

Curriculum Vitae

Prof. Francesco Sala

Personal:

Date of birth: October 1st 1967

Place of birth: Vicenza

Address:

Section of Neurosurgery

Dept. Of Neurosciences, Biomedicine and Movement Sciences

University Hospital

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Education:

<i>Years</i>	<i>Institute</i>	<i>Degree</i>
1981-1986	Scientific Lyceum "G.B. Quadri Vicenza	High School Degree
1986-1992	Faculty of Medicine and Surgery University of Verona	Doctor of Medicine (MD)
August 1989	General Surgery II University of Graz, Austria Chairman: Prof. H. Cesnik	
August 1990	Department of Neurosurgery University of Vienna, Austria Chairman: Prof. W. Koos	
August 1992	Department of Neurosurgery University of Hannover, Germany Chairman: Prof. H. Dietz	
Since 1991	Department of Neurosurgery University of Verona Chairman: Prof. A. Bricolo	
1992-1997	Residency in Neurosurgery University of Verona Chairman: Prof. A. Bricolo	Board Certified Neurosurgeon
June. 1994 - Sept. 1995	Neurosurgical Research Laboratory New York University Medical Center Director: W. Young, MD PhD	
Oct. 1995 - Dec. 1995	Military Health School Florence	Medical Second Lieutenant
Jan. 1996 - Jan. 1997	Medical Second Lieutenant Verona Military Hospital Section of Forensic Medicine	

<i>Years</i>	<i>Institute</i>
Dec. 1997 - May 1998	Fellow Section of Neurosurgery Dept. of Neurological Sciences and Vision University of Verona Chairman: Prof. A. Bricolo
May 1998 - Nov. 1999	Clinical Fellow Division of Intraoperative Neurophysiology Institute for Neurology and Neurosurgery Beth Israel Medical Center, New York, NY, USA Director: V. Deletis, MD PhD
Nov. 1999 - Aug. 2000	Fellow Section of Neurosurgery Dept. of Neurological Sciences and Vision University of Verona Chairman: Prof. A. Bricolo
Aug. 2000 – Dec. 2006	Attending neurosurgeon Clinical Neurosurgery Unit University Hospital, Verona Chairman: Prof. A. Bricolo (Since Janury 2005 Prof. M. Gerosa)
Sept. 2003 - Sept. 2004	Clinical Fellow Pediatric Neurosurgery The Hospital for Sick Children University of Toronto Director: J. Drake, M.D.
Dec. 2006 – Aug 2014	Assistant Professor Section of Neurosurgery Dept. of Neurological and Movement Sciences University of Verona Chairman: Prof. M. Gerosa (since June 2013 Prof. M. Meglio)
Sept. 2014-Oct. 2017	Associate Professor Section of Neurosurgery Dept. of Neurological and Movement Sciences University of Verona Chairman: Prof. M. Meglio
Since Nov. 2017	Full Professor Section of Neurosurgery

Dept. of Neurosciences, Biomedicine and Movement Sciences
University of Verona

Since Nov. 2018

Chairman
Division of Neurosurgery B
Department of Neurosciences
University Hospital
AOUI Verona

TEACHING

Elective Courses

Since the 2008/2009 Academic Year, Prof. Sala has been the course director of the elective course *“Intraoperative Neurophysiology as a functional approach to modern Neurosurgery”* at the Faculty of Medicine, University of Verona.

Teaching at Degree Courses of the Faculty of Medicine and Surgery and Residency Programs:

Since the 2006/2007 Academic Year, Prof. Sala has regularly conducted seminars as part of the Neurology course for the Degree Program in Medicine and Surgery (Single-cycle Master's Degree in Medicine and Surgery) at the University of Verona.

From the 2002/2003 Academic Year to the 2010/2011 Academic Year, he was the course instructor for Clinical Neurophysiology at the Postgraduate Specialization School in Neurosurgery, University of Verona.

In the 2005/2006 Academic Year, he was the course instructor for Intraoperative Neurophysiological Techniques at the Postgraduate Specialization School in Neurosurgery, University of Padua.

From the 2008/2009 Academic Year to the 2010/2011 Academic Year, he was the course instructor for Neurosurgery at the Postgraduate Specialization School in Neurosurgery, University of Verona.

Since the 2011/2012 Academic Year, he has been the course instructor for Pediatric Neurosurgery at the Postgraduate Specialization School in Neurosurgery, University of Verona.

Since the 2007/2008 Academic Year, he has been the course instructor for Trauma of the Brain-Spinal Axis at the Postgraduate Specialization School in Pediatric Surgery, University of Verona.

In the 2008/2009 Academic Year, he was the course instructor for Pediatric Neurosurgery at the Postgraduate Specialization School in Pediatric Surgery, University of Verona.

Since the 2009/2010 Academic Year, he has been the course instructor for Pediatric Neurosurgery at the Postgraduate Specialization School in Pediatric Surgery, University of Verona (consortium location with the University of Padua).

From the 2009/2010 Academic Year to the 2010/2011 Academic Year, he was the course instructor for Pediatric Neurosurgery at the Postgraduate Specialization School in Neurology, University of Verona.

Since the 2011/2012 Academic Year, he has been the course instructor for Pediatric Neurosurgery at the Postgraduate Specialization School in Child Neuropsychiatry, University of Verona.

From the 2015/2016 Academic Year to the 2018/2019 Academic Year, he was the course instructor for Neurotraumatology at the Degree Program in Physiotherapy (Rovereto campus), University of Verona.

Since the 2015/2016 Academic Year, he has been the course instructor for Neurosurgery at the Postgraduate Specialization School in Ophthalmology, University of Verona.

Since the 2016/2017 Academic Year, he has been the Director of the Postgraduate Specialization School in Neurosurgery at the University of Verona.

Since 2000, he has been a Co-supervisor or Supervisor of over 50 Bachelor's or Specialization Theses in Neurosurgery at the Faculty of Medicine and Surgery (Single-cycle Master's Degree in Medicine and Surgery), University of Verona.

In the 2014-2016 triennium, he was a Co-supervisor for Bachelor's Theses at the Faculty of Medicine and Surgery (Single-cycle Master's Degree in Medicine and Surgery), University of Trieste.

PhD Program

He was a member of the Faculty Board for the Doctoral Program in Neurosciences from 2008 to 2010 and from 2012 to 2013.

He has been a member of the Faculty Board for the Doctoral Program in Neurosciences, Psychological Sciences, and Psychiatric Sciences since 2014 and continues in this role.

He regularly conducts seminar activities and tutoring within the Doctoral Program in Neurosciences.

INTERNATIONAL TEACHING ACTIVITIES

Since 2009, he has regularly participated as a lecturer in the Training Courses of the European Association of Neurosurgical Societies.

In 2009, he was the promoter of the Educational Courses of the International Society of Intraoperative Neurophysiology (ISIN), and from 2009 to 2013, he served as Chairman of the Educational Committee of the same society. He organized and directed the first cycle of Educational Courses (Barcelona 2011, Verona 2012, Cape Town 2013) and continued to play an active role in the faculty of the second cycle of Educational Courses (Istanbul 2014, Rio de Janeiro 2015, Groningen 2016).

From 2017 to 2021, he was Chairman of the Neuromonitoring Committee of the World Federation of Neurosurgical Societies (WFNS), organizing training courses in India and South Africa.

Since 2005, he has lectured at over 60 international training courses in General and Pediatric Neurosurgery and Intraoperative Neurophysiology.

SCIENTIFIC ACTIVITY

Research Activities (Clinical and Basic) and Teaching at High-Quality International Universities and Research Institutes

Typology	Role and Institutions	Duration
Research	Research Fellow, Neurosurgical Research Laboratory, New York University Medical Center, New York, NY, USA. Director: Wise Young, MD, PhD	June 1994- Set.1995 (15th months)

Clinical Research	Research and Clinical Fellow, Division of Intraoperative Neurophysiology, Institute for Neurology and Neurosurgery, Beth Israel Medical Center, New York, NY, USA. Director: Vedran Deletis, MD PhD	May 1998- Nov. 1999 (18th months)
Clinical Research and Teaching	Clinical Fellow in Pediatric Neurosurgery, The Hospital for Sick Children, University of Toronto, Canada. Director, James Drake, MD	Sept. 2003-Set. 2004 (12 months)
Clinical Research	Service de Neurochirurgie Pédiatrique, Hôpital Neurologique de Lyon. Director: Dr. C. Mottolese	10-14 February 2008
Clinical Research and Teaching	Visiting Professor in Neurosurgery, University of Cape Town, Cape Town, South Africa	August 2009 (1 month)
Teaching	Visiting Professor in Neurosurgery, British Columbia's Children Hospital, University of British Columbia, Vancouver, Canada	27-29 June 2012

Scientific participation in International and National Research Projects, funded through competitive calls:

Project	Duration	Role
PRIN 2008: A new niche of stem cells with neural differentiation potential in the spinal cord leptomeninges: identification, characterization, and functional role in a spinal cord injury model.	24 months	Unit Leader
2008 Call Cassa di Risparmio di Bologna Study for the experimental evaluation of intraoperative cortical electrical stimulation using Optical Imaging. Project Leader: Dr. Milena Raffi, Researcher, Department of Human and General Physiology, University of Bologna.	12 months	Collaborator
University Cooperation 2008 Partner: Department of Neurosurgery, Cape Town University, South Africa. Bilateral international cooperation project for the development of Intraoperative Neurophysiology (Cape Town University) and neurosurgical treatment of spasticity from cerebral palsy (University of Verona).	1 month	Project Leader
University Cooperation 2012 Type A2: Senior Visitor Program. Dr. Vedran Deletis, Albert Einstein College of Medicine, Yeshiva University, New York, NY.	6 months	Responsible

University Research Grant for Basic Research, 2017. Intraoperative neurophysiological monitoring of the arcuate fasciculus during brain tumor surgery under general anesthesia.	1 year	P.I.
Fondazione CariVerona Grant 2018 NEURO-CONNECT. System neurosciences meets clinical neurosurgery: Development of novel multimodal monitoring indices of brain connectivity in patients with glioma.	3 years	P.I.
PRIN 2022 Call Motivated behavior in the medial premotor areas, in health and disease. Local Coordinator.	2 years	Local Coordinator

POSITIONS HELD WITH RELEVANT SCIENTIFIC SOCIETIES FOR NEUROSCIENCES

International Society for Pediatric Neurosurgery (<https://www.ispneurosurgery.org>)

- Member of the Scientific Committee for the Annual Meetings in 2002 (Kyoto), 2007 (Liverpool), 2008 (Cape Town), 2009 (Los Angeles), 2010 (Jeju), 2016 (Kobe), 2017 (Denver)
- Member of the Nominating Committee 2008-2009
- Member of the Executive Board (Office: Liaison) 2009-2011 and from 2016 (Office: Vice-Chair Scientific Committee 2016-2018; Chair Scientific Committee 2018-2021)

European Society for Pediatric Neurosurgery (<https://www.espneurosurgery.org>)

- Member of the Executive Board 2008-2012 (Office: Website and Communication) and from 2016 (Office: Membership 2016-2018; Office: Liaison 2018-2025)
- Member of the Nominating Committee 2012-2014

International Society of Intraoperative Neurophysiology (<https://neurophysiology.org>)

- Member of the Scientific Committee for the Biannual Meetings in 2007 (Lucerne), 2009 (Dubrovnik), 2013 (Cape Town)
- Member of the Executive Board 2009-2017 (Secretary 2009-2011; President-Elect 2011-2013, President 2013-2015, Immediate Past-President 2015-2017)
- Chair of the Educational Committee 2009-2013, Responsible for International Educational Courses - outside the three-year Cycle format - (since 2013)
- Co-chair Education Committee 2017-2019; Co-chair Liaison Committee 2019-2022

European Association of Neurosurgical Societies (<https://eans.org>)

- Delegate of the Italian Society of Neurosurgery for the Training Committee (from September 2015 to January 2018)
- Member of the Executive Board since 2017 (Office: Scientific Chair 2017-2021; Treasurer 2021-2023, President-Elect 2023-2025)

World Federation of Neurosurgical Societies (<https://wfns.org>)

- Chair of the Neuromonitoring Committee (2017-2021)

Italian Society of Neurosurgery (<https://sinch.it>)

- 2015-2017 Delegate for the Training Committee of the European Association of Neurosurgical Societies
- 2020-2022 Vice-President

Verona Brain Research Foundation (VBRF) (<https://www.brainresearchfoundationverona.org>)

- Member of the Scientific Committee from its foundation until 2016. From 2016 to 2023, Member of the Board of Directors.

POSITIONS AS REVIEWERS FOR SCIENTIFIC JOURNALS AND NATIONAL AND INTERNATIONAL ORGANIZATIONS

Participation in Editorial Boards of International Scientific Journals:

1. Journal of Neurosurgical Sciences
2. Brain and Spine

Reviewing Activities for International Scientific Journals:

1. Acta Neurochirurgica
2. Biomed Central Neurology
3. Brain and Spine
4. Childs Nervous System
5. Clinical Neurophysiology
6. European Spine Journal
7. Frontiers in Neurology
8. Journal of Clinical Neurophysiology
9. Journal of Experimental and Clinical Cancer Research
10. Journal of Neurosurgical Sciences
11. Neurological Research
12. Neurosurgical Review
13. Neurosurgery
14. Neurosurgical Focus
15. Operative Neurosurgery
16. Pediatric Neurosurgery
17. Surgical Neurology International
18. World Neurosurgery
19. Zentralblatt Neurochirurgie

Other Reviewing Roles for National and International Organizations:

2011: International referee for the 2011 call of the French Research National Agency (L'Agence Nationale de la Recherche) in the field of Neurosciences. Title of the reviewed project: "The hidden functional organization of the motor and sensory cortex in humans."

2013: International reviewer for the dissertation thesis (MMed in Neurosurgery) of Dr. Edwin Mogere, Faculty of Health Sciences, University of Cape Town, South Africa. Title of the thesis: "Impact of secondary insults on the outcome of paediatric traumatic brain injury."

2014: External evaluator for the assignment of a research grant at the Department of Medical Biotechnology and Translational Medicine, University of Milan. Candidate: Dr. Luca Forna. Title of the project: "Anatomo-functional study of the parieto-frontal circuits in humans: Clinical impact on surgical resection of tumors located in the parietal lobe."

AWARDS AND RECOGNITIONS FOR SCIENTIFIC ACTIVITY

- 1) International Federation of Clinical Neurophysiology Fellowship Award 2001 for young investigators: "The role of intraoperative neurophysiological monitoring and provocative tests in understanding spinal cord hemodynamics during endovascular procedures for spinal vascular lesion". Presentato a Buenos Aires, Maggio 2001.
- 2) Guidetti Award 2002 for the best paper submitted by a young neurosurgeon to the Italian Society of Neurosurgery Annual Meeting: "Brain surgery in motor areas: The invaluable assistance of intraoperative neurophysiological monitoring". Presentato a Bolzano, Settembre 2002.
- 3) Raimondi Award 2002 for the best paper submitted by a young neurosurgeon to Child's Nervous System: "Intraoperative neurophysiological monitoring in pediatric neurosurgery: why, when, how?". Presentato a Kyoto, Ottobre 2002.
- 4) Presidential Lecture at the 21st Annual Meeting of the American Society of Neurophysiological Monitoring. Nashville (TN), USA, April 22-25, 2010
- 5) First European Keynote Speaker at the Annual Symposium of the Canadian Association of Neurophysiological Monitoring. Ottawa, Canada, September 4-5, 2013
- 6) Award certificate for the best Discussion Group evaluation score at the EANS Training Course in Berlin, October 2-5, 2016

PUBLICATIONS

Prof. Francesco Sala is the author/co-author of 168 publications (peer-reviewed articles) with a total of 3,995 citations and an H-index of 31 (Scopus, March 2025)

<https://www.scopus.com/authid/detail.uri?authorId=55188634200>

He is also the author of over 30 book chapters and has presented over 400 invited lectures at national and international conferences and courses.

BRIEF SUMMARY OF CLINICAL ACTIVITY

Prof. Francesco Sala has regularly served since August 2001 as attending neurosurgeon at the (Clinical Neurosurgery Unit of the *Azienda Ospedaliero-Universitaria Integrata* in Verona. In 2001, he introduced the Intraoperative Neurophysiology Unit at the Institute of Neurosurgery, where over the past 25 years over 4,500 neuromonitoring procedures have been performed, positioning it as a national and international reference center, with over 100 neurophysiologists, neurosurgeons, and ION technicians undergoing training for periods ranging from a few weeks to over a year.

From September 1, 2009, to October 31, 2018, he was the Head of the Pediatric Neurosurgery Unit at the departmental level, and he continues to coordinate Pediatric Neurosurgery activities at the AOUI of Verona.

Since November 1, 2018, he has been the Director of the Neurosurgery Unit B at the *Azienda Ospedaliero-Universitaria Integrata* in Verona.

Prof. Sala's primary interests are a functional approach to Neurosurgery—particularly through the use of intraoperative neurophysiology techniques in neurooncology—and Pediatric Neurosurgery. The surgical experience accounts for over 3,200 surgeries characterized by, among others, adult brain gliomas, intramedullary tumors, Chiari malformation, hydrocephalus and cerebrospinal fluid circulation disorders, spinal dysraphism, craniosynostosis, pediatric intracranial and spinal tumors, and endoscopic intraventricular procedures.