

UNIVERSITY OF MIAMI

Curriculum Vitae
Standard Format

1. Date: Feb 6, 2011

I. PERSONAL

2. Name: James D. Guest, MD, PhD
3. Home Phone: Private
4. Office Phone: 305-243-7144
5. Home Address: Private
6. Current Academic Rank: Associate Professor
- 6a. Current Track of Appointment: Clinical Educator Track
7. Primary Department: Department of Neurological Surgery, Miller School of Medicine
8. Secondary or Joint Appointments: The Miami Project to Cure Paralysis, The Miami Veteran's Administration Health Center
The Neuroscience Graduate Program
9. Citizenship: Canada
10. Visa Type (if non-citizen): United States Permanent Resident, US Citizenship pending 2/2011.

II. HIGHER EDUCATION

11. Institutional: University of Alberta, Edmonton, Canada. **B.A.**, Economics and Political Science, 9/79 – 5/83
- University of Alberta, Edmonton, Canada. **B.Sc.**, Chemistry and Biology (magna cum laude), 9/83 – 5/85
- University of Alberta School of Medicine, Edmonton, Canada. **M.D.** (magna cum laude with honors in research), 8/85 – 6/89
Thesis title: "The production and characterization of monoclonal antibodies to clinically relevant surface antigens of Chlamydia Trachomatis." Supervisor: Wanda Wenman, MD.
- University of Miami, Department of Neuroscience, Miami, FL. **Ph.D.**, Neuroscience, 7/93 – 9/96. Thesis title: "The potential for human Schwann cell grafts to influence spinal cord

regeneration in the nude rat.”Thesis advisor: R. P. Bunge, Ph.D.
US Copyright Registration: TX4-996-628

Internship: St. Paul’s Hospital, Vancouver, British Columbia,
Canada. 7/89 – 6/90

Residency: Department of Neurosurgery, University of British Columbia,
Canada. 7/90 – 6/98

Rotation: Brain Institute - University of Zurich, Zurich, Switzerland.
Supervisor: Dr. ME. Schwab, PhD. Myelin-associated inhibition
of neuronal sprouting and regeneration in the adult CNS. 7/94-
09/94

12. Non-Institutional:
1. ACLS (Advanced Cardiac Life Support) 86-89.
 2. ATLS (Advanced Trauma Life Support) 1990.
 3. ATLS Instructor 1991. Actively teaching 91-93.
 4. Midas Rex Neurosurgical Power Instrument Course. Seattle,
Washington, 1991.
 5. Lougheed Neurosurgery Microsurgical Course. Univ. of
Toronto. October 1992.
 6. Canadian Neuroscience Network Annual Symposium,
University of British Columbia, October 1997.
 7. Cellular and Molecular Treatments of Neurologic Diseases.
Harvard Medical School, Cambridge, Massachusetts.
October 1998.
 8. Frameless Stereotaxis for Spinal Surgery. Recent Advances
in Neurosurgery. Barrow Neurologic Institute. Phoenix, AZ,
March 1999.
 9. Endoscopic lumbar microdiscectomy. Sofamor Danek
training facility, Memphis, TN, March 2000.
 10. Intradiscal Electrothermy, Oratec training program, Orlando,
FL. February 24, 2001.
 11. Thorascopic spinal surgery. Aesculap. Barrow Neurologic
Institute, Phoenix, AZ. May 14-16, 2004.
 12. X-stop interspinous decompression device. Kyphon training
course Miami, FL, March, 2007.
 13. Balloon Kyphoplasty, Kyphon training course, Miami FL,
January, 2008.
 14. Stem Cell Translation: Strategies, Best Practices and
Regulatory Considerations. ISCT, San Francisco, Sept, 2010.

13. Certification, licensure: Licentiate Medical Council Canada (LMCC), June 1990
- US National Board Diplomat, June 1994
- General License to practice Medicine in British Columbia,
Canada, June 1990- June 2000.
- American Board of Neurological Surgery, Board certified
5/ 2005.

Fellow Royal College of Surgeons of Canada, Certified, July 1998.

Arizona's Board of Medical Examiners, licensed September 1998- January 2001.

Florida's Board of Medical Examiners, ME 81960, licensed March 2001- current.

III. EXPERIENCE

14. Academic: Assistant Professor of Neurological Surgery. University of Miami, The Miami Project to Cure Paralysis Faculty July 1999-2006.
- Associate Professor of Neurological Surgery, University of Miami, The Miami Project to Cure Paralysis. 2006-2010
- Faculty Member, University of Miami Neuroscience Graduate Program, 2005-current
15. Hospital Appointments: Attending Neurosurgeon: Barrow Neurologic Institute, Phoenix, AZ, 1998 – 99.
- Attending Neurosurgeon: Scottsdale Memorial North Hospital, Scottsdale, AZ, 1998 - 99.
- Attending Neurosurgeon: West Palm Beach VA Medical Center, West Palm Beach, FL 1999 – 2002
- Attending Neurosurgeon, University of Miami Hospitals and Clinics, Jackson Memorial Hospital, Miami, FL 1999-2010.
- Attending Neurosurgeon and Chief of Spinal Neurosurgery : Miami Veteran's Medical Center. 1999 – 2010.
16. Military: Royal Canadian Army Cadets, Governor General's Horse Guards, Rank of Captain. Canada, 1970-1976.
- Commonwealth Leadership Training Course, Sheffield, UK. 1975.
- Banff National Leadership School (Outward Bound), Banff, Alberta, Canada. 1975.

IV. PUBLICATIONS

Books and monographs published:

1. Hood B, **Guest J**, Pathophysiology of Spinal Cord Injury, Orthopedic Knowledge Update, 2010, In Press.
2. **Guest J**, Principles of Translation of Biological Therapies in Spinal Cord Injury, In: Youmans Neurological Surgery, Winn H, Youmans J, Becker D eds., Saunders Press, 2010, In Press.
3. **Guest J**, and Dietrich W, Therapeutic hypothermia following spinal cord trauma and ischemia, In: Therapeutic Hypothermia (Molecular and Cellular Biology of Critical Care Medicine), Tisherman S, Stertz F eds., Springer Press, 1010-1019, 2005.
4. **Guest J**, Biological strategies for CNS repair, In: Youmans Neurological Surgery, Winn H, Youmans J, Becker D eds., Saunders Press, Volume 4, 4153-4179, 2004.
5. Sonntag V, and **Guest J**, Patient Selection and Timing of Surgery, In: Contemporary Management of Spinal Cord Injury (From Impact to Rehabilitation), Tator C, Benzel E eds., American Association of Neurological Surgery, 109-123, 2000.
6. **Guest J**, Deafferentation pain, In: Encyclopedia of Neuroscience, Second Edition, Adelman G, Smith BH eds., New York Elsevier, 737-740, 2004.
7. **Guest J**, Spinal cord transection, In: Encyclopedia of Neuroscience, Second Edition, Adelman G, Smith BHS, eds., New York Elsevier, 354-358, 2004.
8. Zwimpfer T, and **Guest J**, Grafting of peripheral nerves and Schwann cells in the CNS to support axonal regeneration, In: Modern Techniques in Neuroscience Research, Windhorst U, Johansson H eds., Springer Press, 397-406, 1999.

Juried or refereed journal articles or exhibitions:

1. Grossman RG, Frankowski RF, Burau KD, Toups EG, Crommett JW, Johnson MM, Fehlings MJ, Tator CH, Shaffrey CI, Harkema SJ, Hodes JE, Aarabi B, Rosner MK, **Guest JD**, Harrop JS, Incidence and Severity of Acute Complications after Spinal Cord Injury, submitted J Neurotrauma, 2011.
2. **Guest JD**, F Benavides, K Padgett, E Mendez, Diego Tovar, Technical aspects of spinal cord injections for cell transplantation. Clinical and translational considerations. Brain Research Bulletin, (published online Dec, 2010).
3. Characterization of neurological recovery following traumatic sensorimotor complete thoracic spinal cord injury. J Zariffa, J Kramer, J Fawcett, D Lammertse, A Blight, **J Guest**, L Jones, S Burns, and M Schubert, M Bolliger, A Curt for the EM-SCI Study Group, J Steeves, Spinal Cord (submitted).
4. Kim KN, **Guest JD**, Oh JS, Pennant WA, Yoon do H, Ha Y. Effect of primate bone marrow stromal cells on survival and neurite outgrowth. Neuroreport. 2010 15;21(13):877-81.
5. Kwon BK, Okon EB, Tsai E, Beattie MS, Bresnahan J, Magnuson DS, Reier PJ, McTigue DM, Popovich P, Oudega M, Blight AR, **Guest JD**, Weaver L, Fehlings M, Tetzlaff WA Grading System to Objectively Evaluate the Strength of Preclinical Data of Acute Neuroprotective Therapies for Clinical Translation in Spinal Cord Injury. J Neurotrauma, Epub. 2010/05/29
6. J Steeves, J Kramer, J Fawcett, J Cragg, D Lammertse, A Blight, RMarino, J Ditunno, Jr., W Coleman, F Geisler, **J Guest**, L Jones, S Burns, and M Schubert, H van Hedel, Armin Curt for the EM-SCI Study Group Extent of spontaneous motor recovery after traumatic cervical sensorimotor complete spinal cord injury. Spinal Cord 2010, In press
7. **Guest JD**, Anderson K. Hopes and Illusions. A comment on Stem Cell Tourism and the Power of Hope by Charles E Murdoch and Christopher Thomas Scott. American Journal of Bioethics 10(5)46-48. 2010.
8. O Nestic; **JD Guest**; D Zivadinovic; Ponnada A. Narayana; JJ. Herrera; RJ. Grill; VU.L. Mokkaapati; BB. Gelman; Julieann Lee Aquaporins in spinal cord injury. The Janus face of AQP4. Neuroscience. 168:4, 1019-1035, 2010.

9. A Blight A, Curt A, Ditunno J, Dobkin B, Ellaway P, Fawcett J, Fehlings M, Grossman R, Lammertse D, Privat A, Steeves J, Tuszynski M, Kalichman M, **Guest, JD**. Position statement on the sale of unproven cellular therapies for spinal cord injury The International Campaign for Cures of Spinal Cord Injury Paralysis, *Spinal Cord* 47(5) 427-428, 2009.
10. Benglis, D.M., **Guest JD**, and M.Y. Wang, Clinical feasibility of minimally invasive cervical laminoplasty, *Neurosurgery Focus*, **25**(2): p. E3, 2008.
11. **Guest JD**, Herrera L, Margitich I, Oliveria M, Marcillo A, and Casas CE, Xenografts of expanded primate olfactory ensheathing glia support transient behavioral recovery that is independent of serotonergic or corticospinal axonal regeneration in nude rats following spinal, *Experimental Neurology*, 212(2) 261-274, 2008.
12. Trombly R, and **Guest J**, Central cord injury arising spontaneously from a cervical epidural abscess, *Neurosurgery* 61(2): 41-45, 2007.
13. Lammertse D, Tuszynski MH, Steeves JD, Curt A, Fawcett JW, Rask C, Ditunno JF, Fehlings MG, **Guest JD**, Ellaway PH, Kleitman N, Blight AR, Dobkin BH, Grossman R, Katoh H, Privat A, and Kalichman M, Guidelines for the conduct of clinical trials for spinal cord injury as developed by the ICCP panel: clinical trial design, *Spinal Cord*, 2007. 45(3):232-242.
14. Tuszynski MH, Steeves JD, Fawcett JW, Lammertse D, Kalichman M, Rask C, Curt A, Ditunno JF, Fehlings MG, **Guest JD**, Ellaway PH, Kleitman N, Bartlett PF, Blight AR, Dietz V, Dobkin BH, Grossman R, and Privat A, Guidelines for the conduct of clinical trials for spinal cord injury as developed by the ICCP Panel: clinical trial inclusion/exclusion criteria and ethics, *Spinal Cord*, 2007. 45(3):222-231.
15. Steeves JD, Lammertse D, Curt A, Fawcett JW, Tuszynski MH, Ditunno JF, Ellaway PH, Fehlings MG, **Guest JD**, Kleitman N, Bartlett PF, Blight AR, Dietz V, Dobkin BH, Grossman R, Short D, Nakamura M, Coleman WP, Gaviria M, and Privat A, Guidelines for the conduct of clinical trials for spinal cord injury (SCI) as developed by the ICCP panel: clinical trial outcome measures, *Spinal Cord*, 2007.45(3): 206-221.
16. Fawcett JW, Curt A, Steeves JD, Coleman WP, Tuszynski MH, Lammertse D, Bartlett PF, Blight AR, Dietz V, Ditunno J, Dobkin BH, Havton LA, Ellaway PH, Fehlings MG, Privat A, Grossman R, **Guest JD**, Kleitman N, Nakamura M, Gaviria M, and Short D, Guidelines for the conduct of clinical trials for spinal cord injury as developed by the ICCP panel: spontaneous recovery after spinal cord injury and statistical power needed for therapeutic clinical trials, *Spinal Cord*, 2007. 45(3):190-205.
17. Dobkin BH, Curt A, and **Guest J**, Cellular transplants in China: observational study from the largest human experiment in chronic spinal cord injury, *Neurorehabilitation and Neural Repair*, 20:5-13, 2006.
18. **Guest J**, Herrera LP, Qian T: Rapid recovery of segmental neurological function in a tetraplegic patient following transplantation of fetal olfactory bulb-derived cells, *Spinal Cord*, 44: 135-142, 2006.
19. Amador MJ, and **Guest JD**, An appraisal of ongoing experimental procedures in human spinal cord injury, *Journal of Neurologic Physical Therapy*, 29:70-86, 2005.
20. Anderson DK, Beattie M, Blesch A, Bresnahan J, Bunge M, Dietrich D, Dietz V, Dobkin B, Fawcett J, Fehlings M, Fischer I, Grossman R, **Guest J**, and et al, Recommended guidelines for studies of human subjects with spinal cord injury, *Spinal Cord*, 43:453-458, 2005.
21. Casas CE, Herrera LP, Prusmack C, Ruenes G, Marcillo A, and **Guest JD**, Effects of epidural hypothermic saline infusion on locomotor outcome and tissue preservation after moderate thoracic spinal cord contusion in rats, *Journal of Neurosurgery Spine*, 2:308-318, 2005.
22. **Guest JD**, Hiester ED, and Bunge RP, Demyelination and Schwann cell responses adjacent to injury epicenter cavities following chronic human spinal cord injury, *Experimental Neurology*, 192:384-393, 2005.
23. **Guest JD**, Silbert L, and Casas CE, Use of percutaneous endoscopy to place syringopleural or cystoperitoneal cerebrospinal fluid shunts: technical note, *Journal of Neurosurgery Spine*, 2:498-504, 2005.
24. Herrera LP, Casas CE, Bates ML, and **Guest JD**, Ultrastructural study of the primary olfactory pathway in *Macaca fascicularis*, *Journal of Comparative Neurology*, 488:427-441, 2005.

25. Uribe J, Green BA, Vanni S, Moza K, **Guest JD**, and Levi AD, Acute traumatic central cord syndrome--experience using surgical decompression with open-door expansile cervical laminoplasty. *Surgical Neurology*, 63:505-510, discussion 510, 2005.
26. Casas CE, and **Guest JD**: Percutaneous endoscopic cellular transplantation into the lower lumbar spinal cord, *Neurosurgery*, 54:950-955; discussion 955, 2004.
27. **Guest JD**, Vanni S, and Silbert L, Mild hypothermia, blood loss and complications in elective spinal surgery, *Spine Journal*, 4:130-137, 2004.
28. Wang MY, Green BA, Coscarella E, Baskaya MK, Levi AD, and **Guest JD**, Minimally invasive cervical expansile laminoplasty: an initial cadaveric study, *Neurosurgery*, 52:370-373; discussion 373, 2003.
29. **Guest J**, Eleraky MA, Apostolides PJ, Dickman CA, and Sonntag VK, Traumatic central cord syndrome: results of surgical management, *Journal of Neurosurgery*, 97:25-32, 2002.
30. **JD Guest**, DE Griesdale, and TR Moratta , Thoracic disc herniation presenting with transient anterior spinal artery syndrome, *Interventional Neuroradiology, Case Report*, 6(4): 327-331, (2000).
31. **JD Guest**. N Theodore, G Vishteh, and RF Spetzler, Overview and selection of patients for carotid endarterectomy, *Techniques in Neurosurgery*, Vol. 1:3, 1-20, 1999.
32. **Guest JD**, Hesse D, Schnell L, Schwab ME, Bunge MB, and Bunge RP, Influence of IN-1 antibody and acidic FGF-fibrin glue on the response of injured corticospinal tract axons to human Schwann cell grafts, *Journal of Neuroscience Research*, 50:888-905, 1997.
33. **Guest JD**, Rao A, Olson L, Bunge MB, and Bunge RP, The ability of human Schwann cell grafts to promote regeneration in the transected nude rat spinal cord, *Experimental Neurology*, 148:502-522, 1997.
34. Kaul R, Duncan MJ, **Guest J**, and Wenman WM, Expression of the Chlamydia trachomatis major outer membrane protein-encoding gene in Escherichia coli: role of the 3' end in mRNA stability, *Gene*, 87:97-103, 1990.

Other works, publications and abstracts:

Society for Neuroscience Abstracts:

1. DF Tovar, F Benavides, **JD Guest** Assessment of conduction through motor pathways in the non human primate using clinically relevant methods: Normative data. *Soc Neurosci Abstr*, 2010: 468.11
2. DF Tovar, AL Maldonado, F. Benavides, ML Rodriguez, **JD Guest**. Analyses of lesion volume, demyelination and neuronal injury following stereotaxic radiofrequency lesioning in spinal cord and brain. *Soc Neurosci Abstr*, 2009. 55.3
3. **JD Guest**, C Blandino, E Medina. Immediate changes in conductance of the human cervical spinal cord associated with surgical decompression. *Soc Neurosci Abstr*. 2009.830.8
4. A Maldonado, D Tovar, N. Martinez-Calle, **J. Guest**. Improvement of locomotor performance following transplantation of autologous Schwann cells in a non-human primate with chronic spinal cord injury. *Soc Neurosci Abstr*. 2008: 469.1.
5. D Tovar, A Maldonado, N. Martinez-Calle, **J. Guest**. Assessment of quadrupedal locomotion in non human primates: kinematics analysis during recovery from hemiplegic spinal cord injury. *Soc Neurosci Abstr* 2008: 469.2
6. D. F. Tovar, E. G. Mendez, and **J. D. Guest**, Model of ultrasound assisted injection into chronic spinal cord cavities, *Society for Neuroscience Abstract*, 600.17, 2007.
7. **Guest JD**, Maldonado AL, Mendez E, and Margitich I, Myelin repair in the non-human primate brainstem following radiofrequency lesion, *Society of Neuroscience Abstract*, 904.10, 2007.

8. **JD Guest**, Z. Zhang, and M. S. Shoichet, Axon relationships of transplanted chitosan-tube seeded Schwann cells and olfactory ensheathing glia in a sciatic nerve regeneration model, Society of Neuroscience Abstract, 475.22, 2006.
9. A.L Davies, K.C. Hayes, R. Trombly, J.K.L Kramer, T. E. Close, and **J. Guest**, Cytokine concentrations in the cerebrospinal fluid of individuals with chronic spinal cord injury undergoing surgery for syringomyelia or detethering, Society of Neuroscience Abstract, 286.15, 2006.
10. Maldonado, C. Levine, and **J. Guest**, Motor behavioral tests for the evaluation of hand dexterity in non-human primates after radiofrequency injury of the corticospinal tract, Society of Neuroscience Abstract, 655.4, 2006.
11. Casas CE, Marcillo A, Levine C, and **Guest JD**, Spontaneous intraspinal hypothermia after laminectomy in the rat spinal cord C.E., Society of Neuroscience Abstract, 863.6, 2005.
12. **Guest JD**, Casas CE, Herrera LP, Margitich IR, Bates M, Iron oxide nanoparticle labeling of primate Schwann cells in vitro and following autologous transplantation, Society of Neuroscience Abstract, 455.8, 2005.
13. Levine C, Herrera LP, Casas CE, Margitich IR, and **Guest JD**, The olfactory ensheathing cell: the history of a “restorative” cell that remains incompletely defined, Society of Neuroscience Abstract, 18.22 2005.
14. Kim K, Casas, CE, Herrera LP, Corredor R, Margitich IR, and **Guest JD**, Primate bone marrow stromal cells enhance neurite outgrowth and neuronal survival of DRG neurons, Society of Neuroscience Abstract, 184.12, 2004.
15. Casas, CE, Herrera LP, Corredor R, Margitich IR, Kim K , and **Guest JD**, Non-human primate model of autologous olfactory ensheathing glia transplantation following a stereotaxic electrolytic unilateral lesion of the medullary pyramid, Society of Neuroscience Abstract, 184.5, 2004.
16. Herrera LP, Casas, CE, Bates M, and **Guest JD**, Ultrastructural study of the olfactory pathway in Macaca fascicularis, Society of Neuroscience Abstract, 67.1, 2004.
17. Herrera LP, Casas, CE, M Oliviera, and **Guest JD**, Frame-by-frame video analysis enhances consistency of BBB Locomotor rating scale, Society of Neuroscience Abstract, 493.5, 2003.
18. Casas, CE, Prusmack C, G Ruenes G, L Herrera, and **Guest JD**, The effects of epidural cooling on locomotor outcome and tissue preservation after moderate contusion thoracic spinal cord contusion in rats, Society of Neuroscience Abstract, 76.8, 2003.
19. Casas, CE, EJ Owen, Oliveira M, and **Guest JD**, Endoscopic Transplantation into the conus medullaris, Society of Neuroscience Abstract, 852.8, 2002.
20. **Guest JD**, Margitich IR, Oliveira M, L Herrera, and Casas, CE, Co-cultures of primate and human olfactory ensheathing glia or Schwann cells with adult rodent retina, Society of Neuroscience Abstract, 635.17, 2002.
21. **Guest JD**, M Ibanez, Oliveira M, Marcillo A, Casas, CE, and Wood P, Harvest of olfactory tissue to produce autologous ensheathing glia transplants in primates and humans, Society of Neuroscience Abstract, 829.13, 2001.
22. Casas, CE, Oliveira M, Ibanez M, Marcillo A, Almqvist P, and **Guest JD**, Transplantation of primate olfactory ensheathing glia into transected spinal cord: cell survival, migration, regeneration, and behavioral outcome, Society of Neuroscience Abstract, 829.14, 2001.
23. **Guest JD**, Cuenca B, Oliveira M, Dougherty M, Kleitman N, and Marcillo A, Primate olfactory ensheathing glia: anatomy, harvest methods, culture, and characterization, Society of Neuroscience Abstract, 325.12, 2000.
24. Pong M, **Guest JD**, Horn KM, Bichard WD, Sonntag VKH, and Gibson AR, Spinal projections of monkey parvicellular red nucleus, Society of Neuroscience Abstract, 256.11, 2000.

25. **Guest JD**, Bakowska J, Breakefield XO, Huang T, Sonntag VKH, and Jia W, HSV/AAV hybrid amplicon vector surpasses recombinant HSV ICP 6 in gene delivery from peripheral nerve to spinal motor neurons, Society of Neuroscience Abstract, 735.9, 1999.
26. Sonntag VKH, Gibson A, and **Guest JD**, Tropic and Trophic effects of FGF-1 and peripheral nerve grafts on injured CST fibers with and without grey matter sparing lesions, Society of Neuroscience Abstract, 194.18, 1999.
27. Puckett WR, **Guest JD**, and Bunge RP, The evolution of cavities within human spinal cords after closed contusive injuries, Society of Neuroscience Abstract, 743.10, 1996.
28. **Guest JD**, Kleitman N, Aebischer P, Bunge MB, and Bunge RP, Axonal regeneration into human Schwann cell grafts placed to span the transected spinal cord of the nude rat, Society of Neuroscience Abstract, 490.19, 1996.
29. **Guest JD**, and Bunge RP, Human Schwann cells can enhance axonal regeneration and myelination in the nude rat spinal cord, Society of Neuroscience Abstract, 458.9, 1994.

Refereed Abstracts & Reviews:

1. F Benavides, DF Tovar, **JD Guest**. MRI-guided Stereotaxic Targeting of the Primate Medullary Pyramid for Lesioning and Transplantation. Congress of Neurological Surgeons 2010. Abstract 1616.
2. Tovar DF, Benavides FD, Maldonado AL, Rodriguez ML, **Guest JD**: Analyses of lesion volume, demyelination and neuronal injury following stereotaxic radiofrequency lesioning in spinal cord and brain. *Neurorehabilitation and Neural Repair*, 23:995, 2009.
3. **Guest JD**, Herrera LP, Bates M, and Casas, CE, Spontaneous myelin repair in the non-human primate spinal cord, *Experimental Neurology*, 193(1):247, 2005.
4. **Guest J**, Corredor R, Herrera LP, Margitich I, Kim K, and Casas, CE, A model to study upper extremity recovery facilitated by cellular transplantation following spinal cord injury in the non-human primate, *Experimental Neurology*, 187(1):209, 2004.
5. Javedan S, Theodore N, Horn K, Pong M, Ponce F, Preul M, **Guest, J**, Sonntag V, Autologous activated macrophage therapy in canine spinal cord injury. *The Spine Journal* 3:123.
6. Casas, CE, C Prusmack, G Ruenes, L Herrera, and **Guest JD**, The effects of epidural cooling on locomotor outcome and tissue preservation after moderate contusion thoracic spinal cord contusion in rats, *Journal of Neurotrauma*, 20(10):1104, 2003.
7. Herrera LP, Casas, CE, M Oliviera, and **Guest JD**, Frame-by-frame video analysis enhances consistency of BBB Locomotor rating scale, *Journal of Neurotrauma*, 20(10):1097, 2003.
8. EJ Owen, L Silbert, S Vanni, and **Guest JD**, Does mild hypothermia hypothermia lead to increased complications in elective spinal surgery, *Journal of Neurotrauma*, 19:10(1335), 2002.
9. **Guest JD**, and Green BA, Surgical Repair of Cauda Equina Transection, *Spinal Cord Medicine*, 2002.
10. **Guest JD**, Oliveira M, and Marcillo A, Primate olfactory ensheathing glia: Anatomy, harvest methods, culture, and characterization, *Restorative Neurology and Neurosciences*, 16:226, 2002.
11. **Guest JD**, Jia W, Bakowska J, and Sonntag VKH, HSV/AAV hybrid amplicon vector surpasses recombinant HSV ICP 6 in gene delivery from peripheral nerve to spinal motor neurons, *Journal of Gene Medicine*, 2S:120, 2002.
12. **Guest JD**, Akong KA, Bunge MB. Injection of Fluororuby into the nude rat spinal cord leads to an unusual infiltrate that may enhance neuronal regeneration following spinal cord injury, *Journal of Neurotrauma*, 15(1):46, 1998.
13. **Guest JD**, Schwab ME, Bunge MB, and Bunge RP, Acidic fibroblast growth-factor-containing fibrin glue reduces corticospinal tract die-back and promotes regeneration

- into human Schwann cell grafts within the injured spinal cord, *Journal of Neurosurgery*, 86:420A, 1997.
14. **Guest JD**, Bunge MB, Hesse DH, Santiago DI, Schwab ME, Schnell L, and Bunge RP, The ability of cultured human Schwann cells within PAN/PVC guidance channels to support regeneration in the transected nude rat spinal cord. *Journal of Neurological Sciences*, 23:S1-92, 1996.
 15. **Guest JD**, and RP Bunge, Functional studies of human Schwann cells transplanted to the nude rat spinal cord, *Journal of Neurotrauma*, 12(3):427, 1995.
 16. Bunge RP, Quencer RM, Becerra JL, Puckett WR, and **Guest JD**, Clinical pathological correlates in damage to the human spinal cord, *Journal of Neurotrauma*, 12(3):354, 1995.

Other published works:

1. **Guest JD**, Promising research developments in the rehabilitation, repair and regeneration of spinal cord injuries, *Iatros*,1(2):34-36, 1987.
2. **Guest JD**, Reading clinical research articles: Critiquing the hypothesis and design, *Iatros*, 2(2), 1988.

V. PROFESSIONAL

17. Funded Research Performed:

1. **Sponsor:** The Travis Roy Foundation
Topic: Culture and transplantation of primate ensheathing glia into the nude rat spinal cord.
Amount: \$20,000
 Miami Project Account # 770031
 Donations in 2000 and 2004
2. **Sponsor:** State of Florida Scientific
Topic: Culture and characterization of primate ensheathing glia.
 2002: Appropriation # 70,
 Amount: \$52,050
 Percent Effort: 5% (June 1, 2002 - June 30, 2002)
 UM account #: 668222
 2003: Appropriation # 56,
 Amount: \$113,991
 Percent Effort: 40% (October 1, 2002 - October 31, 2002)
 20% (June 1, 2003 - June 30, 2003)
 UM account #: 661359
 2004: Appropriation # 598A,
 Amount: \$60,458
 Percent Effort: 5%
 UM account #: 667703
 2005: Appropriation # 588AB,
 Amount: \$57,182
 Percent Effort: 5%
 UM account #: 66090R
3. **Sponsor:** Ralph Wilson Medical Research Foundation
Topic: Autologous Transplantation of primate ensheathing glia into the transected medullary pyramid of the primate.
 2001-2002: \$100,000 per year

2003: no-cost extension without additional funds
Percent Effort: 10% (February 1, 2001 – May 31, 2001)
9.09% (September 1, 2001 – May 31, 2002)

UM proposal #: M01376

4. **Sponsor:** International Spinal Research Trust
Topic: Generation and testing of human ensheathing glia for spinal cord transplantation. (Shared with P Wood, MB Bunge, NK Kleitman)
2000-2003: \$278,783(total)
2004-2005: no-cost extension after original end date with no additional funds granted.
Grant #: NET002
5. **Sponsor:** US Army Medical Research
Topic: Neuroprotection, The effects of various levels of epidural perfusion hypothermia on spinal cord blood flow. (Contract # W81XWH-05-1-0061)
Nov 2004-Nov 2005
Amount: \$170,000
Percent Effort: 30%
UM Account #: 66098M
6. **Sponsor:** The Daniel Heumann Fund for Spinal Cord Research
Topic: Characterization of a cervical model of unilateral corticospinal tract injury in the non-human primate.
Amount: \$62,205
Miami Project Account # 770031
Donation in January 2005
7. **Sponsor:** American Association of Neurological Surgeons
Topic: Summer Studentship to support Donnie Konovsky, MD student, 2007.
8. **Sponsor:** North American Clinical Trials Network
Topic: Database and Riluzole study
Site Principal Investigator
Amount: \$175,000 per year
2008-2010
9. **Sponsor:** Mystic Force Neuroblastoma Foundation.
Topic: Creation of patient-specific neuroblastoma cell lines
Principal Investigator
Amount: 40,000 per year
2008-2010.
10. **Sponsor:** International Spinal Research Trust
Topic: Comparison of Schwann cells and Skin-derived precursor cells for repair of demyelination in the primate corticospinal tract.
Role. Principal Investigator
Amount. 450,000 USD 2010-2013.
11. **Sponsor:** US Department of Defense
Topic: SC090411P2 Schwann cell (SC) implantation for SCI repair: optimization of dosing, long-term cell persistence and the evaluation of toxicity and tumorigenicity.
Role. Co-Investigator
Amount. 2,100,000 USD 2010-2013.
12. **Sponsor:** Christopher Reeve Paralysis Foundation/US Department of Defense.
Topic: North American Clinical Trials Network (NACTN). NACTN registry and Riluzole phase 1 trial.
Role: Principal Investigator
Amount: 135,000 USD per year.
2008-2010.

18. Editorial responsibilities, Peer and Grant Review:

1. Research Editor, then Editor-in-Chief: Iatros, Univ. of Alberta Medical Journal. 1986- 89.
2. Reviewer: Experimental Neurology, Journal of Neurosurgery, Neurosurgery, Spine, Journal of Neuroscience, Journal of Neuropathology and Experimental Neurology, PNAS, Canadian Journal of Neurological Sciences, Glia, Journal of Neurotrauma, Spine Journal, Pain, etc. Approximately 50 manuscripts in past 36 months.
3. Reviewer: Grants section of the AANS Spine section. 2000-02.
4. External Advisory Board Program Project Grant, Kentucky Spinal Cord Injury Research Center. 2002-2007
5. Peer Review. Feasibility of clinical translation of olfactory ensheathing cell transplantation for spinal cord injury. The British Neurological Research Trust.
6. Peer Review. International Spinal Research Trust, 2004-2010.
7. Peer Review. Canadian Institutes for Health Research, 2004.
8. Peer Review: State of New Jersey Commission on Spinal Cord Research. 2005.
9. Peer Review: Neurological Foundation of New Zealand, 2004
10. Consultant: Clinical trials. Spinal Treatment Australia, 2005, 2006.
11. External Advisory Board, UMDNJ, Spinal Cord Injury Core, 2007
12. VA Merit review panel, March, 2010.
13. Co-editor, Special Issue on “Translational Aspects of Spinal Cord Cell Transplantation”, Neurology Research International. To be published 2011.
14. Guest Editor, Neurology Research International Special Issue on “ Spinal Cord Injury: toward clinical application”. To be published 2011.
15. Peer Review. Canada Institutes for Health Research. 2010-2011.
16. Peer Review. Wings for Life, Salzburg, Austria.2011.
17. Peer Review. Craig H. Neilsen Foundation. 2011.

Bioethical Reviews of Research Protocols:

18. Health Research Counsel of New Zealand. 2007.

19. Professional and Honorary Organizations:

1. AANS/CNS Spine Section Research Committee, Chairman, 2003-2006.
2. Alpha Omega Alpha Honor Medical Society, Member, 1987 - present
3. American Association of Neurological Surgeons, Member
4. Congress of Neurological Surgeons, Member
5. Society for Neuroscience, Member
6. International Society for Neurotrauma, Member, 1997 – present.
7. Research Committee of the Spine and Peripheral Nerve section AANS/CNS, Member, 1999 – present
8. American Society for Neural Transplantation and Repair, Member
9. American Spinal Injury Association, Member, 2002-2006
10. Scientific Committee. International Spinal Research Trust. Appointed, 2004.
11. ICCP Clinical trials guidelines committee, Member, 2004-2005.
12. Board of Directors, American Spinal Injury Association, Appointed, 2005-current.
13. Neurosurgical Research Education Fund, Scientific board, Appointed 2006-current.
14. Industry Advisory Council, American Spinal Injury Association, appointed 2008-current.
15. International Symposium on Neural Regeneration, Planning committee, appointed 2008-current.
16. Chair, ASIA awards committee, 2008-2009.
17. SCOPE- Spinal Cord Outcomes Partnership Endeavour, 2008-2011.
18. North American Clinical Trials Network, Selection of New Therapies Committee.

19. North American Clinical Trials Network, Neural Recovery Network, Planning Board.

Industry Oversight and Advice.

Board of Directors, Neureva, Neuropharmaceuticals, Montpellier, France. Appointed 2008-2010.

Novartis, Scientific Advisor, appointed 2009.

Clinical trials oversight:

1. Geron Corporation. Data Safety Monitoring Committee. OPC1 trial, 2007.
2. FDA. CBER. Special Government Employee. Cellular Tissue and Gene Therapy Advisory Committee, appointed Dec 2007.

20. Honors and Awards:

1. Alberta Scholarship. 1978.
2. I.O.D.E. Westward Ho Chapter Memorial Prize in Political Science. 1982.
3. Awarded competitive Alberta Heritage for Medical Research Studentships. 1984, 1985, 1986.
4. Runner-up Faculty of Medicine Students Research Day. 1984.
5. Winner Faculty of Medicine Student's Research Day. 1985, 1986.
6. University of Alberta Board of Governor's Prize in Science. 1985.
7. Louise McKinney Post-Secondary Scholarship. 1985.
8. Nat Christie Foundation Scholarship. 1986.
9. Nat Christie Foundation Scholarship. 1987.
10. Lennox-Boyd Memorial Trust- Commonwealth University Scholarship. 1988.
11. Dr. H.E Weinlos Award in Medicine. 1989.
12. Rick Hansen Man in Motion Foundation Fellowship (declined) 1994.
13. Research Fellowship of the Research Foundation of the American Association of Neurological Surgeons. 1994-96.
14. K.G. McKenzie award in basic neuroscience research. 1995.
15. WB and MH Chung Lectureship, Best Resident Research Presentation. University of British Columbia. 1997.
16. Award of Academic Merit, University of Miami Graduate School. 1999.
17. Outstanding Scientists of the 21st Century, International Biographical Center. 2008.
18. Marquis. Who's Who in America, 2009
19. Robson Award, International Spinal Research Trust, 2009

21. Post-Doctoral Fellowships:

1. Fellowship in Spinal Neurosurgery, Barrow Neurologic Institute, St. Joseph's Hospital, Phoenix, Arizona. Supervisor: Dr. Volker KH Sontag) 1998-99.
2. Fellow: American Association of Neurological Surgeons Research Foundation 1994-96.
3. Post-doctoral Associate (part-time) Collaboration on [CNS] Repair Discoveries - University of British Columbia. Zoology Department. Dr. John Steeves, and Dr. William Jia. 1996-97.

22. Other Professional Activities:

1. Invited Speaker, Institute for Brain Research, University of Zurich, Invitation from Dr. ME. Schwab. July, 1994.
2. Invited Speaker, International Symposium on Axonal Regrowth in the Mammalian Spinal Cord and Peripheral Nerve. Deauville, Normandy, April, 1995.
3. Invited Presenter: Pasteur Institute, Paris, on invitation of Dr. Monique Dubois-Dalq. May, 1995.
4. Invited Speaker, 3rd International Neurotrauma Symposium, Clinical / Pathological Correlates in Damage to the Human Spinal Cord, on behalf of Dr. RP Bunge. July, 1995.
5. Invited Presenter, Annual meeting of the Congress of Canadian Neurological Sciences. WG.Mackenzie Award Presentation.
6. Invited Speaker: Université Réne Descartes, Paris, on invitation of Dr. JC Horvat. September, 1996.
7. Invited Speaker: Veteran's Hospital of Taipei, Taiwan, Division of Neurosurgery and Faculty of Neuroscience, on invitation of Dr. Henrich Cheng. August, 1997.
8. Invited Speaker, University of California, San Francisco, Department of Neurological Surgery Grand Rounds. February, 1999.
9. Invited Speaker, *Cervical Radiculopathy. Optimizing Surgical outcome.* Neurology Grand Rounds. University of Miami, Miami, FL. November, 2000.
10. Invited Speaker, *Glial cell transplantation for spinal cord repair.* Columbia University, Department of Neurosurgery, Grand Rounds, New York, NY. November, 2000.
11. Invited Speaker, *Glial autotransplantation for spinal cord repair.* University of British Columbia. Vancouver, BC, Canada. November, 2001.
12. Progress toward glial cell autotransplantation for spinal cord repair: olfactory ensheathing glia. First Annual H. Rosomoff Neuroscience Research Day, University of Miami, June 2nd, 2001.
13. Invited Speaker, American Spinal Injury Association – International Medical Society of Paraplegia, Vancouver, BC, Canada, *Repair of the Transected Cauda Equina.* May, 2002.
14. Invited Speaker, American Association of Neurological Surgeons. Annual Meeting. *Practical Clinic Spinal Cord Injuries: Complications and Treatments.* April, 2002.
15. Invited Speaker, International Spinal Research Trust Symposium, London, 2002.
16. Invited Speaker, 24th Korean Neurosurgical Society. 1) *Progress towards autotransplantation of human ensheathing glia for spinal cord injury.* 2) *Is mild hypothermia safe during elective spinal surgery?* Seoul, Korea, October, 2002.
17. Invited Speaker, Kentucky Spinal Cord Injury Research Center. *Progress toward autotransplantation of ensheathing glia.* January, 2003.
18. Key Note Speaker, Kentucky Spinal Cord Injury Symposium. *Minimally invasive techniques for spinal cord cellular transplantation.* June, 2003.
19. Invited Speaker, Think First 2004, American Association of Neurologic Surgeons. *The Miami Project to Cure Paralysis and an update on spinal cord repair research.* Orlando, FL., May, 2004.
20. Invited Speaker, *Update on cellular therapy for spinal cord injury.* AANS/CNS Joint Section on Spine and Peripheral Nerve Surgery, Phoenix, AZ, March, 2005.
21. Invited Speaker, *A primate model for translational studies in SCI.* ICORD, Vancouver, BC, April, 2005.
22. Speaker, University of Miami, Rosomoff Research Day, 2002/3/4/5/9.
23. Invited Speaker: Methodist Hospital, *Hand motor deficits associated with radiofrequency lesion of the pyramid.* Houston Texas, November, 2005.

24. Invited Speaker/Chair, *Novel methods to treat syringomyelia*. First International Spinal Cord Injury Treatments and Trials (ISCITT) Symposium, Hong Kong, Dec 17-20, 2005.
25. Invited Speaker. Clinical Trials Workshop, Design and Statistics, North American Clinical Trials Network NACTN/CRPF, Houston, TX. January 2006. “ *Gold Standards and Tarnished Trials*”
26. Delegate, North American Clinical Trials Network, Hand Function Testing for the Nogo Trial. Rehab Institute of Chicago. Host Dr. Zev Rhymer. May, 2006.
27. Invited Speaker. Work To Walk, Christopher Reeve Paralysis Foundation, Washington DC. May, 2006. “*Hope and reality in spinal cord clinical trials.*”
28. Invited speaker, International Spinal Research Trust, September, 2006, London, UK. “*Lessons and New Directions for Clinical Trials in Spinal Cord Injury*”.
29. Invited Speaker, American Paraplegia Association, Las Vegas, NV, September, 2006, “*Lessons and New Directions for Clinical Trials in Spinal Cord Injury*”.
30. *Current status of clinical trials in Spinal Cord Injury*. ASIA annual meeting, Tampa, FL, May, 2007.
31. *Manipulation of hope of cure in spinal cord injured persons by commercial entities*. ASIA Abstract Award presentation, ASIA annual meeting, San Diego, CA, June, 2008.
32. *Treatment Strategies for improved recovery after spinal cord injury*. ASIA instructional course ASIA annual meeting, San Diego, CA, June, 2008.
33. *Cell and tissue transplantation for spinal cord injury*. American Paraplegia Society, Kissimmee Florida, August, 2008
34. Keynote Speaker. *Chronic spinal cord injury. Biological Challenges*. Spinal Research Network meeting. London, UK, Sept 2008.
35. Invited Speaker. Congress of Neurological Surgeons. *The process of translational research for cell and molecular therapy for spinal cord injury*. Orlando, FL, Sept, 2008.
36. Invited Speaker, Mission Connect Symposium, TIRR Foundation, Houston, Dec 2008, *Cellular Therapy for Spinal Cord Injury, a Cornerstone of Spinal Cord Repair. Fact or Fiction?*
37. Invited Speaker, Stanford Neuroscience Seminar, *Autologous Glial Cell Transplantation for Spinal Cord Injury*, Palo Alto, CA, Feb 2009
38. Invited Moderator, *Angiogenesis and Cavitation after Spinal Cord Injury* International Spinal Research Trust Annual Symposium, Glasgow, UK, Sept, 2009.
39. Invited Speaker, *Minimally Invasive Cell Transplantation*, Stanford Neurosurgery Grand Rounds. Palo Alto, CA, Nov, 2009
40. Invited Speaker, *Role for primate models in SCI*. Howard Steele Pediatric Spinal Cord Injury Conference, Dec, 2009
41. Invited Guest. Olivecrona Neurosurgery Symposium. *Recovery of Function mediated by combined behavioral training and Schwann cell transplantation*. Karolinska Hospital, Stockholm, Sweden, Dec, 2009.
42. Invited Panel Member. *Demyelination is a therapeutic target in spinal cord injury*. International Symposium on Neural Regeneration, Asilomar, CA, Dec, 2009.
43. Presentation. *Principles of casualty management under austere conditions. Development and maintenance of initial surgical capability in a nascent field hospital in Haiti 1.2010* UM Neurosurgery Rounds, March, 2010.
44. Invited Keynote Speaker. *Translational Research in Spinal Cord Injury*. VII Encuentro Nacional/ VIII Seminario, Internacionalde Neurociencias, Ibague, Tolima, Colombia, April 24, 2010.
45. Invited Speaker, Global Stem Cell Blueprint Conference, Toronto, May 21/22, 2010, *Clinical Spinal Cord Injury Researcher Perspective: Challenges In Translating Basic Science Discoveries Into Spinal Cord Injury Clinical Trials* Moderator, Government/ Regulator Perspective: “*Regulation of Stem Cells*”.

46. Invited Speaker, American Spinal Cord Injury, Spine Trauma Translational Session, Nashville, May 28, 2010, *Role of Large Animal Studies in Translation of SCI Therapies*.
47. Presentation. *Management of Pott's Disease in Children and Adults*. UM Neurosurgery Rounds, July, 2010.
48. Invited Presentation. L. Hyndman Award Lecture. Toward Restored Spinal Cord Function. The Essential Role of Animal Models. University of Alberta, Oct 20, 2010.
49. Invited presentation. International Spinal Cord Society Annual meeting, Delhi, India, Oct 30, 2010. Improvement of locomotor performance following transplantation of autologous Schwann cells in a non-human primate with chronic spinal cord injury. Delivered via telepresence.
50. Invited presentation. International Spinal Cord Society Annual meeting, Delhi, India, Oct 31, 2010. It will happen again. Lessons from the Haitian Earthquake in disaster management of SCI. Delivered via telepresence.
51. Invited Presentation- MRI-guided spinal cord injections. University of Alberta, Neuroscience Center, Edmonton, Jan 18, 2011.

VI. TEACHING

23. Teaching Specialization (courses taught)

1. ATLS instructor. 1990-93.
2. Spinal Image Guidance and Instrumentation. Recent Advances in Neurosurgery. Barrow Neurologic Institute, Phoenix, AZ, March 5, 1999.
3. Spinal Cord Injury 2000, National Symposium, Miami Beach, Syndromes of Spinal Cord Injury. February 2000.
4. 3rd Annual Pan AM Neurosurgical Conference, Key Biscayne, FL. Spinal Cord Injury: Overview. July 2000.
5. 3rd Annual Pan AM Neurosurgical Conference, Key Biscayne, FL. Biomechanics of Thoracolumbar Spinal Instrumentation. July 2000.
6. Brains and Bones: Journey to Rehab. "New Treatment Modalities in Spine Surgery." Lead speaker at Annual Ortho – Rehab - Neuro Seminar, Miami. October 2000.
7. "Clinical Disorders of the Spinal Cord" University of Miami, Medical School Neuroscience Module. January 2002.
8. "Spinal Cord Injuries, Complications, and Treatments: Update on Spinal Cord Regeneration/Stem Cells", AANS Annual Meeting, Chicago, April 6, 2002.
9. Current status of clinical trials in Spinal Cord Injury. ASIA annual meeting, Tampa, FL, May, 2007.
10. Treatment Strategies for Improved Recovery after Spinal Cord Injury, ASIA annual meeting San Diego, CA, June, 2008.
11. Cell and tissue transplantation for spinal cord injury. American Paraplegia Society, Kissimmee Florida, August, 2008

24. Thesis and Dissertation Advising/Post-doctoral Student Supervision:

1. Carlos Casas, MD: Epidural hypothermia to reduce secondary injury. A primate model of cervical SCI. Methods for glial cell minimally invasive transplantation, 2001-2005.
2. Loren Herrera, MD: a) Epidural hypothermia to reduce secondary injury following contusive SCI. b) Astrocyte - ensheathing glia co-culture studies, 2003-2005.

3. Dr. Kim K MD, PhD. Postdoctoral fellow. Characterization of factors secreted by primate bone marrow stem cells that support neurite growth, 2003-2004.
4. Dr. Z Zhang MD, PhD. Postdoctoral fellow. Determination of the capacity of transplanted human olfactory ensheathing glia to form myelin in a sciatic nerve transection model with guidance channel repair, 2004-2005.
5. Orion Fumanski, BSc, PhD candidate. Biologic mechanisms and cellular treatments for neuropathic pain. Dissertation committee, 2003-2009.
6. Laura Arias, BSc. PhD candidate. Erythropoietin and Bone marrow stromal cells secreted factor interactions in vitro and in vivo models of stroke, 2002-2006.
7. Dr. Andres Maldonado, MD, functional testing of hand function in normal and C1 lesioned primates, 2005-2009.
8. Donnie Konovsky, MD student supported by American Association of Neurological Surgeons Summer Research Program. Labeling of Primate Schwann cells with quantum dots.
9. Diego Tovar, MD, Determination of the capacity of transplanted human olfactory ensheathing glia and Schwann cells to form myelin in a sciatic nerve transection model with guidance channel repair in the presence of human astrocytes. 2006-2010.
10. Fabian Morales, MD. Visiting research scholar, G ratio analysis of axons in region of radiofrequency injury, 2008.
11. Nicolas Martinez-Calle- MD, Visiting research scholar. in vitro time lapse studies of axo-glial association. 2005. Establishment of a neuroblastoma cell line, 2008.
12. Brandon Kitay, MD, PhD candidate. Thesis committee, 2008.
13. Francisco Benavides, MD. Visiting research scholar, 2009-2010, Dose-Injury volume study of radiofrequency lesioning.

Undergraduate Student/ Lab member supervision:

1. Eric E Hiester, MSc: Demyelination following human SCI. Undergraduate Honors thesis, 1994-1995.
2. Kathryn Akong, BSc: Undergraduate honors thesis. University of Miami. Mapping of Brainstem Nuclei of the Nude Rat, 1995-1996.
3. Catherine Levine, BSc. Cervical spinal cord blood flow under induced local hypothermia, 2005-2006.
4. Nicolas Martinez-Calle, MD student, in vitro time lapse studies of axo-glial association, 2005.
5. Diego Tovar, MD Student, Determination of the capacity of transplanted human olfactory ensheathing glia and Schwann cells to form myelin in a sciatic nerve transection model with guidance channel repair in the presence of human astrocytes, 2006-present.
6. Annie Martinez, BSc. Student. Methods to assess hand function in primates after RF SCI. 2004-2006.
7. Michele Fass, MD student. Ultrastructure of Schwann-cell transplanted medullary pyramid of Macaca Fascicularis. 2008-2010.
8. Luis Miguel Diazgranados, BSc. Visiting Research Student. Behavioral testing of non-human primates 08-12, 2010.
9. Jimena SantaMaria, MD student, Primate behavioral analysis after pyramidal RF lesion, 12/2010-

Inventions and Patents:

Percutaneous endoscopic transplantation into the spinal cord. Guest JD, Casas CE, US Patent **7,666,177**.

VII. SERVICE

University Committee and Administrative Responsibilities:

1. Education Review Committee - St. Paul's Hospital, Vancouver, Canada. 1989-90.
Vancouver General Hospital Ethics Committee. 1991-92.
2. Senior Advisory Committee of the Miami Project to Cure Paralysis. 2001.
3. Independent Case Reviews and Recommendations - Veteran's Affairs, United States Government. Detailed case reviews with conclusions regarding diagnosis, prognosis, natural history and association with military service. 2000-2005
4. Root Cause Analysis of an accidental exposure to HIV-contaminated blood in the operating room. Recommendations for improved safety of personnel. Miami VA Medical Center. 2002.
5. University of Miami ESCRO member, 2008-2010
6. University of Miami, MD-PhD selection committee interviewer, 2008-2010.
7. University of Miami Department of Neurology, MS Center Director, Search Committee. 2008-2010

Community Activities:

1. UNICEF 1981- Disaster Relief, First Aid and Veterinary Care, Cambodia Feb-May, 1981.
2. Red Cross 1982, Vehicle mechanic, Vietnamese Boat exodus, Kai Tak North refugee camp, Hong Kong May- June, 1982.
3. Poverty relief operations, Youth With a Mission, South East Asia, 1982-1984.
4. Primary Care, rural hospitals in Northern India, Landour Community Hospital, Mussoorie India, May-June, 1986.
5. Surgical assistant, obstetrics and ophthalmology rural hospitals in Northern India,, Lemon Hospital, Dehradun, July-August, 1986.
6. Surgical assistant, orthopedics, Robertsganj, Uttar Pradesh ,India, Jiwan Jyoti Hospital, Dec-Mar 1988.
7. Expert Testimony, Forensic Neurology. United States Department of Justice, Dade County, Nov, 2002; North Florida District. May 2004.
8. Protocol for walking therapy following incomplete paraplegia, El Yaque Venezuela, June 2006.
9. Spinal Cord Injury consultation, Haiti, Feb, 2007.
10. Donation of original artworks to ASIA silent auction, 2006, 2007.
11. Director of Research. Mystic Force Neuroblastoma Foundation, 2008-2010
12. Evaluation and treatment of progressive multiple sclerosis in an athlete, Costa Rica, 2009.
13. Project Medishare, Haitian Earthquake, Jan, 1020, Deployed Jan 16-21, served as neurosurgeon and OR/PAR coordinator.
14. Project Medishare, Haitian Earthquake, Jan, 1020, Deployed Jan 30-Feb 4, served as neurosurgeon and OR/PAR coordinator.
15. Project Medishare, Haitian Earthquake, Jan, 1020, Deployed Feb 6-11, served as neurosurgeon, rehabilitation physician and Chief of Surgery.
16. Project Medishare, Healing Hands for Haiti, evaluation and support of spinal cord rehabilitation hospital in Cap Haitien. 3/20-3/22 2010
17. Haiti Hospital Appeal, consultant neurosurgeon, 3/20-current. (5-10 hours per week)
18. Sacre Couer Hospital, Milot, Haiti Crudem Foundation, spinal surgery, June 7-12, 2010.

19. Kathmandu Nepal. Provision of surgical instructional talks for spinal surgery training, Nov 4, 2010. Spinal cord salvage, decompression and fixation, spinal biomechanics.