## CURRICULUM VITAE RICHARD ALAN HAAS, M.D.

Updated 2/2018

### PERSONAL INFORMATION

Business Address: Department of Diagnostic Imaging

Rhode Island Hospital

593 Eddy Street

02903

Business Telephone: (401) 444-5194

(401) 444-5017 FAX

**EDUCATION** 

Undergraduate: University of Illinois

B.S. High Honors

1975

University of Illinois M.S. Bioengineering

1978

Medical School: University of Illinois

M.D. Graduation with Honors

1980

#### POSTGRADUATE TRAINING

Residency: University of Colorado

Diagnostic Radiology

1980-1984

Fellowship: University of Colorado

Fellowship

Angiography and Special Procedures

1982

Fellowship Stanford University College of Medicine

Fellowship

Neuroradiology, including Magnetic Resonance Imaging

1984-1985

#### POSTGRADUATE HONORS AND AWARDS

# Fellow, American College of Radiology, 4/05

### PROFESSIONAL LICENSES AND BOARD CERTIFICATION

1981 Diplomate National Board of Medical Examiners 1981-Present Colorado Medical License 1984-Present California Medical License 1984-Present American Board of Radiology Certified in Diagnostic Radiology 1985-Present Rhode Island Medical License 1996 Certificate of Added Qualification in Neuroradiology Certificate of Added Qualification in Vascular and 1998 Interventional Radiology Vermont Medical License 1998-Present 2015-Present Recertified in Neuroradiology and Interventional

### **ACADEMIC APPOINTMENTS**

1983	Instructor, Diagnostic Radiology University of Colorado
1985-1996	Clinical Assistant Professor Diagnostic Radiology Department of Diagnostic Imaging Brown University Program in Medicine
1985-1995	Associate Professor of Biology Rhode Island College
1996-1999	Assistant Professor of Diagnostic Imaging Brown University School of Medicine
1999-2001	Clinical Assistant Professor of Diagnostic Imaging Brown Medical School

Radiology

2001-Present Associate Professor of Diagnostic Imaging (Clinical) Brown Medical School HOSPITAL APPOINTMENTS 1985-Present Radiologist Rhode Island Hospital 1985-Present Radiologist Women & Infants' Hospital 1985-1988 Director Division of MRI Rhode Island Hospital 1986-2001 Director, Division of Neuroradiology Department of Diagnostic Imaging Rhode Island Hospital 1998 – Present Radiologist The Miriam Hospital 2001-2003 Director Section of Vascular and Interventional Radiology Rhode Island Hospital OTHER APPOINTMENTS

1994-Present Reviewer, <u>American Journal of Roentgenology</u>
1986-1988 Neuroradiologist, TPA Trial Rhode Island
2001-2002 Radiology Representative, Rhode Island
Carrier Advisory Committee
Medicare

#### MEMBERSHIP IN SOCIETIES

1972 Phi Eta Sigma

1973 Eta Kapp Nu, Tau Beta Pi

1979 Alpha Omega Alpha

1986 American Medical Association

1986 Providence Medical Association

### MEMBERSHIP IN SOCIETIES (cont)

1986	American College of Radiology
1986	Rhode Island Radiologic Society
1986	Radiological Society of North America
1986	Boston Neuroradiology Club
April, 1987	Association of University Radiologists
May, 1988	American Society of Neuroradiology Senior Member
1987	New England Society for Cardiovascular and Interventional Radiology
1988	Society of Cardiovascular & Interventional Radiology
1988	New England Roentgen Ray Society
1999	American Society of Interventional and Therapeutic Neuroradiology

#### **HOSPITAL COMMITTEES**

Human Subjects Committee-Rhode Island Hospital

Chairman, Education Committee—Radiological Society of Rhode Island

### <u>PUBLICATIONS</u> (peer reviewed)

- 1. Lambiase RE, Cronan JJ, Dorfman GS, Paolella LP, Haas RA. Percutaneous drainage of abscesses in patients with Crohn disease. AJR 1988; 150:1043-1045.
- 2. Merriam MA, Cronan JJ, Dorfman GS, Lambiase RE, Haas RA. Radiographically guided percutaneous catheter drainage of pleural fluid collections. AJR 1988; 151:1113-1116.
- 3. Daly P, Ohley WJ, Gewirtz H, Haas RA. A magnetic resonance image processing system for cardiac research.
- 4. Lambiase RE, Haas RA, Carney WI, Rogg JM. Case Report: Anamolous branching of the

- left common carotid artery with associated atherosclerotic changes. AJNR 1991; 12:187-189.
- 5. Knuckey NW, Haas R, Jenkins R, Epstein MH. Thrombosis of difficult intracranial aneurysms by the endovascular placement of platinum-Dacron microcoils. J Neurosurg 1992; 77:43–50.
- 6. Rogg JM, Benzil D, Haas R, Knuckey N. Intramedullary abscess: An unusual manifestation of a dermal sinus. AJNR 1993; 14:1393.
- 7. Murphy TP, Webb MS, Lambiase RE, Haas RA, Dorfman GS, Carney WI Jr., Morin CJ. Percutaneous revascularization of complex iliac artery stenoses and occlusions with use of Wallstents: three-year experience. J Vasc Intervent Radiol 1996; 7:21-27.
- 8. Goldstein JH, Haas RA, Tung GA. General case of the day. Intraventricular neurocytoma. Radiographics 1996; 16:971-973.
- 9. Rogg JM, Smeaton S, Doberstein C, Goldstein JH, Tung GA, Haas RA. Assessment of the value of MR imaging for examining patients with angiographically negative subarachnoid hemorrhage. Am J Roentgenol 1999; 172:201-206.
- 10. Hoffman AI, Lambiase RE, Haas RA, Rogg JM, Murphy TP. Acute vertebrobasilar occlusion: treatment with high-dose intra-arterial urokinase. Am J Roentgenol 1999; 172:709-712.
- 11. Jayaraman MV, Mayo-Smith WW, Tung GA, Haas RA, Rogg JFM, Mehta NR, Doberstein CE. Detection of intracranial aneurysms: Multi-detector row CT angiography compared with DSA. Radiology 2004; 230:510-518.
- 12. Bowkley CW, Dubel GJ, Haas RA, Soares GM, Ahn SH. Uterine artery embolization for control of life-threatening hemorrhage at menarche: brief report. J Vasc Interv Radiol. 2007; 18(1 Pt 1):127-31.
- 13. Jayaraman MV, Haas RA, Do HM, Meyers PM. Should CT Angiography be routine used in patients suspected of having aneurismal subarachnoid hemorrhage? No! Radiology 2010; 254:314-315.
- 14. McTaggart RA, Raghavan D, Haas RA, Jayaraman MV. Starclose vascular closure device: safety and efficacy of deployment and reaccess in a neuorinterventional radiology service. Am J Neuroradiol 2010; 31:1148-1150.
- 15. Prince EA, Jayaraman MV, Haas RA. Use of self-expanding intracranial stents in the treatment of acute ischemic stroke. J Vasc Interv RAdiol 2010; 21:1755-1759.

- 16. Spader HS, Grossberg JA, Haas RA, Soares GM. Fundamentals of the neurologic examination for patients undergoing central nervous system interventional procedures. Semin Intervent Radiol. Sep 2013; 30(3): 240-244.
- 17. Haas RA, Ahn SH. Interventional management of head and neck emergencies: carotid blowout. Semin Intervent Radiol. Sep 2013; 30(3): 245-248.
- 16. Boxerman JL, Jayaraman MV, Mehan WA, Rogg JM, **Haas RA**. Clinical stroke penumbra: use of National Institutes of Health stroke scale as a surrogate for CT perfusion in patient triage for intra-arterial middle cerebral artery stroke therapy. Clinical stroke penumbra: use of National Institutes of Health stroke scale as a surrogate for CT perfusion in patient triage for intra-arterial middle cerebral artery stroke therapy. American Journal of Neuroradiology, 33 (10), 1893-1900, November 2012.
- 17. Mayaraman MV, Boxerman JL, Davis LM, **Haas RA**, Rogg JM. Incidence of extrinsic compression of the internal jugular vein in unselected patients undergoing CT angiography. American Journal of Neuroradiology, 33 (7), 1247-1250, August 2012.
- 18. Boxerman JL, Jayaraman MV, Mehan WA, Rogg JM, **Haas RA**. Clinical stroke penumbra: use of National Institutes of Health stroke scale as a surrogate for CT perfusion in patient triage for intra-arterial middle cerebral artery stroke therapy. American Journal of Neuroradiology, 2012, 33(10):893-900.
- 19. Jayaraman MV, Boxerman JL, Davis LM, **Haas RA**, Rogg JM. Incidence of extrinsic compression of the internal jugular vein in unselected patients undergoing CT angiography. American Journal of Neuroradiology, 2012, 33(7):1247-50.
- 20. Alexander ES, Wolf FJ, Machan JT, Charpentier KP, Beland MD, Iannuccilli JD, **Haas RH,** Dupuy DE. Microwave ablation of focal hepatic malignancies regardless of size: A 9-year retrospective study of 64 patients. Eur J Radiol. 2015 Mar 14.
- 21. McTaggart RA, Yaghi S, Baird G, **Haas RA**, Jayaraman MV. Decreasing procedure times with a standardized approach to ELVO cases. J Neurointerv Surg. 2016 Jul 8.
- 22. McTaggart RA, Tung EL, Yaghi S, Cutting SM, Hemendinger M, Gale HI, Baird GL, **Haas RA**, Jayaraman MV. Continuous aspiration prior to intracranial vascular embolectomy (CAPTIVE): a technique which improves outcomes. J Neurointerv Surg. 2016 Dec 16.
- 23. McTaggart RA, Yaghi S, Sacchetti DC, **Haas RA**, Hemendinger M, Arcuri D, Rogg JM, Furie KL, Jayaraman MV. Mechanical embolectomy for acute ischemic stroke beyond six hours from symptom onset using MRI based perfusion imaging. J Neurol Sci. 2017 Apr 15;375:395-400.
- 24. McTaggart RA, Yaghi S, Cutting SM, Hemendinger M, Baird GL, Haas RA, Furie KL, Jayaraman MV. The effect of a primary stroke center protocol for suspected large

vessel occlusion stroke that includes early vessel imaging on efficiency and outcomes. In Press. JAMA Neurology.

### **OTHER PUBLICATIONS**

- 1. Tung GA, Davis LM, Rogg JM, Haas RA, Gold RL. Innovations in neuroimaging and neurointerventional radiology. Med Health RI 1999; 82:207-212.
- 2. Vance AZ, Jayaraman MV, Haas RA, Doberstein CE. Intracranial aneurysms: perspectives on the disease and endovascular therapy. Med Health R I 2009; 92:388-383.
- 3. McTaggart RA, Jayaraman MV, Haas RA, Feldmann E. Intracranial atherosclerotic disease: epidemiology, imaging and treatment. Med Health R I 2009; 92:412-414.

#### **ABSTRACTS**

- 1. Dorfman GS, Cronan JJ, Haas RA, Lambiase R, Paolella LP. The fate of the percutaneous entry site in Greenfield filter placement. Invest Radiol, 1987;22: S16.
- 2. Dorfman GS, Cronan JJ, Haas RA, Lambiase RE, Paolella LP. Percutaneous Greenfield inferior vena cava filter placement: Further experiences, future directions. Radiology,

# ABSTRACTS (cont)

1987;165(P):205.

- 3. Dorfman GS, Cronan JJ, Haas RA, Lambiase RE, Paolella LP. Percutaneous Greenfield filter in the inferior vena cava: Caveats in patient selection and placement technique. Radiology, 1987;165(P): 38921.
- 4. Lambiase RE, Cronan JJ, Dorfman GS, Haas RA, Paolella LP. Percutaneous management of vascular abscesses. Radiology, 1987;165(P):387.
- 5. Lambiase RE, Dorfman GS, Cronan JJ, Caldwell M, Haas RA, Paolella LP. Alternatives in percutaneous nutritional support. Radiology, 1987;165(P):425.
- 6. Paolella LP, Cronan JJ, Dorfman GS, Haas RA, Esparza AR. Value of the negative biopsy. Radiology, 1987;165(P):431.
- 7. Haas RA, Moon AC, Knuckey N, Epstein M. *Computed Tomography Manifestations of Subdural Hygromas*. 87th Annual Meeting of the American Roentgen Ray Society. Miami Beach, FL April 26-May 1, 1987.
- 8. Haas RA, Cronan, JJ, Dorfman GS, Kane N. *Risk of Abdominal Aortic Aneurysm Rupture: CT Assessment.* 73rd Scientific Assembly of the Radiological Society of North America, Chicago, IL November 30-December 4, 1987.

- 9. Cronan JJ, Marcello A, Horn D, Dorfman GS, Haas RA, Paolella LP, Lambiase RE. Antibiotic prophylaxis: Is there a role during tube change? Radiology 1988; 169(P):67.
- 10. Lambiase RE, Cronan JJ, Dorfman GS, Paolella LP, Haas RA. Percutaneous drainage of abscesses with enteric communication: Success in patients with versus those without Crohn disease. Radiology 1988; 169(P):26.
- 11. Dorfman GS, Paolella LP, Haas RA, Lambiase RE, Cronan JJ. Traumatic rupture of the Aorta: Compression of diagnostic accuracy with DSA and cut film technique. Radiology 1988; 169(P):316.
- 12. Daly PM, Ohley WJ, Gewirtz H, Haas, RA. *A Magnetic Resonance Image Processing System for Cardiac Research* IEEE Fifteenth Annual Northeast Bioengineering Conference Northeastern University Boston, MA March 28-29, 1989.
- 13. Cronan JJ, Horn DL, Marcello A, Robinson A, Paolella LP, Haas RA, Opal S, Dorfman GS. *Antibiotics and Nephrostomy Tube Care: Preliminary Observations. Part II Bacteremia*. Radiology 1989;172: 1043-1045.
- Haas RA, Spearman MP, Knuckey N. Endovascular Cerebral Aneurysm Ablation with Platinum Micro-coils. Poster Session. Annual Meeting of the American Society of Neurovascular Radiology. Washington, D.C. June 1991.
- 15. Haas RA, Knuckey N, Jenkins R. Assessment of the Effectiveness of Platinum Microcoils in Achieving Aneurysm Thrombosis in a Rabbit Model. SCVIR 17th Annual Scientific Meeting. Washington, DC. April 6, 1992.
- 16. Jenkins R, Knuckey N, Haas RA. Endovascular Occlusion of Aneurysms using Platinum-Dacron Microcoils: Evolution of Partial and Total Thrombosis. AANS. San Francisco, CA. April 14, 1992.
- 17. Haas RA, Doberstein C. Treatment of Difficult Intracranial Aneurysms by Endovascular Placement of Platinum-Dacron Microcoils: A Follow-up Study in 32 Consecutively Treated Patients. American Society of Neuroradiology. Seattle, WA. June 23, 1996.

#### **INVITED PRESENTATIONS**

- 1. The Role of Radiology in the Evaluation of Splenic Trauma. Department of Surgery Grand Rounds, Brown University Program in Medicine and Rhode Island Hospital. Providence, Rhode Island. September 14, 1985.
- 2. Efficacy of MRI and the Diagnosis of Central Nervous System Disease. Radiology Grand Rounds, Brown University Program in Medicine and Rhode Island Hospital. Providence, Rhode Island. December 2, 1985.
- 3. CT Evaluation of Gliomas. Department of Radiation Therapy, Brown University Program in Medicine and Rhode Island Hospital.

- Providence, Rhode Island. June 30, 1986.
- 4. Faculty-Seventh Annual Symposium in Diagnostic Imaging, Sponsored by Rhode Island Hospital and Brown University Program in Medicine.
  Newport, Rhode Island. August 11-14, 1986.
- 5. Options in Interventional Neuroradiology. Haas RA. Rhode Island Radiological Technology Society. March 12, 1987.
- 6. The Angiographic Evaluation of Cerebral Vascular Disease. Haas RA, Dorfman GS. Neurology Grand Rounds, Brown University Program in Medicine and Rhode Island Hospital. Providence, Rhode Island. May 27, 1987.
- 7. Faculty-Eighth Annual Symposium in Diagnostic Imaging, Sponsored by Rhode Island Hospital and Brown University Program in Medicine. Newport, Rhode Island. August 9-13, 1987.
- 8. Magnetic Resonance Imaging in the Diagnosis of Endocrine Disease. Endocrine Grand Rounds. Rhode Island Hospital. Providence, RI. November 16, 1987.
- 9. Faculty-Ninth Annual Symposium in Diagnostic Imaging, Sponsored by Rhode Island Hospital and Brown University Program in Medicine. Newport, Rhode Island. August 8-11, 1988.
- 10. Evaluation of Cervical/Cranial Trauma. The New England Roentgen Ray Society, Inc. Scientific Meeting—Head and Neck Radiology. April 29, 1988.
- 11. Diagnostic Film Panel. The New England Roentgen Ray Society, Inc. Scientific Meeting—Head and Neck Radiology. April 29, 1988.
- 12. MRI of the Extremities. Rhode Island Society of Radiologic Technologists. Rhode Island Hospital. February 15, 1989.
- 13. Magnetic Resonance Imaging. New England Chapter of the American Radiologic Nurses Association. April 8, 1989.
- 14. Applications of MRI With Developmental Delay. Rhode Island Hospital Child Development Clinic. May 8, 1989.
- 15. MRI Applications in General Surgery. Rhode Island Hospital Surgical Grand Rounds. May 27, 1989.
- Faculty-Tenth Annual Symposium in Diagnostic Imaging. Sponsored by Rhode Island Hospital and Brown University Program in Medicine. Newport, Rhode Island. August 14-17, 1989.
- 17. Faculty-Eleventh Annual Symposium in Diagnostic Imaging. Sponsored by Rhode Island

- Hospital and Brown University Program in Medicine. Newport, Rhode Island. August 13-16, 1990.
- 18. Spiffy Interventional Procedures Options in Interventional Neuroradiology. 32nd New England Conference of Radiologic Technologists. Nashua, N.H. September 7, 1990.
- 19. MRI in Mimickers of Cervical Spondylosis. New England Roentgen Ray Society Annual Refresher Course. Practical Magnetic Resonance Imaging. Harwich, Cape Cod, Massachusetts. October 13, 1990.
- 20. Faculty–Twelfth Annual Symposium in Diagnostic Imaging. Sponsored by Rhode Island Hospital and Brown University Program in Medicine. Newport, Rhode Island. August 12-15, 1991.
- 21. Paranasal Sinus CT. New England Roentgen Ray Society. January 17, 1992.
- 22. Diagnostic Film Panel. New England Roentgen Ray Society. January 17, 1992.
- 23. Endovascular Treatment of Vascular Lesions: Head and Neck. Oral Facial Society Meeting. February 23, 1993.
- 24. Reading Sinus X-rays. Allergy Grand Rounds, Rhode Island Hospital. Providence, RI. March 16, 1995.
- 25. Post Subarachnoid Hemorrhage Vasospasm. Neurology Grand Rounds, Rhode Island Hospital. Providence, RI. March 26, 1997.
- 26. Emergency Intracranial Interventions: What the Interventional Radiologist Should Know. The Seventh Annual Symposium on Peripheral Vascular Disease. Newport, RI. August 16, 1997.
- 27. Endovascular Techniques within the Central Nervous System. The Eighth Annual Symposium on Peripheral Vascular Disease. Newport, RI, August 16, 1998.
- 28. Visiting Professor. Lackland Air Force Base. Houston, TX, May 1999
- 29. Endovascular Techniques within the Central Nervous System. The Ninth Annual Symposium on Peripheral Vascular Disease. Newport, RI, August 15, 1999.
- 30. Carotid Artery Case Presentation. The Tenth Annual Brown University Symposium on Peripheral Vascular Disease: Diagnosis, Intervention and Surgery. Newport, RI. July 23, 2000.
- 31. Management in Interventional Radiology. Meeting on Acute Stroke Management for EMT's. Providence, RI. May 23, 2001.

- 32. Contemporary Diagnostic Imaging and Interventional Radiology for Primary Care 2.0. Providence, RI. March 1, 2014.
- 33. Visiting professor UVM November 16, 2018

### **SCIENTIFIC EXHIBITS**

- Haas RA, Cronan JJ, Dorfman GS. Extra-Axial Causes of Sciatic Pain.
   72nd Scientific Assembly of the Radiological Society of North America, Chicago, IL November 30-December 5, 1986.
- Paolella LP, Cronan JJ, Dorfman GS, Haas RA, Esparza AR. The Value of the Negative Biopsy.
   73rd Scientific Assembly of the Radiological Society of North America, Chicago, IL November 30-December 4, 1987
  - 87th Annual Meeting of the American Roentgen Ray Society. Miami Beach, FL April 26-May 1, 1987.
- Lambiase RE, Dorfman GS, Cronan JJ, Haas RA, Paolella LP. Alternatives in Percutaneous Nutritional Support.
   73rd Scientific Assembly of the Radiological Society of North America, Chicago, IL November 30-December 4, 1987.
   87th Annual Meeting of the American Roentgen Ray Society. Miami Beach, FL April 26-May 1, 1987.
- Dorfman GS, Cronan JJ, Haas RA, Lambiase RE, Paolella LP. Percutaneous Greenfield IVC Filter: Caveats in Patient Selection and Placement Technique.
   73rd Scientific Assembly of the Radiological Society of North America, Chicago, IL November 30-December 4, 1987
   87th Annual Meeting of the American Roentgen Ray Society. Miami Beach, FL April 26-May 1, 1987.
- Haas RA, Cronan JJ, Dorfman GS. Extra-Axial Causes of Sciatica.
   87th Annual Meeting of the American Roentgen Ray Society. Miami Beach, FL April 26-May 1, 1987.
- Lambiase RE, Cronan JJ, Dorfman GS, Haas, RA, Paolella LP. The Percutaneous Management of Vascular Abscesses.
   73rd Scientific Assembly of the Radiological Society of North America, Chicago, IL November 30-December 4, 1987.
- Lambiase RE, Dorfman GS, Cronan JJ, Haas RA, Paolella LP. Alternatives in Percutaneous Nutritional Support.
   87th Annual Meeting of the American Roentgen Ray Society. Miami Beach, Florida. April 26-May 1, 1987.
- 8. Paolella LP, Cronan JJ, Dorfman GS, Haas RA, Esparza AR. The Value of the Negative

Biopsy.

87th Annual Meeting of the American Roentgen Ray Society. Miami Beach, Florida. April 26-May 1, 1987.

9. Haas RA, Spearman MP, Knuckey N. Cerebral Aneurysm Ablation with Platinum Microcoils.

77th Scientific Assembly of the Radiological Society of North America, Chicago, IL December 1-6, 1991.

#### **GRANTS**

1. 1 R01 HL071556-01

The CORAL Study: Cardiovascular Outcomes with Renal Artery Lesions.

Co-Investigator

National Heart, Lung, and Blood Institute, funding notification March 2004. Total award \$12.9 million, subcontract \$818,839.

2. SAPPHIRE WW

Stenting and Angioplasty with Protection in Patients at High-Risk for

Endarterectomy

Co-Investigator

Cordis Corporation, 02/01/07 – 12/31/2014, \$43,200

Pending approval

3. CREST (Carotid Revascularization vs. Endarterectomy Stenting Trial):

Co-Investigator

National Institutes of Health/National Institute of Neurological Disorders and Stroke, 3/1/2005, up to \$227,400 (per enrollment).

### **UNIVERSITY TEACHING ROLES**

1. Biomed 629: General Introduction to Radiology

The Warren Alpert Medical School of Brown University

I provide a one-hour formal lecture during this cycle and interact directly with the students rotating in the department.

2. Biomed 633 - Vascular and Interventional Radiology

The Warren Alpert Medical School of Brown University

In this role, I participate in the direct supervision of Brown University medical students and students visiting from other medical schools during this clinical elective. The experience consists of reading directed by the current cases, direct patient care under supervision, and participation in procedures including clinical follow up

3. Biomed 181: Human Morphology

The Warren Alpert Medical School of Brown University

Correlation of cross-sectional imaging with gross anatomy. 1997