of the Bootcamp program
  Yannick GEORG Strasbourg, France

8:40 > 12:45 am  Simulation and Hands-on practice
Supervisors: Frederico BASTOS GONÇALVES, Jean BISMUTH, Mohamed BOUAYED, Nabil CHAKFÉ, Yannick GEORG, Jason T. LEE, Murray SHAMES, Malachi SHEAHAN, Claudie SHEAHAN, Fabien THAVEAU
• Rotation on Simulators - Aortic and Peripheric sessions - Suture practice
  Assessment with video records on simulator
• Company product presentation
• Set-up results & debriefing on video records

12:45 am > 1:30 pm  On site Lunch

1:30 > 5:30 pm  Simulation and Hands-on practice

5:00 pm  Break out session

5:30 > 6:00 pm  Conclusion

Social events for the Faculty | see page 23
Provide the theoretical and practical knowledge to make progress.

Analyse the technical steps important for endovascular procedures

Come & learn in an homely working atmosphere in our independant center

**Educational methods:**
- Small groups designed courses (4 to 6 pers.)
- Interactivity between experts teachers and attendees

**Targeted audience:**
- General and vascular surgery resident, vascular surgery fellows, vascular surgeons
- Medical industry representatives and/or customers

**Contact organization:**

Céline Petjjean  |  Project Manager

Geprovas  |  Faculté de médecine
4 rue Kirschleger
67085 Strasbourg  |  France
Cell : + 33 (0)6 71 56 02 60
Secretary : + 33 (0)3 68 85 40 94
education@geprovas.org
Satellite Workshop (Half-day) > Parallel Session

Venue: Pavillon Leriche - Nouvel Hôpital Civil (2nd floor)
1 Place de l’Hôpital - 67000 Strasbourg. (More information on how to get there page 20)

1:30 pm
Meeting point at Pavillon Leriche

2:00 > 4:15 pm
Medical Textile Symposium

Organizer: Frédéric HEIM Mulhouse, France

- Introduction and welcome
- When cells meet textile - Petra MELA, Aachen, Germany
- Potential of textile in sutures - Martin KING, Raleigh, USA
- Break out session - Discussions, Coffee, Questions & More...
- Textile mitral valve design - Valentine GESCHE, Aachen, Germany
- Nanofibers for controlled drug release and tissue engineering - Giuseppino FORTUNATO, St. Gallen, Switzerland
- Conclusion & remarks session
- End of the Symposium

2:00 > 4:15 pm
Radiation safety Workshop

Organizer: Lars LÖNN Copenhagen, Denmark

- Introduction and welcome
- Basic safety standard for the protection of the health of individuals subject to occupational and medical exposure against the dangers arising from ionising radiation - Cécile SALVAT, Paris, France
- How I reduce the exposure in EVAR, TEVAR, BEVAR, FEVAR to patients and the team? - Timothy RESCH, Malmö, Sweden
- Break out session - Discussions, Coffee, Questions & More...
- 3D Visualization of radiation scatter in hybrid operating rooms: a novel tool to examine occupational risks and influence radiation safety - Ponraj CHINNADURAI, Houston, USA - Siemens
- Analyze, identify and optimize radiation dose performance in interventional procedures with comprehensive data - Hervé GARFAGNI and Claire STEINVILLE, Strasbourg, France
- Why build a training program including practical hands on - Lars LÖNN Copenhagen, Denmark - Adrien HERTAULT, Lille, France
- Conclusion & remarks session
- End of the Workshop
Satellite Workshops (Half-day) > Parallel Session

Venue: Pavillon Leriche - Nouvel Hôpital Civil (2nd floor)
1 Place de l’Hôpital - 67000 Strasbourg. (More information on how to get there page 20)

4:15 pm  Meeting point at Pavillon Leriche

4:30 > 6:15 pm  Vascular Tissue BioBanking Workshop
Organizer: Ulf HEDIN Stockholm, Sweden - Scott BERCELI Gainesville, USA

- Introduction and welcome
- A general overview: legal and ethical matters, permissions, aspects of structure and organization, sample processing, analyses, bioinformatics and data dissemination - Ulf HEDIN Stockholm, Sweden
- PREDICT-PVI, a recent failed attempt at a biobank that was organized and funded by the Vascular Cures Foundation - Scott BERCELI Gainesville, USA
- BIOMAX: Strasbourg Experience at a BioBank - Seiamak BAHRAM Strasbourg, France
- Bioprotec: a company point of view

5:15 pm  Discussions, Coffee, Questions & More…
Moderated by Renu VIRMANI Gaithersburg, USA

6:00 pm  Final Break Out Session - How to make this move forward to our community?
6:15 pm  End of the Workshop

or

4:30 > 6:15 pm  Alsatian gastronomy discovery
Organizer: Wolfgang MEICHELBOECK Pentenried, Germany

- Intallation
- Introduction and welcome
- Wine & wineyards history
  - Thibault BALDINGER – Cave historique des Hospices de Strasbourg
- Alsatian typical food, history
  - Isabelle HINCKER - Touristic Gastronomy Guide, Musée Alsatien, Strasbourg
  - “Foie gras” de La Ferme de la Plume D’or and “Pain d’épices” by Mireille Oster
  - “Kougelhopf salé et sucré” by Boulangerie Hanss
  - “Es gilt”, trinquons

- Typical Liquor & chocolate by Distillerie Nusbaumer

6:00 pm  End of the discovery for today
6:15 pm  End of the workshop for today
# Detailed Program | Friday October 13th

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am</td>
<td>Opening Registration for Faculty at Hotel Hilton</td>
</tr>
<tr>
<td>7:30 am</td>
<td>Opening Registration for Delegates at Palais de la musique et des congrès (PMC)</td>
</tr>
<tr>
<td>8.15 am</td>
<td>Welcome Remarks:</td>
</tr>
<tr>
<td></td>
<td>• Nabil CHAKFÉ Strasbourg, France</td>
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<tr>
<td></td>
<td>• Nicolas MATT Vice Président de l’Eurométropole de Strasbourg et Conseiller Municipal de Strasbourg</td>
</tr>
<tr>
<td>8:45 &gt; 9:45 am</td>
<td><strong>Durability of vascular and endovascular devices - 1</strong></td>
</tr>
<tr>
<td></td>
<td>Chairmen: Nabil CHAKFÉ - Renu VIRMANI - Jean-Pierre FAVRE</td>
</tr>
<tr>
<td></td>
<td>cancelled</td>
</tr>
<tr>
<td>08:47 am</td>
<td>Martin KING Raleigh, USA: Factors Influencing the Durability and Fatigue Resistance of Synthetic Vascular Devices.</td>
</tr>
<tr>
<td>09:00 am</td>
<td>Alan PELTON San Francisco, USA: The use of next generation Nitinol for medical implants.</td>
</tr>
<tr>
<td>09:13 am</td>
<td>Frédéric HEIM Mulhouse, France: Textile/stent interactions. Can we predict durability?</td>
</tr>
<tr>
<td>9:26 am</td>
<td>Janet POWELL London, UK (5 min) and Discussion</td>
</tr>
<tr>
<td>9:45 &gt; 10:40 am</td>
<td><strong>Durability of vascular and endovascular devices - 2</strong></td>
</tr>
<tr>
<td></td>
<td>Chairmen: Malachi SHEAHAN - Francesco MIGLIAVACCA - Janet POWELL</td>
</tr>
<tr>
<td></td>
<td>cancelled</td>
</tr>
<tr>
<td>09:47 am</td>
<td>Jason T. LEE Stanford, USA: Current knowledge on long-term results on branched-endoprostheses including iliac, visceral and supra-aortic arteries.</td>
</tr>
<tr>
<td>09:59 am</td>
<td>Nabil CHAKFÉ Strasbourg, France: Lessons learnt from an explant analysis program.</td>
</tr>
<tr>
<td>10:11 am</td>
<td>Frederico BASTOS GONÇALVES Lisbon, Portugal: Reappraisal of the anatomic factors that influence long-term performance of EVAR.</td>
</tr>
<tr>
<td>10:23 am</td>
<td>Markus KOLEMAIJ Amsterdam, The Netherlands: Open versus endovascular AAA repair after 10 years.</td>
</tr>
<tr>
<td>10:40 &gt; 11:10 am</td>
<td>Coffee Break and Poster visit in the Exhibition Hall</td>
</tr>
<tr>
<td>11:10 &gt; 11:25 am</td>
<td><strong>Expert updates on latest endovascular technologies - 1</strong></td>
</tr>
<tr>
<td></td>
<td>• Jorg TESSAREK Lingen, Germany: New technologies on the last 2 years. A critical appraisal.</td>
</tr>
<tr>
<td>11:25 &gt; 11:45 am</td>
<td><strong>Industry Symposium #1</strong> (more details page 18)</td>
</tr>
<tr>
<td>11:45 &gt; 12:30 am</td>
<td><strong>Young Researcher Prize - Session 1</strong> (more details page 16)</td>
</tr>
<tr>
<td></td>
<td>Jury: Jean BISMUTH - Frédéric HEIM - Philippe KOHL - Wolfgang MEICHELBOECK</td>
</tr>
<tr>
<td></td>
<td>• YRP 1: Alban LONGCHAMP Lausanne, Switzerland</td>
</tr>
<tr>
<td></td>
<td>• YRP 2: Luca P. ARGANI Liverpool, UK</td>
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<td>• YRP 3: Justine MOUGIN Lille, France</td>
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<td>• YRP 4: Can GÖKGÖL Bern, Switzerland</td>
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<tr>
<td>12:30 &gt; 11:45 am</td>
<td><strong>Expert updates on latest endovascular technologies - 2</strong></td>
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<td>• Renu VIRMANI Gothenburg, USA: Pathology of peripheral artery &amp; endovascular treatment.</td>
</tr>
<tr>
<td>12:45 am</td>
<td>Nabil CHAKFÉ Strasbourg, France: A look in the mirror - ESVB history</td>
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</tbody>
</table>
On site Lunch in the Exhibition Hall

What are the future industry innovations?
Chairmen: Murray SHAMES - Jean BISMUTH
2:06 pm  •  François KOTIAN  Buc, France
2:13 pm  •  Dirk SUNDERBRINCK  Forchheim, Germany

Latest trends in per-operative imaging technologies - 1
Chairmen: Santi TRIMARCHI - François KOTIAN - Luc MERTZ
2:22 pm  •  Prakash SAHA  London, UK: Imaging the pelvic venous system: the role of MRI.
2:32 pm  •  Henrik SILLESEN  Copenhagen, Denmark: Multimodality imaging to study atherosclerotic plaques.
2:42 pm  •  Malachi SHEAHAN  New Orleans, USA: Computed tomography angiography and carotid disease: software-aided analysis.
2:52 pm  Take-home message session: Santi TRIMARCHI  Milano, Italy (5 min) and Discussion

Latest trends in per-operative imaging technologies - 2
Chairmen: Lars LÖNN - Henrik SILLESEN - Anne LEJAY
3:07 pm  •  Gerd BRUNNER  Houston, USA: Skeletal calf muscle perfusion imaging in peripheral artery disease.
3:17 pm  •  Daniel van den HEUVEL  Utrecht, The Netherlands: Region-based perfusion estimation using angiographic C-arm systems in critical limb ischemia.
3:27 pm  •  Jean BISMUTH  Houston, USA: Dynamic imaging (CT-MR): what does it add and how does it change our understanding of the disease.
3:37 pm  Take-home message session: Lars LÖNN  Copenhagen, Denmark (5 min) and Discussion

Young Researcher Prize Session 2 (more details page 16)
Jury: Gert de BORST - Florian DICK - Lars LÖNN - Francesco MIGLIAVACCA
•  YRP 5: Shengheng CAO  Strasbourg, France
•  YRP 6: Monika COLOMBO  Houston, Texas, USA
•  YRP 7: Jérémie JAYET  Paris, France
•  YRP 8: Adeline SCHWEIN  Houston, Texas, USA

Coffee Break and Poster visit in the Exhibition Hall

Industry Symposium #2 (more details page 18)

Latest trends in per-operative imaging technologies - 3
Chairmen: Jean BISMUTH - Philippe NICOLINI - Mark KOLEMAIJ
5:17 pm  •  Ponraj CHINNADURAI  Houston, USA: Intra-operative multi-modal imaging integration techniques.
5:25 pm  •  Dan WALLACE  San Francisco, USA: Three Dimensional medical navigation.
5:33 pm  •  Pierre GUNTZER  Strasbourg, France: Integration of a radiation skin dose mapping module in a pre-operative endovascular simulator.
5:41 pm  •  Zsolt GARAMI  Houston, Texas, USA: Transcranial Doppler Monitoring in the Operating Room.
5:49 pm  •  David RIGBERG  Los Angeles, USA: Expanded applications for intravascular ultrasound.
5:57 pm  •  Markus KLEEMAN  Lübeck, Germany: Endovascular interventions proceeded under contrast agent and radiation sparing using navigation and imaging techniques for holographic visualisation.

6:05 pm  Take-home message session: Jean BISMUTH  Houston, USA (5 min) and Discussion and Conclusion Remarks - Time off

Welcome Cocktail and Refreshments at “L’Ancienne Douane”

Conference Dinner and Young Researcher Prize at “L’Ancienne Douane”

Awarding of the Young Researcher Prize Session
Université de Strasbourg, Eurométropole de Strasbourg, Université de Haute Alsace and GEPROVAS
8:00 am | Registration
8:30 am | Opening remarks

8:35 > 9:40 am | Tissue, plaque and vessel wall properties and endovascular technologies - 1
Chairmen: Andrea STELLA - Yann GOUÉFFIC - Gert de BORST - Carlo SETACCI

08:37 am | • Gianandrea PASQUINELLI Bologna, Italy: Calcification mechanisms in native atherosclerotic arteries.

08:49 am | • George HAMILTON London, UK: Late calcifications of vascular substitutes.

08:59 am | • Nenad FILIPOVIC Belgrade, Serbia: Coupled continuum-discrete modeling of plaque development in the coronary arteries.

09:11 am | • Ulf HEDIN Stockholm, Sweden: Late calcification: deadly enemy or stable partner?

9:23 am | Take-home message session: Gert de BORST Utrecht, The Netherlands (5 min) and Discussion

9:40 > 11:20 am | Alsatian Coffee Break and Poster visit in the Exhibition Hall

10:20 > 10:45 am | Expert updates on latest endovascular technologies - 3

10:20 am | • Michael LICHTENBERG Arnsberg, Germany: Debulking: should we use the same devices for calcifications, myointimal hyperplasia or thrombus?

10:32 am | • Thomas ZELLER Bad Krozingen, Germany: Shockwave technologies for the SFA.

10:45 > 11:10 am | Industry Symposium #3 (more details page 18)

11:10 > 12:15 am | Tissue, plaque and vessel wall properties and endovascular technologies - 2
Chairmen: Hans Henning ECKSTEIN - Scott BERCELI - Fabien THAVEAU

11:12 am | • Vincent SCHOLTES Utrecht, The Netherlands: Impact of diabetes and time-dependence on peripheral atherosclerotic plaques.

11:24 am | • Stéphane AVRIL S’Etienne, France: Mechanical characterization of arterial wall.


11:48 am | • Massimiliano MARROCCO-TRISCHITTA Milano, Italy: Computational analysis of hemodynamic displacement forces in the aorta.

12:00 am | Take-home message session: Scott BERCELI Gainsville, USA (5 min) and Discussion

⚠️ Take Home Message
5 minutes for KOL to give their feedback on scientific session

📍 Accreditation information
The congress was granted 17 European CME credits (ECMEC) by the European Accreditation Council for Continuing Medical Education (EACCME).
12:15 > 12:55 am  Industry Symposium #4 and #5 (more details page 18)

12:55 am > 1:35 pm  On site Lunch in the Exhibition Hall

1:35 > 1:50 pm  INNOV’CONTEST Prize
With the Eurométropole & Alsace BioValley Healthcluster

1:50 > 2:15 pm  Expert updates on latest endovascular technologies - 4
1:50 pm  • Rombout KRUSE  Zwolle, The Netherlands: Computation of blood flow through collateral circulation of the superficial femoral artery.
2:02 pm  • Arindam CHAUDHURI  Bedford, UK: CO₂ angiography: where are we now?

2:15 > 3:00 pm  Tissue, plaque and vessel wall properties and endovascular technologies - 3
Chairmen: Jean-Marc ALSAC - Stéphane AVRIL - Wolfgang MEICHELBOECK
02:17 pm  • Santi TRIMARCHI  Milano, Italy: Impact of mechanical coupling of endograft to thoracic aorta.
02:29 pm  • Yannick GEORG  Strasbourg, France: What do we know about forces applied by endoprosthesis to the aortic wall?
02:39 pm  • Christopher CHENG  Stanford, USA: Impact of mechanical coupling of endograft to thoracic aorta.
02:51 pm  • Paolo SPADA  Milan, Italy: Should we share pre-operative EVAR planning in a community?

3:00 pm  Take-home message session: Stéphane AVRIL  St Etienne, France (5 min) and Discussion

3.15 pm  Closing Remarks - End of the meeting
**Young Researcher Prize | Friday October 13th**

The Poster and Young Researcher Prize sessions aim at presenting the research works of young PhD and/or fellows in order to support and boost research in the field of vascular biomaterials.

**Jury Young Researcher Prize 1**
- Jean BISMUTH, Houston, USA
- Frédéric HEIM, Mulhouse, France
- Philippe KOLH, Liège, Belgium
- Wolfgang MEICHELBOECK, Pentenried, Germany

**Jury Young Researcher Prize 2**
- Gert de BORST, Utrecht, The Netherlands
- Florian DICK, Saint Gallen, Switzerland
- Lars LÖNN, Copenhagen, Denmark
- Francesco MIGLIAVACCA, Milano, Italy

**11:45 > 12:30 am**
- **Young Researcher Prize 1** in Conference Room
  - Hydrogen sulfide limits the development of intimal hyperplasia in a mouse model of femoral wire injury
    *Alban LONGCHAMP, Lausanne, Switzerland*
  - Modelling of deformation and dynamic response of abdominal aortic aneurysms treated by endovascular sealing
    *Luca P. ARGANI, Liverpool, UK*
  - Simvastatin loaded electrospun membrane covered stent for intra-stent restenosis
    *Justine MOUGIN, Lille, France*
  - Nitinol Stent Implantation vs. Leaving-Nothing-Behind: Implications on the Deformations of the Femoro-popliteal Arterial Segment
    *Can GÖKGÖL, Bern, Switzerland*

**3:50 > 4:30 pm**
- **Young Researcher Prize 2** in Conference Room
  - Degradation Phenomena on "Homemade" Explanted Aortic Textile Endografts
    *Shengheng CAO, Strasbourg, France*
  - Intra-stent restenosis in femoral arteries: from imaging to patient-specific computer simulations
    *Monika COLOMBO, Houston, Texas, USA*
  - Experimental in situ laser fenestration creates immediate substantial textile damages
    *Jérémie JAYET, Paris, France*
  - An innovative porcine model of acute and chronic central venous thrombosis mimicking human pathology
    *Adeline SCHWEIN, Houston, Texas, USA*

**Poster Session**
- 38 posters will be displayed in the Exhibition Hall.
  **Please visit the posters during the coffee and lunch breaks.**

In 2017, the awards will be shared among the 3 best communication and the best poster presentation. The YRP awarded prizes will be endorsed by the GEPROVAS (1500€), the Eurométropole de Strasbourg (1000€), the Université de Haute-Alsace (500€). The poster award (300€) will be given by Université de Strasbourg.
Posters

1. Experimental in situ laser fenestration creates immediate substantial textile damages.
   Jérémie JAYET Paris, France

2. A protective role of IRF3 and IRF7 signaling downstream TLRs in the development of vein graft disease via type-I interferons.
   Karin SIMONS Leiden, The Netherlands

3. Endovascular navigation systems for treatment of peripheral arterial disease: current state and future perspectives.
   Rick BERGMANS Utrecht, The Netherlands

4. Study of the fatigue behavior of peripheral nitinol stent of the superficial femoral arteries through mathematical modeling.
   Daniela MAZZACARO Milano, Italy

5. Towards a spring model for a fast virtual deployment of stent-grafts.
   Alisson ZACCARIA Milano, Italy

6. Comparison of corrosion properties of different coronary stent materials.
   Lilla ASZTALOS Budapest, Hungary

7. Off-the-Shelf Treatment of Type III and IV Thoracoabdominal Aortic Aneurysm.
   Jeffrey EDWARDS Tampa, Florida, USA

8. Polycystic kidney embolization: Can we reduce kidney’s volume to authorize a heterotopic transplantation.
   Benjamin DEL TATTO Strasbourg, France

9. Upregulation of SGLT2 expression mediates the high glucose-induced premature endothelial senescence and acquisition of pro-atherothrombotic markers via the activation of the angiotensin system.
   Sonia KHEMAIS-BENKHIAT Strasbourg, France

    Francesca BERTI Milano, Italy

    Alice FINOTELLO Genoa, Italy

12. How compression inside a delivery system can degrade the cover of aortic endograft.
    Bettina CHENSESSEAU Strasbourg, France

13. Virtual endograft deployment as an early predictor of post-operative TEVAR outcome.
    Rodrigo ROMAROWSKI Milano, Italy

    Can GÖCKÖL Bern, Switzerland

15. Intra-stent restenosis in femoral arteries: from imaging to patient-specific computer simulations.
    Monika COLOMBO Houston, Texas, USA

16. A Fluid-Structure Interaction Patient-Specific Computational Methodology to study aortic roots with native calcified valves.
    Giulia LURAGHI Milano, Italy

17. A multiscale approach for tuning boundary condition parameter for hemodynamics simulations.
    Massimiliano MERCURI Rennes, France

18. In situ stent model classification based on directed graphs and statistical learning.
    Hugo GANGLOFF Strasbourg, France

19. 3D-unwrapping of stent structure.
    Hugo GANGLOFF Strasbourg, France

    Shengheng CAO Strasbourg, France

21. Enzymatic method removing formalin fixed tissues from explanted polyester endovascular prosthesis.
    Shengheng CAO Strasbourg, France

22. Oral intake of EPA:DHA 6:1 improves ageing-related blunted endothelium-dependent relaxations and increased contractile responses in the mesenteric artery: role of oxidative stress and cyclooxygenases.
    Muhammad FAROOQ Strasbourg, France

23. Patient-specific isogeometric analysis of Thoracic Aortic Aneurysms.
    Margherita CODA Milano, Italy

24. Modified polyethylene terephthalate substrates' properties for vascular substitutes.
    Donia CHETOUANE Mulhouse, France

    Hector de BEAUFORT Milano, Italy

    Luca P ARGANI Liverpool, UK

27. A Methodology for Determination of In-Vivo Mechanical Properties in Lower Extremity Arteries.
    Rosella COLLI Milano, Italy

28. Simvastatin loaded electrospun membrane covered stent for intra-stent restenosis.
    Justine MOUGIN Lille, France

29. Impact of the Prevena® aspiration wound system therapy on groin wound complication following vascular surgery.
    Justine LONGCHAMP Lausanne, Switzerland

30. Ten-years experience using cryopreserved allografts for distal bypass.
    Sophie MASMEJAN Lausanne, Switzerland

31. Aneurysmal thrombus density on non-contrast ct scan predicts type II endoleaks after endovascular abdominal aortic aneurysm repair.
    Martin ROUER Rouen, France

    Alban LONGCHAMP Lausanne, Switzerland

    Alban LONGCHAMP Lausanne, Switzerland

34. Stimulation of Endogenous H2S a Novel Nutrient Dependent Trigger of Angiogenesis.
    Alban LONGCHAMP Lausanne, Switzerland

35. An innovative porcine model of acute and chronic central venous thrombosis mimicking human pathology.
    Adeline SCHWEIN Houston, Texas, USA

36. Haemodynamics changes and fluid geometry analysis after EVAS in aorto-iliac aneurysms.
    Céline DUBUIS Lausanne, Switzerland

37. Chimney graft technique combined with the Nellix Endovascular Aneurysm Sealing Technology for complex abdominal aortic aneurysms.
    Céline DUBUIS Lausanne, Switzerland

38. Non-destructive stent tests coupled to surrogate-assisted optimisation to identify NiTi mechanical properties.
    Dario ALLEGRETTI Milano, Italy
Industry symposia

**Friday October 13th**

11:25 > 11:45 am

Industry Symposium

**Cook Medical®** | sponsored symposium

- Drug Eluting Stent: Impact of coating on drug diffusion
  - Nicolas BLANCHEMAIN | Lille, France

4:50 > 5:15 pm

Industry Symposium

**W.L. Gore®** | sponsored symposium

- Gore Technology Innovation: Together. Improving Life
  - James CHOW | Phoenix, Arizona, USA / Gore

**Saturday October 14th**

10:45 > 11:10 am

Industry Symposium

**Bard®** | sponsored symposium

- COVERA Vascular Covered Stent: Increase our endovascular options in daily practice
  - Julien MORIN | Reims, France

12:15 > 12:55 am

Industry Symposium

**Vascutek®** | sponsored symposium

- Numerical simulation
  - Jean-Noël ALBERTINI | Saint-Etienne, France

**Medtronic®** | sponsored symposium

- Science to explain DCB safety and efficacy, and why all DCBs are not the same
  - Francesco JATTA | Medtronic Europe
INNOV’illage

The ESVB promotes the innovation for its 10th edition!

This year, the ESVB, with the support of the health cluster Alsace BioValley, will promote innovative Start-ups & technical firms by offering a space of visibility in the “INNOV’illage”.

Take time to discover them in the exhibition hall!

INNOV’contest

For this very first edition, 4 brave Start-ups stand up and took part in the INNOV’contest.

You can find their 30” video at www.esvb.net/vote

Do not forget to VOTE for your favourite Start-up online:

Go to the INNOV’illage page on the ESVB website: esvb.net/vote

Start-ups:

ID NEST MEDICAL
VeinSound

nimesis
SimforHealth

The INNOV’contest award will be endorsed by the health cluster Alsace BioValley and the ESVB Committee.
General information

Your event coordinator’s contact

Julie PAPILLON +33 (6) 24 47 47 25  
Florence FLICK +33 (0) 7 68 84 92 60  
Nathalie COUVREUR +33 (0) 6 71 56 02 60

Bootcamp Registration

Registration & information desk at the Simulation Center: Thursday 12th | 7.30 > 8.00 am

ESVB Registration & information

Registration and information desk at the Palais de la Musique et des Congrès:  
**Friday 13th**: 7:30 am > 6.30 pm  
**Saturday 14th**: 8:00 am > 3:30 pm

Official language: English only

Target audience

All physicians: vascular surgeons, cardiovascular surgeons, neuro-surgeons, radiologists, angiologists, cardiologists, vascular anaesthesiologists, specialists in nephropathy and dialysis, phlebologists, fellows in training, medical students, vascular technicians & nurses interested in vascular surgery.

How to get to the Satellite events?

**Thursday October 12th, 2017**

- **ESVB Endovascular Simulation Bootcamp**
  Vascular Simulation and Training Center  
  **UNISIMES** Building, 2nd Floor  
  1 Place de l’Hôpital  
  67000 Strasbourg  
  please follow the arrow on site...

- **ESVB Satellite Workshop**
  Pavillon Leriche - Nouvel Hôpital Civil  
  Faculté de Chirurgie Dentaire, 2nd Floor  
  1 Place de l’Hôpital  
  67000 Strasbourg  
  please follow the arrow on site...
How to get to the main conference?

October, Friday 13th and Saturday 14th, 2017

- Palais des Congrès et de la Musique de Strasbourg, PMC

**Wacken, Strasbourg**

Tram B & E - Station Wacken
10 minutes away of Strasbourg City center

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**Conference book**

The ESVB 2017 published in a new more intuitive and colourful Conference Book with all articles of the lectures and presentations of this 10th edition.

The Conference Book will also be available online from October 21 at www.esvb.net

Visit our booth in the Exhibition Hall.

You can consult the previous Edition (2015 to 2005) and get the chance to bring them back home at preferential rates (5 to 15€). These are unique reference books.

Not enough place in your suitcase?
Don’t worry, we can send them to you at preferential rate too.
Map information

1. **Hôtel Hilton Strasbourg ****** 1 Avenue Herrenschmidt - 67000 Strasbourg - [www.hiltonhotels.com](http://www.hiltonhotels.com)
2. **Hôtel Mercure Palais des Congrès ****** 20 Place de Bordeaux - 67000 Strasbourg - [www.mercure.com](http://www.mercure.com)
3. **Hôtel Mercure Centre Gare ****** 14-15 Place de la Gare - 67000 Strasbourg - [www.mercure.com](http://www.mercure.com)
4. **Hôtel IBIS Ponts Couverts *** 7 rue de Molsheim - 67000 Strasbourg - [www.accorhotels.com](http://www.accorhotels.com)
5. **Hôtel Le Kleber ** 29 Place Kleber - 67000 Strasbourg - [www.hotel-kleber.com](http://www.hotel-kleber.com)
6. **Hôtel Pax ** 24-26 Rue du Faubourg National - 67000 Strasbourg - [www.paxhotel.com](http://www.paxhotel.com)
8. **Winstub Zuem Strissel** 5 Place de la Grande Boucherie - 67000 Strasbourg - [www.strissel.fr](http://www.strissel.fr)
The ESVB 2017 Social Events

We are pleased to invite you to discover some French and Alsatian specialities and share with us many enjoying and networking times.

**Thursday October 12th** For ESVB 2017 Faculty only

- **6:30 pm** Visit of the “Cave des Hospices de Strasbourg”
  1 place de l’Hôpital • F-67000 Strasbourg
  Tel: +33 (0)3 88 11 64 50
  www.vins-des-hospices-de-strasbourg.fr

- **8:30 pm** Faculty Dinner at the restaurant “Zuem Strissel”
  Winstub Zuem Strissel - 5 Place de la Grande Boucherie • F-67000 Strasbourg
  Tel. +33 (0)3 88 32 14 73
  www.strissel.fr

**Friday October 13th**

- **7:45 pm** Alsatian “Crémant” discovery

- **8:15 pm** Nabil Chakfé welcoming

- **8:30 pm** Cocktail dinner

- **10:00 pm** Young Researcher Prize Award

- **10:15 pm** Time to enjoy and build new collaborations
  The first drink is offered by the ESVB Organizers
Sponsor acknowledgment
We thank our sponsor for their financial support to the 10th European Symposium on Vascular Biomaterials