
Signature

STEVEN D. HAM, DO

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EDUCATION

DO 1978
The University of Health Sciences, Kansas City, Missouri

MA 1974
The University of Kansas, Lawrence, Kansas

BA 1972
The University of Kansas, Lawrence, Kansas

POSTGRADUATE TRAINING

Fellowship in Pediatric Neurosurgery 1988 - 1989
Children's Hospital of Michigan, Detroit, Michigan

Resident in Neurosurgery 1983 - 1988
Wayne State University, Detroit, Michigan

Resident in General Surgery 1982 - 1983
Mt. Clemens General Hospital, Mt. Clemens, Michigan

Director of Health Services 1980 - 1982
Selfridge Air National Guard Base, Mt. Clemens, Michigan

General Medical Officer 1979 - 1980
United States Army, Second Infantry Division
Republic of Korea

Commission, Captain 1979
United States Army Corp

Internship 1978 - 1979
Mt. Clemens General Hospital, Mt. Clemens, Michigan

FACULTY APPOINTMENTS

Assistant Professor, Neurological Surgery 2002 - Present
Schotanus Professor of Neurosurgery
Wayne State University, Detroit, Michigan

HOSPITAL APPOINTMENTS

Consultant 1997 - Present
Sinai-Grace Hospital, Detroit, Michigan

Active Staff 1992 – Present
St. John’s Hospital, Detroit, Michigan

Active Staff 1991 - Present
William Beaumont Hospital, Royal Oak, Michigan

Consultant 1990 - Present
William Beaumont Hospital, Troy, Michigan

Consultant 1989 - Present
Rehabilitation Institute of Michigan, Detroit, Michigan

Consultant 1989 - Present
Hutzel Hospital, Detroit, Michigan

Active Staff 1989 - Present
Children’s Hospital of Michigan, Detroit, Michigan

Active Staff 1989 - Present
Harper University Hospital, Detroit, Michigan

Active Staff 1989 - Present
Detroit Receiving Hospital, Detroit, Michigan

Chief, Pediatric Neurosurgery 2002 - Present
Children’s Hospital of Michigan, Detroit, Michigan

MAJOR PROFESSIONAL SOCIETIES

- American Association for the Advancement of Science
- American College of Osteopathic Surgeons
- American Medical Association
- American Osteopathic Association
- Hydrocephalus Research Foundation, Scientific Review Panel
- International Society for Pediatric Neurosurgery
- Michigan Association of Neurological Surgeons
- Michigan Association of Osteopathic Physicians and Surgeons
- 38th Parallel Medical Society of Korea

MEDICAL LICENSURE AND CERTIFICATION

License to Practice Osteopathic Medicine and Surgery State of Michigan	Present
Board of Examination American Osteopathic Board of Surgery, Neurosurgery Section	2004 - Present
American Osteopathic Board of Surgery, Neurosurgery Section	1995

HONORS AND AWARDS

Top Docs Recognition	2000 2003 - 2012
First place poster, <i>Kaolin Induced Hydrocephalus in The Hamster: A Potential Model for Hydrocephalus Induced Endocrinopathies</i> American Association of Neurological Surgeons	1989
The Robert C. Ervin Literary Achievement Award American College of Osteopathic Surgeons	1988, 1989
Meritorious Service Medal Awarded for service in the Republic of Korea	1980

SERVICE

Clinical Service

Children's Hospital of Michigan, Detroit, Michigan	
<ul style="list-style-type: none">Trauma CommitteeHead Injury Team, Medical DirectorClinical Excellence CommitteeSurgery CommitteeMedical Operations CommitteeInvestigational Review BoardInfection Control CommitteeResearch Committee	2008-Present, 1990-2001 2007-Present, 1992-1998 2006-Present 2002-Present 2001-Present 1992-1998 1991-1992, 1996-1997 1991-1995
Detroit Receiving Hospital, Detroit Michigan	1989 - 1992
<ul style="list-style-type: none">Trauma Advisory CommitteeTrauma Quality Assurance CommitteeTrauma Morbidity and Mortality CommitteeICU CommitteeEthics CommitteeTraumatic Brain Injury CommitteeQuality Assurance Committee	<i>All Committees</i>

SERVICE (Continued)

Clinical Service (Continued)

Harper Hospital, Detroit, Michigan

- Credentials Committee 1993-1997
- Quality Assurance Committee 1989-1995

Member, Pediatric PICU Committee

1995 - Present

St. John's Hospital, Detroit, Michigan

GRANTS, CONTRACTS, AND OTHER FUNDING

Pediatric Neurosurgery Shunt Registry Program 2012
Principal Investigator, \$48,707
Children's Hospital of Michigan Foundation

Shunt Registry Program 2012
Principal Investigator, \$47,776
Children's Hospital of Michigan Foundation

Technological Advances to Aid Children with Brain Injury: Smart Shunts for the 2004
Improved Treatment of Hydrocephalus.
Supported by Research Enhancement Program. Award for \$238,856

Hydrocephalus Induced Endocrinopathies: Morphologic Correlates. 1991
Principal Investigator, \$24,765.00
Children's Hospital of Michigan Intramural Funding

Clinical Evaluation of the Aesculap Miethke PAEDI-GAV Valve in the Treatment
of Hydrocephalus, Principal Investigator, \$60,000 funded by Aesculap

Principal Investigator for "Hydrocephalus Induced Endocrinopathies:
Morphologic Correlates." Supported by a Children's Hospital of Michigan
Intramural Funding Award for \$24,696.00.

PATENTS

Programmable Antisiphon Shunt, U.S. Patent Serial No: 09/086,891, S. Sood, 2000
A. I. Canady, S.D. Ham.

PUBLICATIONS

Peer-Reviewed Publications

1. Galarza M, Martínez-Lage JF, **Ham S**, Sood S. Cerebral Anomalies and Chiari Type 1 Malformation. *Pediatric Neurosurgery* 46(6): 442-449, 2011.
2. Chandrakasan S, Sood S, **Ham S**, Moltz K, Frey MJ, Rajpurkar M. Risk factors and management of deep venous thrombosis in children following post-surgical hypopituitarism in craniopharyngioma. *Pediatric Blood and Cancer* 57(1): 175-177, 2011.

PUBLICATIONS (Continued)

Peer-Reviewed Publications (Continued)

3. Sood S, Nundkumar N, **Ham SD**. Interhemispheric endoscopic resection of large intraventricular and thalamic tumors. *Journal of Neurosurgery, Pediatrics* 7(6): 596-599, 2011.
4. Sood S, Rozzelle A, Shagiri B, Sood N, **Ham SD**. Effect of molding helmet on head shape in nonsurgically treated sagittal craniosynostosis. *Journal of Neurosurgery, Pediatrics* 7(6): 627-632, 2011.
5. Sood S, Hoeprich M, **Ham SD**. Pure endoscopic removal of pineal region tumors. *Childs Nervous System* 27(9): 1489-1492, 2011.
6. Heidemann SM, Fiore M, Sood S, **Ham S**. Eosinophil activation in the cerebrospinal fluid of children with shunt obstruction. *Pediatric Neurosurgery* 46(4): 255-258, 2010.
7. Colen CB, Rayes M, McClendon J, Rabah R, **Ham SD**. Pediatric spinal clear cell meningioma. Case Report. *Journal of Neurosurgery, Pediatrics*, 3(1): 57-60, 2009.
8. S. Sood, H. Gilmer-Hill, **S.D. Ham**: Management of lumbar shunt site swelling in children. *Journal of Neurosurgery, Pediatrics*, 1: 357-360, 2008.
9. Schuhmann MU, Sood S, McAllister JP, Jaeger M, **Ham SD**, Czosnyka Z, Czosnyka M.: Value of overnight monitoring of intracranial pressure in hydrocephalic children. *Pediatric Neurosurgery*, 44(4): 269-279, 2008.
10. Wilkinson N, Sood S, **Ham SD**, Gilmer-Hill H, Fleming P, Rajpurkar M.: Thrombosis associated with ventriculoatrial shunts. *Journal of Neurosurgery, Pediatrics*, 2(4): 286-291, 2008.
11. Q.E. Stevens, C.B. Colen, **S.D. Ham**, S. Sood: Delayed lateral rectus palsy following resection of a pineal cyst in sitting position – direct injury or elevated intracranial pressure? *Journal of Child Neurology*, 22: 1411-1414, 2007
12. Kumar C.R., Sood S., **Ham S.D.** Complications of Bioreabsorbable Fixation Systems in Pediatric Neurosurgery. *Child's Nervous System*. 21: 205-210, 2005.
13. M.U. Schuhmann, K.R. Ostrowski, E.J. Draper, J.W. Chu, **S.D. Ham**, S. Sood, and J.P. McAllister: The value of C-reactive protein in the management of shunt infections, *Child's Nervous System*, 103: 223-230, 2005.
14. S. Sood, R.J. Barrett, T. Powell, and **S.D. Ham**, The role of lumbar shunts in the management of slit ventricles: does the slit-ventricle syndrome exist? *Journal of Neurosurgery*, 103: 119-123, 2005.
15. S. Sood, J. Lokuketagoda, and **S.D. Ham**, Periventricular rigidity in long-term shunt-treated hydrocephalus, *Journal of Neurosurgery*, 102: 146-149, 2005.

PUBLICATIONS (Continued)

Peer-Reviewed Publications (Continued)

16. S. Sood, M.U. Schuhmann, N.Cakan, and **S.D. Ham**, Endoscopic fenestration and coagulation shrinkage of suprasellar arachnoid cysts. Technical note, *Journal of Neurosurgery*, 102: 127-133, 2005.
17. R. Eskandari, J.P. McAllister, J.M. Miller, Y. Ding, **S.D. Ham**, D.M. Shearer, and J.S. Way: Effects of hydrocephalus and ventriculo-peritoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex. *Journal of Neurosurgery*, 101: 196-210, 2004.
18. S. Sood, C.R. Kumar, M. Jamous, M.U. Schuhmann, **S.D. Ham**, and A.I. Canady: Pathophysiological changes in cerebrovascular distensibility in patients undergoing chronic shunt therapy, *Journal of Neurosurgery*, 100: 447-453, 2004.
19. Jamous, M., Sood, S., Kumar, R., **Ham, S.** Frontal and Occipital Horn Width Ratio for the Evaluation of Small and Asymmetrical Ventricles. *Pediatric Neurosurgery*, 39(1):17-21, 2003.
20. Koo B, **Ham SD**, Sood S, Tarver, B: Human Vagus Nerve Electrophysiology. *Journal of Clinical Neurophysiology*, 18(5):429-433, 2002.
21. Sood S, **Ham SD**, Canady AI: Current Treatment of Hydrocephalus. *Neurosurgery Quarterly* 11(1):36-44, 2001.
22. Sood S, Canady AI, **Ham SD**: Evaluation of Shunt Malfunction Using Shunt Site Reservoir. *Pediatric Neurosurgery* 32(4): 179-185, 2000.
23. Sood S, Barami K, Canady AI, **Ham SD**: Postural Changes in Intracranial Pressure in Chronically Shunted Patients. *Pediatric Neurosurgery*, 33(2):64-69, 2000.
24. Sood S, Canady AI, **Ham SD**: Adjustable Anti-Siphon Shunt. *Child's Nervous System*, 15:246-249, 1999.
25. Barami K, Sood S, **Ham SD**, Canady AI: Chemical Meningitis from Bile Reflux in Lumbar-Gallbladder Shunt. *Pediatric Neurosurgery*, 15(5):246-249, 1999.
26. Azzi, GM, Canady AI, **Ham SD**, Mitchell, JA: Kaolin-induced hydrocephalus in the hamster: temporal sequence of changes in intracranial pressure, ventriculomegaly and whole-brain specific gravity. *Acta Neuropathologica* 98:245-250, 1999.
27. Mitchell JA, **Ham SD**: Scanning Electron Microscopy of Central Nervous System Cerebrospinal Fluid-Contacting Surfaces: A Bibliography (1963-1995), *Microscopy Research and Technique* 41:158-171, 1998.
28. S. Sood, S. Kim, **SD Ham**, AI Canady, N. Greninger: Useful Components of the Shunt Tap Test for Evaluation of Shunt Malfunction. *Child's Nervous System* 9:157-162, 1993.

PUBLICATIONS (Continued)

Published Abstracts

1. Sood S, Ahmad H, Canady A.I., **Ham S.D.** Effect of Ventriculostomy on Pressure Volume Index of Brain With and Without Differential Pressure Valve. Presented at Annual Meeting of Michigan Association of Neurological Surgeons, June 1997
2. Gerras, G.G., **Ham, S.D.**, Canady, A.I. and Mitchell, J.A.: The Effects of Kaolin-Induced Hydrocephalus on the Ependyma of the Lateral Ventricles of the Hamster. *The Anatomical Record*, 226:36A, 1990.
3. Johnson, R., **Ham, S.D.**, Canady, A.I. and Mitchell, J.A.: The Occurrence and Organization of Supraependymal Neuronal Elements on the Medial and Lateral Walls of the Lateral Ventricles of the Hamster. *The Anatomical Record*, 226:48A, 1990
4. **Ham, S.D.**, Canady, A.I., Johnson, R. and Mitchell, J.A.: Hydrocephalus Results in Persistent Description of the Estrous Cycle in the Hamster, *Mesocricetus Auratus*. *Society for Neuroscience Abstracts*, Vol. VI, 1990, Abstract #168.16.

Book Authorships, Editorships, and Chapters

1. Dutcher S, Sood S, **Ham S**, Canady AI: Skull Fractures and Penetrating Brain Injury", *Pediatric Neurosurgery: Surgery of the Developing Nervous System*, Fourth Edition, pp. 573-583, (W.B. Saunders Company, 2001)
2. Barami K, **Ham S**, Sood S, Shankaran S, Canady AI: Pediatric Intracranial Hemorrhage, "Textbook of Neurological Surgery" (Lippincott-Raven, Philadelphia, 1999)
3. Sood S, Canady AI, Rozzelle A, **Ham SD.** Unicoronal and Bicoronal Craniosynostosis in: Brenzel, E, Rengachary, SS (eds), *Calvarial and Dural Reconstruction*. *Neurosurgical Topics* pp 149-167, 1998.
4. Canady, A.I., Sood, S., **Ham, S.D.** "Surgical Management of Hydrocephalus in Children" ed. Schmidek/Sweet in: Operative Neurosurgical Techniques, 3rd. edition, Vol. 2, pp. 1231-1244, (W.B. Saunders Company 1995).
5. Spitzer, R., **Ham, S.D.** and Peterson, P. Clinical Neurophysiology in the Intensive Care Unit in *Principles and Practice of Medical Intensive Care*. Ed. Carlson, R. W. and Geheb, M. A. 1993

PRESENTATIONS

Invited Lectures and Grand Rounds

1. **Ham, S.** and Darmody, W.: Extraction of Bullet Fragments Wedged Between Atlas and Axis. Michigan Association of Neurological Surgeons, June, 1985.
2. **Ham, S.**, Austin, D., Decker, D., Eichenlaub, M. and Kresge, C.: Continuous Intraventricular Morphine Infusion for Intractable Cancer Pain. American Association of Neurological Surgeons Annual Meeting, April 14, 1986, Denver, Colorado.
3. **Ham, S.:** Jacob-Creutzfeld Disease, presented to the Michigan Association of Operating Room Nurses, May 6, 1986.
4. **Ham, S.:** Current Neurosurgical Management of Pain. Conference on Pain Management, Harper Hospital, April 14, 1987.
5. **Ham, S.** and Canady, A.: Hydrocephalus Complicating Tuberculosis in Children. Pediatric Section of the American Association of Neurological Surgeons, December 9, 1987, Chicago, Illinois.
6. **Ham, S.:** Hydrocephalus Complicating Tubercular Meningitis in Children. American College of Osteopathic Surgeons, October 24, 1988, New York, New York.

7. **Ham, S.:** Shunt Malfunction. Children's Hospital of Michigan. July 12, 1989.

PRESENTATIONS (Continued)

Invited Lectures and Grand Rounds (Continued)

8. **Ham, S.:** Myelomeningocele Update: Where Are We Going in Genetic Research? Children's Hospital of Michigan, October 18, 1989.
9. **Ham, S.:** The Traumatically Head Injured Child Returns to School: Medical Management Following Head Injury in Children. Children's Hospital of Michigan, November 3, 1989.
10. **Ham S.:** Excessive Tap Water and the Brain: Current Treatment of Hydrocephalus in Children and Lessons from Laboratory Investigation. Cranbrook Institute of Science, Nov. 19, 1989.
11. **Ham, S.:** Frequent Errors in the Treatment of Head Injury Patients in the ICU. 19th Annual Critical Care Symposium, Detroit, April 19, 1990.
12. **Ham, S.:** Posttraumatic Hydrocephalus. Traumatic Brain Injury Rehabilitation in the 90's: Future Directions in Medical and Rehabilitation Management. Detroit, June 29, 1990.
13. Gerras, G.G., **Ham, S.D.**, Canady, A.I. and Mitchell, J.A.: The Effects of Kaolin-Induced Hydrocephalus on the Ependyma and Supraependymal Neuronal Elements of the Lateral Ventricle of the Hamster. Michigan Association of Neurological Surgeons. June 16, 1990.
14. Johnson, R.R., **Ham, S.D.**, Canady, A.I. and Mitchell, J.A.: Kaolin-Induced Hydrocephalus in the Hamster: A Model for Studying Hydrocephalus-Induced Endocrinopathies. Michigan Association of Neurological Surgeons.
15. **Ham, S.:** Hydrocephalus and Shunt Malfunction. Pediatric House Staff, Children's Hospital of Michigan, July 11, 1990.
16. **Ham, S.:** Shunt Malfunction. Grand Rounds, Department of Emergency Medicine, Children's Hospital of Michigan, September 12, 1990.
17. **Ham, S.:** Post Traumatic Hydrocephalus in Children. Pediatric Multidisciplinary Trauma Conference, Children's Hospital of Michigan, October 1, 1990.
18. **Ham, S.:** Surgical Approach to Pituitary Tumors and Management of the Pituitary Tumor in Pregnancy. Obstetrical Endocrinology, Hutzel Hospital, Detroit, February 13, 1991.
19. **Ham, S.:** Pathophysiology of Head and Spine Trauma. Second Year Medical Students, Wayne State School of Medicine, Detroit, February 15, 1991.
20. **Ham, S.:** Management of Spinal Cord Injury in Children. Department of Emergency Medicine. Children's Hospital of Michigan, February 20, 1991.
21. **Ham, S.:** Clinicopathological Conference-Septic Cerebral Venous Thrombosis. Children's Hospital of Michigan, February 22, 1991.
22. **Ham, S.:** Child Abuse and Neglect: Difficulties in Making a Diagnosis. Children's Hospital of Michigan Annual Social Work Conference, March 18, 1991.
23. Alcantara, A., Shah, A. K., Piotrowski, L., Roszler, M. H., **Ham, S.D.**, Diaz, F. G. and Peterson, P. L.: Traumatic Brain Injury Due to Assault. American Academy of Neurology, Boston, Massachusetts, April 21-27, 1991.
24. **Ham, S.:** Spinal Cord Injury. Multidisciplinary Trauma Conference. Children's Hospital of Michigan, April 29, 1991.
25. **Ham, S.:** Head and Spinal Cord Injury in Children. Butterworth Regional Trauma Symposium, Grand Rapids, Michigan, May 7, 1991.
26. **Ham, S.:** Hydrocephalus. Neurology Grand Rounds, Wayne State University, June 7, 1991.
27. **Ham, S.:** Emergent Management of Head Trauma. Traumatic Brain Injury Conference, Detroit Receiving Hospital, June 18, 1991.

28. **Ham, S.:** Head Trauma. Advanced Trauma Life Support Provider Course, Detroit Receiving Hospital, June 24, 1991.

PRESENTATIONS (Continued)

Invited Lectures and Grand Rounds (Continued)

29. **Ham, S.:** Shunt Malfunction. Pediatric House staff Noon Conference, Children's Hospital of Michigan, July 8, 1991.
30. **Ham, S.:** Spinal Cord Injury in Children. Pediatric Surgery Conference, Children's Hospital of Michigan, July 17, 1991.
31. **Ham, S.:** Errors in ICU Management of the Head Injured Patient. Traumatic Brain Injury Conference. Detroit Receiving Hospital, September 12, 1991.
32. **Ham, S.:** Neurologic Exam of the Pediatric Trauma Patient. Surgical Conference, Children's Hospital of Michigan, September 18, 1991.
33. **Ham, S.:** The Neurosurgeon and Occupational and Physical Therapists. Main Speaker of 1991 Fall Conference of Michigan Alliance of School Physical and Occupational Therapists, Lansing, Michigan, October 4, 1991.
34. **Ham, S.:** Acute Management of Traumatic Brain Injury and Early Indicators of Outcome. Care Management Issues in Traumatic Brain Injury: Coma to Community, Detroit, Michigan, October 10, 1991.
35. **Ham, S.:** Intracranial Pressure and Shunting. The Neurologically Atypical Child. Children's Hospital of Michigan, November 8, 1991.
36. **Ham, S.:** Management of the Head Injured Child. Traumatic Brain Injury and Spinal Cord Injury. Michigan State Medical Society, Dearborn, Michigan, November 12, 1991.
37. **Ham, S.:** The Responsibility of Neurosurgery. Eighth Grade Class, Kosciuszko School, Hamtramck, Michigan, January 24, 1992.
38. **Azzi, G.M., Ham, S.D., Canady, A.I., Mitchell, J.A.:** Changes in Whole Brain Specific Gravity and Ventricular Size in Kaolin Induced Hydrocephalus. Consensus Conference on Hydrocephalus, Assisi, Italy, April 27, 1992.
39. **Ham, S.:** Causes and Treatment of Neurogenic Shock. EMS Expo '92, Battle Creek, Michigan, May 15, 1992.
40. **Ham, S.:** Head Injury, Trauma Care Perspectives Conference of Detroit Receiving Hospital, Dearborn, Michigan, June 5, 1992.
41. **Ham, S.:** Head Trauma: Problems and Controversies, Neurotrauma: Concepts, Current Practice and Emerging Therapies - A National Conference Sponsored by Wayne State University, Dearborn, Michigan, June 11, 1992.
42. **Ham, S.:** Neurosurgical Exam of the Head Injured Patient. Multi-Disciplinary Trauma Conference, Children's Hospital of Michigan, August 31, 1992.
43. **Ham, S.:** Management of the Complicated Shunt. American College of Osteopathic Surgery, 65th Annual Clinical Assembly, Chicago, Illinois, September 22, 1992.
44. **Ham S.:** Exam of the Spine Injured Child. Pediatric Surgical Conference, September 30, 1992.
45. **Ham S.:** Spinal Cord Injury - Beyond the Plateau: Long Term Consequences of Traumatic Brain Injury. Children's Hospital of Michigan, October 30, 1992.
46. **Ham S.:** Severe Head Trauma. Advanced Pediatric Life Support, Children's Hospital of Michigan, November 12, 1992.
47. **Ham S.:** Pediatric Head Injury in Sports. Children's Hospital of Michigan Conference, November 19, 1992.
48. **Ham, S.:** Intrathecal Morphine for Pain Control. Neurosurgery Presentation, December 10, 1992, Grosse Pointe Park, Michigan.

PRESENTATIONS (Continued)

Invited Lectures and Grand Rounds (Continued)

49. **Ham, S.:** Pediatric Head Injury. Traumatic Brain Injury Transition from Home/Hospital/Rehabilitation to School, State of Michigan, Department of Education Conference, Romulus, Michigan, February 4, 1993.
50. **Ham S.:** On Being a Neurosurgeon, Career Day, Ottawa Elementary School, March 9, 1993.
51. **Ham, S.:** Shunt Malfunction, Department of Pediatrics Conference, St. John's Hospital of Detroit, April 6, 1993.
52. **Ham, S.:** Head Injury, Physical Therapy Conference, Rehabilitation Institute of Michigan, April 23, 1993
53. **Ham, S.:** Shunt Malfunction & Medos Valve, Emergency Department, Children's Hospital of Michigan, August 4, 1993.
54. **Ham, S.:** Hydrocephalus & Shunts, Department of Pediatrics, Children's Hospital of Michigan, August 10, 1993.
55. **Ham, S.:** Pediatric Head Injury, Department of Pediatrics, St. John's Hospital of Detroit, August 16, 1993.
56. **Ham, S.:** Pathophysiology of Pediatric Head Injury. Comprehensive Management of the Pediatric Patient, Detroit, September 29, 1993.
57. **Ham, S.:** Head Injuries/Seizures - When and When Not to Play, Sports Injuries in Children & Adolescents, Children's Hospital of Michigan, October 1, 1993.
58. **Ham, S.:** Gun Shot Wound to the Head. Trauma in Children. October 7, 1993.
59. **Ham, S.:** Hydrocephalus and Your Child. Hydrocephalus Support Group, Children's Hospital of Michigan, October 21, 1993.
60. **Ham, S.:** Management of Posterior Fossa Brain Tumor in Children, American College of Osteopathic Surgeons, San Francisco, October 30, 1993.
61. **Ham, S.D.:** The Child with Tethered Cord and Chiari Malformation, Myelo Support Group, September 16, 1994.
62. **Ham, S.D.:** Pediatric Head Trauma, Children's Hospital of Michigan Trauma Conference, December 8, 1994.
63. **Ham, S.D.:** Cerebrospinal Fluid and Coverings of the Brain, Lecture to first year medical students, Wayne State University, March 29, 1994.
64. **Ham, S.D.:** Head Injury, lecture to Wayne State University occupational therapy students, January 19, 1995.
65. **Ham, S.D.:** Head Trauma and Child Abuse, presentation to Child Protection Team, March 17, 1995.
66. **Ham, S.D.:** Spine Injury, lecture to Wayne State University occupational therapy students, March 23, 1995.
67. **Ham, S.D.:** Cerebrospinal Fluid and Coverings of the Brain, lecture to first year medical students, Wayne State University, March 28, 1995.
68. **Ham, S.D.:** A Brief World History of Neurosurgery, presented in the conference Neuroscience: The Dark Age to the New Age, Children's Hospital of Michigan, March 3, 1995.
69. **Ham, S.D.:** Head and Neck Injuries presented to Sports Medicine and the Young Athlete, Children's Hospital of Michigan, May 16, 1995.

70. **Ham, S.D.:** Current research in hydrocephalus presented to Hydrocephalus Support Group, May 11, 1995.
71. **Ham S:** Pediatric Head Injury. Multidisciplinary Trauma Lecture, December 14, 1995.

PRESENTATIONS (Continued)

Invited Lectures and Grand Rounds (Continued)

72. **Ham S:** Traumatic Brain Injury in Children. Wayne State Traumatic Brain Injury Conference, March 21, 1996.
73. **Ham S.D.:** Cerebrospinal Fluid and Coverings of the Brain, lecture to first year medical students, Wayne State University, March 26, 1996.
74. **Ham S.:** Inflicted Head Injuries. Child Abuse and Neglect. St. John Hospital Symposium, August 29, 1996
75. **Ham, S.:** Traumatic Brain Injury. The Neurologically Atypical Child Symposium. Children's Hospital of Michigan, October 10, 1996.
76. **Ham, S.D.:** Cerebrospinal Fluid and Coverings of the Brain, lecture to first year medical students, Wayne State University, April 15, 1997.
77. **Ham, S:** Advance Management of Spasticity Symposium, Guest Speaker, St. Vincent Medical Center, Toledo, Ohio, May 20, 1997.
78. **Ham, S:** Shunt Malfunctions in Infants and Children, Kids in Crisis, St. John Hospital, Detroit, Michigan, May 22, 1997.
79. **Ham, S.D.:** Third Ventriculostomy, Children's Hospital of Michigan Pediatric Grand Rounds, July 11, 1997.
80. **Ham, S.D.:** Surgical Management of Spasticity with Intrathecal Baclofen, Spasticity Management Conference, Detroit, Michigan, October 10, 1997.
81. **Ham, S.D.:** Neurosurgical Emergencies, Emergency Medicine Conference, October 15, 1997.
82. **Ham, S.D.:** Spasticity Management, Dinner Presentation to Neurology Journal Club, Southfield, Michigan, January 13, 1998.
83. **Ham, S.D.:** Head & Spine Injury lecture to Wayne State University occupational therapy students, March 21, 1998.
84. **Ham, S.D.:** Strategies in Spasticity Management, Developmental Disability conference, Lansing, Michigan, April 7, 1998.
85. **Ham, S.D.:** Spasticity Management for Pediatrics and Adults, Intrathecal Baclofen experience, April 21, 1998.
86. **Ham, S.D.:** Pediatric Neurosurgery, Board Review, University of Michigan, September 16, 1998.
87. **Ham, S.D.:** Emergent Surgical Decompression for Ischemic Stroke. American College of Osteopathic Surgeons. Chicago, September 26, 1998.
88. **Ham, S.D.:** Emergent Trephination in Head Injury. Is there a role in 1998. American College of Osteopathic Surgeons, Chicago, September 27, 1998.
89. Barami K, Sood S, **Ham SD**, Canady AI: Postural Changes in Intracranial Pressure in Chronically Shunted Patient. Paper presented at Annual Meeting of Congress of Neurological Surgeons, Washington State, Seattle, Washington, Oct 3-8, 1998.
90. **Ham, S.D.:** Prevention of Neural Athletic Injuries. The Fourth Detroit Neurosurgery Symposium, November 14, 1998.
91. **Ham, S.D.:** Spasticity Management with Intrathecal Baclofen. Spasticity Conference. Toledo, Ohio, November 5, 1998.
92. **Ham, S.D.:** Head and Spine Injury. Occupational Therapy Students, Wayne State University, February 26, 1999.

93. **Ham, S.D.:** Surgical Management of Severe Spasticity. Kansas City, Missouri, March 12, 1999.

PRESENTATIONS (Continued)

Invited Lectures and Grand Rounds (Continued)

94. **Ham, S.D.:** Surgical Complications of Intrathecal Baclofen Therapy. Kansas City, Missouri, March 13, 1999.
95. **Ham, S.D.:** Hydrocephalus Management and Complication. Early-On, Wayne County Interagency Coordination Council, April 15, 1999.
96. **Ham, S.D.:** Pediatric Neurosurgery, Board Review, University of Michigan, September 15, 1999.
97. **Ham, S.D.:** Shunt Malfunction, American College of Osteopathic Surgeons Annual Meeting, Seattle, Washington, October 4, 1999.
98. **Ham, S.D.:** Neurologic Trauma and Sports, St. Johns Hospital, Detroit, MI, October 27, 1999.
99. **Ham, S.D.:** Evaluating Pediatric Head Trauma, A Child Out of Sync 99, Toledo, OH, November 4, 1999.
100. **Ham, S.D.:** Surgical Management of Spasticity, Grand Rounds presentation, Children's Hospital of Michigan, Detroit, MI, November 12, 1999.
101. **Ham, S.D.:** Surgical Management of Spasticity presentation at 16th Annual Developmental Disabilities Conference, Lansing, MI, April 3, 2000.
102. **Ham, S.D.:** Pediatric Head Injury, Presentation to Nursing Staff, Children's Hospital of Michigan, Detroit, MI, April 4, 2000.
103. **Ham, SD:** Management of Shunts. Anesthesia Grand Rounds, Children's Hospital of Michigan, August 9, 2000.
104. **Ham, SD:** Pediatric Neurosurgery, Board Review, University of Michigan, September 20, 2000.
105. Lai Q, Ding Y.C., McAllister J.P., Koo B.K., Canady A.I., **Ham S.D.**, Sood S: Memory Impairment of Motor Skill Learning in Hydrocephalus Society for Neuroscience. 2000.
106. Sood S, Canady A.I., **Ham S.D.:** Evaluation of Shunt Malfunction Using Shunt Site Reservoir, American Society of Pediatric Neurosurgeons, 23rd Annual Meeting, Jan 30-Feb 4, 2000.
107. Sood S, Barami K, Canady A.I., **Ham S.D.:** Venous Overdrainage in Slit Ventricle Syndrome. Presented at American Association of Neurological Surgeons, Annual Meeting, Toronto, April 22-26, 2001.
108. **Ham S.D.:** Pediatric neurosurgery, Pediatric Board Review, University of Michigan, September 12, 2001.
109. Sood S, Canady A.I., **Ham S.D.:** Pressure Volume Index in Chronic Shunted Patients. Presented at Annual Meeting, American Society of Pediatric Neurosurgery, Nevis January 27-Feb. 1, 2002.
110. **Ham S.D.:** Pediatric Neurosurgery, Pediatric Board Review. University of Michigan, September 10, 2002.
111. Sood S, **Ham S.D.:** Is Periventricular Gliosis Restrictive in Chronic Shunt Patients? Presented at meeting of American Society of Pediatric Neurosurgery, December 2002, Phoenix, Arizona.
112. Sood S, **Ham S.D.:** Endoscopic Management of Suprasellar Arachnoid Cysts. Presented at meeting of American Society of Pediatric Neurosurgery, February 1-7, 2003, Honolulu, Hawaii.

113. **Ham S.D.:** Pediatric Neurosurgery, Pediatric Board Review. University of Michigan, September 8, 2004.
114. **Ham S.D.:** Pediatric Neurosurgery, Pediatric Board Review. University of Michigan, September 13, 2005.

PRESENTATIONS (Continued)

Invited Lectures and Grand Rounds (Continued)

115. **Ham S.D.:** Pediatric Neurosurgery, Pediatric Board Review. University of Michigan, September 14, 2006.
116. **Ham S.D.:** Pediatric Neurosurgery, Pediatric Board Review. University of Michigan, August 22, 2007.
117. Martinez V.L., Gilmer-Hill H., Brock J., Zhou Y., **Ham S.D.**, Sood S., McAllister J.P.: Efficacy of the Bactiseal Catheter in Pediatric Hydrocephalus. American Association of Neurological Surgeon Pediatric Section Meeting, Miami Florida, December 6, 2007.
118. **Ham S.D.:** Pediatric Neurosurgery, Pediatric Board Review. University of Michigan, September 17, 2008.
119. **Ham, S.**, Roszler, M., Chandrasekar, D. and Darmody, W.R.: Epidural Abscess in Intravenous Drug Abusers. American Association of Neurological Surgeons, April 1988, Toronto, Ontario, Canada.
120. Canady, A., Zakalik, K. and **Ham, S.:** Brain Tumors Presenting as Meningitis. International Symposium on Pediatric Neuro-Oncology, June 1989, Seattle, Washington.
121. Johnson, R., **Ham, S.D.**, Canady, A.I. and Mitchell, J.A.: The Occurrence and Organization of Supraependymal Neuronal Elements on the Medial and Lateral Walls of the Lateral Ventricles of the Hamster. American Association of Anatomists, April 22-26, 1990, Philadelphia, Pennsylvania.
122. Gerras, G.G., **Ham, S.D.**, Canady, A.I. and Mitchell, J.A. The Effects of Kaolin-Induced Hydrocephalus on the Ependyma of the Lateral Ventricles of the Hamster. American Association of Anatomists, April 22-26, 1990, Philadelphia, Pennsylvania.
123. **Ham, S.D.**, Johnson, R., Canady, A. and Mitchell, J.A. Kaolin Induced Hydrocephalus in the Hamster: A Potential Model for Hydrocephalus Induced Endocrinopathies. American Association of Neurological Surgeons, April 28-May 3, 1990, Nashville, Tennessee.
124. **Ham, S.D.**, Canady, A.I., Johnson, R. and Mitchell, J.A.: Hydrocephalus Results in Persistent Disruption of the Estrous Cycle in the Hamster, *Mesocricetus Auratus*. Society for Neuroscience Abstracts, Vol. VI, 1990, Abstract #168.16.
125. **Ham, S.**, Azzi, G., Canady, A., Mitchell, J.A.: Changes in whole brain specific gravity and ventricular size in kaolin induced hydrocephalus. Congress of Neurological Surgery, October 31 through November 5, 1992, Washington, D.C.
126. **Ham, S.D.** and Mitchell, J.A.: Kaolin Induced Hydrocephalus in the Hamster: A Scanning Electron Microscope Study. Annual Clinical Assembly of the American College of Osteopathic Surgery, Los Angeles, California, October 28-31, 1990.
127. Shah, A.K., Guyot, A.M., **Ham, S.D.**, Diaz, F.G. and Peterson, P.L.: CT or Not to CT-ER Evaluation of Head Trauma. American Academy of Neurology. Boston, Massachusetts, April 21-27, 1991.
128. Azzi, G.M., **Ham, S.D.**, Canady, A.I., Mitchell, Ph.D.: Hydrocephalus-induced Alterations in Median Eminence Structure and Erythrocyte Density in the Endocrine Hypothalamus and Pituitary Gland of the Hamster. American Association of Neurological Surgeons, San Diego, California, April 9-14, 1994.
129. Sood, S., Canady, A.I., **Ham, S.D.:** Risk of Infection after Shunt Tap. American Association of Neurological Surgeons, San Diego, California, April 9-14, 1994.

130. Azzi, G., **Ham SD**, Canady AI, Mitchell JA: "Hydrocephalus-Induced Changes in the Periventricular Endocrine Hypothalamus of the Hamster". American Association of Neurological Surgeons, Minneapolis, Minnesota, April, 1996.

PRESENTATIONS (Continued)

Invited Lectures and Grand Rounds (Continued)

131. Ahmed H, Sood S, Canady A, **Ham SD**: "The Effect on Brain Compliance of Ventriculostomy With and Without Differential Pressure Valve", 1998 AANS Annual Meeting, Philadelphia, Pennsylvania, April 25-30, 1998.
132. Sood, S, Canady AI, **Ham SD**. Shunt Site Reservoir in Evaluation of Shunt Malfunction. Presented at Pediatric Section Meeting of AANS, Indianapolis, Dec 1-4, 1998.
133. **Ham, S.D.**, Schermerhorn Thomas, Vandebelt Scott, Riutta Justin, Canady Alexa, Mitchell, Jerald. Imminodipropionitrile Induces Hydrocephalus in the Hamster. Presented American Association of Neurological Surgeons Annual Meeting, April 28, 1999.
134. Lai, Q, Ding Y-C, McAllister J.P., Koo, B.K.K., Canady, A.I., **Ham, S.D.**, Sood, S.S. Memory Impairment of Motor Skill Learning in Hydrocephalus. Society for Neuroscience 1999 Annual Meeting, Miami Beach, Florida, October 23-28, 1999.
135. Sood S, Barami K, Canady AI, **Ham SD**: Venous Overdrainage in Slit Ventricle Syndrome. Presented at American Association of Neurological Surgeons Annual Meeting, Toronto, April 22-26, 2001.