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CURRICULUM VITAE

Arshak R. Alexanian VMD, PhD

Adjunct Associate Professor
Department of Medicine

OFFICE ADDRESS:

EDUCATION:

1980 - 1985 VMD (Veterinary Medical Doctor), Institute of Veterinary Medicine, Yerevan, Armenia
1986 - 1990 Graduate Student, Institute of Biochemistry and Institute of Fine Organic Chemistry, National Academy of Science, Armenia
1991 PhD, (Biochemistry, Pharmacology) National Academy of Science

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

1994 - 1995 Postdoctoral Researcher(awarded by George Soros Foundation), Institute of Biochemistry of "Bach, " Moscow, Russia
1995 International training course (organized and awarded by UNESCO): "Calcium and protein phosphorylation in cell signaling, " Institute of Biochemistry, Shanghai, China
1996 Postdoctoral training, Institute of Physiology, University of Saarlandes, Germany
1996 Postdoctoral training, Laboratory of Biochemistry and Molecular Genetics, Institute of Pasteur, (awarded by Bureau de la Cooperation Scientifique et Technique L'Attache Scientifique), Paris, France
1997 Visiting Professor, Department of Cellular and Molecular Physiology (awarded by Bureau de la Cooperation Scientifique et Technique L'Attache Scientifique), Faculty of Pharmacy, University of Montpellier
1997 - 1999 Fogarty Fellowship, National Institutes of Health (awarded for two years); Visiting Associate Professor, Department of Biochemistry and Molecular Biology, Colorado State University, Fort Collins, CO
2003 International training workshop: "Human embryonic stem cell culture methods, " Institute of WiCell (organized by Dr. James Thomson, UW-Madison Professor and Director of WiCell), University of Wisconsi, WI
2003 International training workshop: "Spinal cord injury research methods, " W.M. Keck Center for Collaborative Neuroscience, Rutgers University, Piscataway, NJ

FACULTY APPOINTMENTS:

1991 Head, Group of Biochemical Pharmacology, Institute of Biochemistry and Assistant professor in the Institute of Fine Organic Chemistry, Academy of Science of Armenia, Armenia
1997 - 1999 Visiting Associate Professor, Department of Biochemistry and Molecular Biology, Colorado State University, Fort Collins, CO
1999 - 2001 Research Associate Professor, Department of Anatomy and Neurobiology, Colorado State University, Fort Collins, CO
2001 - 2002 Faculty at the Department of Cell Biology, Neurobiology and Anatomy, Medical College of Wisconsin, Milwaukee, WI
2002 - 2007 Assistant Professor, Department Neurosurgery, Neuroscience Research Laboratories, Medical College of Wisconsin, Milwaukee, WI
2008 - 2013 Associate Professor, Department Neurosurgery, Neuroscience Research Laboratories, Medical College of Wisconsin, Milwaukee, WI
2015 - Present Adjunct Associate Professor, Department of Medicine

AWARDS AND HONORS:

1994 George Soros Foundation.
1995 UNESCO
2000 Committee of 6th European Symposium on Calcium Binding Proteins in Normal and Transformed Cells, Paris, France
2002 American Association of Anatomists
2009 Global Spine Congress 2009, San Francisco
2010 World Forum for Spine Research, Montreal

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

1998 - 2001 American Society for Cell Biology
2001 - 2011 Society for Neuroscience
2001 - 2011 Society for Neuroscience
2001 - 2002 American Association of Anatomists
2002 - 2003 Society for Developmental Biology
2003 - 2013 International Society for Stem Cell Research
2003 - 2011 International Society for Stem Cell Research
2003 - 2006 Society for Neurotrauma
2003 - 2011 American Association for Advancement of Science
2004 International Society of Differentiation
2006 - Present International Society of Differentiation
2008 - 2009 International Society of Differentiation
2008 - 2011 Society for Neurotrauma
2008 - 2013 AOSpine (the international community of spine care professionals)

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Journal Review

Spine
Brain Research, Neuroscience Letters
Regenerative Medicine.
Stem cells and Development
Journal of Cancer Detection and Prevention
Basic and Clinical Pharmacology and Toxicology
BMC Cell Biology
Cell Biology International
Stem Cell Journal
Experimental Neurology

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

Alzheimer's Foundation (review submitted grants)
National Institute of Biomedical Imaging and Bioengineering, NIH (panel roster)
Department of Defense (DoD) Grant reviews
Congressionally Directed Medical Research Programs (CDMRP) Grant reviews

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Current Peer-Reviewed - Title: Hypoxic chamber system for efficient stem cell growth and differentiation studies at different low oxygen levels Source: NIH, NCATS, SBIR, Role: Principle Investigator, Dates: 2021-2023. Peer-Reviewed - Title: Commercialization, New cell reprogramming technology to produce dopaminergic neurons. Source: SBIR Advance NIH grant-matching program, Wisconsin. Principle Investigator, Dates: 2022 -2023. Peer-Reviewed - Title: Chemically produced neural progenitors as a delivery vehicle for anti-glioma therapy. Source: NIH, NCI, SBIR, Role: Principle Investigator, Dates: 2018-2022. Previous Peer-Reviewed – Title: Supplement Award to “Generation of Dopaminergic Neurons from Fat” Source: NSF grant supplement award to support entrepreneurial training. Role: Principle Investigator, Dates: 2021. Peer-Reviewed – Title: Supplement Award “Immunomodulatory potential of GMP-manufactured DFAT cells” to National Science Foundation (NSF) award (2020-2021) for COVID-19 research. The goal of this proposal is to develop optimal protocol for generation and expansion of specialized stem cells in compliance of good manufacturing

practice (GMP) that can be used as cell therapeutics for COVID-19 induced ARDS. Role: Principle Investigator, Dates: 2021. Peer-Reviewed – Title: Generation of Dopaminergic Neurons from Fat. Source: NSF, SBIR, Role: Principle Investigator, Dates: 2018-2021. Peer-Reviewed - Title: Chemically produced neural progenitors loaded with ferumoxide-protamine sulfate complex for visualization of gliomasSource: NIH, NCI, SBIR, Role: Principle Investigator, Dates: 2018-2021. Peer-Reviewed – Title: Supplement Award to "New cell reprogramming technology to produce dopaminergic neurons" Source: NIH (NIA) grant supplement award to support entrepreneurial training. Role: Principle Investigator, Dates: 2017. Peer-Reviewed - Title: New cell reprogramming technology to produce dopaminergic neurons. Source: NIH, NIA, SBIR, Role: Principle Investigator, Dates: 2015-2017. Peer-Reviewed - Title: Commercialization, New cell reprogramming technology to produce dopaminergic neurons. Source: SBIR Advance NIH grant-matching program, Wisconsin. Principle Investigator, Dates: 2016 -2017. Peer-Reviewed - Title: Novel MSC-derived neural cell growth. Source: NIH, SBIR, (with Primorigen Biosciences, Inc) Role: Co-PI at MCW, Date: 2012-2014. Peer-Reviewed - Title: Diffusion Tensor Imaging of the Injured Spinal cord. Source: Veterans Affairs, Role: Co-PI, Dates: 2009-2012 Peer-Reviewed - Title: The therapeutic effect of human neurally modified mesenchymal stem cells on functional recovery of spinal cord injured rats. Source: Hansjorg Wyss award, AOSpine International, Role: Principle Investigator Dates: 2010-2011. Peer-Reviewed - Title: Promoting survival of neurally induced stem cells within the injured spinal cord. Source: AOSpine, Role: Principle Investigator, Dates: 2009-2010. Peer-Reviewed - Title: Transplantation of human neurally induced mesenchymal stem cells into the injured spinal cord of rats. Source: Bryon Riesch Paralysis Found., Role: Principal Investigator, Dates: 2009 – 2010. Award: Title: Generation of neural cells from human bone marrow-derived mesenchymal stem cell, Source: Fraternal Order of Eagles, Role: Principle Investigator, Dates: 2009-2011. Peer-Reviewed - Title: Promoting survival of neurally induced stem cells within the injured spinal cord. Source: AOSpine, Role: Principle Investigator, Dates: 2008, 2009. Peer-Reviewed - Title: Spinal cord regeneration with neurally induced mesenchymal stem cells. Source: Quadracci, Role: Principle Investigator, Dates: 2008-2009. Peer-Reviewed - Title: Grafting Neural Stem Cells for SCI: Analysis of Allodynia, Source: Veterans Affairs Merit Grant, Role: Co-Investigator, Dates: 2007 – 2009.

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. ALEXANIAN A.R, Combination of the modulators of epigenetic machinery and specific cell signaling pathways as a promising approach for cell reprogramming. Molecular and Cellular Biochemistry, 2022 May 3., doi: 10.1007/s11010-022-04442-z. Online ahead of print.
2. ALEXANINAN A.R. and Avonlea Brannon, Unique Combinations of epigenetic modifiers synergistically impair the viability of the U87 glioblastoma cell line while exhibiting minor or moderate effects on normal stem cell growth. Medical Oncology, 2022 Apr 28;39(5):86.
3. Heidi Marie Stoellinger and ALEXANINA A.R, Modifications to the Transwell Migration/Invasion Assay Method That Eases Assay Performance and Improves the Accuracy. ASSAY and Drug Development Technologies. Feb-Mar 2022;20(2):75-82
4. ALEXANIAN A.R, and Huang, Yi-Wen. Specific combinations of the chromatin modifying enzymes modulators significantly attenuate glioblastoma cells proliferation and viability while exerting minimal effect on normal adult stem cells growth. Tumor Biology, 2015, 36(11): 9067-72.
5. ALEXANIAN A.R, Epigenetic modulators promote mesenchymal stem Cell phenotype switches. The International Journal of Biochemistry & Cell Biology, 2015, 64: 190-194.
6. Funk R.T. and ALEXANIAN A.R. Enhanced dopamine release by mesenchymal stem cells neuronally reprogrammed by the modulators of SMAD signaling, chromatin modifying enzymes and cyclic adenosine monophosphate levels. Translational Research, The Journal of Laboratory and Clinical Medicine, 2013; 162: 317-323.
7. ALEXANIAN A.R, Qing-song Liu, Zhiying Zhang Zhiying. Enhancing the efficiency of direct reprogramming of human mesenchymal stem cells into mature neuronal-like cells with the combination of small molecule modulators of chromatin modifying enzymes, SMAD signaling and cyclic adenosine monophosphate levels. The International Journal of Biochemistry & Cell Biology, 2013; 45: 1633-8.
8. Zhang Z. and Alexanian A.R. Dopaminergic-like cells from epigenetically reprogrammed mesenchymal stem cells. Journal of Cellular and Molecular Medicine 2012 Nov;16(11):2708-14.

9. Zhiying Zhang and ALEXANIAN A.R. The neural plasticity of early passage human bone-marrow derived mesenchymal stem cells and its modulation with chromatin modifying agents. The Journal of Tissue Engineering and Regenerative Medicine, 2014 May;8(5):407-13.
10. Zhiying Zhang, Dennis Maiman, Shekar Kurpad, ALEXANIAN A.R. Feline bone marrow-derived mesenchymal stem cells express several pluripotent and neural markers and easily turn into neural-like cells by manipulation with chromatin modifying agents and neural inducing factors. Cellular Reprogamming, 13(5):385-90, 2011.
11. ALEXANIAN A.R., Michael F.G., Zhang Z. and Maiman D.J. Transplanted neurally modified bone marrow derived mesenchymal stem cells promote tissue protection and locomotor recovery in spinal cord injured rats. . Neurorehabilitation and neural repair, 25(9):873-80, 2011.
12. ALEXANIAN, A.R., Svendsen CN, Crowe, M.J., Kurpad, S.N. Transplantation of human glial-restricted neural precursors into the injured spinal cord of rats improves locomotor and sensory functions without causing allodynia. Cytotherapy 13(1):61-8, 2011.
13. ALEXANIAN, A.R. An efficient method for generation of neural-like cells from adult human bone marrow derived mesenchymal stem cells. Regenerative Medicine 5(6):891-900, 2010.
14. ALEXANIAN, A.R., Kwok, W., Pravdicb, D., Maiman D.J., and Fehlings M.J. Survival of neurally induced mesenchymal stem cells may determine degree of functional recovery in grafted injured spinal cord rats. Restorative Neurology and Neuroscience 28: (6), 761-7, 2010.
15. ALEXANIAN, A.R., Maiman D.J., Kurpad, S.N., Gennarelli, T.A.: In vitro and in vivo characterization of neurally modified mesenchymal cells induced by epigenetic modifiers and neural stem cells environment. Stem Cells and Development V.17, 1123-30 2008.
16. ALEXANIAN, A.R.: Epigenetic modifiers promote efficient generation of neural-like cells from bone marrow-derived mesenchymal cells grown in neural environment. Journal of Cellular Biochemistry 100:362-371, 2007.
17. Macias, M.Y., Syring, M.B., Pizzi, M.A., Crowe, M.J., ALEXANIAN, A.R., Kurpad, S.N.: Pain with no gain: Allodynia following neural stem cell transplantation in spinal cord injury. Experimental Neurology 201:335-48, 2006.
18. ALEXANIAN, A.R.: Neural stem cells induce bone marrow-derived mesenchymal stem cells to generate neural stem-like cells via juxtacrine and paracrine interactions. Experimental Cell Research 310(2):383- 391, 2006.
19. ALEXANIAN, A.R., Crowe, M.J., Kurpad, S.N.: Efficient differentiation and integration of lineagerestricted neural precursors in traumatically injured adult cat spinal cord. Journal of Neuroscience Methods 150:41-46, 2005.
20. ALEXANIAN, A.R., Kurpad, S.K.: Quiescent neural cells regain multipotent stem cell characteristics influenced by adult neural stem cells in co-culture. Experimental Neurology 119(1):193-197, 2005.
21. ALEXANIAN, A.R., Sieber-Blum, M.: Differentiating adult hippocampal stem cells into neural crest derivatives. Neuroscience 118(1):1-5, 2003.
22. ALEXANIAN, A.R., Bamburg, J.R., Hidaka, H., Mornet, D.: Calcium-dependent regulation of interactions of caldesmon with calcium-binding proteins found in growth cones of chick forebrain neurons. Cellular and Molecular Neurobiology 21(5):437-451, 2001.
23. ALEXANIAN, A.R., Howard, N.O.: Proliferation and regeneration of retrogradely labeled adult rat corticospinal neurons in culture. Experimental Neurology 170(2):277-282, 2001.
24. ALEXANIAN, A.R., Bamburg, J.R.: Neuronal survival activity of S100b is enhanced by calcineurin inhibitors and requires activation of NF-kappab. FASEB 13(12):1611-1620, 1999.
25. ALEXANIAN, A.R., Arutyunian, N.S.: Reversal of drug resistance in sarcoma-45 by the new calmodulin antagonist - trihydrochloride of [1,2,5-trimethyl-4-phenyl-4-b [N-(b-ethylamino)-N-4'-methoxybenzyl]- ethylamino] piperidine (AR-2). Investigational New Drugs 17(2):105-110, 1999.
26. ALEXANIAN, A.R., Arutyunian, N.S., Galoyan, A.A.: Anti-arrhythmic action of the new calcium antagonist [1,2,5-trimethyl-4-phenyl-4- -[N-cyanoethyl-N-4'-methoxybenzyl)-ethylamino] piperidine dihydrochloride. Arzneimittel-Forschung 46(12):1110-1113, 1996.
27. ALEKSANIAN, A., Arutyunian, N., Gerasimian, J., Galoyan, A.: Correlation between inhibition of phosphorylation of platelets myosin light chains and inhibition of platelets aggregation with novel calcium and calmodulin antagonist. Biulleten Eksperimentalnoi Biologii I Meditsiny 122(7):40-42, 1996.
28. Srapionian, R., Popova, T., ALEKSANIAN, A., Galoyan, A.: Biochemical property of coronaroactive peptides, indentificated from the bovine heart. Biochemical Journal 63(6):20-25, 1991.

29. ALEXANIAN, A., Galoyan, A., Chailian, S., Ulanovsky, I.: To the molecular mechanisms of action of new cardioactive compounds of peptide nature on the smooth muscle. Academic Science Reports (DAN) 92(5):216-220, 1991.
30. ALEXANIAN, A.R.: Influence of hypothalamic factors on contractility of aorta smooth muscle. Neurochemistry, Archives of Science 10(1,2):94-96, 1991.
31. Shaginian, C., Noravian, O., ALEKSANIAN, A., Tosunian, A.: Synthesis and pharmacological studies of disubstituted arylhetherylamines containing tetrahydropyranic rings. Chemical Journal 43(11):723-727, 1990.
32. Barkudaryan, N., Zakaryan, T., Shuvalova, L., Chailian, S., ALEXANIAN, A., Galoyan, A.: Influence of coronarodilator peptide factors of hypothalamus on the activity of myosin light chain kinase. Neurochemistry, Archives of Science 8(4):336-341, 1989.

Books, Chapters, and Reviews

1. " Mesenchymal Stem Cells in Central Nervous System (CNS) Regeneration" in Tissue Regeneration (in press 2011).

Editorials, Letters to Editor, Other

1. Patent: New methodology for generation of neural-like cells from human bone marrow derived mesenchymal stem cells and their use as a therapeutic agent for spinal cord injury. This new technology is protected by utility patent (pending) and co-owned by the Alexanian, the VA Medical Center, and the Medical College of Wisconsin.

Abstracts

1. Shiying Zhang, Shixing Wu, Chuansen Zhang, Fang Liu, Hanyan Lin, Arshak R. ALEXANIAN. Small molecule approach to produce neural cells from adult stem cells. ISSCR, Vancouver, Canada, June 18-21, 2014.
2. ALEXANIAN A.R. Small molecule modulators of chromatin modifying enzymes promote lineage conversions of adult human mesenchymal stem cells. 8th Annual Wisconsin Stem Cell Symposium. Madison WI, April 10, 2013.
3. Andrea L. Marty, Kyle E. Stehlik, Laura A. Hibbard, Arshak R. ALEXANIAN, Bradley H. Garcia. An improved system for expansion and epigenetic neural induction of human mesenchymal stem cells. International society for stem cell research (ISSCR), Boston, USA, June 12-15, 2013.
4. ALEXANIAN A.R. A safe and efficient method to produce neuronal cells from human bone marrow derived adult mesenchymal stem cells by modulators of chromatin modifying enzymes and SMAD signaling proteins. World Stem Cell Summit, Palm Beach, Florida, December 3-5, 2012.
5. Zhiying Zhang and ALEXANIAN A.R..Intrathecal infusion of bFGF and BDNF improved the survival and differentiation of neurally reprogrammed human mesenchymal stem cells transplanted into the injured spinal cord of rats. Stem Cell Programming & Reprogramming, Lisbon, Portugal, December, 8-10, 2011.
6. Zhiying Zhang and ALEXANIAN A.R. Generation of different neuronal subtype-like cells from neutrally modified human bone marrow derived mesenchymal stem cells. Stem Cell Biology meeting, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, September 20-24, 2011.
7. Zhiying Zhang, Michael G. Fehlings, Dennis J. Maiman, ALEXANIAN A.R. Transplantation of neutrally modified human bone marrow derived mesenchymal stem cells reduces lesion volume and improves locomotor recovery in spinal cord injured animals, 6th Annual Wisconsin Stem Cell Symposium. Reprogramming and controlling stem cell phenotype, Madison, Wisconsin, April 27, 2011.
8. ALEXANIAN, A.R., Michael G. Fehlings, Zhiying Zhang, Dennis J. Maiman. Transplanted neutrally modified human bone marrow derived mesenchymal stem cells reduce the volume of cavity, promote white matter sparing and significantly improve locomotor recovery in spinal cord injured rats. International society for stem cell research (ISSCR), Toronto, Canada, June 15-18, 2011.
9. ALEXANIAN, A.R., Transplanted neurally modified human mesenchymal stem cells survive and promote locomotor recovery in spinal cord injured animals. AOSpine, Bunff, Canada, April 8-11, 2010.
10. ALEXANIAN, A.R., Neural stem cells generated from human bone marrow derived mesenchymal stem cells by manipulation with epigenetic modifiers and neural inducing factors promote functional recovery in spinal cord injured rats. Epigenetics and Stem Cells, Copenhagen, Denmark, August 25-27, 2010.
11. ALEXANIAN, A.R., Zhang. Z., Fehlings, M., and Maiman D.J. Neurally induced human mesenchymal stem cells promote locomotor recovery in spinal cord injured rats. Neurotrauma, Las vegas, June 14-17,

2010.

12. ALEXANIAN, A.R., and Maiman D.J. Efficient production of neural cells from cat bone marrow-derived mesenchymal stem cells. International society for stem cell research (ISSCR), San Francisco, 17-21, 2010.
13. ALEXANIAN, A.R., Stadig C.J., Grosek J. Efficient production of neural cells from human bone marrowderived mesenchymal stem cells. 39th Annual Meeting Society for Neuroscience, Chicago, IL, October 17-21 2009.
14. ALEXANIAN, A.R., Svendsen S.N., Crowe M.J., and Kurpad, S.N. Human glial-restricted neural precursor transplants significantly improve motor and sensory function of spinal cord injured rats without causing allodynia. ISSCR 7th Annual Meeting, Barcelona, Spain, July 8-11, 2009.
15. ALEXANIAN, A.R., Svendsen S.N., Crowe M.J., and Kurpad, S.N. Transplantation of human glialrestricted neural precursors into the injured spinal cord promotes functional and sensory recovery without causing allodynia. International and National Neurotrauma Metting, Santa Barbara, California from September 7-11, 2009.
16. ALEXANIAN, A.R. An efficient method for generation of neural-like cells from adult human bone marrow derived mesenchymal stem cells. International and National Neurotrauma Metting, Santa Barbara, California from September 7-11, 2009.
17. Kurpad, S.N., ALEXANIAN, A.R., Svendsen S.N. Transplantation of human glial-restricted neural precursors into injured spinal cord promotes functional motor and sensory recovery without causing allodynia. Annual Meeting Congress of Neurological Surgeons, New Orleans, Louisiana, October 24-29, 2009.
18. ALEXANIAN, A.R., Dennis J. Maiman, Christy J. Stadig, James Grosek. Survival rate of transplanted neurally induced mesenchymal stem cells determines degree of functional recovery of spinal cord injured rats. 38th Annual Meeting Society for Neuroscience, Washington DC, November 15-19, 2008.
19. Tampo,A., ALEXANIAN, A.R., Kwok, W. Expression of Sodium and Calcium Channels in Neuronal-like Cells Derived from Mouse Bone Marrow Mesenchymal Stem Cells. 38th Annual Meeting Society for Neuroscience, Washington DC, November 2008.
20. ALEXANIAN, A.R., Stadig C.J., Maiman D.J.: Survival of neurally induced mesenchymal stem cells determines degree of functional recovery in grafted injured spinal cord rats. National Neurotrauma Society Symposium, July, 2008, Orlando, Florida.
21. ALEXANIAN, A.R., Maiman, D.J., Stadig, C.S.: Neurally induced mesenchymal stem cells facilitate motor recovery in spinal cord injured rats. 6th Annual Meeting International Society for Stem Cell Research, Philadelphia, Pennsylvania, June, 2008.
22. ALEXANIAN, A.R., Stadig, C., Syring, M.B., Kurpad, S.K., Gennarelli, T.A.: In vitro and in vivo characterization of neurally modified mesenchymal cells induced by epigenetic modifiers and neural stem cells environment. 37th Annual Meeting Society for Neuroscience, San Diego, CA, November 2007.
23. ALEXANIAN, A.R., Stadig, C., Syring, M.B., Gennarelli, T.A.: Neurally induced mesenchymal stem cells survive, generate neuronal and glial cells, and integrate into host neural circuitries after transplantation into intact spinal cord of rats. 5th Annual Meeting International Society for Stem Cell Research, Cairns, Australia, June 2007.
24. ALEXANIAN, A.R., Kwok, W.M., Tampo, A., Kurpad, S.N., Gennarelli, T.A.: Multi-step protocol for conversion of mesenchymal stem cells into neural stem-like cells and subsequent terminal differentiation into mature glial- and neuronal-like cells with appropriate morphology, expression profile and functional characteristics. Rachidian Society 15th Annual Meeting, Kona, HI, February 2007.
25. Akihito, T., ALEXANIAN, A.R., Kwok, W.K.: Electrophysiology of neural cells derived from bone marrow mesenchymal stem cells. American Society of Anesthesiologists, October 14-18, 2006, Chicago, IL.
26. ALEXANIAN, A.R., Kwok, W., Kurpad, S.N., Stadig, C., Syring M., Akihito, T.: Epigenetically modified mesenchymal stem cells grown in neural environment generate excitable neuron-like cells. 36th Annual Meeting Society for Neuroscience, October 14-18, 2006, Atlanta, GA.
27. ALEXANIAN, A.R., Kwok, W., Kurpad, S.N., Stadig, C., Syring, M., Akihito, T.: Neurally induced mesenchymal stem cells differentiated into excitable neuron-like cells. National Neurotrauma Society Symposium, July 7-9, 2006, St. Louis, MO.
28. ALEXANIAN, A.R.: Epigenetic modifiers promote efficient generation of neural-like cells from bone marrow-derived mesenchymal cells grown in neural environment. International Society for Stem Cell Research 4th Annual Meeting, June 29-July 1, 2006, Toronto, Ontario, Canada.

29. Kurpad, S.N., Macias, M.Y., Syring, M.B., Rickert, K., ALEXANIAN, A.R.: Thermal allodynia following C17.2 and C17.2/GDNF neural stem cell transplantation in spinal cord injury. Rachidian Society 14th Annual Meeting, Kona, HI, February 2006.
30. ALEXANIAN, A.R.: Epigenetic modifiers promote efficient generation of neural-like cells from bone marrow-derived mesenchymal cells grown in neural environment. Rachidian Society 14th Annual Meeting, Kona, HI, February 2006.
31. Kurpad, S.N., Bacon, M., ALEXANIAN, A.R.: A small portion of engrafted GDNF-expressing immortalized neural stem cells generate neuronal and glial phenotypes in traumatically injured spinal cord but do not provide functional recovery and induce allodynia in unaffected forepaws. 23rd Annual National Neurotrauma Society Symposium, November 10-11, 2005; Journal of Neurotrauma Abstracts 22(10):1163-1258, October 2005.
32. ALEXANIAN, A.R.: Bone marrow-derived mesenchymal stem cells generate cells with neuronal and glial characteristics induced by alive or paraformaldehyde or methanol fixed neural stem cells in vitro. 35th Annual Meeting Society for Neuroscience, Washington, DC, November 2005.
33. Kurpad, S.N., Bacon, M., ALEXANIAN, A.R.: GDNF-expressing C17.2 neural stem cells grafted into the injured spinal cord of rats exhibit little differentiation potential, do not provide functional benefit and cause allodynia-like hypersensitivity of forepaws. 35th Annual Meeting Society for Neuroscience, Washington, DC, November 2005.
34. ALEXANIAN, A.R.: Neural stem cells induce some bone marrow-derived cells to generate neural stemlike cells via juxtacrine and paracrine interactions. 3rd Annual Meeting International Society for Stem Cell Research, San Francisco, CA, June 2005.
35. ALEXANIAN, A.R., Bacon, M., Kurpad, S.N.: Co-expression of Oct4 and Sox2 in adult mouse neural stem cells grown in the presence and absence of murine embryonic stem cells. 34th Annual Meeting Society for Neuroscience, San Diego, CA, October 2004, #D36.
36. Kurpad, S.N., Crowe, M.J., Rickert, K., Hempeck, N., Bacon, M., ALEXANIAN, A.R.: Survival and differentiation of adult mouse neural stem cells transplanted into spinal cord-injured immunosuppressed cats. Journal of Neurotrauma 21:1339, 2004.
37. ALEXANIAN, A.R., Kurpad, S.N.: Some adult neural stem cells co-cultured with embryonic stem cells can regain pluripotent cell markers Oct4 and Sox2 expression but not growth characteristics. 13th Conference International Society of Differentiation, Honolulu, HI, pp 267-268, September 2004.
38. ALEXANIAN, A.R., Crowe, M.J., Kurpad, S.N.: Adult mouse neural stem cells expanded as monolayer/neurosphere cultures survive and integrate into the spinal cord of immunosuppressed cats. International Society for Stem Cell Research (ISSCR) 2nd Annual Meeting, Boston, MA, June 2004.
39. ALEXANIAN, A.R.: Reprogramming glia into multipotent neural stem cells. International Society for Stem Cell Research (ISSCR) 2nd Annual Meeting, Boston, MA, June 2004.
40. Kurpad, S.N., ALEXANIAN, A.R., Crowe, M.J.: Grafting neural stem cells in a cat model of spinal cord injuries. American Association of Neurological Surgeons, Orlando, FL, May 2004.
41. Kurpad, S.N., Crowe, M.J., Rickert, K.L., Hempeck, N.R., Maiman, D.J., ALEXANIAN, A.R.: Survival and integration of adult mouse neural stem cells after transplantation to the spinal cord of immunosuppressed cats. American Association of Neurological Surgeons, Orlando, FL, #1114, May 2004.
42. ALEXANIAN, A.R., Kurpad, S.N.: Transformation of quiescent and/or differentiated neural cells into stem cell pool in co-culture with neural stem cells. Rachidian Society 12th Annual Meeting, Kona, HI, February 2004.
43. Kurpad, S.N., Crowe, M.J., Rickert, K.L., ALEXANIAN, A.R.: Transplanted adult mouse neural stem cells into injured spinal cords of immunosuppressed cats survive, migrate, and differentiate into neurons and glia. Rachidian Society 12th Annual Meeting, Kona, HI, February 2004.
44. Kurpad, S.N., Crowe, M.J., Rickert, K.L., Hempeck, N.R., ALEXANIAN, A.R.: Survival and integration of adult mouse neural stem cells after transplantation to the spinal cord of immunosuppressed cats. American Association of Neurological Surgeons, Orlando, FL, May 2004.
45. ALEXANIAN, A.R., Kurpad, S.N.: Reprogramming of differentiated neural cell types in co-culture with neural stem cells. Society for Neuroscience 33rd Annual Meeting, New Orleans, LA, November 2003.
46. ALEXANIAN, A.R., Kurpad, S.N.: Neural stem cells induce reprogramming of neural cell types in coculture accompanied by connexin 43 protein (Cx43) expression in interacting cells. Society for Developmental Biology 62nd Annual Meeting, Boston, MA, July-August 2003.
47. ALEXANIAN, A.R.: Induced neural cell dedifferentiation as an alternative to neural stem cell transplants. Rachidian Society 11th Annual Meeting, Kona, HI, February 2003.

48. ALEXANIAN, A.R., Sieber-Blum, M.: Transforming adult neural stem cells into neural crest derivatives. Role of connexins. Experimental Biology Annual Meeting, New Orleans, LA, April 2002.
49. ALEXANIAN, A.R., Sieber-Blum, M.: Turning adult neural stem cells into neural crest derivatives. 31st Annual Meeting of the Society of Neuroscience, San Diego, CA, November 2001.
50. ALEXANIAN, A.R., Nornes, O.H.: Proliferation and regeneration of retrogradelly marked adult rat spinal and corticospinal neurons in culture. 40th American Society for Cell Biology Annual Meeting, San Francisco, CA, December 2000.
51. ALEXANIAN, A.R., Hidaka, H., der Terrossian, E., Nornes, H.: Co-localization of calponin and caldesmon with calcium-binding proteins - ocalcin and calmodulin in neurites and growth cones. A possible Ca2+-dependent regulatory pathway for growth cone motility. 6th European Symposium on Calcium Binding Proteins in Normal and Transformed Cells, Paris, France, June 2000.
52. ALEXANIAN, A.R., Mornet, D., Bamburg, J.R.: Direct interaction of caldesmon with calcium binding proteins. 39th Annual Meeting of the American Society for Cell Biology, Washington, DC, December 1999.
53. ALEXANIAN, A.R., Bamburg, J.R.: Effect of immunophilin ligands on the neuronal survival activity of 1998.
54. ALEXANIAN, A., Aghajanian, V., Muradian, H., Galoyan, A.: Role of 67kDa calcium-binding protein of annexin family and brain S-100 in calponin and caldesmon-dependent regulation of skinned smooth muscle contraction. 4th European Symposium on Calcium Binding Proteins in Normal and Transformed Cells, Perugia, Italy, May 1996.
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