

7:00 AM CONTINENTAL BREAKFAST

8:00 – 8:05 AM WELCOME

8:05 – 8:30 AM KEYNOTE LECTURE – PHILLIP M. DEVLIN, MD, FACR, FASTRO, FFRCSI (HON)

The Current Value and Usefulness of Brachytherapy in the Overall Management of the Oncology Patient

8:30 – 10:15 AM

### SESSION A1: BREAST BRACHYTHERAPY IN THE HEAT OF COMPETITION

**Chairs:** Atif J. Khan, MD; Jean-Michel Hannoun-Levi, MD, PhD; Csaba Polgár, MD, PhD, MSc

- **Overview of APBI Phase III Trials: Validation of the APBI Concept According to the Irradiation Technique Used**  
Atif J. Khan, MD
- **Breast Brachytherapy “State-of-the-Art”**  
Robert R. Kuske, MD, FAACE
- **Salvage Brachytherapy as a New Indication After Previous BCT**  
Jean-Michel Hannoun-Levi, MD, PhD
- **Why Choose Brachytherapy and Not External Beam RT or IORT?**  
Csaba Polgár, MD, PhD, MSc
- **Results of APBI Clinical Trials Using Intracavitary Single- and Multi-Channel Breast Brachytherapy Applicators**  
Frank A. Vicini, MD, FACR
- **Panel Discussion**

SCIENCE

### SESSION A2: BRACHYTHERAPY IN GYNECOLOGIC CANCERS: CHALLENGES AND DEVELOPMENTS

**Chair:** Umesh Mahantshetty, DMRT, MD, DNB (RT)

- **Transition From 2D to 3D Brachytherapy in Cervical Cancers: The Vienna Experience**  
Richard Pötter, MD
- **Implementation in Clinical Practice: Challenges in Developing Economies**  
Umesh Mahantshetty, DMRT, MD, DNB (RT)
- **Imaging Modalities: Current Challenges and Future Directions**  
Johannes C. Athanasios Dimopoulos, MD
- **Gynecologic Brachytherapy Case Discussion**

CHALLENGES

### SESSION A3: PHYSICS

**Chair:** Luc Beaulieu, PhD

- **Prostate Brachytherapy Ultrasound QA: A Practical Approach**  
Frank-André Siebert, PhD
- **Everything You Wanted to Know About Skin Brachytherapy But Were Too Busy to Ask**  
Zoubir Ouhib, MS, DABR
- **Advanced Dose Calculations in Brachytherapy: First Contact**  
Luc Beaulieu, PhD

HANDS-ON WORKSHOP

10:45 AM – 12:30 PM

### SESSION B1: GYNECOLOGY – 100 YEARS OF EXPERIENCE, NEW CHALLENGES

**Chairs:** Christian Kirisits, MSc, PhD; Subhakar Mutyala, MD

- **Vaginal Cylinders for Modern Brachytherapy**  
D. Jeffrey Demanes, MD, FACRO, FACR, FASTRO
- **The Overall Concept for Definitive Endometrium Radiotherapy**  
Subhakar Mutyala, MD
- **Modern Interstitial Techniques**  
Umesh Mahantshetty, DMRT, MD, DNB (RT)
- **The New ICRU/GEC-ESTRO Report in Clinical Practice**  
Christian Kirisits, MSc, PhD
- **Update of EMBRACE and Retro-EMBRACE**  
Kari Tanderup, PhD
- **Panel Discussion**

SCIENCE

### SESSION B2: BREAST BRACHYTHERAPY: STATE-OF-THE ART AND CHALLENGING PERSPECTIVES

**Chairs:** Jean-Michel Hannoun-Levi, MD, PhD; Csaba Polgár, MD, PhD, MSc

- **Breast Brachytherapy: State-of-the-Art and Challenging Perspectives**  
Jean-Michel Hannoun-Levi, MD, PhD
- **Brachytherapy for Breast Cancer: Which Device for Which Patient?**  
Robert R. Kuske, MD, FAACE
- **How to Prevent/Avoid Late Side Effects**  
Csaba Polgár, MD, PhD, MSc
- **Challenges Faced in Setting Up a Breast Brachytherapy Service**  
Johann Tang, MBBS, FRANZCR
- **Breast Brachytherapy: How to Allay Fears of Patients and Colleagues, and What Are Our Expectations for the Future?**  
Vratislav Strnad, MD, PhD, Prof.

CHALLENGES

### SESSION B3: NEW HORIZONS—BREAKTHROUGH TECHNOLOGIES

**Chair:** Atif J. Khan, MD

- **Y90 Microsphere Liver Treatment: Set Up, Tips & Tricks**  
Phillip M. Devlin, MD, FACR, FASTRO, FFRCSI (Hon)
- **Robotic Brachytherapy**  
Gabriel Kacsó, MD
- **Post-Craniotomy Cesium Implants**  
Atif J. Khan, MD
- **Practical Aspects of CT-Guided Biliary Duct Brachytherapy**  
Atif J. Khan, MD, and Phillip M. Devlin, MD, FACR, FASTRO, FFRCSI (Hon)

HANDS-ON WORKSHOP

10:15 – 10:45 AM BREAK

12:30 – 1:30 PM LUNCH

1:30 – 3:15 PM

## SESSION C1: PHYSICS – ADDING CERTAINTY TO SAFETY

**Chair:** Luc Beaulieu, PhD

- **State-of-the-Art in Brachytherapy Dose Calculation**  
Luc Beaulieu, PhD
- **Clinical Uncertainties: What Is the Magnitude?**  
Kari Tanderup, PhD
- **Advancements in Real-Time Imaging for Brachytherapy**  
Frank-André Siebert, PhD
- **In Vivo Dosimetry in Brachytherapy: Feasible and Needed?**  
Annette Haworth, PhD, FACPSEM
- **Panel Discussion**

SCIENCE

## SESSION C2: BUILDING A GLOBAL BRACHYTHERAPY COMMUNITY

**Chairs:** André-Guy Martin, MD, MSc, FRCP; Tim R. Williams, MD

- **How to Develop a Brachytherapy Community: The Need for an Interconnected Global Community for Brachytherapy**  
Tim R. Williams, MD
- **The International Cancer Expert Corps: A Peace Corps for Oncology**  
C. Norman Coleman, MD
- **Challenges and Accomplishments for Globalization of Brachytherapy: The (GEC)-ESTRO Perspective**  
Richard Pötter, MD
- **Radioactive Seed Brachytherapy in China: Lessons From the First 14 Years**  
JunJie Wang, MD, PhD, and Fuquan Zhang, MD
- **The Concept of an Interconnected Global Brachytherapy Community**  
André-Guy Martin, MD, MSc, FRCP
- **Panel Discussion: A Rollout Plan for an Interconnected Global Brachytherapy Community**

CHALLENGES

## SESSION C3: PRACTICAL TIPS & TRICKS FOR A GOOD BREAST BRACHYTHERAPY IMPLANT USING STANDARD AND NEW DEVICES

**Chairs:** Csaba Polgár, MD, PhD, MSc; Vratislav Strnad, MD, PhD, Prof.

- **Video Presentation on Postoperative CT- and Template-Guided Breast Implantation**  
Csaba Polgár, MD, PhD, MSc
- **GEC-ESTRO Recommendations for APBI PTV Definition After Open- and Closed-Cavity Surgery**  
Vratislav Strnad, MD, PhD, Prof.
- **Tips & Tricks for a Good Interstitial Implant – Choice Between Different Types of Brachytherapy Techniques**  
Johann Tang, MBBS, FRANCRZ
- **Pros & Cons of Single-Lumen (MammoSite®) and Multi-Lumen Balloon Brachytherapy**  
Frank A. Vicini, MD, FACR
- **Panel Discussion**

HANDS-ON WORKSHOP

3:45 – 5:30 PM

## SESSION D1: WHAT MAKES BRACHYTHERAPY SO EXCITING?

**Chairs:** Vincenzo Valentini, MD; Yasuo Yoshioka, MD

- **Why Patients Should Choose Brachytherapy**  
Vincenzo Valentini, MD
- **The Awareness to Cure Patients**  
Phillip M. Devlin, MD, FACR, FASTRO, FFRCSI (Hon)
- **The Organ-Sparing Capacity of Brachytherapy**  
Peter Grimm, DO
- **The Portfolio of Technical Innovations**  
Yasuo Yoshioka, MD
- **Panel Discussion: Which Messages Can Reach Your Patients**

SCIENCE

## SESSION D2: EMBRACING THE KNOWLEDGE OF RADIOBIOLOGY AND RADIATION

**Chair:** Christian Kirisits, MSc, PhD

- **The EQD2 Concept for Practical Reporting of Cervix Brachytherapy**  
Christian Kirisits, MSc, PhD
- **Background of Brachytherapy for Different Sites**  
Alexandra Stewart, DM, MRCP, FRCR
- **Hidden Issues in the Use of LQ and Other Models**  
William H. McBride, PhD, DSc
- **Operator Training in HDR Brachytherapy: Preventing Treatment Errors**  
Zoubir Ouhib, MS, DABR
- **Panel Discussion**

CHALLENGES

## SESSION D3: WHAT DOES ADVANCED GYNECOLOGIC BRACHYTHERAPY LOOK LIKE IN PRACTICE?

**Chairs:** Mitchell Kamrava, MD;  
Umesh Manhantshetty, DMRT, MD, DNB (RT)

- **CT- and U/S-Guided Brachytherapy Ablation for Gynecologic Cancers**  
Mitchell Kamrava, MD
- **Advanced Brachytherapy Procedures for Local Disease**  
Umesh Manhantshetty, DMRT, MD, DNB (RT)
- **The Planning Process in Adaptive Gynecologic Brachytherapy**  
Razvan Galalae, MD, PhD
- **Planning: Tips & Tricks**  
Johannes C. Athanasios Dimopoulos, MD, and Kari Tanderup, PhD

HANDS-ON WORKSHOP

3:15 – 3:45 PM BREAK

7:00 AM CONTINENTAL BREAKFAST

8:00 – 8:05 AM WELCOME

8:05 – 8:30 AM KEYNOTE LECTURE – RICHARD PÖTTER, MD

Shaping the Future of Brachytherapy - Between New Technologies, Diagnostic Tools, and Improved Outcomes

8:30 – 10:15 AM

## SESSION E1: PROSTATE CANCER: IS PROVEN QUALITY AN ARGUMENT?

**Chairs:** Janusz Skowronek, MD, PhD; Mitchell Kamrava, MD; André-Guy Martin, MD, MSc, FRCP

- **LDR, HDR, or PDR – Crossroads**  
Janusz Skowronek, MD, PhD
- **Why Choose Brachytherapy and Not EBRT?**  
Mitchell Kamrava, MD
- **Is LDR Brachytherapy Still an Option for Developing Countries?**  
André-Guy Martin, MD, MSc, FRCP
- **The Role of HDR Monotherapy for Intermediate-/High-Risk Prostate Cancer Patients**  
John K. Hayes, Jr, MS, MD
- **The Role of HDR Boost for High-Risk Prostate Cancer Patients**  
Ferrán Guedea, MD, PhD
- **Prostate Cancer Results Study Group 2014 – Results Comparing Treatment of Prostate Cancer**  
Peter Grimm, DO
- **Panel Discussion: How Brachytherapy Can Overcome Tremendous Competition**

SCIENCE

## SESSION E2: DEVELOPING A BRACHYTHERAPY PROGRAM

**Chair:** Tim R. Williams, MD

- **How to Start a Brachytherapy Program: It Depends on Where You Live!**  
Tim R. Williams, MD
- **The Essential Components: The Brachytherapy Suite**  
Akila Viswanathan, MD, MPH
- **Starting a Brachytherapy Program in Government-Controlled Healthcare Systems**  
Razvan Galalae, MD, PhD
- **Building a Brachytherapy Program in Developed Countries Outside of the USA and Europe**  
Keith H. C. Lim, MBBS, FRANZCR
- **The Process of Care, Reimbursement Potential, Program Costs, and Pro Forma for Starting a New Brachytherapy Program in the USA**  
Tim R. Williams, MD
- **Panel Discussion**

CHALLENGES

## SESSION E3: UNDERVALUED TECHNIQUES EXPOSED

**Chairs:** Vratislav Strnad, MD, PhD, Prof.; Antonio Cássio Assis Pellizzon, MD, PhD, MSc

- **Brachytherapy for Penile Carcinoma: Technique, Target Definition/Delineation, and Dose Schedule**  
Vratislav Strnad, MD, PhD, Prof.
- **Brachytherapy for Bladder Cancer: Technique, Intraoperative, and Postoperative Target Definition, and Dose Schedule**  
Geert Smits, MD
- **Brachytherapy for Sarcomas: Techniques, Intraoperative Target Definition and Postoperative Target Delineation, and Dose Schedule**  
Antonio Cássio Assis Pellizzon, MD, PhD, MSc
- **Endorectal Brachytherapy: Equipment, Technique, Target Definition, and Dose Schedule**  
Té Vuong, MD, FRCP

*This session includes round robin demonstrations using a phantom.*

HANDS-ON WORKSHOP

10:45 AM – 12:30 PM

## SESSION F1: PALLIATIVE BRACHYTHERAPY – A CARE FOR PATIENTS

**Chairs:** Janusz Skowronek, MD, PhD; Subhakar Mutyala, MD

- **Palliative Brachytherapy: A Solution for Advanced Esophageal Cancer**  
Té Vuong, MD, FRCP
- **Brachytherapy Against Deadly Threat: Dyspnea**  
Subhakar Mutyala, MD
- **“Rendez-Vous” as a Solution for Biliary Duct Cancer**  
Janusz Skowronek, MD, PhD
- **Palliative Brachytherapy of Head and Neck Cancer – When, Why, How?**  
Antonio Cássio Assis Pellizzon, MD, PhD, MSc
- **Panel Discussion: Is Palliative Brachytherapy Always Better Than Supportive Treatment?**

SCIENCE

## SESSION F2: CHALLENGES IN ADVANCING YOUR PROSTATE PRACTICE

**Chairs:** André-Guy Martin, MD, MSc, FRCP; Yasuo Yoshioka, MD; Mitchell Kamrava, MD

- **Are We Going in the Right Direction? Expectations of a Better Cure and Survival Gain With HDR Brachytherapy**  
John K. Hayes, Jr, MS, MD
- **Would SBRT Hypofractionated Approach Be as Good? Then Why Bother With Brachytherapy?**  
Yasuo Yoshioka, MD
- **Can We Salvage Local Recurrence With Brachytherapy Better Than With Surgery or SBRT?**  
D. Jeffrey Demanes, MD, FACRO, FACR
- **Is Focal Therapy Really the Right Step Forward?**  
Mitchell Kamrava, MD
- **Advancing Your Prostate Practice: Could a Robotic Telemanipulator Integrated to Functional Imaging Be of Help?**  
André-Guy Martin, MD, MSc, FRCP
- **Clinical Case Discussions**

CHALLENGES

## SESSION F3: IMAGING IN BRACHYTHERAPY

**Chair:** Christian Kirisits, MSc, PhD

- **MRI-Based Imaging and Contouring of Gynecologic Cases**  
Johannes C. Athanasios Dimopoulos, MD
- **CT-Based Imaging and Contouring of Gynecologic Cases**  
Akila Viswanathan, MD, MPH
- **Registration and Reconstruction of Different Image Modalities (MRI, CT, and U/S) and Applicators**  
Christian Kirisits, MSc, PhD
- **Imaging for Prostate and Other Sites**  
Bradley R. Pieters, MD, PhD
- **Hands-On Cases**

HANDS-ON WORKSHOP

10:15 – 10:45 AM BREAK

12:30 – 1:30 PM LUNCH

1:30 – 3:15 PM

## SESSION G1: NEW HORIZONS – BREAKTHROUGH TECHNOLOGIES

**Chair:** Vincenzo Valentini, MD

- **Can Protons Replace Eye Brachytherapy?**  
Richard Pötter, MD
- **High-Dose-Rate Intraoperative Radiation Therapy: The Nuts and Bolts of Starting a Program, and New Directions**  
Joseph M. Herman, MD, MSc
- **CT-Guided HDR Brachytherapy in Oligometastases**  
Jens Ricke, MD, PhD
- **HDR and SBRT: Competitive Treatments?**  
Ferrán Guedea, MD, PhD
- **Panel Discussion**

SCIENCE

## SESSION G2: BRACHYTHERAPY FOR HEAD & NECK AND SKIN TUMORS – CHALLENGE OR ROUTINE FOR PHYSICIAN AND PHYSICIST?

**Chairs:** Tim R. Williams, MD; Vratislav Strnad, MD, PhD, Prof.

- **Surface Brachytherapy for Squamous and Basal Cell Carcinomas of the Skin**  
Michael E. Kasper, MD, FACRO
- **Head & Neck Brachytherapy: Primary or Salvage – When, Why, Who?**  
Vratislav Strnad, MD, PhD, Prof.
- **Interactive Session: Solve a Problem — Large-Volume Skin Brachytherapy — Scalp, Skin, Breast Wall, etc.**  
Alexandra Stewart, DM, MRCP, FRCR
- **Clinical Case Discussion**

CHALLENGES

## SESSION G3: PROSTATE BRACHYTHERAPY: FROM NEEDLE INSERTION AND BASIC PLANNING TO INTEGRATED REAL-TIME ULTRASOUND-BASED PROCEDURES

**Chairs:** André-Guy Martin, MD, MSc, FRCP; Luc Beaulieu, PhD

- **Why HDR Prostate Brachytherapy and for Whom?**  
André-Guy Martin, MD, MSc, FRCP
- **Overview of an HDR Brachytherapy Procedure**  
André-Guy Martin, MD, MSc, FRCP
- **Hands-on Session**  
John K. Hayes, Jr, MS, MD; Luc Beaulieu, PhD;  
André-Guy Martin, MD, MSc, FRCP
- **Ask the Experts**

HANDS-ON WORKSHOP

3:45 – 5:30 PM

## SESSION H1: HIDDEN HEROES OF BRACHYTHERAPY: UNDERVALUED TECHNIQUES

**Chairs:** Vratislav Strnad, MD, PhD, Prof.;  
Antonio Cássio Assis Pellizzon, MD, PhD, MSc

- **Penile Carcinoma – Organ Preservation With Brachytherapy**  
Vratislav Strnad, MD, PhD
- **Bladder Cancer: Is Brachytherapy an Alternative for Cystectomy?**  
Bradley R. Pieters, MD, PhD
- **Sarcoma: Benefit From Brachytherapy in Curative Intention**  
Antonio Cássio Assis Pellizzon, MD, PhD, MSc
- **Is High-Dose-Rate Brachytherapy a Treatment Option for Patients With Rectal Cancer?**  
Té Vuong, MD, FRCP
- **Interstitial Brachytherapy for Lung Cancer: Techniques and Results**  
Alexandra Stewart, DM, MRCP, FRCR
- **Panel Discussion**

SCIENCE

## SESSION H2: THE COMPELLING CASE FOR BRACHYTHERAPY IN THE PALLIATIVE SETTING

**Chairs:** Janusz Skowronek, MD, PhD; Yasuo Yoshioka, MD;  
Tim R. Williams, MD

- **Re-irradiation of Lung Cancer: Undervalued Possibility**  
Janusz Skowronek, MD, PhD
- **Re-irradiation Using HDR Interstitial Brachytherapy for Locally Recurrent Cervical Cancer**  
Yasuo Yoshioka, MD
- **Esophageal Cancer: Is Combination With Surgery (Stents) or EBRT a Better Solution?**  
Razvan Galalae, MD, PhD
- **Quality of Life: To Treat or Not to Treat?**  
Tim R. Williams, MD
- **Clinical Case Discussion**

CHALLENGES

## SESSION H3: SKIN, HEAD & NECK

**Chair:** Subhakar Mutyala, MD

- **Leipzig Applicators and E-brachytherapy**  
Zoubir Ouhib, MS, DABR
- **Surface Molds – Believe it or Not, Not All Skin Cancers Are Flat and Round!**  
Subhakar Mutyala, MD
- **Head & Neck Brachytherapy (Clinical)**  
Phillip M. Devlin, MD, FACR, FASTRO, FFRCSI (Hon)
- **Head & Neck Brachytherapy (Physics)**  
Frank André-Siebert, PhD

HANDS-ON WORKSHOP

3:15 – 3:45 PM BREAK