CURRICULUM VITAE 2019 JOSEPH C. MAROON, M. D.

CITIZENSHIP:	United States
BUSINESS ADDRESS:	Department of Neurological Surgery UPMC-Presbyterian Hospital 5C, 200 Lothrop Street Pittsburgh, PA 15213
TELEPHONE:	(412) 647-3604
FACSIMILE:	(412) 647-3605

EDUCATION AND TRAINING

<u>UNDERGRADUATE</u>

1958-1961	Indiana University Bloomington, Indiana	A.B. Anatomy &1961 Physiology
<u>GRADUATE</u>		
1961-1965	Indiana University School of Medicine Indianapolis, Indiana	M.D. 1965
POST GRADUATE		
1965-1966	Indiana University Medical Center Indianapolis, Indiana	Internship
1966-1967	Georgetown University Hospital Washington, D.C.	Residency General Surgery
1967-1968	Indiana University Medical Center Indianapolis, Indiana	Residency Neurological Surgery
1968-1969	Oxford University Hospitals The Radcliffe Infirmary	Residency Neurological Surgery

	Oxford, England	
1969-1971	Indiana University Medical Center Indianapolis, Indiana	Residency Neurological Surgery
1971-1972	University of Vermont Burlington, Vermont	Given Scholar in Microneurosurgery
	APPOINTMENTS AND POSITIONS	
PRESENT		
10/99 - Present	Department of Neurosurgery UPMC Health Systems Presbyterian University Hospital Pittsburgh, PA	Vice Chairman
1995-1998	Department of Surgery Allegheny University of the Health Sciences Allegheny General Hospital Pittsburgh, Pennsylvania	Chairman
1984-1999	Department of Neurological Surgery Allegheny University of the Health Sciences Allegheny General Hospital Pittsburgh, Pennsylvania	Chairman 5
1972-1984	Department of Neurological Surgery University of Pittsburgh Medical Center Presbyterian-University Hospital Pittsburgh, Pennsylvania	Chief
ACADEMIC APPOINTME	<u>NTS</u>	
10/99-Present	Department of Neurological Surgery University of Pittsburgh Medical Center Presbyterian-University Hospital Pittsburgh, Pennsylvania	Clinical Professor
1988-1999	Department of Surgery	Professor 2

	(Neurosurgery) Allegheny University of the Health Science Pittsburgh, Pennsylvania	S
1987-Present	Department of Neurological Surgery West Virginia University School of Medicine Wheeling, West Virginia	Professor
1984-1993	Department of Neurological Surgery University of Pittsburgh School of Medicine Pittsburgh, Pennsylvania	Clinical Professor
1981-1984	Department of Neurological Surgery University of Pittsburgh School of Medicine Pittsburgh, Pennsylvania	Professor
1974-1981	Department of Neurological Surgery University of Pittsburgh School of Medicine Pittsburgh, Pennsylvania	Assistant Professor
1972-1974	Department of Neurological Surgery University of Pittsburgh School of Medicine Pittsburgh, Pennsylvania	Assistant Professor
HOSPITAL APPOINTMEN	<u>TTS</u>	
2/2004 – Present	Mercy Hospital of Pittsburgh Department of Surgery Division of Neurosurgery	Courtesy
2001-Present	Sewickley Valley Hospital Department of Surgery Division of Neurosurgery	Active
10/99-Present	Neurosurgery Department University of Pittsburgh Medical Center Presbyterian-University Hospital	Attending

	Pittsburgh, Pennsylvania	
1984-1999	Neurosurgery Department Allegheny University of the Health Science Allegheny General Hospital Pittsburgh, Pennsylvania	Sr. Attending s
1992-Present	Neurosurgery Division North Hills Passavant Hospital Pittsburgh, Pennsylvania	Consulting
1986-Present	The Rehabilitation Institute 6301 Northumberland Pittsburgh, Pennsylvania	Consulting
1977-2004	Neurosurgery Department Mercy Providence Hospital Pittsburgh, Pennsylvania (Closure of facility)	Consulting
1972-1984	Neurosurgery Department Presbyterian-University Hospital Pittsburgh, Pennsylvania	Attending
CONSULTANT		
2015	Operation Backbone	Neurosurgical Consultant
2008 – Present	World Wrestling Entertainment	Medical Director
1977-Present	The Pittsburgh Steelers Football Organization Pittsburgh, Pennsylvania	Team Neurosurgeon
1972-1983	The Pitt Panthers Football Team University of Pittsburgh Pittsburgh, Pennsylvania	Consultant
MILITARY SERVICE		
4/1966/4/1972	400th Medical Intelligence Detachment	Captain

United States Army Reserve

SPECIALTY BOARDS

5/1973	American Board of Neurological	Certified
	Surgeons	

LICENSURE

1969	Indiana
1972	Pennsylvania
1976	West Virginia
1980	Ohio

MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

Allegheny County Medical Society American Academy of Anti-Aging Medicine Sr. Vice President (2008 -) American Association of Neurological Surgeons American College of Sports Medicine American College of Surgeons American Medical Association **Congress of Neurological Surgeons** President (1986) General Program Chairman (1978-1979) Executive Committee (1977-1979) Chairman, Scientific Program Committee (1977-1978) Chairman, Public Relations Committee (1975-1977) Chairman, Workshop Committee (1974-1975) Mid-Atlantic Neurosurgical Society Council Member (1976-1978) National Association for Disabled Athletes Advisory Board (1984-Present) National Football League Physicians Society (1983-Present) Neurosurgical Society of America Program Committee (1978-1979) Pennsylvania Medical Society Pennsylvania Neurosurgical Society Pittsburgh Academy of Medicine Pittsburgh Neurosurgical Society President (1976-1977)

EDITORIAL BOARD MEMBERSHIPS

Neurosurgery, Robert Wilkins, Editor (1977-1984) Clinical Neurosurgery, Peter Carmel, editor (1975-1977) The Journal of Microsurgery, R.M.P. Donaghy, Editor (1978-1988) Journal of the American Association of Surgeons Assistants, (1977-1994) The Physician and Sportsmedicine, (1978-1999; 10/2008 - Present) Neurological Research, (1991-Present) Turkish Journal of Neurosurgery, (1992-Present) Stroke, (1995-Present) - Reviewer Journal of Cranial Base Surgery, (1995-Present) - Reviewer Annals of Otology, Rhinology and Laryngology, (1995-Present) - Reviewer Today's Health, (1995-Present) Journal of Neural Regeneration Research, (4/2007 - Present) - Reviewer European Journal of Pain, (2009-Present) – Reviewer Journal of the American College of Surgeons (2010-Present) - Reviewer Surgical Neurology International (3/2011-Present) – Associate Editor in Chief Journal of Neurotrauma (2013) - Reviewer Spine Surgery Today (Feb 2012-Present) World Neurosurgery (2015) – Reviewer Pharmacogenomics (2017-Present) - Reviewer

HONORS AND AWARDS

UNDERGRADUATE

Scholastic All-American, Varsity FootballBoard of Aeons (Twelve man advisory board to the President on Student Affairs)Alpha Epsilon Delta honorary pre-medical fraternity

GRADUATE

President of Medical School Class American Heart Association Student Research Fellowship in Cardiology Student Research Fellow in Renal and Metabolic Diseases

POST GRADUATE

McCaskey Award - Presented annually by the Indiana Chapter of the

American College of Surgeons for the best paper presented by a Resident in the surgical specialities: <u>Ophthalmosonometry: An</u> <u>Ultrasonic Technique for Assessing Carotid Blood Flow.</u>

- Alex Ross Award Presented annually by the Indiana Neurological Society for the best paper dealing with clinical neurological Sciences: the use of Ultrasound in Assessing Carotid Patency.
- Ensminger Award Presented annually by the Indiana Chapter of the American College of Surgeons for the best paper on trauma: <u>Management of Football Head and Neck Injuries.</u>
- A Teacher of the Year Award presented by Class of 1971, Indiana University School of Medicine.

PROFESSIONAL CAREER

- Dapper Dan Man of the Year presented by the Upper Ohio Valley Dapper Dan for excellence in sports medicine. Wheeling Civic Center, Wheeling, West Virginia, February 21, 1988.
- The Wakeman Award presented at the Searle Center for Continuing Education in Health Science, Duke University Medical Center for research in the neurosciences, National Acute Spinal Cord Injury Study II. Durham, North Carolina, October 26, 1990.
- Contributors Recognition Award for accomplishments and contributions To Allegheny Health Services, May 2, 1991.
- Distinguished Alumnist Award St. Johns Central High School, Bellaire, Ohio, June 1, 1991.
- Clevenger Award distinguished alumnus, Indiana University, Bloomington, Indiana, 1993.
- The Best Doctors in America selected annually by Woodward/White, Inc. 1994 2016.

Dennis and Rose Heindl Endowed Chair for Neuroscience Research, 1996-present

Healthcare Hero Finalist, The Pittsburgh Business Times, January, 1999

Arab American Medical Association Award for Excellence in Medicine, Pittsburgh Chapter, May 1, 1999.

Honorary President, World Association of Lebanese Neurosurgeons, May, 1999.

- Lou Holtz/Upper Ohio Valley Hall of Fame inductee, for excellence in athletics and medicine, June 1999
- American Association of Neurological Surgeons peer reviewed poster/lecture. First Place Award for "Results of Omega-3 EFA for Spine Pain". April, 2005.
- Western Chapter Pennsylvania Sports Hall of Fame Induction, May 2, 2009.
- National Fitness Hall of Fame Induction, Chicago, IL. March 14, 2010.
- Distinguished Alumni Service Award (highest accolade reserved solely for Alumni), Indiana University, Bloomington, IN, November 4, 2011.
- Ohio Valley Athletic Conference Hall of Fame Class of 2012, Wheeling, WV, August 18, 2012.
- Pioneer Award. 25th Anniversary UPMC Center for Cranial Base Surgery, Pittsburgh, PA, November 17, 2012
- Lifetime Achievement Award in recognition of pioneering work in concussion research and practice. UPMC Sports Medicine Concussion Program and the Department of Orthopaedic Surgery, Pittsbsurgh, PA, June 11, 2016.
- Circus Saints and Sinners Man of the Year, Pittsburgh, PA, July 25, 2017.
- Humanitarian of the Year Award from the Jerome Bettis The Bus Stops Here Foundation. Received at the Jerome Bettis Caring for Kids Gala, PNC Champions club at Heinz Field, Pittsburgh, PA, September 27, 2018.

RESEARCH GRANTS

Co-Investigator:

- 1989 Cryogenic Lesions of Canine Brain Allegheny-Singer Research institute \$4,865.00
- 1990 Effect of Sapphire Probe Nd:YAG Laser on Rabbit Cerebral Cortex

Allegheny-Singer Research Institute \$4,988.34

- 1990 Cryogenic Lesions of the Brain Cryomedical Sciences, Inc. \$14,000.00
- 1990 Head injury Study Upjohn \$200.000
- 1990 Percutaneous Laser Discectomy Contract though Candela Laser on NIH SBIR Grant (1 R44 AR402878-02) \$15,495.40
- 1991 Chronic ICP Measurements and MRI Images Following Cranial Cryosurgical Lesions
 Cryomedical Sciences, Inc. \$35,881.00
- 1991 Percutaneous Laser Discectomy Contract though Candella Laser on NIH SBIR Grant (1 R44 AR402878-02) \$137,787.00
- 1991 National Acute Spinal Cord Injury Study, III
 NIH \$1,500,000.00
- 1992 Head Injury Study Sterling-Winthrop \$150,000.00
- 1994 MRI Spectroscopy with Spinal Cord Injury Allegheny-Singer Research Institute \$200,000.00
- 1995 Neurosurgery Research The Pittsburgh Foundation \$2,000.00
- 2012 ElMindA, Ltd. Research Contract Comparison of brain network activation analysis using evoked response Potentials, clinical symptoms and neurocognitive performance in concussed

Children, young adults and matched controls. January 2012 – December 2013 \$367,000

 2012 Defense Medical Research and Development Program (DMRDP) Research Grant Validation of AMPA receptor peptide assay to improve diagnostic certainty of Mild traumatic brain injury (mTBI). January 2012 – December 2014 \$208,000

Consultant:

2014 NFL/General Electric Research Grant for concussion treatment using high definition fiber tracking.
 January 23, 2014
 \$300,000

RESEARCH STUDIES

- 2005 Evaluation of Omega-3 EFA for Spine-Related Pain
 250 patients, daily dose of Omega-3 EFAs 2.4 gm/day
 60% able to stop NSAIDS and/or pain meds, no side effects
 Completed and Published
- 2006 CerviCore Artificial Disc Study Stryker Spine, PI at University of Pittsburgh Medical Center – Ongoing
- 2007 Steelers Omega-3 Lipid Study Investigator Completed and Published Jan 2009

MEMBER, BOARD OF DIRECTORS

Allegheny General Hospital and Allegheny Health Services, Inc. Pittsburgh, Pennsylvania Think First Foundation, National Head and Neck Injury Prevention Society, 1986 - 1994 American Youth Foundation, St. Louis, Missouri, 1999 – 2005 Mylan Laboratories, Morgantown, West Virginia, 2003-2017 Chairman, Scientific and Technology Committee Member, Compliance Committee Member Governance and Nominating Committee Member, NFL Head, Neck and Spine Committee, 2007 – 2010 Senior Consultant, NFL Head, Neck and Spine Committee 2010-present World Advisory Board of the International Sports Hall of Fame, 2012-present Board of Directors, Phipps Conservatory, 2012 - 2014 Chairman, Science and Technology Committee of Mylan Labs, 2012-2017 Chairman, Medical and Scientific Advisory Board, Stemedica, 2012 Member, Global Advisory Board of the International Sports Hall of Fame, 2014 Medical Consultant, Mylan Corporation, 2017 -

Chairman, Scientific Committee, The Chuck Noll Foundation for Brain Injury Research, 2017 –

Special Advisor, AANS/CNS Section on Neurotrauma and Critical Care, 2018-2020

OFFICES HELD IN NATIONAL SOCIETIES

Congress of Neurological Surgeons Secretary (1980-1983) Vice President (1983-1984) President Elect (1984-1985) President (1985-1986)

ATHLETIC ACCOMPLISHMENTS

Ironman Triathalon (2.4 mile swim, 112 mile bike, 26.3 mile run):
Kailua-Kona, Hawaii, October 1993, October 2003, October 2008, October 2010, October 2013
Pendicton, Canada, 1996
New Zealand, March 1998
Escape from Alcatraz, 1998
50 Olympic distance triathlons, 1980-Present
Ironman Germany, July 8, 2000
Summited Mt. Kilimanjaro, February 26, 2014
World Ironman Triathlon championship (70.3) Austria 2015

BIBLIOGRAPHY

BOOKS AND BOOK CHAPTERS

- 1. Maroon, J.C. <u>What You Can Do About Cancer.</u> Doubleday & Co., New York, 185 pp., 1969 (English, Italian, German and French translations).
- 2. Maroon, J.C. A Cranioplasty. <u>In Maxillofacial Prosthetics</u>, Varoujan Chalion (Ed.), Williams & Wilkins, Baltimore, Maryland, 456 pp., 1971.
- Maroon, J.C. Current Concepts in Cerebral Revascularization with Bypass Grafts. In <u>Microneurosurgical Anastomoses for Cerebral Ischemia</u>, George M. Austin (Ed.), Charles C. Thomas Co., Springfield, Illinois, 1976, pp. 35-38.
- 4. Dujovny, M., Barrionuevo, P.J., Laha, R.K., Osgood, C. P., DeCastro, S., Maroon,

J.C. & Hellstrom, R. Experimental Middle Cerebral Artery Microsurgical Embolectomy. In <u>Microsurgery for Stroke</u>, Peter Schmiedek (Ed.), Springer-Verlag, New York, 1977, pp. 91-97.

- Dujovny, M., Osgood, C.O., Maroon, J.C., and Jannetta, P.J. Canine Cerebral Ischemia. In <u>Microvascular Anastomoses for Cerebral Ischemia</u>, Jack M. Fein & O. Howard Reichman (eds.), Springer-Verlag, New York, (June) 1978, pp. 8-22.
- 6. Reid, M.H., Maroon, J.C., & Albin, M.S. Ultrasound in Neurosurgery. In <u>Neurosurgery 2nd Edition</u>, J.Youmans (Ed.), W.B. Saunders., Philadelphia, 1980.
- 7. Maroon, J.C. & Kennerdell, J.S. Optic Nerve Meningiomas. In <u>Current Therapy in</u> <u>Neurological Surgery</u>, D.M. Long (Ed.), B.C. Decker, Inc., 1985.
- Warren, F.A., Maroon, J.C. & Kennerdell, J.S. Diagnosis and Surgical Management of Exophthalmos. In <u>Neurology and Neurosurgery</u>, Update Series, R. Ratcheson (ed.), 1985.
- 9. Wilberger, J.E. & Maroon, J.C. Trigeminal Neuralgia. In <u>Conns Current Therapy</u>, Rakakel (Ed.), W.B. Saunders, Philadelphia, 1985.
- Maroon, J.C. & Kennerdell, J.S. Transcranial Superior Orbital Approach to the Orbit. In <u>Techniques in Ophthalmic Plastic Surgery</u>, Ralph E. Wesley (Ed.), John Wiley and Sons, Inc., New York, 1986, pp. 445-448.
- Kennerdell, J.S. & Maroon, J.C. Four Wall Orbital Decompression for Severe Dysthyroid Exophthalmos. In <u>Techniques in Ophthalmic Plastic Surgery</u>, Ralph E. Wesley (Ed.), John Wiley and Sons, Inc., New York, 1986, pp. 449-451.
- 12. Maroon, J.C. & Abla A.A. Classification of Acute Spinal Cord Injury, Neurological Evaluation, and Neurological Considerations. In <u>Critical Care Medicine Clinics</u> <u>Acute</u> <u>Spinal Cord Injuries</u>, M.S. Albin (Ed.), Vol. 3, No. 3, (July) 1987.
- Maroon, J.C. & Kennerdell, J.S. Surgical Approaches to the Orbit-Indications and Techniques. In <u>The Diagnosis and Management of Orbital Tumors</u>, Edward R. Laws (Ed.), Futura Publishing Co., Mount Kisco, New York, 1988, pp. 195-219.
- Maroon, J.C., Abla, A., Kennerdell, J.S. &Garrity, J. Tumors of the Orbit. In <u>Practice of Surgery</u>, Julian Hoff (Ed.), Practice of Surgery, Ltd., Woodbury, Connecticut, 1988, pp. 1-19.
- 15. Maroon, J.C. The History of Lumbar Intervertebral Disc Surgery. In <u>Automated</u>

<u>Percutaneous Discectomy</u>, G.M. Onik and C. Helms (Eds.), UCSF Radiology Research Foundation, San Francisco, 1988.

- 16. Maroon JC, Onik G, Day A: Percutaneous automated discectomy in athletes. The Physician and Sportsmedicine, 16(8), pp 61-74, 1988.
- Onik, G.M. & Maroon, J.C. Automated Percutaneous Discectomy. In <u>The Lumbar</u> <u>Spine-Concepts</u>, Y. Floman (Ed.), Hebrew University, Hadassah University Hospital, Jerusalem, Israel, 1988.
- Wilberger, J.E. & Maroon, J.C. Head Injuries in Athletes. In <u>Clinics in Sports</u> <u>Medicine-Emergency Treatment of the Injured Athlete</u>, Vol. 8, No. 1, Richard L. Ray (ed.), W.B. Saunders Co., Philadelphia, (Jan.), 1989, pp. 1-9.
- Bailes, J.E. & Maroon, J.C. Management of Cervical Spine Injuries in Athletes. In <u>Clinics in Sports Medicine-Emergency Treatment of the Injured Athlete</u>, Vol. 8, No. 1, Richard L. Ray (Ed.), W.B. Saunders Co., Philadelphia, (Jan.), 1989, pp. 43-58.
- 19. Maroon, J.C. & Abla, A.A. Orbital Tumors. In <u>Current Therapy in Neurosurgery</u>, D. Long (Ed.), 1989, pp. 29-37.
- Maroon, J.C. Presidential Address: From Aequanimitas to Icarus In <u>Clinical</u> <u>Neurosurgery</u>, Vol. 34. Proceedings of the Congress of Neurological Surgeons, Williams and Wilkins, 1988, pp 3-15.
- 21. Maroon, J.C. & Onik, G.M. Percutaneous Automated Discectomy: Indications, Technique, Results. In <u>Spine</u>, 3rd Edition, 1989.
- 22. Maroon, J.C., Abla, A. General Operative Technique. In <u>Textbook of Neurological</u> <u>Surgery</u>, J. Youmans (Ed.), 3rd Edition, 1990, pp. 922-940.
- Maroon, J.C., Abla, A.A., Wilberger, J.E., Bailes, J.E. & Sternau, L.L. Central Cord Syndrome. In <u>Clinical Neurosurgery</u>, Vol. 37, Proceedings of the Congress of Neurological Surgeons, Williams and Wilkins, 1989, pp. 612-621.
- 24. Wilberger, J.E. & Maroon, J.C. Athletic Cervical Spine Injuries. In <u>Disorders of the</u> <u>Cervical Spine</u>, Camins, OLeary (Eds.), Williams and Wilkins, 1991, pp. 303-309.
- 25. Wilberger, J.E., Maroon, J.C. & Whiting, D. Radiographic Investigation of the Post-Spinal Cord Injury Patient. In <u>The Outcome Following Traumatic Spinal Cord Injury</u>, J.M. Piepmeier (Ed.), Futura, 1992, pp. 31-55.
- 26. Wilberger, J.E. and Maroon, J.C.: Athletic Cervical Spine Injuries. Disorders of the

Cervical Spine, Camins and O'Leary (Eds.), Williams and Wilkins, pp. 303-309, 1992.

- 27. Quigley, MR: Shih T: Elrifai A, Maroon JC, Lesiecki M: Percutaneous laser discectomy with the Ho: YAG laser. Lasers in Surgery and Medicine, 12:621-624, 1992.
- Maroon, J.C., Onik, G.M., Quigley, M.R. & Douglas, R. Automated Percutaneous Lumbar Discectomy. Indications, Technique and Results. In <u>Lumbar Disc Disease, 2nd</u> <u>Edition</u>, Russell W. Hardy, Jr., (Ed.), Raven Press, 1993, pp. 147-153.
- Maroon, J.C., Kazim, J. and Kennerdell, J.C.: Orbital meningiomas and other tumors. <u>Brain Surgery, Complication, Avoidance and Management.</u> Michael L.J. Appuzzo M.D. (Ed.), Churchill Livingstone, pp. 652-667, 1993.
- 29. Maroon, J.C., The paradox of success...and the neurosurgeon. <u>Perspectives in</u> <u>Neurological Surgery</u>, Vol. 5, No. 1, Mark N. Hadley (Ed.), pp. 1561-162, 1994.
- Maroon, J.C. The Paradox of Success and the Neurosurgeon Competing Currents and Allegiances. In <u>Philosophy of Neurological Surgery</u>, Issam A. Awad (Ed.), AANS, 1995, pp. 203-210.
- Quigley, M.R. & Maroon, J.C. Intradiscal Treatment of Lumbar Disc Disease. In <u>Neurological Surgery, 4th Edition</u>, Julian R. Youmans (ED.), W. B. Saunders, 1996, pp. 2382-2389.
- 32. Maroon, J.C. & Abla, A.A. Tumors of the Orbit. In <u>Neurological Surgery, 4th Edition</u>, Julian R. Youmans (Ed.), W.B. Saunders, 1996, pp. 2882-2892.
- Quigley, M.R. & Maroon, J.C. Percutaneous Approaches to the Lumbar Disc. In <u>Principles of Spinal Surgery</u>, Vol. 1, Memesez and Sonntag (Eds.), McGraw-Hill, 1996, pp. 609-619.
- 34. Maroon, J.C., Kennerdell, J.S. & Brillman, J. Tumors of the Orbit. In <u>Neurosurgery</u>, <u>2nd Edition</u>, Vol. 1, Wilkins and Rengachary (Eds.), McGraw-Hill, 1996, pp. 1481-1493.
- Quigley, M.R., Maroon, J.C., Onik, G. Percutaneous Lumbar Discectomy. In <u>Neurosurgery, 2nd Edition</u>, Vol. 3, Wilkins and Rengachary (Eds.), McGraw-hill, 1996, pp. 3817-3822.
- Quigley, M.R. & Maroon, J.C. Automated Percutaneous Discectomy. In <u>Neurosurgery Clinics of North America</u>, Mayberg and Winn (Eds.), W.B. Saunders, 1996, pp. 29-35.

- Bailes, J.E. & Maroon, J.C. Neurosurgical Trauma in the Athlete. In <u>The Practice of Neurosurgery.</u> Tindall, Cooper and Barrow (Eds.), Williams and Wilkins, 1996, pp. 1659-1672.
- Maroon, J.C., Abla, A.A. & Kennerdell, J.S. Management of Tumors of the Orbit. In <u>The Practice of Neurosurgery</u>, Tindall, Cooper and Barrow (Eds)., Williams and Wilkins, 1996.
- Maroon, J.C., Onik, G. Treatment of Lumbar Disc Protursion with Unilateral Radiculopathy: Percutaenous Aspiration Discectomy vs. Microdiscectomy vs. Conservative Treatment. In <u>Controversies in Neurosurgery</u>, Al-Mefty, Origitano and Harkey (eds.), Thieme Medical Publishers, Inc., 1996.
- 40. Dureza, C., Tantuwaya, L.S. and Maroon, J.C. Surgical Approaches to the Orbit. In <u>Cranial Base Surgery</u>. Robertson, Robertson and Coakham (eds.), Churchill Livingstone, November, 1999.
- 41. Abla, A.A., Celin, S.E., Maroon, J.C. and Medary, M. Cervical Spondylotic Myelopathy. In <u>Neurosurgical Issues in Otolaryngology: Principles and Practice of</u> <u>Collaboration.</u> Arriaga and Day (eds.), Lippincott Williams & Wilkins, 1999.
- 42. Smith, M.D., Watson, J.C., Maroon, J.C.: Percutaneous Approaches to Lumbar Discectomy. In <u>Spine Surgery</u>. Benzel, E. (ed), 1999.
- 43. Kennerdell, J.S.; Cockerham, K.P., Maroon, J.C., Rothfus, W.E.: <u>Practice Diagnosis and</u> <u>Management of Orbital Disease</u>. Butterworth-Heinemann, 2001.
- 44. Maroon, J.C.; Field, M.; Lovell, M.; Collins M.; Bost, J.: The evaluation of athletes with cerebral concussion. Proceedings of the Congress of Neurologial Surgeons In <u>Clinical</u> <u>Neurosurgery</u>, vol. 49, pp 319-322, 2002.
- 45. Bejjani, G.K.; Cockerham, K.P.; Maroon, J.C.; Kennerdell, J.S.: Orbital Tumors. In <u>Youmans Neurological Surgery</u>, Vol. 1, Winn, H.R. (ed.), Saunders, pp1371-1380, 2004.
- Bailes, J.E.; Maroon, J.C.; Cantu, R.C.: Athlete with Spinal Injury. In <u>Spine Surgery</u> <u>Techniques, Complication Avoidance and Management 2nd Edition</u>. Benzel, E.C. (Ed.), Elsevier, pp. 1935-1953, 2005.
- 47. Maroon, J.C.; Bost, J: <u>Fish Oil The Natural Anti-Inflammatory</u>. Basic Health, California, 172 pp. 2006.
- 48. Maroon, J.C., Bost, J: Extending life: The new science of aging—how to activate longevity genes and increase quality and length of life. In <u>Anti-Aging Therapeutics, Vol.</u>

IX. Klatz, R and Goldman R (Eds.), A4M Publications, Chicago, IL, 231-233, 2007.

- 49. Maroon, JC: The Longevity Factor: How Resveratrol and Red Wine can Activate Genes for a Longer and Healthier Life, Simon & Schuster Atria Books, New York, NY, Jan 1, 2009.
- 50. Smoliga J, Bost J, Maroon JC: Potential benefits of Resveratrol supplementation for optimizing health and preventing chronic diseases. <u>Anti-Aging Therapeutics</u>, Vol XI, Klatz Goldman (eds), A4M Publications, pp 361-368, 2009.
- Maroon JC, Bost J: Cancer prevention with phytonutrients: Reviewing the latest research on resveratrol, Omega-3, green tea, curcumin, genstein and lycopene. <u>Anti-Aging Therapeutics</u>, Vol. XIII, Klatz Goldman (eds), A4M Publications, Chapter 7, 2010.
- 52. Maroon JC, Bost J: Concussion management at the NFL, college, high school and youth sports levels. <u>Clinical Neurosurgery</u> Vol. 58, Proceedings of the 2010 Congress of Neurological Surgeons, San Francisco, CA. Lippincott Williams Wilkins, pp 51 56, 2011.
- 53. Maroon JC, Kilham C, Bost J: The Science of Cocoa. Published by ResVitale, Tampa, FL, 2011.
- 54. Gardner PA, Maroon JC, Kassam AB: Tumors of the Orbit. Youmans Textbook of Neuroogical Surgery, 6th edition. Winn HR (ed), Elsevier Saunders, Philadelphia, pp 1655-1665, 2011.
- 55. Pardini J, Bailes JE, Maroon JC: Mild traumatic brain injury in adults and concussion in sports. Youmans Textbook of Neurological Surgery, 6th edition. Winn HR (ed), Elsevier Saunders, Philadelphia, pp 3380-3389, 2011.
- 56. Blaylock RL, Petraglia AL, Maroon JC, Bost JW: Approach to concussion and associated neurodegeneration. Encyclopedia of Clinical Anti-aging Medicine and Regenerative Biomedical Technologies, American Academy of Anti-aging Medicine, 2012, pp 239-260.
- 57. Watt TJ, Amen DG, Blaylock RL, Petraglia AL, Maroon JC, Bost JW, Cebula C: Non-Pharmacological Interventions. Encyclopedia of Clinical Anti-aging Medicine and Regenerative Biomedical Technologies, American Academy of Anti-aging Medicine, 2012, pp 261-280.
- 58. Blaylock RL, Maroon JC: Immunoexcitotoxicity as a Central Mechanism of Chronic Traumatic Encephalopathy—A Unifying Hypothesis. Biomarkers for Traumatic Brain Injury. Dambinova, Hayes, Wand (eds), RSC Publishing, Cambridge, UK, 2012, pp 45

- 59. Maroon JC, Bost J, Amos A, El-Kadi M: Advances in the Treatment of Movement and Balance Disorders, Depression and Obesity with Electrical Neuromodulation of the Central Nervous System. Anti-Aging Therapeutics Volume XV, 2012 Conference Year. Klatz R and Goldman R (Eds), A4M Publications, Chicago, IL, 2013, pp 105
- 60. Maroon JC, Bost J, Mathyssek C: Should you allow your child to play football? Update on concussion management, prevention and treatment. Anti-Aging Therapeutics Vol XVI, Klatz Goldman, Chapter 13, 2014.
- 61. Maroon JC, Mathyssek C, Bost J: Cerebral concussion: A historical perspective. Concussion: Progress in Neurological Surgery, Lunsford, Niranjan (eds), Vol 28, pp 1-13, 2014.
- 62. Gardner PA, Maroon JC, Stefko ST. Tumors of the orbit. In Winn HR (ed): Youmans and Winn's Neurological Surgery, 7th Ed. Elsevier, Philadelphia, accepted for publication, October 2014.
- 63. Maroon JC, Bost J, Amos A, Winkelman R, Mathyssek C: Concussion update: immunoexcitotoxicity, the common etiology of post concussion syndrome, chronic traumatic encephalopathy and post traumatic stress disorder. The Craniocervical Syndrome and MRI. Smith FW, Dworkin JS (eds). Basel, Karger, 2015, DOI: 10.1159/000365468.
- 64. Maroon JC, Bost J, Mathyssek C: Nutritional and medical applications for Cannabidiol: hemp health benefits without THC. Anti-Aging Therapeutics, Vol XVII. Klatz R, Goldman R (eds.), 2015.
- 65. Maroon JC, Bost J: Omega 3's for Optimal Life: Why You Need Fish Oil. 2016
- 66. Maroon, JD: Square One—A Simple Guide to a Balanced Life. Pythia Publishing, Bridgeport, OH, 173 pp, 2017.

AUDIO/VISUALS

- 1. Maroon, J.C. <u>The Initial Management of Football Head and Neck Injuries.</u> (Movie.) Jointly produced through the Division of Intercollegiate Athletics and the Medical Education Resource Program, Indiana University, Indianapolis, Indiana, 1971.
- 2. Maroon, J.C. and Klein, J.C. <u>Microdiscectomy of the Lumbar Spine.</u> (Patient Education Videotape.) Produced by the Department of Neurological Surgery and the Media Services Department, Allegheny General Hospital, Pittsburgh, Pennsylvania, 1988.

3. Maroon, J.C. and Bailes, J.E. <u>Athletic Injuries of the Cervical Spine.</u> (Educational Videotape/Booklet presented by Glaxo.) Synapse Publications, Inc., 1991.

<u>MEDIA</u>

- 1. Maroon, J.C.: EFA and Inflammation. WSSH Radio with Hank Baughman, November 21, 2004.
- 2. Maroon, J.C.: EFA and Inflammation. WTAE TV with Marilyn Brooks, November 2004.
- 3. Maroon, J.C.: No Fish Tale: Diet Can Relieve Joint Pain. Tribune Review newspaper, Alyson Walls, writer, November 11, 2004.
- 4. Maroon, J.C. Omega-3 EFA and Pain Relief: Study results. Syndicated video and print release to 250 media markets. January, 2005.
- 5. Maroon, J.C.: Functional Medicine Update with Jeffrey Bland, Ph.D., February 2005.
- 6. Maroon, J.C.: EFA and Inflammation. WPXI TV News interview, April 2005.
- 7. Maroon,, J.C.: EFA and Inflammation, Good Life radio interview with Jesse Dylan, Canada, April 2005.
- 8. Maroon JC, Donahue B: Resveratrol and longevity. KDKA-TV News interview with Kristine Sorenson, January, 2010.

LETTERS

- 1. Maroon, J.: Venous air embolus. Lancet 1:605, 1973.
- Maroon, J.C., Robinson, A.G. and Kennerdell, J.S.: Treatment of acromegaly. <u>Lancet</u> 1:226, 1975.
- Maroon, J.C., Albin, M.S. and Jannetta, P.J.: Air embolism-Diagnosis and treatment. <u>New Eng. J. Med.</u> 293:1211, 1975.
- 4. Maroon, J.C.: Severely deformed infants. <u>New Eng. J. Med.</u> 295:115, 1976.
- Maroon, J.C. and Bissonette, D.: Late effects of botulinum intoxication. <u>JAMA</u> 238:129, 1977.
- 6. Maroon, J.C.: Optic nerve sheath meningioma. <u>Arch. Neurol.</u> 38:329, 1981.

- Teeple, E., Maroon, J.C., Rueger, R.: Hemimacroglossia and unilateral ischemic necrosis of the tongue in a long-duration neurosurgical procedure. <u>Anesthesiology</u> 64(6):845-846, 1986.
- 8. Chedid, M.K., Maroon, J.C., Bagshaw, M.A.: Radiation therapy of hemangioendotheliomas. <u>Neurosurgery</u> 20(6):995-996, 1987.
- 9. Maroon, J.C. and Onik, G.M.: Percutaneous discectomy. <u>J. Neurosurg.</u> 67:151, 1987.
- 10. Kennerdell, J.S. and Maroon, J.C.: Orbital decompression for dysthyroid orbitopathy. <u>J.</u> <u>Neurosurg.</u> 70:816, 1989.
- 11. Maroon, J.C.: Primary intraosseous orbital hemangioma: A case report and review of literature. <u>Neurosurg.</u> Vol. 35, No. 6, 1994.
- 12. Maroon, J.C.: Percutaneous endoscopic lumbar discectomy: Minimally invasive, but perhaps only minimally useful? <u>Surg. Neurol</u> 43:534-41, 1995.
- 13. Maroon JC, Bailes JE: Weighing the childhood risks of contact sports. Washington Times, Analysis/Opinion, January 29, 2015.

SCIENTIFIC PAPERS

- 1. Childress, R.H., Maroon, J.C. and Genovese, P.D.: Mitral insufficiency secondary to ruptured chordae tendineae. <u>Ann. Int. Med.</u> 65:232-244, 1966.
- 2. Maroon, J.C. and Lukemeyer, G.T.: Primary aldosteronism: Cast report with plasma renin suppression. J. Indiana State Med. Assn. 60:27-30, 1967.
- 3. Maroon, J.C.: What interns think of internships. <u>Hosp. Phys.</u>:70-72, May 1967.
- 4. Maroon, J.C.: A new approach to the selection and evaluation of internships. <u>New Phys.</u> 16:221-223, 1967.
- 5. Maroon, J.C., Goodman, J.M., Horner, T.G. and Campbell, R.L.: Detection of minute venous air emboli with ultrasound. <u>Surg. Gyn. & Obst.</u> 127:1236-1238, 1968.
- 6. Maroon, J.C., Pieroni, D.W. and Campbell, R.L.: A new technique for evaluating carotid blood flow. J. Invest. Ophth. 7:71, 1968.
- 7. Maroon, J.C., Pieroni, D.W. and Campbell, R.L.: Ophthalmosonometry: An ultrasonic method for assessing carotid blood flow. J. Neurosurg. 30:238-246, 1969.

- 8. Maroon, J.C. and Campbell, R.L.: Atrial myxoma: A treatable cause of stroke. <u>J.</u> <u>Neurol.,Neurosurg. & Psych.</u> 32:129-133, 1969.
- 9. Maroon, J.C., Edmonds-Seal, J. And Campbell, R.L.: An ultrasonic method for detecting air embolism J. Neurosurg. 31:196-201.
- 10. Edmonds-Seal, J. and Maroon, J.C.: Air embolism diagnosed with ultrasound: A new monitoring technique. <u>Anesthesia</u> 24:438-440, 1969.
- 11. Edmonds-Seal, J. And Maroon, J.C.: Detection of air embolus by Doppler ultrasonics. <u>Proc. Roy. Soc. Med.</u> 62:30, 1969.
- 12. Maroon, J.C. and Campbell, R.L.: subdural hematoma with inappropriate antidiuretic hormone secretion. <u>Arch. Neurol.</u> 22:234-239, 1970.
- Horner, T.G., Maroon, J.C. and Campbell, R.L.: Traumatic occlusion of the internal carotid secondary to closed craniocervical injury. <u>J. Indiana State Med. Assn.</u> 63:136-140, 1970.
- 14. Maroon, J.C., Campbell, R.L. and Dyken, M.: Internal carotid artery occlusion diagnosed with Doppler ultrasound. <u>Stroke</u> 1:122-127, 1970
- 15. Maroon, J.C. and Healion, T.: Head and neck injuries in football. <u>J. Indiana State Med.</u> <u>Assn.</u> 63:995-999, 1970.
- 16. Maroon, J.C. and Mealey, J.: Benign intracranial hypertension. Sequel to tetracycline therapy in a child. JAMA 216:1479-1480.
- 17. Schulhof, L.A., River, T. And maroon, J.C.: Severe head injuries: A retrospective review of 100 consecutive cases at Marion County General Hospital. J. Indiana State <u>Med.</u> <u>Assn.</u> 65:739-746, 1972.
- Maroon, J.C., Jones, R. And Mishkin, F.S.: Tuberculous meningitis diagnosed by brain scan. <u>Radiology</u> 104:333-335, 1972.
- 19. Maroon, J.C.: The management of football head an neck injuries. <u>Medical Digest</u> 18:26-23, 1972.
- 20. Maroon, J.C., Roberts, E., Numoto, M. And Donaghy, R.M.P.: Microvascular surgery: Simplified instrumentation. Technical Note. J. Neurosurg. 38:119-124, 1973.
- 21. Maroon, J.C. and Donaghy, R.M.P.: Experimental cerebral revascularization with

autogenous grafts. J. Neurosurg. 38:172-179, 1973.

- 22. Maroon, J.C. and Jannetta, P.J.: Pain following peripheral nerve injuries. <u>Curr. Prob.</u> <u>Surg.</u> (Chicago: Year Book Medical Publishers, Inc.):20-32, February, 1973.
- 23. Maroon, J.C. and Gosling, C.: A head and neck trauma teaching model. J. Trauma 13:245-247, 1973.
- 24. Gosling, C. And Maroon, J.C.: Patient simulators and medical models. <u>J. Assn. Of</u> <u>Med. Illustrators:</u> 17-22, May 1974.
- 25. Maroon, J.C. and Albin, M.S.: Air embolism diagnosed by Doppler ultrasound. <u>Anes & Analg. Cur. Res.</u> 53:399-402, 1974.
- 26. McCallum, J.E. and Maroon, J.C.: Subarachnoid hemorrhage: Diagnosis and therapy. <u>Geriatrics</u> 29:107-116, 1974.
- 27. Archer, D., Nankin, H., Gabor, P., and Maroon, J.C.: Serum prolactin in patients with inappropriate lactation. <u>Amer. J. Obste. & Gynec.</u> 119:466-472, 1974.
- 28. McCallum, J.E., Maroon, J.C. and Jannetta, P.J.: Treatment of postoperative cerebrospinal fluid fistulas by subarachnoid drainage. J. Neurosurg. 42:434-437, 1975.
- 29. Kennerdell, J.S. and Maroon, J.C.: Intracanalicular meningioma with chronic optic disc edema. <u>Annals of Ophthal.</u> 7:507-512, 1975.
- 30. Dujovny, M., Vas, R., Osgood, C.P., Maroon, J.C. and Jannetta, P.J.: Automatically irrigated bipolar forceps: Technical note. J. Neurosurg. 43:502-503, 1975.
- Maroon, J.C.: Case History #86: An unusual complication of lumbar puncture: A cerebrospinal fluid cutaneous fistula. Comment. <u>Anes & Analg. Cur. Res.</u> 54:691-694, 1975.
- 32. Maroon, J.C. and Albin, M.S.: Air embolism diagnosed by Doppler ultrasound. <u>Survey</u> of Anesthes. 19:348-349, 1975.
- 33. Dujovny, M., Osgood, C.P., Maroon, J.C. and Jannetta, P.J.: Penetrating intracranial foreign bodies in children. J. Trauma 15:981-986, 1975.
- 34. Gendell, H., Maroon, J.C. and Wisotzkey, H.: Epidermoid of the fourth ventricle: Discovery by computerized tomography. <u>Surg. Neurol.</u> 5:37-39, 1976.
- 35. Maroon, J.C. and Kennerdell, J.S.: Lateral microsurgical approach to intraorbital tumors.

J. Neurosurg. 44:556-561, 1976.

- Maroon, J.C., Holst, R.A. and Osgood, C.P.: Chymopapain in the treatment of ruptured lumbar discs: Preliminary experience in 48 patients. <u>J. Neurol., Neurosurg. & Psych.</u> 39:508-513, 1976.
- Sashin, D., Maroon, J.C., Heinz, E.R., Herbert, D. And Ricci, J.L.: Electronic radiography for rapid non-invasive intervention in neurological surgery. <u>Appl. Opt.</u> <u>Instrum. Med.</u> 70:322-336, 1976.
- Albin, M.S., Babinski, M., Maroon, J.C. and Jannetta, P.J.: Anesthetic management of posterior fossa surgery in the sitting position. <u>Acta Anaesth. Scand.</u> 20:117-128, 1976.
- 39. Dujovny, M., Osgood, C.P., Barrionuevo, P., Heilstrom, R. And Maroon, J.C.: Experimental middle cerebral artery microsurgical embolectomy. <u>Acta Neurochirurgica</u> 35:91-96, 1976.
- 40. Selker, R.G., Wolfson, S.K., Maroon, J.C. and Steichen, F.M.: Preferential cerebral hypothermia with elective cardiac arrest: Resection of AGiant≅ aneurysm. <u>Surg. Neurol.</u> 6:173-179, 1976.
- 41. Kennerdell, J.S. and Maroon, J.C.: Microsurgical approach to intraorbital tumors. <u>Arach.</u> <u>Ophthal.</u> 94:1333-1336, 1976.
- 42. Maroon, J.C.: Book review of Microneurosurgery. Hajime Handa, (ed.), Baltimore/London: University Park Press, 1975. J. Neurosurg. 45:236, 1976.
- 43. Maroon, J.C.: Medical ethics and the public interest. <u>Bulletin of Alleg. County Med.</u> <u>Soc.</u> 66:53-54, 1977.
- 44. Drayer, B.P., Rosenbaum, A.E., Maroon, J.C., Bank, W.O. and Woodford, J.E.: Posterior fossa extra axial cyst: Diagnosis with metrizamide CT cisternography <u>Am. J. Roentgenol</u> 128:431-436, 1977.
- 45. Maroon, J.C.: Medical manpower and time. <u>Bulletin of Alleg. County Med. Soc.</u> 66:189-190, 1977.
- 46. Maroon, J.C. and Albright, L.: AFailure to thrive≅ due to pontine glioma. <u>Arch Neurol.</u> 34:295-297, 1977.
- 47. Maroon, J.C., Bank, W.O., Drayer, B.P. and Rosenbaum, A.E.: Intracranial biopsy assisted by computerized tomography. J. Neurosurg. 46:740-744, 1977.

- 48. Jannetta, P.J. Abbasy, M., Maroon, J.C., Ramos, F.M. and Albin, M.S.: Etiology and definitive microsurgical treatment of hemifacial spasm: Operative techniques and results in 47 patients. J. Neurosurg. 47:321-328, 1977.
- 49. Maroon, J.C. and Sashin, D.: Electronic radiography in neurosurgery. <u>Surg. Neurol</u> 8:187-190, 1977.
- 50. Dubois, P.J., Maroon, J.C. Heinz, E.R., Markarian, P.B. and Hydovitz, J.D.: Spontaneous fracture of the dorsum sellae associated with post irradiation empty sella syndrome. <u>Surg. Neurol.</u> 8:216-218, 1977.
- 51. Gendell, H.M., Barmada, M.A., Maroon, J.C. and Wisotzkey, H.: Intracranial hemorrhage in achondroplasia. <u>Surg. Neurol.</u> 8:283-285, 1977.
- 52. Maroon, J.C., Kerin, T., Rehkopf, P. and McMaster, J.: A system for preventing athletic injuries. <u>Phys. Sportsmed.</u> 5:77-79, 1977.
- 53. Lunsford, L.D., Maroon, J.C., Bank, W.O., Drayer, B.P., and Rosenbaum, A.E.: Localization of velum interpositum AVM with metrizamide ventriculography and simultaneous stereoangiography. J. Neurosurg. 47:623-625, 1977.
- 54. Maroon, J.C.: ABurning hands≅ in football spinal cord injuries. <u>JAMA</u> 238:2049-2051, 1977.
- 55. Archer, D.F., Josimovich, J.B. and Maroon, J.C.: Chlorpromazine-induced changes in serum prolactin in women with oligomenorrhea, amenorrhea and pituitary adenoma. <u>Fertil. Steril.</u> 28:1164-1167, 1977.
- 56. Lunsford, L.D., Maroon, J.C. and Vega, A.: Amnestic syndrome in limbic lesions: Report on three cases. <u>Surg. Forum</u>:481-484, 1977.
- 57. Newfield, P., Albin, M.S., Chestnut, J.S. and Maroon, J.C.: Air embolism during transphenoidal pituitary operations. <u>Neurosurg.</u> 2:39-42, 1978.
- 58. Barrionuevo, P.J., Dujovny, M., Maroon, J.C. and Kossovsky, N.: Universal control suction valve. <u>Surg. Neurol</u> 9:253-254, 1978.
- 59. Chestnut, J.S., Albin, M.D., Gonzalez, E.A., Newfield, P. and Maroon, J.C.: Clinical evaluation of intravenous nitroglycerin for neurosurgery. J. Neurosurg. 48:704-711, 1978.
- 60. Kennerdell, J.S. and Maroon, J.C.: CT scan appearance of dysthyroid orbital disease.

Ann. Ophthal. 10:153-156, 1978.

- 61. Archer, D.F., Maroon, J.C. and Dubois, P.J.: Galactorrhea, amenorrhea, hyperprolactinemia and an empty sella. <u>Obstet. Gynec.</u> 52S:23-27, 1978.
- 62. Nelson, P.B., Robinson, A.G., Archer, D.R. and Maroon, J.C.: Symptomatic pituitary tumor enlargement after induced pregnancy: Case report. <u>J. Neurosurg.</u> 49:283-287, 1978.
- 63. Maroon, J.C.: Hemifacial spasm: A vascular cause. <u>Arch. Neurol.</u> 35:481-483, 1978.
- 64. Maroon, J.C., Lunsford, L.D. and Deeb, Z.L.: Hemifacial spasm due to aneurysmal compression of the facial nerve. <u>Arch. Neurol.</u> 35:545-546, 1978.
- 65. Laha, R.K., Dujovny, M., Barrionuevo, P.J., DeCastro, S.C., Hellstrom, H.R. and Maroon, J.C.: Protective effects of methylprednisolone and dimethyl sulfoxide in experimental middle cerebral artery embolectomy. J. Neurosurg. 49:508-516, 1978.
- 66. Albin, M.S., Carroll, R.G. and Maroon, J.C.: Clinical considerations concerning detection of venous air embolism. <u>Neurosurg.</u> 3:380-384, 1978.
- 67. Haines, S.J., Maroon, J.C. and Jannetta, P.J.: Supratentorial intracerebral hemorrhage following posterior fossa surgery. J. Neurosurg. 49:881-886, 1978.
- 68. Mark, L.E., Kennerdell, J.S., Maroon, J.C., Rosenbaum, A.E., Heinz, E.R. and Johnson, B.L.: Microsurgical removal of a primary intraorbital meningioma. <u>Am. J. Ophthalmol.</u> 86:704-709, 1978.
- 69. Drayer, B., Kattah, J.R., Rosenbaum, A., Kennerdell, J.S. and Maroon, M.D.: Diagnostic approaches to pituitary adenomas. <u>Neurology</u> 29:161-169, 1979.
- 70. Dujovny, M., Kossovsky, N., Kossovsky, R., Haines, S. And Maroon, J.C.: Heifetz clip failure: A metallurgical study. J. Neurosurg. 29:161-169, 1979.
- 71. Bank, W.O., Kerber, C.W., Drayer, B.P., Troost, B.T. and Maroon, J.C.: Carotid cavernous fistula: Endarterial cyanoacrylate occlusion with preservation of carotid flow. J. Neurorad. 5:279-282, 1978.
- 72. Maroon, J.C.: Orbital involvement by tumors Types, recognition and treatment. <u>Contemp. Neurosurg.</u>:1-8, 1979.
- 73. Maroon, J.C., Haines, S.J. and Phillips, J.C.: Calvarial hemangioendothelioma with intracranial hemorrhage: Case report. <u>Neurosurg.</u> 4:178-180, 1979.

- 74. Maroon, J.C. and Nelson, P.B.: Hypovolemia in patients with subarachnoid hemorrhage: Therapeutic implications. <u>Neurosurg.</u> 4:233-236, 1979.
- 75. Lunsford, L.D., Maroon, J.C., Sheptak, P.E. and Albin, M.S.: Subdural tension pneuomocephalus. J. Neurosurg. 50:525-527, 1979.
- 76. Troost, B.T., Mark, L.E. and Maroon, J.C.: Resolution of classic migraine after removal of an occipital lobe AVM. <u>Ann. Neurology.</u> 5:199-201, 1979.
- 77. Maroon, J.C. and Kennerdell, J.S.: Microsurgical approach to orbital tumors. <u>Clin.</u> <u>Neurosurg.</u> 26:479-489, 1979.
- 78. Nelson, P.B., Seif, S.M., Maroon, J.C. and Robinson, A.G.: Hyponatremia in patients with subarachnoid hemorrhage: A study of vasopressin and blood volume. <u>Proceedings</u> of the Second International Workshop:654-658, Amsterdam, The Netherlands, 1979.
- 79. Kennerdell, J.S., Maroon, J.C. and Rehkopf, P.: Why use the operating microscope in orbital surgery? <u>Ophthalmology</u> 86:2040-2047, 1979.
- 80. Schramm, V.L., Myers, E.N. and Maroon, J.C.: Anterior skull base surgery for benign and malignant disease. <u>The Laryngoscope</u> 89(7):1077-1091, 1079.
- 81. Martinez, A.J., Lee, A., Moossy, J. And Maroon, J.C.: Pituitary adenomas: J Clinicopathological and immunohistochemical study. <u>Ann. Neurology</u>. 7:24-36, 1980.
- Archer, D.F., Salazar, H., Maroon, J.C. and Hough, L.J.: Prolactin secreting pituitary adenomas: Serum and tissue prolactin levels with ultrastructural correlation. <u>Am. J.</u> <u>Obstet. & Gynec.</u> 137:646-652, 1980.
- 83. Maroon, J.C., Steele, P.B. and Berlin, R.: Football head and neck injuries an update. <u>Clinical Neurosurg.</u> 27:414-429, 1980.
- 84. Spoor, T.C., Kennerdell, J.S., Maroon, J.C., Hepler, R. And Krohel, G.: Pneumosinus dilatans, Klippel-Trelaunay-Weaver syndrome and progressive visual loss. <u>Annals of Ophthalmology</u> 105-108, 1981.
- 85. Yonas, H. And Maroon, J.C.: Cerebral revascularization. <u>Surgical Rounds</u>:12-19, April 1981.
- 86. Maroon, J.C.: Catastrophic neck injuries from football in Western Pennsylvania. <u>The</u> <u>Physician and Sportsmedicine</u> 9(11):83-86, 1981.

- 87. Nelson, P.B., Rosenbaum, A.E., Moossy, J. And Maroon, J.C.: Delayed deterioration in the syndrome of temporal lobe contusion: Evaluation by computed tomography (CT). <u>J.</u> <u>of Trauma</u> 22:39-42, 1982.
- 88. Maroon, J.C. and Kennerdell, J.S.: Radical orbital decompression for severe dysthyroid exophthalmos. J. Neurosurg. 56:260-266, 1982.
- 89. Deeb, Z.L. and Maroon, J.C.: Presurgical computed tomography and skin marking as an aid to brain biopsy. J. Comput. Tomogr. 6:103-107, 1982.
- 90. Ryan, A.J., Rimel, R.W., Maroon, J.C., Bruno, L.A. and Torg, J.S.: Concussion in athletes. A round table. <u>The Physician and Sportsmedicine</u> 10(10):95-108, 1982.
- 91. Kennerdell, J.S. and Maroon, J.C.: An orbital decompression for severe dysthyroid exophthalmos. <u>Ophthal.</u> 89:467-472, 1982.
- 92. Sekhar, L.N., Jannetta, P.J. and Maroon, J.C.: Tentorial meningiomas: surgical management and result. <u>Neurosurg.</u> 14:268-275, 1984.
- 93. Maroon, J.C. and Kennerdell, J.S.: Surgical approaches to the orbit: Indications and techniques. J. Neurosurg. 60:1226-1235, 1984.
- 94. Maroon, J.C. and Kennerdell, J.S.: Surgical approaches to the orbit. <u>Contemp Neurosurg.</u> 6(1):1-6, 1984.
- 95. Sibony, P.A., Kraus, H.R., Kennerdell, J.S., Maroon, J.C. and Slamovits, T.L.: Optic nerve sheath meningiomas. Clinical manifestations. <u>Ophthalmology</u> 91(11):1313-1326, 1984.
- 96. Maroon, J.C. and Abla, A.A.: Microdiscectomy versus chemonucleolysis. <u>Neurosurgery</u> 16(5):644-649, 1985.
- 97. Abla, A.A., Maroon, J.C., Kennerdell, J.S. and Deeb, Z.L.: Fibrosis surrounding a silicone implant simulating recurrent orbital meningioma. <u>J. Neurosurg.</u> 63:467-469, 1985.
- Deeb, Z.L. and Maroon, J.C.: Diagnosis of craniocervical dermoid by computed tomography and magnetic resonance imaging: A case report. <u>The Journal of Computed</u> <u>Tomography</u> 9:305-310, 1985.
- 99. Wilberger, J.E., Abla, A., Kennerdell, J.S. and Maroon, J.C.: Mucocele of the pterygoid recess treated by laser surgery. <u>J. Neurosurg.</u> 63:970-972, 1985.

- 100. Deeb, Z.L., Rothfus, W.E. and Maroon, J.C.: MR imaging of heterotopic gray matter: A case report. J. Comput. Assist. Tomogr. 9(6):1140-1141, 1985.
- 101. Abla, A.A., Maroon, J.C. and Slifkin, M.: Brain abscess due to haemophilus aphrophilus: Possible canine transmission. <u>Neurosurgery</u> 19(1):123-124, 1986.
- Abla, A.A., Maroon, J.C., Wilberger, J.E., Kennerdell, J.S. and Deeb, Z.L.: Intrasellar mucocele stimulating pituitary adenomas: Case report <u>Neurosurgery</u> 18(2):197-199, 1986.
- Deeb, Z.L., Schimel, S., Rothfus, W.E., Maroon, J.C.: Diagnosis of bilateral intracavernous carotid artery aneurysms by computed tomography. CT: <u>The Journal of</u> <u>Computed Tomgraphy</u> 10:121-127, 1986.
- Alba, A., Rothfus, W.E., Maroon, J.C. and Deeb, Z: Delayed spinal subarachnoid hematoma: A rare complication of C1-2 cervical myelopathy. <u>Am. J. Neurorad.</u> 7:526-528, May/June, 1986.
- Kennerdell, J.S., Maroon, J.C., Garrity, J.A. and Abla, A.: Surgical management of orbital lymphangioma with the carbon dioxide laser. <u>Am. J. Ophthalmol.</u> 102:304-308, September, 1986.
- 106. Kao, R., Eichenlaub, E., Tsao-Wu, G., Happel, M.B., Maroon, J.C. and Magovern, G.: Laser assisted microvascular anastomosis with thermal activated binding compound. <u>World Congress of Cardiology</u>, Washington, D.C., September 14-19, 1986.
- 107. Maroon, J.C. and Abla, A.A.: Microlumbar discectomy. <u>Clin. Neurosurg.</u> 33:407-417, 1986.
- 108. Wilberger, J.E., Abla, A.A. and Maroon, J.C.: Burning hands syndrome revisited. <u>Neurosurgery</u> 19:1038, 1986.
- 109. Maroon, J.C. and Onik, G.M.: Percutaneous automated discectomy: A new method for lumbar disc removal. J. Neurosurg. 66:143-146, 1987.
- 110. Onik, G.M., Maroon, J.C., Helms, C., et al: Automated percutaneous discectomy: Initial patient experience. <u>Radiology</u> 162:129-132, 1987.
- 111. Rothfus, W.E., Chedid, M.K., Deeb, Z.L., Abla, A.A., Maroon, J.C. and Sherman, R.L.: MR imaging in the diagnosis of spontaneous spinal epidural hematomas. <u>J. Comput.</u> <u>Assist. Tomogr.</u> 11(5):851-854, 1987.
- 112. Kennerdell, J.S., Maroon, J.C. and Buerger, G.F.: Comprehensive surgical management

of proptosis in dysthyroid orbitopathy. Orbit 6(3):153-179, 1987.

- 113. Wilberger, J.E., Maroon, J.C., Prostko, R., Baghai, P.N., Backman, W. And Deeb, Z.: Magnetic resonance imaging and intraoperative neurosonography in syringomyelia. <u>Neurosurgery</u> 20:599-605, 1987.
- 114. Maroon, J.C. and Onik, G.M.: A new technique for lumbar disc removal. <u>Hospital</u> <u>Physician</u> 23(4):95-100, April 1987.
- 115. Maroon, J.C.: Presidential Address: From Icarus to Aequanimitas. <u>Neurosurgery</u> 21(1):2-6, July 1987.
- 116. Onik, G.M. and Maroon, J.C.: Percutaneous discectomy challenges chymopapain. <u>Diagnostic Imaging:</u> 142-145, September 1987.
- 117. Maroon, J.C., Onik, G and Day, A.: Percutaneous automated discectomy in athletes. <u>The</u> <u>Physician and Sportsmedicine</u> 16(8):61-76, 1988.
- 118. Maroon, J.C., Kennerdell, J.S. and Abla, A.A.: Diagnosis and treatment of orbital tumors. <u>Clin. Neurosurg.</u> 34:485-498, 1988.
- 119. Maroon, J.C.: Congress of Neurological Surgeons Presidential Address: From Icarus to Aequanimitas. <u>Clin. Neurosurg.</u> 34:3-15, 1988.
- 120. Maroon, J.C.: On being a complete professional: From Icarus to Aequanimitas. <u>Perspectives in Radiology</u> 1(1):147-158, 1988.
- Onik, G. and Maroon, J.C.: Percutaneous automated discectomy: A less invasive alternative for the treatment of herniated lumbar discs. <u>Perspectives in Radiology</u> 1(2):1-25, 1988.
- 122. Reich, J., Onik, G.M. and Maroon, J.C.: Intracerebral biopsy hemorrhage, monitoring, and intervention guided by intraoperative ultrasound. <u>Am. J. Neurorad.</u> 9(6):1240-1241, Nov./Dec., 1988.
- 123. Onik, G.M. Maroon, J.C., Day, A. And Helms, C.: Automated percutaneous discectomy: Preliminary experience. <u>Acta Neurochirurigica</u> 571: Acta Suppl. 43:58-62, 1988.
- 124. Kennerdell, J.S., Maroon, J.C., Malton, M. And Warren, F.A.: The management of optic nerve sheath meningiomas. <u>Am. J. Ophthal.</u> 106:450-457, 1988.
- 125. Onik, G.M., Shang, Y. And Maroon, J.C.: Postoperative discitis: Diagnosis with an automated apsiration probe. <u>Clin. Orthop.</u>, 1988.

- 126. Maroon, J.C., Onik, G.M. and Sternau, L.L.: Percutaneous automated discectomy: A new approach to lumbar surgery. <u>Clin. Orthop.</u> 238:64-70, 1989.
- 127. Onik, G.M. and Maroon, J.C.: Automated percutaneous discectomy at the L5-S1 level: Use of a curved cannula. <u>Clin. Orthop.</u> 238:71-76, 1989.
- 128. Leavitt, M.L., Yudofsky, S.S., Maroon, J.C., Riley, E.J. and Bavitz, M.B.: Effect of intraventricular nadolol infusion on shock-induced aggression in 6-hydoxydopamine-treated rats. J. Of Neuropsychiatry 1(2):167-172, 1989.
- Kaufman, H.H., Herschberger, J.E., Maroon, J.C., Wilberger, J.E. and Onik, G.M.: Mechanical aspiration of hematomas in an in vitro model. <u>Neurosurgery</u> 25(3):347-350, 1989.
- Chedid, M.K., Deeb, Z.L., Rothfus, W.E., Abla, A.A., Sherman, R.L. and Maroon, J.C.: Major cerebral vessel injury caused by a seatbelt shoulder strop: Case report. <u>J. of</u> <u>Trauma</u> 29(11Z):1601-1603, 1989.
- 131. Maroon, J.C.: Book Review <u>Disease of the Orbit</u> by Jack Rootmen, 628 pp., Lippincott, Philadelphia, 1988. In: <u>Neurosurgery</u> 24(2):294, 1989.
- 132. Maroon, J.C.: Book Review <u>Functional Restoration for Spinal Disorders: The Sports</u> <u>Medicine Approach</u> by Tom G.Mayer and Robert J. Gatchel, 321 pp., Lea and Febiger, Philadelphia, 1988. In: <u>J. Neurosurg</u>. 70:290, 1989.
- Bailes, J.E. and Maroon, J.C.: Management of cervical spine injuries in athletes. <u>Sport.</u> <u>Med. Clin. North Am.</u> 8:43-58, 1989.
- 134. Kennerdell, J.S. and Maroon, J.C.: Orbital decompression for dysthyroid orbitopathy. <u>J.</u> <u>Neurosurg.</u> 70:816, 1989.
- 135. Leavitt, M.L., Loesch, D.B. and Maroon, J.C.: Intracranial pressure monitoring I spontaneously hypertensive rats. <u>Soc. Neurosci. Abst.</u> 15:596-1989.
- 136. Leavitt, M.L. Maroon, J.C. and Price, T.R.P.: Effects of central versus subcutaneous infusion of buspirone on aggression. <u>The Physiologist</u> 32:203, 1989.
- 137. Leavitt, M.L., Maroon, J.C., Riley, E.H. and Yudofsky, S.C.: Antiaggressive effect of buspirone of 6-hydroxydopamine-treated rats. <u>FASEB J</u> A295, 1989.
- 138. Leavitt, M.L., Bailes, J.E., Magovern, G., Kao, R., Elrifai, A.M., Teeple, E., Maroon, J.C., Shih, S.R. and Marquardt, M.: Ultra-profound hypothermic cardiac arrest in totally

blood-substituted dogs. <u>Cardiovasc. Sci. and Technology: Basic and Applied</u> I:116-118, 1989.

- 139. Kennerdell, J.C., Maroon, J.C. and Malton, M.: Surgical approaches to orbital tumors. Seminars in Ophthal. 4:209-218, 1989.
- 140. Maroon, M.C., Abla, A.A., Wilberger, J.E., Bailes, J.E. and Sternau, L.L.: Central Cord Syndrome. <u>Clin. Neurosurg.</u> 37:612-621, 1989.
- 141. Maroon, J.C. and Gianaris, P.G.: Biomechanics of the lumbosacral spine. <u>Clin.</u> <u>Neurosurg.</u> 36:125-134, 1990.
- 142. Onik, G.M., Mooney, B., Maroon, J.C., Wiltse, L., Helms, C., Schweigel, J., Watkins, R., Kahanovitz, N., Day, A., Morris, J., McCullough, J.A., Reicher, M., Croissant, P., Dunsker, S., Davis, G.W., Brown, C., Hochschuler, S., Saul, T., and Ray, C.: Automated percutaneous discectomy: A prospective multi-institutional study. <u>Neurosurgery</u> 26(2):228-233, 1990.
- Onik., G., Shang, Y., Maroon, J.C., Eichenblat, M., Mercer, D. And Bailes, J.E.: Percutaneous automated biopsy in the diagnosis of primary infectious spondylitis. <u>Neurosurgery</u> 26(2):234-237, 1990.
- Maroon, J.C., Kopitnik, T.A., Schulhof, L., Abla, A.A. and Wilberger, J.E.: Diagnosis and microsurgical approach to far-lateral disc herniation in the lumbar spine. <u>J.</u> <u>Neurosurg.</u> 72:378-382, 1990.
- 145. Kennerdell, J.S. and Maroon, J.C.: Use of the carbon dioxide laser in the management of orbital plexiform neurofibromas. <u>Ophthalmic Surgery</u> 21(2):138-140, 1990.
- 146. Wilberger, J.E. and Maroon, J.C.: Cervical spine injuries in athletes. <u>The Physician and</u> <u>Sportsmedicine</u> 18(3):56-70, 1990.
- 147. Wilberger, J.E. and Maroon, J.C.: Occult post-traumatic cervical ligamentous instability. J. Of Spinal Disorders 3(2):1-6, 1990.
- 148. Bracken, M.B., Shepard, M.J., Collins, W.F., Maroon, J.C., Wilberger, J.E. et al: A randomized controlled trial of methylprednisolone or naloxone in the treatment of acute spinal cord injury. Results of the Second National Acute Spinal Cord Injury Study. <u>New Eng. J. Med.</u> 322:1405-1411, 1990.
- 149. Elrifai, A.M., Bailes, J.E., Leavitt, M.L., Maroon, J.C., Loesch, D.V., Shih, S.R., Teeple, E and Cottington, E.: Rewarming following profound cooling. <u>Cardiovasc. Sci. And</u> <u>Technology: Basic and Applied</u> II:195-198, 1990.

- 150. Elrifai, A.M., Bailes, J.E., Leavitt, M.L, Shih, S.R., Teeple, E., Marquardt, M. And Maroon, J.C.: Use of blood substitutes for whole body perfusion in ultra-profound hypothermic cardiac arrest. <u>Ann. Clin. Lab. Sci</u> 20-292, 1990.
- 151. Elrifai, A.M., Loesch, D.V., Leavitt, M.L., Bailes, J.E., Shih, T.S. and Maroon, J.C.: Rewarming rate and survival post induced ultra-profound hypothermia. <u>Clin. Res.</u> 38(3):793A, 1990.
- 152. Leavitt, M.L., Bailes, J.E., Elrifai, A., Teeple, E., Marquardt, M., Shih, S.R. and Maroon, J.C.: Survival from prolonged cardiac arrest in totally exsanguinated hypothermic dogs. FASEB J 4(4):A963, 1990.
- 153. Leavitt, M.L., Bailes, J.E., Shih, S.R., Elrifai, A.M., Hoffman, W.E. and Maroon, J.C.: Outcome following cooling to near the freezing point in totally blood substituted dogs. <u>Soc. Neurosci. Abst.</u> 16(1):740, 1990.
- 154. Leavitt, M.L., Loesch, D.V. and Maroon, J.C.: Effect of intraventricular atrial natriuretic factor on intracranial pressure in the awake rat. <u>The Physiologist</u> 33:A39, 1990.
- 155. Leavitt, M.L., Loesch, D.V. and Maroon, J.C.: Measurement of increased intracranial pressure in spontaneously hypertensive versus Wistar rats. <u>Amer. J. Hypert.</u> 3(5):9A, 1990.
- 156. Teeple, E., Bailes, J.E., Leavitt, M.L., Shih, S.R., Marquardt, M., Elrifai, A., and Maroon, J.C.: Ultra-profound hyperthermia, complete blood substitution, cardiac arrest and low flow perfusion in a dog model: A report. J. Neurosurg. Anesth. 2:515, 1990.
- 157. Onik, G., Maroon, J.C. and Shang, Y.: Far-lateral disc herniation: Treatment by automated percutaneous discectomy. <u>AJNR</u> 11:865-868, 1990.
- 158. Bailes, J.E. and Maroon, J.C.: Spinal cord injuries in athletes. <u>New York State J. Of</u> <u>Med.</u> 91(2):44-45, 1991.
- 159. Bailes, J.E., Leavitt, M.L., Teeple, E. And Maroon, J.C.: Ultra-profound hypothermia with complete blood substitution in a canine model. J. Neurosurg. 74:781-788, 1991.
- 160. Maroon, M.C. and Bailes, J.E.: Athletic injuries of the cervical spine. <u>Educational</u> <u>booklet by Glaxo</u>, Research Triangle Park, NC, April 1991.
- Quigley, M.R., Shih, T., Elrifai, A., Loesch, D.V., Smith, K., Lesiecki, M., and Maroon, J.C.: Laser discectomy: Comparison of Ho:YAG and Nd:YAG Systems. <u>Surgical Forum</u> <u>Vol. XLIL</u>:507-509, 1991.

- 162. Quigley, M.R. and maroon, J.C.: The relationship between survival and the extent of the resection in patients with supratentorial and malignant gliomas. <u>Neurosurgery</u> 29(3):385-389, 1991.
- 163. Maroon, J.C., Abla, A.A., Wilberger, J.E., et. al: Central cord syndrome. <u>Clinical</u> <u>Neurosurgery</u> Vol. 37:612-621, 1991.
- Quigley, M.R., Loesch, D.V., Shih, T., Marquardt, M., Lupetin, A., and Maroon, J.C.: Intracranial cryosurgery in a canine model: A pilot study. <u>Surgical Neurology</u> 38:101-105, 1992.
- Elrifai, A.M., Bailes, J.E., Leavitt, M.L., Teeple, E., Shih, S.R., Taylor, M.J., Maroon, J.C.: Blood substitution: An experimental study. <u>Journal of Extra-Corporeal Technology</u>, Vol. 24, No. 2:62-67, 1992.
- 166. Leavitt, M.L., Bailes, J.E., Elrifai, A.M., Teeple, T.S., Shih, S.R., Ciongoli, K., Devenyi, C., Bazmi, B., and Maroon, J.C.: Comparison of the effects of total blood substitution during two difference levels of hypothermic cardiac arrest. <u>Biomat., Art. Cells Immob.</u> <u>Biotech.</u>, 20(2-4), 963-872, 1992.
- 167. Kazim, M., Kennerdell, J.S., Maroon, J.C., Rothfus, W., Marquardt, M.: Choristoma of the optic nerve and chiasm. <u>Arch. Ophthalmol.</u> 110(2):236-238, 1992.

168. Leavitt, M.L., Bailes, J.E., Elrifai, A.M., Taylor, M.J., Maroon, J.C., Shih, S.R., and Teeple, E.: Blood parameters following extracorporeal circulation of a blood substitute during profound hypothermia in dogs. Proceed. Amer. Acad. Cardiovasc. Perfusion 13:49-53, 1992.

- 169. Bracken, M.D., Shepard, M.J., Collins, W.F., et. A.: Methylprednisolone or naloxone treatment after acute spinal cord injury: 1-year follow-up data. Results of the second national acute spinal cord injury study. J. Neurosurg. 76:23-31, 1992.
- 170. Onik, G., Maroon, J.C., Jackson, R.: Cauda equine syndrome secondary to an improperly placed nucleotome probe. <u>Neurosurgery</u> 30:412-415, 1992.
- 171. Chedid, M.K., Handy, F.F., Wilkinson, D.A., Kennerdell, J.S. and Maroon, J.C.: Temperature distributions in porcine orbital tissues following the use of CO₂ and ND:YAG lasers. <u>Ophthalmic Surgery</u> 24(2):100-104, 1992.
- 172. Elrifai, A.M., Bailes, J.E., Shih, S.R., Maroon, J.C., et. Al.: Rewarming, ultraprofound hypothermia and cardiopulmonary bypass. Journal of Extra-Corporeal Technology, 24(4):109-114, 1992.

- Maroon, J.C., Onik, G., Quigley, M.R., et. al.: Cryosurgery re-visited for the removal and destruction of brain, spinal and orbital tumours. <u>Neurological Research</u>, Vol. 14:294-302, 1992.
- 174. Quigley, M.R., Kortyna, R., Goodwin, C., and Maroon, J.C.: Lumbar surgery in the elderly. <u>Neurosurgery</u> Vol. 30(5):672-674, 1992.
- 175. Wilberger, J.E., Maroon, J.C. and Whiting, D.: Radiographic investigation of the postspinal cord injury patient. <u>The Outcome Following Traumatic Spinal Cord Injury.</u> Futura Publishing Co., Inc., Mt. Kisco, NY 1992.
- 176. Quigley, M.R., Shih, T., Elrifai, A., Maroon, J.C. and Lesiecki, M.L.: Percutaneous laser discectomy with the Ho:YAG laser. <u>Lasers in Surgery and Medicine</u>12:621-624, 1992.
- 177. Elrifai, A.M., Bailes, J.E., Leavitt, M.L., Teeple, E., Shih, S.R., Taylor, M.H., Maroon, J.C., et. al.: Blood substitution: An experimental study. <u>The Journal of Extra-Corporeal</u> <u>Technology</u> 24(2):58-63, 1992.
- 178. Bailes, J.E., Elrifai, A.M., Leavitt, M.D., Shih, S.R., Taylor, M.J. and Maroon, J.C.: Hypothermia, total blood substitution and cardiac arrest. An experimental study. Neuroscience Journal of Allegheny General Hospital 3, 17-22, 1992.
- 179. Maroon, J.C., Onik, G., Vidovich, D.V.: Percutaneous discectomy for lumbar disc herniation. Neurosurgery Clinics of North America. Vol. 4(1):125-134, 1993.
- 180. Maroon, J.C., and McKenzie, R.: Far lateral lumbar disc herniations. <u>Contemporary</u> <u>Neurosurgery</u> Vol. 15, No. 6, 1993.
- Maroon, J.C., Kennerdell, J.S., Vidovich, D.V.: Spheno-orbital craniotomy for meningioma. <u>Neurosurgical Operative Atlas</u>, Vol. 3, No. 4, pp. 249-257, 1993.
- 182. Bailes, J.E., Elrifai, A.M., Taylor, M.J., Shih, S.R., Teeple, E., Leavitt, M.D., Baust, J.G. and Maroon, J.C.: Ultra-profound hypothermia combined with blood substitution: A new protocol for extending the safe limits of cardiac arrest for up to 3 hours. <u>Surg. Forum.</u> XLIV, 564-567, 1993.

183. Elrifai, A.M., Bailes, J.E., Shih, S.R., Maroon, J.C., Leavitt, M.L., Teeple, E., Loesch, D.V., Cottington, E.M., Taylor, M.J., Bazmi, B., Devenyi, C. and Ciongoli, K.A.: Rewarming ultraprofound hypothermia and cardiopulmonary bypass. J. Extra-Corporeal Technol. 24(4): 107-112, 1993.

184. Quigley, M.R., Maroon, J.C., Shih, T., Elrifai, A. and Lesiecki, M.L.: Laser Discectomy

comparison of systems. SPINE, Vol. 19(3), 319-322, 1994.

- 185. Maroon, J.C., Kennerdell, J.S., Vidovich, M.D., Abla, A.A., Sternau, L: Recurrent spheno-orbital meningoma. J. Neurosurg. 80:202-208, 1994.
- Fessler, R.G., Cahill, D.W. Maroon, J.C., Matthew, H.H., Quigley, M.R.: Microdiscectomy for the lumbar spine. <u>Perspect. Neurosurg.</u> 5:73-90, 1994.
- 187. Taylor, M.J., Bailes, J.E., Elrifai, A.M., Shih, T.S., Teeple, E., Leavitt, M.L., Baust, J.G. and Maroon, J.C.: Asanguineous whole body perfusion with a new intercellular acellular solution and ultraprofound hypothermia provides cellular protection during 3.5 hours of cardiac arrest in a canine model. <u>ASAIO Journal</u> 40:M351-M358, 1994.
- Maroon, J.C., Bailes, J.E.: Cryoprobe-assisted removal of spinal cord tumors: Technique note. <u>Surg. Neurol.</u> 43:265-266, 1995.
- 189. Taylor, J.J., Bailes, J.E., Elrifai, A.M., Shih, S.R., Teeple, E., Leavitt, M.L., Baust, J.G. and Maroon, J.C.: A new solution for life without blood: Asanguineous low flow perfusion of a whole-body perfusate during 3 hours of cardiac arrest and profound hypothermia. <u>Circulation</u> 91:431-444, 1995.
- 190. Simon, D., Taylor, M.J., Elrifai, A.M, Shih, S.R., Bailes, J.E., Davis, D., Kluger, Y., Diamond, D.L. and Maroon, J.C.: Hypothermic blood substitution enables resuscitation after hemorrhagic shock and 2 hours of cardiac arrest. <u>ASAIO Journal</u>, Vol. 41, No. 3, pp. M297-M300, 1995.
- 191. Maroon, J.C. and Bailes, J.E.: Athletes with cervical spine injuries. <u>Spine</u>21(19): 2294-2299, 1996.
- 192. Bailes, J.E., Poole, C.C., Hutchison, W., Maroon, J.C., and Fukushima, T.: Utilization and cost savings of a wide-area computer network for neurosurgical consultation. <u>Telemedicine Journal</u> 3(2): 135-139, 1997.
- 193. Acevedo, H.F., Hartsock, R.J., and Maroon, J.C.: Detection of membrane-associated human chorionic gonadotropin and its subunits on human cultured cancer cells of the nervous system. <u>Cancer Detection and Prevention</u> 21(4):295-303, 1997.
- 194. Kiya, N., Dureza, C., Fukushima, T., and Maroon, J.C.: Computer navigational microscope for minimally invasive neurosurgery. <u>Minimally Invasive Neurosurgery</u>, 3(40):110-115, 1997.
- 195. Daffner, R.H., Yakulis, R., and Maroon, J.C.: Intraosseous meningioma: A case report. Skeletal Radiology 27:108-111, 1998.

- 196. Quigley, M.R., Bost, J., Maroon, J.C., et al: Outcome after microdiscectomy: results of a prospective single institutional study. <u>Surg. Neurol.</u>, 49(3):263-267, 1998.
- 197. Fukushima, T. and Maroon, J.C.: Repair of carotid artery perforations during transsphenoidal surgery. <u>Surg. Neurol.</u>, 50:174-177, 1998.
- 198. Elrifai, A.M., Taylor, M.J., Bailes, J.E., Shih, S-r., Teeple, E., Govindan, E. and Maroon, J.C.: Further development of ultraprofound hypothermia and blood substitution in a canine model with a view to clinical trials. <u>Cryobiology</u>, December, 1998.
- 199. Maroon, J.C.: Medical Warrior: Fighting Corporate Socialized Medicine. A Book Review. <u>Surg. Neurol.</u>, 50:495-496, 1998.
- 200. Maroon, J.C.; Abla A.A.; Bost, J.: Association between peridural scar and persistent low back pain after lumbar discectomy. <u>Neurological Research</u> 21(Suppl 1):S43-S46, 1999.
- 201. Baser, S., Maroon, J.C., Oh, M. and Whiting, D: Spinocerebellar degeneration treated with deep brain stimulation: case report. <u>Neurosurgery</u>, In Press.
- 202. Bost, J., Maroon, J.C., and Abla, A.A.: New Product Review: ADCON-L7 for inhibiting postoperative fibrosis. <u>Surgical Physician Assistant</u>, pp. 13-16, May, 1999.
- Lovell, M.R., Iverson, G.L, Collins, M.W., McKeag, D., Maroon, J.C.: Does loss of consciousness predict neuropsychological decrements after concussion? Clin. J. Sports Med., (4):193-198, October, 1999.
- Maroon, J.C., Lovell, M.R., Norwig, J., Podell, K., Powell, J.W., Hartl, R.: Cerebral concussion in athletes: Evaluation and neuropsychological testing. Neurosurg. 47(3):659-672, September, 2000.
- 205. Bejjani, G.K; Cockerham, K.P.; Kennerdell, J.S.; Maroon, J.C.: A reappraisal of surgery for orbital tumors. Part I: extraorbital approaches. Neurosurg Focus 10(5): Article 2, 1-6, 2001.
- 206. Bejjani, G.K.; Cockerham, K.P.; Kennerdell, J.S.; Maroon, J.S.: Surgery for orbital tumors. Part II: Transorbital approaches. Neurosurg Focus 10(5): Article 3, 1-6, 2001.
- 207. Maroon, J.C.; Field, M.F.; Lovell, M.R.; Collins, M.W.; Bost, J.D.: The evaluation of athletes with cerebral concussion. Clinical Neurosurgery, 49; 319-322, 2001.

- 208. Bejjani, G.K.; Cockerham, K.P.; Kennerdell, J.S. and Maroon, J.C.: Visual field deficit caused by vascular compression from a suprasellar meningioma: a case report. Neurosurgery, Vol. 50 (5), pp 1129-1132, May 2002.
- 209. Bejjani G.K.; Cockerham, K.C., Kennerdell, J.S., Rothfus, W. and Maroon, J.C.: Commentary. Neurosurgery. Vol. 30 (5), 1125, May 2002.
- 210. Koebbe C.J., Maroon, J.C., Abla, A.A., El-Kadi, H. and Bost, J.: Lumbar microdiscectomy: a historical perspective and current technical considerations. Neurosurg. Focus, Vol. 13, pp 1-6, August, 2002.
- 211. Maroon, J.C.: Current concepts in minimally invasive discectomy. Neurosurgery Vol 51 (2), pp S2-1 S2-9, November, 2002.
- 212. Collins, M.W., Lovell, M.R., Iverson, G.L., Cantu, R.C., Maroon, J.C., Field, M.: Cumulative effects of concussion in high school athletes. Neurosurgery Vol 51 (5), pp 1175-1179, November, 2002.
- 213. Maroon, J.C.; Field, M.; Lovell, M.; Collins, M.; Bost, J.: The evaluation of athletes with cerebral concussion. Clin. Neurosurg. 49:319-32, 2002.
- 214. Maroon, J.C.: Current concepts in minimally invasive discectomy. Neurosurg. 51 (5 Suppl): 137-45, Nov. 2002.
- 215. Bejjani, G.K.; Cockerham, K.P.; Rothfus, W.E.; Maroon, J.C.; Maddock, M.: Treatment of failed adult chiari malformation decompression with CSF drainage: observations in six patients. Acta Neurochir (Wien). 145(2): 107-16, Feb. 2003.
- 216. Collins, M.W.; Field, M.; Lovell, M.R.; Iverson, G.; Johnstown, J.M.; Maroon, J.C.: Fu, F.H.: Headache following sports-related concussion: To play or not to play. American Journal of Sports Medicine, 31 (2):168-173, 2003.
- Lovell, M.R.; Collins, M.W.; Iverson, G.L.; Field, M.; Maroon, J.C.; Cantu, R.; Podell, K; Powell, J.W; Belza, M.; Fu, F.H.: Recovery from mild concussion in high school athletes. J. Neurosurg. 98(2): 296-301, Feb. 2003.
- 218. Collins, M.W.; Field, M.; Lovell, M.R.; Iverson, G.; Johnston, J.M.; Maroon, J.C.; Fu, F.H.: Relationship between post-concussion headache and neuropsychological test performance in high school athletes. Am. J. Sports Medicine, 31:168-173, 2003.
- 219. Field, M.; Collins, M.W.; Lovell, M.R.; Maroon, J.C.: Does age play a role in recovery from sports-related concussion? A comparison of high school and collegiate athletes. J. Pediatrics, 142(5):546-553, 2003.

- 220. Collins, M.W.; Iverson, G.L.; Lovell, M.R.; McKeag, D.B.; Norwig, J.; and Maroon, J.C.: On-field predictors of neuropsychological and symptom deficit following sports-related concussion. Clin. J. of Sports Med. 13: 222-229, 2003.
- 221. Abla, A.A.; El-Kadi, H; Bost, J; Maroon, J.C.; Wert, M.: Post-Laminectomy spondylolisthesis: surgical techniques. Contemporary Neurosurgery, Vo. 26, No. 24, December 2004.
- 222. Lovell, M.R.; Collins, M.W.; Stump, J.E.; Maroon, J.C., et al.: UPMC sports concussion program: progress and future directions. The Pittsburgh Ortho Jnl. Vol 15, 186-187, 2004.
- 223. Harrigal, C.; Branstetter, B.F.; Snyderman, C.H.; Maroon, J.C.: Teflon granuloma in the nasopharynx: A potentially false-positive PET/CT finding. AJNR Am J. Neuroradiol. 26(2):417-420, Feb. 2005.
- 224. Mihalik, J.P.; Stump, J.E.; Collins, M.W.; Lovell, M.R.; Field, M.; Maroon, J.C.: Posttraumatic migraine characteristics in athletes following sports-related concussion. J. Neurosurg. 102:850-855, May, 2005.
- 225. Maroon, J.C.: Skull base surgery: past, present, and future trends. Neurosurg. Focus 19 (1):E1, pp. 1-4, July 2005.
- 226. Abla, A.A.; El-Kadi, M.; Bost, J.; Maroon, J.C.; Wert, M.: Recurrent lumbar disc herniation: microsurgical approach. Contemporary Spine Surgery 6 (10), October 2005.
- 227. Abla A.A.; El-Kadi, Hikmat; Bost, J; Maroon, J.C.; Wert, M.; Abla, A: Degenerative changes above and below lumbar fusion. Contemporary Neurosurgery, Vol. 27, No. 24, December 2005.
- El-Kadi, M.; Abla, A.A.; Bost, J.; Maroon, J.C.: Complication and avoidance techniques in long-segment anterior cervical fusion: Part II. Contemporary Neurosurgery Vol. 28, No. 3, February15, 2006.
- 229. Abla, AA; El-Kadi, H.; Bost, J; Maroon, J.C.; Wert, M. and Abla, A.: Degenerative changes above and below lumbar fusion. Contemporary Spine Surgery, Vol 7, No. 2, February, 2006.
- 230. Collins, M; Lovell, M.R.; Iverson, G. L.; Ide, T; Maroon, J.C.: Examining concussion rates and return to play in high school football players wearing newer helmet technology: A three-year prospective cohort study. NEUROSURGERY, Vol. 58 (2): 275-286, Feb. 2006.

- 231. Lovell MR, Iverson GL, Collins MW, Podell K, Johnston KM, Pardini D, Pardini J, Norwig J, Maroon JD: Measurement of symptoms following sports-related concussion: Reliability and normative data for the post-concussion scale. Applied Neuropsychology, Vol 13 (3), 166-174, 2006.
- Maroon, J.C.; Bost, J.W.: Omega-3 fatty acids (fish oil) as an anti-inflammatory: an alternative to nonsteroidal anti-inflammatory drugs for discogenic pain. Surg. Neurol. 65, 326-331, May 2006.
- 233. Maroon JC, Bost JW, Borden MK, Lorenz KM, Ross NA: Natural anti-inflammatory agents for pain relief in athletes. Neurosurgical Focus 21 (4): E 1, October 2006
- 234. El-Kadi M, Abla AA, Bost J, Maroon JC: Complication and avoidance techniques in long-segment anterior cervical fusion. Cont Spine Surg Vol 7(12), December 2006.
- 235. El-Kadi M, Abla AA, Bost J, Maroon JC: Complication and avoidance techniques in long-segment anterior cervical fusion, Part II. Cont Spine Surg, Vol 8(1), January 2007.
- 236. Maroon JC, Gardner P, Abla AA, El-Kadi h, Bost J: "Golfer's stroke": golf-induced stroke from vertebral artery dissection. Surg Neurol 67 (2): 163-168, February 2007.
- 237. Maroon JC, El-Kadi H, Abla AA, Wecht DA, Bost J, Norwig J, Bream T: Cervical neurapraxia in elite athletes: evaluation and surgical treatment. J Neurosurg Spine, Vol. 6 (4): 356-363, April 2007.
- 238. Maroon JC: Not just for the heart, Advance for Healthy Aging, pp 73-76, May/June, 2007.
- 239. Maroon JC, Bost J: Nothing fishy about fish oil, Chiropractic Economics, Vol. 53(9), June 8, 2007.
- 240. Maroon JC: The Neurosurgeon in the Locker Room, Congress Quarterly, pp. 22-25, Summer 2007.
- 241. Maroon JC, Bost J: Spine injury in sports: understanding neurapraxia in athletes. Neurosurgical News, Univ. of Pittsburgh, Vol 8, No 4, p 5, Fall 2007.
- 242. Maroon JC: Snapshot of the world. Surg. Neurol 69(2), 216-217, Feb. 2008.
- 243. Yates A, Norwig J, Maroon JC, Bost J, Bradley JP, Duca M, Wecht DA, Grove R, Iso A, Cobb I, Ross N, Borden, M: Evaluation of lipid profiles and the use of omega-3 essential fatty acid in professional football players. Sports Health, Vol 1, No 1, 21-30, Jan/Feb

2009.

- 244. Maroon JC; El-Kadi M; Bost J: Pneumatic kerrison rongeur: a technical note. Surg Neurol., April 2009.
- 245. Maroon JC: Omega-3 EFAs a better choice for pain relief. Canadian Chiropractor, Vol 15(3), 18-20, May 2010.
- 246. Maroon JC: Triathlons for Stress Reduction. Congress Quarterly, Vol 11 (3), page 6, Summer 2010.
- 247. Maroon JC, Bost JW, Maroon A: Natural anti-inflammatory agents for pain relief. Surg Neurol Int, 1:30, Dec, 2010.
- 248. Maroon JC, Bost J: Concussion management at the NFL, college, high school and youth sports levels. Clin Neurosurg 58:51-6, January 2011.
- 249. Abla AA, Maroon JC, Lochhead R, Sonntag VK, Maroon A, Field M: Return to golf after spine surgery. J Neurosurg Spine, 14(1): 23-30, January 2011.
- 250. Marion DW, Curley KC, Schwab K, Hicks RR, mTBI Diagnostics Workgroup: Proceedings of the military mTBI Diagnostics Workshop, St. Pete Beach, August, 2010. J Neurotrauma 28(4):517-526, April 2011.
- 251. Mills JD, Bailes JE, Turner RC, Dodson SC, Sakai J, Maroon JC: Anabolic steroids and head injury. Neurosurgery, May 2011.
- 252. Blaylock RL, Maroon JC: Immunoexcitotoxicity as a central mechanism in chronic traumatic encephalopathy-a unifying hypothesis. Surg Neurol Int. July 30, 2011.
- 253. Maroon JC, Bost J: Concussion management at the NFL, college, high school and youth sports levels. Neurosurg, 69 Suppl Operative: 51-6, Sep 2011.
- 254. Maroon JC, Bost J, et al: TBI and neuro inflammation: a rationale for treatment. Journal of Healthcare, Science and the Humanities, Vol. 1(4):51-59, 2011. http://nmvaa.org/library/file/NMI/JHSHVol1No4Singles.pdf
- 255. Mills JD, Bailes JE, Turner RC, Dodson SC, Sakai J, Maroon JC: Anabolic steroids and head injury. Neurosurgery, Vol 70(1):205-210, January 2012.
- 256. Petraglia Al, Maroon JC, Bailes JE: From the field of play to the field of combat: A review of the pharmacological management of concussion. Neurosurgery, Jan 2012.

- 257. Koutourousiou M, Gardner PA, Stefko ST, Paluzzi A, Fernandez-Miranda JC, Snyderman CH, Maroon JC. Combined endoscopic endonasal transorbital approach with transconjunctival-medial orbitotomy for excisional biopsy of the optic nerve - technical note. J Neurol Surg Rep. 2012;73(01):052-056.
- 258. Maroon JC, LePere DB, Blaylock RL, Bost JW: Postconcussion syndrome: a review of pathophysiology and potential nonpharmacological approaches to treatment. The Physician and Sportsmedicine, Vol 40 (4), pp 73-87, November 2012.
- 259. Maroon JC, Bost JW, LePere DB, Bost SM, Williams L, Amos AS: Clinical evaluation of TruFUSE® lumbar facet fusion system. Surgical Science 4:166-175, February 2013 (online).
- 260. Dambinova SV, Sowell RL, Maroon JC: Gradual return to play: potential role of neurotoxicity biomarkers in assessment of concussions severity. J Mol Biomark Diagn S3: 003, 2013.
- 261. Maroon JC, Bost J, Austin A, Zuccoli G: Restricted Calorie Ketogenic Diet for the Treatment of Glioblastoma Multiforme, *J Child Neurol, Special Issue*, May 13 2013.
- 262. Maroon JC, Bost JW, Petraglia A et al: Outcomes After Anterior Cervical Discectomy and Fusion in Professional Athletes, Neurosurgery 73:103-112
- Kontos AP, Elbin RJ, Fazio-Sumrock VC, Burkhart S, Swindell H, Maroon J, Collins MW: Incidence of sports-related concussion among youth football players aged 8-12 years. J Pediatr, June 2013 (Epub ahead of print).
- 264. Maroon JC: Commentary: Reflections on a career in neurosurgery. Surg Neurol Int 2013, 4:89. Available online: http://www.surgicalneurologyint.com/text.asp?2013/4/1/9/114812
- 265. Maroon JC, Bost J: Guest Commentary: Largest ACDF series in professional athletes provides insight on return to play decisions. Spine Surgery Today, Vol. 1, No. 1, page 5, February 2014.
- 266. Maroon JC; Bost J: Commentary: Lumbar facet bone fusion presents alternative fusion method for stable degenerative grade I spondylolisthesis. Spine Surgery Today, January/February 2014.
- 267. Maroon JC: Cerebral concussion: a historical perspective. Prog Neurol Surg, Vol 28, pp 1-13, 2014.

- 268. Maroon, JC: The Evolution of Life and Career. Congress Quarterly, pp 16-17, Summer 2014.
- 269. Rousseau G, Bailes J, Maroon J (Guest Editors): Current Concepts in Sports Concussion. NEUROSURGERY October 2014 Supplement, pp S1-S155.
- Okonkwo DO, Tempel ZJ, Maroon JC: Sideline assessment tools for the evaluation of concussion in athletes: a review. NEUROSURGERY, 75:S82-S95, October 2014 Supplement. <u>www.neurosurgery-online.com</u>
- Paluzzi A, Gardner PA, Fernandez-Miranda JC, Tormenti MJ, Stefko ST, Snyderman CH, Maroon JC. "Round the clock" surgical access to the orbit. J Neurol Surg B. 2015 Feb; 76(1):12-24.
- 272. Maroon JC, Winkelman BS, Bost J, Austin A, Mathyssek C, Miele V: Chronic traumatic encephalopathy in contact sports: a systematic review of all reported pathological cases. In Press, PLOS ONE, Feb 2015.
- 273. Tempel ZJ, Bost JW, Norwig JA, Maroon JC: Significance of T12 hyperintensity on magnetic resonance imaging (MRI) following cervical cord injury and return to play in professional athletes. Neurosurgery 0:1–8, 2015 DOI: 10.1227/NEU.000000000000728
- 274. Maroon JC, Mathyssek CM, Bost JW, Amos A, Winkelman R, Yates AP, Duca MA and Norwig JA: Vitamin D profile in national football league players. Am J Sports Med. Published online February 3, 2015.
- 275. Maroon JC: Book Review: Handbook of neurological sports medicine concussion and other nervous system injuries in the athlete. Surgical Neurology International, Feb. 2015.
- 276. Maroon JC, Seyfried TN, Donohue JP, Bost J: The role of metabolic therapy in treating glioblastoma multiforme. Surg Neurol Int 2015;6:61. Available free in open access from: http://www.surgicalneurologyint.com/text.asp?2015/6/1/61/155259.
- 277. Mathyssek CM, Bost JW, Maroon JC: Vitamin D and muscle function and performance a perspective. Austin J Nutri Food Sci. 3(2), page 1064, June 8, 2015.
- 278. Tempel ZJ, Bost JW, Maroon JC: Contact sport athletes with persistent cervical cord MRI T2 hyperintensity following trauma may safely return to play. University of Pittsburgh Neurosurgery News, Vol 16(3), Summer 2015.
- 279. Lucke-Wold BP, Logsdon EF, Nguyen L, Eltanahay A, Turner RC, Bonasso P, Knotts C, Moeck A, Maroon JC, Bailes JE, Rosen CL: Supplements nutrition and alternative therapies for the treatment of traumatic brain injury, Nutritional Neuroscience, DOI:

<u>10.1080/1028415X.2016.1236174</u>. To link this article: http://dx.doi.org/10.1080/1028415X.2016.1236174

- 280. Mai HT, Burgmeier RJ, Mitchell SM, Hecht AC, Maroon JC, Nuber GW, Hus WK: Does the level of ervial disc herniation surgery affect performance-based outcomes in national football league athletes? Spine, 2016 Dec 1;41(23): 1785-1789.
- 281. Collins MW, Kontos AP, Okonkwo DO, et al: Statements of agreement from the Targeted Evaluation and Active Management (TEAM) Approaches to Treating Concussion Meeting Held in Pittsburgh, October 15-16, 2015. NEUROSURGERY, 0:1-18, 2016 Special Article, published ahead of print, DOI: 10.1227/NEU.000000000001447
- 282. Seyfried TN, Yu G, Maroon JC, D'Agostino DP: Press-pulse: a novel therapeutic strategy for the metabolic management of cancer. Nutrition & Metabolism (2017) 14:19. DOI: 10.1186/s12986-017-0178-2.
- 283. Maroon JC, Coury S, Coury C, Bost J: How are concussion severity and return to play determined? medicallawperspectives.com, Wordsworth Law Publications, Inc., NY, NY, August 2017.
- 284. Mai HT, Chun DS, Schneider AD, Hecht AC, Maroon JC, Hsu WK: The difference in clinical outcomes after anterior cervical fusion, disk replacement and foraminotomy in professional athletes. Clin Spine Surg 31(1): E80-E84, 2018.
- 285. Agoston Denes, Arun Peethambaran, Bellgowan Patrick, Broglio Steven, Cantu Robert, Cook David, da Silva Uade Olaghere, Dickstein Dara, Elder Gregory, Fudge Elizabeth, Gandy Sam, Gill Jessica, Glenn John F., Gupta Raj K., Hinds Sidney, Hoffman Stuart, Lattimore Theresa, Lin Alexander, Lu Kun Ping, Maroon Joseph, Okonkwo David, Perl Daniel, Robinson Meghan, Rosen Charles, and Smith Douglas: Military blast injury and chronic neurodegeneration: Research presentations from the 2015 International State-ofthe-Science Meeting. Journal of Neurotrauma.Sep 2017. Ahead of print http://doi.org/10.1089/neu.2017.5220
- 286. Ellenbogen RG: Batjer H, Cardenas J, et al: National Football League Head, Neck and Spine Committee's Concussion Diagnosis and Management Protocol: 2017-18 season. Br J Sports Med, Epub ahead of print. DOI: 10/1136/bjsports-2018-099203. March 16, 2018.
- 287. Moshayedi P, Thomas D, Rinaldo CR, Moossy JJ, Maroon JC: Subacute histopathological features in a case of varicella zoster virus myelitis and post-herpetic neuralgia. International Spinal Cord Society, <u>https://doi.org/10/1038/s41394-018-0068-5</u> April 4, 2018.

- 288. Maroon JC, Bost J: Review of the neurological benefits of phytocannabinoids. Surg Neurol Int 2018, 9.9.1. <u>http://surgicalneurologyint.com/Review-of-the-neurological-benefits-of-phytocannabinoids/</u>
- 289. McDowell M, Parry P, Miele V, Maroon J, Agarwal N: Long term delay in onset of prevertebral hematoma following anterior cervical discectomy and fusion: a case report. Journal of Clinical Neuroscience. DOI: https://doi.org/10.1016/j.jocn.2018.12.031

ABSTRACTS-

- 1. Leavitt, M.L., Yudofsky, S.C., Maroon, J.C.: Effects of chronic intraventricular propranolol infusion on shock-induced attack behavior in the rat. American Physiology Society, San Diego, California, October 12, 1987.
- 2. Leavitt, M.L., Yudofsky, S.C., Maroon, J.C.: Reduction of aggressive behavior by intrathecal infusion of propranolol in the rat. Research Day, The Medical College of Pennsylvania, Philadelphia, October 30, 1987.
- 3. Haag, E., Maroon, J.C., Lovell, M., Kelin, J.: the effects of cerebral concussion on high school football players. The 4th National Traumatic Brain Injury Symposium, The University of Maryland School of Medicine, Baltimore, Maryland, March 25, 1988.
- 4. Wilberger, J.E., Maroon, J.C., Prostko, E.R., Diamond, D.: Delayed post-traumatic cervical instability. The 4th Annual Meeting of the Joint Section on Disorders of the Spine and Peripheral Nerves, American Association of Neurosurgeons and Congress of Neurosurgeons. Phoenix, Arizona, February 16-20, 1988.
- 5. Sternau, L.L., Harris, M.E., Maroon, J.C., Lust, W.D.: CSF neurotransmitters as early predictors of outcome in head injury. The 6th Neurotrauma Symposium, Society of Neuroscience Annual Meeting, Toronto, Canada, 1988.
- 6. Leavitt, M.L., Yudofsky, S.C., Maroon, J.C., Riley, E.J., Vavitz, M.B.: Chronic intraventricular infusion of the beta-blocker nadolol reduces aggressive behavior. Fed. Amer. Soc. Exp. Biol. 2:A1566, 1988.
- 7. Leavitt, M.L., Yudofsky, S.C., Maroon, J.C., Happel, M.B., Riley, E.J.: Antiaggressive effect of central nadolol infusion. American Journal of Hypertension 1:17A, 1988.
- 8. Leavitt, M.L., Yudofsky, S.C., Maroon, J.C., Bavitz, M.B., Riley, E.J.: Continuous systemic administration of beta-blockers reduces aggressive behavior. J. Clin. Pharmacol. 28:932, 1988.

- 9. Leavitt, M.L., Maroon, J.C., Yudofsky, S.C., Riley, E.J., Bavitz, M.B.: Effects of chronic central versus peripheral infusion of a beta-blocker on aggression. Soc. Neuroscience 14:1011, 1988.
- Harris, M.E., Sternau, L.L., Maroon, J.C., Lust, W.D.: CSF neurotransmitter and early predictors of outcome in head injury. Poster-Second Prize. AANS, Washington, DC, April, 1989.
- 11. Leavitt, M.L., Maroon, J.C., Riley, E.J., Yudofsky, S.C.: Antiaggressive effect of buspirone in 6-hydroxydopamine-treated rats. FASEB Journal 3:A295, 1989.
- 12. Leavitt, M.L., Maroon, J.C., Price, T.R.P.: Effects of central versus subcutaneous infusion of buspirone on aggression. Physiologist 32:213, 1989.
- 13. Leavitt, M.L., Loesch, D.V., Maroon, J.C.: Intracranial pressure monitoring in spontaneously hypertensive rats. Society of Neuroscience 15:596, 1989.
- Leavitt, M.L., Bailes, J.E. Magovern, G., Kao, R., Elrifai, A.M., Teeple, E., Maroon, J.C., Shih, T.S., Marquardt, M.: Ultra-profound hypothermic cardiac arrest in total bloodsubstituted dogs. Cardiovascular Science and Technology: Basic and Applied I:116-118, 1989.
- Leavitt, M.L., Bailes, J.E., Elrifai, A.M., Teeple, E., Shih, T.S., Marquardt, M., Maroon, J.C.: Survival from prolonged cardiac arrest in totally exsanguinated hypothermic dogs. 74th Annual Meeting, FASEB, Washington, DC, April 1990.
- 16. Teeple, E., Bailes, J.E., Leavitt, M.L., Shih, T.S., Marquardt, M., Elrifai, A.M., Maroon, J.C.: Ultra-profound hypothermia, complete blood substitution, cardiac arrest and low flow perfusion in a dog model: A report. Annual Meeting, Society of Neurosurgical Anesthesia and Critical Care, Honolulu, Hawaii, March 1990.
- 17. Elrifai, A.M., Bailes, J.E., Leavitt, M.L., Shih, T.S., Teeple, E., Marquardt, M., Maroon, J.C.: The use of blood substitutes for whole body perfusion in ultra-profound hypothermic cardiac arrest. 92nd Meeting, Association of Clinical Scientists, Vancouver, British Columbia, May 1990.
- Leavitt, M.L., Bailes, J.E., Shih, T., Elrifai, A.M., Teeple, E., Hoffman, W.E., Maroon, J.C.: Outcome following cooling to near the freezing point in totally blood-substituted dogs. Soc. Neuroscience Abst. 16:740, 1990.
- 19. Leavitt, M.L., Loesch, D.B., Maroon, J.C.: Effect of intraventricular atrial natriuretic factor of intracranial pressure in the awake rat. Physiologist 33:A39, 1990.

- 20. Leavitt, M.L., Devenyi, C., Riley, J., Price, T.R.P., Maroon, J.C.: Test of the buspirone metabolite I-PP on induced aggressiveness in the rat. FASEB J 5(4):A487, 1991.
- Gianaris, P.G., Knepper, P., Maroon, J.C., Rumdna C., Bailes, J.E., McLone, D.: Embryonic spinal cord transplantation: an electrophoretic analysis of graft viable tissue. 7th Annual Meeting of the Joint Section of Disorders of the Spine and Peripheral Nerves, Rancho Mirage, California, February 14, 1991.
- 22. Gianaris, P., Bailes, J.E., Maroon, J.C.: CO₂ laser assisted embryonic spinal cord transplantation I. Lasers in Surgery and Medicine, Supplement 3, 31, 1991.
- 23. Bailes, J.E. and Maroon, J.C.: Preliminary experience with NeuroLink: A neurosurgical wide area network. Congress of Neurological surgeons, 44th Annual Meeting, Chicago, IL, October 1994.
- 24. Quigley, J.R., Bost, J., Maroon, J.C., Elrifai, A., and Panahandeh, J: Outcome following microdiscectomy. American Association of Neurological Surgeons 63rd Annual Meeting, Orlando, FL, April 1995.
- 25. Quigley, J., Cantella, D., Vidovich, D., Wilberger, J., and Maroon, J.C.: Simplified method of predicting the outcome following very severe head injury. American Association of Neurological surgeons 63rd Annual Meeting, Orlando, FL, April 1995.
- Leavitt, M.L., Acevedo, H.F., Acevedo, E.A, Krichevsky, A., Gorewit, R., and Maroon, J.C.: Brain glioma treatment by monoclonal antibodies to human chorionic gonadotropin. Society for Neurosciences 25th Annual Meeting, San Diego, California, November, 1995.
- 27. Collins MW, Field M, Maroon JC, Lovell MR, Bost J: The use of ImPACT to manage sports related concussion: Validity data and implications for return to play. Proceedings of the Congress of Neurological Surgeons Annual Meeting, 2003.
- 28. Bejjani GK, Maroon JC, Zabramski J, Barranco F, Smith K, Green B, Levi AD, Payner T, Guthikonda M, Bost J: Durasis: A Novel Dural Substitute. Results of a Multi-Center Study. North American Skull Base Society (NASBS), February, 2004, New Orleans, LA.
- 29. Gim S, Skledar SJ, Fedutes-Henderson B, Ansani N, Bost J, Maroon JC: Evaluating a Novel Use of Etanercept for Chronic Discogenic Pain. American Society of Hospital Pharmacists Midyear Clinical Meeting, December 4-9, 2004, Orlando, FL.
- 30. Abla AA, Bost J, El-Kadi H, Maroon JC, McHugh S, Abla A: Evaluation of Lumbar Fusion Extension Surgery. American Association of Neurological Surgeons Annual

Meeting, May 1-5, 2004, Orlando, FL.

- Abla AA, Bost J, El-Kadi H, Maroon JC, McHugh S, Abla A: Evaluation of Post-Lumbar Laminectomy Spondylolisthesis. American Association of Neurological Surgeons Annual Meeting, May 1-5, 2004, Orlando, FL.
- 32. Abla AA, Bost J, El-Kadi H, Maroon JC, McHugh S, Abla A: Outcome of Lumbar Spinal Fusion on the Elderly (75 year and older). American Association of Neurological Surgeons Annual Meeting, May 1-5, 2004, Orlando, FL.
 - 33. El-Kadi H, Abla AA, Bost J, Maroon JC, Kaushik D, Murty V, Mullen B: Outcome of Long Segment Cervical Fusion with a Rigid Fixed-angle Screw Plating System. American Association of Neurological Surgeons Annual Meeting, May 1-5, 2004, Orlando, FL.
 - 34. EL-Kadi H; Abla A; Bost J; Maroon JC; Kaushik D; Murty V, Mullen B: Pedicle screw fixation for mechanical low back pain. American Association of Neurological Surgeons Annual Meeting, May 1-5, 2004, Orlando, FL.
 - 35. Collins, MW, McClincey M, Lovell MR, Stump J, Lowe A, Maroon JC: Cognitive recovery patterns following sports-related concussion. British Journal of Sports Medicine, 38: 654-664, 2004.
 - Paluzzi A, Tormenti M, Koutourousiou M, Stefko S, Fernandez-Miranda JC, Gardner P, Snyderman CH, Maroon J: "Round the clock" surgical access to the orbit. Skull Base 22 (Suppl 1):51, Feb 2012.
 - Koutourousiou M, Stefko ST, Paluzzi A, Tormenti MJ, Fernandez-Miranda JC, Snyderman CH, Maroon J, Gardner PA: Combined endoscopic endonasal transorbital approach with transconjunctival-medial orbitotomy for excisional biopsy of the optic nerve-a technical note. Skull Base 22(Suppl 1):65, Feb 2012.
 - Paluzzi A, Koutourousiou M, Tormenti M, Fernandez-Miranda J, Snyderman C, Gardner P, Maroon JC: "Round the clock" surgical access to the orbit. J Neurol Surg B. 73(suppl 2): 133-4, June 2012.

NATIONAL AND INTERNATIONAL PRESENTATIONS and POSTERS

- 1. Maroon, J.C.: Surgery at the Base of the Skull. Basal Skull Surgery Symposium, San Francisco, California, April 5-7, 1984
- 2. Maroon, J.C.: Surgical Treatment of Orbital Tumors: Indications and Techniques. American Association of Neurological Surgeons, April 8-13, 1984,

- 3. Maroon, J.C.: Diagnosis and Management of Disc Disease. Monsour Medical Center, Pittsburgh, Pennsylvania, June 12, 1984.
- 4. Maroon, J.C.: Neurological Treatment for Fitness and Sports Injury. Congress of Neurological Surgeons Annual Meeting, New York, September 30 October 5, 1984.
- 5. Maroon, J.C.: Diagnosis and Treatment of Stroke. St. John=s Medical Center, Steubenville, Ohio, October 15, 1984.
- 6. Maroon, J.C.: Fractures: Common Sense Solutions for Common Problems. Cervical Spine Injuries Seminar, Station Square, Pittsburgh, Pennsylvania, November 14, 1984.
- Maroon, J.C.: Head and Neck Injuries in the Athlete. Fifth Annual Sports Medicine Seminar, Conemaugh Valley Memorial Hospital, Johnstown, Pennsylvania, March 6, 1995.
- 8. Maroon, J.C.: Orbital and Parasellar Tumors. Laser Association of Neurological Surgery International, Houston, Texas, March 28-31, 1985.
- 9. Maroon, J.C.: Orbital Approaches, Microsurgery Workshop, St. Louis, Missouri, April 18-1, 1985.
- 10. Maroon, J.C.: Head and Neck Injuries, Highland Sports Medicine Clinic, Highland High School, April 20, 1985.
- 11. Maroon, J.C.: Neurological Aspects of Sports Medicine. American Association of Neurological Surgeons Annual Meeting, Atlanta, Georgia, April 21-15, 1985.
- 12. Maroon, J.C.: Neurological Consequences of Sports Injuries. Regional Adolescent Trauma Meeting, Station Square, Pittsburgh, Pennsylvania, May 15, 1985.
- Maroon, J.C.: The Diagnosis and Treatment of Tumors of the Base of the Skull, Microsurgery in the Treatment of Ruptured Lumbar Discs and Syringomyelia. 35th Annual Meeting of the Congress of Neurological Surgeons, Honolulu, Hawaii, September 29 - October 4, 1985.
- 14. Maroon, J.C.: Indications for Surgery in Subarachnoid Hemorrhage. Beaver County Medical Society, November 16, 1985.
- 15. Maroon, J.C.: The Microsurgical and Percutaneous Treatment of Lumbar Disc Disease. Interurban Neurosurgical Society, Chicago, Illinois, March 7, 1986.

- 16. Maroon, J.C.: The Microsurgical and Percutaneous Treatment of Lumbar Disc Disease. Post-Graduate Course on Skeletal Radiology, Phoenix, Arizona, March 15-20, 1986.
- 17. Maroon, J.C.: The Neurosurgical Management of Cervical Disc Disease. Post-Graduate Course on Skeletal Radiology, Phoenix, Arizona, March 15-20, 1986.
- 18. Maroon, J.C.: Percutaneous Lumbar Discectomy. Annual Meeting o the American Association of Neurological Surgeons, Denver, Colorado, April 13-17, 1986.
- Maroon, J.C.: Intraoperative Cranial Neurosonography Correlative Imaging with CT and MRI, American Roentgen Ray Society, Scientific Program, XVIII, Washington, D.C., April 18, 1986.
- 20. Maroon, J.C.: Microsurgical and Percutaneous Removal of Lumbar Disc. Columbia University, May 21-22, 1986.
- Maroon, J.C.: New Approaches to Disc Disease Percutaneous Lumbar Discectomy. Congress of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, September 16, 1986.
- 22. Maroon, J.C.: Presidential Address. Congress of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, September 16, 1986.
- 23. Maroon, J.C.: The Neurosurgeon=s Role in Management of Orbital Tumors. Congress of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, September 18, 1986.
- 24. Maroon, J.C.: Surgical Treatment of Brain Tumors. Japanese Neurosurgical Society, Tokyo, Japan, October 1-4, 1986.
- 25. Maroon, J.C.: Percutaneous Automated Lumbar Discectomy. Japanese Neurosurgical Society, Tokyo, Japan, October 1-4, 1986.
- 26. Maroon, J.C.: Advanced Orbital Surgery: Techniques and practical Experience, Techniques of Transcranial Orbital Surgery. Allegheny General Hospital, Pittsburgh, Pennsylvania, October 24-25, 1986.
- 27. Maroon, J.C.: Athletic Sports Injuries. St. John=s Hospital, Steubenville, Ohio, November 17, 1986.
- 28. Maroon, J.C.: Neurosurgical Management of Craniocerebral and Spinal Cord Trauma, Second San Antonio International Symposium on Neuroanesthesia, San Antonio, Texas,

February 6, 1987.

- 29. Maroon, J.C.: Advanced Technology New Neurosurgical Techniques and Instrumentation. Second San Antonio International Symposium on Neuroanesthesia, San Antonio, Texas, February 6, 1987.
- 30. Maroon, J.C.: Advanced Neurosurgical Laser Course, Allegheny General Hospital, Pittsburgh, Pennsylvania, April 3-4, 1987.
- 31. Maroon, J.C.: Advanced Orbital Surgery Course, Techniques of Transcranial Orbital Surgery. Allegheny General Hospital, Pittsburgh, PA April 10-11, 1987.
- 32. Maroon, J.C.: New Techniques in the Treatment of Lumbar Disc Disease. Annual Meeting of the American Association of Neurological Surgeons, Dallas, Texas, May 4-6, 1987.
- 33. Maroon, J.C.: Automated Percutaneous Discectomy. Annual Meeting of the American Association of Neurological Surgeons, Dallas, Texas, May 4-6, 1987.
- 34. Maroon, J.C.: Effective Chronic Continuous Intraventricular Propranolol on Aggressive Behavior. Neurosurgical Society of America, Gleneden Beach, Oregon, May 13, 1987.
- 35. Maroon, J.C.: Percutaneous Discectomy Workshop, Allegheny General Hospital, Pittsburgh, Pennsylvania, May 16-17, 1987.
- 36. Maroon, J.C.: Automated Percutaneous Discectomy: Preliminary Experience. Eighth European Congress of Neurosurgery, Barcelona, Spain, September 6-11, 1987.
- 37. Maroon, J.C.: Surgical Approaches to the Orbit. 37th Annual Meeting of the Congress of Neurological Surgeons, Baltimore, Maryland, October 25, 1987.
- 38. Maroon, J.C.: Treatment Alternatives in Lumbar Disc Disease. 37th Annual Meeting of the Congress of Neurological Surgeons. Baltimore, Maryland, October 18, 1987.
- 39. Maroon, J.C.: Acute Head and Neck Injuries in Athletes. Post-Graduate Day in Family Practice, Wheeling Hospital, Wheeling, West Virginia, November 5, 1987.
- 40. Maroon, J.C.: Spinal Trauma: New Approaches to Therapy. The 6th Annual Trauma Symposium, The McLure House, Wheeling, West Virginia, November 12, 1987.
- 41. Maroon, J.C.: Athletic Head and Neck Injuries. The Emstar 6th Annual Trauma Symposium, Ohio Valley Medical Center, Wheeling, West Virginia November 14, 1987.

- 42. Maroon, J.C.: Percutaneous Aspiration of Herniated Lumbar Discs. Society of British Neurosurgeons, Oxford, England, April 13-15, 1988.
- 43. Maroon, J.C.: Positioning for Spinal Surgery. American Association of Neurological Surgeons Annual Meeting, Toronto, Canada, April 24-28, 1988.
- 44. Maroon, J.C.: Spinal Injuries in Athletes. American Association of Neurological Surgeons Annual Meeting, Toronto, Canada, April 24-28, 1988.
- 45. Maroon, J.C.: Techniques of Transcranial Orbital Surgery. Advanced Orbital Surgery Course, Allegheny General Hospital, Pittsburgh, Pennsylvania, May 13-14, 1988.
- 46. Maroon, J.C.: Management of Orbital Lesions. Neurosurgical Nurse=s Conference, San Francisco, California, June 2-3, 1988.
- 47. Maroon, J.C.: Percutaneous Automated Discectomy. Neurosurgical Nurse=s Conference, San Francisco, California, June 2-3, 1988.
- 48. Maroon, J.C.: Nucleotome Workshop for Percutaneous Discectomy. Korean Society of Neurological Surgeons, Seoul, Korea, June 17-24, 1988.
- 49. Maroon, J.C.: Surgical Treatment of Orbital Tumors. Korean Society of Neurological Surgeons, Seoul, Korea, June 17-24, 1988.
- 50. Maroon, J.C.: Anterior and Anterolateral Approaches to the Cranial Base, Panel Discussion. International Symposium on Cranial Base Surgery, Pittsburgh, Pennsylvania, September 13-17, 1988.
- 51. Maroon, J.C.: Orbital Tumors. International Symposium on Cranial Base Surgery, Pittsburgh, Pennsylvania, September 13-17, 1988.
- 52. Maroon, J.C.: Spinal Cord Injury and Regeneration. Congress of Neurological Surgeons Annual Meeting, Seattle, Washington, September 24-29, 1988.
- 53. Maroon, J.C.: Percutaneous Automated Discectomy. Congress of Neurological Surgeons Annual Meeting, Seattle, Washington, September 24-19, 1988.
- 54. Maroon, J.C.: Biomechanics of the Lumbar Spine. Congress of Neurological Surgeons Annual Meeting, Seattle, Washington, September 24-29, 1988.
- 55. Maroon, J.C.: New Approaches to Lumbar Disc Disease. Congress of Neurological Surgeons Annual Meeting, Seattle, Washington, September 24-29, 1988

- 56. Maroon, J.C.: Spinal Cord Injury and Regeneration An Overview of the Problem. Pittsburgh, Pennsylvania, November 9-11, 1988.
- 57. Maroon, J.C.: Lasers in Orbital Surgery. Latin American Congress of Neurological Surgeons, Acapulco, Mexico, November 13-19, 1988.
- 58. Maroon, J.C.: Percutaneous Discectomy. Latin American Congress of Neurological Surgeons, Acapulco, Mexico, November 13-19, 1988.
- 59. Maroon, J.C.: Results of Percutaneous Discectomy National Cooperative Study. American Association of Neurological Surgeons Annual Meeting, Washington, D.C., April 3-8, 1989.
- 60. Maroon, J.C.: The Microsurgical and Percutaneous Treatment of Herniated Lumbar Discs. American Neurological Society Meeting, Chicago, Illinois, April 15, 1989.
- 61. Maroon, J.C.: Development of a Robotically Controlled Operating Microscope. Neurosurgical Society of American Meeting, Bermuda, May 11, 1989.
- 62. Maroon, J.C.: Percutaneous Discectomy: Which Therapy, Which Patient. International Symposium on the State-of-the-Art of Percutaneous Lumbar Discectomy, Marbella, Spain, May 25, 1989.
- 63. Maroon, J.C.: Automated Percutaneous Lumbar Discectomy: The American Experience. International Symposium on the Sate-of-the-Art of Percutaneous Lumbar Discectomy, Marbella, Spain, May 25, 1989.
- Leavitt, M.L., Bailes, J.E., Magovern, G., Kao, R., Elrifai, A.M., Teeple, E., Maroon, J.C., Shih, T.S. and Marquardt, M.: Ultra-Profound Hypothermic Cardiac Arrest in Totally Blood-Substituted Dogs. Conference for Cardiovascular Science and Technology, Louisville, Kentucky, December 2, 1989.
- 65. Bailes, J.E., Leavitt, M.L., Maroon, J.C., Teeple, E., Shih, T.S., Elrifai, A. and Marquardt, M. Ultra-Profound Hypothermia and Blood Substitution. Lende Neurosurgical Conference, Snowbird, Utah, February 5, 1990.
- 66. Teeple, E., Bailes, J.E., Leavitt, M.L., Maroon, J.C., Shih, T.S., Marquardt, M. and Elrifai, A. Ultra-Profound Hypothermia, Complete Blood Substitution, Cardiac Arrest and Low-Flow Perfusion in a Dog Model. Society of Neurosurgical Anesthesia and Critical Care, Waikiki, Hawaii, March 14, 1990.
- 67. Maroon, J.C.: Diagnosis and Microsurgical Approach to Far Lateral Disc Herniation in

the Lumbar Spine. American Association of Neurological Surgeons Annual Meeting, Nashville, Tennessee, April 28, 1990.

- 68. Maroon, J.C.: The Management of Recurrent Spheno-Orbital Meningiomas. American Association of Neurological Surgeons Annual Meeting, Nashville, Tennessee, April 28, 1990.
- 69. Maroon, J.C.: Management of Lumbar Disc: Percutaneous Automated Discectomy. American Association of Neurological Surgeons Annual Meeting, Nashville, Tennessee, April 28, 1990.
- Bailes, J.E., Leavitt, M.L., Maroon, J.C., Teeple, E., Elrifai, A., Shih, T.S. and Marquardt, M., Potential for Ultra-Profound Hypothermia and Blood Substitution: A Model System. Symposium on Hypothermic Medicine, CRYO >90, Binghampton, New York, June 17, 1990.
- 71. Bailes, J.E., Leavitt, M.L., Elrifai, A.M., Shih, T.S., Teeple, E., Marquardt, M and Maroon, J.C.: The Use of Ultra-Profound Hypothermia in Totally Exsanguinated and Blood-Substituted Canine Model: I. The Method. CRYO >90, Binghampton, New York, June 18, 1990.
- 72. Elrifai, A.M., Bailes, J.E., Leavitt, M.L., Shih, T.S., Teeple, E., Marquardt, M. and Maroon, J.C.: The Use of Ultra-Profound Hypothermia in Totally Exsanguinated and Blood-Substituted Canine Model: II. The Outcome. CRYO >90, Binghampton, New York, June 18, 1990.
- 73. Elrifai, A.M., Loesch, D.V., Leavitt, M.L., Bailes, J.E., Shih, T.S., Maroon, J.C., Ciongoli, K.A. and Devenyi C.: Rewarming Rate and Survival Post Induced Ultra-Profound Hypothermia. Amer. Fed. Clin. Research Meeting, New York, New York, October 1990.
- 74. Leavitt, M.L., Bailes, J.E., Shih, T., Elrifai, A.M., Teeple, E. And Maroon, J.C.: Outcome Following Cooling to Hear the Freezing Point in Totally Blood-Substituted Dogs, Society for Neuroscience Meeting, St. Louis, Missouri, October 1990.
- 75. Bailes, J.E., Leavitt, M.L., Maroon, J.C., Teeple, E., Elrifai, A., Shih, T.S. and Marquardt, M.: Ultra-Profound Hypothermia and Asanguineous Blood-Sustained Cardiac Arrest in a Canine Model. Congress of Neurological Surgeons Annual Meeting, Los Angeles, California, October 20, 1990.
- 76. Maroon, J.C.: Current Techniques in Lumbar Disc Disease. Congress of Neurological Surgeons Annual Meeting, Los Angeles, California, October 20, 1990.

- 77. Maroon, J.C.: Microsurgery and the Professional Athlete. NFL PA Retired Players Convention, Oglebay, West Virginia, Mary 24, 1991.
- 78. Wilberger, J.E., Haag, B. and Maroon, J.C.: Cumulative Effects of Football Related Minor Head Injury. Congress of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, April 20-25, 1991.
- 79. Quigley, M.R. and Maroon, J.C.: The Relation of Survival to the Extent of Resection in Supratentorial Malignant Glioma Patients. Congress of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, April 20-25, 1991.
- 80. Leavitt, M.L., Loesch, D.V. and Maroon, J.C.: Poster #1137 Cerebrospinal Blood Pressure: Effects of Intracerebroventricular Infusions of Artificial CSF and Atrial Natriuretic Peptide in the Conscious Rat. Congress of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, April 20-25, 1991.
- 81. Quigley, M.R. and Maroon, J.C.: Poster #1237 The Role of Discography Prior t Automated Percutaneous Discectomy. Congress of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, April 20-25, 1991.
- Gianaris, P., Bailes, J.E. and Maroon, J.C.: Poster #1248 Successful Embryonic Transplantation is Distinct from Normal Developmental Neurobiology: An Electrophoretic Assay of Visible Graft Tissue. Congress of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, April 20-25, 1991.
- Quigley, M.R., Loesch, D.V., Shih, T.S., Marquardt, M. And Maroon, J.C.: Poster #1309
 Intracranial Cryosurgery in a Canine Model. American Association of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, April 20-25, 1991.
- Maroon, J.C.: Refinements of Techniques for Lumbar Disc Surgery. American Association of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, April 20-25, 1991.
- 85. Maroon, J.C.: Spectrum of Athletic Injury. American Association of Neurological Surgeons Annual Meeting, New Orleans, Louisiana, April 20-25, 1991.
- 86. Maroon, J.C.: Sports Injuries in Neurosurgery. Congress of Neurological Surgeons Annual Meeting, Orlando, Florida, October 1991.
- 87. Maroon, J.C.: The Diagnosis and Treatment of Surgical Lesions of the Visual System -Optic Nerve to Occipital Cortex. Special Course. Congress of Neurological Surgeons Annual Meeting, Orlando, Florida, October 1991.

- 88. Maroon, J.C.: Surgical Management of Recurrent Sphenoid Wing Meningiomas. IV Congresso Da Academia Brasileira de Neurocirurgia, Sao Paulo, Brazil, November 1991.
- 89. Maroon, J.C.: Surgical Approaches to the Orbit. IV Congresso Da Academia Brasileira de Neurocirurgia, Sao Paulo, Brazil, November 1991.
- 90. Maroon, J.C.: Percutaneous Discectomy--What=s New and What=s Coming. Greater Pittsburgh Rehabilitation Hospital, Monroeville, Pennsylvania, November 1991.
- 91. Maroon, J.C.: The Lumbar Disc. American Association of Neurological Surgeons Annual Meeting, San Francisco, California, April 1992.
- 92. Maroon, J.C.: Recent Trends in Spinal Surgery. The American College of Surgeons Annual Meeting, New Orleans, Louisiana, October 1992.
- 93. Maroon, J.C., Onik, G., Quigley, M.R., et. al: Cryosurgery Re-Visited for the Removal and Destruction of Brain, Spinal and Orbital Tumors. Congress of Neurological Surgeons Annual Meeting, Washington, DC, October 1992.
- 94. Ominous Prognostic Indicators Following Head Injury. Congress of Neurological Surgeons Annual Meeting, Washington, DC, October 1992.
- 95. Maroon, J.C.: Comprehensive Management of Lumbar Disc Disease. Congress of Neurological Surgeons Annual Meeting, Washington, DC, October 1992.
- 96. Maroon, J.C.: Cryosurgery in the Treatment of Brain, Spinal and Orbital Tumors. Neurosurgical Society of America Annual Meeting, Boca Raton, Florida, March 1993.
- 97. Maroon, J.C.: Tumors of the Orbit and Periorbital Region. American Association of Neurological Surgeons Annual Meeting, Boston, Massachusetts, April 1993.
- Maroon, J.C.: Cryosurgery in the Treatment of Brain, Spinal and Orbital Tumors. Poster Presentation. American Association of Neurological Surgeons Annual Meeting, Boston, Massachusetts, April 1993.
- 99. Maroon, J.C.: Surgical Management of Orbital Tumors Experience with 900 Cases. The 6th Japanese Society for Skull Base Surgery, Nagoya, Japan, June 30-July 1, 1994.
- Maroon, J.C.: Treatment of Lumbar Disc Disease, State-of-the-Art. American Association of Neurological Surgeons, Annual Meeting, San Diego, California, April 1994.

- Maroon, J.C.: Percutaneous Spine Techniques: Discography, APLD, and Laser. Congress of Neurological Surgeons 44th Annual Meeting, Chicago, Illinois, October 1994.
- 102. Maroon, J.C.: How to Evaluate a Practice Opportunity. Congress of Neurological Surgeons Annual Meeting, Chicago, Illinois, October 1994.
- 103. Maroon, J.C.: Percutaneous Lumbar Techniques. Congress of Neurological Surgeons Annual Meeting, Chicago, Illinois, October 1994.
- 104. Maroon, J.C.: The Management of Spine and Disc Disorders. St. John Medical Center Fall Seminar, Steubenville, Ohio, November 1994.
- 105. Maroon, J.C.: Surgical Management of Spheno-Orbital Meningiomas. Pan Pacific Skull Base Surgery Workshop, Island of Lanai, Hawaii, March 1995.
- 106. Maroon, J.C.: Dissection of Cranio-Orbital Approaches (Part I and II). Congress of Neurological Surgeons Annual Meeting, Chicago, Illinois, October 1994.
- 107. Maroon, J.C.: Change in Health Care and Impact on Neurosurgery. American Association of Neurological Surgeons Annual Meeting, Orlando, Florida, April 1995.
- 108. Maroon, J.C.: Treatment of Lumbar Disc Disease: State of the Art. American Association of Neurological Surgeons Annual Meeting, Orlando, Florida, April 1995.
- 109. Maroon, J.C.: Concepts of Minimally Invasive Surgery. Joint International Congress of Minimally Invasive Techniques in Neurosurgery and Otolaryngology, Pittsburgh, Pennsylvania, June 1995.
- 110. Maroon, J.C.: Indications and Operative Techniques for Percutaneous Discectomy and Microsurgical Discectomy. Joint International Congress of Minimally Invasive Techniques in Neurosurgery and Otolaryngology, Pittsburgh, Pennsylvania, June 1995.
- 111. Maroon, J.C.: Cerebral Monitoring Techniques and Lasers in Surgery. Joint International Congress of Minimally Invasive Techniques in Neurosurgery and Otolaryngology, Pittsburgh, Pennsylvania, June 1995.
- 112. Maroon, J.C.: Surgical Management of Cranio-Orbital Tumors. Joint International Congress of Minimally Invasive Techniques in Neurosurgery and Otolaryngology, Pittsburgh, Pennsylvania, June 1995.
- 113. Maroon, J.C.: How to Evaluate a Practice Opportunity. Congress of Neurological Surgeons Annual Meeting, San Francisco, California, October 1995.

- 114. Maroon, J.C.: Is there a Future for Percutaneous Intradiscal Therapy? Congress of Neurological Surgeons Annual Meeting, San Francisco, California, October 1995.
- 115. Maroon, J.C.: Orbital Tumors. Congress of Neurological Surgeons Annual Meeting, San Francisco, California, October 1995.
- 116. 6th Bangkok Neurosurgical Forum, Bangkok, Thailand, February 1996.
- 117. Maroon, J.C.: Introduction and Overview of Sports Related Concussion. Sports Related Concussion and CNS Injuries, Orlando, Florida, February, 1997.
- 118. Maroon, J.C.: Surgical Approaches to the Orbit. 18th Annual Meeting of the Egyptian Society of Neurological Surgeons. Cairo, Egypt, March 1997.
- 119. Maroon, J.C.: Minimally Invasive Treatment of Lumbar Disc Disease. 18th Annual Meeting of the Egyptian Society of Neurological Surgeons. Cairo, Egypt, March, 1997.
- 120. American Association of Neurological Surgeons 65th Annual Meeting, April, 1997.
- 121. Pennsylvania Athletic Trainer=s Association, May, 1997.
- 122. World Association of Lebanese Neurosurgeons, Beirut, Lebanon, July, 1997.
- 123. Maroon, J.C.: Cranio-orbital Surgery, Congress of Neurological Surgeons 47th Annual Meeting, New Orleans, Louisiana, September 1997.
- 124. Maroon, J.C.: Greast Expectations: The Joy of a Surgical Career, 83rd Clinical Congress of the American College of Surgeons, Chicago, Illinois, October 1997.
- 125. Maroon, J.C.: The Past, Present and Future of Neurosurgery. The American Academy of Pediatric Neurosurgery and The Pediatric Neurosurgical Fellowship Directors Annual Meeting, Pittsburgh, Pennsylvania, November, 1997.
- 126. Maroon, J.C.: Neurological Injuries and the Athlete. American Association of Neurological Surgeons 66th Annual Meeting, Philadelphia, Pennsylvania, April 1998.
- 127. Maroon, J.C.: Diagnosis and Management of Foraminal and Far Lateral Lumbar Disc Herniations. American Association of Neurological Surgeons 66th Annual Meeting, Philadelphia, Pennsylvania, April, 1998.
- 128. Maroon, J.C.: Inhibition of Postoperatie Peridural Fibrosis and Reduction of Fibrosis

Related Symptoms with a Bioresorbable Carboyhydrate Gel: Adcon7. American Association of Neurological Surgeons 66th Annual Meeting, Philadelphia, Pennsylvania, April 1998.

- 129. Maroon, J.C.: Microsurgical and Percutaenous Approaches to Lumbar Discs. XIX Course of Continued Education in Neurosurgery, Sao Paulo, Brazil, April, 1998.
- 130. Maroon, J.C.: Management of Head and Neck Injuries in Athletics. XIX Course of Continued Education in Neurosurgery, Sao Paulo, Brazil, April, 1998.
- 131. Maroon, J.C.: Management of Spheno-Orbital Meningiomas. XIX Course of Continued Education in Neurosurgery, Sao Paulo, Brazil, April, 1998.
- 132. Maroon, J.C.: The Management of Cerebral Concussion in Athletes, 51st Annual Meeting of the Neurosurgical Society of America, Quebec City, Quebec, Canada, May, 1998.
- 133. Maroon, J.C.: Concussions and Other Head Injuries. National Basketball Trainer=s Association Continuing Medical Education, Chicago, Illinois, June, 1998.
- Maroon, J.C.: Neuropsychological Testing of Professional Athletes. National Basketball Trainer's Association Continuing Medical Education, Chicago, Illinois, June, 1998.
- 135. Maroon, J.C.: Minimally Invasive Surgery for Lumbar Disc Disease. International Winter Congress on Minimally Invasive Techniques for Neurosurgery and Otolaryngology, Aspen, Colorado, March 24, 1999.
- 136. Maroon, J.C.: Healing and Spirituality: Patients I Have Met. Live Well with Cancer Programs at the Cancer Caring Center, Pittsburgh, PA, April 7, 1999.
- 137. Maroon, J.C.: Cerebral Concussion Management and Return to Play Decisions. American Association of Neurological Surgeons 67th Annual Meeting, New Orleans, LA, April 26, 1999.
- Maroon, J.C.: Cerebral Concussion on Athletes: Evaluation and Neuropsychological Testing. American Association of Neurological Surgeons 67th Annual Meeting, New Orleans, LA, April 27, 1999.
- 139. Maroon, J.C.: Head and Neck: The NFL C-Spine. Sports Medicine 1999: An NFL Perspective, Bal Harbour, FL, May 7-9, 1999.

- 140. Maroon, J.C.: the Diagnosis and Treatment of Head Injuries in Athletes. Congerss of Neurological Surgeons Annual Meeting, Boston, MA, October, 1999.
- 141. Maroon, J.C.: Management of the Injured Athlete. ImPACT--A New Neuropsychological Tool for Evaluating Concussion in Athletes. American Association of Neurological Surgeons 68th Annual Meeting, San Francisco, CA, April 8-13, 2000.
- 142. Maroon, J.C.: Minimally Invasive Surgery of the Spine. American Association of Neurological Surgeons 68th Annual Meeting, San Francisco, CA, April 8-13, 2000.
- 143. Maroon, J.C.: Faith and Healing. Calvary Baptist Church, Follansbee, WV, April 30, 2000.
- 144. Maroon, J.C.: Faith and Healing. Cancer Caring Center, Pittsburgh, PA, May 17, 2000.
- 145. Maroon, J.C.: Diagnosis and Treatment of Athletic Concussions: A New Approach. Samuel Francis School Law Symposium, Sports Law Update 2000, University of Pittsburgh Law School, Pittsburgh, PA June 13, 2000.
- Maroon, J.C.: Current Concepts in Minimally Invasive Discectomy: Percutaneous, Endoscopic, Laser and Microsurgical. First Interdisciplinary World Congress of Spinal Surgery. Berlin, German, August 2 –September 1, 2000.
- Maroon, J.C.: Cerebral Concussion in Athletes: Neuropsychological Evaluation and Testing. Congress of Neurological Surgeons Annual Meeting, San Antonio, TX, September, 2000.
- 148. Maroon, J.C.: Balance and a Surgical Career—an Oxymoron or Possibility. Clinical Congress of the American College of Surgeons, Chicago, IL, October 26, 2000.
- 149. Maroon, J.C.: Recent Advances in Brain Tumor Treatment. Ohio Cancer Research Annual Meeting, St. Clairsville, OH, March 30, 2001.
- 150. Maroon, J.C.: Overview of Minimally Invasive Techniques of Lumbar Discectomy: APLD, Chymopapain, Laser Discectomy, Microdiscectomy. American Association of Neurological Surgeons Annual Meeting, Toronto, Canada, April 21-26, 2001.
- 151. Maroon, J.C.: Sports Related Concussion: Evaluation and Neuropsychological Testing. American Association of Neurological Surgeons Annual Meeting, Toronto, Canada, April 21-26, 2001.
- 152. Field, M.; Abla, A.A.; Maroon, J.C.; Burke, J.P.; Bost, J.; Abla, A.; Abla, Ad.: Posterior

Occipitocervical Fusion in Adults. A long-term follow-up Study. American Association of Neurological Surgeons Annual Meeting, Toronto, Canada, April, 21-26, 2001.

- 153. Burke, J.P.; Abla, A.A.; Maroon, J.C.; Field, M.; Bost, J.; Abla, A.; Abla, Ad: Outcome Comparison of Synthes Cervical Spoine Locking Plate systems. American Association of Neurological Surgeons Annual Meeting, Toronto, Canada, April 21-26, 2001.
- 154. Burke, J.P.; Abla, A.A.; Maroon, J.C.; Field, M.; Bost, J.: Abla, A.: Abla, Ad.: Long Term Outcome of Lumbar Pedicle Screws. American Association of Neurological Surgeons Annual Meeting, Toronto, Canada, April 21-26, 2001.
- 155. Maroon, J.D.: The Management of Cervical Spine Injuries in the NFL. American Orthopedic Society of Sports Medicine, Phoenix, AZ, May 11-13, 2001.
- 156. Maroon, J.C.: ImPACT—Immediate Post Concussion Athletic Cognitive Testing. Neurosurgical Society of America Annual Meeting, Amelia Island, FL, June 8-10, 2001.
- 157. Maroon, J.C.: Basic Concepts, Definitions and guidelines: From the Laboratory to the Playing Field. New Developments in Sports Related Concussion Symposium, Pittsburgh, PA, July 27-29, 2001.
- 158. Maroon, J.C.: Neurosurgical Management of Athletic Injuries. Congress of Neurological Maroon, J.C.: Guidelines for Athletes with Concussion: What is the Evidence? Congress of Neurological Surgeons 51st Annual Meeting, San Diego, CA, September 29-October 4, 2001.
- 159. Maroon, J.C.; Gardner, P.; Levy, E.; Bejjani, G.K.: Golf Induced Stoke from Vertebral Artery Dissection. Poster Session, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, CA, September 29-October 4, 2001.
- 160. Greenspan, J.; Sypert, G.; Maroon, J.C., et al.: Retrospective Safety Evaluation of ADCON®-L for Inhibition of Postoperative Peridural Fibrosis Following Spinal Root Decompression. Poster Session, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, CA, September 29-October 4, 2001.
- 161. Maroon, J.C.; Sypert, G.; Bartie, G.; Moldawaer, T.; et al. Retrospective safety evaluation of ADCON-L® for inhibition of postoperative peridural fibrosis following spinal root decompression. American Association of Neurological Surgeons Annual Meeting, Chicago, IL, April 6-11, 2002.
- 162. Burke, J.; Abla, A.A.; Maroon, J.C., Bost, J.; et al: Salvage pedicle screws for post laminectomy spondylolisthesis and failed spinal fusion. American Association of Neurological Surgeons Annual Meeting, Chicago, IL, April 6-11, 2002.

- 163. Burke, J.; Abla, A.A.; Maroon, J.C.; Bost, J.; et al: Advances in postoperative management of lumbosacral pedicle screw fusion patients. American Association of Neurological Surgeons Annual Meeting, Chicago, IL, April 6- 11, 2002.
- 164. Burke, J; Abla, A.A., Maroon, J.C.; Relic, R.; et al: Long segment plating of the anterior cervical spine: radiographic and clinical outcome. American Association of Neurological Surgeons Annual Meeting, Chicago, IL, April 6 – 11, 2002.
- 165. Bejjani, G.K.; and Maroon, J.C.: Treatment of failed adult chiari malformation decompression with CSF drainage. American Association of Neurological Surgeons Annual Meeting, Chicago, IL, April 6-11, 2002.
- Maroon, J.C.: New and evolving technologies for minimally invasive surgery fo the lumbar disc. American Association of Neurological Surgeons Annual Meeting, Chicago, IL, April 6-11, 2002.
- 167. Maroon, J.C.: Challenges in identifying and treating sports injuries. The role of neuropsychological testing in athletes. American Association of Neurological Surgeons Annual Meeting, Chicago, IL, April 6-11, 2002.
- 168. Maroon, J.C.: Evaluation and management of head injuries in athletes. Neurosurgical Society of America, Kiawah Island, SC, April 21-24, 2002.
- 169. Maroon, J.C.: Management of the concussed professional athlete. New Developments in Sports-Related Concussion. Pittsburgh, PA, July 19-21, 2002.
- 170. Bejjani, G.K.; Maroon, J.S.; Bost, J; Eddy, K.; Heise, T.: Evaluation of a new dural substitute for adult arnold chiari malformation reconstruction. Congress of Neurological Surgeons Annual Meeting, Philadelphia, PA, September 21-26, 2002.
- 171. El-Kadi, M.; Maroon, J.C.; Abla, A.A.; Bost, J.W.; Marcello, L.; Relic, R.; Painter, D.; Gojkovich, C.: Prospective evaluation of VG2 [™] interbody fusion for patients with discogenic back pain. Congress of Neurological Surgeons Annual Meeting, Philadelphia, PA, September 21-26, 2002.
- 172. El-Kadi, M.; Maroon, J.C.; Abla, A.A.; Bost, J.W.; Marcello, L.; Relic, R.; Painter, D.; Gojkovich, C.: Revisiting fixed-angle screw rigid anterior cervical plate system. Congress of Neurological Surgeons Annual Meeting, Philadelphia, PA, September 21-26, 2002.
- 173. Maroon, J.C.: New Developments in concussion management: the Pittsburgh Steelers protocol. Congress of Neurological Surgeons Annual Meeting, Philadelphia, PA,

September 21-26, 2002.

- 174. Maroon, J.C.: Minimally invasive surgery of the spine. AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves, Tampa, FL, March 5-8, 2003.
- 175. Maroon, J.C.: Advances in minimally invasive techniques in lumbar spine surgery. Pennsylvania Neurosurgical Society, Mid-Atlantic Neurosurgical Society Annual Spring Meeting, Pittsburgh, PA, March 27-28, 2003.
- Maroon, J.C.: Challenges in identifying and treating sports injuries. American Association of Neurological Surgeons Annual Meeting, San Diego, CA, April 26-May 1, 2003.
- 177. Maroon, J.C.: The Fires Within The Role of Inflammation in Heart, Joint, and Brain Diseases. Wheeling Hospital, Wheeling, WV, April 28, 2004.
- Maroon, J.C.; Bost, J.: The Role of Essential Fatty Acids in Modification of Eiconsanoids in Discogenic Disease. American College of Nutrition, September 30-October 3, 2004, Long Beach, CA.
- 179. Maroon, J.C.: Sports Medicine in Neurosurgery. Congress of Neurological Surgeons Annual Meeting, October 16-21, 2004, San Francisco, CA.
- 180. Maroon, J.C.: Concussion. Senior Resident Course on Neurotrauma and Critical Care. February 26-27, 2005. University of Pittsburgh School of Medicine, Pittsburgh, PA.
- 181. Maroon, J.C.: Omega-3 JEFA, We Now Have the Facts. Nutrition and Health Meeting, Tucson, AZ, March 2005.
- 182. Maroon, J.C.: Neuropraxia—Spinal Stenosis—and Herniated Cervical Discs. Treatment Options and Return to Play Decision Making. AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix, Arizona, March 9 12, 2005.
- 183. Abla, A.A., El-Kadi, H.; Maroon, J.C., Bost, J., Marcello, L., Wert, M., Montgomery, A., Baughman, J., Strelec, L.: Prospective Evaluation of Composite Cortical and Cancellous Bone Graft for Anterior Cervical Fusion. American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, April 16-21, 2005.
- 184. Abla, A.A., El-Kadi, H.; Maroon, J.C., Bost, J., Marcello, L., Wert, M., Montgomery, A., Baughman, J., Strelec, L.: Evaluation of ENT-Assisted Anterior Cervical Approach for Spinal Fusion. American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, April 16-21, 2005.

- 185. Abla, A.A., El-Kadi, H.; Maroon, J.C., Bost, J., Marcello, L., Wert, M., Montgomery, A., Baughman, J., Strelec, L.: Surgical Techniques Minimizing Blood Loss in Posterior Pedicle Screw Lumbar Spine Fixation. American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, April 16-21, 2005.
- 186. Abla, A.A., El-Kadi, H.; Maroon, J.C., Bost, J., Marcello, L., Wert, M., Montgomery, A., Baughman, J., Strelec, L.: Operative Techniques to Reduce Instrumentation failure with Pedicle Screw Fusion. American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, April 16-21, 2005.
- 187. Maroon, J.C., Bost, J., Baughman, J., Wert, M.: Results of Omega-3 EFA for Spine Pain. American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, April 16-21, 2005. Received First Place Award for Poster Presentation.
- 188. El-Kadi, H., Abla, A.A., Maroon, J.C., Bost, J., Marcello, L., Kosovec, M., Mullen, B.: Complications in Long Segment Anterior Cervical Fusion, Experience in 100 Patients, Prognostic Factors in Elderly Patients with Long Segment Anterior Cervical Fusion. American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, April 16-21, 2005.
- 189. El-Kadi, H., Abla, A.A., Maroon, J.C., Bost, J., Marcello, L., Kosovec, M., Mullen, B.: Evaluation of Pedicle Screw Fixation for Mechanical Post-Laminectomy Pain Syndrome. American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, April 16-21, 2005.
- 190. Maroon, J.C.: Complex Cranio Orbital Tumors Lesions. American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, April 16-21, 2005.
- 191. Maroon, J.C.: Modulation of Inflammation and Immune Responses by Prostaglandins and Thromboxanes. The Institute for Functional Medicine 12th International Symposium, Palm Springs, CA, May 2005.
- 192. Maroon, J.C.: Omega-3 EFA for Spine Pain. ACAM Fall 2005 Conference, Anaheim, CA, November 9-13, 2005.
- 193. Maroon, J.C.: Cognitive Function in Physical Fitness—A Critical Interaction. Milken Institute Global Conference of Healthy Aging/Faster Cures. Santa Monica, CA, April 23, 2005.
- 194. Maroon, J.C.: The use of ImPACT-Sr. Milken Institute Global Conference of Healthy Aging/Faster Cures. Santa Monica, CA, April 23, 2005.
- 195. Maroon, J.C.: The History of Spine Surgery. American Association of Neurological

Surgeons Annual Meeting, San Francisco, CA, April 26, 2006.

- 196. Maroon, J.C.: Complex Crani-Orbital Tumors and Lesions. American Association of Neurological Surgeons Annual Meeting, San Francisco, CA, April 26, 2006.
- 197. Maroon JC: The New Genetic Science of Aging: Increasing the Quality and Length of Life, A4M Meeting, Chicago, IL, July 14-16, 2006.
- 198. Maroon JC: Omega-3 EFA's: Now we have the facts. Webinar, September 13, 2006.
- 199. Maroon JC: A Surgeon's Story--Successes, Failures and an Rx for a balanced life. American College of Surgeons Clinical Congress, Chicago, IL, October 9, 2006.
- 200. Maroon JC: Neurocognitive Testing in Athletic Cerebral Concussion. Congress of Neurological Surgeons Annual Meeting, Chicago, IL, October 9, 2006.
- 201. Maroon JC: Neurological injury and sports. Neurosurgery Grand Rounds, The Cleveland Clinic, Cleveland, OH, November 3, 2006.
- 202. Maroon JC: Sports medicine and neurosurgery: Recent advances in neurapraxia and cerebral concussion injuries. 9th Annual Innovations in Neuroscience Nursing, Cleveland, OH, November 3, 2006.
- 203. Maroon JC: Extending Life: The New Science of Aging How to Activate Longevity Genes and Increase Quality and Length of Life, 14 International Congress on Anti-Aging Medicine, Las Vegas, NV, December 7-10, 2006.
- Maroon JC: A Surgeon's Story—Successes, Failures and a Rx for a Balanced Life. 2007 Congress of Neurological Surgeons Annual Meeting, San Diego, CA, September 18, 2007.
- Maroon JC: Anterior vs. Posterior Approaches for Cervical Radiculopathy. 2007 Congress of Neurological Surgeons Annual Meeting, San Diego, CA, September 18, 2007.
- 206. Maroon JC: Cerebral Concussion and Neurapraxia in Sports—Current Management Perscpectives. 2nd Annual Neurotrauma Symposium, Barrows Neurological Institute, Phoenix, AZ, January 16-18, 2008.
- 207. Bost J, Maroon JC: The Wild West of Resveratrol and other Polyphenol Supplements: What to Recommend? A4M Meeting, Orlando, April 2008.
- 208. Maroon JC, Bost J: Extending Life: The New Science of Aging. How to Activate

Longevity Genes and Increase Quality and Length of Life. A4M Meeting, Orlando, April 2008.

- 209. Bost J, Maroon JC, The Wild West of Resveratrol and other Polyphenol Supplements: What to Recommend? A4M Meeting, Orlando, April 2008
- 210. Maroon JC, El Kadi M, Bost J: CervicCore® Disc Replacement vs. Fusion for Cervical Nerve Root Compression: One-Year Outcomes from Four Study Sites in a Prospective Randomized Controlled Trial, American Association of Neurological Surgeons Annual Meeting, Chicago, IL, April 26-May 1, 2008.
- 211. Maroon JC, Bost J: Cervicore ® Disc Replacement vs. Fusion for Cervical Nerve Root Compression: One-Year Outcomes form Four Study Sites in a Prospective Randomized Control Trial. Poster Presentation. Section on Disorders of the Spine and Peripheral Nerves. Congress of Neurological Surgeons Annual Meeting, Orlando, FL, Sept. 20-25, 2008.
- 212. Maroon JC: Making Sports Safer. Section on Neurotrauma and Critical Care Seminar-Injury Prevention: Neurosurgery and Public Health. Orlando, FL, September 23, 2008.
- 213. Maroon JC: Anterior vs. Posterior for Cervical Radiculopathy. Congress of Neurological Surgeons Annual Meeting, Orlando, FL, Sept. 20-25, 2008.
- 214. Bost J, Maroon JC: Omega-3 and Neurological Diseases, Conference on Anti-Inflammatory Medicine. Cancun, Mexico, November 15, 2008.
- 215. Maroon JC, Bost J: The Longevity Factor. A4M Meeting, Orlando, December 13, 2008.
- 216. Maroon JC: The Longevity Factor: How Resveratrol and Red Wine Activate Genes for a Longer and Healthier Life. Academy of Trial Lawyers of Allegheny County, Omni William Penn Hotel, April 22, 2009.
- 217. Maroon JC, Bost J: Human Longevity: A New Paradigm. A4M Meeting, Orlando, April 24, 2009.
- Maroon JC, Collins M: Management of the Concussion Patient: Subacute Management. Sixth Annual Sports-Related Conference on Concussion and Spine Injury. Boston, MA, May 1, 2009
- 219. Maroon, JC, Abla AA: Occupational Hazards: Dodging Bullets, Radiation and Disease. 77th Annual Meeting of the American Association of Neurological Surgeons, San Francisco, CA, May 2-6, 2009.

- 220. Maroon, JC: Living Longer and Healthier. UPMC Office of Graduate Medical Education, University Club, December 3, 2009.
- 221. Maroon JC: Cancer Prevention with Phytonutrients—Reviewing the Latest Research on Resveratrol, Omega-3, Green Tea, Curcumin, Genistein and Lycopene. A4M, Las Vegas, Nevada, December 11, 2009.
- 222. Maroon JC: Living Longer and Healthier. Grand Rounds, UPMC-St. Margaret's Hospital, December 17, 2009.
- 223. Bleicher AG, Pathak SK, Schneider WW, Lovell MR, Norwig J, Maroon JC: Documenting White Matter Damage in Sports Related Mild Traumatic Brain Injury with Diffusion and High Definition Fiber Tracking. American Society of Functional Neuroradiology Meeting, Las Vegas, NV, February 22, 2010.
- 224. Maroon JC: Advances in Concussion Management—From the NFL to Youth Sports. Department of Neurosurgery-UPMC Conference, March 17, 2010
- 225. Maroon JC: The Pathogenesis of CTE, NFL Guidelines for Preventing Concussions and Possible Therapeutic Interventions. Is Football Bad for the Brain? Forensic scientific, medical legal and societal aspects of the concussion debate. Institute of Forensic Science and Law, Duquesne University, March 12, 2010.
- 226. Maroon JC: How to Live Longer and Healthier Through Chemistry. Society of Analytical Chemists of Pittsburgh and Spectroscopy Society of Pittsburgh, Studies of Alzheimer's Dementia and Sports Related Effects of Concussions. Sewickley Academy, March 27, 2010.
- 227. Maroon JC, Bost J: Cancer Prevention with Phytonutrients: Reviewing the Latest Research on Resveratrol, Omega-3, Green Tea, Curcumin, Genistein and Lycopene. 18th Annual World Congress on Anti-Aging Medicine and Regenerative Biomedical Technologies, Marriott World Center, Orlando, FL, April 14-17, 2010.
- 228. Maroon JC: Orbital Tumors An Update. 4th World Congress of Endoscopic Surgery of the Brain, Skull Base and Spine. David L. Lawrence Convention Center, Pittsburgh, PA, April 28-30, 2010.
- 229. Maroon JC: The Longevity Factor. IFM 17th International Symposium on Confronting Cancer as a Chronic Disease. The LaCosta Resort and Spa, Carlsbad, CA, May 20-23, 2010
- 230. Maroon JC: New Developments in Sports Related Concussion. Latrobe Academy of Medicine, Colonial Inn, Ligonier, PA, May 26, 2010.

- 231. Maroon JC: How to Live Longer and Healthier, 37th Refresher Course in Family Medicine, Marriott Pittsburgh City Center, June 11, 2010.
- 232. Maroon JC: Evaluation and Treatment for mTBI—The NFL Model. Advanced Technology Applications for Combat Casualty Care 2010 (ATACCC 2010) Conference, TradeWinds Island Grand Resort, St. Petersburg, FL, August 16-19, 2010.
- 233. Maroon, JC: Evolution of Concussion Management at the NFL, College, High School and Youth Sports Levels: Overcoming Obstacles. Congress of Neurological Surgeons 2010 Annual Meeting, San Francisco, CA, October 16-21, 2010.
- 234. Maroon JC: Sports-Related Spinal and Peripheral Nerve Injuries, Luncheon Seminar Moderator, Congress of Neurological Surgeons 2010 Annual Meeting, San Francisco, CA, October 16-21, 2010.
- 235. Maroon JC: Development and Implementation of Neurocognitive Tests in TBI: High School to NFL. Congress of Neurological Surgeons 2010 Annual Meeting, San Francisco, CA, October 16-21, 2010.
- Maroon JC: Introduction of Michael Collins, Ph.D., Integra Foundation Lecture. Congress of Neurological Surgeons 2010 Annual Meeting, San Francisco, CA, October 16-21, 2010.
- 237. Maroon JC: Sports and Brain Injury: Controversies and Recommendations. Brain and Spine Symposium, Hallandale Beach, FL, November 5-6, 2010.
- 238. Maroon JC: The New Science of Epigenetics: How to Live Healthier and Longer. Brain and Spine Symposium, Hallandale Beach, FL, November 5-6, 2010.
- 239. Maroon JC: Epigenetics and the Effect of Resveratrol on the Aging Brain. American Museum of Natural History, New York, NY, February 16, 2011.
- 240. Maroon JC: Cancer Prevention and Phytonutrients. Integrative Health Symposium, New York Hilton, New York. March 5-6, 2011.
- 241. Maroon JC: Epigenetics and Longevity—How to live a long, healthy and balanced life. American Association of Neurological Surgeons Annual Meeting, Denver, CO. April 9 – 13, 2011.
- 242. Maroon JC: Advances in Concussion Management in Athletics. CECANOT, Santo Domingo, Dominican Republic, April 14 16, 2011.

- 243. Maroon JC: How to Live Longer and Healthier Through Gene Activation—The New Science of Epigenetics. CECANOT, Santo Domingo, Dominican Republic, April 14 16, 2011.
- 244. Maroon JC: Concussion Management: Current Advances in the NFL and WWE. American Osteopathic Academy of Sports Medicine (AOASM), Providence, RI. April 27-29, 2011.
- 245. Maroon, JC: TBI and Neuroinflammation: A Rationale for Treatment. 2nd Annual Navy Medicine Research Conference Connecting wounded Warriors to Advanced Diagnostic and Therapeutic Options. Uniformed Services University of the Health Sciences, Bethesda, MD. June 4-7, 2011.
- 246. Maroon JC: Head injuries: NFL concussions and beyond. Jacob Schwinn Study Club, Stratford Spring, WV, October 25, 2011.
- 247. Maroon JC, Bost J: The Metabolic Treatment of Cancer. 19th Annual World Congress on Anti-Aging Medicine and Biomedical Technologies. Las Vegas, NV, December 9, 2011.
- 248. Maroon JC: The Restricted Ketogenic Diet—A New Treatment Option for Malignant Gliomas?" Neuroscience Conference, University of Pittsburgh Medical Center, Pittsburgh, PA, February 2, 2012.
- 249. Koutourousiou M, Stefko ST, Paluzzi A, Tormenti MJ, Fernandez-Miranda JC, Snyderman CH, Maroon JC, Gardner PA: Combined endoscopic endonasal transorbital approach with transconjunctival-medial orbitotomy for excisional biopsy of the optic nerve-a technical note. North American Skull Base Society 22nd Annual Meeting, Las Vegas, NV, February 17-19, 2012.
- 250. Maroon JC: The Restricted Ketogenic Diet—A New Treatment Option for Malignant Gliomas?" UPMC Presbyterian Shadyside Tumor Conference, University of Pittsburgh Medical Center, Shadyside Hospital, Pittsburgh, PA, February 29, 2012.
- 251. Maroon JC: Immunoexcitotoxicity in Post Concussion Syndrome, PTSD, Chronic Traumatic Encephalopathy: A Unifying Hypothesis and a Rationale for Treatment. Posttraumatic Stress Disorder and Traumatic Brain Injury Clinical Consortium, Hyatt Dulles, Herndon, VA, May 24, 2012.
- 252. Maroon JC: Concussion Awareness at the Professional Athlete Level. Advances in the Prevention and Management of Sports-Related Concussion. First Annual Conference Brain Health Education and Research Institute, Bethesda, MD, June 8-9, 2012.

- 253. Maroon JC: The Longevity Factor Pre-Conference Workshop. The 6th Annual Anti-Ageing and Aesthetic Medicine Conference, Melbourne, Australia, August 17-19, 2012.
- 254. Maroon JC: Concussion Management: Alternative Approach to Brain Recovery and Treatment. The 6th Annual Anti-Ageing and Aesthetic Medicine Conference, Melbourne, Australia, August 17-19, 2012.
- 255. Maroon JC: Cancer Prevention with Phytonutrients: Reviewing the Latest Research on Resveratrol, Omega 3, Green Tea, Curcumin and Lycopene. The 6th Annual Anti-Ageing and Aesthetic Medicine Conference, Melbourne, Australia, August 17-19, 2012.
- 256. Maroon JC: Life, Longevity and The New Science of Genetic Activation. The Washington Hospital Women's Day, Southpointe Golf Club, Canonsburg, PA, August 27, 2012.
- 257. Maroon, JC: The Secrets of Longevity. Comprehensive Medical Update, Cambria-Somerset Council for Education of Health Professionals, Inc., Seven Springs Mountain Resort, Champion, PA, September 14, 2012.
- 258. Maroon JC: Secrets of Longevity. RN Lecture Series, UPMC Passavant, Pittsburgh, PA, September 15, 2012.
- 259. Maroon JC: The Restricted Ketogenic Diet for the Treatment of Malignant Gliomas. Third International Symposium: Dietary Therapies for Epilepsy and other Neurologic Disorders, Hilton Chicago Indiana Lakes Resort, September 19-22, 2012.
- 260. Maroon JC, El-Kadi H, Bost JW, et al: Clinical evaluation of TruFUSE® lumbar facet fusion system. Congress of Neurological Surgeons Annual Meeting Poster Session, Chicago, IL, October, 2012.
- 261. Maroon JC, El-Kadi H, Bost JW, et al: Lumbar fusion with allograft clinical outcome in different age groups. Congress of Neurological Surgeons Annual Meeting Poster Session, Chicago, IL, October, 2012.
- 262. Maroon JC, Bost JW, et al: Outcomes following ACDF in professional athletes. Congress of Neurological Surgeons Annual Meeting Poster Session, Chicago, IL, October, 2012.
- 260. Maroon JC: Immunoexcitotoxicity and chronic traumatic encephalopathy. Outside Counsel Conference. Herberman Conference Center, Pittsburgh, PA, November 14, 2012.
- 261. Maroon JC: Head injury, rehabilitation program (NFL). The Dan Marisi Memorial

Lecture, International Council of Motor Sport Sciences Annual Congress, Orlando Convention Center, Orlando, FL, November 28, 2012.

- 262. Maroon JC: Evolution of spinal minimally invasive surgery. 6th Minimally Invasive Spinal Surgery and Navigation: Hands-on Symposium, Weill Cornell Medical College, New York, NY, November 29, 2012.
- 263. Maroon JC: Concussion Update—Lessons from the NFL: Present and Future Developments. Symposium on Mild Head Injury, Concussion and Return to Activities: update 2013, The University of Chicago Medicine and Biological Sciences, Chicago, IL, January 25, 2013.
- 264. Maroon JC: Concussions and Sports—Diagnosis, Testing and Post-Concussion Assessment. ProAssurance Defense Counsel Meeting, Miami, FL, March 20, 2013.
- 265. Maroon JC: Concussion Update Immunoexcitotoxicity the Common Etiology of PCS, CTE and PTSD. Symposium 2013 The Cranio-Cervical Syndrome. The Millennium Broadway Hotel, New York, NY, April 6, 2013.
- 266. Maroon JC: Neurological Issues in Retired NFL Players. The Health, Body and Mind Screening Event, The Pittsburgh Steelers and The NFL Player Care Foundation, UPMC Southside Training Complex, Pittsburgh, Pennsylvania, June 1, 2013.
- 267. Maroon JC: Chronic Traumatic Encephalopathy (CTE): What Do We Know and What Are We Learning? Emerging Frontiers in Concussion. UPMC Center for Sports Medicine, Pittsburgh, Pennsylvania, June 7-9, 2013.
- 268. Maroon JC, Bost JW, Winkelman R, Amos A, Mathyssek C: Chronic Traumatic Encephalopathy (CTE): What Do We Know and What Are We Learning? (Poster Session). Emerging Frontiers in Concussion. UPMC Center for Sports Medicine, Pittsburgh, Pennsylvania, June 7-9, 2013.
- 269. Maroon JC: How to Activate Your Genes to Live Longer and Healthier. Women's Health Conversations. Consol Energy Center, Pittsburgh, PA. September 12, 2013.
- 270. Maroon JC: Evolution of Sports Concussion Management, Diagnosis and Treatment.The Kansas City Neurology/Neurosurgery Society, Kansas City, MO, November 7, 2013.
- 271. Maroon JC: PTSD and CTE: Clinical Features and Pathogenesis. Life. Extend It. PATH Foundation New York, Canoe Studios, New York, NY, March 21, 2014.
- 272. Maroon JC: Update on a handheld brain hematoma detector project. The 4th Annual

Traumatic Brain Injury Conference, Washington, DC, April 16-17, 2014.

- 273. Maroon JC: Can Alzheimer's Disease be Prevented? Understanding Newly Identified Risk Factors with Alzheimer's Disease. 2014 Walter Allen Lecture Series, Hill House Kaufman Center, Pittsburgh, PA, October 16, 2014.
- 290. Maroon JC: From Kona to Kilimanjaro A Metaphor for Neurosurgery. General Scientific Session 1, Congress of Neurological Surgeons Annual Meeting, Boston, MA, October 18 22, 2014.
- 291. Maroon JC, Bost J, Winkelman R, Amos A, Mathyssek C: A Meta-Analysis of the Prevalence and Risk Factors Associated with Chronic Traumatic Encephalopathy. Poster Session. Congress of Neurological Surgeons Annual Meeting, Boston, MA, October 18 – 22, 2014.
- 292. Maroon JC: Live Long and Prosper How to Activate your Genes to Live Longer and Healthier. Women's Health Conversations. The Westin Convention Center. November 6, 2014.
- 293. Maroon JC, Nowinski, C: Should Organized, Full-contact Football be Prohibited for Minors? Seventh Marcella L. Finegold Memorial Public Debate, University of Pittsburgh, November 7, 2014.
- 294. Maroon JC: Nutritional & Medical Applications for Cannabidiol. 22nd Annual World Congress on Anti-aging Medicine. Venetian/Palazzo Hotel, Las Vegas, NV, December 11-13, 2014.
- 295. Maroon JC: The Evolution of Sports Concussion Management, Diagnosis and Treatment. Anesthesia Grand Rounds, LHAS Auditorium Montefiore Hospital, December 18, 2014.
- 296. Maroon JC, Yates A, Duca M, Bradley J, Gyslund S, Bost J: Evolution of T2 Hyperintensity on MRI Following Spinal Cord Injury in Professional Athletes. NFL Physicians Society Annual Scientific Meeting, New York, NY, 2/19/15.
- 297. Maroon JC: Concussions, PTSD, CTE and Unifying Etiology Neuroimaging Treatment. Naval Special Warfare (NSW) Resilience Program, NSW Base Coronado, San Diego, CA March 13, 2015.
- 298. Maroon JC: Secrets of Brain Plasticity and Longevity. Naval Special Warfare (NSW) Resilience Program, NSW Base Coronado, San Diego, CA March 13, 2015.
- 299. Maroon JC: Brain Plasticity and Longevity—The New Science of Epigenetics: A Proven 70

Formula for Balancing One's Work, Family/Social, Physical and Spiritual Life. Southwestern Nursing Leadership Event, Diamond Run Golf Club, Sewickley, PA April 23, 2015.

- 300. Maroon JC: Concussion, Use of ImPACT. 2015 Think First Conference on Injury Prevention. Hyatt Regency Washington on Capitol Hill, Washington, DC, May 2, 2015.
- Maroon JC: Neurosurgeon Team Physician. Practical Clinic 031. 83rd Annual AANS Scientific Meeting. Walter E. Washington Convention Center, Washington, DC, May 2, 2015.
- 302. Tempel Z, Bost J, Norwig J and Maroon JC: Evolution of T2 hyperintensity on Magnetic Resonance Imaging (MRI) Following Spinal Cord Injury in Professional Athletes. 83rd Annual AANS Scientific Meeting. Walter E. Washington Convention Center, Washington, DC, May 6, 2015.
- 303. El-Kadi M, Maroon JC: The Effect of AGA, Age and Obesity on Hospital State in Lumbar Pedicle Screw Fixation. Poster Pressentation at the 83rd Annual AANS Scientific Meeting. Walter E. Washington Convention Center, Washington, DC, May 2-6, 2015.
- 304. Maroon JC: Secrets of Brain Plasticity and Longevity. Naval Special Warfare Resilience Program, SEAL Heritage Center, Joint Expeditionary Base Little Creek, Virginia Beach, Virginia, June 4, 2015.
- 305. Maroon JC: NFL Perspective on the relationship between head trauma and CTE, Blast Injury Research Program, Department of Defense, Booz Allen Research Center, McLean, VA, November 4, 2015.
- 306. Maroon JC and Bost J: A New Safety Paradigm for Youth Football: Pediatric Neurocognitive Testing, Impact Sensors and Telemedicine. 23rd Annual World Congress on Anti-aging Medicine, The Venetian Las Vegas, December 11, 2015.
- Maroon JC: Concussions and Chronic Traumatic Encephalopathy: Past, Present and Future. Yasargil Lectureship, University of Arkansas Medical Science, Department of Neurosurgery, January 29, 2016.
- 308. Maroon JC: Disc Herniations in Athletes: When to Fuse. 32nd Annual Meeting of the Section on Disorders of the Spine and Peripheral Nerves, Loews Royal Pacific Resort, Orlando, FL, March 16-19, 2016.

- 309. Maroon JC: Concussions and CTE Past, Present and Fugure. Inaugural Inova Capital City Sports Medicine Summit, Nationals Park, Washington, DC, May 5-6, 2016.
- 310. Maroon JC: Secrets of Longevity and Epigenetics: How to Live Healthier and Longer. Keynote Speaker, Inaugural Inova Capital City Sports Medicine Summit, Nationals Park, Washington, DC, May 5-6, 2016.
- 311. Maroon JC: Sequela of Concussion: Endocrine, Neurocognitive and Somatic. PATH Foundation NY Conference, Cano Studios, New York, NY, May 13-14, 2016.
- 312. Maroon JC: The Issue of Chronic Traumatic Encephalopathy (CTE). Moderator, Emerging Frontiers in Concussion Session 5, Renaissance Hotel, Pittsburgh, PA, June 11-12, 2016.
- 313. Maroon JC: Planning for your Future. Congress of Neurological Surgeons Annual Meeting, San Diego, CA, September 24-28, 2016.
- 314. Maroon JC: Finding Balance in Your Life. St. Barnabas Leadership Conference, St. Barnabas Health System, Pittsburgh, PA, September 30, 2016
- 315. Maroon JC: Beaver Meadows Brain Health Seminar, St. Barnabas Beaver Meadows, Beaver, PA, November 3, 2016.
- 316. Maroon JC: Cannabidiol (CBD): Review of Recent Clinical Studies and Applications for Weight loss, Diabetes and Neurological Conditions. 24th Annual World Congress on Anti-Aging Medicine, Las Vegas, NV, December 9 -11, 2016.
- 317. Maroon JC: Square One A Simple Guide to a Balanced Life. Garden of Life National Sales Meeting, West Palm Beach, FL, January 30, 2017.
- 318. Maroon JC: Square One A Simple Guide to a Balanced Life. Atrium-Professional Brands National Sales Meeting, Pittsburgh, PA February 2, 2017.
- 319. Mark Duca, MD, Joseph C. Maroon, MD, Christina Mathyssek PhD, Jeff Bost PAC, Anthony Yates, MD, John Norwig, M.ed., ATC, Sonia Gysland, ATC, Vitamin D Profile in NFL 2015 Combine Athletes, 2017 NFL Combine, Indianapolis, IN, March 2, 2017.
- 320. Maroon JC: Current status of cannabidiol (CBD) as an anti-inflammatory, analgesic and anxiolytic. Pennsylvania Orthopedic Society Meeting, Erie, PA, May 11-12, 2017.
- 321. Maroon JC: Better brain health following a concussion. Concussion Health Summit, Columbus, OH, July 29, 2017.
- 322. Maroon JC: Master of Ceremony, Tripping Over the Truth, Nourishing Your Body, While Starving Cancer to Death. Maritime Conference Center, Baltimore, MD November 3-5 2017.

- 323. Maroon JC: Cannabidiol (CBD) Potential Therapeutic Use in Athletes." National Football League Combine, Indianapolis, IN, March 1, 2018.
- 324. Maroon JC: Improving Cognition, Memory and Energy Utilizing Omega-3s. American Academy of Anti-Aging Medicine Spring Meeting, Hollywood, FL, April 13-14, 2018.
- 325. Maroon JC: Concussion and CTE: Past, Present and Future. Frontiers in Primary Care Conference, Casper, WY, April 10-21, 2018.
- 326. Maroon JC: "Burnout to Wellness": A Guide to a Balanced Life. Frontiers in Primary Care Conference, Casper, WY, April 19-21, 2018.
- 327. Maroon JC: From Icarus to Aequanimitas: Surviving Burnout. Walter Reed National Military Medical Center, Department of Neurosurgery, Bethesda, MD, June 4, 2018.
- 328. Maroon JC: From Burn Out to Wellness: Epigenetics, The Connectome and Neuroplasticity. Pennsylvania Neurosurgical Society Annual Meeting, Hershey, PA, July 20-22, 2018.
- 329. Maroon JC: Reflection on a Career in Sports Medicine. Keynote address, Midwest Spine Symposium, The Cleveland Clinic, Cleveland, OH, September 21-22, 2018.
- 330. Maroon JC: Burnout, Litigation stress, Death & Near Death: A Personal Account. Midwest Spine Symposium, The Cleveland Clinic, Cleveland, OH, September 21-22-2018.
- Maroon JC: The Secret to Work/Life Balance: Burnout to Wellness. 2019 Physician Wellbeing Seminar, University of Pittsburgh Medical Center, Herberman Conference Center, January 25, 2019.
- 332. Maroon JC: The Secret of Work/Life Balance in Neurosurgery: From Burnout to Wellness. Interurban Neurosurgical Society 2019 Annual Meeting, Chicago, IL, March 1, 2019.

VISITING PROFESSOR

- 1. University of Cincinnati, March 27-18, 1984, Diagnosis and Treatment of Pituitary Tumors.
- 2. Indiana University and Indiana State Medical Association, October 19-24, 1984, Surgical Approaches to the Orbit.
- 3. Harvard University, November 5-9, 1984, Optic Nerve and Sports Medicine.
- 4. Northwestern University April 4-5, 1985, Treatment of Orbital and Parasellar Tumors.

- 5. Cleveland Clinic, November 14-15, 1985, Surgical Approaches to the Orbit.
- 6. University of Cincinnati, January 8-10, 1986, Percutaneous Lumbar Discectomy.
- 7. Dartmouth University, December 12, 1986, Percutaneous Discectomy.
- 8. West Virginia University, December 11, 1987, Treatment of Cervical and Lumbar Spine Disorders.
- 9. Medical College of Pennsylvania, December 15, 1987, Microsurgical and Percutaneous Approaches to Herniated Lumbar Discs.
- 10. Wayne State University, May 1990, Treatment of Cervical and Lumbar Spine Disorders.
- 11. University of Pittsburgh Medical Center, December 1995.
- 12. Stanford University Medical Center, January 15, 1998, Surgical Approaches to Orbital Tumors.
- 13. University of Miami Medical Center, January 14-15, 1999, Minimally Invasive Surgery of the Spine, Orbital Surgery by the Neurosurgeon, Balance and the Neurosurgeon: Attainable or an Oxymoron?
- 14. University of Indiana, March 13-14, 1999, Head Injuries in Athletes Evaluation and Neuropsychological Testing.
- 15. Hebrew University Medical School, Jerusalem, March 12-17, 2000, Minimally Invasive Surgery of the Spine.
- 16. Celebration Hospital, Celebration, FL., September 27, 2002: "Balance in a Physician's Life."
- 17. University at Buffalo Neurosurgery, Buffalo, NY, November 19, 2004: "The Role of Neurocognitive Testing in Athletic Cerebral Concussion."
- 18. Stanford University Medical Center, Palo Alto, CA, February 4, 2005: "Neurocognitive Testing in Athletes with Concussion (MTBI). A New Standard of Care.
- 19. Stanford University Medical Center, Palo Alto, CA, February 4, 2005. "The Role of Inflammation in Intervertebral Disc Disease."
- 20. Fifth Annual G. Robert Nugent Lectureship, West Virginia University School of Medicine, May 7, 2005. "A Neurosurgeon's Journal: Successes, Failures and Lessons

(Hopefully) Learned.

- 21. Weill-Cornell Medical Center, New York, NY, November 26, 2007. "A Neurosurgeon's Life: Success, Failure and a Prescription for a Balanced Life".
- 22. University of Illinois, Chicago, IL, January 12, 2008. "A Surgeon's Story: Successes, Failures and a Prescription for a Balanced Life.
- 23. Barrows Neurological Institute, Phoenix, AZ, January 18, 2008. "A Neurosurgeons Diary--Successes, Failures and a Rx for a Balanced Life."
- 24. Cleveland Clinic Neurologic Institute and Department of Neurosurgery, April 14, 2010. "New Developments in the Management of Sports Related Concussions.
- 25. Walter Reed Army Medical Center, April 23, 2010. "New Developments in the Management of Sports Related Concussion" and "Balancing Your Diet and Your Life-The Science of Epigenetic and Nutragenomics".
- 26. Rush University Medical Center, September 29, 2011. "Is Balance in Neurosurgery an Oxymoron?" and "Recent Advances in Concussion Management in the NFL".
- Northshore University Health System, Department of Neurosurgery Academic Day, April 20, 2012. "Neuro Inflammation in Post-Concussion Syndrome, PTSD and Chronic Traumatic Encephalopathy: A Rationale for Treatment".
- 28. Kansas City University Medical Center Grand Rounds, November 8, 2013. "The Secrets of Longevity: The New Science of Epigenetics".
- 29. University of Rochester Medical Center, Grand Rounds, June 5, 2014. "From Kona to Kilimanjaro—A Metaphor for Neurosurgery and Neurology Training".
- 30. University of Rochester Medical Center, Combined Neurology/Neurosurgery Grand Rounds, June 6, 2014. "The Evolution of Sports Concussion Management, Diagnosis and Treatment in the NFL".
- 31. University of Louisville, Neuroscience Grand Rounds, January 22, 2015. "The Evolution of Concussion Management in the NFL".
- 32. University of Louisville, Neurosurgery resident morning didactics. January 22, 2015. "Kona – Kilimanjaro – Neurosurgery – Lessons Learned!"
- 33. Inova Neuroscience and Spine Institute, Provider Wellness, January 19, 2016. "From Kona to Kilimanjaro—Lessons Learned".

- Inova Neuroscience and Spine Institute, Continuing Medical Education Event, January 19, 2016. "Concussion, PTSD and CTE: Unifying Etiology, Neuroimaging and Treatments".
- 35. University of Buffalo Department of Neurosurgery Grand Rounds, June 15, 2017. "A Neurosurgeon's Journal: Successes, Failures and Lessons (Hopefully) Learned!"
- 36. University of Buffalo Department of Neurosurgery Cohn Lecture, June 15, 2017. "From Burnout to Balance".
- 37. University Hospitals Case Medical Center, Cleveland, OH, August 16, 2017. "Past, Present and Future of Concussions and CTE".
- 38. University Hospitals Case Medical Center, Cleveland, OH, August 16, 2017. "From Burnout to Wellness A Resident's Guide to a Balanced Life".
- 39. Harvard Medical School Cushing Neurosurgical Society, John Warren Surgical Society and the Wellness and Mental Health Initiative, Tosteson Medical Education Center, Boston, MA, October 6, 2017. "How to Avoid Burnout, a Simple Guide for a Balanced Life".
- 40. University of Colorado, Aurora, CO, February 12, 2019. "From Burnout to Wellness The Secret to Work/Life Balance".
- 41. University of Colorado, Aurora, CO, February 12, 2019. "Past, Present and Future of Concussion Management.

Updated: 2/5/2019 kph