Sunday – Hands On training workshops: Share the experience, build the knowledge

- 20’ lunch sessions
- Bax: Imaging for cardiovascular interventions: what’s established, what is new, what is missing
- Prendergast: Mitral and tricuspid: innovations expected in 2018

- WS1 x1 Multimodality imaging 1x
  - Organized by Leipzic and Piazza, Hahn,
  - Invite Bax, Zuber Plass
  - MAISANO WRITES LEIPSIC AND PIAUZZA; IN COPY PLASS similar to TVT

- WS2 x3 How to do Cardioband 3x (Maisano, TBD EDWARDS)
  - Patient selection
  - CT planning
  - Procedural steps
  - Hands on training
  - Troubleshooting
  - Clinical data
  - 25 p per WS (80 invited by edwards)

- WS3 x2 How to perform percutaneous tricuspid repair with Trilign (Taramasso, Latib, Anker)
- **WS XX x1**  How to do Harpoon (Alternative neochordae transcatheter devices) (Weber, TBD EDWARDS)
  - Patient selection
  - Device platform specifications
  - Procedural steps
  - Hands on training
  - Troubleshooting
  - Clinical data

- **WS 4 x2**  Combined Procedures (Ferreiro, Nietlispach, Kar)
  - PCI and mitral interventions
  - Mitral interventions and LAA occlusion
  - Mitral Interventions and TAVI
  - Procedural steps MC and Amulet
  - Hands on training Amulet
  - Troubleshooting Amulet
  - Clinical data

- **WS 5 x1** Understanding surgical techniques: a hands on Workshop for Interventional cardiologists (Medtronic) (Reser, TBD)
  - Anatomy
  - Wet lab set-up
  - 3D camera
• WS 6 x3 Advanced surgical repair and replacement conventional and minimally invasive techniques Medtronicx1, Edwardsx1, Abbottx1 (Reser, Weber, Grimm, Sardari)
  o Anatomy
  o Wet lab set-up
  o 3D camera
  o Basics of mitral repair
  o Hands on training triangular resection
  o MICS simulator
  o Robot simulator
  o 3D printing
  o Hands on annuloplasty

• WS 7 x1 Tricuspid repair and replacement Medtronic (Taramasso, TBD)
  o Anatomy
  o Wet lab set-up
  o 2D camera

• WS 8x2 Ablation techniques (Benussi, TBD)
  o Anatomy
  o Ablation set-up
  o Wet lab set-up
  o 2D camera

• WS9 x2 MitraClip for Beginners (how to start-up efficiently) (Adolfo, Maisano, Latib, Swaans)
  o Patient selection
  o Device platform specifications
- Procedural steps
- Hands on training
- Troubleshooting
- Clinical data
- 6 simulators

- **WS10x2**  MitraClip for Advanced (Maisano, Feldman, Kar)
  - Advanced steering
  - Hemodynamics and MitraClip therapy
  - Complex cases
  - Barlows
  - Extreme FMR
  - Multiple clip implants
  - Beyond EVEREST
  - 6 simulators

- **WS11x1**  MitraClip in Japanese (Kuwata, )
  - Patient selection
  - Device platform specifications
  - Procedural steps
  - Hands on training
  - Troubleshooting
  - Clinical data
  - 1 simulator

- **WS12x2**  tricuspid edge-to-edge treatment: state of the art in Europe, (Taramasso, Hahn)
  - Patient selection
  - Device platform specifications, and future pipeline
  - Procedural steps
  - Hands on training (?)
  - Troubleshooting
  - Clinical data
• WS13x4 Transseptal puncture and LA navigation (Maisano, , Granada, Moarof, Reismann)
  o Anatomical landmarks
  o Devices
  o Step-by-step fluoro based TS puncture
  o Step-by-step echo based TS puncture
  o Where to puncture for which procedure
  o TS puncture Hands-on training
  o LA navigation Hands-on training

• WS14x2 How to do PVL (Nietlispach, Eechout)
  o Anatomical landmarks
  o Devices
  o La navigation
  o Sizing
  o Approaches
  o Cases in a box
  o Hands-on training

• WS15x2 Complications in structural interventions (Nietlispach, Eechout)
  o Anatomical landmarks
  o Devices
  o La navigation
  o Sizing
  o Approaches
  o Cases in a box
  o Hands-on training
• WS 16x2  How to do LAA occlusion Amulet, Watchman, Lifetech (Nietlispach, Kar, Meier)
  o  Patient selection
  o  Device platform specifications
  o  Procedural steps
  o  Hands on training
  o  Troubleshooting
  o  Clinical data

• WS 17x2 Neochord: How to do it (weber, colli)
  o  Patient selection
  o  Device platform specifications
  o  Procedural steps
  o  Hands on training
  o  Troubleshooting
  o  Clinical data

• WS 18x2 Mitral Valve 3D Anatomical (Ouda, reisman, Maastricht, ETH)
  o  Hands-on anatomy
  o  3D printed anatomies
  o  How to 3D print
  o  How to assess anatomy on CT
  o  Bioskills for mitral interventions

• WS 19x3 How to do TMVR CT planning (Plass 3Mensio, Philips,)
  o  Patient selection
  o  Device platform specifications
  o  CT planning
  o  3D printing
  o  Clinical data
• WS 20x1 Innovation (Guidotti Swissvortex, Biegelsen)

Monday

• 7.00-8.00 Breakfast Session
  • Diagnostics Live
    ▪ Moderators: Hahn, Rickli
    • Panel: Sarano, Ruiz
    • Live cases: Zuber, Tanner

• 8.00-9.00 Opening session
  • Moderators: Maisano, Mack, Leon, Ruschitzka
  ▪ The big picture: 2018….Mitral and Tricuspid are center stage
    • 0800-0810 Welcome (maisano, leon, ruschitzka)
    • 0810-0820 Follow up of live cases 2017 (taramasso, nietlispach)
    • 0820-0830 The most important discoveries of 2017 (Stone)
    • 0820-0830 The most important papers on EHJ family (EHJ, Eurointervention, EJHF) of 2017 (ruschitzka)
    • 0840-0850 What will happen in the next 5 years? (Leon)
    • 0850-0900 Education for the future structural interventionists (Maisano)

• 9.00-12.00 Live cases (surgical and interventional mitral valve repair)
Moderator: Mack, Hahn,
Panel: Modine, Pedrazzini, Prêtre, Genoni, Ince, Laufer, Meier

- Innovation in imaging, 3D printing, simulation training
- Breaking news, imaging and trial data snapshots on mitral valve repair and replacement
  - 2 Echo Imaging quiz (tanner, staempfli, zuber) (CAVEAT: NEED VOTING SYSTEM)
  - 2 Imaging snapshots (Piazza/Leipsic)
  - Surgical complex cases (Vogt)
  - Bioskills
  - Mitral repair devices in clinical trials
  - New technology in the pipeline
    - Cardioband state of the art (Nickenig)
    - Amend trial (valcare) (Colli)
    - Polares (previously Middle Peak Medical) with a “in-vivo in a box” case (Ulrich Schaefer)
    - MVVRx ARTO followed by Mitraclip – first in man (Prendergast)
    - Cardiac Implants (ruiz)
    - Innovheart Saturn (Denti)

- Live-in-a-box cases
  - Cardiac Dimension Live in a Box (Goldberg)
  - Cardioband for Barlow’s Live in a Box (Saccocci)
  - Cardioband + MitraClip in an extreme anatomy patient. (Taramasso)
• Fusion imaging PVL closure (Pozzoli)
• FEOPS
• Tiara case in a box (Colombo)
• Cephea (Granada)
• Cardiovalve (Maisano)

• 12.00-12.30  Keynote lecture: Larry Biegelsen, Wells Fargo (CAVEAT: NEED VOTING SYSTEM)

  o How to predict the future of Mitral and Tricuspid Interventions: a day in the life of a Wall Street analyst...
    ▪ 1200-1210  “a day in the life of a Medtech analyst...: how do Wall Street looks at our work” (Larry Biegelsen)
    ▪ 1210-1225 interactive audience interview “Together we can... predict the future of Mitral and Tricuspid interventions” (Larry Biegelsen, Francesco Maisano, Marty Leon, Mike Mack, Wjins, Prendergast, Robb, Mussallem, Meredith, Maraschi)
    ▪ 1225-1230  pause

• 12.30-13.30  Lunch Symposia
  o Fusion imaging
  o Medtronic
  o Edwards mitral repair landscape
  o Surgical nightmares: I wish I had a transcatheter solution....(Mestres, Vogt)
  o Valve in Ring, Valve in Valve (DVir, Vahanian)

• 13.30-15.30  Case-based Review of current technologies for mitral repair
- Moderator Ruschitska, Alfieri
- Panel Beyersdorf, Cheung, Borger, Vahanian,

- Case #1: a heart failure patient with severe FMR,
  - 1330-1335 case presentation (severe FMR, 
  - 1335-1345 live in a box (Intrepid) 
  - 1345-1355 Surgery remains an important alternative (Fontana) 
  - 1355-1405 The emerging landscape of FMR transcatheter repair therapies: a systematic review (Piazza) 
  - 1405-1410 COAPT trial: what if comes negative? (Feldman) 
  - 1410-1415 COAPT trial: what if comes positive? (Adams) 
  - 1415-1429 panel discussion and case wrap-up

- 1429-1430 Imaging quiz

- Case #2: an intermediate risk patient with DMR and AFib
  - 1430-1435 case presentation 
  - 1435-1445 live in a box: MitraClip + Amulet 
  - 1445-1455 Alternative platforms for edge-to-edge transcatheter repair (windecker) 
  - 1455-1505 Neochordal approaches (weber) 
  - 1505-1515 Combination of mitral repair and LAA occlusion, PCI, TAVI... (Nietlispach) 
  - 1515-1525 Watchman update (TBD)
- 1525-1529  discussion

- 1529-1530  Imaging quiz

- 15.30-16.30  When repair is not possible...: state of the art TMVI
  - Moderators: Dreyfuss, Popma
  - Panel: Delabays, Demertzis, Bax, Vahanian, Haude, van Miegem, Moccetti, Kuck,

  - State of the art TMVI: devices in clinical trials
    - 15.30-1538  Update on Trials (Mack)
    - 1538-1546  CT screening: lessons learned (Leipsic)
  - State of the art TMVI: devices in early feasibility trials
    - 1546-1654  ongoing EFS for transcatheter mitral replacement (Reismann)
    - 1654-1604  EFS experience: the good the bad and the ugly (Leon)
  - State of the art TMVI: devices in in preclinical stage
    - 1604-1608  New generation devices for TMVI (Webb)
    - 1608-1616  the valve I would like to have in 2025 (Grube)

- 1616-1629  Panel discussion

- 1629-1630  Imaging quiz

- 16.30-1830  Case-based Review of current technologies for mitral repair and replacement
  - Case #3: an intermediate risk patient with severe MAC and MR
- 1630-1635  case presentation
- 1635-1645  live in a box
- 1645-1655  Lessons learned in valve in MAC (guerrero)
- 1655-1705  CT planning for valve in MAC (Blanke)
- 1705-1710  FEOPS and valve in MAC
- 1710-1720  dealing with calcium in open heart surgery (Dreyfuss)
- 1720-1729  panel discussion

- 1729-1730  Imaging quiz

  - Case #4: an intermediate risk patient with severe MR following an attempted MitraClip
    - 1730-1735  case presentation
    - 1735-1745  live in a box (Tendine)
    - 1745-1755  Annuloplasty following mitraclip (van BArdeleben)
    - 1755-1805  Surgery following mitraClip (Vanermen)
    - 1805-1815  the opposite situation: when clipping is a solution following surgical or catheter repair (Zuber)
    - 1815-1820  How to improve long-term durability of transcatheter repair The value of measuring hemodynamics during MC therapy (Maisano)
    - 1820-1829  Panel discussion

- 1829-1830  Imaging quiz
18.30-19.00  Final grand round: P2 prolapse: one target for everybody: a case-based competition among Conventional surgery, Robotics, transcatheter leaflet repair
  o Objectives:
    ▪ to understand what is the best treatment for P2 lesions today
    ▪ to understand strength and limitations of the different options
    ▪ to learn patient-specific decision making
  o 1830-1835  Case presentation (clinical status, 3D echo, 3D printing)
  o 1835-1840  Best case for Robotic surgery (Weber)
  o 1840-1845  Best case for MitraClip (Kar)
  o 1845-1850  Best case for Neochord (Adams)
  o 1850-1852: red cards
  o 1852-1854  green cards
  o 1854-1856  votation
  o 1856-1900 and the winner is....

19.00  adjourn, and evening events
Tuesday

- **7.00-8.00** Breakfast Session
  - Diagnostics Live

- **8.00-9.00** Tricuspid valve: still forgotten?
  - Epidemiology of TR (Rosenhek)
  - Tricuspid vs mitral: an anatomical journey (Reisman)
  - Tricuspid vs mitral: imaging challenges (Wunderlich)
  - Assessment of severity of TR (Hahn)
  - State of the art surgical repair and replacement (Adams)
  - State of the art transcatheter treatments (Taramasso)

- **9.00-12.00** Live cases (surgical and interventional tricuspid valve repair)
  - Innovation in imaging, 3D printing, simulation training
  - Breaking news, imaging and trial data snapshots on tricuspid valve repair and replacement
    - Mitraclip for triicuspid (NicKenig)
    - Cardioband for tricuspid (Maisano)
    - Live in a Box Trialign (Latib)
    - Live in a Box Key (Labrousse)
    - 4Tech live in a Box
    - Endocarditis angiovac (oudah)
    - Tricento valve from NVT, (Toggweiler)
    - Navigate (bapat)

- **12.00-12.30** Eye opening lectures: what brings the future
  - 12.00-12.15 Eye opening lecture 1: Alternatives to pericardium in the future of valve replacement (Emmert)
- 1215-1230  Eye opening lecture2 : Predicting outcomes with simulated hemodynamics (FEOPS)

- **12.30-13.30  Lunch sessions**
  - Expanding MitraClip indications: how to deal with tricuspid valve
  - Mitralign
  - New horizons for tricuspid regurgitation (in collaboration with Edwards Lifesciences)

- **13.30-16.00  Case-based Review of current technologies for tricuspid repair and replacement**
  - Case #5: a patient with severe isolated TR
    - 1330-1335  case presentation (severe FMR, severe TR)
    - 1335-1345  live in a box (mitralign)
    - 1345-1355  In which patients still surgery remains an alternative? (Obadia)
    - 1355-1405  I would use a different device (Rodes-Cabau)
    - 1405-1415  Too late is too late (Topilsky)
    - 1415-1429  panel discussion and case wrap-up

  - 1429-1430  Imaging quiz

  - Case #6: a patient with degenerated tricuspid prosthesis
    - 1430-1435  case presentation (a patient with degenerated Tricuspid tissue valve)
    - 1435-1445  live in a box
    - 1445-1455  Tricuspid valve in valve and valve in ring state of the art (Webb)
    - 1455-1505  Which valve for surgical TVR (Mestres)
- 1505-1515 Anticoagulation therapy in patients with tricuspid prostheses (Fontana)
- 1515-1529 panel discussion and case wrap-up

  - 1529-1530 Imaging quiz

  - Case #7: a patient with PM induced TR
    - 1530-1535 case presentation
    - 1535-1545 live in a box
    - 1545-1555 Lead induced TR, echo examples (Zuber)
    - 1555-1535 Leadless Pacemaker: state of the art (Steffel)
    - 1535-1544 panel discussion and case wrap-up
  - 1544-1545 Imaging quiz

- 1545-16.45 Future of tricuspid valve interventions
  - 1545-1555 Is TR a culprit or a signal? (Rodes Cabau)
  - 1555-1605 what can we offer to TR patients today? (Hahn)
  - 1605-1615 TR and heart failure: a challenging couple (Anker)
  - 1615-1625 TR and Afib: an underestimated issue? (Kuck)
  - 1625-1633 Extreme position 1: TR should never be treated, patients are too end stage (Ruschitska)
  - 1633-1641 Extreme position 2: TR should never develop, patients should be treated before right ventricular involvement takes the stage (Maisano)
  - 1641-1645 Negotiation: this is the way we will treat/prevent TR in the future

- 16.45 Good Bye