

BIOGRAPHICAL SKETCH

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NAME Issam A. Awad, MD, MSc, FACS, MA (hon)		POSITION TITLE Professor of Neurosurgery Vice Chairman for Research and Program Development	
eRA COMMONS USER NAME issamawad			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Loma Linda University, Loma Linda, CA	B.S., M.Sc.	1976, 1979	Biochemistry
Loma Linda University, Loma Linda, CA	M.D.	1980	Medicine
The Cleveland Clinic, Cleveland, OH	Residency	1986	Neurosurgery

A. Positions and Honors**PROFESSIONAL EXPERIENCE**

- Barrow Neurological Institute, Phoenix, AZ: Neurovascular Fellow (1985-1986).
- Stanford University School of Medicine, Stanford, CA: Physician Specialist and Clinical Assistant Professor of Surgery (Neurosurgery); Associate Chief of Neurosurgery, Santa Clara Valley Medical Center, San Jose, CA (1986-1987).
- Cleveland Clinic Foundation, Cleveland, OH: Attending Staff (1987-1993); Head, Section of Epilepsy Surgery (1988-1992); Head, Section of Cerebrovascular Surgery (1990-1993); Vice-Chairman, Department of Neurological Surgery (1992-1993).
- Yale University School of Medicine, New Haven, CT: Associate Professor of Surgery (1993-1994); Professor of Neurosurgery (1994-2001); The Nixdorff-German Professor of Neurosurgery (1997-2001); Head, Neurovascular Surgery Program; Director, Neurovascular-Neuroscience ICU; Co-Director, Yale Cerebrovascular Center (1993-2000).
- University of Colorado School of Medicine, Denver, CO: The Ogsbury-Kindt Chair in Neurosurgery; Professor with tenure of Neurosurgery, Neurology and Pathology (2001-2003).
- Northwestern University Feinberg School of Medicine and Evanston Northwestern Healthcare, Evanston, IL: Professor of Neurological Surgery (with tenure); Vice-chairman for Research and Program Development (2003-present).

SELECTED HONORS

- Student Investigator of the Year Award, Loma Linda University. February 20, 1979.
- Donald E. Griggs Award for "Meritorious Scholarship", Loma Linda University. June 1, 1980.
- Crile Traveling Fellowship, The Cleveland Clinic Foundation. June 11, 1985
- The Pudenz Award for "Excellence in Hydrocephalus Research." December 15, 1988.
- The Oldendorf Award for "Outstanding Contribution to Neuro-imaging." February 17, 1989.
- Honorary Master of Arts (Privatim), Yale University. January 24, 1995.
- The Rasmussen Lecturer, Montreal Neurologic Institute, December 15, 1995.
- The Nixdorff-German Endowed Professorship in Neurosurgery, Yale University, 1997-2000.
- The 4th Tindall Distinguished Professor, Emory University, April 15, 1999.
- Honored Neuroscience Alumnus, The Cleveland Clinic Foundation, May 21, 1999.
- Invited Nominator, the Nobel Committee for Physiology and Medicine, Stockholm, Sweden, 1998, 1999 and 2001 Prizes.
- The Ogsbury Kindt Endowed Chair in Neurosurgery, University of Colorado, 2001-2003.
- Chairman, Joint Section on Cerebrovascular Surgery of the American Association of Neurological Surgeons and the Congress of Neurological Surgeons, 2000-2001
- President, Congress of Neurological Surgeons, 2000-2001.
- 2000 Outstanding Intellectuals of the 21st Century (Second Edition), 2002, 2003.
- Best Doctors in America, 1995-2006
- Academic Excellence Award. Highest Academic Achievement in the Department of Surgery, Evanston Northwestern Healthcare, 2005, 2006.

B. Selected Peer-Reviewed Publications

(Publications selected from 225 papers and chapters, and 11 books)

Gunel M, Awad IA, Finberg K, Anson JA, Steinberg GK, Batjer HH, Kopitnik TA, Morrison L, Giannotta SL, Nelson-Williams C, Lifton RP: A founder mutation as a cause of cerebral cavernous malformation in Hispanic Americans. The New Eng J Med, 334: 946-51, 1996

Principal Investigator/Program Director (Last, First, Middle):

- Rothbart D, [Awad IA](#), Kim J, Lee J, Criscuolo G: Expression of angiogenic growth factors and structural matrix proteins in central nervous system vascular malformations. [Neurosurgery](#) 38: 915-925, 1996
- Gunel M, [Awad IA](#), Finberg K, Steinberg GK, Cepeda O, Nelson-Williams C, Lifton RP: Genetic heterogeneity of inherited cerebral cavernous malformations. [Neurosurgery](#) 38:1265-1271 1996
- Skirgaudas M, [Awad IA](#), Kim J, Criscuolo G: Expression of angiogenesis factors and selected vascular wall matrix proteins in intracranial saccular aneurysms. [Neurosurgery](#) 39: 537-547, 1996
- Schlosser MJ, McCarthy G, Fulbright RK, Gore JC, [Awad IA](#): Cerebral vascular malformations adjacent to sensorimotor and visual cortex: functional magnetic resonance imaging studies before and after therapeutic intervention. [Stroke](#) 28: 1130-1137, 1997.
- Fulbright RK, Chaloupka JC, Putman CM, Sze GK, Merriam MM, Lee GK, Fayad PB, [Awad IA](#), White RI Jr: MR of Hereditary Hemorrhagic Telangiectasia: Prevalence and Spectrum of Cerebrovascular Malformations, [AJNR Am J Neuroradiol](#) 19: 477-484, 1998
- Baev N and [Awad IA](#). Endothelial cell cultures from human cerebral cavernous malformations. [Stroke](#) 29: 2426-2434, 1998
- Craig HD, Gunel M, Cepeda O, et al., [Awad IA](#), Lifton RP. Multilocus linkage identifies two new loci for a mendelian form of stroke, cerebral cavernous malformation, at 7p15-13 and 3q25.2-27. [Human Mol Gen](#). 7: 1851-1858, 1998
- Kiwak KJ, Abrams DJ, [Awad IA](#): Appearance of an intraparenchymal arteriovenous malformation following obliteration of a dural arteriovenous malformation: Case Report. [J Neurovasc Disease](#) 1 (2): 1-5, 1996
- Gunel M, Lifton R, [Awad IA](#): Molecular Biology of Cerebrovascular Diseases. In [Neurosurgical Techniques](#), Salzman M (Ed.), [Awad IA](#) (Cerebrovasc. Sect. Ed.). Current Science Publishers: 163-173, 1998
- Abdulrauf SI, Keynar M and [Awad IA](#). A comparison of the clinical profile of cavernous malformations with and without associated venous malformations. [Neurosurgery](#) 44: 41-47, 1999
- Abdulrauf SI, Malik, GM, [Awad IA](#) . Spontaneous angiographic obliteration of cerebral arteriovenous malformations. [Neurosurgery](#) 44: 280-288, 1999
- Schlosser MJ, Luby M, Spencer DD, [Awad IA](#), McCarthy G. Comparative Localization of Auditory Comprehension Using Functional MRI and Cortical Stimulation. [JNeurosurgery](#) 91: 626-635, 1999
- Chiang VLS, Claus EB, [Awad IA](#). Toward More Rational Prediction of Outcome in High Grade Patients with Subarachnoid Hemorrhage. [Neurosurgery](#) 46: 28-36, 2000
- Montes J, Gunel M, Wong J, Fayad PB, [Awad IA](#). Stereotactic Computed Tomographic Guided Aspiration and Thrombolysis of Intracerebral Hematoma: Protocol and Preliminary Experience. [Stroke](#) 31: 834-840, 2000
- Wong J, Kim J, [Awad IA](#). Ultrastructural Pathology of Cerebral Vascular Malformations: A Preliminary Report. [Neurosurgery](#) 46: 1454-1459, 2000
- Ng PY, Huddle D, Gunel M, [Awad IA](#). Intraoperative Endovascular Adjunct in Microsurgical Clipping of Paraclinoid Aneurysms. [J Neurosurgery](#) 93: 554-560, 2000
- Impact of GDC on Multidisciplinary Management Outcome of Intracranial Aneurysms at a Single Institution. [JNeurosurgery](#) 93: 569-580 (Letter and Reply pp 719-721), 2000
- Uranishi R, Baev NI, Ng P-Y, Kim JH, [Awad IA](#). Expression of endothelial cell angiogenesis receptors in human cerebral vascular malformations. [Neurosurgery](#) 48: 359-368, 2001.
- Hamedani AG, Well CK, Brass LM, Kernan WN, Viscoli CM, Maraire JN, [Awad IA](#), Horwitz RI. A Quality-of-Life instrument for young hemorrhagic stroke patients. [Stroke](#) 32: 687-695, 2001
- Carpentier AC, Constable RT, Schlosser MJ, DeLotbiniere A, Piepmeier JM, spencer DD, [Awad IA](#). Patterns of functional magnetic imaging activation in association with structural lesions in the rolandic region: a classification system. [JNeurosurgery](#) 94: 946-954, 2001.
- Ogilvy CS, Stieg PE, [Awad IA](#), Brown RD, Kondziolka D, Rosenwasser R, Young WL. Recommendations for the Management of Intracranial Arteriovenous Malformations. A statement for health care professionals from a special writing group of the Stroke Council, American Stroke Association. [Stroke](#) 32: 1458-1471, 2001
- Uranishi R, Baev NI, Kim JH, [Awad IA](#). Vascular smooth muscle differentiation in human cerebral vascular malformations. [Neurosurgery](#) 49: 671-680, 2001
- Uranishi R, Awadallah N, Ogunshola OO, [Awad IA](#). Further study of expression of CD31 protein and mRNA in human cerebral vascular malformations. [Neurosurgery](#) 50:110-116, 2002
- Shenkar R, Elliott JP, Diener K, Gault J, Hu L-J, Cohrs RJ, Phang T, Hunter L, Breeze RE, [Awad IA](#). Differential Gene Expression in Human Cerebral Vascular Malformations. [Neurosurgery](#) 52: 465-478, 2003
- Shenkar R, Sarin H, Awadallah NA, Gault J, Kleinschmidt-DeMasters BK, [Awad IA](#). Variations in structural protein expression and endothelial cell proliferation in relation to clinical manifestations of cerebral cavernous malformations. [Neurosurgery](#) 56: 343-354, 2005
- Gault J, Shenkar R, Recksiek P, [Awad IA](#). Biallelic somatic and germ line CCM1 truncating mutations in a cerebral cavernous malformation lesion. [Stroke](#) 36: 872-874, 2005
- Gault J, HU L-J, Sain S, [Awad IA](#). Spectrum of genotype and clinical manifestations in human cerebral cavernous malformations. [Neurosurgery](#). 59: 1278-1285, 2006.

[CEREBRAL CAVERNOUS MALFORMATIONS](#), Barrow DL and [Awad IA](#), eds, AANS publishers. 1999, 248 pages.

[VASCULAR MALFORMATIONS OF THE CENTRAL NERVOUS SYSTEM](#), Jafar JJ, [Awad IA](#) and Rosenwasser R, eds. Lippincott-Raven Publishers. 2000, 540 pages.

C. Research Support

Ongoing and Pending Research Support

“Advanced Imaging in Cerebral Cavernous Malformations”

Principal Investigator

ENH Research Career Development Award, Midcareer (April 2005-March 2007)

Intramural support for pilot studies on advanced imaging in human cerebral vascular malformations, including protected time for the P.I. to establish novel collaborations and collect preliminary data for the imaging of inflammatory cells in cavernous angiomas, imaging of lesions in transgenic mice, and high field imaging of vascular malformations in patients.

“Minimally Invasive Surgery plus rTPA for Intracerebral Hemorrhage Evacuation (MISTIE) Trial”

Principal Investigator, Evanston Northwestern Healthcare (ENH) Site

NIH/NINDS, subcontract with Johns Hopkins Medical Institution, (2005-2009)

The PI's role, approximately 5 percent time commitment, is to oversee recruitment of patients and to conduct minimally invasive evacuation of cerebral hemorrhage, and contribute to blinded dose escalation and assessment of safety and preliminary effectiveness of this therapy.

“Immune Response in Cerebral Cavernous Malformations”

Principal Investigator

NIH/NINDS R21-NS052285,

\$240,625 Total Direct Costs (2006-2008),

The PI's role on this project, 15 percent time commitment, is to oversee recruitment of patients and securing and processing of surgical lesions for the proposed research, and to supervise experimental procedures for characterization of immune response in human lesional samples