#### **CURRICULUM VITAE**

Ranjan Gupta, M.D.

# **EDUCATION**

Rensselaer Polytechnic Institute Troy, New York	Bachelor of Science	1986 – 1988
Albany Medical College Albany, New York	MD	1988 – 1992
University of Pennsylvania, Philadelphia, Pennsylvania	Internship General Surgery	1992 – 1993
University of Pennsylvania, Philadelphia, Pennsylvania	Residency Orthopaedic Surgery	1993 – 1997
University of Pennsylvania, Philadelphia, Pennsylvania	NIH Post-doctoral Fellowship	1993 – 1994
University of California, Los Angeles Los Angeles, California	Fellowship Hand Surgery/Microsurgery	1997 – 1998
University of Berne Inselspital and Lindenhofspital Berne, Switzerland	AO Fellowship Trauma/Upper Extremity Surgery	1998

#### **ACADEMIC APPOINTMENTS**

University of California, Irvine
Department of Orthopaedic Surgery
Professor Step V with Tenure & FTE
Professor Step IV with tenure & FTE
7/1/2013 to 6/30/2015
Professor Step II with tenure & FTE
Professor Step I with tenure & FTE
Professor Step I with tenure & FTE
2/07- 12/1/09
Associate Professor Step II with tenure & FTE
Associate Professor Step II with tenure & FTE
1/1999 – 2/2005

# **ACADEMIC APPOINTMENTS**

University of California, Irvine Department of Biomedical Engineering/Henry Samueli School of Engineer	rina
Professor Step V with Tenure & FTE Professor Step IV with tenure & FTE Professor Step II with tenure & FTE Professor Step I with tenure & FTE Associate Professor Step II with tenure & FTE Assistant Professor with FTE	7/1/2016 to present 7/1/2013 to 6/30/2016 12/1/09-6/30/2013 2/07- 12/1/09 2/2005 - 2/2007 7/2000 - 2/2005
University of California, Irvine Department of Anatomy & Neurobiology Professor Step V with Tenure & FTE Professor Step IV with tenure & FTE Professor Step II with tenure & FTE Professor Step I with tenure & FTE Associate Professor Step II with tenure & FTE Assistant Professor with FTE	7/1/2016 to present 7/1/2013 to 6/30/2016 12/1/09-6/30/2013 2/07- 12/1/09 2/2005 - 2/2007 8/2003 - 2/2005
PROFESSIONAL APPOINTMENTS	
Attending in Orthopaedic Surgery Chief of Peripheral Nerve Research Lab Interim Chair Chairman Interim Residency Director	1/4/1999- Present 1/4/1999- Present 11/1/2006-12/31/2006 1/1/2007-12/23/2015 4/1/2007-7/1/2007
HONORS AND AWARDS	
Best Student Paper, Role: Mentor International Society for Ligament & Tendon Research	2016
Orthopedic Institute for Children Resident Award; Role: Mentor California Orthopaedic Association	2016
Joseph H. Boyes Award- Best Scientific Presentation at Annual Meeting American Society for Surgery of the Hand	2015
Oral Examiner for the American Board of Orthopaedic Surgery	2016 2015 2014 2011
Best Scientific Exhibit "Cost-effective Arthroscopic Surgery Training and Assessment Tool for Resident Education" American Academy of Orthopaedic Surgery	2015

# HONORS AND AWARDS

Chosen as a member of Best Doctors	2015 2014 2013 2012 2011
Orthopaedic Research & Education Foundation Resident Award California Orthopaedic Association (\$2000)	2015
Best Scientific Exhibit "Cost-effective Surgical Simulation" American Academy of Orthopaedic Surgery	2014
Accelerated Merit Increase Professor Step II to Professor Step IV	2013
15th International Symposium on Neural Regeneration Poster Finalist Award in recognition of excellence in research "Schwann Cell Derived Desert Hedgehog provides a Neuroprotective Effect against the Mechanical Stimuli from Compressive Neuropathies"	2013 ne
American British Canadian (ABC) Traveling Fellowship American Orthopaedic Association	2013
Best Basic Science Paper American Society of Peripheral Nerve	2013
AAHS Outstanding Paper American Association for Hand Surgery	2012
ASPN Outstanding Paper American Society of Peripheral Nerve	2011
Orthopaedic Hospital Resident Award California Orthopaedic Association (\$1000) Role: Primary Mentor	2011
Lloyd Taylor Award Western Orthopaedic Association (\$2000) Role: Primary Mentor	2010
1 <sup>st</sup> Place Research Award Resident/Fellow Cervical Spine Research Society (\$2000) Role: Primary Mentor	2008
Sterling Bunnell Traveling Fellowship in Hand Surgery American Society for Surgery of the Hand	2007-2008
Accelerated Merit Increase Assoc. Step II to Professor Step I	2007

# **HONORS AND AWARDS**

Kappa Delta Young Investigator Award (\$20,000) - AAOS/ORS/OREF	2006	
UCI nominee for the Burroughs Wellcome Fund for the Clinical Scientist Award in Translational Research	2006	
Finalist Russel Hibbs Award-Scoliosis Research Society	2005	
Chancellor's Award for Excellence in Fostering Undergraduate Research	2005	
Marshall Urist Young Investigator Award (\$5000) - Association of Bone and Joint Surgeons 2005		
Accelerated Merit Increase Asst. Prof. Step V to Assoc. Step II	2005	
Selected to be Co-Councilor for Zeta Chapter of Alpha Omega Alpha (UCI)	2004	
Selected for ASSH Young Leaders Program	2004	
AOA Emerging Leaders Program	2004	
Neer Award Finalist- American Shoulder & Elbow Surgeons	2004	
Best Shoulder/Elbow Poster at the AAOS	2004	
University of California, Irvine - Physician/Scientist Award (\$5000)	2003	
Chancellor's Award for Excellence in Research	2003	
Accelerated Merit Increase Asst. Prof. Step II to IV	2003	
Selected as a member of Advisory Board to the Arthritis Foundation	2001	
University of California ARISE Award for Academic Achievement	2001	
North American Traveling Fellowship – Alternate	2000	
NIH Career Development Award	2000	
AO/ASIF Orthopaedic Faculty Member – Selected to be a member of the North American Musculoskeletal Trauma Education Committee	1999	
AO International fellowship to study with Drs. Uhli Buehler and Diego Fernandez	1998	
Alpha Omega Alpha Honor Medical Society	1991	
Dean's Award for Outstanding Research Endeavors for the paper: "A Preliminary Study of Ligamentous Structures in the Occiputo-Atlanto- Axial Region with an Evaluation of Three Posterior Fusion Devices"	1990	

1/1/11-1/1/12

#### **HONORS AND AWARDS**

Letter of Commendation for Academic Excellence in Medical School 1989

Summa Cum Laude Graduate – Rensselaer Polytechnic Institute 1990

Elected to Alpha Epsilon Delta Junior Honor Medical Society – Rensselaer Chapter 1989

#### RESEARCH SUPPORT

Principal Investigator - NIH Award from the National Institute for
Neurologic Disorders and Stroke
Schwann Cell Control of Chronic Nerve Injury
2R01NS049203-06A1
(\$1,653,862)

Orthopaedic Research and Education Foundation 7/1/2014-6/30/2015
Clinician Scientist Training Grant – Minal Tapadia
Schwann Cell-Derived Hedgehog as a Therapeutic Adjunct for Compressive Neuropathies
Role: Primary Mentor
(\$20,000)

OREF Resident Clinician Scientist Training Grant- Tom Chao 7/1/2012- 6/30/2013 *A Novel Method to Preserve the Neuromuscular Junction After Traumatic Nerve Injury.*Role: Primary Mentor (\$20,000)

Orthopaedic Trauma Association Resident Grant

Preservation of the Neuromuscular Junction after Nerve Injury

Role: Primary Mentor

(\$8,000)

Co-Investigator/Sponsor, The Henry Samueli School of Engineering Research Fellowship for Undergraduate Students-Nima Nassiri 3/30/09- 7/10/09

Co-Investigator/Sponsor, Undergraduate Research Opportunity- Ryan Anderson 12/23/08 – 6/30/09 *The Role of Durotomy and Duraplasty Following Cervical Spinal Cord Injury in an Animal Model* (\$600)

Co-Investigator/Sponsor, Undergraduate Research Opportunity- Nima Nassiri 12/23/08 – 6/30/09 Schwann Cell Integrin Expression Following Peripheral Nerve Injury (\$600)

Principal Investigator-American Society for Surgery of the Hand

Altered Myelination with Compression Neuropathies: The Role of Schwann Cell

Mechanotransduction
(\$19,187 annual direct costs)

## **RESEARCH SUPPORT (cont.)**

Co-Investigator (5% effort) - NIH Award from the National Institute for Neurologic Disorders and Stroke

07/15/01-06/30/06

Post-doctoral Training Program in Neural Regeneration T32 NS-07486

(\$218,860 annual direct costs)

Co-Investigator (5% effort) - NIH Award from the National Institute for Neurologic Disorders and Stroke

07/01/03-06/30/07

Summer Research Training in Neuroscience

T35 NS-45563

(\$38,280 annual direct costs)

Co-Investigator/Sponsor, Orthopaedic Research and Education Foundation Medical Student Summer Orthopaedic Research Fellowship-Michael Gray *Macrophage mediated effects with chronic nerve compression injury* (\$2500)

6/1/05-9/1/05

Principal Investigator - NIH Award from the National Institute for Neurologic Disorders and Stroke

7/1/04-4/30/10

Schwann cell regulation of chronic nerve injury 5R01 NS049203 (\$1,670,679)

Co-Investigator/Sponsor, Whitaker Foundation-Tom Chao

6/1/03 - 9/1/03

Mechanical Stimulation of Peripheral Neural Tissue Alters the Process of Myelination (\$4500)

Co-Investigator/Sponsor, NIH Post-doctoral fellowship-Phong Bui *Evaluation of Schwann cell responses to different injury models* (\$5500)

6/1/03 - 9/1/03

Co-Investigator/Sponsor, Undergraduate Research Opportunity-Michael Gray *The role of vascular endothelial growth factor in compressive neuropathy* (\$3000)

6/1/03 - 9/1/03

Principal Investigator, AirCast Orthopaedic Research Foundation 8/1/03 – 7/31/05 Schwann Cell Response to Biomechanical forces of Carpal Tunnel Syndrome (\$100,000)

Principal Investigator, University Academic Senate Faculty Desktop Computing Initiative Allocation (\$2250)

2/4/02

#### **RESEARCH SUPPORT (cont.)**

Co-Investigator/Sponsor, AOA Honor Medical Society Student Research Fellowship- Kasra Rowshan 3/14/02 - 12/31/02

Development of a transgenic model for compression Neuropathy (\$3500)

Co-Investigator/Sponsor, UCI Undergraduate Research Opportunity-Phong Bui 6/1/00 – 6/1/01 *Induction of Schwann cell apoptosis with chronic nerve injury* (\$2000)

Principal Investigator, NIH Award from the National Institute for Neurologic Disorders and Stroke 5K08 NS02221 Transduction of Chronic Nerve Injury by Schwann Cells (\$645,300) 09/30/00 - 08/31/05

Co-Investigator/Mentor, NIH Post-doctoral fellowship-Dara Chafik Response of Schwann cells to shear stress (\$5500) 6/1/00 - 9/1/00

Principal Investigator, UCI Whitaker Foundation Bioengineering Grant *The development of a chronic* in-vitro *model for chronic nerve injury* (\$4500)

6/99 - 8/99

Principal Investigator, University of Pennsylvania Seed Grant 1/1/96 – 1/1/97 The Effect of Laminar Fluid Flow on Fibroblasts Derived from Dupuytren's Tissue (\$1700)

#### RESEARCH SUPPORT (PENDING)

Principal Investigator with Oswald Steward (Professor of Neurobiology and Behavior and Anatomy & Neurobiology and the Director of the Reeve-Irvine Research Center) and David Gardiner (Professor of Developmental & Cell Biology and Associate Dean for Research)

"The Lazarus Project: Harnessing Neuromuscular Factors to Improve Functional Recovery after Traumatic Nerve Injury"

Defense Medical Research and Development Program 2015

Award Mechanism: Extremity Regeneration - Technology/Therapeutic Development Award

Principal Investigator

"Surgical Repair: Failure at the Enthesis without Prevention of Disease Prevention" RR&D Merit Review

KREED WICHT REVIEW

VHA Research and Development Program 2016

# **PUBLICATIONS Full Length Manuscripts**

- 1. <u>Gupta, R</u>: A short history of neuropathic arthropathy. *Clinical Orthopaedics and Related Research* **296**: 43-49, November 1993. PMID: 8222448
- 2. Lieberman, JR; Fuchs, MD; Haas, SB; Garvin, KL; Goldstock, L; <u>Gupta, R</u>; Pellicci, PM; Salvati, EA: Hip Arthroplasty in Patients with Chronic Renal Failure. *Journal of Arthroplasty* **10(2)**: 191-195, 1995. PMID: 7798100
- 3. Bernot, M; <u>Gupta, R</u>; Dobrasz, B; Chance, B; Heppenstall, RB; Sapega, A: The effect of antecedent ischemia on the tolerance of skeletal muscle to increased interstitial pressure. *Journal of Orthopaedic Trauma* **10(8):** 555-559, 1996. PMID: 8915918
- 4. <u>Gupta, R</u>; Leggin, BG; Iannotti, JP: Results of surgical repair of full thickness tears of the rotator cuff. *Orthopaedic Clinics of North America* **28(2):** 241-248, 1997. PMID: 9113719
- 5. Steinberg, D and <u>Gupta</u>, <u>R</u>: Proximal interphalangeal joint arthroplasty: a review. *Seminars in Arthroplasty* **8(2)**: 120-127, 1997.
- 6. <u>Gupta, R</u>; Sher, J; Williams, GR; Iannotti, JP: Non-union of the scapular body a case report. *Journal of Bone and Joint Surgery* **80A(3)**: 428-430, 1998. PMID: 9531212
- 7. Lorich, DG; Brighton, CT; <u>Gupta, R</u>; Corsetti, JR; Levine, SE; Gelb, ID; Seldes, R, Pollack, SR: Biomechanical pathways mediating the response of bone cells to capacitive Coupling. *Clinical Orthopaedics & Related Research* **350**: 246-256, May, 1998. PMID: 9602826
- 8. <u>Gupta, R;</u> Allen, FA; Tan, V; Bozentka, DJ; Bora, FW; Osterman, AL: The effect of laminar fluid flow on fibroblasts derived from Dupuytren's tissue and normal palmar fascia. *Journal of Hand Surgery* **23A:** 945-950, 1998. PMID: 9763277
- 9. <u>Gupta, R;</u> Bozentka, DJ; Bora, FW: The evaluation of tension in an experimental model of external fixation of distal radius fractures. *Journal of Hand Surgery* **24A:** 108-112, 1999. PMID: 10048524
- 10. Fernandez, DL and <u>Gupta</u>, <u>R</u>: Vessel Implantation for Kienbock's Disease. *Atlas of Hand Clinics* **4(2)**: 73-90, 1999.
- 11. Fornalski, S; Lee, TQ; <u>Gupta, R</u>: Chronic Instability of the Distal Radioulnar Joint: A review. *The University of Pennsylvania Orthopaedic Journal* **13:** 43-52, 2000.
- 12. <u>Gupta, R;</u> Nelson, SD; Baker, J; Jones, NF; Meals, RA: The innervation of the triangular fibrocartilage complex: nitric acid maceration rediscovered. *Plastic & Reconstructive Surgery* **107:** 135-139, 2001. PMID: 11176611
- 13. Jones, NF; <u>Gupta, R</u>: Post-operative Monitoring of Pediatric Toe-to-Hand Transfers with Differential Pulse Oximetry. *Journal of Hand Surgery* **26A**: 525-529, 2001. PMID: 11418919

- 14. <u>Gupta, R</u>; Bozentka, DJ; Osterman, AL: Wrist arthroscopy: indications and technique. *Journal of the American Academy of Orthopaedic Surgery* **9(3)**: 200-209, 2001. PMID: 11421577
- 15. <u>Gupta, R;</u> Villablanca, PJ; Jones, NF: Evaluation of an acute compression injury in an animal model by magnetic resonance neurography. *Journal of Hand Surgery* **26A**: 1093-1099, 2001. PMID: 11721257
- 16. <u>Gupta, R</u>; Allaire, RB; Fornalski, S; Osterman, AL; Lee, TQ: Kinematic Analysis of the Distal Radioulnar Joint after a Simulated Progressive Ulnar-sided Wrist Injury. *Journal of Hand Surgery* **27A**: 854-862, 2002; PMID: 12239676
- 17. Chafik, D; <u>Gupta, R</u>: Primary total elbow arthroplasty. *Operative Techniques in Orthopaedics* **12(1)**: 15-20, 2002. PMID: 15540850
- 18. Fornalski, S; <u>Gupta, R</u>; Lee, TQ. Anatomy and Biomechanics of the Elbow Joint. *Sports Medicine and Arthroscopy Review*. Jan-March; 11(1): 1-9, 2003.
- 19. Chafik, D; Bear, D; Bui, P; Patel, A; Kim, BT; Jones, NF; Hung, CT; <u>Gupta, R</u>: Optimization of Schwann Cell Adhesion for Peripheral Nerve Tissue Engineering. *Tissue Engineering* **9(2)**: 233-243, 2003. PMID: 12740086
- 20. <u>Gupta, R;</u> Steward, O. Chronic nerve compression induces concurrent proliferation and apoptosis of Schwann cells. *Journal of Comparative Neurology* **461(2)**: 174-86, June 23, 2003. PMID: 12724836
- 21. <u>Gupta, R;</u> Jones, NF: A Novel Method of Skeletal Fixation in an Above Elbow Replantation: The Dowel Pin Technique. *Plastics and Reconstructive Surgery* **111(7):** 2349-2352. 2003. PMID: 12794480
- 22. <u>Gupta, R;</u> Lin, Y; Bui, P; Chao, T; Preston, C; Mozzafar, T: Macrophage recruitment follows the pattern of inducible nitric oxide synthase expression in a model for carpal tunnel syndrome. *Journal of Neurotrauma* **20(7)**: 671-680, 2003; PMID: 12908928
- 23. Fornalski, S; <u>Gupta, R</u>; Lee, TQ. Anatomy and Biomechanics of the Elbow Joint. *Techniques in Hand and Upper Extremity Surgery* **7(4)**: 168-178, 2003; PMID: 16518218
- 24. <u>Gupta, R;</u> Rowshan, K; Mozaffar, T; Steward, O: Chronic Nerve Compression Induces Segmental Demyelination in a Rat Model of Carpal Tunnel Syndrome. *Experimental Neurology* **187(2)**: 500-508, 2004; PMID: 15144876
- 25. Rummler, LR; <u>Gupta, R</u>: Peripheral nerve repair: a review. *Current Opinion in Orthopaedics* **15(4)**: 215-219, 2004.

- 26. Azanchi, R; Bernal, G; <u>Gupta, R</u>; Keirstead, HS: Combined demyelination plus Schwann cell transplantation therapy increases spread of cells and axonal regeneration following contusion injury. *Journal of Neurotrauma* **21(6)**: 775-788, 2004. PMID: 15253804
- 27. Kobayashi, MR; Brenner, KA; <u>Gupta, R</u>; Evans, GRD: Functional Biceps Brachii Reconstruction Using the Free Tensor Fascia Lata. *Plastic and Reconstructive Surgery* **114(5)**: 1208-14, 2004. PMID: 15457037
- 28. Chafik, D; Lee, TQ; <u>Gupta, R</u>: Total Elbow Arthroplasty: Current Indications, Factors Affecting Outcome, and Long-term Follow-up Results. *American Journal of Orthopaedics* **33(10)**: 496-503, 2004. PMID: 15540850
- 29. Rummler, LS; Dinh, PT; <u>Gupta, R</u>. The anatomy and biochemistry of myelin and myelination. *Operative Techniques in Orthopaedics* **14(3)**: 146-152, 2004.
- 30. Rowshan, K; Jones, NF, <u>Gupta, R</u>. Current Surgical Techniques in Nerve Repair. *Operative Techniques in Orthopaedics* **14(3)**: 163-170, 2004.
- 31. Dinh, PT; <u>Gupta, R</u>. Subtotal Medial Epicondylectomy as a Surgical option for treatment of Cubital Tunnel Syndrome. *Techniques in Hand & Upper Extremity Surgery* **9(1)**: 52-59, 2005; PMID: 16092820
- 32. <u>Gupta, R</u> and Lee, TQ. Positional-dependent changes in glenohumeral joint contact pressure and force: Possible biomechanical etiology of posterior glenoid wear. *Journal of Shoulder and Elbow Surgery* **14(1S)**: S105-10, 2005; PMID: 15726069
- 33. <u>Gupta, R</u>; Gray, M; Chao, T; Bear, D; Modafferri, E; Mozaffar, T. Schwann cells upregulate vascular endothelial growth factor secondary to chronic nerve compression injury. *Muscle Nerve* **31(4):** 452-60, 2005; PMID: 15685607
- 34. <u>Gupta, R;</u> Rummler, L; Steward, O. Understanding the biology of compressive neuropathies. *Clinical Orthopaedics and Related Research* **436**:251-260, June 2005.
- 35. <u>Gupta, R</u>; Bingenheimer, E; Fornalski, S; McGarry, MH; Osterman, AL; Lee, TQ. The effect of ulnar shortening on lunate and triquetrum motion-a cadaveric study. *Clinical Biomechanics* **20**:839-845, 2005; PMID: 16006023
- 36. <u>Gupta, R;</u> Truong, L; Bear, D; Chafik, D; Modafferi, E; Hung, CT: Shear stress alters Schwann cell expression of myelin associated glycoprotein (MAG) and myelin basic protein (MBP). *Journal of Orthopaedic Research* **23**:1232-1239, 2005. PMID: 16140204
- 37. Karamanoukian, R; <u>Gupta, R</u>; Evans, GRD. A Novel Technique for the Prophylactic Plating of the Osteocutaneous Radial Forearm Flap Donor Site. *Annals of Plastic Surgery* **56(2):** 200-204, 2006. PMID: 16432333

- 38. <u>Gupta, R;</u> Chanual, J. Spatiotemporal pattern of macrophage recruitment after chronic nerve compression injury. *Journal of Neurotrauma* **23(2):** 216-226, 2006. PMID: 16503805
- 39. <u>Gupta, R</u>; Rummler, LS; Palispis, W; Chao, T; Truong, L; Steward, O: Local down-regulation of myelin-associated glycoprotein permits axonal sprouting with chronic nerve compression injury. *Experimental Neurology* **200(2)**: 418-29, 2006. Epub 2006 Jun 9; PMID: 16764860
- 40. Berger, B; <u>Gupta, R</u>. Demyelination after chronic nerve compression injury alters Schmidt-Laterman Incisures. *Journal of Anatomy* **209**:111-118, 2006.
- 41. Rasouli, A; Bhatia, N; Souryadevara, S; Cahill, K; <u>Gupta, R</u>. Transplantation of preconditioned Schwann cells in peripheral nerve grafts following contusion injury to the adult spinal cord improves recovery in a rat model. *Journal of Bone and Joint Surgery* **88A**(11): 2400-2410, 2006; PMID: 17079397
- 42. Shapiro, TA; McGarry, Gupta, R, M; Lee, Y S; Lee, T Q: Biomechanical effects of glenoid retroversion in total shoulder arthroplasty. *Journal of Shoulder and Elbow Surgery* 16(3): 90S-95S, May/June 2007 [2006 Dec 11Epub ahead of print]; PMID: 17169588
- 43. Gray, M; Palispis, W; Popovich, PG; van Rooijen, N; <u>Gupta, R</u>. Macrophage depletion alters the blood nerve barrier without affecting Schwann cell function after neural injury. *Journal of Neuroscience Research* **85(4):** 766-777, 2007. [Epub ahead of print January 31, 2007]; PMID: 17266098. Cover Image for the Journal is from this manuscript.
- 44. Dinh, PT; Bhatia, N; Souryadevara, S; Cahill, K; <u>Gupta, R</u>. Transplantation of preconditioned Schwann cells in peripheral nerve grafts following hemisection spinal cord injury. *Spine* **32(9)**: 943-9, 2007; PMID: 17450067
- 45. Ecklund, K; Lee, TQ; Tibone, J; <u>Gupta, R</u>: Rotator Cuff Tear Arthropathy: Pathogenesis, Diagnosis, and Treatment. *Journal of the American Academy of Orthopaedic Surgery* **15(6)**: 340-349, 2007; PMID: 17548883
- 46. <u>Gupta, R</u>; Lee, TQ. Contributions of the Different Rabbit Models to our Understanding of Rotator Cuff Pathology. *Journal of Shoulder and Elbow Surgery* **16(5):** 149S-157S, September/October 2007; PMID: 17903710
- 47. Strandberg, E; Mozaffar, T; <u>Gupta, R</u>. The Role of Electrodiagnostic Studies in Nerve Injuries and other Orthopaedic Disorders. *Journal of Hand Surgery* **32A(8):** 1280-1290, 2007; PMID: 17923316
- 48. Chao, T; Pham, K; Steward, O; <u>Gupta, R</u>. Chronic nerve compression injury induces a phenotypic switch of neurons within the dorsal root ganglia. *Journal of Comparative Neurology* **506:**180-193, 2008; PMID: 18022951

- 49. Krishnan, KG; Mucha, D; <u>Gupta, R</u>; Schackert, G. Brachial Plexus Compression caused by recurrent Clavicular Nonunion and Space Occupying Pseudoarthrosis: Definitive Reconstruction using free vasularized bone flap: A Series of Eight Cases. *Neurosurgery Operative Neurosurgery Supplement 2* **62(5)**: 461-470, discussion 469-70, May 2008; PMID: 18596530
- 50. Tafti, M; Cramer, S; <u>Gupta, R</u>. Orthopaedic Management of the Upper Extremity in Stroke Patients. *Journal of the American Academy of Orthopaedic Surgery* **16(8)**: 462-70. 2008; PMID: 18664635
- 51. Mozaffar T, Strandberg E, Abe K, Hilgenberg LG, Smith MA, <u>Gupta R.</u> Neuromuscular junction integrity after chronic nerve compression injury. *Journal of Orthopaedic Research* **27(1):** 114-9, Jan 2009; 2008 Jul 24. [Epub ahead of print]; PMID:18655131
- 52. Seiber K, <u>Gupta R</u>, McGarry MH, Safran MR, Lee TQ. The role of the elbow musculature, forearm rotation, and elbow flexion in elbow stability: An in vitro study. *Journal of Shoulder and Elbow Surgery* **18(2):** 260-8, March-April, 2009 with Epub 2008 Nov 30. PMID: 19046641
- 53. Rasouli A, Bhatia N, Dinh P, Cahill K, Suryadevara S, <u>Gupta R</u>. Resection of glial scar following spinal cord injury. *Journal of Orthopaedic Research* **27(7):** 931-6; July, 2009.PMID: 19062171
- 54. Pham, KD and <u>Gupta</u>, <u>R</u>. Understanding the mechanisms of entrapment neuropathies. *Neurosurgical Focus* 26(2): E7, February, 2009.
- 55. Grumet, RC; Hadley, S; Diltz, MV; Lee, TQ; <u>Gupta, R</u>. Development of a Novel Model for Rotator Cuff Pathology: The Rabbit Subscapularis Muscle. *Acta Orthopaedica* **80(1):** 97-103, 2009 Feb; PMID: 19234889
- 56. Schamblin, R; <u>Gupta, R</u>; McMaster, W; Lee, TQ: Quantitative Assessment of Glenohumeral Joint Forces in Total ands Bipolar Shoulder Arthroplasties- An In-Vitro Study. *Clinical Biomechanics* (Bristol, Avon). **24(8):** 626-31; 2009 Jun 5. [Epub ahead of print] PMID: 19501938
- 57. Hazel, A; Lee, TQ; <u>Gupta, R</u>. Reverse Shoulder Arthroplasty: Indications and Future Directions. *Current Orthopaedic Practice* **20(4)**: 355-364, July/August 2009.
- 58. Dinh, PT; Hazel, A; Palispis, W; <u>Gupta, R</u>. Functional Assessment after Sciatic Nerve Injury. *Microsurgery* **29(8)**: 644-649; 2009 Aug 3. [Epub ahead of print] PMID: 19653327
- 59. Frieboes LR and <u>Gupta R</u>. An in vitro traumatic model to evaluate the response of myelinated cultures to sustained hydrostatic compression injury. *Journal of Neurotrauma* **26(12):** 2245-56, Dec 2009. [Epub 2009 Jul 31] PMID: 19645529

- 60. Pham, KD; Nassirin, N; <u>Gupta, R</u>. c-Jun, krox-20, and integrin beta4 expression following chronic nerve compression injury. *Neuroscience Letters* **465(2)**: 194-8; 2009 Nov 13. [Epub 2009 Sep 16] PMID: 19765400
- 61. Seiber, KS; Savoie, FH; McGarry, MH; Gupta, R; Lee, TQ. Biomechanical evaluation of a new reconstruction technique of the ulnar collateral ligament in the elbow with modified bone tunnel placement and interference screw fixation. *Clinical Biomechanics* (Bristol, Avon) **25(1):** 37-42; Jan 2010. [Epub 2009 Oct 16] PMID: 19837496
- 62. Bederman, SS; Rosen, CD; Bhatia, NN; Kiester, PD; Gupta, R. Drivers of Surgery for the Degenerative Hip, Knee and Spine: A Systematic Review. *Clinical Orthopaedics & Related Research* 2011 Aug 5. [Epub ahead of print] PMID: 21818668
- 63. Frieboes, LR; Palispis, WA; Gupta, R. Nerve compression activates selective nociceptive pathways and up regulates peripheral sodium channel expression in Schwann cells. *Journal of Orthopaedic Research* **28(6):** 753-61; June, 2010. [Epub ahead of print] PMID: 20014316 Cover Image for this issue of the Journal is Figure 4 from this manuscript
- 64. Tapadia, M; Mozaffar, T; Gupta, R. Compressive Neuropathies of the Upper Extremity: Update on Pathophysiology, Classification, and Electrodiagnostic Findings. *Journal of Hand Surgery* **35(4):** 668-677; April, 2010. [Epub 2010 Mar 11] PMID: 20223605
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- **4.** Palisipis W and <u>Gupta, R</u>. Limits of Human Peripheral Nerve Regeneration: Current and Future Directions.
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- 134. Nassiri, N; Kang, J; Hazel, T; Bathen, M; <u>Gupta, R</u>. Cajal Band Reorganization and the Disruption of Schwann Cell Dystrophin-Related Protein Complex following Chronic Nerve Compression Injury. *Journal of the Peripheral Nervous System* **16(Supplement):** S96-97, 2011.
- 135. Vitali, RS; Bowen, A; Rafijah, N; Dolores C; Mozaffar, T; Rafijah, G; <u>Gupta, R</u>. The Use of Fibrin Glue with Nerve Repairs does not Hinder Recovery. *Journal of the Peripheral Nervous System* **16(Supplement):** S145-146, 2011.
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- 139. Kang, JR; Wang, W; Nassiri, N; Hahn, P; Frum, D; Mozaffar, T; <u>Gupta, R</u>. Neural Wound Healing: Why Surgery May Not Be Enough for Carpal Tunnel Syndrome. *Transactions of the American Society for Peripheral Nerve* page 168, January 2012.
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- 142. <u>Gupta, R;</u> Tornetta, P; Mazzocca, AD; Stern, PL. Changing the Surgical Education Paradigm- How Do You Teach Someone to Have the Surgical Skills of an Orthopaedic Surgeon? *Transactions of the American Orthopaedic Association* page 46, 2012.
- 143. Chao, T; Hanh, P; Frump, D; Caiozzo, V; Mozzafar, T; <u>Gupta, R</u>. Blockade of Matrix Metalloproteinase-3 after Traumatic Nerve Injury Offers a Novel Treatment for Improving Functional Recovery. *Transactions of the American Society for Society for Surgery of the Hand* **67:**16-17, 2012.
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- 147. Kurimoto, S; Jung, JS; Frump, D; Waterman, M; Mozaffar, T; <u>Gupta, R</u>. The Role of the Wnt3a and the Beta-Catenin Signaling Pathway at the Motor Endplate following Traumatic Nerve Injury. *Transactions of the Orthopaedic Research Society* **60**: 0531, 2014.
- 148. Lopez, G; Wright, R; Martin, D; Jung, J; Hahn, P; <u>Gupta, R</u>. Cost-Effective Surgical Simulation Training and Assessment Tool for Junior Level Resident Psychomotor Surgical Skills. *Transactions of the American Orthopaedic Association* ED01, p. 61, 2014.

- 149. <u>Gupta, R.</u> Orthopaedic Alternative Medicine: The Science and the Voodoo. *Transactions of the Association of Bone and Joint Surgeons* **76**:134, 2015.
- 150. Zhu, D; Rao, R; Moroski, N; Lee, T; <u>Gupta, R</u>. Curcumin: Does it Decrease Inflammation in Tendon Healing? Transactions of the International Symposium on Ligaments and Tendons **XV**: 48, 2016.

- 1. "Examination of the Hand and Wrist" at Orthopaedics for Primary Care Physicians at UCLA Department of Orthopaedic Surgery, Santa Monica, California, 1998.
- 2. "Fingertip Amputations and flap Coverage of the Upper Extremity" at Norodom Sihanouk Teaching Hospital of Phnom Penh University, Cambodia, 1998.
- 3. "Third World Orthopaedic Surgery: Cambodia" at UCLA Division of Plastic Surgery Grand Rounds, Los Angeles, California, 1998.
- 4. "Dupuytren's Contracture: Basic Science and Clinical Medicine" at Department of Hand Surgery, University of Berne, Switzerland, 1998.
- 5. "Tenosynovitis of the Hand and Forearm" at the American Society of Surgery of the Hand Regional Review course, Los Angeles, California, 1998.
- 6. "The effect of laminar fluid flow on fibroblasts derived from Dupuytren's tissue and normal palmar fascia" at Lund University, Malmo, Sweden, 1998.
- 7. "Arthritis Pharmacology" at Basic Science Update for Occupational Therapists and Physical Therapists at UCLA, Los Angeles, California, 2000.
- 8. "Compressive neuropathies of the Upper Extremity" at USC Orthopaedic Surgery Grand Rounds, Los Angeles, California, 2000.
- 9. "Rheumatoid Thumb" at the UCLA Hand Therapist Conference, Los Angeles, California, 2001.
- 10. "Current concepts of Compression Neuropathy" at University of California, Irvine Orthopaedic Surgery Grand Rounds, Irvine, California, 2002.
- 11. "The biology of carpal tunnel syndrome" at the University of California, Los Angeles Department of Orthopedic Surgery Grand Rounds, Los Angeles, California, 2002.
- 12. "Compression Neuropathy Basic Science and Clinical Practice" at the University of California, Irvine, Division of Plastic Surgery, Irvine, California, July 2002.
- 13. "Arthritis Pharmacology" at Orthopaedics Update for Occupational therapists and Physical Therapists at UCLA, Los Angeles, California, March 2003.
- **14.** "Ganglions" at Orthopaedics Update for Occupational therapists and Physical Therapists at UCLA, Los Angeles, California, March 2003.
- 15. "Anatomy and Evaluation of the Upper Extremity" at the 2003 Spinal Cord Conference at the Long Beach VA Healthcare System, Long Beach, California, June 2003.

- 16. "What's new in hand surgery?" at the International College of Surgeons Unites Stated Section-California Division Annual Meeting at Disneyland Anaheim Hilton Hotel, Anaheim, California, November 23, 2003.
- 17. Moderator of Shoulder session at the Orthopaedic Research Society, 2004- San Francisco, CA.
- 18. "Research as a Career Option" at the American Society for Surgery of the Hand, New York, NY, 2004.
- 19. "Compartment Syndromes of the Hand and Upper Extremity" at the Stanford Hand and Upper Limb Symposium, Palo Alto, CA, November 12-13, 2004.
- 20. Moderator of the Nerve session at the Orthopaedic Research Society, 2005- Washington, D.C.
- 21. "The Biology of Nerve Injury" at the American Society for Surgery of the Hand Pre-Course 3 -Advances and Innovations in Nerve Injury, Repair and Reconstruction, San Antonio, TX, September 22, 2005.
- 22. "The Role of Electrical Studies" at the American Society for Surgery of the Hand Pre-Course 3 -Advances and Innovations in Nerve Injury, Repair and Reconstruction, San Antonio, TX, September 22, 2005.
- 23. "Cubital Tunnel Syndrome" at the ASSH Crucial Elements Review Course for the Southern California Society for Surgery of the Hand, Los Angeles, CA, November, 2005.
- 24. Moderator of the Upper Extremity session at the Orthopaedic Research Society, March, 2006- Chicago, IL.
- 25. "Schwann cell control of Chronic Nerve Injury" at the 51<sup>st</sup> Annual Meeting of the Plastic Surgery Research Council, Dana Point, CA, May 17-20<sup>th</sup>, 2006.
- 26. "Schwann cell control of Chronic Nerve Injury" at the Fifth Annual U.C. Irvine Multidisciplinary Exercise Science Retreat, Irvine, CA, June 15-16, 2006.
- 27. "Emerging Concepts in the Management and Treatment of Nerve Injuries" at the ASSH Crucial Elements Review Course for the Southern California Society for Surgery of the Hand, Los Angeles, CA, October, 2006.
- 28. "Carpal Tunnel Syndrome: The Basic Science around the Pathophysiology of Nerve Compressive Neuropathies and How This Can Help the Practicing Surgeon in Everyday Practice: at the Annual American Society for Surgery of the Hand meeting, Washington DC, September 7, 2006.

- 29. Organizer of Workshop 3 "Evolving Ideas in Spinal Cord and Peripheral Nerve Injuries: Neuroscience for Musculoskeletal Investigators" at the 53<sup>rd</sup> Orthopaedic Research Society meeting, San Diego, CA, February 11, 2007.
- 30. "Developmental Neuroscience" at the 53<sup>rd</sup> Orthopaedic Research Society meeting, San Diego, CA, February 11, 2007.
- 31. "Fractures of the Adult Elbow" at the Western Orthopaedic Association San Diego chapter, April 10, 2007.
- 32. "Understanding the mechanisms of the chronic nerve injuries from carpal tunnel syndrome to spinal nerve root stenosis" Visiting Professor for the Department of Orthopaedic Surgery at the University of California, San Diego, April 11, 2007.
- 33. Moderator of Platform Session 4 Neurobiology and Schwann cell Biology at the Biennial Meeting of the Peripheral Nerve Society Snowbird, Utah, July 17, 2007.
- 34. Moderator of the Nerve Session at the 62<sup>nd</sup> Annual Meeting of the American Society for Surgery of the Hand, Seattle, WA, September 28, 2007.
- 35. Moderator Symposium 3- "Evidence Based Management of Cubital Tunnel Syndrome" at the 62<sup>nd</sup> Annual Meeting of the American Society for Surgery of the Hand, Seattle, WA, September 28, 2007.
- 36. "Biology of Carpal Tunnel Syndrome" in the Instructional Course 15/Presidential Instructional Course: Evidence Based Diagnosis and Treatment of Carpal Tunnel Syndrome at the 62<sup>nd</sup> Annual Meeting of the American Society for Surgery of the Hand, Seattle, WA, September 28, 2007.
- 37. "The inherent limitations of peripheral nerve surgery and the role of molecular medicine"-Visiting Professor for the Department of Orthopaedic Surgery at the St. Luke's Roosevelt Hospital, NY; October 4, 2007.
- 38. "Mechanotransduction of chronic nerve injury by Schwann cells" Visiting Professor for the Department of Biomedical Engineering at Columbia University, NY; October 5, 2007.
- 39. "Fractures of the Adult Elbow" Visiting Professor for the Department of Orthopaedic Surgery at the University of Pittsburgh, PA; October 23, 2007.
- 40. "The inherent limitations of peripheral nerve surgery and the role of molecular medicine" Visiting Professor for the Department of Orthopaedic Surgery at the University of Pittsburgh, PA; October 24, 2007.
- 41. "Nerve Physiology and Repair"- Invited Speaker at the Concepts in Upper Extremity Restoration (CUER) *Disruptive Technologies and Future Directions in Upper Extremity*

- 42. "Nerve Repair and Reconstructions: The Future"- Invited Speaker at the Concepts in Upper Extremity Restoration (CUER) *Disruptive Technologies and Future Directions in Upper Extremity Surgery*, Aventura, FL; October 26-27, 2007.
- 43. Moderator Scientific Session B of the Annual Meeting of American Society for Peripheral Nerve, Beverly Hills, CA; January 11, 2008.
- 44. "Schwann cell control of chronic nerve injury". Visiting Professor for the Department of Orthopaedic Surgery, Lerdsvin Hospital, Bangkok, Thailand; February 19, 2008.
- 45. "Schwann cell control of chronic nerve injury". Visiting Professor at Ogori-Daiichi General Hospital, Yamaguchi, Japan; April 14, 2008
- 46. "Mechano-transduction of chronic nerve injury by Schwann cells" at the 51st Annual Meeting of the Japanese Society for Surgery of the Hand, Tsukuba, Japan; April 17, 2008.
- 47. "Fractures of the adult elbows-tips and pearls from the trenches". Visiting Professor at the Department of Orthopaedic Surgery, St. Mariannna University, Tokyo, Japan; April 20, 2008.
- 48. "Mechano-transduction of chronic nerve injury by Schwann cells" Visiting Professor for the Department of Plastic Surgery, Niigata University, Niigata, Japan; April 22, 2008.
- 49. "The inherent limitations of peripheral nerve surgery and the role of molecular medicine" Visiting Professor for the Department of Orthopaedic Surgery, Nagoya University, Nagoya, Japan; April 24, 2008.
- 50. "Mechano-transduction of chronic nerve injury by Schwann cells" 2007-2008 Gail F. Beach Memorial Visiting Lectureship Series for the Department of Neurologic Surgery and the Miami Project to Cure Paralysis, University of Miami, Miami, FL; June 5, 2008.
- 51. "Schwann cell control of chronic nerve injury". Visiting Professor at the Texas Scottish Rite Hospital for Children, Dallas, TX; July 10, 2008.
- 52. "Nerve Injuries: Current Management and Future Directions". Invited Speaker at the Society for Military Orthopaedic Surgeons (SOMOS) 50<sup>th</sup> Annual Meeting, Las Vegas, NV; December 12, 2008.
- 53. Moderator of the Hand Session. Society for Military Orthopaedic Surgeons (SOMOS) 50<sup>th</sup> Annual Meeting, Las Vegas, NV; December 12, 2008.
- 54. Moderator of Scientific Paper Session D. American Society for Peripheral Nerve Annual Meeting, Maui, Hawaii; January 11, 2009.

- 55. Moderator at the AAOS/ORS Clinical Trials in Orthopaedics Research Symposium, Albuquerque, NM; May 7-9, 2009.
- 56. "Anatomy and Surgical Approaches to the Shoulder". Invited Speaker at the UC Irvine Shoulder Symposium, Newport Coast, CA; May 29, 2009.
- 57. Moderator at the UC Irvine Shoulder Symposium, Newport Coast, CA; May 29, 2009.
- 58. "Shoulder Arthroplasty: Current State of Affairs and Future Directions". Invited Speaker at the ASME 4<sup>th</sup> Frontiers in Biomedical Devices Conference & Exhibition, Irvine, CA, June 8, 2009.
- 59. Moderator of Session 2-6: Joint Arthroplasty at the ASME 4<sup>th</sup> Frontiers in Biomedical Devices Conference & Exhibition, Irvine, CA, June 8, 2009.
- 60. Key Note speaker at the Hand Therapy Society of Greater Los Angeles Annual meeting "Embryology of the Hand & Upper Extremity- Why does Elmo only have four fingers?" Irvine, VA, January 23, 2010.
- 61. Invited Speaker "Challenges of Limb Salvage: Major Nerve Injury" at Extremity War Injuries V AAOS/OTA/ORS/SOMOS symposium, Washington D.C., January, 29, 2010.
- 62. Invited Speaker "Current Innovations: Nerve" at the American Society for Surgery of the Hand Electives in Hand Surgery course, New Orleans, LA, February 5, 2010.
- 63. Invited Speaker "Current Innovations: Molecular Biology" at the American Society for Surgery of the Hand Electives in Hand Surgery course, New Orleans, LA, February 5, 2010.
- 64. Moderator of the "Shoulder-Biologic and Mechanical Factors" session at the Orthopaedic Research Society, March 8, 2010- New Orleans, LA.
- 65. Invited Speaker "Mentoring Infrastructure: As Residents and Fellows" at the AAOS/OREF/ORS Clinical Scientist Development Program, October 18, 2010- Rosemont, IL.
- 66. Moderator "SM01-08: Challenges of Limb Salvage: Major Nerve Surgery" at the 11<sup>th</sup> Triennial Congress of the International Federation of Societies for Surgery of the Hand. Seoul, South Korea, November 1, 2010.
- 67. Moderator "FP03-19: Nerve: Other Compression Neuropathy" at the 11<sup>th</sup> Triennial Congress of the International Federation of Societies for Surgery of the Hand. Seoul, South Korea, November 3, 2010.
- 68. Invited Speaker "Latissimus transfer for Massive Rotator Cuff Tears" at the International Shoulder Symposium at the Konkuk University Medical Center and IFSSH. Seoul, South Korea; November 1, 2010.

- 69. Keynote Speaker for the OREF/ORS Chesapeake Region Resident Research Symposium "From mice to men: why nerve surgery can only do so much" at Johns Hopkins University. Baltimore, MD; December 9, 2010.
- 70. Invited Speaker and Moderator for the UC Irvine Wrist and Elbow Arthroscopy Course "Distal Biceps Ruptures" at UC Irvine. Orange, CA; December 11, 2010.
- 71. Invited Speaker "Mechano-transduction of chronic neural injury by Schwann cells" by the Department of Biomedical Engineering at Duke University. Durham, North Carolina, December 14, 2010.
- 72. Invited Speaker "From mice to men: why nerve surgery can only do so much" at Research Triangle Orthopaedic Society. Cardinal Club, Raleigh, North Carolina; December 14, 2010.
- 73. Invited Speaker for the Joint Concurrent AAHS/ASPN Panel: Assessment and Management of the Mangled Hand with talk "Management of Bone Loss: Acute & Reconstructive". Cancun, Mexico, January 14, 2011.
- 74. Moderator of "Scientific Paper Session E" of the American Society of Peripheral Nerve annual meeting. Cancun, Mexico, January 16, 2011.
- 75. Moderator of "Regeneration-other" Session of the Peripheral Nerve Society Biannual meeting. Potomac, MD, June 27, 2011.
- 76. Invited Speaker "Nerve Physiology and Repair" at the ASSH Comprehensive Review in Hand and Upper Extremity Surgery. Chicago, Illinois, July 16, 2011.
- 77. Invited Speaker "Complex Regional Pain Syndrome" at the ASSH Comprehensive Review in Hand and Upper Extremity Surgery. Chicago, Illinois, July 16, 2011.
- 78. Invited Speaker "Posterior Instability" and Course Faculty for the AAOS/ASES Advanced Surgical Management of Complex Shoulder Instability at the Orthopaedic Learning Center. Rosemont, Illinois, July 22-23, 2011.
- 79. Moderator of Scientific Session VIII at the Sunderland Society Meeting December 10-13, 2011, New York City.
- 80. Invited Speaker "Intra-articular phalangeal fractures of the hand" and AAHS Course Faculty for Hands-On Workshop Surgeons Workshop: Principles and Application of Internal Fixation in the Hand. Las Vegas, Nevada, January 11, 2012.
- 81. Invited Speaker "Management of Digital Nerve Gap-What Really Works? Basic Science" at the Annual Meeting of the American Association for Hand Surgery. Las Vegas, Nevada, January 11, 2012.

#### **INVITED PRESENTATIONS**

- 82. Course Faculty for the American Academy of Orthopaedic Surgery Surgical Skills Course 9SK entitled "Shoulder Instability", San Francisco, CA, February 9, 2012.
- 83. "Peripheral Nerve Injuries: Current and Future Treatment Strategies" Visiting Professor for the Department of Orthopaedic Surgery at the University of Rochester, New York, March 1, 2012.
- 84. "How to Interpret the Summary Statement" and "Effective Collaboration" at the 2012 ORS/OREF/AAOS Research Funding Workshop *Strategies for Success: Tools for Investigators in Challenging Times* Long Beach, CA, May 17-18, 2012.
- 85. Moderator for "Symposium 5: Changing the Surgical Education Paradigm- How Do You Teach Someone to Have the Surgical Skills of an Orthopaedic Surgeon?" at the 2012 American Orthopaedic Association annual meeting, Washington, D.C., June 9, 2012.
- 86. Invited Speaker for "Symposium 1: Highlighting the Achievements of the American Foundation for Surgery of the Hand (Nerve)" at the 2012 American Society for Surgery of the Hand annual meeting, Chicago, IL; September 6, 2012.
- 87. Moderator for the Clinical Paper Session 6: Basic Science at the 2012 American Society for Surgery of the Hand annual meeting, Chicago, IL; September 7, 2012.
- 88. Moderator for Session 9 *Brachial Plexus/Nerve* with Invited Lecture "Nerve Overview" at the 2013 Annual Meeting for the American Association for Hand Surgery, Naples, FL; January 11, 2013.
- 89. Moderator for Spotlight Session 14 *Rotator Cuff Repair* at the 2013 Annual Meeting for the Orthopaedic Research Society, San Antonio, TX; January 27, 2013.
- 90. Invited Speaker/Grand Rounds for the Department of Neurology at UC Irvine "From Mice to Men: Lessons We Have Learned About Peripheral Nerve Injuries", February 8, 2013.
- 91. Invited Speaker for the Allan Smith Lecture at the United States Uniform Health Sciences "From Mice to Men: Lessons We Have Learned About Peripheral Nerve Injuries" & "The Evolving Role of Reverse Shoulder Arthroplasty"; February 28, 2013.
- 92. Invited Speaker University of Calgary Department of Neurology "Traumatic Nerve Injuries: Current and Future Management"; June 5, 2013.
- 93. Invited Speaker for Resident Educators Workshop "The Role of Surgical Skills Labs and Surgical Simulation Exercises in Resident and Fellow Education" at the 2013 American Society for Surgery of the Hand annual meeting, San Francisco, CA; October 2, 2013.
- 94. Invited Speaker for Precourse 7: Nerve Repair and Reconstruction-Basic Principles and Complex Problems "Nerve Transfers to Regain Sensibility" at the 2013 American Society for Surgery of the Hand annual meeting, San Francisco, CA; October 2, 2013.

#### **INVITED PRESENTATIONS**

- 95. Moderator for the Clinical Paper Session 14: Basic Science/Microsurgery at the 2013 American Society for Surgery of the Hand annual meeting, San Francisco, CA; October 5, 2013.
- 96. Invited Discusser/Reviewer for AAHS/ASPN Concurrent Scientific Session VI: Nerve at the 2014 American Association for Hand Surgery/American Society for Peripheral Nerve annual meeting; Kauai, Hawaii; January 10, 2014.
- 97. Visiting Professor for the Department of Orthopaedic Surgery at Loma Linda University "Nerve Regeneration-Current and Future Strategies"; Loma Linda, CA: January 22, 2014.
- 98. Invited Speaker for Extremity War Injury Symposium IX: Reducing Disability with the Military, Washington, DC; February 11, 2014.
- 99. Invited Speaker for Mammoth Upper Extremity Winter Conference "Oberlin and other Nerve transfers of the Upper Extremity", Mammoth Mountain Inn, Mammoth Lakes, CA; March 1, 2014.
- 100. Keynote Speaker for the University of Connecticut's New England Musculoskeletal Center "Nerve Injuries: Current and Future Management", Avon Old Farm Inn, Farmington, CT; April 4, 2014.
- 101. Invited Speaker for California Orthopaedic Association 2014 Annual Meeting/QME Course "Iatrogenic Nerve Injury in the Upper Extremity: What you should know", Portola Hotel & Spa Monterey, CA; June 1, 2014.
- 102. Invited Speaker for California Orthopaedic Association 2014 Annual Meeting/QME Course "Nerve Injury Transfer", Portola Hotel & Spa Monterey, CA; June 1, 2014.
- 103. Invited Speaker for the American Orthopaedic Association's Council of Orthopaedic Residency Directors (CORD) Conference "Symposium II: Basic Surgical Skills Curriculum Implementation", Montreal, Canada; June 20, 2014.
- 104. Invited Speaker for the American Association for Hand Surgery 2015 Annual Meeting "Compression Neuropathies", Paradise Island, Bahamas; January 23, 2015.
- 105. Moderator for American Association for Hand Surgery/American Society for Peripheral Nerve Scientific Abstract Session VI at the 2015 Annual Meeting, Paradise Island, Bahamas; January 23, 2015.
- 106. Keynote Speaker for the International Symposium on Ligaments and Tendons- XIV "Does my shoulder look fat to you? Muscle Phenotypic changes and Rotator Cuff Pathology" at the MGM Grand Hotel, Las Vegas, Nevada; March 27, 2015.
- 107. Moderator of Ulnar Nerve Session at the ASSH/JSSH meeting, Maui, Hawaii; April 1, 2015.

#### **INVITED PRESENTATIONS**

- 108. Invited Speaker & Moderator for California Orthopaedic Association 2015 Annual Meeting/QME Course "The evolving role of shoulder arthroplasty", Esmeralda Resort & Spa, Indian Wells, CA; April 25, 2015.
- 109. Invited Speaker & Moderator for California Orthopaedic Association 2015 Annual Meeting/QME Course "Lessons learned from the Literature 2014-2015", Esmeralda Resort & Spa, Indian Wells, CA; April 25, 2015.
- 110. Invited Speaker for the Mayo Clinic Division of Hand Surgery, "Surgical Skills Training", Rochester, MN; June 5, 2015.
- 111. Invited Speaker/Moderator at the AOA's Council of Orthopaedic Residency Directors (CORD) Conference, "Best Practices: Success with Surgical Skills Training", Providence, RI; June 27, 2015.
- 112. Invited Speaker/Moderator of Clinical Paper Session 09: Basic Science at American Society for Surgery of the Hand annual meeting, Seattle, WA; September 12, 2015.
- 113. Invited Speaker/Moderator of Shoulder and Elbow VI: The Rotator Cuff II: Basic Science Aspects Papers #871-885 at the American Academy of Orthopaedic Surgery annual meeting, Orlando, FL; March 4, 2016.
- 114. Invited Speaker for the Panjabi Symposium at Yale University, "Reflections of my first professional mentor", New Haven, CT; March 9, 2016.

#### MENTORED STUDENTS

Undergraduate

Andy Rastegar

Phong Bui

Arush Patel

Michael Gray

David Bear

Linh Truong

Jennifer Channual

Winnie Palispis

Khoa Pham

Nima Nassirin

Ryan Landers

Mustafa Khan

Derek Frump

Andy Bowen

Christina Dolores

Jared Sui

Michelle Luu

## **MENTORED STUDENTS (continued)**

#### Medical

Charlie Preston Dara Chafik Amar Arora **Brent Berger** Scott Hadley Michael Gray David Bear Tom Chao Khoa Pham Minal Tapadia Thu Pham Antony Hazel Jason Kang James Jung Peter Hahn Diana Zhu

#### Graduate

Laura Rummler Jim Greene

## Post-doctoral Fellows

Chad Warren, MD
Alexander Rasouli, MD
Paul Dinh, MD
Robert Grumet, MD
Kasra Rowshan, MD
Jeremy Smith, MD
Ryan Vitali, MD
Michael Y. Lin, MD, PhD
Tom Chao, MD
Phuc (Phil) Dang, MD
Minal Tapadia, MD, JD
Shigeru Kurimoto, MD, PhD
Tetsuro Onishi, MD, PhD

#### **Invited Reviews**

- 1. <u>Gupta, R. Plastic and Reconstructive Surgery</u> **116(5)**: 1405-1407, October 2005 of Fong, KD; Trindade, MC; Wang, Z; Nacamuli, RP; Pham, H; Fang, TD; Song, HM; Smith, RL; Longaker, MT; Chang, J. Microarray Analysis of Mechanical Shear Effects on Flexor Tendon Cells.
- 2. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2006 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp. 193-194, 2006 of Temple CLF, Ross DC, Dunning CE, et al. Resistance to Disruption and Gapping of Peripheral Nerve Repairs: An In Vitro Biomechanical Assessment of Techniques *J Reconstr Microsurg* 20(8): 645-650, 2004.
- 3. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2006 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp.113-115, 2006 of Popa M and Dubert TH. Treatment of Cubital Tunnel Syndrome by Frontal Partial Medial Epicondylectomy. A Retrospective Series of 55 Cases. *J Hand Surg* 29B(6): 563-567, 2004.
- 4. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2006 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp. 51-54, 2006 of O'Driscoll SW, Petrie RE, and Torchia, ME. Arthroscopic Removal of the Glenoid Component for Failed Total Shoulder Arthroplasty. *J Bone Joint Surg* 87A(4): 858-863, 2005.
- 5. <u>Gupta, R. Year Book of Hand and Upper Extremity Surgery</u> 2006 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp.181-182, 2006 of Hirata H, Nagakura T, Tsujii M et al. The Relationship of VEGF and PGE2 Expression to Extracellular Matrix Remodelling of the Tenosynovium in the Carpal Tunnel Syndrome. *J Pathology* 204:605-612, 2004.
- 6. <u>Gupta, R.</u> Year Book of Hand and Upper Extremity Surgery 2006 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp. 24-25, 2006 of Charousset C, Bellaiche L, Duranthon LD, et al. Accuracy of CT Arthrography in the Assessment of Tears of the Rotator Cuff. *J Bone Joint Surg* 86B(6): 824-828, 2005.
- 7. Gupta, R. Year Book of Hand and Upper Extremity Surgery 2006 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp.7-8, 2006 of Gardner MJ, Griffith MH, Dines JS, et al. The Extended Anterolateral Acromial Approach Allows Minimally Invasive Access to the Proximal Humerus. Clin Orthop & Rel Research 434:123-129, 2005.
- 8. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2007 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp.123-124, 2007 of Tambe AD, Stilwell CJ, Murali SR, et al. Scaphoid Non-union: The Role of Vascularized Grafting in Recalcitrant Non-unions of the Scaphoid. *J Hand Surg* 31B(2): 185-190, 2006.
- 9. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2007 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp. 139-140, 2007 of Schmid MR, Schertler, T, Pfirrmann, CW et al. Interosseous Ligament Tears of the Wrist: Comparison of Multi-Detector Row CT Arthrography and MR Imaging *Radiology* 237(3): 1008-1013, 2006.

#### **Invited Reviews**

- 10. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2007 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp.88-89, 2007 of Iba K, Wada T, Aoki M et al. Intraoperative Measurement of Pressure Adjacent to the Ulnar Nerve in Patients With Cubital Tunnel Syndrome. *J Hand Surg* 31A(4): 553-558, 2006.
- 11. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2007 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp. 163-164, 2007 of Ikeda K, Osamura N, and Tomita K. Segmental Carpal Canal Pressure in Patients with Carpal Tunnel Syndrome *J Hand Surgery* 31A(6): 925-929, 2006.
- 12. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2007 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp. 4-5, 2007 of Koukakis A, Apostolou CD, Taneja T, et al. Fixation of Proximal Humeral Fractures Using the PHILOS Plate. *Clin Orthop & Rel Research* 442:115-120, 2006.
- 13. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2007 with Editors Chang J and Steinmann SP, Mosbey, Inc., pp. 97-98, 2007 of Harness NG, Ring D, Zurakowski D, et al. The Influence of Three-Dimensional Computed Tomography Reconstructions on the Characterization and Treatment of Distal Radius Fractures. *J Bone and Joint Surg* 88A(6): 1315-1323, 2006.
- 14. <u>Gupta, R. Year Book of Hand and Upper Extremity Surgery</u> 2008 with Editors Chang J and Steinmann SP, Mosbey, Inc. (In Press) of Edwards SL, Wilson NA, Zhang Q, et al. Two-Part Surgical Neck Fractures of the Proximal Part of the Humerus: A Biomechanical Evaluation of Two Fixation Techniques. *J Bone Joint Surg (Am)* 88A(10): 2258-2264, 2006.
- 15. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2008 with Editors Chang J and Steinmann SP, Mosbey, Inc. (In Press) of Gray KV and Meals RA. Hematoma and Distraction Arthroplasty for Thumb Basal Joint Osteoarthritis: Minimum 6.5-Year Follow-Up Evaluation. *J Hand Surg* (*Am*) 32A: 23-29, 2007.
- 16. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2008 with Editors Chang J and Steinmann SP, Mosbey, Inc. (In Press) of Jia X, Koenig MA, Zhang X, et al. Residual Motor Signal in Long-Term Human Severed Peripheral Nerves and Feasibility of Neural Signal-Controlled Artificial Limb. *J Hand Surg (Am)* 32A: 657-666, 2007.
- 17. <u>Gupta, R.</u> *Year Book of Hand and Upper Extremity Surgery* 2008 with Editors Chang J and Steinmann SP, Mosbey, Inc. (In Press) of Smith AM, Barnes SA, Sperling JW, et al. Patient and Physician-Assessed Shoulder Function After Arthroplasty. *J Bone Joint Surg* (*Am*) 88A(3): 508-513, 2006.
- **18.** Gupta, R. Year Book of Hand and Upper Extremity Surgery 2008 with Editors Chang J and Steinmann SP, Mosbey, Inc. (In Press) of Yildirim AM, Okur MI, and Ozercan R. Reduction of the Incidence of Neuroma Formation by Proximal Epineural Striping: An Experimental Study in Rats. *J Hand Surg (Br)* 31B(4): 450-452, 2006.

## **Book Chapters**

- 1. <u>Gupta, R</u> and Meals, RA: Review of the Hand. In *The Journal of Hand Surgery*. Strickland, J. (Ed.). 23A: 958, 1998.
- 2. Jones, NF and <u>Gupta</u>, <u>R</u>: Vascular Disorders of the Hand. In *Hand Surgery Update II*. American Society for Surgery of the Hand; pp. 275-278, 1999.
- 3. <u>Gupta, R;</u> Caiozzo, V; Cook, SD; Barrack, RL; Skinner, HB: Basic Science in Orthopaedic Surgery in *Current Diagnosis & Treatment in Orthopaedics* 3<sup>rd</sup> edition, McGraw-Hill Companies, Inc; pp.1-60, 2003.
- 4. Namba, RS; Skinner, HB; <u>Gupta, R</u>: Adult Reconstructive Surgery in *Current Diagnosis & Treatment in Orthopaedics* 3<sup>rd</sup> Edition, McGraw-Hill Companies, Inc.; pp.370-414, 2003.
- 5. <u>Gupta, R</u>: Nerve. In *Review of Hand Surgery*. Beredjiklian, P and Bozentka, D. (Eds.), 1<sup>st</sup> edition, Elsevier Inc.; pp.79-100, 2004.
- 6. Baker J, <u>Gupta R</u>. Peripheral nerve repair. In *Handbook of Plastic Surgery*. Greer S, Benhaim P,Lorenz HP, Chang J, Hedrick MH (Eds.), 1<sup>st</sup> edition, Marcel Dekker, New York; pp. 365-368, 2004.
- 7. Baker J, <u>Gupta R</u>. Nerve injuries. In *Handbook of Plastic Surgery*. Greer S, Benhaim P,Lorenz HP, Chang J, Hedrick MH (Eds.), 1<sup>st</sup> edition, Marcel Dekker, New York; pp. 457-462, 2004.
- 8. <u>Gupta, R</u>; Caiozzo, V; Cook, SD; Barrack, RL; Skinner, HB: Basic Science in Orthopaedic Surgery in *Current Diagnosis & Treatment in Orthopaedics* 4th edition, McGraw-Hill Companies, Inc.; pp.1-63, 2006.
- 9. Namba, RS; Skinner, HB; <u>Gupta, R</u>: Adult Reconstructive Surgery in *Current Diagnosis & Treatment in Orthopaedics* 4th Edition, McGraw-Hill Companies, Inc.; pp. 381-423, 2006.
- 10. Rasouli, A; <u>Gupta, R</u>: Hand, Wrist and Elbow Injuries in *Current Diagnosis & Treatment in Sports Medicine* 1<sup>st</sup> Edition, McGraw-Hill Companies, Inc.; pp. 146-159, 2007.
- 11. <u>Gupta, R</u>; Mozaffar T. Form and Function of the Spinal Cord and Peripheral Nerves. In: Einhorn TA, O'Keefe RJ, Buckwalter JA (eds). *Orthopedic Basic Science: Foundations of Clinical Practice*. 3<sup>rd</sup> Edition, American Academy of Orthopedic Surgeons, Rosemont, Illinois; pp. 245-258, 2007.
- 12. <u>Gupta, R;</u> Mozaffar T. Neuromuscular Diseases. In: Einhorn TA, O'Keefe RJ, Buckwalter JA (eds). *Orthopedic Basic Science: Foundations of Clinical Practice*. 3<sup>rd</sup> Ed. American Academy of Orthopedic Surgeons, Rosemont, Illinois; pp.427-443, 2007.
- 13. Rowshan, K and <u>Gupta R</u>. Peripheral Nerve Physiology, Injury, and Repair. In Trumble, TE and Budoff, JE (editors) *Hand Surgery Update 4* American Society for Surgery of the Hand, Rosemont, Illinois; pp. 389-398, 2007.

## **Book Chapters**

- 14. Bhatia, N; Bae, H; <u>Gupta, R</u>. Spinal Cord Injury and Peripheral Nerve Injury. In Fischgrund, JS (editor). *Orthopaedic Knowledge Update 9* American Academy of Orthopedic Surgeons, Rosemont, Illinois; pp. 49-66, 2008.
- 15. Hadley, S; <u>Gupta. R</u>. Arthroscopic treatment of wrist ganglion cysts. In Capo, JT and Tan, V (eds) *Atlas of Minimally Invasive Hand & Wrist Surgery*, 1<sup>st</sup> edition, Informa Healthcare USA, Inc. New York, NY; pp. 257-262, 2008.
- 16. Rowshan K and <u>Gupta, R.</u> Digital Nerve Repair. In Slutsky, DJ (Editor) *Upper Extremity Nerve Repair-Tips and Techniques: A Master Skills Publication*. American Society for Surgery of the Hand, Rosemont, Illinois; pp. 89-96, 2008.
- 17. <u>Gupta, R.</u> Nerve Compression. In Leiberman J and Boyer M (editor) *AAOS Comprehensive Orthopaedic Review*. American Academy of Orthopedic Surgeons, Rosemont, Illinois; pp. 965-974, 2009.
- 18. Wong, JE and <u>Gupta, R.</u> Nerve Repair: Basic Science and Current Concepts. Matthew M. Tomaino, MD Section Editor for *Orthopaedic Knowledge Online*. May 24, 2010. http://www5.aaos.org/oko/page.cfm?topic=HAN028
- 19. Bathen, M and <u>Gupta, R</u>. Basic Science of Peripheral Nerve Injury and Repair. In Skirven, TM; Osterman, AL; Fedorczyk, JM; Amadio, PC (Editors) *Rehabilitation of the Hand and Upper Extremity*. Sixth Edition, Elsevier Mosby, Philadelphia, Pennsylvania; pp. 591-600, 2011.
- 20. Mozaffar, T and <u>Gupta R.</u> Disorders of the Nervous System. *Orthopaedic Knowledge Update 10*. American Academy of Orthopedic Surgeons, Rosemont, Illinois; pp. 225-238, 2011.
- 21. Kang, JR and <u>Gupta</u>, <u>R</u>. Reoperative Options for Compressive Neuropathies of the Upper Extremity. In Duncan, SFM (Editor) *Reoperative Hand Surgery*. First Edition, Springer, New York, NY; pp. 227-242, 2012.
- 22. Lopez, G; Tornetta, P; Mazzocca, AD; Stern, PJ; Heckmann, N; <u>Gupta, R</u>. How Do You Educate Someone to Have the Skills of an Orthopaedic Surgeon? In Hart, RA and Della Valle CJ (Editors) *Instructional Course Lectures* Volume 63. American Academy of Orthopaedic Surgeons, Rosemont, IL; pp. 487-494, 2014.
- 23. Jung, J and <u>Gupta, R</u>. Nerve Injuries. In Cheema T (editor) *Complex Injuries of the Hand JP* Medical Publishers, St. Louis, MO; pp. 143-153, 2014.

- <u>Gupta, R</u>, Naranja, RJ, Levitz, CL, Brighton, CT. The Biochemical Pathway of Capacitively Coupled Electric Field Stimulation of Osteoblast and Osteoblast-like Cells. Society for Physical Regulation in Biology and Medicine, Washington, D.C., October 1994.
- <u>Gupta, R, Taffet, R, Adler, LM, Nelson, CL, Dalton, GP, Dalsey, RM, DeLong, WG, Born, CT, Iannacone, WM, Deutsch, LS. Operative Stabilization of Humeral Shaft Fractures Using Enders Rods and Statically Locked Intramedullary Nails. American Academy of Orthopaedic Surgeons, Orlando, Florida, 1995.</u>
- <u>Gupta, R</u>, Allen, F, Bozentka, DJ, Osterman, AL, Bora, FW. The Effect of Laminar Fluid Flow on Fibroblasts Derived from Dupuytren's Tissue. Orthopaedic Research Society, San Francisco, California, February 1997.
- <u>Gupta, R</u>, Bozentka, DJ, Bora, FW. Evaluation of Tension Applied for External Fixation of Distal Radius Fractures. American Academy of Orthopaedic Surgeons, San Francisco, California, February 1997.
- <u>Gupta, R</u>; Villablanca, PB; Jones, NF; Filler, AA: Evaluation of an acute compression injury in an animal model by magnetic resonance neurography. International Reconstructive and Microsurgery, Los Angeles, California, June 1999.
- <u>Gupta, R;</u> Nelson, SD; Baker, J; Jones, NF; Meals, RA: the innervation of the triangular fibrocartilage complex: nitric acid maceration rediscovered. American Society for Surgery of the Hand, Boston, Massachusetts, September 1999.
- <u>Gupta, R</u>; Jones, NF: Post-operative Monitoring of Toe-to Hand transfers in a pediatric Population with Pulse Oximetry. American Society for Surgery of the Hand, Boston, Massachusetts, September 1999.
- <u>Gupta, R</u>; Fornalski, S; Allaire, R; Osterman, AL: Three dimensional motion analysis of progressive ulnar wrist pathology. American Society for Surgery of the Hand, Seattle, Washington, 2000.
- <u>Gupta, R</u>; Bui, P; Jones, NF; Robertson, RT: Induction of Schwann cell apoptosis in an animal model for carpal tunnel syndrome. American Society for Surgery of the Hand. Seattle, Washington, 2000.
- <u>Gupta, R</u>; Bui, P; Baretta, J; Robertson, RT: Is carpal tunnel syndrome an acquired neuro-degenerative process? Society for Neuroscience, New Orleans, Louisiana, 2000.
- <u>Gupta, R</u>; Chafik, D; Bear, D; Steward, O: Quantative stereologic evaluation of a model for carpal tunnel syndrome. Society for Neuroscience, San Diego, California, 2001.
- <u>Gupta, R;</u> Lin, Y; Preston, C; Jones, NF; Steward, O: Altered expression of mRNA for iNOS with chronic nerve injury. American Association for Hand Surgery, Cancun, Mexico, 2002.

- <u>Gupta, R</u>; Chafik, D; Bear, D; Bui, P; Steward, O: Quantitative stereologic evaluation of a model for carpal tunnel syndrome. Orthopaedic Research Society, Dallas, Texas, 2002.
- <u>Gupta, R</u>; Schamblin, M; Yang, BY; McMaster, WC; Lee, TQ: Shoulder arthroplasty and glenohumeral joint forces in positions of overhead activities. Orthopaedic Research Society, Dallas, Texas, 2002.
- <u>Gupta, R</u>; Chafik, D; Jones, NF; Steward, O: Chronic nerve compression induces Schwann cell proliferation. American Society for Surgery of the Hand, Phoenix, Arizona, 2002.
- <u>Gupta, R</u>; Rowshan, K; Chao, T; Bui, P; Mozaffar, T: Aberrant axonal sprouting with the absence of Wallerian degeneration in a model for carpal tunnel syndrome. Orthopaedic Research Society, New Orleans, Louisiana, 2003.
- <u>Gupta, R</u>; Bingenheimer, E; McGarry, MH; Fornalski, S; Lee, TQ: Ulnar shortening may be a useful adjunct for lunato-triquetral arthrodesis. Orthopaedic Research Society, New Orleans, Louisiana, 2003.
- <u>Gupta, R</u>; Chao, T; Jones, NF; Steward, O. Why is there pain with carpal tunnel syndrome? American Society for Surgery of the Hand, Chicago, IL, 2003.
- <u>Gupta, R</u>; Lee, TQ. Positional dependent changes in glenohumeral contact pressure and forcepossible biomechanical etiology of posterior glenoid wear. American Shoulder and Elbow Surgeons Current Basic Science in Shoulder and Elbow. Dana Point, CA, 2003.
- Rowshan, K; Chao, T; Mozaffar, T; <u>Gupta, R</u>. Myelin Changes During Chronic Nerve Compression. American Society for Peripheral Nerve. Palm Springs, CA, 2004.
- Rowshan, K; Chao, T; Bui, P; Mozaffar, T; Steward, O; <u>Gupta, R</u>. Altered Schwann Cell Function with a Model for Carpal Tunnel Syndrome. International Symposium on Ligaments & Tendons IV. San Francisco, CA, 2004.
- <u>Gupta R</u>, Rummler L, Palispis W, Truong L, Chao T, Rowshan K, Steward O. Local down-regulation of myelin associated glycoprotein permits axonal sprouting after chronic nerve compression injury. Peripheral Nerve Society. Il Cucciono, Italy, 2005.
- Bear, D; Rummler, LS; <u>Gupta, R</u>. The pain of carpal tunnel syndrome occurs secondary to localized ion channel migration. Peripheral Nerve Society. Il Cucciono, Italy, 2005.
- <u>Gupta, R</u>; Rummler, LS; Palispis, W; Truong, L; Chao, T; Rowshan, K; Mozaffar, T; Steward, O. Local down-degulation of myelin associated glycoprotein permits axonal sprouting after chronic nerve compression injury. The Eleventh International Symposium on Neural Regeneration, Pacific Grove, CA, December 14-18, 2005.

<u>Gupta, R</u>; Gray, M; Popovich, PG; Van Rooijen N. Macrophage depletion alters the blood nerve barrier without affecting Schwann cell function after neural injury. The Society for Neuroscience Annual Meeting, Atlanta, GA, October 15, 2006.

Rummler, L; Palispis, W; <u>Gupta, R</u>. Schwann cells up-regulate NaV1.8 after chronic nerve injury. The 16<sup>th</sup> Meeting of the Sunderland Society, Manchester, UK, April 30, 2007.

<u>Gupta, R</u>; Strandberg, E; Tafti, M; Steward, O. Glial Derived Growth Factor Modulates Neuronal Phenotype after Chronic Nerve Injuries (Paper 39). 62<sup>nd</sup> Annual Meeting of the American Society for Surgery of the Hand, Seattle, WA, September 28, 2007.

Rummler, LS; Palipis, W; <u>Gupta, R</u>. Understanding the pain associated with Chronic Nerve Compression Injuries. Annual Meeting of American Society for Peripheral Nerve. Los Angeles, CA, January 13, 2008.

<u>Gupta, R.</u> Mechanotransduction of chronic nerve injury via Schwann cells. Annual Meeting of the Japanese Society for Surgery of the Hand. Tsukuba, Japan, April 17, 2008.

<u>Gupta, R</u>; Hazel, A; Palispis, W; Forootan, M; Rummler, LS. Ischemic Nerves are more Susceptible to Mechanical Injury. Annual Meeting of the American Society for Surgery of the Hand and American Society of Hand Therapists. San Francisco, California, September 4, 2009.

Gupta, R; Nguyen, ML; Jun, B; Galle, SE; McGarry, MH; Burkhart, SS; Lee, TQ. Paper #25: Margin Convergence to Bone for Reconstruction of the Anterior Attachment of the Rotator Cable in Massive Rotator Cuff Tears. American Shoulder and Elbow Surgeons 2010 Closed Meeting. Scottsdale, AZ, October 22, 2010.

Gupta, R. Future Directions and Innovations in the Management of Peripheral and Brachial Plexus Injuries. The 11<sup>th</sup> Triennial Congress of the International Federation of Societies for Surgery of the Hand. Seoul, South Korea, November 1, 2010.

Lin, M; Forootan, M; <u>Gupta, R</u>. Hypoxia and Ischemia Sensitize Peripheral Nerves to Pressure: A Study of Entrapment Neuropathy. The 11<sup>th</sup> Triennial Congress of the International Federation of Societies for Surgery of the Hand. Seoul, South Korea, November 3, 2010.

Lin YM; Friebos, LR; Palispis, W; <u>Gupta, R</u>. Biophysical stimuli induce demyelination via an integrin dependent mechanism. The American Society for Peripheral Nerve. Cancun, Mexico, January 15, 2011.

Kang, JR; Wang, W; Nassiri, N; Mozaffar, T; <u>Gupta, R</u>. Does Neural Wound Healing Help to Explain the Pathogenesis of Compressive Neuropathies? The Peripheral Nerve Society. Potomac, MD. June 27, 2011.

Nassiri, N; Kang, J; Hazel, T; Bathen, M; <u>Gupta, R</u>. Cajal Band Reorganization and the Disruption of Schwann Cell Dystrophin-Related Protein Complex following Chronic Nerve Compression Injury. The Peripheral Nerve Society. Potomac, MD. June 27, 2011.

Chao, T; Frump, D; Mozaffar, T; <u>Gupta, R</u>. Nerve Surgery Alone Can Only Do So Much: An Attempt to preserve the Target End-Organ. The Sunderland Society. New York City, NY. December 13, 2011.

<u>Gupta, R.</u> Orthopaedic Alternative Medicine: The Science and the Voodoo. The Association of Bone and Joint Surgeons Paper 32, Eugene, OR. July 11, 2015.

### **SCIENTIFIC PRESENTATIONS (Regional and Local Meetings)**

<u>Gupta, R</u>, Kitay, GS, Naranja, RJ, Lee, BS, Osterman, AL, Rubin, D, Bozentka, DJ. MRI Diagnosis of Flexor Tendon Injuries. Pennsylvania Orthopaedic Society, Philadelphia, Pennsylvania, November 1995.

<u>Gupta, R</u>: Dupuytren's Contracture, Department of Orthopaedic Surgery, University of California, Irvine, California, March 25, 1999.

<u>Gupta, R</u>: Surgical Anatomy of the Hand and Upper Extremity Part I and II, Department of Orthopaedic Surgery, University of California, Irvine, California, July 2000.

<u>Gupta, R</u>: Surgical Management of Proximal Humerus Fractures, Department of Orthopaedic Surgery, University of California, Irvine, California, September 2000.

<u>Gupta, R</u>: Sports Injuries of the Elbow Parts I and II, Department of Orthopaedic Surgery, University of California, Irvine, California, October, 2000.

<u>Gupta, R</u>: Histology Clinical Correlate: Bone. First year medical students. College of Medicine, University of California, Irvine, California, October 26, 2000.

<u>Gupta, R</u>: Histology Clinical Correlate: Muscle and Nerve. First year medical students. College of Medicine, University of California, Irvine, California, November 2, 2000.

<u>Gupta, R</u>: The Painful Shoulder – History and Physical Examination. Orange County Association of Registered Nurse Practitioners, Irvine, California, California, January 18, 2001.

<u>Gupta, R</u>: The Painful Shoulder – Humeral Head Replacement vs. Total Shoulder Arthroplasty. Grand Rounds, Department of Orthopaedic Surgery, University of California, Irvine, California, January 25, 2001.

<u>Gupta, R</u>: Surgical Anatomy of the Hand and Upper Extremity, Department of Orthopaedic Surgery, University of California, Irvine, California, July 2002.

<u>Gupta, R</u>: Histology Clinical Correlate: Bone. First year medical students. College of Medicine, University of California, Irvine, California, October 22, 2002.

## **SCIENTIFIC PRESENTATIONS (Regional and Local Meetings)**

<u>Gupta, R</u>: Histology Clinical Correlate: Muscle and Nerve. First year medical students. College of Medicine, University of California, Irvine, California, October 28, 2002.

<u>Gupta, R</u>: UPDATE – Specialty Panel for medical students. College of Medicine, University of California, Irvine, California, December 4, 2002.

<u>Gupta, R</u>: Electrical Burns of the Upper Extremity, Department of Orthopaedic Surgery, University of California, Irvine, California, February 2003.

<u>Gupta, R</u>: Biomechanics of the wrist. Department of Orthopaedic Surgery, University of California, Irvine, California, March 2003.

<u>Gupta, R</u>: LCS plate fixation of the upper extremity. Department of Orthopaedic Surgery, University of California, Irvine, California, March 2003.

<u>Gupta</u>, <u>R</u>: Replantation of the Upper Extremity, Department of Orthopaedic Surgery, University of California, Irvine, California, April 2003.

<u>Gupta, R</u>: Flexor Tendon Injury and Repair, Department of Orthopaedic Surgery, University of California, Irvine, California, November 2003.

<u>Gupta, R</u>: What's new in Hand Surgery?, Department of Orthopaedic Surgery, University of California, Irvine, California, December 2003.

<u>Gupta, R</u>: Adult Brachial Plexus Injuries. Department of Orthopaedic Surgery, University of California, Irvine, California, January 2004.

<u>Gupta, R</u>: Histology Clinical Correlate: Bone. First year medical students. College of Medicine, University of California, Irvine, California, October 29, 2004.

<u>Gupta, R</u>: Histology Clinical Correlate: Muscle and Nerve. First year medical students. College of Medicine, University of California, Irvine, California, November 4, 2004.

<u>Gupta, R</u>: Compartment Syndromes of the Upper Extremity. Department of Orthopaedic Surgery, University of California, Irvine, California, December 16, 2004.

<u>Gupta, R</u>: Distal Radius Fractures. Department of Orthopaedic Surgery, University of California, Irvine, California, June 16, 2005.

<u>Gupta, R</u>: Surgical Anatomy of the Hand and Upper Extremity, Department of Orthopaedic Surgery, University of California, Irvine, California, July, 2005.

<u>Gupta, R</u>: Histology Clinical Correlate: Bone. First year medical students. College of Medicine, University of California, Irvine, California, October 12, 2005.

## **SCIENTIFIC PRESENTATIONS (Regional and Local Meetings)**

<u>Gupta, R</u>: Histology Clinical Correlate: Muscle and Nerve. First year medical students. College of Medicine, University of California, Irvine, California, October 13, 2005.

<u>Gupta</u>, <u>R</u>: Examination of the Hand and Upper Extremity, Department of Orthopaedic Surgery, University of California, Irvine, California, April, 2006.

<u>Gupta, R</u>: Carpal and Hand Fractures, Department of Orthopaedic Surgery, University of California, Irvine, California, April, 2006.

<u>Gupta, R</u>: General Principles of Tendon Transfers and Tendon Transfers for Radial Nerve Palsy, Department of Orthopaedic Surgery, University of California, Irvine, California, June, 2006.

<u>Gupta, R</u>: Wrist Arthroscopy, Department of Orthopaedic Surgery, University of California, Irvine, California, September, 2006.

<u>Gupta, R</u>: Anatomy of the Hand and Upper Extremity, Department of Orthopaedic Surgery, University of California, Irvine, California, August, 2007.

<u>Gupta, R</u>: Peripheral Nerve Injury and Repair, Department of Orthopaedic Surgery, University of California, Irvine, California, August, 2007.

<u>Gupta, R</u>: Basic Science of Peripheral Nerve Injury, Department of Orthopaedic Surgery, Kaiser Permanente, Orange California, August, 2007.

<u>Gupta, R.</u> Histology Clinical Correlate: Bone and Cartilage. First year medical students. College of Medicine, University of California, Irvine, California, October, 2007.

#### **CO-AUTHORED SCIENTIFIC PRESENTATIONS (National, Regional and Local Meetings)**

Panjabi, M, Crisco, J, Dvorak, M, Oxland, T, Grog, D, Hillibrand, A, <u>Gupta, R</u>. Coupled motion patterns of the upper cervical spine. Cervical Spine Research Society, San Diego, California, 1989.

Panjabi, M, Crisco, J, Dvorak, M, Oxland, T, Grog, D, Hillibrand, A, <u>Gupta, R</u>. Coupled motion patterns of the upper cervical spine. First World Congress of Biomechanics, San Diego, California, 1990.

Allen, FD, Pollack, SR, <u>Gupta, R</u>, Hung, CT. The Intracellular Calcium Response of Osteoblast-like Cells to 60kHz Electric Field Stimulation from 10V/m to 1kV/m. Society for Physical Regulation in Biology and Medicine, Washington, D.C., October 1994.

Naranja, RJ, Brighton, CT, Pollack, SR, <u>Gupta, R</u>. In Vivo Capacitive Coupled Electric Stimulation of the Beagle Distal Radius Growth Plate. Society for Physical Regulation in Biology and Medicine, Washington, D.C., October 1994.

Levitz, CL, Naranja, RJ, <u>Gupta, R</u>, Brighton, CT. The Role of Platelet-Derived Growth Factor and Transforming Growth Factor-Beta in Mechanical Strain Induced Bone Cell Proliferation. Orthopaedic Research Society, Orlando, Florida, 1995.

Naranja, RJ, Brighton, CT, Levitz, C, <u>Gupta, R</u>. Is Osteoblast Proliferation in Response to Mechanical Stress Linked to a Tyrosine Kinase? Orthopaedic Research Society, Orlando, 1995.

Nelson, CL, <u>Gupta</u>, <u>R</u>, Taffett, R, Dalsey, RM, DeLong, WG. Functional Outcome Following Distal Humerus Fractures in Adults. American Academy of Orthopaedic Surgeons, Orlando, Florida, 1995.

Bozentka, DJ, <u>Gupta</u>, R, Bora, FW. Evaluation of Tension Applied for External Fixation of Distal Radius Fractures. Pennsylvania Orthopaedic Society, Philadelphia, Pennsylvania, November 1995.

<u>Gupta, R;</u> Chafik, D; Bear, D; Bui, P; Jones, NF; Patel, A; Hung, CT: Optimization of Schwann cell adhesion for Peripheral Nerve Tissue Engineering. American Society for Peripheral Nerve, Cancun, Mexico, 2002.

Kobayishi, M; <u>Gupta, R</u>; McMahon, PJ; Evans, GDR: Functional upper extremity reconstruction using a microneural tensor fascia lata flap. American Society for Reconstructive Microsurgery, Cancun, Mexico, 2002.

Faux, JR; Lemly, KS; McMahon, PJ; Armstrong, KL; McMaster, WC; <u>Gupta, R</u>; Lee, TQ: Contribution of shoulder muscles to glenohumeral joint forces: implications for patients with spinal cord injury. Orthopaedic Research Society, Dallas, Texas, 2002.

Bissell, JL; McGarry, MH; Yang, BY; <u>Gupta, R</u>; Lee, TQ: A biomechanical analysis of supraspinatus rotator cuff tear and repair. Orthopaedic Research Society, Dallas, Texas, 2002.

Rowshan, R; Chafik, D; Bear, D; Benhaim, P; <u>Gupta, R</u>: Chronic nerve compression induces early proliferation of unmyelinated fibers while preserving axonal integrity. Plastic Surgery Research Council, Boston, Massachusetts, 2002.

Chafik, D; Bear, D; Bui, P; Hung, CT; Benhaim, P; <u>Gupta, R</u>: Chronic nerve compression induces Schwann cell proliferation. Plastic Surgery Research Council, Boston, Massachusetts, 2002.

Rowshan, K; Chao, T; Bui, P; Mozaffar, T; <u>Gupta, R</u>. Aberrant axonal sprouting with the absence of Wallerian degeneration in a model for carpal tunnel syndrome. American Federation for Medical Research Regional Meeting (Western Section), Carmel, California, January 29 – February 1, 2003.

Chafik, D; Bear, D; Warren, C; Bui, P; Hung, CT; <u>Gupta, R</u>: Schwann cells remain promyelogenic after being subjected to sustained shear stress. Orthopaedic Research Society, New Orleans, Louisiana, 2003.

McGarry, MH; <u>Gupta, R</u>; Armstrong, KL; Yang, BY; Schamblin, M; Lee, TQ: Biomechanical etiology for the posterior erosion of the glenoid. Orthopaedic Research Society, New Orleans, Louisiana, 2003.

Shapiro, T; McGarry, MH; <u>Gupta, R</u>; Lee, YS; Lee, TQ: Biomechanical effects of glenoid retroversion in total shoulder arthroplasty. Transactions of the Orthopaedic Research Society, New Orleans, Louisiana, 2003.

Rowshan, K; Bui, PH; Lin, YM; Mozzafar, T; <u>Gupta, R</u>: Macrophage recruitment follows the pattern of inducible nitric oxide synthase expression in a model for carpal tunnel syndrome. Orthopaedic Research Society, New Orleans, Louisiana, 2003.

Bear D, Warren C, Bui P, Modafferri E, Hung CT, <u>Gupta R</u>. Schwann cells remain promyelinogenic after being subjected to sustained shear stress. Plastic Surgery Research Council, Las Vegas, Nevada, April 2003.

Gray, M; Modafferri, E; Chao, T; Rummler, L; Jones, NF; Mozaffar, T; Steward, O; <u>Gupta, R</u>. The role of vascular endothelial growth factor and its receptors in carpal tunnel syndrome. Plastic Surgery Research Council, Las Vegas, Nevada, April 2003.

Bui, P; Chao, T; Gray, M; Jones, NF; Mozaffar, T; <u>Gupta, R</u>: How are macrophages involved with carpal tunnel syndrome? Plastic Surgery Research Council, Las Vegas, Nevada, April 2003.

Chao, T; Bui, P; Gray, M; Rummler, L; Jones, NF; Mozaffar, T; <u>Gupta, R</u>. Chronic nerve compression induces aberrant axonal sprouting. Plastic Surgery Research Council, Las Vegas, Nevada, April 2003.

Rowshan, K; Chao, T; Mozaffar, T; Jones, NF; <u>Gupta, R</u>. The Lost Art of Nerve Teasing. American Society for Surgery of the Hand Residents & Fellows Conference. Chicago, IL, 2003.

Fornalski, S; Bingenheimer, E; McGarry, MH; Gupta, R; Lee, TQ: Ulnar shortening may be a Useful Adjunct for Lunato-Triquetral Arthrodesis. American Society for Surgery of the Hand Residents & Fellows Conference. Chicago, IL, 2003.

Lee, TQ; Shapiro, TA; McMarry, MH; <u>Gupta, R</u>; Le, YS: Effects of glenoid retroversion in Total Shoulder Arthroplasty. American Shoulder and Elbow Surgeons. Dana Point, CA, 2003.

Hadden, A; Steward, O; <u>Gupta, R</u>. Transplantation of peripheral nerve graft following contusion injury to the adult spinal cord. Western Neurosurgical Society Meeting, Kamuela, HI. Sept. 22, 2003.

Rummler, LS; Chao, T; Steward, O; <u>Gupta, R</u>. Evaluation of Pain in an Animal Model for Compression Neuropathy. American Society for Peripheral Nerve. Palm Springs, CA, 2004.

Gray, M; Modafferi, E; Chao, T; Jones, NF; Mozaffar, T; Steward, O; <u>Gupta, R</u>: Angiogenesis and Carpal Tunnel Syndrome. American Association for Hand Surgery. Palm Springs, CA, 2004.

Shapiro, T; McGarry, MH; <u>Gupta, R</u>; Lee, YS; Lee, TQ: Effects of Glenoid Retroversion in Total Shoulder Arthroplasty. American Shoulder & Elbow Surgeons 20<sup>th</sup> Open Meeting. San Francisco, CA, 2004.

Truong, LN; Rummler, L; Bear, D; Hung, CT; <u>Gupta, R</u>. Shear stress alters the expression of myelin associated glycoprotein and myelin basic protein in Schwann cells. Orthopaedic Research Society 51<sup>st</sup> annual meeting. Washington, D.C., 2005.

Chao, T; Mozaffar, T; Steward, O; <u>Gupta, R</u>. Chronic nerve compression preferentially induces sprouting from smaller caliber axonal fibers. Orthopaedic Research Society 51<sup>st</sup> annual meeting. Washington, D.C., 2005.

Rummler, LS; Chao, T; Steward, O; <u>Gupta, R</u>. Evaluation of pain in an animal model for compressive neuropathies. Orthopaedic Research Society 51<sup>st</sup> annual meeting. Washington, D.C., 2005.

Channual, JC; Mozaffar, T; Steward, O; <u>Gupta, R</u>. The temporal pattern of macrophage recruitment in a model for chronic nerve compression injury. Orthopaedic Research Society 51<sup>st</sup> annual meeting. Washington, D.C., 2005.

Nguyen, S; Bear, D; Truong, LN; <u>Gupta, R</u>. Age affects the neural response to chronic nerve compression injury Orthopaedic Research Society 51<sup>st</sup> annual meeting. Washington, D.C., 2005.

Berger, B; Mozaffar, T; <u>Gupta, R</u>. Chronic nerve compression alters the occurrence of Schmidt-Lanterman Incisures. Orthopaedic Research Society 51<sup>st</sup> annual meeting. Washington, D.C., 2005.

Bear, D; Rummler, L; Chao, T; Mozaffar, T; <u>Gupta, R</u>. The pain of carpal tunnel syndrome may occur secondary to localized ion channel migration. Adrian E. Flatt Residents and Fellows Conference in Hand Surgery 23<sup>rd</sup> Annual Meeting. San Antonio, TX 2005.

Rasouli, A; Bhatia, N; Dinh, PT; Sourydevara, S; Cahill, K; <u>Gupta, R</u>. Novel Transplantation of Preconditioned Schwann cells for Spinal Cord Injury with a Contusion Model. Scoliosis Research Society-Finalist for the Russell Hibbs Award. Miami, FL 2005.

Savoie, FH; Seiber, K; McGarry, MH; <u>Gupta, R</u>; Lee, TQ. Biomechanical Evaluatiomnn of a New Reconstructionn Technique for the Anterior Medial Collateral Ligament of the Elbow with Modified Bone Tunnel Placement and Interference Screw Fixation. American Shoulder and Elbow Surgeons 22<sup>nd</sup> Closed Meeting. Palm Beach, FL 2005.

Lee, TQ; Ecklund, KJ; McGarry, MH; <u>Gupta, R</u>. The Role of the Pectoralis Major and Latissimus Dorsi Muscles in a Biomechanical Model of Massive Rotator Cuff Tear. American Shoulder and Elbow Surgeons 22<sup>nd</sup> Closed Meeting. Palm Beach, FL 2005.

Chao, T; <u>Gupta, R</u>. Glial derived growth factor (GDNF) mediates neuronal phenotypic changes. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Bear, D; Rummler, L; Chao, T; Mozaffar, T; <u>Gupta, R</u>. Localized ion channel migration after neural injury mediates pain. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Gray, M; Palispis, W; Truong, LN; Popovich, PG; <u>Gupta, R</u>. Macrophage depletion alters the blood nerve barrier without affecting Schwann cell function after neural injury. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Rasouli, A; Bhatia, N; Dinh, PT; Sourydevara, S; Cahill, K; <u>Gupta, R</u>. Novel Transplantation of Preconditioned Schwann cells for Spinal Cord Injury with a Contusion Model. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Bhatia, N; Rasouli, A; Dinh, PT; Sourydevara, S; Cahill, K; <u>Gupta, R</u>. Resection of glial scar following spinal cord injury. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Dinh, PT; Rasouli, A; Bhatia, N; Sourydevara, S; Cahill, K; <u>Gupta, R</u>. Transplantation of Preconditioned Schwann cells following Hemisection Spinal Cord Injury. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Rummler, LS; Palispis, W; Truong, LN; Chao, T; Rowshan, K; Steward, O; <u>Gupta R</u>. Local down-degulation of myelin associated glycoprotein permits axonal sprouting after chronic nerve compression injury. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Ecklund, KJ; McGarry, MH; Chu, E; <u>Gupta, R</u>; Lee, TQ: The Role of Pectoralis Major and Latissimus Dorsi Muscles in a Biomechanical Model of Massive Rotator Cuff Tear. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Ecklund, KJ; Chu, E; McGarry, MH; <u>Gupta, R</u>; Lee, TQ: Reverse Shoulder Arthroplasty Restores Abductor Muscle Efficiency in Massive Rotator Cuff Tears. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Seiber, KS; <u>Gupta, R</u>; McGarry, MH; Safran, MR; Lee, TQ: The Role of Elbow Musculature and Forearm Rotation in Elbow Stability. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Seiber, KS; Savoie, FH; McGarry, MH; <u>Gupta, R</u>; Lee, TQ: Biomechanical Evaluation of a new Reconstruction Technique for the Anterior Medial Collateral Ligament of the Elbow with Modified Bone Tunnel Placement and Interference Screw Fixation. Orthopaedic Research Society 52<sup>nd</sup> annual meeting, Chicago, IL 2006.

Pham, KD; Palispis, W; Mozaffar, T; <u>Gupta, R</u>: Chronic nerve compression preferentially affects small to medium axons. Plastic Research Council 51<sup>st</sup> annual meeting; Talk 79A; Dana Point, CA 2006.

Gray, M; Palispis, W; Truong, LN; Popovich, PG; <u>Gupta, R</u>: Macrophage depletion alters the blood nerve barrier but not Schwann cell proliferation in an animal model for carpal tunnel syndrome. Plastic Research Council 51<sup>st</sup> annual meeting; Talk 106B; Dana Point, CA 2006.

Lee, TQ; <u>Gupta, R</u>: Novel New Model for Rotator Cuff Pathology: Rabbit Subscapularis Muscle. American Shoulder and Elbow Surgeons-Biologics in Shoulder Surgery meeting in Session I: Rotator Cuff; Chicago, IL September 6, 2006.

Rummler, LS; Palispis, W; <u>Gupta</u>, <u>R</u>: Mechanisms of pain in an in vivo model for chronic nerve compression injury. Society for Neuroscience Annual Meeting. Atlanta, GA, October 16, 2006.

Grumet, R; Hadely, S; Lee, TQ; <u>Gupta, R</u>: Development of a Novel Model for Rotator Cuff Pathology: The Rabbit Subscapularis Muscle. International Symposium on Ligaments & Tendons VII. San Diego, CA; February 10, 2007.

Strandberg, EJ; Mozaffar, T; Abe, K; Cahill, K; Hilgenberg, LG; Smith, MA; <u>Gupta, R</u>. Atrogin-1 Levels and Axonal Integrity are maintained after chronic nerve compression-induced nerve sprouting. Orthopaedic Research Society. San Diego, CA; February 11, 2007.

Chao, T; Pham, K; Steward, O; <u>Gupta, R</u>. Local chronic nerve injury induces a neuronal phenotypic switch of the dorsal root ganglia. Biennial Meeting of Peripheral Nerve Society. Snowbird, Utah; July, 2007.

Mozaffar, T; Strandberg, EJ; Abe, K; Cahill, K; Hilgenberg, LG; Smith, MA; <u>Gupta, R</u>. Atrogin-1 Levels and Axonal Integrity are maintained after chronic nerve compression-induced nerve sprouting. Biennial Meeting of Peripheral Nerve Society. Snowbird, Utah; July, 2007.

Rowshan, K; Hadley, S; Lee, TQ; <u>Gupta, R</u>. Nerve Injury in Rotator Cuff Pathology. Biennial Meeting of Peripheral Nerve Society. Snowbird, Utah; July, 2007.

Rummler, LS; Palispis, WA; <u>Gupta, R</u>. Schwann cells up-regulate NaV1.8 after chronic nerve injury. Biennial Meeting of Peripheral Nerve Society. Snowbird, Utah; July, 2007.

Strandberg, E; Abe, K; Mozaffar, T; <u>Gupta, R</u>. Atrogin-1 Levels and Axonal Integrity are Maintained after Chronic Nerve Compression-Induced Nerve Sprouting (Paper 40). 62<sup>nd</sup> Annual Meeting of the American Society for Surgery of the Hand, Seattle, WA, September 28, 2007.

Rummler, LS; Palispis, W; <u>Gupta, R</u>. The Pain of Chronic Nerve Injuries May Be M3ediated by Schwann Cells (Paper 42) 62<sup>nd</sup> Annual Meeting of the American Society for Surgery of the Hand, Seattle, WA, September 28, 2007.

Pham, K; Chao, T; Palispis, W; Steward, O; <u>Gupta, R</u>. Local nerve injury induces a phenotypic switch of the dorsal root ganglia. 54<sup>th</sup> Annual Meeting of the Orthopaedic Research Society, San Francisco, CA, March 3, 2008.

Rummler, L; Palispis, W; <u>Gupta, R</u>. The pain of carpal tunnel syndrome is likely mediated by Schwann cells. 54<sup>th</sup> Annual Meeting of the Orthopaedic Research Society, San Francisco, CA, March 3, 2008.

- Smith, JS; Pham, T; Anderson, R; Bhatia, N; Steward, O; <u>Gupta, R</u>. The Role of Durotomy and Duraplasty Following Cervical Spinal Cord Injury in an Animal Model (Paper 20). 36<sup>th</sup> Annual Meeting of the Cervical Spine Research Society, Austin, TX, December 5, 2008.
- Hazel, A; Bathen, ME; Jones, NF; Mozaffar, T; <u>Gupta, R</u>. Can Demyelination Occur in the Absence of Inflammation? A Novel Murine Model of Chronic Nerve Compression Injury (Residents & Fellows Paper 7). 27<sup>th</sup> Annual Adrian E. Flatt Residents and Fellows Conference in Hand Surgery. San Francisco, CA, September 2, 2009.
- Jones, NF; <u>Gupta, R</u>; Hansen, SL; Harness, NG. Microsurgical Reconstruction of Congenital Missing Digits with Toe-to-Hand Transfers. Annual Meeting of the American Society for Surgery of the Hand and American Society of Hand Therapists. San Francisco, California, September 5, 2009.
- Hazel, A; Bathen, ME; Nassiri, N; Kang, JR; Lin, MY; Anderson, RL; Mozaffar, T; Gupta, R. A Murine Model of Compressive Neuropathy Defines Demyelination Distinct From Acute Nerve Injuries. *13*<sup>th</sup> *International Symposium on Neural Regeneration*, Asilomar Conference Center, Pacific Grove, CA, December 10, 2009.
- Lin, MY; Kang, JR; Anderson, RL; Nassiri, N; Hazel, A; Mozaffar, T; <u>Gupta, R</u>. Hydrostatic Pressure Activates an Integrin- Associated Signal Cascade in a Myelinating Co-Culture System. *13<sup>th</sup> International Symposium on Neural Regeneration*, Asilomar Conference Center, Pacific Grove, CA, December 12, 2009.
- Hazel, A; Bathen, M; Nassiri, N; Kang, J; Anderson, R; Mozaffar, T; <u>Gupta, R</u>. Wallerian Degeneration Does Not Play an Early Role in Chronic Nerve Compression Injury. 56<sup>th</sup> Annual Meeting of the Orthopaedic Research Society, New Orleans, LA; March 6-9, 2010.
- Gupta, R; Nassiri, N; Hazel, A; Anderson, R; Kang, J; Brophy, P; Mozaffar, T. Chronic Nerve Compression Injury Alters Cajal Band Morphometry: A Possible Mechanism for Demyelination. 56<sup>th</sup> Annual Meeting of the Orthopaedic Research Society, New Orleans, LA; March 6-9, 2010.
- Otarodifard, K; Wong, J; Preston, C; Park, M; Tibone, J; ElAttrache, N; <u>Gupta, R</u>; Lee, TQ. Rotator Cuff Repair Constructs in the Rabbit Subscapularis: Comparison with Human Data. 56<sup>th</sup> Annual Meeting of the Orthopaedic Research Society, New Orleans, LA; March 6-9, 2010.
- Rafijah, G; Dolores, C; Bowen, A; Vitali, R; Mozaffar, T; <u>Gupta, R</u>. Fibrin Glue Augmentation Does Not Impede Neurological Recovery in an Animal Model. Annual Meeting of the American Association for Hand Surgery, Las Vegas, NV; January 14, 2012.
- Kang, JR; Wang, W; Nassiri, N; Hahn, P; Frum, D; Mozaffar, T; <u>Gupta, R</u>. Neural Wound Healing: Why Surgery May Not Be Enough for Carpal Tunnel Syndrome. Annual Meeting of the American Society for Peripheral Nerve, Las Vegas, NV; January 14, 2012.
- Chao, T; Frump, D; Nassiri, N; Jung, J; Hahn, P; <u>Gupta, R.</u> Matrix Metalloproteinase 3 knock-out mice Resist Degradation of the Neuromuscular Junction following Nerve Transection Injury. 58<sup>th</sup> Annual Meeting of the Orthopaedic Research Society; San Francisco, CA; February 5, 2012.

CO-AUTHORED SCIENTIFIC PRESENTATIONS (National, Regional and Local Meetings) Nguyen, M; Quigley, R; McGarry, M; Hanypsiak, B; Morgan, C; Gupta, R; Lee, TQ. The Role of the Biceps Brachii in Overhead Throwing: A Biomechanical Study. 58<sup>th</sup> Annual Meeting of the Orthopaedic Research Society; San Francisco, CA; February 4-7, 2012.

Chao, T; Hanh, P; Frump, D; Caiozzo, V; Mozzafar, T; <u>Gupta, R</u>. Blockade of Matrix Metalloproteinase-3 after Traumatic Nerve Injury Offers a Novel Treatment for Improving Functional Recovery. 67<sup>th</sup> Annual Meeting of the American Society for Society for Surgery of the Hand; Paper 21, Chicago, IL; September 7, 2012.

Jung, J; Frump, D; Mozaffar, T; <u>Gupta, R</u>. Schwann Cell Derived Desert Hedgehog has a Neuroprotective Effect Against Mechanical Stimuli. Annual meeting for the American Society for Peripheral Nerve annual meeting; Kauai, Hawaii; January 10-12, 2014.

Jung, J; Frump, D; Waterman, M; Mozaffar, T; Gupta, R. The Role of the Wnt3a and the Beta-Catenin Signaling Pathway at the Motor Endplate Following Traumatic Nerve Injury. Annual meeting for the American Society for Peripheral Nerve annual meeting; Kauai, Hawaii; January 10-12, 2014.

## **LICENSES AND CERTIFICATIONS**

California Medical License G083863	1997 to present
Pennsylvania Medical License MD 057448L	1995
California Department of Health Services: X-Ray Supervisor and Operator Certification No. 144111	1998 to present
Diplomate, National Board of Medical Examiners United States Department of Justice DEA No. BG5868027	1993
American Board of Orthopaedic Surgery Board Eligible – Passed Part I	1997
American Board of Orthopaedic Surgery Board – Passed Part II	2001
Diplomat of American Board of Orthopaedic Surgery	July 12, 2001
Certificate of Added Qualifications in Surgery of the Hand	August 26, 2002
ABOS and Hand Surgery Recertified through 12/31/2021	September, 2010
CONTINUING EDUCATION	
AO/ASIF Basic Fracture Fixation Course - Portland, Maine	1996
University of Pennsylvania Reconstructive Microsurgery Course	1995

# MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Medical Association/Medical Society of the State of New York	1988 – 1992
American Medical Association	2014-Present
Alpha Omega Alpha Honor Medical Society	1991-Present
American Academy of Orthopaedic Surgery	1994 – Present
Orthopaedic Overseas	1996-1997
Los Angeles Hand Club	1999 – Present
American Society for Surgery of the Hand (Candidate Member)	2000 - 2003
Society for Neuroscience (Member ID# 100009738)	2001 – Present
Orthopaedic Research Society (Member ID# 00179823)	2001 – Present
American Medical Association	2001 – Present
American Society for Surgery of the Hand (Active Member)	2003-present
Young Members Steering Committee ASSH	2003 - 2006
OREF Grants Review Committee	2004-2008
Young Leaders 2004 ASSH	2004-2005
Young Leaders Task Force ASSH	2004-2005
Medical Student One-on-One Task Force ASSH	2004-2005
Vice-Chair of Young Members Steering Committee ASSH	2004-2005
Chair of Young Members Steering Committee ASSH	2005-2006
American Shoulder and Elbow Surgeons	2006-2012
Associate Member (#13440) Active Member	2012 to present
Councilor Board of Directors Western Orthopaedic Association	2006-2008
Basic Science Committee and Grants Review ASSH	2007-2011
Association for Bone and Joint Surgery (Member #30368)	2007-present

# MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Research Development Committee AAOS/ORS	2008-2011
Nominating Committee Orthopaedic Research Society	2008-2009
Basic Science Committee and Grants Review ASSH	2006-2009
AOA Emerging Leaders Committee	2009-2011
AOA Young Leaders Committee	2011-2014
Bunnell Traveling Fellows Committee ASSH (Vice Chair)	2009-2010
Basic Science Committee and Grants Review ASSH (Chair)	2010-2013
Bunnell Traveling Fellows Committee ASSH (Chair)	2010-2011
Council Member at Large American Society for Peripheral Nerve	2012-2014
American Neurological Association (Active member)	2012-present
ORS Topic Chair: Shoulder and Elbow	2012-2014
ORS New Investigator Research Award Committee	2013-2014
AOA Distinguished Clinician Educator Award Committee	2013-2014
Program Committee ASSH Co-Program Chair for the 72 <sup>nd</sup> Annual Meeting of the ASSH	2014-2016
GRANT REVIEW	
Orthopaedic Research Education Foundation American Society for Surgery of the Hand	2004-20 2007-Present
NIH/NINDS Resident Research RFA ZNS1 SRB-S (17)	December, 2008
Airlift Orthopaedic Research Foundation	October, 2009
NIH/NINDS CNNT study section Ad Hoc reviewer	October, 2012

# UNIVERSITY AND COMMUNITY SERVICE University of California, Irvine

UC Irvine Medical School Admissions Committee	1999 – Present
UC Irvine Willed Body Program Advisory Committee UC Irvine Minimally Invasive Surgery Committee	2001 – 2015 2002 2015
Co-Councilor for the Zeta Chapter of AOA Honor Society	2004-2015
UC Irvine School of Medicine Compensation Committee	2007-2015
UC Irvine School of Medicine Finance Committee	2009-2015
UC Irvine Chancellor's Advisory Committee to Select the Permanent Dean of the School of Medicine	2009
Chair of the Selection Committee for the Permanent Chair of Internal Medicine	2009-2010
Member of the Selection Committee for the Permanent Chair of Pathology	2011
Chair of the Selection Committee for the Director of the NCI Comprehensive Chao Cancer Center	2012-2013
Councilor for the Zeta Chapter of AOA Honor Society	2015-Present
Albany Medical College	
Student Orthopaedic Lecture Series, Coordinator	1990 – 1992
Student Member of Admissions Committee	1990 – 1992
Student AIDS Education Committee	1989 – 1992
Community Service	
Volunteer at the Ronald McDonald House, Philadelphia, Pennsylvania	1994
Volunteer Physician at Lennox Community Health Fair UCLA – Chicano/Latin Medical Student Association	1998
Volunteer Surgeon at Sihanouk Center of Hope, Phnom Penh, Cambodia	5/98 – 6/98
Member of the Advisory Board to the Arthritis Foundation	11/01– Present
Vice-President of Western Orthopaedic Association, Orange County Chapter	1/05-1/06

## **UNIVERSITY AND COMMUNITY SERVICE (cont.)**

## **Community Service**

President-Elect of Western Orthopaedic Association, Orange County Chapter 1/06-1/07 President of Western Orthopaedic Association, Orange County Chapter 1/07-1/08 Service to Scholarly Journals and Publications Reviewer, Journal of Hand Surgery 1994 – Present Reviewer, Journal of Orthopaedic Research 2002 – Present Reviewer, Experimental Neurology 2004 – Present Reviewer, Journal of Comparative Neurology 2004 – Present Reviewer, Clinical Orthopaedics and Related Research 2004 – Present Reviewer, Neurobiology of Aging 2006-Present Reviewer, Muscle Nerve 2007-Present Reviewer, Journal of Neurotrauma 2007-Present Reviewer, Journal of Bone and Joint Surgery 2008-Present Reviewer, Tissue Engineering 2008-Present Reviewer, Journal of Rehabilitation Research and Development 2008-Present Associate Editor, Journal of Orthopedic Research and Reviews 2009-Present

#### **PERSONAL INFORMATION**

Date of Birth: March 22, 1969

Children: Deven (12) and Arjun (10)