CURRICULUM VITAE

JUAN CARLOS BARTOLOMEI

Born: July 26, 1967, Mayaguez, PR

Marital Status: Married with five children

Address: 31 Woodlawn Ave,

Madison, CT 06443

Tel: (817) 980-5474

E-mail: bartolomeij@verizon.net

Education: 1989 B.S.E Marquette University, Milwaukee, WI, cum Laude

1994 M.D. Yale University School of Medicine, New Haven, CT, cum Laude

Boards: Passed NMBE Part I, II and III, Neurosurgical Written Boards

ABNS Board Certification 2007

Licenses Connecticut 39678 Current

Texas L7657 Current

Arizona 28348 Lapsed

DEA BB6779992 Current

NPI 1922033489 Current

CT CSC CSP.0064349 Currrent

Professional Positions:

06/1994-06/1995 Intern Department of General Surgery Yale New Haven Hospital, New Haven, CT

06/1995-06/1999 Resident Department of Neurosurgery Yale New Haven Hospital, New Haven, CT

0/61999-07/2000 Chief Resident, Instructor Department of Neurosurgery Yale New Haven Hospital, New Haven, CT

07/2000-072001 Attending/Fellow-Spine Barrow Neurological Institute, St Joseph Hospital, Phoenix, AZ

07/2001- 01/2004 Assistant Professor Department of Neurosurgery Yale University School of Medicine

01/2004- 12/2016 Vice President Spine Team Texas, Southlake, TX

03/2013-01/2014 Vice Chairman of Surgery Texas Health Rockwall Hospital

01/2005-12/2016 Quality Review Committee Texas Health Southlake Hospital

01/2009-12/2016 Vice Chief of Staff Texas Health Southlake Hospital

01/2009-12/2016 Board Member Texas Health Southlake Hospital

01/2017- Present Assistant Clinical Professor Department of Neurosurgery Yale University School of Medicine

Grants, Fellowships, and Awards:

* 1. Dean's Honor List
  2. Marquette University Academic Scholarship.

1988 Cornell Medical College Summer Research Fellowship.

1988-1989 Tau Beta Pi Engineering Honor Society.

1988-1989 Alpha Beta Mu Beta Biomedical Engineering Honor Society.

1989 Marquette University Outstanding Senior Award.

1989 Marquette University Ethnic Senior Award.

1989 Biomedical Engineering Scholastic Honors.

1990 Yale University School of Medicine Summer Fellowship.

1991 Yale University School of Medicine Surgery Department Small Grant Award.

1. National Medical Fellowship Inc. Academic Medicine Scholar.

1991 National Medical Fellowship & Brystol Myers-Squibb Fellowship.

1992 Association for Chemoreception Science Student Travel Fellowship.

1992 Park Nicollet Medical Center Fellowship.

1992 Hugh J. Andersen Scholarship.

1992-1994 National Institute of Deafness and Other Communication Disorders Fellowship.

1992 Society for Neuroscience Travel Fellowship.

1994 Yale University School of Medicine Department of Surgery Honors.

1994 The Connecticut Chapter of the American College of Surgeons & The Connecticut Society of American Board Surgeons Excellence in Surgical Studies Award.

1994 American Association of Academic Surgery Research Award

1. Sandoz Recognition of Superior Academic Achievement and Contribution to Health Care Award

2001 North American Spine Society Traveling Fellowship

2007 Dallas Business Journal, Healthcare Heroes – Physician Award

2007-2009 Fort Worth Magazine Top Docs Neurosurgical Specialty

2009 Member of Neurosurgical Society of America

Dissertation:

Immunocytochemical and Synaptological Organization of Rat Olfactory Bulb Glomeruli. Doctor in Medicine Thesis, 1994.

Professional Societies:

American Association of Neurological Surgeons

Congress of Neurological Surgeons

Neurosurgical Society of America

Research Experience:

June-August, 1988 Effect of insulin treatment on gestational diabetic mothers. Cornell Medical College, New York, NY.

1990 – 1992. Plasticity and structural organization of piriform cortex following selective differentation. Yale University School of Medicine, New Haven, CT.

June 12th- 25th, 1991Cuba's health care delivery system under economic sanctions. Havana, Cuba.

1992-1994. Immunocytochemical characterization of the olfactory bulb glomerular layer. Yale University School of Medicine, New Haven, CT.

1993-1994. Characterization of apparent heterogeneity of the rat olfactory bulb glomeruli. Yale University School of Medicine, New Haven, CT.

1995-1998. Calcium gradients in rat and human epileptic astrocytes. Yale University School of Medicine, New Haven, CT.

July- September, 1997. Complex spine disorders and cervical stability. Mr. H. Allan Crockard, National Queen Square, Division of Neurological Surgery, London, England.

1998-2004. Role of cortical astrocytes and ensheathing cells during axonal extension. Yale University School of Medicine, New Haven, CT.

1998-2004. Role of ensheathing cells transplants in axonal reinnervation following spinal cord transection in rat model. Yale University School of Medicine, New Haven, CT

2000-2001. Cervical pedicle screw augmentation for acute traumatic injuries: A biomechanical comparison with lateral mass plating, Barrow Neurological Institute, Phoenix, AZ

2001-2004. Bone marrow stem cells transplantation following selective axonal transection. Yale University School of Medicine, New Haven, CT

2005-Present. Cervicore disc arthroplasty IDE study site, Southlake, TX

2008-Present Diam interspinous process device IDE study site, Southlake, TX

Invited Presentations and Lectures:

1. *Effect of Insulin Treatment on Gestational Diabetic Mothers for Prevention of Macrosomia*. Department of Internal Medicine, Cornell Medical College August, 1988.

2. *Genetic Mutations of the Olfactory System and Plasticity of the Piriform Cortex.*  Department of Otolaryngology, Yale University School of Medicine, December, 1991.

3. *Ultrastructural Characterization and Functional Reorganization in Piriform Cortex Following a Genetic Lesion.*  Fifth Student Research Day. Yale University School of Medicine, May, 1992.

4. *Ultrastructural Characterization and Synaptic Organization of Tyrosine Hydroxylase Immunoreactive Processes in Rat Olfactory Bulb Glomeruli*. Sixth Student Research Day. Yale University School of Medicine, May, 1993.

5. *Experimental Remyelinating and Regenerating Strategies for the Injured Spinal Cord.* Grand Rounds. Barrow Neurological Institute. October 29, 2000.

6. *Adjacent Level Disease Following Cervical Fusion.* Volker K.H. Sonntag, **Juan C. Bartolomei**, Nicholas Theodore, James J. Lynch. Barrow Neurological Institute 27th Annual Symposia March 2, 2001

*7. Management Strategies for Cervical Myelopathy*. Lunch seminar. Congress of Neurological Surgeons San Diego, CA September 2001

8. *Revelations of Scoliosis and Deformity Surgery.* Volker Sonntag, Geoffrey Zubay, **Juan Bartolomei**, Stephen Ondra. Congress of Neurological Surgeons San Diego, CA September 2001

9*. Cervical pedicle screws/plates or lateral mass screws/plates combined with anterior plating: a biomechanical in vitro study*. **Bartolomei, J.C.**, Das, K. , Crawford, N.R. , Chamberlain, R.H, Park, S.C., Lynch, J.J., Dickman, C.A., and Sonntag, V.K.H. AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves Annual Meeting, Orlando FA 2002

10 *Management of Metastatic Tumors to the Spine: Strategies and Operative Indications* Oncology Grand Rounds. Yale University School of Medicine November 2002.

11 *Management of Metastatic Tumors to the Spine: Strategies and Operative Indications* RadiationOncology Grand Rounds. Yale University School of Medicine August 2003

12. *Experimental Remyelinating and Regenerating Strategies for the Injured Spinal Cord.* NeurosurgeryGrand Rounds. University of Utah August 2003.

Invited Courses:

1. Lumbosacral fusion: Cages, dowels, and pedicle screws. Congress of Neurological Surgeons San Diego, CA September 2001

2. Principles of spinal stabilization. AANS Meeting, Chicago IL, 2002

3. Principles of lumbosacral fusion, CNS Meeting, Philadelphia, PA September, 2002

4. Principles of cervical stabilization AANS Meeting, San Diego, CA 2003

5. Principles of lumbosacral fusion AANS Meeting, San Diego, CA 2003

6. Principles of lumbosacral fusion AANS Meeting, Orlando, FL 2004

7. Bone morphogenic proteins: Biology and Clinical applications. AANS Meeting, Orlando, FL, 2004

8. Biology of Bone and Fusion. Joint Section of Spine and Peripheral nerve Disorders Meeting. San Diego, CA 2004

9. Latest Technology for Spine Reconstruction. Joint Section of Spine and Peripheral nerve Disorders Meeting. Phoenix, AZ. 2005

10. Principles of lumbosacral fusion AANS Meeting, San Francisco 2006

11. Principles of lumbosacral fusion AANS Meeting, Chicago, 2008

12. Principles of cervical deformity AANS Meeting, San Diego, 2009

13. Moderator Future of Spine technologies. NSA Meeting, Kona, HI,

2011

14. How to Build a Comprehensive Spine Center, AANS Meeting, New Orleans, LA, 2013

15. How to Build a Comprehensive Spine Center, AANS Meeting, San Francisco. 2014

Students

Paul Ivancic Department of Biomedical Engineering: Cervical spine soft tissue injuries during simulated automobile collisions

Deborah Kaplan Department of Neurosurgery: Qualitiy of life in patents with spinal cord injury in the state of Connecticut

Publications:

Abstracts:

1. **Bartolomei, J. C.** and Greer, C. A. (1991). The organization of afferent fibers and local synaptic circuit in piriform cortex following mitral cell loss. Soc. Neuroscience Abst., 17: 1017.

2 **Bartolomei, J. C.** and Greer, C. A. (1992). Analyses of synaptic and afferent fiber organization in piriform cortex of Purkinje cell deficient mice following mitral cell loss. Assoc. Chemorecep Sci Abst., 14:74.

3. **Bartolomei, J. C.** and Greer, C. A. (1992). Fine ultrastructural analyses of piriform cortex following selective transection of mitral cell. National Medical Foundation & Brystol Myers- Squibb National Symposium Abst., 8:31.

4. **Bartolomei, J. C.** and Greer, C. A. (1993) Synaptic organization of immunocytochemical identified GABA and TH processes in rat olfactory bulb glomeruli. Soc. Neuroscience Abst., 19, 55.1.

5. **Bartolomei, J. C.** and Greer, C. A. (1993). Synaptic organization of tyrosine hydroxylase immunoreactive neurons in the olfactory glomerulus Assoc. Chemorecep Sci Abst., 15:125.

6. Greer, C.A., Dembner, J.M., and **Bartolomei, J.C.** (1994) Intrinsic organization of the bulb glomerulus. European Chemoreception Organiz. Abst., 11:45.

7. Greer C.A., **Bartolomei, J.C.**, and Dembner, J.M. (1994) Organization of primary and local circuit synapses in the olfactory glomerulus. Microscopy Society of America Abst., 52:36.

8. **Bartolomei, J.C.** and Greer, C.A. (1994) Ultrastructural characterization of tyrosine hydroxylase and GABA immunoreactive processes in rat olfactory bulb glomeruli. Assoc. Chemorecep. Sci Abst., 16:332.

9. **Bartolomei, J. C,** Wecht, D.A., Sun, P., Awad, I.A. (1996)Visual field deficit and occipital lobe malformation. Congress of Neurological Surgeons Abst.. 81.

10. Kennedy, J.D., **Bartolomei, J. C.,** Wecht, D.A., Sun, P., and Awad, I.A. (1997) Occipital lobe vascular malformations: Prognosis of visual field defects after therapy. 22nd International Conference on Stroke and Cerebral Circulation. Anaheim, CA February 6-8.

11. **Bartolomei, J. C,** Wecht, D.A., Putnam, C.P., Chaloupka, J.C., Roth, T.C., and Awad, I.A. (1997) Management Outcome of dural arteriovenous malformations at a single institution. American Association of Neurological Surgeons Abst. Denver, CO, April 14-16, 1997.

12. de Lotbiniere, A.J., **Bartolomei, J.C.**, Knisely, J., Awad, I.A. (1997) Stereotactic radiosurgery for AVM. International Society of Radiosurgery Abst. 37:141.

13. de Lotbiniere, A.J., **Bartolomei, J.C**., Knisely, J., Piepmeier, J.M. (1997) Stereotactic radiosurgery for acoustic neuromas; Fractionated vs. conventional treatment. International Society of Radiosurgery Abst. 41:145.

14. **Bartolomei, J.C.** and Greer, C.A. (1998) Differential axon extension from DRG cells on poly-l-lysine, laminin, ensheathing cell, and cortical astrocyte substrates**.** Society for Neurosciences Abst. 420.13

15. Greer, C.A., **Bartolomei, J.C.**, and Dennis D. Spencer. (1998) Calcium transients and oscillatory waves in cortical astrocytes following chronic exposure to glutamate Society for Neurosciences Abst. 851.12.

16. **Bartolomei, J.C.**, Spencer D.D., Greer, C.A.. (1999) Rapid calcium transients and oscillatory waves in cortical astrocytes following chronic exposure to glutamate. American Association of Neurological Surgeons Abst.. New Orleans, LA April 7-12.

17. **Bartolomei, J.C.** and Greer, C.A. (1999) Differential axon extension from DRG cells on poly-l-lysine, laminin, ensheathing cell, and cortical astrocyte substrates**.** American Association of Neurological Surgeons Abst. New Orleans, LA April 7-12.

18. **Bartolomei, J.C.**, Lynch, J.J., Hen, J.S. and Sonntag, V.K.H. (2001) Fusion rates of six or more contact surfaces after three or more level discectomy and corpectomy. Section of Disorders of the Spine and Peripheral Nerves Annual Meeeting February 14-17, Phoenix, AZ.

19.Lemole, M.G., **Bartolomei, J.C.**, Hen, J.S., Lynch, J.J., Dickman, C.A., Sonntag, V.K.H. (2001) Management of thoracic fractures: The BNI experience. American Association of Neurological Surgeons. Toronto. CA April 14-20.

20. ACDF with Cornerstone-SR Allograft and Plate: rhBMP-2 versus Autograft.Richard Westmark, James Lynch, David Baskin, Patrick Ryan, **Juan Bartolomei**, Nicolas Theodore, Volker Sonntag. Congress of Neurological Surgeons San Diego, CA September 2001

21. ACDF with Cornerstone-SR Allograft and Plate: rhBMP-2 versus Autograft. James Lynch, David Baskin, Patrick Ryan, Richard Westmark, **Juan Bartolomei**, Nicolas Theodore, Volker Sonntag. Cervical Spine Research Society, Monterry, CA December 2001.

22. Cervical pedicle screws/plates or lateral mass screws/plates combined with anterior plating: a biomechanical in vitro study. **Bartolomei, J.C**., Das, K. , Crawford, N.R. , Chamberlain, R.H, Park, S.C., Lynch, J.J., Dickman, C.A., and Sonntag, V.K.H. American Association of Neurological Surgeons 2002

23. Biomechanics of lateral mass/pedicle screw fixation at C1-C2. Lynch, J.J., Crawford, N.R., Chamberlain, R.H., **Bartolomei, J.C**., and Sonntag, V.K.H. American Association of Neurological Surgeons 2002

Chapters:

1. Greer, C. A. and **Bartolomei, J. C.** (1994) Synaptic circuitry of the olfactory glomeruli. In: K. Kurihara, N. Suzuki and H. Ogawa (Eds.), Olfaction and Taste XI. Springer-Verlag, Tokyo, 425-428.

2 **Bartolomei, J.C.** (1994) Immunocytochemical and Synaptological Organization of Rat Olfactory Bulb Glomeruli. Yale University School of Medicine Doctor in Medicine Thesis.

3. **Bartolomei, J.C.,** Harris, D., Awad, I.A. (1995) Intracranial Unruptured Aneurysms Electronic Journal Ed. Brass, L.

4. Greer, C. A. and **Bartolomei, J. C.** (1996) The neurobiology of olfaction. In: R. Gammage and B.A. Berven, (Eds.) Indoor Air and Human Health. Lewis Publishers, New York, pp 31-51.

5. **Bartolomei, J. C**. and Greer, C. A. (1999) Cell transplantation for spinal cord injury. In R.G. Kalb, and S.M. Strittmatter, (Eds). Neurobiology of Spinal Cord Injury Humana Press Inc, Totowa, NJ pp 195-215.

6. **Bartolomei, J.C**. (1999) Management of closed head injury. In: S. Spector, and C. Coppola, (Eds.). The Handbook of Surgery Williams and Wilkins, New York.

7. **Bartolomei, J.C.** and deLotbiniere, A.C.J. Postthoracotomy pain syndrome. In K.J. Burchiel (Ed) Pain Surgery. In Press.

8.**Bartolomei, J.C.** Management of head injury (2000). In: S. Spector, and C. Coppola, R. Bell (Eds.). The Handbook of Surgery Williams and Wilkins, New York. pp 605-610.

9.**Bartolomei, J.C.** Intracranial pressure monitoring (2000). In: S. Spector, and C. Coppola, R. Bell (Eds.). The Handbook of Surgery Williams and Wilkins, New York. pp 681-684.

10. Lemole G.E, **Bartolomei, J.C.,** Hen, J., Sonntag, V.K. Thoracic fractures. (2002) In: Vacarro, A. (Ed). Spinal Surgery. Marcel Dexter, New York, New York. pp 407-439

11. McLaughlin, M.R. **Bartolomei, J. C.** Overview of Spinal Navigation.(2003) In Progress in Neurological Surgery: Advances in Spinal Stabilization. Subach, Haid, Rodts (Eds). Basel Karger vol 16 pp 71-83

Journal Articles:

1. Greer C.A., **Bartolomei, J.C.**, and Dembner, J.M. (1994) Organization of primary and local circuit synapses in the olfactory glomerulus. *Microscopy Society America Proceedings*, 52:148-149.

2. **Bartolomei, J.C.,** Christopher, S., Vives, K. Spencer, D.D., and Piepmeier, J.M. (1997) Low grade gliomas of chronic epilepsy a distinct clinical and pathological entity. *Journal of Neurooncology*, 34: 79-84.

3. **Bartolomei, J. C**., Wecht, D.A., Fayad, P., Chaloupka, J., Awad, I.A. (1998) Occipital vascular malformations prevalence of visual field deficit and prognosis after therapeutic intervention. *Neurosurgery* 43: 415-421.

4**. Bartolomei, J. C**. and Greer, C. A. (1998) The organization of piriform cortex and the lateral olfactory tract following the loss of mitral cells in PCD mice. *Experimental Neurology* 154: 537-550.

5. **Bartolomei, J.C.** and Spencer, D.D. (1999) Fetal mesencephalic tissue implantation for Parkinson's disease. *Techniques in Neurosurgery*. 5(1) 73-78.

6. **Bartolomei J.C.**, Wong, J., Kalfas, I., Dickman, C., Rodts, G, and Awad, I.A. (2000) Spinal cord hernia, *Neurosurgery*. 46:1408-15.

7. **Bartolomei, J.C**., and Greer, C.A. (2000) Olfactory ensheathing cells; bridging the gap in spinal cord injury. *Neurosurgery.* 47:1057-69.

8. Treolar, H., **Bartolomei, J. C**., Lipscomb B.W., and Greer, C. A. (2001) Mechanisms of axonal plasticity: Lesson from the olfactory pathway. *The Neuroscientist*. 7:55-63.

9. **Bartolomei, J.C**., and Crockard, H.A. (2001) Surgical management of mirror image C2 neurofibromas: A report of four cases and literature review. *Journal of Neurosurgery.*94:292-298.

10. **Bartolomei, .J.C.,** Hen J., Lemole, G.M., Lynch, J.J. Dickman, C.A., and Sonntag, V.K.H. (2001) Stereotactic applications in spine surgery. *BNI Quarterly*. 17:1-6.

11. Pitt, A., Prenger, E., **Bartolomei, J.C.** (2001) Role of image guidance in the diagnosis and treatment of neck and back pain. *BNI Quarterly*. 17:11-16.

12. Cholewicki, J., Alvi, K., Silfies S.P., **Bartolomei, J.C.** (2003) Comparison of motion restriction and trunk stiffness provided by three thoraco-lumbar-sacral orthoses (TLSO). *Journal of Spinal Disorders and Techniques.* 16: 461-468, 2003.

## 13. Bartolomei, J.C., Theodore, N., and Sonntag, V.K.H. (2005) Adjacent Level Degeneration Following Anterior Cervical Fusion: A Clinical Review *Neurosurg Clin N Am*. 16: 575-587.

Personal interests & skills:

Volleyball, Basketball, Golf, Cooking.

Fluent in Spanish, Spending time with the family