



# INSTITUTE *for* THERAPY ADVANCEMENT

*Where innovation and education go hand in hand*

HEALTHCARE PROFESSIONAL EDUCATION  
EUROPE CAMPUS





# GLOBAL MISSION

The Institute for Therapy Advancement is committed to

**EUROPE** providing world-class training and education focused

**NORTH AMERICA** on cardiac and vascular therapies to help healthcare

**JAPAN** professionals advance the standard of patient care.

## THE INSTITUTE EXPERIENCE



SKILLS TRAINING

EXPERIENCE SHARING WITH PEERS

OBJECTIVE THERAPY ORIENTATION

FOCUS ON YOUR DAILY PRACTICE





*Dr. Lorell is responsible for evaluating new and emerging technologies, determining product development priorities, and influencing the company's clinical research strategy across all of its therapy areas. She also serves as a strong advocate for education and public policy initiatives, which are critical to advancing the quality of patient care.*

*In addition to her role at Guidant, Dr. Lorell is Professor of Medicine at Harvard University Medical School. She is internationally recognised for her expertise in clinical care of heart failure, as well as interventional cardiology. Her research work has been published extensively and she has served as an invited lecturer at various conferences and symposiums around the world.*

*Additionally, Dr. Lorell has served in leadership positions on numerous national advisory boards and committees including the American Heart Association, Heart Failure Society of America and American College of Cardiology, which guide national standards for the care of patients.*

## Advancing the standard of patient care together

Developments in therapies for the treatment of cardiac and vascular disease provide you with ever-greater flexibility to treat your patients and improve outcomes. However, the speed of innovation and the volume of clinical trials published are overwhelming. At the same time, the need for increased productivity makes it a challenge for healthcare professionals to stay abreast of the latest developments.

We recognised this challenge and founded a global education and training network, the Institute for Therapy Advancement. It reflects our commitment to helping you efficiently and effectively put into practice the latest developments and guidelines in your specialty.

At the Institute, independent Course Directors and faculty members, all well known opinion leaders and practitioners, warrant the quality and objectivity of the many programmes offered. As a result, the vast majority of programmes are officially CME accredited.

Thousands of healthcare professionals each year benefit from the experience gained at the Institute and I invite you to join them. Our aim is to let you participate in an exceptional learning experience.

You will be in excellent company.

A handwritten signature in blue ink that reads "Beverly H. Lorell MD".

**Prof. Beverly H. Lorell, MD**

**Vice President, Chief Medical and Technology Officer**

## What makes the Institute experience unique?

No other educational facility completely immerses you in new therapy learning. You receive in-depth focused training on all aspects of one topic with the latest theoretical updates and practical skills training. This unique integral approach is designed to maximize your learning experience and optimize your patients' outcome.

# THE INSTITUTE EXPERIENCE...



## SKILLS TRAINING

“Learning by doing” is the best way to increase your confidence and skills level.

The Institute is the first training facility in Europe combining a fully functional CathLab, one-of-a-kind Virtual Reality simulators and state-of-the-art audiovisual equipment to offer live case transmissions. All courses offer real-case scenarios with hands-on simulations so you experience procedural techniques, as it would be in actual practice.

## EXPERIENCE SHARING WITH PEERS

Experience first hand the significance of learning in a stimulating and lively environment. Courses are limited to small groups where a high level of interaction facilitates open discussions and a sharing of best practices and experiences from all participants. A diverse mix of faculty and participants from across Europe broaden and test your beliefs.

## OBJECTIVE THERAPY ORIENTATION

Objective course content is designed and supervised by four independent Course Directors. In total, the Institute faculty consists of more than 100 independent medical experts applying the “physicians teaching physicians” approach. As a result, almost all programmes have received European CME accreditation points.

## FOCUS ON YOUR DAILY PRACTICE

Newly acquired skills and techniques that can be swiftly transferred from the classroom to clinical practice creates immediate value for you and your patients. Our in-depth training combines practical skills building with science-based knowledge so you develop the know-how to perform a treatment relevant to your daily practice.



# ...AN EXPERIENCE OF INNOVATION

## Where innovation and education go hand in hand

As your partner in education, the Institute offers you an opportunity to enhance your skills, knowledge and experience in cardiac and vascular therapies.

The Institute Course Directors, each of them renowned opinion leaders, ensure the innovative character and the scientific purity of teaching content through an independent scrutiny of the programme. To affirm the high quality of education, most programmes have received the stamp of approval by several CME accreditation boards. As a participant, you therefore have the confidence that the Institute provides you with knowledge and skills that create value for you and your patients.

A world-class faculty whose knowledge is grounded in clinical practice educates participants in a highly interactive environment, facilitating open discussions and sharing of experiences. You benefit from close contact with thought leaders and receive immediate feedback addressing individual needs, allowing you to better meet the needs of patients in your day-to-day practice. Participation in an Institute course is an excellent way to network with peers and opinion leaders.

*“A great mix of practical and theoretical information, I have learned many tips and tricks, which will surely benefit my patients.”*





### **Professor Jean Marco**

*is Director and Founder of the Interventional Cardiology Unit in Clinique Pasteur, Toulouse, France.*

*Prior to this position, his hospital and university appointments included Hospital Resident (externship and internship), Head Resident in the Cardiology department of the University Hospital of Toulouse-Purpan and Professor of Cardiology and Chief of the Catheterization Laboratory of the University Hospital of Toulouse-Purpan.*

*Aside from his daily posts, Prof. Marco is the Founder of the Annual Complex Coronary Angioplasty Course, where he served from 1989 to 1997, Course Supervisor of the Endovascular Therapy Course organised in Paris from 1997 to 1999, and Course Director of the Paris Course on Revascularization from 2000 to 2004. He also co-edited 15 Complex Coronary Angioplasty Course books.*

*Prof. Marco is involved in medical research and the evaluation of new technologies in Interventional Cardiology. He is also chairman of the Board of Directors of PCR.*

## The value of post-graduate education

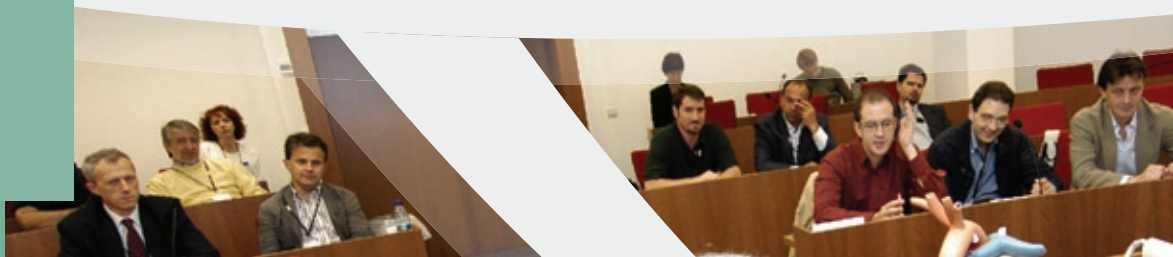
Experienced physicians know that in fast-paced, rapidly changing environments, it's important to stay abreast of the latest information and to refresh basic knowledge while applying new updates. That's why the value of post-graduate education is so high – physicians can treat their patients using the most up-to-date evidence, tools and techniques available.

Herein lies the value of the Institute for Therapy Advancement's educational programme. Course Directors and faculty members analyse the overwhelming amount of information found in journals, abstracts and congresses and present it in a clear and concise format that is pertinent to your daily clinical practice. Therefore, course material maintains objectivity and is not influenced by industry-financed forces.

Learning by sharing experiences, questioning ideas and testing theories is the goal of courses at the Institute. It gives you the exceptional opportunity to interact directly with a faculty of clinical teachers, all renowned opinion leaders from across Europe.

"Physicians teaching physicians" creates immediate value for you and your patients. Close interactivity between teachers and participants helps to build confidence and leads to better judgments. You will benefit from interacting in small groups with people who will challenge your way of thinking. And this will lead us to our objective, which is to improve the knowledge, skills and quality of care that doctors deliver to patients.

**Prof. J. Marco**





*Doctor John Morgan is currently Consultant Cardiologist and CRM Specialist at the Wessex Cardiac Centre. During his professional career, he has gained extensive experience in the management of cardiovascular disease. Under his leadership, the Electrophysiology Service of the Wessex Cardiac Centre has become nationally and internationally recognised for the management of cardiac arrhythmias and is making novel contributions to the understanding of internal cardiac defibrillation and complex arrhythmia management.*

*In addition to being a professor at the Institute for Therapy Advancement and busy clinician, Dr. Morgan leads a large research team at the University of Southampton. He is in the process of establishing a "School of Device-Based Therapy" in partnership with the UK's Department of Health. He qualified from Gonville and Caius College Cambridge in 1982 and trained at Westminster Hospital and the National Heart Hospital before taking up his current post in 1992.*

## Educational governance for industry sponsored Continuing Medical Education (CME)

Where high technology plays a major role in clinical therapy, "industry" is often best positioned to deliver educational and clinical skills training programmes. To ensure programme objectivity, educational relationships between physicians, healthcare professionals and industry must be regulated. In this way, participants will receive unbiased education (not compromised by commercial sponsorship) of real value to physicians whose top priority is enhancement of patient care.

The Course Directors at the Institute for Therapy Advancement have developed a set of standards and guidelines, under the title of "Educational Governance," that form the basis for regulating the relationship between commercial organisations and physicians during educational events that they supervise (Heart, June 2005). It enables the development of objective educational programmes within an industry-sponsored infrastructure while ensuring the integrity and impartiality of teaching content. The Institute for Therapy Advancement adheres to "Educational Governance" in its day-to-day operations.

The Institute relies on its partnership with the healthcare industry to provide a "virtual school of technology based medicine" and has earned a reputation for CME accredited therapy-oriented programmes of great quality.

**Dr. J. Morgan**





### Doctor Luc Stockx

*has been the interventional vascular and neurovascular radiologist at the department of Medical Imaging in the Ziekenhuis Oost-Limburg in Genk (Belgium) since 2000. Before taking on this position, he was the Senior Interventional Radiologist at the University Hospital of Leuven for the past ten years, where he also was involved in postgraduate training programmes.*

*Amongst many other international societies in radiology, Dr. Stockx is a member of the Royal Belgian Radiological Society (RBRS) where he was President of the Vascular and Interventional Radiology section from 1996 to 1999. Since 1977, he has been Fellow of the Cardiovascular and Interventional Radiological Society of Europe (CIRSE) where he also served as an advisor to the CIRSE foundation, which focuses on research and educational programmes in interventional radiology. He is an active reviewer of the CVIR, the journal of the society. Dr. Stockx is also a member of the Society of Interventional Radiology (SIR) since 1996.*

*Within the Institute, Dr. Stockx teaches skills with a focus on patient safety through correct and meticulous material manipulation.*

## Practical skills training to advance the standard of patient care

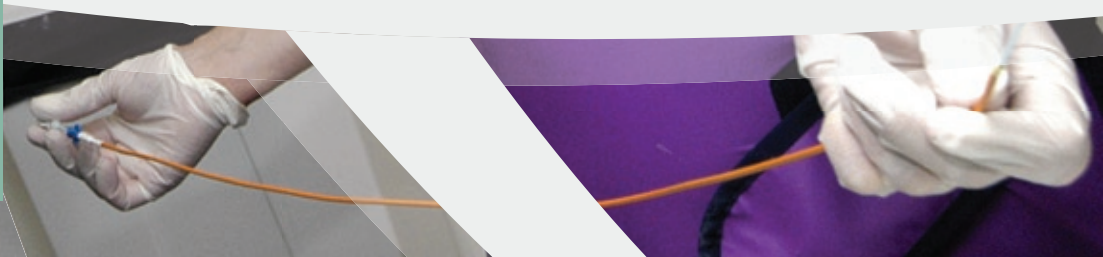
Mastering any technical skill requires hours performing the task. This is especially true in the medical field. The introduction of new technology, along with innovative tools and techniques, has resulted in a discrepancy in what we know on paper and how we put it into practice.

Today's newest interventional therapies require intensive skills training. Physicians are regularly confronted with new modalities, but have little or no opportunity to practice these skills before applying them to their patients. In theory, action learning – where the student assists the teacher on procedures and gradually takes on more and more responsibility – is the optimal way of training. However, this is not always possible and too often “see one, do one, teach one” is still more rule than exception.

The Institute now offers a way of practicing these skills without facing your patient. The goal is to provide you with the confidence and comfort level to perform procedures in your day-to-day practice, move your learning curve out of your own lab and make you a “professional in performance.”

The Institute's Virtual Reality and CathLab equipment simulates anatomy and disease in a real setting to be treated with real materials. Like a flight simulator allows pilots to train without risks, the advanced training equipment at the Institute for Therapy Advancement provides a safe environment for you to improve your practical skills and enhance patient safety and care. It's only by doing that you learn best!

**Dr. L. Stockx**







### **Professor Faiez Zannad**

is currently Professor of Therapeutics at the Medical Faculty of the Henri Poincaré University of Nancy where he heads up the Division of Heart Failure, Hypertension and Preventive Cardiology/ Department of Cardiovascular Disease. His many roles include Director of the Clinical Investigation Center (CIC), mutually funded by Nancy's academic hospital, the INSERM and a research group (Equipe d'Accueil) "Cardiac and arterial remodelling" at the Faculty of Medicine. He conducts research in the area of physiopathology, genetics and pharmacotherapeutics of hypertension and heart failure.

Prof. Zannad is a Fellow of the European Society of Cardiology (FESC), member of the Board of the French Society of Hypertension, as well as of a large number of international societies in cardiology, hypertension, pharmacology and therapeutics. With Professor Bertram Pitt (Ann Arbor, USA), he is chairman and organiser of an annual international meeting "Advanced Drug Research in Cardiology" (1997 to 2002) and 'Global CardioVascular Clinical Trialists Forum' (since 2004), and of the Cardiovascular Clinical Trialists Workshop. Throughout his many years in the field, Prof. Zannad has contributed to the design, conduct and steering of several large clinical trials in cardiology.

## **A multidisciplinary team approach optimises global patient care**

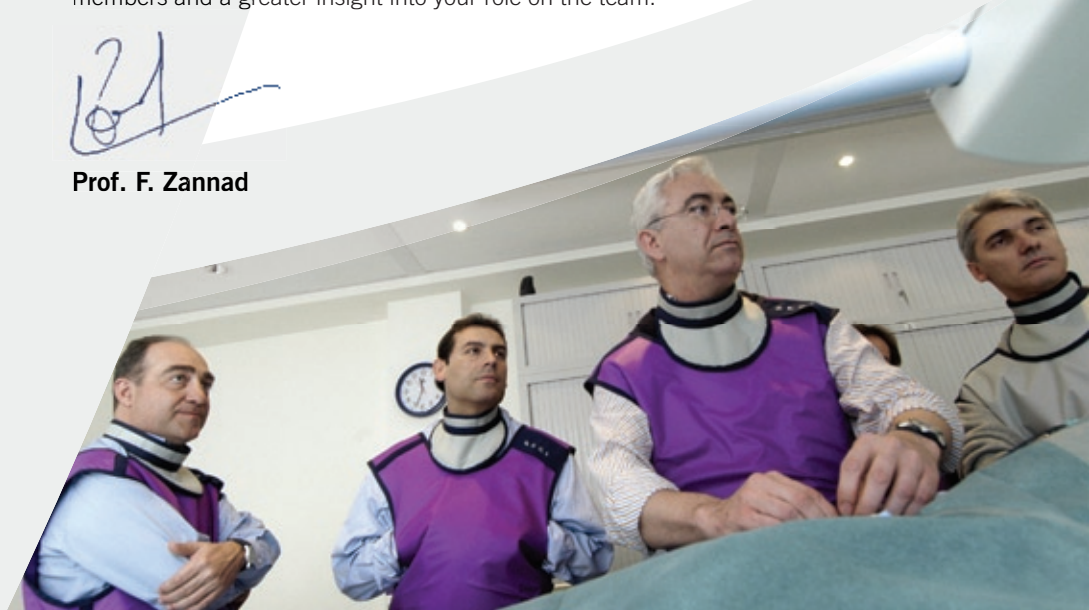
New approaches to current behaviour always involve a shift. Moving from multidisciplinary specialists to multidisciplinary teams not only requires an organisational change, but also a modification in mindset. Specialists must think, behave and communicate differently in order to improve patient outcomes.

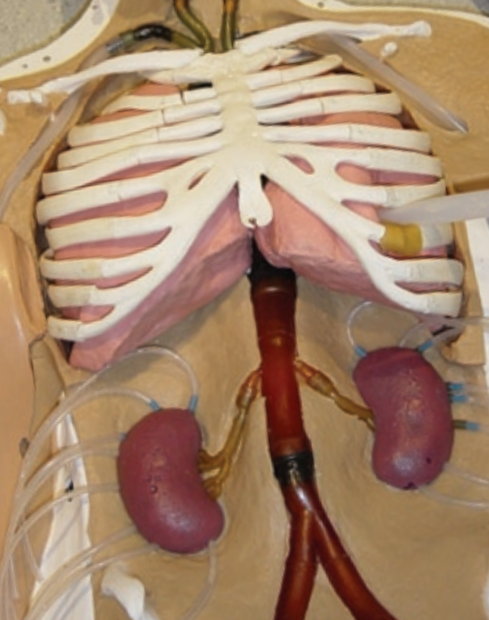
In the past, a patient with multiple problems was not cared for as one person but was treated separately moving from one doctor to the next. Today, there are many ways to treat diseases, including smart devices, drug therapies and patient education. Each alone does not solve all problems so the answer lies in somehow working together to optimise global patient care.

Changing ideas in therapy-oriented medicine have emphasised the need for specialists in hospitals. At present, there is a gap between this new consciousness and reality. The Institute aims to bridge this gap by providing a platform for advancing a team approach in patient management.

Implementing a team approach is difficult at a physician level but the Institute for Therapy Advancement is taking a step forward to improve communication between subspecialties. Led by independent clinicians who are field leaders, CME accredited courses are given in small groups in an open and lively learning environment facilitating open interactions and discussions. You understand first hand the challenges inherent in each member subspecialty and learn from the experience of others in the group. In this way, you gain experience on how to structure a multidisciplinary team and you have a deeper appreciation of team members and a greater insight into your role on the team.

**Prof. F. Zannad**





# SKILLS TRAINING THROUGH SIMULATION

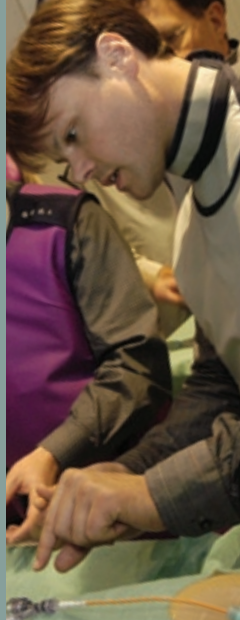
The [Institute for Therapy Advancement](#) has identified the crucial role of skills training for physicians to improve procedural techniques. The Institute pioneered the development of unique skills training tools based on advanced and innovative simulation techniques. They provide exceptional training opportunities on models that closely resemble patient anatomy and physiology.

## PHYSICAL FLOW SIMULATION MODEL IN CATHLAB

The physical flow model is a synthetic replica of the human arterial anatomy. This model allows physicians to practice procedures and treat patients in a real CathLab setting with real patient anatomy, but with no risk to the patient.

## ELECTRONIC HEART SIMULATION MODEL

The electronic heart simulation model is an advanced skills training tool for practicing the programming of pacemakers, defibrillators and resynchronisation devices. This device generates electronic signals, simulating the depolarisation wave in the heart, and can be easily changed into slow, fast, irregular or life-threatening heart rhythms. It is then up to the physician to make sure the patient receives optimal treatment.



### VIRTUAL REALITY SIMULATION

Building on the extensive training experience of the aviation industry, the Institute has pioneered the development of training simulators in cooperation with the company Mentice. This training tool has now grown to maturity and is the most useful skills training technique today and for the future.

### Hand-Eye Coordination

Hand-eye coordination is a vital skill for achieving success in any minimally invasive procedure involving X-ray projection. Simulation training is the most efficient way to practice this psychomotor skill and to acquire the necessary device manipulation skills.

### 3D Visualisation of the Anatomy

Recognising 3D anatomical details in a CathLab is only possible through a 2D projection on the X-ray screen. Specific software on the simulator creates 3D images helping the operator to recognise the typical anatomies and make an optimal diagnosis.

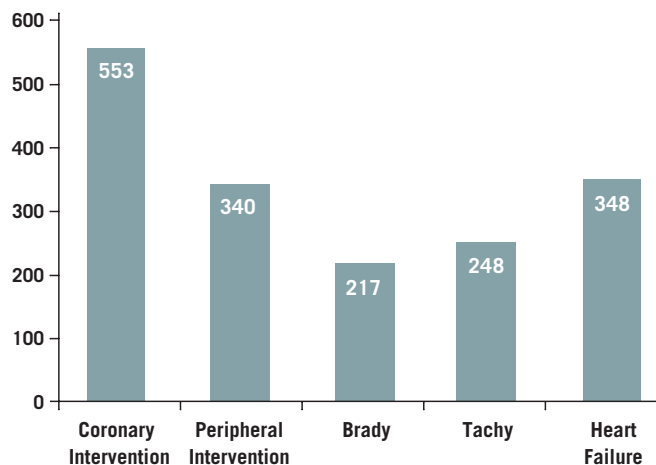
*“I have learned a lot despite already being involved with implants, and will adapt these new skills in my practice”*



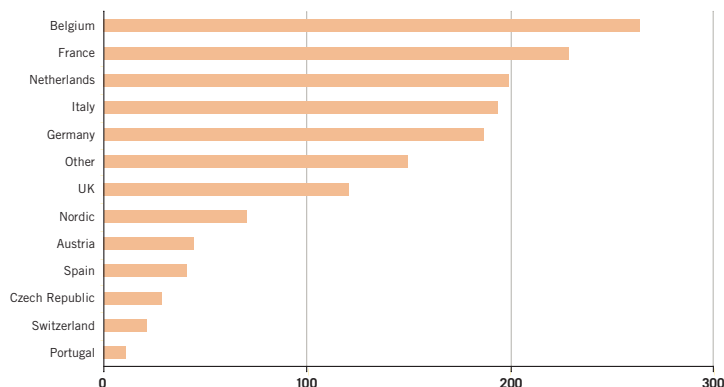
# YOU ARE IN GOOD COMPANY

*84% of participants  
indicated that they would  
recommend the "Institute  
Experience" to a colleague*

## OVERVIEW 2004 INSTITUTE FOR THERAPY ADVANCEMENT

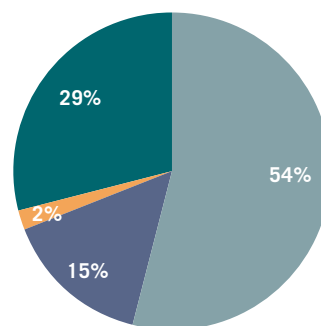


**NUMBER OF  
PARTICIPANTS BY  
COURSE TYPE**  
TOTAL :1,706

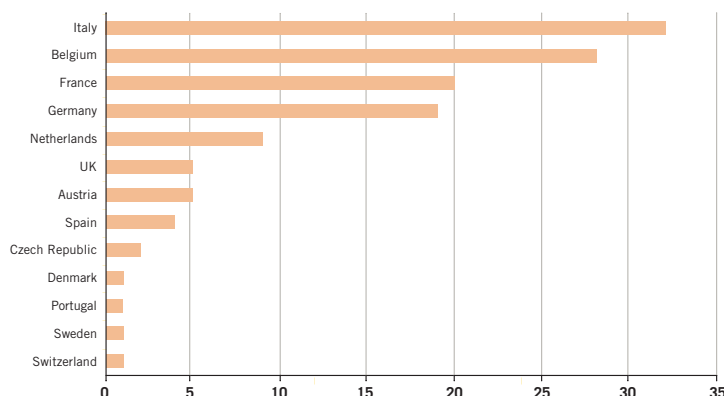


**NUMBER OF  
PARTICIPANTS  
BY NATIONALITY**

■ Cardiologist  
■ Interventional Radiologist  
■ Vascular Surgeon  
■ Nurse/Technician



**NUMBER OF  
PARTICIPANTS  
BY SPECIALTY**



**NUMBER OF  
FACULTY BY  
NATIONALITY**  
TOTAL :129





ST. PAUL

BRUSSELS

TOKYO

*"Each visit to the Institute is exhausting (in a good way), but very enriching. In my opinion, it's the best educational organisation where small groups can learn in a highly interactive way."*

# GLOBAL EDUCATION NETWORK



## EUROPE CAMPUS



## NORTH AMERICAN CAMPUS



## JAPAN CAMPUS

### BRUSSELS

The Institute for Therapy Advancement welcomed its first participant in September 2000 in Brussels, the first of a global network of educational centres built on learning and information sharing. Located in modern, purpose-built facilities close to the airport, the Institute allows participants to exchange ideas and experiences that look beyond physical borders.

### ST. PAUL

The newest facility, located on the Guidant campus in St. Paul, Minnesota, extends close to five years of educational experience from Europe and Japan to North America and pioneers a new level of cardiac and vascular therapy training. State-of-the-art training facilities include a CathLab, which also uses the latest simulation techniques, and a Virtual Reality lab with real-time computer simulations in different anatomies and procedures.

### TOKYO

In May 2003, the Institute for Therapy Advancement in Japan opened its doors to a completely new state-of-the-art training facility. The Institute in Japan forms part of the global educational network, which maintains the same philosophy and the same high quality therapy oriented training as the other Institute locations. It is located next door to the Shinagawa station and only 20 minutes from the Haneda Airport. The Shinkansen (bullet train) stops at the office, making access extremely convenient.

*"We appreciated the training from beginning to end and were really impressed by the Institute's organisation and high-quality training facilities. Everything went very smoothly."*



## Innovative skills training at other educational events

The Institute for Therapy Advancement's efforts in pioneering innovative skills training techniques have been recognised by several congress organisers and professional organisations. Through the use of transportable Virtual Reality (VR) simulators, the Institute has contributed to the educational value of congresses, giving it a new dimension by offering active participation onsite through simulator mediated skills training. In 2004, the Institute provided skills training support to more than 30 international and local training initiatives. Look for Guidant and the Institute for Therapy Advancement at your next congress. Institute representatives will be pleased to introduce you to this new training technology.

### Do you need a partner in education?

If you want to add an advanced skills training component to your local educational initiative, the Institute for Therapy Advancement can be your partner. Please contact your local Guidant representative for further information.

## THE INSTITUTE ONLINE

The Institute for Therapy Advancement online gives you more information on our continuing education and training programme. You will find course updates, a summary of each of our three facilities in Brussels, Tokyo and St. Paul, as well as additional links to the PowerPoint Resource Centre. Learn more about what the Institute can offer you online at [www.guidant.com/education/institute](http://www.guidant.com/education/institute) or [www.institute-europe.com](http://www.institute-europe.com)

## HOW TO REGISTER?

Please contact your local Guidant Representative for registration

Registration for specially designed programmes in association with scientific societies (ESVS, CIRSE Foundation) is available through the specific website of the organisation.



**INSTITUTE** *for*  
**THERAPY ADVANCEMENT**



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