



18th Delhi Course on Neurointervention 21 - 24 May 2023



Under the aegis of
**Stroke & Neurointervention
F o u n d a t i o n**





Dr. Shakir Husain

Chairman, Stroke & Neurointervention Foundation (SNIF)
Course Director

Dear colleagues and friends,

It gives me great pleasure to invite you to participate in the 18th *Edition of Delhi Course on Neurointervention* to be held from **21- 24 May 2023**.

More than a decades and half of collaboration between the Department of Neuroradiology, University Hospital Zurich, Switzerland and Stroke & Neurointervention Foundation (SNIF) has been instrumental in imparting education and training in the practice of neurointervention as a subspecialty of cerebrovascular disease management. It has delivered its mission of imparting knowledge and understanding of cerebrovascular diseases and its management through various neurointerventional techniques in a rather unbiased manner and as a passionate approach.

The primary objective of this residential course is to learn and discuss anatomical, biological, embryological, phylogenetic and histogenetic aspects of various neurovascular diseases and build up a philosophy and knowledge base, a base on which new generation of neurointerventionist and neuroscientists continue to learn for the practice and advancement of research in neurointervention.

This course provides an opportunity to learn from the masters through their thought provoking lectures and in depth discussions on the intricacy and technical aspects of the Neurointervention practice. Generally the participants are from diverse fields of neurosciences including neurology, neurosurgery and neuroradiology making it an apt platform for a detailed discussion from different perspective.

The Neuroendovascular technology is advancing *pari passu* with the advancement of the knowledge base and newer devices are appearing in practice arena making it imperative to understand their advantages and care of use in a thoughtful manner. Therefore, we focus equally on the materials and devices through conducting hands-on practical material workshops and video workshops for its safe use. This year we have main focus on the acute stroke intervention, complex aneurysms of the brain, brain and spinal AVM and dural-fistula and carotid stenting.

To achieve an objective of giving a comprehensive and in depth view on the subject we have carved the program and chosen eminent, dedicated, and experienced faculty to deliver educational information and discuss with the participants through their vast experience of this field. We propose you, a high quality of educational contents without binding on time in this course.

I, on behalf of the faculty, organising committee of the course and myself, look forward to welcoming you in this course.

Shakir HUSAIN



Course Venue:

Raviz KADAVU

Calicut (Kerala), India

Course Direction:

DR. SHAKIR HUSAIN
15A- Platinum Crescent
Bank Road, Calicut -673001 (Kerala)
Ph: +91-9810120942

Course Organisation:

Dr. Moinul Haq	:	+91 98 470 18366
Dr. ANAND Warriar	:	+91 73 564 25250
Dr. Somesh Vanchilingam	:	+91 94 425 01101
Dr. Gautham S P	:	+91 90 031 16212
Dr. K. G. Lodha	:	+91 91 168 11511
Dr. Sumit Goyal	:	+91 99 103 33 961
Dr. Somnath Jena	:	+91 90 786 71479
Dr. Ateequr Rahman	:	+91 99 897 09 877
Dr. Rimpay Joseph	:	+91 85 473 06 559
Dr. Ummer Kardan	:	+91 94 478 43 954
Dr. Abhilash	:	+91 98 467 29302
Dr. Roselyn Pamatmat	:	
Dr. Srijithesh	:	+917994246286

Course Coordinator:

Ms. Elizabeth Siju	:	+91 98 735 48918
Mr. Rizwan	:	+91 99 106 12107
Ms. Pratibha	:	+91 81 398 38129

Email: delhicourse@gmail.com

Website: www.delhicourse.com

Faculty of the Course



Prof. Dr. Anton Valavanis
Professor Emeritus, Institute of Neuroradiology
Klinik für Neuroradiologie,
Head, Clinical Neurosciences center
UniversitätsSpital Zürich, Zürich, Switzerland

Prof. Anton Valavanis started his career as an Assistant Professor in 1984 and obtained full professorship at the chair of neuroradiology in 1994. The same year he founded the Institute of Neuroradiology at the University of Zurich. He retired from this position in December 2017. He is currently working as a professor emeritus and Head of clinical neurosciences center, university hospital Zurich. The institute is the leading center of Interventional Neuroradiology worldwide.

He co-founded the Clinical Neuroscience Center at the University Hospital Zurich, where he currently serves as Chair of the governing council. He is also a founding member of the European Society of Head and Neck Radiology, the Swiss Society of Neuroradiology and other prestigious organizations. He served as president of the World Federation of Neuroradiological Societies from 1997 to 2002 and has been President of the Swiss Society of Neuroradiology since 2001.

He has received numerous honors, including the Scientific Award of the German, Swiss and European societies of neuroradiology and the James Bull Medal of the British Society of Neuroradiologists. He has served as Editor-in-Chief of *Neuroradiologia Helvetica*, and *Neuroradiology* and a member of editorial board of various journals on neuroradiology, neurosurgery and skull base surgery.

Apart from extensive lectures across the world, Prof Valavanis has authored or co-authored 200 original scientific publications and two books. In 1992 he founded the ‘Zurich Course on Interventional Neuroradiology’, which has been held annually ever since.

He has been an inspiration behind the ‘Delhi Course’ and has been integral part of it since it’s beginning.



Prof. Dr. med. Shakir Husain Hakim
Chairman, Stroke & Neurointervention Foundation (SNIF)
Senior Consultant
Formerly Deputy Head, Interventional Neuroradiology
Co-director, International Fellowship Programme University
Hospital Zurich, Zürich, Switzerland

Dr. Shakir Husain Obtained his board qualification in neurology from G.B.Pant Hospital, Delhi University. He is one of the first neurologists in the global arena to be trained in Neurointervention from University Hospital Zurich in 1997 – 1999.

He is an accomplished neurointerventionist practicing in India. He developed one of the first independent Departments of Neuroendovascular Therapy and Stroke at Sir Ganga Ram Hospital and served as its Chief of Services for over a decade. After he moved to Max Healthcare in 2009, he developed one of the first independent and comprehensive departments of Interventional Neurology & Stroke treatment, which is at par with any best centre in the world. From Feb 2014, he joined as Director of Interventional Neurology & Stroke at Saket City Hospital, New Delhi where he developed department of Interventional neurology & stroke with integrated stroke intensive care unit and a biplane neurovascular suit. In March 2015 he moved again to Max Institute of Neurosciences. He joined Neo Hospital, Noida in June 2015 where he developed neurointervention program. In October 2017, he joined UniversitätsSpital Zürich, Klinik für Neuroradiologie, where he worked until November 2021 and held a position of a Professor and the director of the International Fellowship Program in Neurointervention. He is currently working as a Consultant,

He single handedly conceptualised and started the Delhi Course on Neurointervention and has shaped it to what it has become today! He also runs a one-year Fellowship Program (Egas Moniz Fellowship in Interventional Neurology & Stroke) and is actively involved in teaching and developmental activities of Neurointervention in Asia Pacific region.

He is the founding chairman of the Stroke & Neurointervention Foundation (SNIF), which has been actively involved in the advancement of knowledge, science and art on neurointervention in Asia Pacific region.



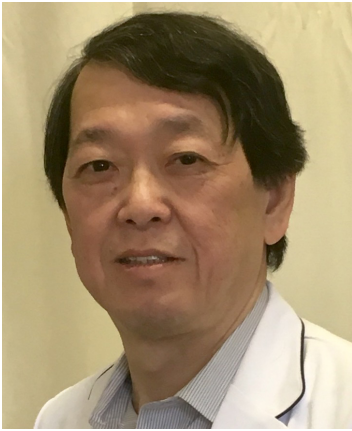
Dr Michihiro Tanaka

Director – Neurosurgery
Kameda Medical Center Kamogawa City,
Chiba – JAPAN

Dr. Michihiro Tanaka is an accomplished neurosurgeon and neuroendovascular surgeon who holds board certification in both fields. He has been serving as the director of the Department of Neuroendovascular Surgery and Neurosurgery at Kameda Medical Center, one of the largest private hospitals in Japan, since 2004. In addition, he currently holds positions as a visiting professor at Tokyo Jikeikai University School of Medicine, Showa University School of Medicine, and Fukuoka University Chikushi Hospital.

In addition to his clinical work, Dr. Tanaka has made notable professional contributions through his appointment as President of the World Federation of Intravascular Therapeutic Neuroradiology (WFITN) from 2022 to 2024, where he is deeply involved in advancing the field through cutting-edge research and fostering collaborative partnerships.

Prior to his current appointment, Dr. Tanaka held the position of Associate Professor at University Hospital Zurich from 1998 until 2004. His areas of expertise encompass clinical neuroanatomy, surgical neuroangiography, embryological anatomy, minimally invasive neurosurgery, functional vascular anatomy of the brain, acute stroke management, cerebral blood flow, and metabolism.



Dr. MASAKI KOMIYAMA

Consultant, Department of Neuro-Intervention
Osaka City General Hospital, Osaka, Japan

Dr. Komiyama is a board-certified neurosurgeon and a neuro-endovascular therapist in Japan. He was graduated from Keio University in Tokyo and started his medical carrier in plastic and reconstructive surgery first and extended the fields to neurosurgery and neuro-intervention. Amongst the field of neuro-intervention, he is a specialist in pediatric neuro- intervention. He is also specialized in the functional neurovascular anatomy and care for hereditary hemorrhagic telangiectasia (HHT). He has established 'Niche Neuro- Angiology Conference (NNAC)' in 2006 in Japan, which is the core meeting for functional neurovascular anatomy. The 16th NNAC meeting will be held this year in Osaka. He has also established HHT JAPAN in 2013 for an improvement of the HHT patients' care. HHT-JAPAN holds the annual scientific meeting. The 9th HHT JAPAN meeting will be held this year in Osaka.

He has published more than 150 peer-reviewed English papers related to mostly neuro-intervention and neurovascular anatomy. He was a former editor-in-chief of 'Interventional Neuroradiology'.



Dr Bernd Tomandl

Head of Department of Radiology and Neuroradiology
Christophsbad Fachklinik GmbH
Fachkrankenhaus KG
Göppingen, Germany

Dr. Bernd Tomandl is a Neuroradiologist practicing in Germany. He is the Head of Department of Radiology and Neuroradiology at Christophsbad Fachklinik. He has vast experience on diagnostic neuroradiology and therapeutic neurointerventions including spinal cord AVMs, cerebral aneurysms, brain AVMs, and head and neck vascular anomaly and acute stroke.



Dr. Takahiro Ota

Director of Neurosurgery
Tokyo Metropolitan Tama Medical Center -
Fuchu, Tokyo – JAPAN

Dr. Ota is board-certified in Neurosurgery in Japan, and also Board certified Trainer of both the Japanese Society for NeuroEndovascular Therapy and the Japanese Society on Surgery for Cerebral Stroke. He was graduated from University of Tokyo, and started his medical career in general surgery first, and extended the fields to neurosurgery and neurointervention, currently a specialist in vascular neurosurgery, functional neurovascular anatomy, neurointervention and brain tumor surgery.

He has been a director of Department of Neurosurgery in Tokyo Metropolitan Tama Medical Center since 2012, and an associated editor of the journal "Interventional Neuroradiology (INR)" an official journal of the World Federation of Interventional and Therapeutic Neuroradiology (WFITN).



Dr. Keisuke Kadooka

Chief of Neuroendovascular Surgery,
Kameda Medical Center, Kamogawa, Chiba, Japan

Dr. Kadooka is board certified in neurosurgery and neuroendovascular surgery in Japan. He graduated from Kyushu University in 2006 and started his medical career at Asahi General Hospital(Asahi, Chiba, Japan). After training, he moved to the department of neurosurgery, Kameda Medical Center in 2013. He trained in interventional neuroradiology at the University

Hospital Zurich from 2017 to 2018 and finished the Fellowship in Interventional Neuroradiology (FINR). After his having returned to Japan, they launched the department of neuroendovascular surgery at Kameda Medical Center in 2020.

He has special interests in cerebrovascular diseases, interventional neuroradiology and neuroanatomy.



Day – 1 (21st May 2023)

Cerebral Angiography, Carotid Stenting:

11.00 - 12.00 Check-in

12.00 – 12.30 Registration & Lunch

12.30 – 1.00 Welcome & Introduction: **Shakir Husain**

1.00 – 2.00 Angiographic anatomy of cerebral blood vessels.
S. Husain

2.00 - 2.30 Principles & Technique of cerebral angiography
S. Husain

2.30 - 2.45 **Discussion**

2.45 – 3.00 **Coffee Break**

3.00 - 3.45 Carotid Plaque Characteristics: Evaluation and Therapeutic implication
B. Tomandl

3.45 - 4.00 Developing Carotid Stenting program in a peripheral centre. Nuances.
Dr. Moinul Haq

4.00 - 4.15 CT perfusion: technique and interpretation
Rimpy Joseph

4.00 - 4.30 The Use and Pitfalls of Intracranial Vessel Wall Imaging: How We Do It
Anand Warriar

4.30 – 5.15 Carotid Stenting: Concept, principles and technique
S. Husain

5.15 – 5.30 **Discussion**

5.30 – 5.45 **Coffee Break**

5.45 - 6.45 Material Workshop: Vascular Access / Cerebral angiography Technique and Principles / Vascular Closure device and techniques. **S. Husain**

6.45 – 7.45 Simulation Workshop: Hands On practice Session.
S. Husain

8.00 - 9.30 Dinner

Day -2 (22nd May 2023)

Brain AVM & Dural AVF:

7.00 – 8.00 Breakfast

8.30 - 9.15 Functional vascular anatomy of the skull base and trans-arterial embolization of dural AVF. **M. Tanaka**

9.15 – 10.00 Targeting dural-AVF through Trans-venous and combined trans-venous and trans-arterial routes. **S. Husain**

10.00 – 10.30 Discussion

10.30 – 10.45 *Coffee break*

10.45 – 11.30 Pediatric vascular malformations: Clinical and Genetic Spectrum
M. Komiyama

11.30 – 12.00 Technique of Preoperative AVM embolization with Onyx. **Takahiro Ota**

12.00 – 12.15 Discussion

12.15 – 12.45 Video workshop: Techniques of Dural AVF Embolization: Transarterial, transvenous, transtorcular and combined approach.
S. Husain, M. Tananka , M. Komiyama, Takahiro Ota

12.45 – 1.45 Poster Session: Walk through & Discussion

1.45 - 2.15 *Lunch*

2.30 – 3.30 Theory & Practice of curative Embolization of brain AVM. **A. Valavanis**

3.30 – 3.45 Discussion

3.45 – 4.00 *Coffee Break*

4.00 - 4.45 Understanding angio-architecture of brain AVM's in determining treatment options with special reference to Endovascular embolization: **S. Husain**

4.45 – 5.30 Discussion & Video workshop: Techniques of brain AVM embolization (microcatheterization of the nidus, single vs multimicro- catheter approaches, intranidal obliteration techniques in plexiform, fistulous and mixed compartments),
S. Husain, M. Tananka , M. Komiyama, Takahiro Ota

5.30 - 6.00 **Material Workshop:** Basics of access and Co-axial system and Device Selection in Neurointervention
S. Husain

6.00 – 7.00 *Training on simulation models.* **S. Husain**

8.00 – 9.00 Dinner



Day -3 (23rd May 2023)

Brain Aneurysm:

7.00 – 8.00 Breakfast

8.30 – 9.15 Functional anatomy of intracranial aneurysms **M. Komiyama**

9.15 – 10.00 Wide neck aneurysm management with Flow diversion and Flow disruption.
M. Tanaka

10.00 – 10.45 Embolization of aneurysm with balloon assistance: Principle, Indications and technique. **M. Tanaka**

10.45 – 11.00 Discussion

11.00 – 11.15 *Coffee Break*

11.15– 11.45 Peripheral dissecting Aneurysms: Pathophysiology Natural history and Treatment options. **S. Husain**

11.45 - 12.30 Giant intracranial aneurysms: Aetiology, pathophysiology and Treatment options. **S. Husain**

12.30 – 1.15 Aneurysm in Paediatric population. **M. Komiyama**

1.15 – 1.30 Discussion

1.30 - 2.00 *Lunch*

2.00 – 2.45 Complex intracranial aneurysms: Management strategies. **S. Husain**

2.45 – 3.00 Discussion

3.0 – 3.45 Video workshop: techniques of the endovascular Coiling of Aneurysm (stent Assisted coiling, balloon assisted coiling, double catheter technique, pipeline repair) **S. Husain, M. Tanaka, M. Komiyama,**

3.45 - 4.00 GROUP PHOTOGRAPH

4.00 – 4.15

Coffee Break

4.15 – 5.15 **Poster Walk through & Discussion**

5.15 – 5.45 Material Workshop and Technique demonstration on
Flow models: Aneurysm Coiling. **Shakir Husain**

5.45 – 6.30 *Training on simulation models.* **Shakir Husain**

7.30 – 8.00 Felicitation of Eminent faculties and Award Ceremony for Best Posters

8.00 – 10.00 Course Gala-Dinner.

Day- 4 (24th May 2023):
Acute Stroke Intervention (ASI)

7.00 – 8.00 Breakfast

8.30 – 9.30 Ischemic Stroke In Pediatric Population: **M. Komiyama**

9.30 – 9.45 Mechanical Thrombectomy in Stroke Intervention: Concept, Case selection and techniques **S. Husain**

9.45 - 10.15 Mechanical thrombectomy for isolated ICA occlusion, to recanalize or not? **Takahiro Ota**

10.15 - 10.45 Mechanical thrombectomy for acute ischemic stroke: Patient selection and approaches to the difficult cases. **Keisuke Kadooka**

10.45 – 11.00 Discussion

11.00 – 11.15 Coffee Braeak

11.15 – 11.45 Acute revascularization in ICAD: Indications of Primary Angioplasty and/or Stenting. **S. Husain**

11.45 – 12.00 Discussion

12.00 – 1.00 Stroke Case Discussions: Acute stroke Intervention. by the Participants and Panel discussion

1.00– 1.45 Lunch

1.45 – 2.45 Imaging of acute ischemic stroke with CT and MRI: Dead brain or Penumbra? Defining approach of treatment IV/IA; thrombolysis/ thrombectomy **B. Tomandl**

2.45 – 3.45 Vascular collateral organization in acute ischemic stroke and its implications for interventional stroke treatment, **A. Valavanis**

3.45 - 4.00 Discussion.

4.00 – 4.15

Coffee break

4.15 – 5.30 Material workshop on techniques of mechanical thrombectomy, stent retrievers, suction thrombectomy. Basics of setting up access system. How to overcome difficulties in complex arch. Acute stroke Intervention technical tips:

5.30:

End of Course



Registration fee:

For India and SAARC Nations: INR 25,000/-

For Other Nations: USD 750 (or equivalent in INR)

THE REGISTRATION FEE INCLUDES COURSE FEE, TWIN-SHARING ACCOMMODATION (check in 21st May 12PM; Check out 24th may 11AM) AND ALL MEALS FOR THE DURATION OF THE COURSE, GALA DINNER AND REGISTRATION KIT.

Registration fee to be sent by a demand draft in the name of **“Stroke & Neurointervention Foundation”** payable at Delhi OR by online bank transfer as detailed below.

ONLINE TRANSACTION DETAILS:

FOR DOMESTIC PARTICIPANTS :

Account Name:	STROKE AND NEUROINTERVENTION FOUNDATION
Account No.	061488700000151
IFS CODE	YESB0000003 (Used for RTGS & NEFT Transactions)
MICR CODE	110532002
BANK	YES BANK
ADRESS	PLOT NO : 11/48,SHOPPING CENTRE, DIPLOMATIC ENCLAVE, MALCHA MARKET CHANAKYAPURI, DELHI-110021
BRANCH	CHANAKYAPURI, NEW DELHI
PHONE NO	011-30259000
BRANCH CODE	000003

FOR INTERNATIONAL PARTICIPANTS:

Beneficiary Name	AT Designz
Bank name	City Union Bank
Bank Address	Ground Floor, Meera Complex, Opp. Meera Girls College, Sardarpura, Udaipur, Rajasthan 313001
Account No	510909010130492
SWIFT Code	CIUBIN5M
IFSC Code	CIUB0000603



Registration Form

18th Delhi course on Neurointervention

21 - 24 May 2023

Name:

Qualification: DM (neurology) / MCh (Neurosurgery) / DM (Neuroradiology) / other (specify)
(please tick appropriate)

Designation:

Practicing Neurointerventionist / Fellow / Resident (please tick appropriate)

Department & Institute:

.....
.....

City

Address for Correspondence:

.....City

.....Postal code.....

Email address:

Mobile no:

Names of Referee-1

Referee- 2

Demand Draft No./ NFT transfer

PAN CARD NO.

Date

Signature

Please send registration form along with registration fee (demand draft) along with two reference letters and a CV to Course Director at following address.

Dr. Shakir Husain Hakim
A15-Platinum Crescent Apartments
Bank Road, Calicut -673001 (Kerala)

Google Maps The Raviz Kadavu

