



## Sorin Gheorghe Barac

**Nationality:** Romanian **Date of birth:** 18/05/1976 **Place of birth:** Romania

**Gender:** Male

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### WORK EXPERIENCE

🏥 **Pius Brinzeu Emergency Clinical County Hospital – Timișoara, Romania**

#### Chief of Vascular Surgery

[ 08/2023 – Current ]

##### Medical and Administrative Management

- Oversight of the entire Vascular Surgery Department, including operating room scheduling and allocation of human and material resources.
- Implementation and monitoring of clinical protocols in accordance with national and international guidelines.
- Ensuring compliance with patient safety and quality standards across all surgical procedures.
- Supervision of departmental performance indicators (complication rates, reintervention rates, mortality, and cost control).
- Collaboration with hospital management in departmental budget planning and procurement of modern medical equipment.
- Development and implementation of continuous training programs for physicians, residents, and allied healthcare staff.

##### Professional and Academic Activity

- Performance of complex surgical procedures, including advanced open and endovascular interventions.
- Introduction and development of minimally invasive techniques in the treatment of vascular diseases.
- Participation in interdisciplinary boards (cardiology, interventional radiology, intensive care) to optimize patient management.
- Publication of scientific articles in peer-reviewed journals and presentations at national and international congresses.
- Active involvement in clinical research, multicenter studies, and clinical trials focused on innovative treatments.

##### Leadership and Professional Development

- Mentorship of residents and early-career vascular surgeons.
- Organization of workshops, hands-on courses, and conferences in the field of vascular surgery.
- Contribution to the development of national clinical guidelines and protocols.
- Promotion of an organizational culture based on interdisciplinary collaboration and patient-centered care.

##### Institutional Collaboration

- Representation of the department in relations with public health authorities and the Ministry of Health.
- Participation in expert committees for the evaluation of complex cases and implementation of national healthcare policies.
- Involvement in national screening and prevention programs for vascular diseases.

🏥 **Victor Babes University of Medicine and Pharmacy – Timișoara, Romania**

#### Associate Professor of Vascular Surgery

[ 2021 – Current ]

##### Teaching Activity

- Coordination of courses and clinical rotations for medical students, residents, and physicians in specialty training.
- Development of curricula and educational materials, including textbooks, presentations, and clinical case guidelines.
- Delivery of theoretical lectures and practical demonstrations in the operating room and angiography suite.

- Organization and supervision of practical sessions and interactive seminars using modern teaching methodologies.
- Participation in the assessment of students and residents through written, oral, and practical examinations.

### **Research Activity**

- Coordination and supervision of undergraduate theses, master's dissertations, and PhD theses in vascular surgery.
- Publication of ISI-indexed articles and participation in national and international research projects.
- Acquisition of research grants aimed at the development of innovative techniques and technologies for the treatment of vascular diseases.
- Presentation of research findings at international vascular surgery congresses.

### **Professional and Scientific Activity**

- Active participation in academic and national specialty committees.
- Organization of conferences, workshops, and symposia on vascular surgery for the medical community.
- Contribution to the development of clinical protocols, practice guidelines, and educational materials for physicians.

### **Educational Leadership**

- Mentorship of junior faculty members and training of the next generation of vascular surgeons.
- Promotion of international standards in medical education within the faculty.
- Establishment of international partnerships with academic centers for exchange programs and collaborative research.

## **Pius Brinzeu Emergency Clinical County Hospital – Timisoara, Romania**

### **Manager**

[ 03/2022 – 02/2023 ]

#### **Project Management and Coordination**

- Coordination of the implementation of investment projects funded through the National Recovery and Resilience Plan (NRRP/PNRR), with a focus on modernizing medical infrastructure.
- Ensuring compliance with timelines and performance indicators stipulated in funding agreements.
- Monitoring project progress and reporting to funding authorities.

#### **Infrastructure Development and Equipment**

- Procurement and integration of state-of-the-art medical equipment (angiography systems, vascular ultrasound devices, surgical instruments).
- Rehabilitation and modernization of the Vascular Surgery Department and operating theaters.
- Implementation of hospital digitalization standards.

#### **Digitalization and Innovation**

- Introduction of digital patient management systems, telemedicine solutions, and electronic medical records.
- Promotion of artificial intelligence and modern technologies in vascular screening and diagnostic processes.

#### **Interinstitutional Collaboration**

- Representation of the hospital in regional working groups for prioritizing healthcare investments.
- Cooperation with the Ministry of Health and other central institutions in the implementation of healthcare reform plans.

## **"Pius Branzeu" Emergency County Hospital – Timișoara, Romania**

### **Vascular Surgery Primary Physician**

[ 2023 – Current ]

## **Pius Branzeu Emergency County Hospital – Timișoara, Romania**

## Specialis in plastic and reconstructive microsurgery

[ 02/05/2011 – Current ]

### EDUCATION AND TRAINING

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#### Habilitation Diploma OM 6119/29.08.2025

*Doctoral School of the Victor Babeş University of Medicine and Pharmacy, Timișoara* [ 29/08/2025 ]

City: Timișoara | Country: Romania | Field(s) of study: Health and welfare

Dreptul de a conduce doctorate în domeniul Chirurgie Vasculară.  
Recunoașterea excelenței în cercetare și activitate didactică universitară.

#### Master's Degree in Healthcare Management

*"Victor Babeş" University of Medicine and Pharmacy Timișoara* [ 01/10/2020 – 15/06/2021 ]

City: Timisoara | Country: Romania

#### Medical Doctor

*"Victor Babeş" University of Medicine and Pharmacy Timișoara* [ 01/10/1996 – 15/07/2002 ]

City: Timisoara | Country: Romania

#### Highschool Diploma

*Liceul Energetic* [ 15/09/1990 – 15/07/1994 ]

City: Timisoara | Country: Romania

### LANGUAGE SKILLS

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**Mother tongue(s):** Romanian

**Other language(s):**

#### English

**LISTENING** B1 **READING** B1 **WRITING** B1

**SPOKEN PRODUCTION** B1 **SPOKEN INTERACTION** B1

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

### NETWORKS AND MEMBERSHIPS

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#### Professional Memberships and Leadership Roles

##### Romanian Society of Vascular Pathology President and Founding Member

- Coordination of scientific activities and organization of annual congresses.
- Promotion of research and modern standards of diagnosis and treatment in vascular pathology.

##### Romanian Society of Vascular Surgery Founding Member and Treasurer (2014–2017)

- Involvement in drafting the society's statutes and development of the first national clinical practice guidelines.
- Organization of workshops and hands-on courses for early-career specialists.

##### Romanian Society of Reconstructive Microsurgery Active Member

- Participation in interdisciplinary research projects and promotion of advanced vascular reconstruction techniques.

##### European Society for Vascular Surgery (ESVS) Full Member

- Regular participation in European congresses and contribution to international exchange of best practices.
- Publication of scientific papers and delivery of oral presentations at ESVS congresses.

##### Romanian College of Physicians Licensed Member

- Participation in professional accreditation committees and evaluation of complex clinical cases.
- Promotion of medical ethics and quality standards in surgical practice

## CONFERENCES AND SEMINARS

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### INTERNATIONAL EXPERIENCE Scientific Presentations and Conference Participation

- **Speaker** – Angionet Workshop – Cardiovascular and Oncological Research Network, Braşov, 2021.
- **Chairman & Speaker** – 4th Congress of the **Romanian Society of Vascular Surgery** (Online Event), 2020.
- **Chairman & Speaker** – RSVC Workshops, Iaşi, 2019.
- **Chairman & Speaker** – 3rd Congress of the Romanian Society of Vascular Surgery, Sibiu, 2018.
- **Chairman & Speaker** – RSVC Workshops, November 23–25, Timișoara, 2017.
- **Invited Lecturer** – 5th National Congress of Diabetic Neuropathy and Diabetic Foot with International Participation (Neurodiab), Bucharest, 2017.
- **Active Participant** – 6th Munich Vascular Conference, Munich, Germany, 2016.
- **Participant** – 4th Congress of the **World Society for Reconstructive Microsurgery**, Athens, Greece, 2007.
- **Participant** – 9th Congress of the **European Federation of Societies for Microsurgery**, Turku, Finland, 2008.

### International Fellowship

- **Leonardo da Vinci Fellow** – *“Modern Approach in Cancer Treatment – A Multicenter Training Concept”*, Coordinator: Prof. Dr. Milomir Ninkovic, Department of Plastic, Reconstructive & Hand Surgery, **Technical University of Munich**, 2006.

### Lecturer & Course Director Activity

- **Course Director** – Practical Course on Vascular Suturing (Editions: 2013, 2014, 2016, 2017, 2018, 2019), Timișoara.
- ► Program coordination, development of teaching materials, and hands-on training of participants.
- **Instructor** – International Practical Course on Vessels and Nerves Microsurgery (2011, 2012, 2013 – multiple editions).
- ► Practical training for residents and specialists using experimental microsurgery models.
- **Instructor** – *Perforator Flap Harvesting on Living Tissue*, first edition, November 2012.
- **Trainer** – International Practical Course on Vessels and Nerves Microsurgery (2006–2011).
- **Instructor** – 7th International Course on Living Tissue Dissection, 2008.
- **Instructor** – 1st Practical International Seminar on Ocular Microsurgery, 2006.
- **Participant & Lecturer** – ISEM Congress, 2012; CompasX Congress, 2011.

## PROJECTS

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### RESEARCH PROJECTS AND GRANTS **Researcher** – *Modern Tendencies for Cancer Treatment – Multicenter Training Concept*

- **Program:** Leonardo da Vinci Programme (RO/2005/PL95152/MTD)
- **Budget:** EUR 11,760 | **Period:** 2005
- ► Participation in the development of a multicenter training concept for modern cancer treatment.

### **Researcher** – *3rd Millennium Medicine: Video-Assisted Microsurgery and Tissue Transplantation through Endoscopic Harvesting*

- **Program:** CEEX-PCD / 37/2005
- **Budget:** RON 958,000 | **Period:** 2005–2008
- ► Contributions to the development of advanced endoscopic techniques for tissue transplantation.

### **Project Coordinator** – *Minimally Invasive Peripheral Nerve Decompression: A Modern Solution for Neuropathic Syndrome in Diabetes Mellitus*

- **Program:** CEEX Module I, Contract 92/2006
- **Budget:** RON 1,500,000 | **Period:** 2006–2008
- ► Full responsibility for project management, team coordination, and clinical implementation of results.

### **Researcher** – *Telemedicine and Video-Microsurgery for the Creation of a Trans-Frontier Teaching and Medical Assistance System in Real Time*

- **Program:** PHARE CBC 2004/016-940.01.01, Project No. 4-2.3

- **Budget:** RON 186,489 | **Period:** 2006–2008

- ► Involvement in the development of telemedicine infrastructure and remote surgical training systems.

**Researcher** – *Lymphocyte-Based Cellular Therapies Developed In Vitro: A Modern Approach for Inducing Immunological Tolerance in Organ Transplantation*

- **Program:** PN II, Contract 2329/2007

- ► Advanced research on the development of cellular therapies for organ transplantation.

**Researcher** – *STAFPREDIAB: Functional Foods for the Prevention of Type 2 Diabetes Complications*

- **Program:** PN II-CD IV, Partnership 3448/2008–2011

- **Budget:** RON 2,000,000

- ► Contributions to correlating genetic, nutritional, and clinical data in the prevention of diabetes-related complications.

**Researcher** – *ARTGEN: Angiogenetic Gene Therapy for Peripheral Vascular Complications in Diabetes Mellitus*

- **Program:** PN II, Partnership 41-052/2007–2010

- ► Participation in gene therapy projects aimed at lower-limb revascularization.

**Project Director** – *Endoscopic Approach of Peripheral Nerves in Diabetic Polyneuropathy*

- **Program:** PN II-TD 523

- **Budget:** RON 42,500 | **Period:** 2007–2009

- ► Coordination of the implementation of minimally invasive endoscopic techniques for diabetic neuropathy.

**Researcher** – *Opportunities for Professional Development in Below-the-Knee Vascular Disease*

- **Program:** Erasmus+ KA2 – VET

- **Budget:** EUR 138,170 | **Period:** 2015–2017

- ► Development of a European training curriculum for peripheral arterial disease.

## STRATEGIC PROJECTS EU FUNDING Digitalization of Medical and Administrative Processes – Emergency

**County Clinical Hospital Timișoara**(October 3, 2024 – ongoing)**Role:** Functional Leadership

- Lead coordinator of the project, from drafting the funding application through full implementation.

- Supervision of procurement processes and integration of IT solutions aimed at improving patient safety and comfort.

- Organization of staff training programs and ensuring alignment with European eHealth standards.

**Improving the Quality of Neonatal Medical Services** – Emergency County Clinical Hospital Timișoara(December 11, 2023 – January 15, 2025)**Role:** Member of the Implementation Team

- Involvement in project design and support in coordinating the procurement of modern equipment for neonatal screening and treatment.

- Contribution to technical reporting and dissemination of best practices within the multidisciplinary team.

**Modernization, Expansion, and Equipment of the Integrated Outpatient Department** – Emergency County Clinical Hospital Timișoara(2023–2024)**Role:** Project Team Member

- Participation in planning and implementation activities aimed at increasing accessibility and digitalization of outpatient services.

**Prevention and Control of Healthcare-Associated Infections (HAIs)**(2023–2024)**Role:** Project Team Member

- Involvement in the development and implementation of surveillance and control protocols for healthcare-associated infections, in accordance with European standards.

## HONOURS AND AWARDS

**AWARDS IN THE RESEARCH AREA Award for Research Excellence – PRECISI Competition 2020****Authors:** Barac S, Jiga LP, Rata A, Sas I, Onofrei RR, Ionac M.**Title:** *Role of Reconstructive Microsurgery in Tubal Infertility in Young Women***P ublication:** *Journal of Clinical Medicine*, 2020; 9(5): E1300**DOI:** 10.3390/jcm9051300► **Award-winning paper** in the national competition **PN-III-P1-1.1-PRECISI-2020-41033**, recognized for its significant contribution to advancing female fertility through reconstructive microsurgery.

## PROFESSIONAL DEVELOPMENT COURSES

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### PROFESSIONAL DEVELOPMENT COURSES

**November 30, 2016** – *Revision Course on Technical Skills*

- **Vascular International**, Munich, Germany
- ► Intensive preparation for the European **FEVBS (Fellow of the European Board of Vascular Surgery)** examination, focused on advanced technical skills in vascular surgery.

**2008** – *Postgraduate Course in Psychopedagogy and Didactics*

- **West University of Timișoara**
- ► **Acquisition of teaching and assessment competencies for higher medical education.**

**May 29–30, 2008** – *Public Procurement Training*

- **CENTRANS & ASAPRO**, Timișoara
- ► Certification in public procurement legislation and mechanisms, applicable to project management and healthcare administration.

**February 20 – May 23, 2008** – *Volunteer Training Course*

- **SMURD**
- ► **Competencies in first aid provision and emergency situation management.**

**April 29, 2006** – *Living Tissue Dissection Course*

- ► **Intensive training in flap dissection and microsurgical techniques using experimental models.**
- **July 16–22, 2005** – *Intensive Project Management Course*

**CREST Continuing Education Center**, Timișoara

- ► Certificate issued by the **National Institute of Public Administration** (No. 2447/22.06.2005), covering project planning, implementation, and monitoring.

**March 2005** – *16th International Microsurgical Practical Course on Nerves and Vessels*

- ► **International training in advanced nerve and vascular microsurgery techniques under the supervision of internationally recognized experts.**

### ADVANCED SURGICAL COMPETENCIES

#### Clinical and Surgical Expertise

##### Vascular and Nerve Microsurgery

- Extensive experience in arterial and venous microvascular anastomoses, distal revascularization procedures, and complex nerve reconstructions.
- Limb salvage interventions in critical limb ischemia and reconstructive surgery following major trauma.
- Replantation of amputated segments and post-oncologic reconstructive surgery.

##### Endovascular Techniques

- Angiographic diagnostics, peripheral stent placement, endovascular thrombectomy, and balloon angioplasty.
- Use of hybrid surgical–endovascular approaches for the comprehensive treatment of complex peripheral arterial disease.
- Implementation of minimally invasive techniques resulting in reduced hospital stay and optimized patient recovery.

##### Living Tissue Dissection and Complex Reconstructions

- Expertise in identification and isolation of muscle, fasciocutaneous, and perforator flaps using experimental models.
- Course coordinator for practical training programs in reconstructive microsurgery.
- Development of structured training protocols for residents and specialists, with a focus on complex reconstructions.

## Complex Wound Management

- Reconstruction in critical clinical settings (trauma, severe infections, postoperative complications).
- Application of advanced techniques for tissue coverage and functional reconstruction.

## Advanced Surgical Planning

- Use of 3D imaging technologies for planning complex reconstructive procedures.
- Integration of image-guided surgery principles into routine clinical practice.

## Experimental Surgery and Surgical Training

- Development and validation of experimental models for microsurgical training.
- Organization of workshops and hands-on training programs for advanced surgical skill development.

## MEDICAL EXPERIENCE

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### SURGICAL EXPERIENCE

#### Vascular Surgery (Primary Focus)

- **Complex arterial revascularization** – extensive experience in infragenicular bypass procedures, distal arterial reconstructions, and management of critical limb ischemia.
- **Endovascular surgery and hybrid approaches** – integration of minimally invasive techniques into routine practice, including angioplasty, thrombectomy, and peripheral stent placement.
- **Peripheral arterial disease management** – implementation of multidisciplinary protocols for early diagnosis and personalized treatment, achieving notable reductions in amputation rates.
- **Phlebological surgery** – surgical management of chronic venous insufficiency and its complications, in accordance with modern standards.
- **Participation in screening and prevention programs** – involvement in national initiatives for the detection of abdominal aortic aneurysms and peripheral arterial disease.

#### Reconstructive Surgery and Microsurgery (Complementary Expertise)

- Harvesting and transfer of free and local flaps (muscle, musculocutaneous, and perforator flaps) for coverage of complex defects.
- Microsurgical reconstructions to restore vascular and nerve continuity in trauma and oncologic surgery.
- Microsurgical reconstruction for infertility through tubal ligation reversal.

#### Diabetic Foot Management (Integrated Expertise)

- Comprehensive treatment of neuropathic and ischemic lesions, including revascularization, surgical debridement, tissue coverage, and modern nerve decompression techniques.
- Assessment of diabetic neuropathy using internationally validated methods (PSSD, CASE IV), with accreditation from the Dellon Institute, Baltimore.

#### Traumatology and Hand Surgery

- Complex reconstructions of tendons, nerves, and osseous structures to restore limb functionality.
- Osteosynthesis, replantation procedures, and emergency surgery for major trauma

## COMMUNICATION AND PERSONAL COMPETENCIES

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### Interpersonal and Professional Skills

- **Team-oriented mindset** – excellent collaboration within multidisciplinary teams (surgery, intensive care, interventional radiology), contributing to informed decision-making in complex cases.
- **Adaptability in multicultural environments** – experience gained through participation in international projects, courses, and European congresses.
- **Strong communication skills** – delivery of scientific presentations at national and international conferences, coordination of team meetings, and mentorship of residents.
- **Empathy and patient-centered care** – ability to clearly explain therapeutic options and support patients in making informed decisions.

## ORGANIZATIONAL COMPETENCIES

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### Leadership and Management Competencies

#### Strategic Leadership

- Coordination of the Vascular Surgery Department, including operating room scheduling and management of multidisciplinary teams.
- Leadership of strategic projects focused on digitalization and modernization of medical infrastructure.
- Development and implementation of clinical protocols aligned with international standards.

#### Operational Management

- Proven experience in human and material resource management, cost optimization, and improvement of departmental performance.
- Management of hospital budgets and acquisition of national and European funding.
- Implementation of patient safety and quality indicators, with ongoing monitoring of clinical outcomes.

#### Organizational Competencies

- Planning and coordination of workshops, hands-on courses, and scientific conferences.
- Facilitation of interdisciplinary collaboration between vascular surgery, intensive care, interventional radiology, and other specialties.
- Development of partnerships with academic institutions and national and international professional societies.

#### Communication and Mentorship

- Support for professional development of students, residents, and early-career specialists.
- Excellent communication skills in multicultural environments and international research teams.
- Promotion of an organizational culture grounded in ethics, respect, and high performance.