



ENTHUSIASM

VASCULAR INTERNATIONAL OUT OF CONVICTION

FUTURE-ORIENTED PRACTICAL VASCULAR EDUCATION

ENGAGEMENT & PASSION

EFFECTIVE, EFFICIENT, SUSTAINABLE, LIFELIKE

INNOVATIVE

RAPID

LEARNING SUCCESS

PERSONAL

SUPERVISION

VASCULAR INTERNATIONAL Mission Statement

The VASCULAR INTERNATIONAL Foundation and School is committed to the idea of enhanced training and learning of vascular surgery techniques using lifelike models. With top priority on maximised patient safety, it is the goal of the VASCULAR INTERNATIONAL Foundation and School to constantly improve vascular surgery training in order to support safe and efficient open vascular and endovascular patient care.



"Innovation needs vision and passion – quality needs knowledge and experience"

Vascular surgeons face high demands regarding training: They have to be in control of even the most complex surgical interventions – as rapidly, safely and efficiently as possible. In addition, they always have to keep up with the state of the art of technological developments.

All this happens in the face of demographic change and a steadily ageing population. Since elderly people often suffer from vascular diseases, the number of vascular patients increases constantly. This development goes hand in hand with a rising demand for very highly qualified vascular surgeons.

VASCULAR INTERNATIONAL (VI), based in Fürigen, Switzerland, recognised the challenge early. In 1991 the first vascular surgery hands-on training courses were held using lifelike simulators for the first time. In the following years further lifelike, pulsatile simulators were developed and more courses were organised. VI turned from a pioneer into an international elite training unit – with a concept acknowledged worldwide. All open and endovascular techniques in vascular surgery – simple and complex interventions – can be taught and trained in a stress-free environment.

"Passion for Education" is our slogan. Together with our professional enthusiasm it is what connects and pushes us at VI. Highest quality is our priority. It is the paramount obligation when dealing with maximum patient safety and training on the highest level.

However, there is much more behind VI hands-on training courses than mere perfection of technical skills. In addition to the development of practical and theoretical competences, VI also promotes the idea of professional team thinking and conveys strategies for complication management. It is VI's credo that training and learning represent a lifelong extra occupational necessity in vascular surgery and that our work often goes far beyond merely professional expertise.

In this regard, a VASCULAR INTERNATIONAL SCHOOL is more and more evolving. We not only want to pass on our experience and knowledge to our course participants, but we are eager to expand and utilise our know-how in a continuous exchange and in cooperation with our partners from industry and scientific societies in the name of progress in vascular medicine – out of passion for education and responsibility for our patients.

Univ.-Prof. Dr. Hans-Henning Eckstein VASCULAR INTERNATIONAL President Head of Vascular Surgery, Klinikum rechts der Isar, Germany

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VASCULAR INTERNATIONAL Board Members



"Today traditional education in vascular surgery is no longer applicable. The only way to manage surgical training in the future is simulation. In our courses we have a strong focus on individual training."

PRIM. PD DR. AFSHIN ASSADIAN

VI Tutor, Head of Vascular Surgery at the Wilhelminenspital in Vienna, Austria



"Vascular surgery is also craftwork on an academic basis. The safe use of clean surgical or endovascular techniques is the basis for exercising it perfectly. The VI training on Pontresina models is much closer to reality than exercises on computer-based simulators."

PROF. DR. LORENZ GÜRKE

VI Tutor, Head of Vascular Surgery at the University Hospital Basel, Switzerland



"VI is an impressive example of the co-operation of an international group of more than 40 personalities for a common cause, the practical training of vascular surgeons." HANSPETER KISER

VI Management, Switzerland



"VI courses take place in a perfect quiet learning environment, in contrast to stressful hospital work. The intensive studying situation contributes significantly to a rapid learning curve. Small groups make it possible to constantly watch the participants, to point out mistakes or give useful hints."

DR. KLAUS KLEMM, MSc

VI Tutor, Head of Vascular Surgery at the Marienhospital in Stuttgart, Germany



"In the past years VI has developed rapidly: New models, co-operations and courses around the globe as well as many scientific publications reflect the persistent demand and the necessity to re-position the learning curve from the patient to models and simulators."

TONI MEILE
VI Management and co-founder, Switzerland



"It is important that we do not stop, but develop the products further. This gives us and the industry a win-win-situation. In the end, the patients benefit from it."

PROF. DR. JÜRG SCHMIDLI

 $VI\ Tutor, Head\ of\ Vascular\ Surgery\ at\ the\ University\ Hospital\ for\ Heart\ and\ Vascular\ Surgery\ at\ the\ Inselspital\ in\ Bern,\ Switzerland$



"Simulator training is already indispensable in other high-tech areas and has also become increasingly important in medicine. Besides optimal training results, it also leads to high cost efficiency compared to classical training in the operation theatre."

PROF. DR. HARDY SCHUMACHER

VI Tutor, Vascular Surgery at Hirslanden Hospital, Zurich, Switzerland



Teach and train vascular surgery interventions safely and efficiently

All over the world VASCULAR INTERNATIONAL offers practically oriented and specific handson trainings on specially developed simulation models. Basic but also complex open and endovascular techniques can be taught and practised on these high-quality and lifelike pulsatile models, which are considered the best and most innovative worldwide.

Internationally recognised concept

VASCULAR INTERNATIONAL's concept is unique. The simulation training provides for repeated, step-by-step practice of fundamental as well as new and complex vascular and endovascular techniques. Moreover, it includes fundamental theoretical comprehension of the acquisition of manual and cognitive competences in vascular surgery. VI has also developed a modular vascular surgery curriculum based on learning theory concepts. From basic vascular techniques to the implantation of thoracic stent prostheses, this curriculum shows various levels and contents of vascular surgery techniques.

Studies in national and international renowned professional journals including the "Journal of Vascular Surgery", "Annals of Vascular Surgery" and "Der Chirurg" are proof of the excellent training success resulting from VI courses. The course graduates improve their technical skills and operation results within a short period of time. Overall, these results lead to a shorter learning curve and – most of all – contribute to more safety for our patients.

VI courses – not only for vascular surgeons and specialists ...

The structured course models are most effective in the cognitive and associative phases of learning fine motor skills and are excellently suited for target group oriented courses. VI courses are aimed at junior doctors of various surgical disciplines (surgery, abdominal, trauma, cardiac, paediatric surgery, orthopaedics, plastic surgery, urology, gynaecology and many more) and vascular surgeons prior to the national or European specialist exam (UEMS), but also at experienced vascular surgeons (refresher courses). Moreover, in our theme-centred courses (e.g. open/endovascular therapy of carotid stenosis) we would also like to address colleagues from other vascular subjects, for example radiology, angiology and cardiology. Of course some courses are also suitable for nursing and instrument nursing staff, who may profit from the VI workshops especially regarding the idea of "team approach".

Our course offer is rounded off by so called access courses for lower leg arteries and further important vascular fields like the aorta, the vessels of the upper and lower arm for shunt surgery and for the brain-supplying vessels.

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Training in an optimum learning atmosphere

The training takes place in small groups of three to four participants per tutor and is conducted by renowned first-class physicians from Germany, Austria, Switzerland, England, USA, Finland and Saudi Arabia. They keep checking and correcting the participants' learning progresses continuously. VASCULAR INTERNATIONAL places a special focus on a supporting, motivating and learning-oriented environment. All training modules are summarised in a uniformly structured handbook, which enables the participants to prepare for the course and to reproduce the individual training steps at a later point of time.

VI course specials

- Maximum credits by UEMS
- Perfect preparation for the European vascular surgery specialist exam of UEMS
- Qualification for endovascular surgeon and endovascular specialist according to the quidelines of the German Society for Vascular Surgery and Vascular Medicine (DGG)
- Open surgical and endovascular qualification according to the guidelines of the Swiss Institute for Medical Training SIWF & the Swiss Society for Surgery (SGC)
- The courses "Vascular Surgery Suture and Anastomotic Techniques" and "Basic Endovascular Techniques" are part of the two-day courses accredited by SIWF and SGC.
- Large international team of tutors with impressive experience

Represented worldwide

In addition to the traditional courses in Pontresina, Stuttgart, Zurich and Lucerne, VI hands-on training courses are part of the most important international congresses such as the Charing Cross Meeting in London, the largest and most renowned vascular medical congress in Europe, the European Vascular Course (EVC) in Maastricht and the "Dreiländertagung" in Austria. Further courses are held by VI at the annual meeting of the US Society of Vascular Surgery (SVS), for the German Armed Forces, for the "Methodist DeBakey Heart & Vascular Center" in Houston and the Kingdom of Saudi Arabia, among others.

Specialist societies co-operate with VASCULAR INTERNATIONAL

The extraordinary learning success in VI training courses may be explained, on the one hand, by the tutors' excellent teaching methods and the models' high quality. On the other hand, training in small groups with one tutor instructing a maximum of three to four course participants contributes to the success.

The future lies in the VI teaching model. That is also reflected by the enhanced co-operation with various national specialist societies like for example the Society for Vascular Surgery (SVS, North America), the German Society for Vascular Surgery (DGG), the Austrian Society for Vascular Surgery (ÖGG) and the Swiss Society for Vascular Surgery (SGG). Many of them have already integrated VI courses in their training programmes.





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VI simulation models – innovative, highly qualitative, lifelike and pulsatile

When VASCULAR INTERNATIONAL was founded in Switzerland in 1991, simulation of operation techniques in vascular surgery was completely unknown. Accordingly, the first lifelike VI models represented a groundbreaking revolution. Since then, they have continuously been developed further and produced industrially by Synbone. Using anatomically correct synthetic simulation models helps young surgeons learn and practise the most frequent and complex interventions under the guidance of experienced and internationally renowned tutors within a structured and stress-free environment.





Aorta, carotid artery, arm and leg models

VASCULAR INTERNATIONAL has developed a total of five different models: one for open carotid artery operations, a leg serving as model for practising and teaching the reconstruction from the groin to the lower leg, an abdomen model for surgery of aortic aneurysms and the reconstruction of renal and viscera arteries, a model for basic techniques in vascular surgery and an intervention training unit (ITU), the so called endo tower, which shows the complete vascular tree from the carotid artery to the groin vessels. The latter allows teaching and practising endovascular therapy of carotid stenosis (stent, angioplasty of the carotid artery) as well as the treatment of all pathologies of the aorta (endoprosthesis).





MODELS 9

How everything began: **VASCULAR INTERNATIONAL – from a pioneer** to the world market leader

Everything starts with an idea. So did VASCULAR INTERNATIONAL.

December 1990 Three visionary vascular surgeons, Prof. Dr. med. Jens-Rainer Allenberg, University Hospital Heidelberg, Prof. Dr. med. Georg Hagmüller, Wilhelminenspital Vienna, and Prof. Dr. med. Jon Largiadèr, Klinik im Park in Zurich, share an idea: to convey their specialist knowledge and most of all their practical experience to young colleagues. The industry, above all Albert Panzeri and Toni Meile, is enthusiastic about the idea of simulation training and the development of lifelike models associated with it. In the same year they decide to hold a pilot vascular course in Zermatt the following spring. The development of the first models together with the Anatomic Institute of the University of Zurich starts.

1991 Four months after the foundation, the first "Zermatt Vascular Workshop" takes place. In spite of rather the simple means available at the time, the participants and the industrial partners are enthusiastic about the completely new concept of simulation training. Years of intensive work follow for VI. The course contents and models are further professionalized and perfected.

1993 The first bilingual workshops are held, in German and French. The courses become known beyond the borders of Switzerland, Germany and Austria.

1996 VASCULAR INTERNATIONAL tutors teach in Milan for the first time, later in Palermo and Siena. In the same year the first "advanced course" takes place in Italy and lays the foundation for today's "Masterclass". For the first time an endovascular simulator is shown and applied.

2000 Pontresina becomes the centre and heart of VASCULAR INTERNATIONAL. The so called Pontresina courses, Basic Course and Masterclass, develop rapidly and become an international elite training unit that attracts participants from all over the world. The course contents and the models are constantly developed further.

2009 The foundation is handed over to today's foundation board members Univ.-Prof. Dr. Hans-Henning Eckstein, VI President and Head of Vascular Surgery at the Klinikum rechts der Isar, Prim. PD Dr. Afshin Assadian, Head of Vascular Surgery at the Wilhelminenspital Vienna, Prof. Dr. Jürg Schmidli, Head of Vascular Surgery at the Inselspital Bern, Prof. Dr. Hardy Schumacher, vascular surgeon at the Klinik Hirslanden in Zurich, and Hanspeter Kiser, entrepreneur.

2010 The VASCULAR INTERNATIONAL School AG is founded as part of the realignment and extension of the activities under the management of Toni Meile.

Today VASCULAR INTERNATIONAL, based in Fürigen, has made a name for itself internationally. The high quality of the VI courses and models, which are now used to train in the entire field of vascular medicine, is recognised worldwide. VI courses are qualified with maximum credits by the most important international institutes for certification. Some VI courses have already been integrated in the learning and training programmes of several international specialist societies.



10 HISTORY

