

## **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**

Creighton University Omaha, Nebraska The Anne L. & Michael H. McGuire Endowed Chair Professor of Orthopaedic Surgery, Pharmacology, and Neuroscience Chair of the Department of Orthopaedic Surgery Chair of Orthopaedic Surgery at CHI Health: Omaha, Nebraska	9/5/2024 to Present
University of California, Irvine Department of Orthopaedic Surgery Professor Step VII with Tenure & FTE	7/1/2024-9/4/2024
Professor Step VI with Tenure & FTE	7/1/2020 to 6/30/2024
Professor Step V with Tenure & FTE	7/1/2016 to 6/30/2020
Professor Step IV with Tenure & FTE	7/1/2013 to 6/30/2015
Professor Step II with Tenure & FTE	12/1/09-6/30/2013
Professor Step I with Tenure & FTE	2/07- 12/1/09
Associate Professor Step II with Tenure & FTE	2/2005 – 2/2007
Assistant Professor with FTE	1/19999 – 2/2005

**ACADEMIC APPOINTMENTS**

University of California, Irvine: Department of Biomedical Engineering	
Professor Step VII with Tenure & FTE	7/1/2024-9/4/2024
Prof Professor Step VI with Tenure & FTE	7/1/2020 to 6/30/2024
Professor Step V with Tenure & FTE	7/1/2016 to 6/30/2020
Professor Step IV with tenure & FTE	7/1/2013 to 6/30/2016
Professor Step II with tenure & FTE	12/1/09-6/30/2013
Professor Step I with tenure & FTE	2/07- 12/1/09
Associate Professor Step II with tenure& FTE	2/2005 – 2/2007
Assistant Professor with FTE	7/2000 – 2/2005

University of California, Irvine: Department of Anatomy & Neurobiology	
Professor Step VII with Tenure & FTE	7/1/2024-9/4/2024
Professor Step VI with Tenure & FTE	7/1/2020 to 6/30/2024
Professor Step V with Tenure & FTE	7/1/2016 to 6/30/2020
Professor Step IV with tenure & FTE	7/1/2013 to 6/30/2016
Professor Step II with tenure & FTE	12/1/09-6/30/2013
Professor Step I with tenure & FTE	2/07- 12/1/09
Associate Professor Step II with tenure & FTE	2/2005 – 2/2007
Assistant Professor with FTE	8/2003 – 2/2005

**PROFESSIONAL APPOINTMENTS**

Chair- Creighton School of Medicine	9/5/2024 to Present
Attending in Orthopaedic Surgery	1/4/1999- Present
UC Irvine Chief of Peripheral Nerve Research Lab	1/4/1999- 9/4/2024
UC Irvine Chairman	1/1/2007-12/23/2015
UC Irvine Interim Chair	11/1/2006-12/31/2006
UC Irvine Interim Residency Director	4/1/2007-7/1/2007
UC Irvine Chief of Shoulder Surgery	9/1/2012 to -9/4/2024
Staff Surgeon at Long Beach Veteran's Hospital	8/2/2014-9/4/2024

**HONORS AND AWARDS**

UC Irvine Kevin Armstrong <b>Clinical Faculty Teaching Award</b>	2023
Top 5 Poster Award for the 78 <sup>th</sup> Annual Meeting of the American Society for Surgery of the Hand	2023
Oral Examiner for the American Board of Orthopaedic Surgery	2023
	2022
	2021
	2020
	2017
	2016
	2015
	2014
	2011

**HONORS AND AWARDS**

Chosen as a member of Best Doctors	2024 2023 2022 2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011
<b>Charles S. Neer Award - America Shoulder &amp; Elbow Surgeons</b>	2019
Faculty Teaching Award	2017
UC Irvine Department of Orthopaedic Surgery	2016
<b>Weiland Medal for Outstanding Research</b> in Hand Surgery (\$20,000) American Society for Surgery of the Hand	2016
Vernon Thompson Award, Role: Mentor Western Orthopaedic Association	2016
Faculty Teaching Award UC Irvine Department of Orthopaedic Surgery	2016
Best Student Paper, Role: Mentor International Society for Ligament & Tendon Research	2016
Orthopedic Institute for Children Resident Award; Role: Mentor California Orthopaedic Association	2016
<b>Joseph H. Boyes Award-</b> Best Scientific Presentation at Annual Meeting American Society for Surgery of the Hand	2015
Best Scientific Exhibit “Cost-effective Arthroscopic Surgery Training and Assessment Tool for Resident Education” American Academy of Orthopaedic Surgery	2015
Orthopaedic Research & Education Foundation Resident Award California Orthopaedic Association (\$2000)	2015
Best Scientific Exhibit “Cost-effective Surgical Simulation” American Academy of Orthopaedic Surgery	2014

**HONORS AND AWARDS**

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
<b>American British Canadian (ABC) Traveling Fellowship</b> American Orthopaedic Association	2013
Best Basic Science Paper American Society of Peripheral Nerve	2013
Lloyd Taylor Award, Role: Mentor Western Orthopaedic Association	2012
AAHS Outstanding Paper American Association for Hand Surgery	2012
ASPN Outstanding Paper American Society of Peripheral Nerve	2011
Orthopaedic Hospital Resident Award, Role: Mentor California Orthopaedic Association (\$1000)	2011
Lloyd Taylor Award, Role: Primary Mentor Western Orthopaedic Association (\$2000)	2010
1 <sup>st</sup> Place Research Award Resident/Fellow, Role: Primary Mentor Cervical Spine Research Society (\$2000)	2008
<b>Sterling Bunnell Traveling Fellowship</b> in Hand Surgery American Society for Surgery of the Hand	2007-2008
Accelerated Merit Increase Assoc. Step II to Professor Step I	2007
<b>Kappa Delta</b> 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
<b>Marshall Urist Young Investigator Award</b> (\$5000) - Association of Bone and Joint Surgeons	2005

**HONORS AND AWARDS**

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
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**

**Co-Principal Investigator** with Michael Hicks **4/21/2023-6/30/2025**

*Cellular mechanisms for the degeneration and aging of human rotator cuff tears*

National Institute for Health/ National Institute for Aging

**1 R21 AG081739-01**

Direct Costs \$275,000

Received score 11% percentile from study section- NIA pay line is below 15% percentile

Co-Investigator with PI Clark Hung, PhD

1/1/2021-1/1/2022

Columbia University SIRS/STAR grant: *OCT Imaging as a Novel Tool for Pain Management*

*Research in the Knee*” \$85,000 for 12 months

**Principal Investigator - NIH Award from the National Institute for** **1/19/10-12/31/15**

**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

1/1/11-1/1/12

*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)

**RESEARCH SUPPORT (cont.)**

Principal Investigator-American Society for Surgery of the Hand <i>Altered Myelination with Compression Neuropathies: The Role of Schwann Cell Mechanotransduction</i> (\$19,187 annual direct costs)	11/1/06-10/31/07
Co-Investigator (5% effort) - NIH Award from the National Institute for Neurologic Disorders and Stroke <i>Post-doctoral Training Program in Neural Regeneration</i> T32 NS-07486 (\$218,860 annual direct costs)	07/15/01-06/30/06
Co-Investigator (5% effort) - NIH Award from the National Institute for Neurologic Disorders and Stroke <i>Summer Research Training in Neuroscience</i> T35 NS-45563 (\$38,280 annual direct costs)	07/01/03-06/30/07
Co-Investigator/Sponsor, Orthopaedic Research and Education Foundation Medical Student Summer Orthopaedic Research Fellowship-Michael Gray <i>Macrophage mediated effects with chronic nerve compression injury</i> (\$2500)	6/1/05-9/1/05
<b>Principal Investigator - NIH Award from the National Institute for Neurologic Disorders and Stroke</b> <b><i>Schwann cell regulation of chronic nerve injury</i></b> <b>5R01 NS049203</b> <b>(\$1,670,679)</b>	<b>7/1/04-4/30/10</b>
Co-Investigator/Sponsor, Whitaker Foundation-Tom Chao <i>Mechanical Stimulation of Peripheral Neural Tissue Alters the Process of Myelination</i> (\$4500)	6/1/03 – 9/1/03
Co-Investigator/Sponsor, NIH Post-doctoral fellowship-Phong Bui <i>Evaluation of Schwann cell responses to different injury models</i> (\$5500)	6/1/03 – 9/1/03
Co-Investigator/Sponsor, Undergraduate Research Opportunity-Michael Gray <i>The role of vascular endothelial growth factor in compressive neuropathy</i> (\$3000)	6/1/03 – 9/1/03
<b>Principal Investigator, AirCast Orthopaedic Research Foundation</b> <b><i>Schwann Cell Response to Biomechanical forces of Carpal Tunnel Syndrome</i></b> <b>(\$100,000)</b>	<b>8/1/03 – 7/31/05</b>
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 09/30/00 – 08/31/05**  
*Transduction of Chronic Nerve Injury by Schwann Cells*  
(\$645,300)

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

Principal Investigator, UCI Whitaker Foundation Bioengineering Grant 6/99 – 8/99  
*The development of a chronic in-vitro model for chronic nerve injury*  
(\$4500)

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 (UNDER REVIEW)**

Co-Principal Investigator with Oswald Steward (Professor of Neurobiology and Behavior and Anatomy & Neurobiology and the Director of the Reeve-Irvine Research Center) and Dr. Maya Hatch (UC Irvine PM&R)

*Assessing motor end plate morphometry (MEP) from pre-operative muscle biopsies to quantitatively predict the extent of recovery of function from nerve transfer surgery*

National Institute for Neurologic Disorders and Stroke

RM1 Grant submitted October 20, 2023

**1RM1N#138835-01**

Total direct Cost: \$3,548,932

Indirect Costs: \$1,990,237

Total: \$5,539,169

**PUBLICATIONS****Full Length Manuscripts**

1. Gupta, R: 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; Gupta, R; 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; Gupta, R; 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. Gupta, R; 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 Gupta, R: Proximal interphalangeal joint arthroplasty: a review. *Seminars in Arthroplasty* **8(2)**: 120-127, 1997.
6. Gupta, R; 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. Lorch, DG; Brighton, CT; Gupta, R; 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. Gupta, R; 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. Gupta, R; 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 Gupta, R: Vessel Implantation for Kienbock's Disease. *Atlas of Hand Clinics* **4(2)**: 73-90, 1999.
11. Fornalski, S; Lee, TQ; Gupta, R: Chronic Instability of the Distal Radioulnar Joint: A review. *The University of Pennsylvania Orthopaedic Journal* **13**: 43-52, 2000.
12. Gupta, R; 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; Gupta, R: Post-operative Monitoring of Pediatric Toe-to-Hand Transfers with Differential Pulse Oximetry. *Journal of Hand Surgery* **26A**: 525-529, 2001. PMID: 11418919

**Full Length Manuscripts (cont.)**

14. Gupta, R; 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. Gupta, R; 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. Gupta, R; 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; Gupta, R: Primary total elbow arthroplasty. *Operative Techniques in Orthopaedics* **12(1)**: 15-20, 2002. PMID: 15540850
18. Fornalski, S; Gupta, R; 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; Gupta, R: Optimization of Schwann Cell Adhesion for Peripheral Nerve Tissue Engineering. *Tissue Engineering* **9(2)**: 233-243, 2003. PMID: 12740086
20. Gupta, R; 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. Gupta, R; 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. Gupta, R; 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; Gupta, R; Lee, TQ. Anatomy and Biomechanics of the Elbow Joint. *Techniques in Hand and Upper Extremity Surgery* **7(4)**: 168-178, 2003; PMID: 16518218
24. Gupta, R; Rowshan, K; Mozzafar, 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. Rummeler, LR; Gupta, R: Peripheral nerve repair: a review. *Current Opinion in Orthopaedics* **15(4)**: 215-219, 2004.

**Full Length Manuscripts (cont.)**

26. Azanchi, R; Bernal, G; Gupta, R; 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; Gupta, R; 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; Gupta, R: 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; Gupta, R. The anatomy and biochemistry of myelin and myelination. *Operative Techniques in Orthopaedics* **14(3)**: 146-152, 2004.
30. Rowshan, K; Jones, NF, Gupta, R. Current Surgical Techniques in Nerve Repair. *Operative Techniques in Orthopaedics* **14(3)**: 163-170, 2004.
31. Dinh, PT; Gupta, R. 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. Gupta, R 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. Gupta, R; Gray, M; Chao, T; Bear, D; Modafferi, E; Mozaffar, T. Schwann cells up-regulate vascular endothelial growth factor secondary to chronic nerve compression injury. *Muscle Nerve* **31(4)**: 452-60, 2005; PMID: 15685607
34. Gupta, R; Rummler, L; Steward, O. Understanding the biology of compressive neuropathies. *Clinical Orthopaedics and Related Research* **436**:251-260, June 2005.
35. Gupta, R; 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. Gupta, R; 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; Gupta, R; 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

**Full Length Manuscripts (cont.)**

38. Gupta, R; Chanual, J. Spatiotemporal pattern of macrophage recruitment after chronic nerve compression injury. *Journal of Neurotrauma* **23(2)**: 216-226, 2006. PMID: 16503805
39. Gupta, R; 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; Gupta, R. 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; Gupta, R. Transplantation of pre-conditioned 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; Gupta, R. 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; Gupta, R. Transplantation of pre-conditioned 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; Gupta, R: Rotator Cuff Tear Arthropathy: Pathogenesis, Diagnosis, and Treatment. *Journal of the American Academy of Orthopaedic Surgery* **15(6)**: 340-349, 2007; PMID: 17548883
46. Gupta, R; 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; Gupta, R. 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; Gupta, R. 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

**Full Length Manuscripts (cont.)**

49. Krishnan, KG; Mucha, D; Gupta, R; Schackert, G. Brachial Plexus Compression caused by recurrent Clavicular Nonunion and Space Occupying Pseudoarthrosis: Definitive Reconstruction using free vascularized 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; Gupta, R. 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, Gupta R. 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, Gupta R, 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, Gupta R. Resection of glial scar following spinal cord injury. *Journal of Orthopaedic Research* **27(7)**: 931-6; July, 2009. PMID: 19062171
54. Pham, KD and Gupta, R. Understanding the mechanisms of entrapment neuropathies. *Neurosurgical Focus* 26(2): E7, February, 2009.
55. Grumet, RC; Hadley, S; Diltz, MV; Lee, TQ; Gupta, R. 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; Gupta, R; McMaster, W; Lee, TQ: Quantitative Assessment of Glenohumeral Joint Forces in Total and 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; Gupta, R. Reverse Shoulder Arthroplasty: Indications and Future Directions. *Current Orthopaedic Practice* **20(4)**: 355-364, July/August 2009.
58. Dinh, PT; Hazel, A; Palispis, W; Gupta, R. Functional Assessment after Sciatic Nerve Injury. *Microsurgery* **29(8)**: 644-649; 2009 Aug 3. [Epub ahead of print] PMID: 19653327
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**Full Length Manuscripts (cont.)**

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158. Jung, J; Johnston, TR; Wright, DJ; Lim, P; Navarro, R; Hacquebord, J; Shafiq, B; Gupta, R. Understanding surgeons' decision-making for the management of proximal humerus fractures. *Transactions of the Association of Bone and Joint Surgeons* **73**:99, October 1, 2021.

**Published Abstracts (cont.)**

159. Gupta, R; Johnston, TR; Chen, VY; Steward, O. Preventing Deltoid Dysfunction after Axillary Nerve Injury: Results of Partial Radial to Axillary Nerve Transfer as the Index Procedure. *Current Concepts Arthroscopy Arthroplasty & Fractures* 2022: 293-297; July, 2022.
160. Gonzales LP, Chen V, Johnston TR, Steward O, Gupta R. What Happens After Nerve Injury: Understanding Human Motor Endplate Degeneration after Peripheral Nerve Injury. *Transactions of the American Society for Peripheral Nerve*; January 2023; Miami, FL.
161. Tedesco, A; Gonzales, L; Chen, V; Hicks, M; Johnston, TR; Steward, O; Gupta, R. Analysis Of The Human Deltoid Muscle After Axillary Nerve Injury. *Transactions of the Orthopaedic Research Society* **65**:0356; Session 48; February, 2023.
162. Gonzales, L; Chen, V; Tedesco, A; Johnston, TR; Steward, O; Gupta, R. What Happens After Nerve Injury: Understanding Post-traumatic Human Motor Endplate Degeneration. *Transactions of the Orthopaedic Research Society* **65**: PS2-115:1559 ; February, 2023.
163. Gupta R, Johnston TR, Chen VY, Gonzales L, & Steward O. Preventing Deltoid Dysfunction after Axillary Nerve Injury: Results of Partial Radial to Axillary Nerve Transfer as the Index Procedure. *Transactions of the American Academy of Orthopedic Surgeons*; March 2023; Las Vegas, NV.
164. Gonzales LP, Gupta AT, Tedesco A, Andalib, S, Johnston TR, & Gupta R. Differential Recovery Between Adult and Pediatric Patients Following Peripheral Nerve Injury: Analysis of Human Neonatal Motor Endplates. *Transactions of the American Society for Surgery of the Hand*; October 2023; Toronto, ON.
165. Gupta, R, Tedesco, A., Gonzales, L., Andalib, S., Hicks, M., Johnston, T., Steward, O., "Analysis of the Human Deltoid Across Time Post-Axillary Nerve Injury." *Transactions of the American Society of Elbow and Shoulder Surgeons Annual Meeting*. Scottsdale, AZ. October, 2023.
166. Gonzales L, Chen V, Tedesco A, Andalib S, Johnston T, Steward O, & Gupta R. Aging Accelerates Degradation of Human Neuromuscular Junction Following Peripheral Nerve Injury. *Transactions of the Society for Neuroscience*. PSTR541.12; November 2023.
167. Andalib, S., Gonzales, L., Tedesco, A., Gupta, A., Hatch, M., Johnston, T., Steward, O., Gupta, R. Objective Measurement of Functional Recovery from Nerve Transfer Following Brachial Plexus Injury Using Reachable Workspace. *Transactions of the Society for Neuroscience*. PSTR541.02; November 2023.
168. Tedesco, A., Gonzales, L., Andalib, S., Hicks, M., Johnston, T., Steward, O., Gupta, R. Human Deltoid Muscle Time-Dependent Response to Axillary Nerve Injury: Fatty Atrophy, Satellite Cell Abundance, and Motor Endplate Degeneration. *Transactions of the Society for Neuroscience*. PSTR541.13; November, 2023.

169. Andalib, S., Gonzales, L., Tedesco, A., Gupta, A., Hatch, M., Johnston, T., Steward, O., Gupta, R. Reachable Workspace: An Observer-independent Functional Outcome Measure for Upper Extremity Pathology After Surgical Interventions *Transactions of the Orthopaedic Research Society* **704**; 2024.
170. Gonzales, L., Chen, V., Tedesco, A., Andalib, S., Johnston, T., Steward, O., Gupta, R. Aging Accelerates Degradation of Human Neuromuscular Junction Following Peripheral Nerve Injury. *Transactions of the Orthopaedic Research Society* **1801**; 2024
171. Tedesco A, Kim J, Johnston TR, Gupta R, Hicks MR. Supraspinatus Muscle Cellular Composition in Degenerating and Aging Human Rotator Cuff Tears. *Transactions of the Orthopaedic Research Society* **2144**; 2024.
172. Gupta R, Johnston TJ, Gonzales L, Chen V, Tedesco A., Andalib S, Steward O. Aging Accelerates the Loss of Motor Endplate Innervation following Peripheral Nerve Injury. *Transactions of the Association of Bone & Joint Surgeons* **76**:119-120, 2024.
173. Andalib S., Hatch M., Lee C., Gonzales L., Tedesco A., Wright D., Johnston T., Steward O., Gupta R. “Reachable Workspace Provides an Objective Metric of Upper Extremity Function Independent of Patient Mood and Affect.” *Transactions of the American Society for Surgery of the Hand Annual Conference*. Minneapolis, MN. September 2024.
174. Andalib S., Wright D., Gonzales L., Tedesco A., Habib A., Steward O., Gupta R. “Motor Endplate Morphometry from Muscle Biopsy Correlated with Electromyography Data in Patients with Brachial Plexus/Peripheral Nerve Injury.” *Transactions of the American Society for Surgery of the Hand Annual Conference*. September 2024. Minneapolis, MN.
175. Gonzales L., Wright D., Chen V., Tedesco A., Andalib S., Johnston T., Steward O., Gupta R. “Aging Accelerates Degradation of Human Neuromuscular Junction Following Peripheral Nerve Injury.” *Transactions of the American Society for Surgery of the Hand Annual Conference*. Minneapolis, MN. September 2024.
176. Gonzales L., Chen V., Tedesco A., Andalib S., Wright D., Johnston T., Habib A., Hunt R., Steward O., Gupta R. “Human-derived Neural Progenitor Cell Implantation Rescues Motor Endplates Following Peripheral Nerve Injury.” *Transactions of the American Society for Surgery of the Hand Annual Conference*. Minneapolis, MN. September 2024.
177. Tedesco A., Kim J., Huang T., Johnston T., Gupta R., Hicks M. “Human Muscle Stem Cell Senescence Associated with Aging and Injury Impairs Regenerative Capability.” *Transactions of the American Society for Surgery of the Hand Annual Conference*. Minneapolis, MN. September 2024.
178. Tedesco A., Chalmers C., Cruz J., Sanchez-Navarro G., Van Niekerk M., Hacquebord J.H., Lim P., Shafiq B., Gardner M.J., Gupta R. “Do Surgical or Patient Factors Impact Outcomes after Traumatic Elbow Instability: A Multicenter Analysis of Complex Elbow Fracture-Dislocations.” *Transactions of the American Society for Surgery of the Hand Annual Conference*. Minneapolis, MN. September 2024.

179. Lung, B. E., Tedesco A., Liu S., Wang E.D., Johnston T., Gupta R. “Invasive Gastrointestinal Endoscopy Within 3 Months of Shoulder Arthroplasty Increases the Rate of Periprosthetic Joint Infection.” *Transactions of the American Shoulder & Elbow Surgeons Annual Meeting P55*, San Antonio, TX, October, 2024.
180. Chalmers C.E., Tedesco A., Cruz J., Sanchez-Navarro G., Van Niekerk M., Hacquebord J.H., Lim P., Shafiq B., Gardner M.J., Gupta R. “Do Surgical or Patient Factors Impact Outcomes after Traumatic Elbow Instability: Analysis of 201 Complex Elbow Fracture-Dislocations.” *Transactions of the Orthopaedic Trauma Association Annual Meeting AM169*, p. 417, Montreal, Canada; October, 2024.

## INVITED PRESENTATIONS

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.

## **INVITED PRESENTATIONS**

16. "What's new in hand surgery?" at the International College of Surgeons United States 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.

**INVITED PRESENTATIONS**

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*

**INVITED PRESENTATIONS**

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. Marianna 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.

## **INVITED PRESENTATIONS**

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.

## **INVITED PRESENTATIONS**

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 Discussor/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<sup>[17]</sup> Monterey, CA; June 1, 2014.
102. Invited Speaker for California Orthopaedic Association 2014 Annual Meeting/QME Course “Nerve Injury Transfer”, Portola Hotel & Spa<sup>[17]</sup> 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.
115. Invited Speaker/Moderator of Paper Session 17 – “Daily Considerations for the Hand Surgeon” at the 2nd Combined Meeting of the Australian Hand Surgery Society and American Society for Surgery of the Hand, Sidney, Australia; April 1, 2016.
116. Invited Speaker for “ Symposium 14 - Why Nerve Decompression Fails and What to Do About It “ at the 2nd Combined Meeting of the Australian Hand Surgery Society and American Society for Surgery of the Hand, Sidney, Australia; April 1, 2016.
117. Invited Speaker for ORS/OREF/AAOS New Investigator Research Funding Workshop Clinical, Translational, and Basic Science Research; Hyatt Regency Jacksonville Riverfront, Jacksonville, Florida; May 13-14, 2016
118. Invited Speaker as Annual Invited Professor for Orthopaedic Research Day/ Department of Surgery at the University of Toronto “The Problem of the Human Nerve Injury: Species Specific Findings versus Functional Neural Regeneration”. Toronto, Canada; November 29, 2016.
119. Invited/Special Lecture “The Problem of the Human Nerve Injury: Species Specific Findings versus Functional Neural Regeneration” 60<sup>th</sup> Annual meeting of the Japanese Society for Surgery of the Hand, Nagoya, Japan; April 27, 2017.

**INVITED PRESENTATIONS**

120. Moderator of “Ortho Hand” for Driving Innovation and Establishing Value in Musculoskeletal Care Delivery 2<sup>nd</sup> Summit; Detroit, Michigan; June 1, 2017.
121. Invited Speaker “Robbing Peter to Pay Paul: Upper Extremity Reconstruction/ Peripheral Nerve and Brachial Plexus Injuries” for Driving Innovation and Establishing Value in Musculoskeletal Care Delivery 2<sup>nd</sup> Summit; Detroit, Michigan; June 1, 2017.
122. Invited Speaker “Arthritis of the Upper Extremity” for Driving Innovation and Establishing Value in Musculoskeletal Care Delivery 2<sup>nd</sup> Summit; Detroit, Michigan; June 1, 2017.
123. Invited Speaker “Understanding Compression Neuropathies and Why Non-surgical Therapies are still not Available” for the 7<sup>th</sup> International Symposium on Musculoskeletal System and Pain; Tokyo, Japan; July 22, 2017.
124. Invited Speaker/ Visiting Professor at Yale University Department of Orthopaedic Surgery and Division of Plastic Surgery “The Lazarus Project: Preservation of the Neuromuscular Junction after Traumatic Nerve Injury”; Brady Building in New Haven, CT; August 4, 2017.
125. Invited Speaker/ Visiting Professor at Yale University Department of Orthopaedic Surgery and Division of Plastic Surgery “Robbing Peter to Pay Paul: Case based approach to Nerve transfers and other upper extremity reconstruction”; Brady Building in New Haven, CT; August 4, 2017.
126. Invited Speaker “Strategic Biomimicry & Case Based Approach to Upper Extremity Reconstruction” for the 29<sup>th</sup> Annual Meeting of the Japanese Society for Peripheral Nerve Surgery in Nagoya, Japan; August 26<sup>th</sup>, 2017.
127. Moderator for the Clinical Paper Session 2: Nerve 1 at the 2017 American Society for Surgery of the Hand annual meeting, San Francisco, CA; September 8, 2017.
128. Invited Speaker “Motor Nerve Transfers for the Upper Extremity You Should Know” for Symposium 8: Nerve Reconstruction, Repair to Transfer at the 2017 American Society for Surgery of the Hand annual meeting, San Francisco, CA; September 9, 2017.
129. Invited Speaker “Treating Radial Head Fractures” at the Orthopaedic Trauma & Fracture Care: Pushing the Envelope course, Coronado, CA; February 2, 2018.
130. Invited Speaker “Expanding Role of Reverse Shoulder Arthroplasty Post-Trauma” at the Orthopaedic Trauma & Fracture Care: Pushing the Envelope course, Coronado, CA; February 3, 2018.
131. Invited Speaker “Panel Discussion: The Upper Extremity Specialist: The Wrist, The Elbow & The Nerves” at the Orthopaedic Trauma & Fracture Care: Pushing the Envelope course, Coronado, CA; February 3, 2018.

**INVITED PRESENTATIONS**

132. Invited Speaker “Upper Extremity Rehab after Trauma” at the Orthopaedic Trauma & Fracture Care: Pushing the Envelope course, Coronado, CA; February 3, 2018.
133. Invited Speaker “Surgical Care Pathways for Hip Fracture” at the Interdisciplinary Conference on Orthopaedic Value-Based Care, Newport Beach, CA; February 11, 2018.
134. Invited Speaker “The Opioid Epidemic: Risk evaluation and management strategies for prescribing opioids” as Instructional Course Lecture for the American Academy of Orthopaedic Surgery annual meeting, New Orleans, LA; March 8, 2018.
135. Invited Speaker/ Visiting Professor at The Curtis National Hand Center at Union Memorial Hospital Visiting Lecturer Series “Robbing Peter to Pay Paul: Case based approach to Nerve transfers and other upper extremity reconstruction”; Baltimore, MD; July 23, 2018.
136. Invited Speaker/ Visiting Professor at Baltimore City-wide Hand Surgery Symposium: “The Lazarus Project: Resurrection of the Neuromuscular Junction after Traumatic Nerve Injury”; Baltimore, MD; July 23, 2018.
137. Moderator for the Clinical Paper Session 2: Nerve 1 at the 2018 American Society for Surgery of the Hand annual meeting, Boston, MA; September 14, 2018.
138. Invited Speaker/Moderator Symposium 8: ‘Surgical Simulation and Hand Surgery’ at the 2018 American Society for Surgery of the Hand annual meeting, Boston, MA; September 14, 2018.
139. Invited Speaker: “The Lazarus Project: Resurrection of the Neuromuscular Junction after Traumatic Nerve Injury” at the Ninth Annual California ALS Research Network Summit, Irvine, CA; January 12, 2019
140. Co-Course Director of Interdisciplinary Conference on Orthopedic Value-Based Care, Newport Beach, CA; January 18-20, 2019.
141. Invited Moderator for the 2019 Penn Orthopaedics Alumni Weekend, University of Pennsylvania- Philadelphia, PA; May 3-4, 2019.
142. Invited Speaker “Simulation Curriculum for Microsurgery” for the Symposium “Training the next generation of micro surgeons around the world” at the 10<sup>th</sup> Congress of the World Society for Reconstructive Microsurgery; Bologna, Italy; June 12-15, 2019.
143. Invited Speaker for American Shoulder and Elbow Surgeons Resident Course; Orthopaedic Learning Center, Rosemont, IL; November 22-23, 2019.
144. Invited Speaker “Surgical Misadventures Around the Shoulder: What to Do When You Cut a Nerve” at the 10<sup>th</sup> Annual Course Orthopaedic Trauma & Fracture Care: Pushing the Envelope, La Jolla, CA; January 9-11, 2020

## **INVITED PRESENTATIONS**

145. Invited Speaker “Models for Skill Development” at the 10<sup>th</sup> Annual Course Orthopaedic Trauma & Fracture Care: Pushing the Envelope, La Jolla, CA; January 9-11, 2020
146. Invited Speaker “Orthopaedic Emergencies and Elbow fractures” at the 10<sup>th</sup> Annual Course Orthopaedic Trauma & Fracture Care: Pushing the Envelope, La Jolla, CA; January 9-11, 2020
147. Invited Speaker/Moderator Symposium 8: ‘Surgical Simulation Education’ at the American Society for Surgery of the Hand annual meeting, Virtual Meeting; October 1-3, 2020.
148. Invited Speaker “Nerve dysfunction before and after shoulder and elbow surgery” at the New England Shoulder & Elbow Society Virtual meeting; February 12, 2021.
149. Co-Course Director of Interdisciplinary Conference on Orthopedic Value-Based Care; April 9-11, 2021.
150. Invited Speaker “STEP (Surgical Training and Educational Platform)” at the HFDA Retreat at the American Society for Surgery of the Hand annual meeting; September 28, 2021.
151. Invited Speaker “STEP: ASSH Simulation Testing” at the Resident Educators Workshop (AM21) at the American Society for Surgery of the Hand annual meeting; September 29, 2021.
152. Invited Speaker for American Shoulder and Elbow Surgeons (ASES) 2021 Resident Course at the Orthopaedic Learning Center, Rosemont, IL; November 20-21, 2021
153. Invited Speaker/Visiting Professor: “The Lazarus Project- Preservation of the Neuromuscular Junction after Traumatic Nerve Injury to the Shoulder: From Basic science to Brachial Plexus Surgery”; University of Connecticut Department of Orthopaedic Surgery Grand Rounds, January 13, 2022
154. Invited Speaker “Surgical Misadventures Around the Shoulder: Understanding and Treating Iatrogenic Nerve Injuries in Shoulder Surgery” at Arab Health: 18<sup>th</sup> Orthopaedic Conference; Dubai, United Arab Emirates; January 24, 2022.
155. Invited Speaker “Piriformis Syndrome and Other Uncommon Compression Neuropathies” at Arab Health: 18<sup>th</sup> Orthopaedic Conference; Dubai, United Arab Emirates; January 25, 2022.
156. Invited Speaker “Evolving Management of Proximal Humerus Fractures” at Arab Health: 18<sup>th</sup> Orthopaedic Conference; Dubai, United Arab Emirates; January 25, 2022.
157. Invited Speaker “Nerve Injuries and Their Management with Proximal Humerus Fractures” at the American Shoulder and Elbow Surgeons Open Symposium Proximal Humerus Fractures: From Repair to Reverse; Tampa, Florida; February 12, 2022.

## **INVITED PRESENTATIONS**

158. Co-Chair of the American Shoulder and Elbow Surgeons Open Symposium Proximal Humerus Fractures: From Repair to Reverse; Tampa, Florida; February 12, 2022.
159. Invited Speaker to the University of Pennsylvania as the 2021-2022 Leo Leung Visiting Professor “ The Lazarus Project- Preservation of the Neuromuscular Junction after Traumatic Nerve Injury”; Grand Rounds and Dissection February 24, 2022.
160. Invited speaker for AAOS ICL lecture “Long Bone Fractures: Is the solution always a nail?” as a part of ICL Civilian Gunshot Injuries at annual AAOS meeting in Chicago, March 22, 2022.
161. Invited Speaker Orthopaedic Value Based Health Care Conference "Future of Orthopaedics: Shaping of Surgical Innovation"; April 30, 2022.
162. Invited Speaker Orthopaedic Value Based Health Care Conference "Osteoarthritis: From Gene Therapy to Tissue Engineering", April 30, 2022.
163. Invited Speaker. “Partial Radial Nerve to Axillary Nerve Transfer to Improve Shoulder Function” at the Nice-Shoulder-Course; Nice, France; June 10, 2022.
164. Invited Speaker “Orthopaedic Trauma Conference Pushing the Envelope “Timing for Managing Open Fractures” Friday June 24, 2022.
165. Invited Speaker Orthopaedic Trauma Conference Pushing the Envelope “Proximal Humerus ORIF - Tips, Tricks, and Trade Secrets - How I Get Great Outcomes” Saturday June 25, 2022; San Diego, California.
166. Invited Speaker/Moderator of Concurrent Breakout Session “Proximal Humerus Fractures: From Rehab to Repair to Reverse” at the Annual Meeting of the Orthopaedic Trauma Association; Thursday October 13, 2022; Tampa, Florida.
167. Invited Speaker “How to Make the Transition from Inpatient to Outpatient Shoulder Arthroplasty” at the AAOS/ASES Anatomic and Reverse Total Shoulder Arthroplasty: Concepts and Techniques from Basic to Advanced; November 4, 2022; Rosemont, IL.
168. Invited Speaker “Single Stage Revision” at the AAOS/ASES Anatomic and Reverse Total Shoulder Arthroplasty: Concepts and Techniques from Basic to Advanced; November 5, 2022; Rosemont, IL.
169. Invited Speaker “Basics of Evaluation of the Shoulder and Elbow Patient: Evaluation, Examination, Imaging” at the ASES Resident Course Essentials of Shoulder and Elbow Surgery for Residents and Fellows; November 10-11, 2022; Rosemont, IL.

## **INVITED PRESENTATIONS**

170. Invited Speaker “Rotator Cuff Panel: Case Presentation (Basic Care of Rotator Cuff Problems, Massive RCR, SCR, Transfers, Biceps)” at the ASES Resident Course Essentials of Shoulder and Elbow Surgery for Residents and Fellows; November 10-11, 2022; Rosemont, IL.
171. Invited Speaker to Johns Hopkins University as the 2022-2023 Stein/Finerman Visiting Professor “ Nerve Injuries to Nerve Transfers: Lessons Learned from the Motor Endplate”; Grand Rounds and Case Presentations December 9, 2022.
172. Co-Course Director of 7<sup>th</sup> Annual Interdisciplinary Conference on Orthopedic Value-Based Care, Four Seasons Las Vegas, NV; January 26-28, 2023.
173. Invited Speaker to 7<sup>th</sup> Annual Interdisciplinary Conference on Orthopaedic Value-Based Care & the Future of the Musculoskeletal Space, “The Science and Finance of Orthobiologics”; January 28, 2023.
174. Invited Speaker/Faculty to Shoulder 360 The Comprehensive Shoulder Course; Miami, Florida; April 13-15, 2023.
175. Invited Speaker/Faculty to the Inaugural American Shoulder and Elbow Surgeons Mentor/Mentee Meeting “Innovation & Leadership in Orthopedics”; Gainesville, FL; April 28-29, 2023.
176. Invited Speaker/Faculty to the ISAKOS 2023 Shoulder Instructional Course Lecture: Tips and Tricks for Reverse Shoulder Arthroplasty “Managing complications with rTSA”; Boston, MA; June 21, 2023.
177. Invited Speaker to 10th Annual Revision Course in Shoulder Arthroplasty, “Glenoid Exposure”; August 25, 2023; Tampa, FL
178. Invited Keynote Speaker for the 20<sup>th</sup> Anniversary SoCal Cell and Gene Therapy Conference “Cell and Gene Therapy: From Jesse Gelsinger to Carl June to 2023 Where are we and how did we get here?”; Newport Beach, CA; October 7, 2023
179. Invited Speaker “The Proximal Humerus Fracture Update: Nail, Plate, or RTSA ” at the OC Shoulder Course; November 4, 2023; Huntington Beach, CA.
180. Invited Speaker “Basics of Evaluation of the Shoulder and Elbow Patient: Evaluation, Examination, Imaging” at the ASES Resident Course Essentials of Shoulder and Elbow Surgery for Residents and Fellows; November 17-19, 2023; Rosemont, IL.
181. Invited Speaker “Rotator Cuff Panel: Case Presentation (Basic Care of Rotator Cuff Problems, Massive RCR, SCR, Transfers, Biceps)” at the ASES Resident Course Essentials of Shoulder and Elbow Surgery for Residents and Fellows; November 17-19, 2023; Rosemont, IL.

**INVITED PRESENTATIONS**

182. Invited Speaker/Faculty: “My Best Tips to Avoid Axillary Nerve Injury” at the 30<sup>th</sup> Annual Tampa Shoulder Course; February 1-3, 2023; Tampa, FL
183. Invited Speaker/Faculty: “Case Presentations: Massive Cuff Quandaries: No Waffling – What Would You Do?” at the 30<sup>th</sup> Annual Tampa Shoulder Course; February 1-3, 2023; Tampa, FL
184. Co-Course Director of 8<sup>th</sup> Annual Interdisciplinary Conference on Orthopedic Value-Based Care, Four Seasons Las Vegas, NV; March 21-23, 2024.
185. Invited Speaker to 8<sup>th</sup> Annual Interdisciplinary Conference on Orthopaedic Value-Based Care & the Future of the Musculoskeletal Space, “The Science and Finance of Orthobiologics”; March 21-23, 2024.
186. Moderator of AAOS ICL 231 “Tips and Tricks for the Management of Upper Extremity Fractures for the Generalist on Call”; San Francisco, CA; February 13, 2024.
187. Speaker for AAOS ICL 315 “Intra-operative imaging: Getting the Right Views to Confidently Judge Reduction and Implant Position”; San Francisco, CA; February 14, 2024.
188. Invited Visiting Professor to Massachusetts General Hospital/Harvard Medical School Department of Orthopaedic Surgery. “From Nerve Injuries to Nerve Transfers: Lessons Learned from the Motor Endplate”; Boston, MA; May 16, 2024.
189. Invited Speaker to Massachusetts General Hospital/Harvard Medical School Division of Sports Medicine. “Reachable Workspace for Upper Extremity Function”; Boston, MA; May 16, 2024.
190. Invited Speaker/Faculty for the AO Trauma North America Hand Course- Hand and Wrist Fracture Management. “Management of Proximal Phalanx Fractures”; Irvine, CA; August 3, 2024.
191. Invited Speaker/Faculty for the 11<sup>th</sup> Annual Revision Course in Shoulder Arthroplasty-West. “Infection Management”; Las Vegas, NV; August 9, 2024.
192. Invited Speaker/Faculty for the 11<sup>th</sup> Annual Revision Course in Shoulder Arthroplasty-West. “Humeral Bone Loss”; Las Vegas, NV; August 10, 2024.

**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  
Jennifer Uong  
Henry Hoang  
Lia Tian

*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  
Justin Chan  
Amanda Tedesco  
Vivian Chen  
Luigi Gonzales  
Granlee Nguyen  
Saban Andalib  
Chris Lee

**MENTORED STUDENTS (continued)**

*Medical*      Vikram Murugan

*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  
Winnie Palispis, MD  
James Jung, MD  
Alex Doermans, MD  
Nilay Patel, MD  
Michael Vrla, MD  
David Wright, MD  
Hayk Stepanyan, MD  
Mark R. Cubberly, MD  
Bryan Mark, MD  
Justin Haghverdian, MD  
Justin P. Chan, MD  
Christen Chalmers, MD

**Invited Reviews**

1. Gupta, R. *Plastic and Reconstructive Surgery* **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. Gupta, R. *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.

**Invited Reviews (continued)**

3. Gupta, R. *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. Gupta, R. *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. Gupta, R. *Year Book of Hand and Upper Extremity Surgery* 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. Gupta, R. *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.
8. The Extended Anterolateral Acromial Approach Allows Minimally Invasive Access to the Proximal Humerus. *Clin Orthop & Rel Research* 434:123-129, 2005.
9. Gupta, R. *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.
10. Gupta, R. *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.
11. Gupta, R. *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.
12. Gupta, R. *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.

**Invited Reviews (continued)**

13. Gupta, R. *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.
14. Gupta, R. *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.
15. Gupta, R. *Year Book of Hand and Upper Extremity Surgery* 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.
16. Gupta, R. *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.
17. Gupta, R. *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.
18. Gupta, R. *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.
19. 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. Gupta, R and Meals, RA: Review of the Hand. In *The Journal of Hand Surgery*. Strickland, J. (Ed.). 23A: 958, 1998.
2. Jones, NF and Gupta, R: Vascular Disorders of the Hand. In *Hand Surgery Update II*. American Society for Surgery of the Hand; pp. 275-278, 1999.
3. Gupta, R; 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; Gupta, R: Adult Reconstructive Surgery in *Current Diagnosis & Treatment in Orthopaedics* 3<sup>rd</sup> Edition, McGraw-Hill Companies, Inc.; pp.370-414, 2003.
5. Gupta, R: Nerve. In *Review of Hand Surgery*. Beredjikian, P and Bozentka, D. (Eds.), 1<sup>st</sup> edition, Elsevier Inc.; pp.79-100, 2004.
6. Baker J, Gupta R. 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, Gupta R. 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. Gupta, R; 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; Gupta, R: Adult Reconstructive Surgery in *Current Diagnosis & Treatment in Orthopaedics* 4th Edition, McGraw-Hill Companies, Inc.; pp. 381-423, 2006.
10. Rasouli, A; Gupta, R: 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. Gupta, R; 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. Gupta, R; 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 Gupta R. 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; Gupta, R. 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; Gupta, R. 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 Gupta, R. 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. Gupta, R. 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 Gupta, R. 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 Gupta, R. 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 Gupta R. Disorders of the Nervous System. *Orthopaedic Knowledge Update 10*. American Academy of Orthopedic Surgeons, Rosemont, Illinois; pp. 225-238, 2011.
21. Kang, JR and Gupta, R. 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; Gupta, R. 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 Gupta, R. Nerve Injuries. In Cheema T (editor) *Complex Injuries of the Hand JP* Medical Publishers, St. Louis, MO; pp. 143-153, 2014.
24. Zhu, D and Gupta, R. Basic Science of Nerve Injuries. In *Hand Surgery Update VI*, American Society for Surgery of the Hand, Rosemont, IL, 2016.

**Book Chapters**

25. Gupta, R. Nerve Compression Syndromes. In Lieberman JR (editor) *AAOS Comprehensive Orthopaedic Review 3*, American Academy of Orthopaedic Surgery, Wolters Kluwer, Rosemont, IL; pp352-269, 2020.
26. Hahn, P and Gupta, R. Nerves of the Upper Extremity. In Gupta A (editor) *The Grasping Hand*; Thieme publishing, New York, NY, pp. 93-110, 2021.
27. Mazzocca, AD and Gupta, R. Editors for Section 4: Arthroscopy. In *Orthopaedic Knowledge Update 5 Shoulder and Elbow*, Rosemont, IL, 2021.
28. Seigerman, D; Lutsky, K; Gupta, R. Nerve Anatomy and Physiology, Compression Neuropathies, and Nerve Injuries. In Beredjiklian, PK; Bozentka, DJ; and Gallant, GG (editors) *Review of Hand Surgery Second Edition*, Elsevier, India; p85-103, 2022.
29. Johnston, TR; Chen, V; Gupta R. Anatomic TSA in Elderly Patients: Concerns and Advantages. In Mazzocca, AD and Giacomo GD (editors) *Arthritis Across the Ages* IN PRINT

**SCIENTIFIC PRESENTATIONS (International and National Meetings)**

Gupta, R, 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.

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.

Gupta, R, 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.

Gupta, R, 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.

Gupta, R; 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.

Gupta, R; 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.

Gupta, R; 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.

Gupta, R; 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.

Gupta, R; 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.

Gupta, R; Bui, P; Baretta, J; Robertson, RT: Is carpal tunnel syndrome an acquired neurodegenerative process? Society for Neuroscience, New Orleans, Louisiana, 2000.

Gupta, R; Chafik, D; Bear, D; Steward, O: Quantative stereologic evaluation of a model for carpal tunnel syndrome. Society for Neuroscience, San Diego, California, 2001.

Gupta, R; 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.

**SCIENTIFIC PRESENTATIONS (International and National Meetings)**

Gupta, R; Chafik, D; Bear, D; Bui, P; Steward, O: Quantitative stereologic evaluation of a model for carpal tunnel syndrome. Orthopaedic Research Society, Dallas, Texas, 2002.

Gupta, R; 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.

Gupta, R; Chafik, D; Jones, NF; Steward, O: Chronic nerve compression induces Schwann cell proliferation. American Society for Surgery of the Hand, Phoenix, Arizona, 2002.

Gupta, R; 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.

Gupta, R; 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.

Gupta, R; Chao, T; Jones, NF; Steward, O. Why is there pain with carpal tunnel syndrome? American Society for Surgery of the Hand, Chicago, IL, 2003.

Gupta, R; Lee, TQ. Positional dependent changes in glenohumeral contact pressure and force-possible 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; Gupta, R. 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; Gupta, R. Altered Schwann Cell Function with a Model for Carpal Tunnel Syndrome. International Symposium on Ligaments & Tendons IV. San Francisco, CA, 2004.

Gupta R, 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; Gupta, R. The pain of carpal tunnel syndrome occurs secondary to localized ion channel migration. Peripheral Nerve Society. Il Cucciono, Italy, 2005.

Gupta, R; 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.

**SCIENTIFIC PRESENTATIONS (International and National Meetings)**

Gupta, R; 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; Gupta, R. 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.

Gupta, R; 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; Palispis, W; Gupta, R. Understanding the pain associated with Chronic Nerve Compression Injuries. Annual Meeting of American Society for Peripheral Nerve. Los Angeles, CA, January 13, 2008.

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

Gupta, R; 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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.

**SCIENTIFIC PRESENTATIONS (International and National Meetings)**

Chao, T; Frump, D; Mozaffar, T; Gupta, R. 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.

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

Palispis, WA; Chan, J; Gupta, R. What happens to the human motor endplate after a traumatic nerve injury? The Association of Bone and Joint Surgeons 69th annual meeting paper #30 , Friday, April 7, 2017; Austin, Texas.

Gupta, R. Small Animal Models for Nerve Injury May Not Recapitulate the Human Condition. The Association of Bone & Joint Surgeons 70<sup>th</sup> annual meeting paper #51, Saturday, May 5, 2018; Lisbon, Portugal.

Gupta R, Chan J, Palispis W, Uong J, Hoang H. Two-Photon Imaging of Human Neuromuscular Junction Degradation After Traumatic Peripheral Nerve Injury. Annual meeting of the Peripheral Nerve Society, Tuesday July 24, 2018; Baltimore, Maryland.

Gupta, R; Chan, J; Uong, J; Palispis, W; Steward, O; Lee, TQ. Analysis of Human Muscles of the Shoulder and Upper Extremity: A Temporal Profile of Human Motor Endplate Degradation. Annual Meeting of American Shoulder and Elbow Surgeons, Paper #34; Sunday October 14, 2018; Chicago, Illinois.

Gupta, R. Management of Proximal Phalanx Fractures. AO Hand and Wrist Fracture Management; Saturday November 10, 2018; Irvine, California.

Gupta, R. Understanding surgeons' decision-making for the management of proximal humerus fractures. 73<sup>rd</sup> Annual meeting of the Association of Bone and Joint Surgeons, paper #20; Friday October 1, 2021; Chicago, Illinois.

Gupta. R; Johnston, TR; Chen VY; Gonzales, L; Steward, O. Preventing Deltoid Dysfunction after Axillary Nerve Injury: Results of Partial Radial to Axillary Nerve Injury as the Index Procedure. Annual Meeting of American Shoulder and Elbow Surgeons, Poster #34; Friday October 7, 2022; Atlanta, Georgia.

Gupta R. Preventing Deltoid Dysfunction after an Isolated Axillary Nerve Injury: Results of Partial Radial Nerve to Axillary Nerve transfer as the Index Procedure. Sunderland Society; Saturday July 1, 2023; Banff, Alberta, Canada.

Gupta R. Aging Accelerates the Loss of Motor Endplate Innervation following Peripheral Nerve Injury. Association of Bone & Joint Surgeons; Friday, June 28, 2024; Montreal, Quebec, Canada.

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

Gupta, R, 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Gupta, R: Adult Brachial Plexus Injuries. Department of Orthopaedic Surgery, University of California, Irvine, California, September 2021.

Gupta. R. "Management of Bipolar Bone Loss" at the Sports Medicine and Joint Preservation Symposium. Department of Orthopaedic Surgery, University of California, Irvine, California, June 3, 2022

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

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

Allen, FD, Pollack, SR, Gupta, R, 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, Gupta, R. 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, Gupta, R, 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, Gupta, R. Is Osteoblast Proliferation in Response to Mechanical Stress Linked to a Tyrosine Kinase? Orthopaedic Research Society, Orlando, 1995.

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

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

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

Gupta, R; 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.

Kobayashi, M; Gupta, R; 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; Gupta, R; 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; Gupta, R; 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; Gupta, R: 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; Gupta, R: Chronic nerve compression induces Schwann cell proliferation. Plastic Surgery Research Council, Boston, Massachusetts, 2002.

Rowshan, K; Chao, T; Bui, P; Mozaffar, T; Gupta, R. 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; Gupta, R: Schwann cells remain promyelogenic after being subjected to sustained shear stress. Orthopaedic Research Society, New Orleans, Louisiana, 2003.

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

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

Rowshan, K; Bui, PH; Lin, YM; Mozzafar, T; Gupta, R: 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, Gupta R. Schwann cells remain promyelogenic 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; Mozzaffar, T; Steward, O; Gupta, R. 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; Mozzaffar, T; Gupta, R: 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; Mozzaffar, T; Gupta, R. Chronic nerve compression induces aberrant axonal sprouting. Plastic Surgery Research Council, Las Vegas, Nevada, April 2003.

Rowshan, K; Chao, T; Mozzaffar, T; Jones, NF; Gupta, R. 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; Gupta, R; Le, YS: Effects of glenoid retroversion in Total Shoulder Arthroplasty. American Shoulder and Elbow Surgeons. Dana Point, CA, 2003.

Hadden, A; Steward, O; Gupta, R. 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; Gupta, R. Evaluation of Pain in an Animal Model for Compression Neuropathy. American Society for Peripheral Nerve. Palm Springs, CA, 2004.

Gray, M; Modafferri, E; Chao, T; Jones, NF; Mozzaffar, T; Steward, O; Gupta, R: Angiogenesis and Carpal Tunnel Syndrome. American Association for Hand Surgery. Palm Springs, CA, 2004.

Shapiro, T; McGarry, MH; Gupta, R; 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; Gupta, R. 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.

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

Chao, T; Mozaffar, T; Steward, O; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta, R; 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. American Shoulder and Elbow Surgeons 22<sup>nd</sup> Closed Meeting. Palm Beach, FL 2005.

Lee, TQ; Ecklund, KJ; McGarry, MH; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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.

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

Rasouli, A; Bhatia, N; Dinh, PT; Sourydevara, S; Cahill, K; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta R. Local down-regulation 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; Gupta, R; 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; Gupta, R; 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; Gupta, R; 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; Gupta, R; 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; Gupta, R: 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; Gupta, R: 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; Gupta, R: 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.

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

Rummler, LS; Palispis, W; Gupta, R: 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; Gupta, R: 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. Nerve Injury in Rotator Cuff Pathology. Biennial Meeting of Peripheral Nerve Society. Snowbird, Utah; July, 2007.

Rummler, LS; Palispis, WA; Gupta, R. 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; Gupta, R. 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; Gupta, R. The Pain of Chronic Nerve Injuries May Be Mediated 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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.

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

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

Hazel, A; Bathen, ME; Jones, NF; Mozaffar, T; Gupta, R. 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; Gupta, R; 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; Gupta, R. 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; Gupta, R. 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; Gupta, R; 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; Gupta, R. 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; Gupta, R. 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; Gupta, R. 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.

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.

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

Chao, T; Hanh, P; Frump, D; Caiozzo, V; Mozzafar, T; Gupta, R. 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; Gupta, R. 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.

Gonzales L., Wright D., Chen V., Tedesco A., Andalib S., Johnston T., Steward O., Gupta R. "Aging Accelerates Degradation of Human Neuromuscular Junction Following Peripheral Nerve Injury." American Society for Surgery of the Hand Annual Conference. Minneapolis, MN. September 18, 2024.

**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
ABOS and Hand Surgery Recertified through 12/31/2031	September, 2019

**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 Associate Member (#13440)	2006-2012
Active Member	2012 to present

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

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
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
Program Committee ASES	2014-2019
<b>Orthopaedic Value Based Healthcare Conference (Co-Chair)</b>	<b>2015-present</b>
Basic Science Committee and Grants Review ASSH (Co-Chair)	2016-2017
Surgical Simulation Taskforce ASSH (Chair)	2017-2021
Education Committee ASES (Co-Chair)	2017-2020

## **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

Education Committee ASES (Co-Chair)	2020-2023
Bunnell Traveling Fellows Committee ASSH	2021-2022
ASES Practice Management Taskforce	2021-2025
ASES Virtual Reality Taskforce	2021-2024
Indian American Shoulder and Elbow Society Founding Member Treasurer/Secretary	2020-Present
ABOS Shoulder and Elbow Recertification Examination Committee	2022-2023
AOA Leadership/Fellowship Committee	2022-2025
Co-Director of ASES Resident & Fellows Course	2024-2026

## **GRANT REVIEW**

Orthopaedic Research Education Foundation	2004-20
American Society for Surgery of the Hand	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	2001 – 2015
UC Irvine Minimally Invasive Surgery Committee	2002 -- 2015
Co-Councilor for the Zeta Chapter of AOA Honor Society	2004-2015
UC Irvine School of Medicine Compensation Committee	2007-2015

**UNIVERSITY AND COMMUNITY SERVICE (continued)**

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	2015-9/4/2024
Councilor for Creighton School of Medicine Alpha Omega Alpha Honor Medical Society: Omaha, NE and Phoenix, AZ	11/1/2024- Present
<u>Albany Medical College</u>	
Student Orthopaedic Lecture Series, Coordinator	1990 – 1992
Student Member of Admissions Committee	1990 – 1992
Student AIDS Education Committee	1989 – 1992
<u>Community Service</u>	
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– 9/4/2024
Vice-President of Western Orthopaedic Association, Orange County Chapter	1/05-1/06
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
SoCal Elite Youth Basketball Coach	2012--/4/2024

Service to Scholarly Journals and Publications

Reviewer, <i>Journal of Hand Surgery</i>	1994 – Present
Reviewer, <i>Journal of Orthopaedic Research</i>	2002 – Present
<u>Service to Scholarly Journals and Publications</u>	
Reviewer, <i>Experimental Neurology</i>	2004 – Present
Reviewer, <i>Journal of Comparative Neurology</i>	2004 – Present
Reviewer, <i>Clinical Orthopaedics and Related Research</i>	2004 – Present
Reviewer, <i>Neurobiology of Aging</i>	2006-Present
Reviewer, <i>Muscle Nerve</i>	2007-Present
Reviewer, <i>Journal of Neurotrauma</i>	2007-Present
Reviewer, <i>Journal of Bone and Joint Surgery</i>	2008-Present
Reviewer, <i>Tissue Engineering</i>	2008-Present
Reviewer, <i>Journal of Rehabilitation Research and Development</i>	2008-Present
Associate Editor, <i>Journal of Orthopedic Research and Reviews</i>	2009-Present
Reviewer, <i>Journal of Shoulder &amp; Elbow Surgery</i>	2015 – Present
Reviewer, <i>Journal of American Academy of Orthopaedic Surgery</i>	2017-Present

**PERSONAL INFORMATION**

Children (two boys): Deven (21) and Arjun (18)