

Curriculum Vitae

Gaurav Kumar Gupta, MD, PhD

Education

06/99 - 04/05	M.B.B.S (Bachelor of Medicine and Bachelor of Surgery) Jawaharlal Nehru Medical College, Aligarh, India
05/05 - 05/08	M.D. Clinical Biochemistry (Chemical Pathology Residency Training) Resident in Clinical Biochemistry, Jawaharlal Nehru Medical College, Aligarh India
06/09 - 06/12	Ph.D. Biomedical Sciences Creighton University School of Medicine, Omaha, NE, USA

Postdoctoral Training

02/09 - 06/09	Senior Resident Doctor, G.B. Pant Hospital, New Delhi, India
07/12 - 12/12	Research Fellow, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA
12/12 - 6/13	Research Fellow, The Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA
7/13 - 7/15	Visiting Research Fellow, The Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA
7/13 – 6/17	Resident Physician, Department of Pathology, Tufts Medical Center, Boston, MA
7/13 – 6/17	Clinical Associate, Tufts University School of Medicine, Boston, MA
2/16 – 2/17	Chief Resident, Department of Pathology, Tufts Medical Center, Boston, MA
7/17- present	Clinical Fellow, Hematopathology, NIH/NCI, Bethesda, MD

Thesis

- **Maternal and Fetal Indicators of Oxidative Stress in Preterm Labor** (MD, Clinical Biochemistry, J.N. Medical College, Aligarh, India)
- **Vitamin D and Intimal Hyperplasia in Coronary Artery Disease** (PhD, Biomedical Sciences, Creighton University School of Medicine, Omaha, NE, USA)

Book

- Imaging in Dermatology (Editors: Hamblin MR, Avci P, Gupta GK) Academic Press, 2016

Editorial Activity

- Chief Editor (Immunology Section): International Archives of Medicine
- Review Editor: Frontiers in Immunology (Inflammation)
- Reviewer: PLoS One
Canadian Journal of Physiology and Pharmacology
Journal of Biophotonics
Immunology Research
European Journal of Clinical Nutrition

Prizes

- **First prize** in poster presentation at Creighton University St. Albert's Day/University Research Day celebration , 2012
- **First prize** in poster presentation at Creighton University St. Albert's Day/University Research Day celebration , 2011

Publications

PEER-REVIEWED PUBLICATIONS

- **Gupta GK**, Agrawal DK. CpG oligodeoxynucleotides as TLR9 agonists: therapeutic application in allergy and asthma. *BioDrugs*. 2010; 24:225-235. (PMID: 20623989)
- **Gupta GK**, Dhar K, Del Core MG, Hunter WJ, 3rd, Hatzoudis GI, Agrawal DK. Suppressor of cytokine signaling-3 and intimal hyperplasia in porcine coronary arteries following coronary intervention. *Exp Mol Pathol*. 2011; 91:346-352. (PMID: 21540027)
- **Gupta GK**, Agrawal T, Del Core MG, Agrawal DK. Vitamin D Deficiency Induces Cardiac Hypertrophy and Inflammation in Epicardial Adipose Tissue in Hypercholesterolemic Swine. *Exp Mol Pathol*. 2012; Aug;93(1):82-90 (PMID: 22537546)
- Agrawal T, **Gupta GK**, Agrawal DK. Calcitriol Decreases Expression of Importin α 3 and Attenuates RelA Translocation in Human Bronchial Smooth Muscle Cells. *J Clin Immunol*. 2012 Oct;32(5):1093-103. (PMID: 22526597)

- Agrawal T, **Gupta GK**, Agrawal DK. Vitamin D deficiency decreases the expression of VDR and prohibitin in the lungs of OVA-sensitized and challenged mice. *Exp Mol Pathol*. 2012 Aug;93(1):74-81. (PMID: 22537547)
- **Gupta GK**, Agrawal T, Del Core MG, Hunter WJ, 3rd, Agrawal DK. Decreased Expression of Vitamin D Receptors in Smooth Muscle Cells of Porcine Coronary Arteries Following Angioplasty: Potential Implication in Coronary Intimal Hyperplasia. *PLoS One*.2012;7(8)e42789 (PMID:22880111)
- Agrawal T, **Gupta GK**, Agrawal DK. Vitamin D Supplementation Reduces Airway Hyperresponsiveness and Allergic Airway Inflammation in a Murine Model. *Clin Exp Allergy*. 2013 Jun;43(6):672-83. (PMID:23711130)
- Lakshmanan S, **Gupta GK**, Avci P, Chandran R, Sadasivam M, Jorge AE, Hamblin MR. Physical Energy for Drug Delivery; Poration, Concentration and Activation. *Adv Drug Deliv Rev*. 2013 Jun 7. doi:pji: S0169-409X(13)00148-8. 10.1016/j.addr.2013.05.010. [Epub ahead of print] PubMed (PMID: 23751778)
- Xia Y**, **Gupta GK****, Castano AP, Mroz P, Avci P, Hamblin MR. CpG oligodeoxynucleotide as immune adjuvant enhances photodynamic therapy response in murine metastatic breast cancer. *J Biophotonics* 2013 Aug 7. doi: 10.1002/jbio.201300072. [Epub ahead of print] (PMID: 23922221)
- Avci P, Nyame TT, **Gupta GK**, Sadasivam M, Hamblin MR. Low-Level Laser Therapy for Fat Layer Reduction: A Comprehensive Review. *Lasers Surg Med*. 2013 Jun 7. Doi 10.1002/lsm.22153. [Epub ahead of print] PubMed (PMID: 23749426)
- Avci P, **Gupta GK**, Clark, J, Sadasivam M, Wikonkal, N, Hamblin MR. Low Level Laser (Light) Therapy for Treatment of Hair Loss. *Lasers Surg Med*. 2013 (PMID: 23970445)
- Sadasivam M, Avci P, **Gupta GK**, Lakshmanan S, Chandran R. Huang YY, Kumar, R, Hamblin MR. Self-assembled liposomal nanoparticles in photodynamic therapy. *European Journal of Nanomedicine*. 2013 Sep;5(3):115-29. (PMID: 24348377)
- Avci P, **Gupta GK**, Kawakubo M, Hamblin MR. Photodynamic therapy for melanoma: efficacy and immunologic effects Proc. SPIE 8944, Biophotonics and Immune Responses IX, 894403 (February 28, 2014); doi:10.1117/12.2041328; http://dx.doi.org/10.1117/12.2041328
- Xuan W, Agrawal T, Huang L, **Gupta GK**, Hamblin MR. Low-level laser therapy in mice increases brain derived neurotrophic factor (BDNF) and synaptogenesis. *J. Biophotonics* 1-10 (2014) (PMID:25196192)
- Agrawal T, **Gupta GK**, Rai V, Carroll JD, Hamblin MR Pre-conditioning with low-level laser (light) therapy: light before the storm. *Dose Response*. 2014 Sep 22;12(4):619-49 (PMID: 25552961)

- Agrawal T, Avci P , **Gupta GK**, Rineh A, Lakshmanan S, Batwala V, Tegos GP, Hamblin MR Harnessing the Power of Light to Treat Staphylococcal Infections focusing on MRSA *Curr Pharm Des.* 2015 Mar 9 (**PMID: 25760339**)
- Yin R, Agrawal T, Khan U, Gupta GK, Rai V, Huang YY, Hamblin MR. Antimicrobial photodynamic inactivation in nanomedicine: small light strides against bad bugs. *Nanomedicine (Lond).* 2015 Aug;10(15):2379-404 (**PMID: 26305189**)
- Weinstein GM, Arkun K, Kryzanski J, Lanfranchi M, **Gupta GK**, Bedi, H. Spinal Intradural, Extramedullary Ependymoma with Astrocytoma Component: A Case Report and Review of the Literature. *Case Rep Pathol.* 2016; 2016:353479. (**PMID: 27313931**)
- **Gupta GK**, Agrawal T, Rai V, Del Core MG, Hunter WJ, 3rd, Agrawal DK. Vitamin D Supplementation Reduces Intimal Hyperplasia and Restenosis following Coronary Intervention in Atherosclerotic Swine. *PLoS One.*2016 Jun 6;11(6):e0156857 (**PMID:27271180**)
- Monika Pilichowska, Stefania Pittaluga, Judith A. Ferry, Jessica Hemminger, Hong Chang, Jennifer A. Kanakry, Laurie H. Sehn, Tatyana Feldman, Jeremy S. Abramson, Athena Kritharis, Francisco J. Hernandez-Ilizaliturri, Izidore S. Lossos, Oliver W. Press, Timothy S. Fenske, Jonathan W. Friedberg, Julie M. Vose, Kristie A. Blum, Deepa Jagadeesh, Bruce Woda, **Gaurav K. Gupta**, Randy D. Gascoyne, Elaine S. Jaffe and Andrew M. Evens. Clinicopathologic consensus study of gray zone lymphoma with features intermediate between DLBCL and classical HL *Blood Advances* 2017 1:2600-2609

** These authors made equal contributions.

ABSTRACTS AND POSTERS

- Andrew M Evens, DO, MSc, FACP, Monika Pilichowska, MD, Stefania Pittaluga, MD, PhD, Judith Ferry, MD, Jessica Hemminger, MD, Jennifer A. Kanakry, Laurie H. Sehn, Tatyana Feldman, MD, Jeremy S. Abramson, MD, Francisco J. Hernandez-Ilizaliturri, MD, Izidore S Lossos, MD, Oliver W Press, MD, PhD, Timothy S. Fenske, MD, Jonathan Friedberg, MD, Julie M Vose, MD, Kristie A. Blum, MD, Deepa Jagadeesh, **Gaurav Gupta, MD, PhD**, Randy D Gascoyne, MD and Elaine Jaffe, MD. Gray Zone Lymphoma (GZL) with Features Intermediate Between Diffuse Large B-Cell Lymphoma (DLBCL) and Classical Hodgkin Lymphoma (cHL): Pathologic Classification and Clinical Outcomes from a Multicenter Consensus Study. American Society of Hematology 58th Meeting and Exposition, 2016, San Diego, CA
- **Gupta GK**, Agrawal T, Pilichowska, M Expression of Vitamin D Receptor, FOXP3 and PD-L1 in Classical Hodgkin Lymphoma. College of American Pathologist 2016, Las Vegas, NV
- **Gupta GK**, Alexander AJ, Askarian F Relapsed Acute Megakaryocytic Leukemia Presenting as a Dural Mass. College of American Pathologist 2015, Nashville, TN
- **Gupta GK**, Magnani BJ Detection of Prenatal Exposure to Illicit Substances by Meconium Analysis: Results of a Retrospective Study at a Tertiary Care Center. College of American Pathologist 2015, Nashville, TN
- Avci P, **Gupta GK**, Kawakubo M, and Hamblin MR Photodynamic therapy for melanoma: efficacy and immunological effects. Presented at *SPIE Photonics West 2014, 2014, San Francisco*

- Agrawal, DK, Agrawal T and **Gupta GK** Immunomodulatory role of vitamin D in allergic airway inflammation and airway hyperresponsiveness in bronchial asthma. Presented at *15th International Congress of Immunology (ICI), 2013 Milan, Italy.*
- Agrawal T, **Gupta GK**, and Agrawal DK. Vitamin D Supplementation Reduces Airway Hyperresponsiveness and Allergic Airway Inflammation in a Murine Model. Presented at *Annual Meeting of American Academy of Allergy Asthma and Immunology (AAAAI) 2013 San Antonio, TX.*
- **Gupta GK**, Agrawal T, DelCore MG, Hunter WJ,III, and Agrawal DK. Vitamin D Deficiency Potentiates Restenosis Following Coronary Angioplasty in hypercholesterolemic swine. Presented at *Annual Arteriosclerosis, Thrombosis and Vascular Biology Meeting, 2012, Chicago, IL*
- Agrawal T, **Gupta GK**, Kim MJ, and Devendra K. Agrawal- Increased Expression of Importin $\alpha 3$ (KPNA4) and Decreased VDR in the Lung of OVA-Sensitized and Challenged Mice. Presented at *Annual Meeting of American Academy of Allergy Asthma and Immunology (AAAAI) 2012 Orlando, FL*
- **Gupta GK**, Agrawal T, DelCore MG, and Agrawal DK. Cardiac Hypertrophy and Epicardial Fat Inflammation in Vitamin D-Deficient and Hypercholesterolemic Swine *Presented at Annual Arteriosclerosis, Thrombosis and Vascular Biology Meeting, 2012, Chicago, IL*
- **Gupta GK**, Agrawal T, and Agrawal DK. Effect of Growth Factors on Vitamin D Receptor and its Role in Vitamin D-Mediated Growth Suppression in Porcine Coronary Artery Smooth Muscle Cells. *Presented at Annual American Society for Bone and Mineral Research Meeting, 2011, San Diego, CA*
- Agrawal T, **Gupta GK**, and Agrawal DK. A Cross talk between Prohibitin and Importin $\alpha 3$ in Vitamin D signaling pathway- A novel implication in allergic asthma. *Accepted at Annual American Society for Bone and Mineral Research Meeting, 2011, San Diego, CA*
- **Gupta GK**, Agrawal T, and Agrawal DK. Effect of Calcitriol Treatment on Proliferation, Migration and Phenotypic Modulation in Porcine Coronary Artery Smooth Muscle Cells: A Novel Candidate for the therapy in Coronary Restenosis. *Presented at Annual Arteriosclerosis, Thrombosis and Vascular Biology Meeting, 2011, Chicago, IL*
- **Gupta GK**, DelCore MG, Hatzoudis GI, Hunter WJ,III, and Agrawal DK. Vitamin D Receptor and Tumor Necrosis Factor- α Cross-talk in Percutaneous Transluminal Coronary Angioplasty-induced Intimal Hyperplasia . *Presented at Annual Arteriosclerosis, Thrombosis and Vascular Biology Meeting, 2011, Chicago, IL*
- Agrawal DK, **Gupta GK**, Dhar K, Del Core MG, Hatzoudis GI, and Hunter WJ, III. Suppressor of Cytokine Signaling-3 and Intimal Hyperplasia in Porcine Coronary Arteries following Coronary Intervention. *Presented at Annual European Atherosclerosis Society Meeting, 2011, Gothenburg, Sweden*
- Agrawal T, **Gupta GK**, and Agrawal DK. Effect of TNF- α on Vitamin D Receptor and its Metabolizing Enzymes in Human Bronchial Smooth Muscle Cells: Potential implication in allergic

inflammation in asthma. *Presented at Annual American thoracic society Meeting, 2011, Denver, CO*

- Agrawal T, **Gupta GK**, and Agrawal DK. Effect of Cytokines on expression of Importin $\alpha 3$ (KPNA4) in Human Bronchial Smooth Muscle Cells. *Presented at Annual American thoracic society Meeting, 2011, Denver, CO*
- **Gupta GK**, DelCore MG, Hatzoudis GI, Hunter WJ,III and Agrawal DK. Suppressor of Cytokine Signaling-3 and Intimal Hyperplasia in Porcine Coronary Arteries following Coronary Intervention. *Presented at Annual Faculty Club Meeting,2010, Omaha, NE*
- **Gupta GK**, Agrawal DK: Effect of Calcitriol on Vitamin D Receptor, its Metabolizing Enzymes and Cell Proliferation in Porcine Coronary Artery Smooth Muscle Cells. *Presented at Annual American Society for Bone and Mineral Research Meeting, 2010, Toronto, Canada*
- **Gupta GK**, Islam N, Moin S; A study on the levels of antioxidant defense enzymes in preterm labor. *Presented at 34th National Conference of Clinical Biochemists of India, 2007, New Delhi, India*
- **Gupta GK**, Islam N, Hasan N, and Kakhkasha: Effects of Allicin on glutathione peroxidase activity and TNF- α in m tuberculosis infected human monocytes. *Presented at 33rd National Conference of Clinical Biochemists of India, 2006 Pune, India*

Professional Memberships

- 2013- College of American Pathologist
- 2013- Massachusetts Medical Society
- 2006- Member, Delhi Medical Council
- 2006- Member, Medical council of India