CURRICULUM VITAE (as of February 20, 2025)

Full name	Devendra Kumar Agrawal
Present Academic Rank	*Professor and Director*
Office Address	*Department of Translational Research* Western University of Health Sciences 309 East Second Street Pomona, California 91766-1854, USA Tel : (909) 469-7040 Cell : (402) 690-3667 E-mail: DAgrawal@WesternU.edu
Citizenship	United States of America

EDUCATION

2003 – 2005	**M.S. (Information Technology and Management)** Creighton University, Omaha, NE College of Business
2002 -2004	**M.B.A. (Business Administration)** Creighton University, Omaha, NE College of Business
1984 – 1985	**Postdoctoral Fellow (Pharmacology)** University of British Columbia Faculty of Pharmaceutical Sciences Vancouver, Canada Mentor: John H. McNeill, Ph.D.
1982 – 1984	**Postdoctoral Fellow (Physiology and Pharmacology)** McMaster University Faculty of Health Sciences Hamilton, Ontario, Canada Mentor: Edwin E. Daniel, Ph.D.
1980 – 1984	**Ph. D. (Medical Sciences)** McMaster University Department of Neurosciences Hamilton, Ontario, Canada Mentor/Major Advisor: Edwin E. Daniel, Ph.D.
1973 – 1978	**Ph.D. (Biochemistry)** King George's Medical College Postgraduate Department of Pathology & Bacteriology Lucknow University, Lucknow, U.P., India Mentors/Major Advisors: Professor Abhaya Kumar, D. Phil. and Professor R. M. L. Mehrotra, MBBS, MD, FRCPath
1971 – 1973	**Master of Science (Chemistry) with specialization in Organic Chemistry** Lucknow University Department of Chemistry, Lucknow, U.P., India

1969 – 1971	**B. Sc. (Major in Biology and Chemistry)** Lucknow Christian College Lucknow University, Lucknow, U.P., India

APPOINTMENTS

07/2019 – Present	Professor and Director, Department of Translational Research, College of Osteopathic Medicine of the Pacific, Western University of Health Sciences, Pomona, California, USA
07/2019 – 02/2022	Senior Vice President for Research & Biotechnology, Western University of Health Sciences, Pomona, California, USA
01/2016 – 06/2019	Professor and Chairman, Department of Clinical & Translational Science, Creighton University School of Medicine, Omaha, NE
09/2009 – 06/2019	Director, Graduate Programs (MS and PhD) Clinical & Translational Science Creighton University Graduate School, Omaha, NE
07/2012 – 06/2017	Senior Associate Dean for Clinical & Translational Research Creighton University School of Medicine, Omaha, NE
04/2009 – 06/2012	Associate Dean for Translational Research Creighton University School of Medicine, Omaha, NE
04/2009 – 12/2015	Director Center for Clinical and Translational Science Creighton University School of Medicine, Omaha, NE
07/2004 – 12/2016	Professor Department of Biomedical Sciences (primary) Creighton University School of Medicine, Omaha, NE
07/2004 – 06/2019	Professor Department of Internal Medicine (secondary) Department of Medical Microbiology & Immunology (secondary) Creighton University School of Medicine, Omaha, NE
01/1998 – 06/2004	Professor Department of Biomedical Sciences (secondary) Creighton University School of Medicine, Omaha, NE
07/1997 – 06/2004	Professor Department of Internal Medicine (primary) Department of Medical Microbiology & Immunology (secondary) Creighton University School of Medicine, Omaha, NE
07/1990 – 06/1997	Associate Professor **(Tenure granted effective July 1990)** Department of Internal Medicine (primary) Creighton University School of Medicine, Omaha, NE
07/1995 – 06/1997	Associate Professor Department of Medical Microbiology & Immunology (secondary)

Creighton University School of Medicine, Omaha, NE

07/1990 – 06/1995	Associate Professor Department of Pharmacology (secondary) Creighton University School of Medicine, Omaha, NE
07/1990 – 06/1995	Associate Professor Department of Biomedical Sciences (secondary) Creighton University School of Medicine, Omaha, NE
07/1990 -06/2002	Director, Multidisciplinary Cardiovascular Research Group (formerly Creighton Vascular Center), Creighton University Medical Center, Omaha, NE
10/1985 – 06/1990	Assistant Professor Department of Internal Medicine (primary) Department of Pharmacology (secondary) Creighton University School of Medicine, Omaha, NE
10/1985 – 06/2003	Director of Pre-Clinical Research, Center for Allergy, Asthma and Immunology, Creighton University School of Medicine, Omaha, NE
09/1980 – 06/1982	Teaching Assistant (a resource person to M.D. students in Pharmacology), Faculty of Health Sciences McMaster University Medical Center Hamilton, Ontario, Canada Supervisor: Edwin E. Daniel, Ph.D.
10/1978 – 08/1980	Clinical Biochemist King George's Medical College (Now King George's Medical University) Gandhi Memorial & Associated Hospitals Lucknow, U.P., India
08/1973 – 08/1978	Research Assistant Postgraduate Department of Pathology and Bacteriology King George's Medical College, Lucknow, U.P. India Supervisors: Professor Abhaya Kumar and Professor RML Mehrotra

HONORS and FELLOWSHIPS

02/2016	**Alpha Omega Alpha Honor Medical Society**
Since 09/2014	Fellow, International Academy of Cardiovascular Sciences
Since 04/2013	Fellow, American Physiological Society
07/2009-06/2019	The Peekie Nash Carpenter Endowed Chair in Medicine
Since 10/2001	Fellow, American Heart Association
Since 10/2001	Fellow, Council of Arteriosclerosis, Thrombosis and Vascular Biology
Since 03/2001	Fellow, American Academy of Allergy, Asthma, and Immunology

PATENT:

The United States of America patent granted on January 16, 2024, jointly with Joe Abdo and Sumeet K. Mittal (Patent #11,874,277) on "Systems and Methods for Barrett's Esophagus Pathogenesis and Esophageal Adenocarcinoma Progression Revealing Markers.

AWARDS, PRIZES, and RECOGNITIONS

01/2025 **CVS Innovative Research Award for Outstanding Services in Cardiovascular Physiology, Medicine, and Surgery**, by the International Academy of Cardiovascular Science, India section; 10-12 January 2025 annual meeting, Ahmedabad, Gujarat, India

11/2024 **Special Guest of Honor and Distinguished Scientist and Mentor**, by the International Pharmacology Conference & 54th Annual Conference of Indian Pharmacological Society 2024, organized by the Department of Pharmacolgy, AIIMS, New Delhi; 28-30 November 2024, New Delhi, India

03/2024 **Visiting Professor**, Faculty of Medicine, University of Kragujevac, Kragujevac, Serbia.

10/2023 **Visiting Professor**, Faculty of Medicine, University of Belgrade, Belgrade, Serbia

10/2023 **Visiting Professor**, Faculty of Medicine, University of Banja Luka, Banja Luka, Bosnia & Herzegovina

10/2023 **Andras Varro Award for Excellence in Cardiovascular Sciences,** awarded at the 9th Meeting of International Academy of Cardiovascular Sciences - European Section, October 4-7, 2023, in **Timișoara, Romania**.

09/2023 **USF Health Morsani College of Medicine, Tampa, FL – Special Recognition** for unwavering mentorship to the scientific committee of the IACS-NAS annual meeting 2023.

05/2017 **Robert F. Kennedy Memorial Award for Teaching Achievement** – the Highest Teaching honor at Creighton University; Presented at the annual commencement ceremony on 13th May 2017

03/2017 **Special Recognition Award for Outstanding contribution as a Teaching Professor, Researcher, and Mentor** by Nebraska and Iowa Physicians of India (NIPI); 11th March 2017

10/2016 **Professor Ricardo Gelpi Award for Excellence in Cardiovascular Sciences**, presented at the annual meeting of the International Academy of Cardiovascular Sciences –South America section, Belo Horizonte, Brazil, 21-23 October 2016.

10/2015 **Professor Bohuslav Ostadal Award for Excellence in Cardiovascular Sciences**, presented at the annual meeting of the International Academy of Cardiovascular Sciences – European section, Belgrade, Serbia, 8-10 October 2015.

09/2015 **Distinguished Leadership Award**, International Academy of Cardiovascular Sciences, Winnipeg, Canada; 12 September 2015

05/2015 **Distinguished Service Award**, School of Medicine, Creighton University

03/2015 **Harpar S. Buttar Oration Award in Cardiovascular Sciences**, International Academy of Cardiovascular Sciences – India section; March 10, 2015, New Delhi, India

02/2015 **Keynote speaker** at the 46th Midwest Student Biomedical Research Forum, Omaha, NE; 28 February 2015

06/2013 **Best poster presentation award** at the 81st annual meeting of the European Atherosclerosis Society, Lyon, France 2-6 June 2013

01/2013 **Award of Excellence by the India Association of Nebraska** in appreciation of outstanding service and contribution to Nebraska Community at large

02/2012 **Creighton University Distinguished Faculty Service Award** presented by the President of Creighton University

05/2011 **Distinguished Professor Award by the Faculty of School of Medicine**, Creighton University

02/2011 **University Research Award**, Creighton University, presented by the President of Creighton University

05/2010 **Outstanding Mentor Award by the Faculty**, Creighton University School of Medicine

2010-2019 **The Peekie Nash Carpenter Endowed Chair in Medicine**, Creighton University

04/2008 **Distinguished Faculty Award**, presented by the Health Sciences Multicultural & Community Affairs (HS-MACA), Creighton University Medical Center

04/2006 One of the three nominees for the **Golden Apple Award for Excellence in Teaching** by Medical Students of Creighton University School of Medicine, Omaha, NE

10/2001 **Recognition** by the Midwest Chapter of American Association of Physicians of India for the contribution **as a teaching professor, researcher, and mentor**

10/2000 "**Man of the Year" Award**, presented by the India Association of Nebraska, USA for the outstanding services to the community at-large in the State of Nebraska

05/1998 Creighton University "**Distinguished Research Career Award**" presented by the Faculty, Creighton University School of Medicine.

03/1994 **Premier Allergy Research Award**, American Academy of Allergy and Immunology, Milwaukee, WI.

05/1990 School of Medicine **"Young Investigator Award"** presented by the Faculty, Creighton University School of Medicine.

10/1987 **Morris F. Miller Faculty Development Award** granted by the Health Future Foundation.

10/1986 **James M. Keck Faculty Development Award** granted by the Health Future Foundation.

10/1986 **American Diabetes Association Travel Award** to attend the University of Virginia/American Diabetes Association International conference on research and therapeutic issues in diabetes in Charlottesville, Virginia, USA.

10/1983 **Dr. Robert F. Furchgott Travel Award** to attend and present a paper at the American Society for Pharmacology and Experimental Therapeutics meeting in Indianapolis, USA.

GRANT SUPPORT

ACTIVE SUPPORT:

1. **1R01 HL147662-01 (NIH-NHLBI)**
   Principal Investigator: Devendra K. Agrawal
   Title: Novel Molecular Target to Prevent Maturation Failure of Arteriovenous Fistula
   Dates of entire project: 08/01/2019– 07/31/2025
   Total amount Awarded: **$2,819,916**

2. **WesternU Office of Research & Biotechnology**; Agrawal (Co-Investigator)
   January 2023 – December 2025
   "WesternU Neurosurgery Research Initiative" to develop pig model of TBI and pilot data on the effect of EMF.
   Total amunt awarded: **$100,000**

3. **1R25 AI179582-01A1 (NIH-NIAID)**
   Principal Investigator: Devendra K. Agrawal
   Title: Research Education Program to Promote Diversity in Immunologic and Allergic Diseases
   Dates of entire project: 12/04/2024– 11/30/2029
   Total amount awarded: **$1,875,768**

GRANTS UNDER RESUBMISSION

4. **R01 NS140227-01 (NIH-NINDS)**
   Principal Investigator: Devendra K. Agrawal
   Title: Electromagnetic Field Stimulation in the Healing of Traumatic Brain Injury
   Dates of entire project: 12/01/2025– 11/30/2030
   Requested Total amount: **$ 3,556,458**

PAST FUNDING

1. **R01 HL144125-01** (**NIH-NHLBI**)
   Principal Investigator: Devendra K. Agrawal
   Title: Novel Approach to Stabilize Atherosclerotic Plaque in Carotid Artery
   Dates of entire project: 06/01/2018– 04/30/2024
   Total amount Awarded: **$2,863,992**
2. R01 HL128063-01 (NIH-NHLBI)
   Principal Investigator: Devendra K. Agrawal
   Title: Gene and Stem Cell Therapy in Coronary Artery Bypass Graft
   Dates and total award of entire project: 03/13/2015– 02/28/2020 **$2,903,260**
3. R01HL144125-01S1 (NIH-NHLBI)- Diversity Supplement (*a Graduate Research Supplement to support Mr. Kouassi Tata Kouassi, a PhD student)*
   Principal Investigator: Devendra K. Agrawal
   Title: Novel Approach to stabilize Atherosclerotic Plaque in Carotid Artery
   Dates and total award of entire project: 12/26/2018– 06/30/2019 **$138,308**
4. Dialysis Clinic Inc.
   Principal Investigator: Devendra K. Agrawal
   Title: Gene Therapy to Induce Maturity of Arteriovenous Fistula in Swine Model
   Dates of entire project: 07/01/2018– 06/30/2019; Total Award: **$249,300**
5. State of Nebraska, Department of Health and Human Services

Principal Investigator: Devendra K. Agrawal
Title: Collagen Phenotype and Inflammation in Shoulder Tendon Tissue in Current Smokers
Dates of entire project: 07/01/2018– 06/30/2019; Total Award: **$50,000**

6. **Principal Investigator: Devendra K. Agrawal**
Title: Epicardial Adipose Tissue, Obesity, and Inflammation in Atherosclerosis
Dates and total award of entire project: 07/23/2013– 05/30/2018 **$3,516,675**
7. R01HL116042 (NIH-NHLBI)
Principal Investigator: Devendra K. Agrawal
Title: Vitamin D and Immunomodulation in Coronary Artery Disease
Dates and Total award of entire project: 07/16/2012– 04/30/2018 **$3,121,285**
8. R01 HL112597 (NIH-NHLBI);
Principal Investigator: Devendra K. Agrawal
Title: "Mesenchymal Stem Cells in the Prevention of Thrombosis and Neointimal Hyperplasia"
Dates and Total award for entire project: 12/01/2011 – 11/30/2017 **$3,295,563**
9. R01HL104516 (NIH-NHLBI)
Principal Investigator: Devendra K. Agrawal
Title: Gene Therapy with SOCS3 in Intimal Hyperplasia and In-stent Restenosis
Dates and total award of entire project: 04/01/2011 – 02/28/2017 **$2,577,718**
10. ICW Technology, Omaha, NE, USA
Principal Investigator: Devendra K. Agrawal
Title: "Magnesium binding modifiers in the therapy of hypertension and type II diabetes mellitus"
Dates and Total award for entire project: 01/15/2014 – 02/28/2017 **$78,400**
11. 3R01 HL112597-01S1 (NIH-NHLBI Diversity Supplement)
Principal Investigator: Devendra K. Agrawal; (*Postdoctoral Fellow Supplement to support Kokouvi Paul Djossou, MD);*
Title: "Mesenchymal Stem Cells in the Prevention of Thrombosis and Neointimal Hyperplasia"
Dates and Total award for entire project: 04/06/2013 – 11/30/2016 **$298,947**
12. 3R01 HL112597-01S1 (NIH-NHLBI Diversity Supplement)
Principal Investigator: Devendra K. Agrawal (*a Graduate Research Supplement to support Mr. Yovani Llamas, a PhD student);*
Title: "Mesenchymal Stem Cells in the Prevention of Thrombosis and Neointimal Hyperplasia"
Dates and Total award for entire project: 2/06/2012 – 11/30/2016 **$223,132**
13. 3R01 HL120659-01S1 (NIH-NHLBI Diversity Supplement)
Principal Investigator: Devendra K. Agrawal
(*Graduate Student Supplement to support Kouassi Tata Kouassi, MD)*
Title: "Epicardial Adipose Tissue, Obesity and Inflammation in Atherosclerosis"
Dates and Total award for entire project: 01/01/2014 – 12/31/2016 **$113,472**
14. 3R01HL116042-S1 (Supplement) NIH-Office of Dietary Supplement-NIH Director's office
Principal Investigator: Devendra K. Agrawal
Title: Vitamin D and Immunomodulation in Coronary Artery Disease
Dates and Total award of entire project: 06/01/2014– 04/30/2016 **$140,000**
15. 2R01HL073349-09 (NIH-NHLBI)
Principal Investigator: Devendra K. Agrawal
Title: Apoptosis of Smooth Muscle cells in Carotid Plaques
Dates and total award of the entire project: 01/01/2010 – 11/30/2015 **$1,300,500**
16. 1R01HL090580 (NIH-NHLBI)
Principal Investigator: Devendra K. Agrawal
Title: Smooth Muscle Cell Proliferation in Human Coronary Artery Bypass Conduits
Dates and total cost of the entire project: 01/01/2009 – 12/31/2014 **$1,445,000**
17. 1R01AI075315 (NIH-NIAID)
Principal Investigator: Devendra K. Agrawal
Title: TGF-beta, Chloride Channels and Migration of Eosinophils
Dates and total cost of the entire project: 04/01/2008 – 03/31/2014 **$1,793,750**
18. 3R01HL116042-01S1 (NIH-Office of Dietary Supplement-NIH Director's Office)
Principal Investigator: Devendra K. Agrawal

Title: Vitamin D and Immunomodulation in Coronary Artery Disease
Dates and total award cost of entire project: 07/23/2013– 05/30/2014 **$70,000**

19. November 2007 – June 2012; **Principal Investigator**; Title: Gene Therapy Program at Creighton University in Occlusive Vascular Diseases**;** $1,648,065

20. July 2009 – June 2012; 1R01HL085680 (NIH-NHLBI) – ARRA Funds; **Principal Investigator**; Title: TGF-β, Chloride Channels and Apoptosis of Airway Epithelial Cells **$874,490**
21. July 2009 – June 2010; LB692 DHHS State of Nebraska, Nebraska Tobacco Settlement Funds; **Principal Investigator**; Title: Gene Therapy Program at Creighton University in Occlusive Vascular Diseases **$458,640**
22. July 2009 – June 2010; LB506 DHHS State of Nebraska, Nebraska Cancer and Smoking-related Diseases; **Principal Investigator**; Title: Flt3-Ligand and Lung Dendritic Cells in Allergic Asthma **$40,000**
23. June 2008 – December 2009; R01HL073349-05 S2 (NIH-NHLBI) (Relinquished due to non-joining of the student); **Principal Investigator**; Title: Apoptosis of Smooth Muscle cells in Carotid Plaques – Research Training of a Minority Student (Mr. Chester N. Ashong) **$17,418**
24. June 2008 – December 2009; R01HL073349-05 S1 (NIH) **Principal Investigator**; Title: Apoptosis of Smooth Muscle cells in Carotid Plaques – Research Training of a Minority Student (Ms. Tochi O. Ibekwe): Dates and direct cost of entire project: **$17,418**
25. January 1, 2004 – December 31, 2008; **National Institutes of Health R01HL073349 (NIH score → 4 percentile); Principal Investigator**; Title: Apoptosis of Smooth Muscle cells in Carotid Plaques. **$875,000**
26. July 2008 – March 2009: **TAIHO Pharmaceuticals, Tokyo, Japan**; "Effect of Suplatast tosilate (IPD) on chloride channel function in mouse BALF eosinophils"; **Principal Investigator**; **$50,000**
27. July 1, 2008 – June 30, 2009; **Creighton University Nebraska Tobacco Settlement Funds (LB692)**; "Gene Therapy Program at Creighton University in Occlusive Vascular Diseases"; **Principal Investigator**; total direct cost awarded **$452,607**
28. September 1, 2008 – June 30, 2009; **Creighton University Nebraska Tobacco Settlement Funds (LB692)**; "Angiographic and Fluoroscopic Facility for Large Animals at Creighton: Purchase of C-arm; **Principal Investigator**; **$170,000**
29. July 2008 – June 2009: **Nebraska Cancer and Smoking-related Disease Program (LB506); State of Nebraska**, Department of Health and Human Services; "Protein kinase C isozymes and chloride channels in asthma"; **Principal Investigator**; **$40,000**
30. March 2008– February 2009; **National Institutes of Health Application #3R01 HL070885-01A2S1** for Minority Graduate Student (Halvor Sim McGee) Supplement; Total cost awarded **$22,960**
31. March 2004 – February 2009; **National Institutes of Health** #1R01AI070885; Flt3-Ligand, Immunomodulation and Therapy in Asthma; **Principal Investigator**- Total cost funded for four years **$948,428**
32. January 2005 – May 2008; **National Institutes of Health**; Supplement to the grant application #3R01HL073349 for Minority Graduate Student (Edward P. Moran) Supplement; Total cost awarded **$171,000**
33. July 2007 – September 2008; **Sepracor Inc., Marlborough, MA**; "Comparative effects of the enantiomers of formoterol on importins in human bronchial smooth muscle cells"; **Principal Investigator**; **$98,250**
34. July 1, 2007 – June 30, 2008; **Department of Health Nebraska; Cancer and Smoking-related Diseases Program (LB 506-2008-01)**; "Chloride channels in mouse bronchial epithelial cells"; **Principal Investigator**; **$40,000**
35. November 1, 2007 – June 30, 2008; **Creighton University Tobacco Settlement Funds (LB692)**; "Gene Therapy Program at Creighton University in Occlusive Vascular Diseases"; **Principal Investigator**; total direct cost awarded **$240,775**.
36. September 2004 – February 2008; **National Institutes of Health** Application #3R01 HL070885S1 for Minority Graduate Student Assistantship; Total cost awarded **$149,625**.
37. July 1, 2006 – June 30, 2007; **Nebraska Cancer and Smoking-related Disease Program (LB506)**; State of Nebraska, Department of Health and Human Services; "CLC-3 Channels and apoptosis of airway epithelial cells"; **Principal Investigator**; **$40,000**.
38. April 2006 – March 2007; **Sepracor Inc**.; "Both AP-1 and CREB amplify NF-kB-induced Pro-

inflammatory and Pro-constrictory Effects of (S)-Albuterol and (RS)-Albuterol"; **Principal Investigator.**

39. April 2006 – March 2007; Vice President for Health Sciences Discretionary Funds, Creighton University; "Restenosis in Coronary Artery Bypass Graft"; **Principal Investigator**; Total direct cost awarded **$50,000**.
40. July 2005 – June 2006; **Nebraska Department of Health, Nebraska Cancer and Smoking-Related Diseases**; "Survivin in TRAIL-induced apoptosis in breast cancer"; **Principal Investigator**; **$40,000**.
41. July 2005 – March 2006; TAIHO Pharmaceuticals Inc., Tokyo, Japan; "Characterization of Suplatast tosilate (IPD) binding sites in human airway epithelial cells"; **Principal Investigator**
42. September 2004 – September 2005; Nebraska Tobacco Settlement Funds (LB692) through Creighton University; "Restenosis in Coronary Artery Bypass Graft"; **Principal Investigator**; Total direct cost awarded **$100,000**
43. July 2004 – December 2005; Sepracor Inc., Marlborough, MA: "Is the intracellular (S)- Albuterol Binding site a part of the Transcription factor, NF-kB and acts as Amplification Loop in Inflammation?" **Principal Investigator**
44. July 2004 – December 2005; Sepracor Inc., Marlborough, MA: "Class Specificity of (S)-Albuterol Binding Sites in Human Airway Smooth Muscle Cells". **Principal Investigator**
45. January 2004 – December 2004; TAIHO Pharmaceuticals, Tokyo, Japan, "Chloride channel in airway epithelial cells: Effect of Suplatast tosilate"; **Principal Investigator**
46. January 2004 – December 2004; Sepracor Inc., "Further characterization of (S)-albuterol binding sites in human airway smooth muscle cells"; **Principal Investigator**
47. April 2004 – December 2004; **Hybridon, Inc**., Cambridge, MA: "Effect of Hybridon compounds on the reversal of allergic airway inflammation in an established asthma model. **Principal Investigator**
48. July 2004 – March 2005; TAIHO Pharmaceuticals Inc., Tokyo, Japan; "Interaction of Suplatast tosilate (IPD) with chloride channels in human blood eosinophils and human airway epithelial cells"; **Principal Investigator**
49. July 2003 – June 2004; Nebraska Department of Health; Cancer and Smoking-related Disease Program; "Chloride channels in eosinophils and bronchial asthma"; **$40,000**; **Principal Investigator**
50. January 2003-March 2004; **National Institutes of Health**; Immune Tolerance Network; Subcontract #3104sc; Prime Subcontract Number N01-AI-15416. "Phase II, Double Blinded, Placebo-Controlled, Efficacy and Safety Evaluation of Allergen Immunotherapy Co-Administered with Omalizumab, and Anti-IgE Monoclonal Antibody"; **$1,356,000**; **Co-investigator – 25% efforts**
51. May 2003 – May 2004; TAIHO Pharmaceuticals, Tokyo, Japan; "Mechanisms underlying anti-allergic effects of Suplatast tosilate (IPD); **$50,000**; **Principal Investigator**
52. May 2003 – March 2004; Hybridon Inc., "Effect of Hybridon oligonucleotides in reversing allergic airway inflammation in mouse model"; **$84,500**; **Principal Investigator**
53. November 2002 – March 2004; Orchid Chemicals & Pharmaceuticals Ltd. (OCID –02-02); "Effect of OCID-1001 on allergic airway inflammation in mouse and guinea pig models"; **$60,320**; **Principal Investigator**
54. November 2002- October 2003; Sepracor Inc.; "Investigation of the (S)-albuterol binding site(s) in Human Airway Smooth Muscle Cells"; **Principal Investigator**
55. September 2002-August 2003; LB692 Nebraska Tobacco Settlement Funds; "IGF-1 receptors, apoptosis and plaque stability"; **$90,000**; **Principal Investigator**
56. July 2002 – June 2003: Nebraska Department of Health and Human Services (LB506); "Monocyte ion channels, smoking and vascular diseases"; **$40,000**; **Principal Investigator**
57. November 2002 – July 2003; Hybridon Inc., "Effect of Hybridon oligonucleotides in allergic airway inflammation in mouse model"; **Principal Investigator**
58. April 2002-June 2003; TAIHO Pharmaceuticals, Tokyo, Japan; "Suplatast tosilate (IPD) and ion channels in human blood eosinophils and human bronchial epithelial cells"; **Principal Investigator**
59. September 2001-August 2002; LB692 Nebraska Tobacco Settlement Funds; "IGF-1 receptors, apoptosis and plaque stability"; **Principal Investigator**
60. September 2001- December 2002; Sepracor, Inc.: "Effect of tecastemizole on early and late phase response, and airway hyperresponsiveness in antigen-sensitized mice, and on antigen-induced delayed pulmonary eosinophilia"; **Principal Investigator**
61. September 2001- December 2002; Sepracor, Inc.: "Tecastemizole and eosinophil chemotaxis and adhesion to endothelial cells, and production and release of superoxide anions and leukotriene C4

from human blood eosinophils"; **Principal Investigator**

62. February 2001 – June 2001; Magnesium Diagnostics, Inc., "Effect of MDI compounds on blood pressure in hypertensive rats"; **Principal Investigator**
63. November 2000 – December 2001; Ranbaxy Pharmaceuticals, India; "Effect of experimental drugs as anti-asthmatic agents in guinea pigs"; **Principal Investigator**
64. July 2001 – June 2002; Health Future Foundation; "Alleviating the Asthma Epidemic: From Omaha to the World"; **Co-investigator**
65. July 2000 – December 2001: Sepracor, Inc; "Effect of Formoterol stereoisomers on G-proteins, transcription factors and intracellular free Ca^{2+} concentration in human airway smooth muscle cells" – **Principal Investigator**
66. June 2000 – October 2001: Schering-Plough Research Institute, Kenilworth, NJ; "Effect of DL on the apoptosis of human blood eosinophils" – **Principal Investigator**
67. July 2000 – December 2001: TAIHO Pharmaceuticals, Inc., Tokyo, Japan; "Effect of Suplatast tosilate (IPD) on the expression and activity of G-proteins, intracellular free Ca^{2+}, and nuclear transcription factors, NF-κB and Fos-Jun in human blood eosinophils and bronchial epithelial cells" – **Principal Investigator**
68. December 1999 – December 2000: Sepracor, Inc., MA; "Effect of Formoterol stereoisomers on early and late phase response and airway hyperresponsiveness in antigen-sensitized mice, and on antigen-induced delayed pulmonary eosinophilia"; **Principal Investigator**
69. December 1999 – October 2000: ISIS Pharmaceuticals, Carlsbad, CA: "Effect of antisense oligonucleotides in a mouse model of bronchial asthma"; **Principal Investigator**
70. August 1999 – April 2000: Atherogenics, Inc., Alpharetta, GA; "Effect of Atherogenics compounds in a mouse model of bronchial asthma"; **Principal Investigator**
71. July 1999 – June 2000: Department of Health, Nebraska; "Smoking and Pathogenesis of In-stent Restenosis"; **Principal Investigator**
72. July 2000 – June 2001; Health Future Foundation; "Alleviating the Asthma Epidemic: From Omaha to the World"; **Co-investigator**
73. July 1999 – June 2000; Health Future Foundation; "Alleviating the Asthma Epidemic: From Omaha to the World"; **Co-investigator**
74. March 1999; Guidant Corp., Santa Clara, CA: "Influence of ultrasound on dye uptake in porcine vascular smooth muscle cells"; **Principal Investigator**
75. December 1999 – June 2000; ISIS Pharmaceuticals, Carlsbad, CA: "Effect of Novel drugs in a mouse model of bronchial asthma." **Principal Investigator**
76. February 1999: Guidant Corp., Santa Clara, CA: "Local Delivery of an Investigational drug into pig coronary artery": **Co-Principal Investigator**
77. January 1999: Guidant Corp., Santa Clara, CA: "Local drug delivery into pig coronary and iliac arteries". **Co-Principal Investigator**
78. November 1998 – March 1999; ISIS Pharmaceuticals, Carlsbad, CA: "Effect of antisense oligonucleotides in a mouse model of bronchial asthma." **Principal Investigator**
79. November 1998; Guidant Corporation; "Comparison of Guidant VI guide wires in producing vascular injury response in a pig model"; **Co-Principal Investigator**
80. September 1998 - June 1999; Schering-Plough Research Institute: "Pre-clinical studies with DCL in human blood eosinophils"; **Co-investigator and Leader of Project 1**
81. July 1998 - June 1999: Health Future Foundation; "Creighton regional center for venous disorder"; **Co-investigator**
82. July 1998 - June 1999: Health Future Foundation; "Alleviating the Asthma Epidemic: From Omaha to the World". **Co-investigator**
83. July 1998- June 1999; Sepracor Inc., Marlborough, MA; "Differential effect of racemic albuterol, (S)-albuterol and (R)-albuterol on early and late phase reactions, airway hyperresponsiveness, and BAL eosinophilia in the guinea pig model of asthma"; **Principal Investigator**
84. July 1998 – June 1999; Nebraska Department of Health and Human Services, Cancer and Smoking Disease Research; "Smoking and Nitric Oxide effects on airway responsiveness"; Co-investigator.
85. July 1998 – June 1999; Nebraska Department of Health and Human Services, Cancer and Smoking Disease Research; "Apoptosis of Vascular Smooth Muscle Cells"; **Principal Investigator**.
86. April 1998- June 1999; TAIHO Pharmaceutical Co, Tokyo, Japan; "Effect of IPD on chemotaxis and

cell adhesion molecules expression in human blood eosinophils"; **Principal Investigator**.

87. April 1998-March 1999; Wayne Hughes Institute; "Effect of test compounds vs dexamethasone on early and late phase response, and airway hyperreactivity in antigen-sensitized mice, and on antigen-induced delayed pulmonary eosinophilia. **Principal Investigator**.
88. Department of Veterans Affairs Merit Review Application: "Effects of Cirrhosis on the Pathogenesis of Pneumococcal Infection"; **Collaborator**.
89. January - December 1998: Creighton University Department of Medicine Research Grant; "Cytokines and β-adrenoceptors in Th1 and Th2 cells in bronchial asthma"; **Principal Investigator**.
90. July 1997- June 1998: Health Future Foundation; "Creighton regional center for venous disorder"; **Co-investigator**.
91. July 1997 - June 1998: Health Future Foundation; "Alleviating the Asthma Epidemic: From Omaha to the World". **Co-investigator**.
92. July 1997- June 1998: Health Future Foundation; "The Creighton Vascular Center"; **Principal Investigator** - 25% effort.
93. April 1997 - December 1998: Hoescht Marion Roussel, Clinical Research Division, Kansas City, Kansas: "Protective effect of fexofenadine on β-adrenoceptor desensitization in the airways"; - **Principal Investigator**.
94. August 1996 - June 1998; Drug Research Laboratories, Whitehouse Station, NJ, and Hoescht Marion Roussel, Cincinnati, OH: "Effect of MX7 and Dexamethasone on early and late phase reaction of asthma, and on airway hyperreactivity and bronchoalveolar lavage eosinophilia" - **Principal Investigator**.
95. July 1996 - June 1997: Health Future Foundation; "Comparative effect of Palmaz stent versus wall stent on intimal hyperplasia", **Co-investigator**.
96. July 1996 - June 1997; Health Future Foundation; "The Creighton Vascular Center"; **Co-investigator**- 50% effort.
97. January 1996 - December 1996: Bracco Research Program: "Radiographic Contrast Media and Leukocyte Adherence to Cultured Endothelial Cells" - **Co-investigator**.
98. September 1995 - December 1996: Hoescht Marion Roussel; "Determination of the effect of the terfenadine metabolite, Fexofenadine, on inflammatory cell function"; **Co-investigator**.
99. July 1995 - June 1996; Health Future Foundation; "The Creighton Vascular Center"; **Co-investigator**- 50% effort.
100. January 1995 - October 1995; Abbott Laboratories, Abbott Park, IL: "Urokinase and leukocyte adherence to endothelial cells"; **Co-investigator**.
101. January 1995 - June 1996; Department of Health, Nebraska; Pilot project Grant; "Effect of smoking on monocyte integrins for endothelial cell adhesion molecules"; **Co-investigator**.
102. July 1994 - June 1995; Health Future Foundation; "The Creighton Vascular Center"; **Co-investigator**- 50% effort.
103. July 1993 - June 1995; Department of Health, Nebraska; "Bicyclic isoquinolines as thromboxane A_2 antagonists"; **Co-investigator**.
104. July 1993 - June 1994; Health Future Foundation; "The Creighton Vascular Center"; **Co-investigator** - 50% effort.
105. July 1992- December 1992: Daiichi Pharmaceutical Co., Tokyo, Japan: "Pre-clinical studies with DP 1904": **Principal Investigator**.
106. July-1992 - June 1993: Health Future Foundation; "The Creighton Vascular Center"; **Co-investigator**- 50% effort.
107. Biomedical Research Support Grant; "Vein preservation and storage solution: The use of the University of Wisconsin solution"; **Co-investigator**.
108. July 1991 - February 1992: Daiichi Pharmaceuticals, Japan; 'Effect of DP 1904 on human blood monocyte function'; **Principal Investigator**.
109. May 1992 - September 1992: American Heart Associate, Nebraska Affiliate: "Cell adhesion molecules on vascular endothelial cells: Effect of kinases on the adhesion of human blood neutrophils"; **Sponsor and Supervisor** of summer student fellowship.
110. April 1991- December 1991: The Purdue Frederick Company, Norwalk, CT.: "Effect of PF compounds on the release of cytokines"; **Principal Investigator**.
111. January 1991 - December 1991: The Purdue Frederick Company, Norwalk, CT.: "Evaluation of anti-

inflammatory drugs"; **Principal Investigator**.

112. January 1991- December 1991: Daiichi Pharmaceutical Co., Tokyo, Japan; "Effect of DP 1904 on PAF receptors"; **Principal Investigator**.
113. January 1991- March 1992: Ciba-Geigy Pharmaceutical Company, NJ: 'Effect of Formoterol on β-adrenoceptors; **Principal Investigator**.
114. 1990-1991: Biomedical Research Support Grant; "Effect of neuropeptides on lymphocyte function and airway smooth muscle"; **Supervisor** and co-investigator.
115. 1990-1991; Biomedical Research Support Grant; "Regulation of Monocyte function"; **Supervisor** and co-investigator.
116. 1990-1991; Biomedical Research Support Grant; "Gastrin Receptors on human blood eosinophils"; **Supervisor** and Co-investigator.
117. January 1990 - January 1991: The Purdue Frederick Company, Norwalk, CT.; entitled 'Pre-clinical Testing of Purdue Frederick Drug Candidates': **Principal Investigator**.
118. August 1989 - June 1990: Daiichi Pharmaceutical Co., Ltd., Tokyo, Japan, entitled "Effect of Midaglizole on cAMP Production in Human Blood Neutrophils and Lymphocytes"; Co-investigator.
119. August 1989 - June 1990: Daiichi Pharmaceutical Co., Ltd., Tokyo, Japan, entitled "Effect of Midaglizole on Beta-adrenoceptors and Calcium Channels in Guinea Pig Airways"; **Principal Investigator**.
120. July 1989 - December 1990: National Institute of Health; entitled "Effect of Platelet-activating Factor on Osteoclasts"; **Principal Investigator**.
121. January 1989 - March 1990: The Purdue Frederick Company, Norwalk, Conn., USA, entitled "Testing of PAF and LTB_4 Receptor Antagonists in Human Blood Neutrophils"; **Principal Investigator**.
122. October 1988 - September 1989: Health Future Foundation; entitled "The *in vitro* Effect of PAF on the Bone Resorption Capacity of Osteoclasts"; Co-investigator.
123. August 1988 - December 1989: The Purdue Frederick Company, Norwalk, Conn., USA, entitled "Testing of LTB_4 receptor Antagonists in Guinea Pig Spleen"; **Principal Investigator**.
124. July 1988 - June 1989; Department of Health, Nebraska: entitled "Adrenergic Receptors in Colon Cancer"; Co-investigator.
125. January 1988 - December 1989: Institut Henri Beaufour Laboratories, Robinson, France, entitled "Studies on BN 52021, a PAF Receptor Antagonist"; **Principal Investigator**.
126. January 1988 - December 1989: SANDOZ Research Institute Grant; entitled "Mechanism of Action of Ketotifen in the Guinea Pig Model of Asthma"; **Principal Investigator**.
127. December 1987 - November 1988: Biomedical Research Support Grant, entitled "Role of Platelet-activating Factor and Platelets in Airway Hyperreactivity in Asthmatics", **Principal Investigator**.
128. October 1987 - September 1988; Health Future Foundation; entitled "Platelet-activating Factor and Signal Transduction Mechanisms in the Airways and Their Involvement in Asthma"; **Principal Investigator**.
129. July 1987 - June 1988: American Lung Association of Nebraska; entitled "The effect of Platelet Activating Factor on Eosinophil Chemotaxis and Leukotriene C_4 Production", **Principal Investigator**.
130. November 1986 - October 1987: Health Future Foundation Young Investigator Award, entitled "Epithelium and Airway Hyperresponsiveness in Asthma", **Principal Investigator**.
131. April 1986 - March 1987: Biomedical Research Support Grant entitled "Role of leukotrienes in chronic experimental asthma" **Principal Investigator**.

CONSULTING POSITIONS AND PROFESSIONAL SERVICES

10/2024 - present	Associate Editor, *Molecular and Cellular Biochemistry*
02/2022 - present	Secretary General and Treasurer, International Academy of Cardiovascular Sciences – North America section, Winnipeg, Canada
05/2022 - present	Director and Treasurer, Academy of Cardiovascular Sciences Foundation USA Inc.

2022- Present	Editorial Board, *Cardiology and Cardiovascular Medicine*, Fortune Journals
2022- Present	Editorial Board, *Journal of Surgery and Research*, Fortune Journals
01/2022 – Present	Advisory Board Member, Global Young Researchers' Academy
12/2020	Member of the International Review Panel to select best paper published in the *Journal of Environmental Biology*
12/2019 – 06/2023	Member, Vice President for Research Planning Committee, Association of Academic Health Centers (AAHC-AAMC)
01/2019	Co-convener of the International Conference: "From Health to Well-being: An Interdisciplinary approach from Fundamental Sciences to Translational Medicine", at St. Xavier's College, Mumbai, India 9-11 January 2019
09/2015	Organizer and co-Chair of the International Academy of Cardiovascular Sciences-North American Section, annual meeting at Creighton University, Omaha, NE; 10-12 September 2015
01/2013 – 2021	Re-elected Member of the Editorial Board, *American Journal of Respiratory Cell and Molecular Biology*
01/2009 – 12/2012	Elected Member of the Editorial Board, *American Journal of Respiratory Cell and Molecular Biology*
09/2008 – 06/2010	Journal Editor, The Open Immunology Journal-Bentham Science Publications
04/2009 – 12/2011	The NIH-NHLBI eMentor
07/2005 – 06/2009	Associate Editor, *Journal of Immunology*
03/2005 – 03/2010	Elected member of the Editorial Board, *Journal of Allergy and Clinical Immunology*
07/1995 – present	Associate Editor, *Canadian J. of Physiology and Pharmacology*
01/1992 – 12/2001	Editorial Board, *Journal of Pharmacological and Toxicological Methods*, Elsevier's Publication
01/1990 – present	Regular ad-hoc reviewer of manuscripts for various scientific journals including *Journal of Thoracic & Cardiovascular Surgery, Journal of Clinical Investigation, Circulation, Circulation Research, American Journal of Respiratory and Critical Care Medicine, Journal of Clinical Pathology, Journal of Allergy and Clinical Immunology, Journal of Pharmacology and Experimental Therapeutics, Journal of Immunology, European J. Pharmacology, International Immunopharmacology, Gastroenterology, Frontiers in Immunology, Respiration Physiology, Coronary Artery Disease, Atherosclerosis, Annals of Allergy, Asthma and Immunology, Drugs, Blood Vessels, Arteriosclerosis, Thrombosis and Vascular Biology, Journal of Clinical Pathology, Pulmonary Pharmacology & Therapeutics, Mucosal Immunology*, and many more.
07/1989 – 12/1991	Consultant to the International Molecular Discovery Unit of the Purdue Frederick company, Norwalk, CT, USA in the development of anti-inflammatory drugs

02/1998 – 12/1999 Consultant to the Wayne Hughes Institute, Minneapolis, MN, in Allergy, Immunology and Infectious Diseases

RESEARCH GRANTS REVIEWER for National and International Organizations

01-02/2025 Reviewer of the Research Grants from the European Science Foundation – Science Connect (ESF-FWO-PDOC)

06-07/2024 Grant reviewer panel of the Department of Defense Congressionally Directed Medical Research Program

06-08/2024 Reviewer of the Research Grants from the European Science Foundation – Science Connect (ESF-FWO-MED)

02-03/2024 Reviewer of the Research Grants from the European Science Foundation – Science Connect (ESF-FWO-MED)

06-07/2023 Reviewer of the Research Grants from the Czech Science Foundation, Prague, Czech Republic

06-08/2023 Reviewer of the Research Grants from the European Science Foundation – Science Connect (ESF-FWO-MED)

06-07/2023 Reviewer of the Swiss National Science Foundation (SNSF) and the Swiss Innovation Agency Innosuisse

10/2022 Reviewer of the Research Grant from the NWO Talent Programme (previously the Innovational Research Incentives Scheme) – Vici - Netherlands

09/2022 Expert Reviewer of a PhD Thesis, Nirma University, Ahmedabad, Gujarat, India

07/2022 Reviewer of the Research Grant application in the 2022 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP)

07/2022 Reviewer of the Research Grants from the Czech Science Foundation, Prague, Czech Republic

07/2022 Reviewer of the Research Grants from the European Science Foundation

06/2022 Expert Reviewer of a PhD Thesis, Nirma University, Ahmedabad, Gujarat, India

02/2022 Reviewer of the Research Grant, University of Washington Diabetes Research Center, Seattle, WA

10/2021 Reviewer of the Research Grant applications for the 2021 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP)

10/2020 Reviewer of the Research Grant from the Austrian Science Fund, Vienna, Austria

09/2020 Consultant and Reviewer of the Doctoral Program in "***Immunity in Cancer and Allergy*",** FWF Science & Medicine Austrian Science Fund, Vienna, Austria

06/2020 Reviewer of the Research Grant from the European Science Foundation

03/2020 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A-K (20) L Cardiovascular and Respiratory Sciences; Washington, DC, 26-27 March 2020

12/2019 Reviewer of the Gulf War SPLD VA Grant Review Panel; Washington, DC; December 6, 2019.

08/2019 Chairman of the Grant Review Panel, 2019 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); Tysons, Virginia; 26-27 August 2019

08/2019 Reviewer of the Research Grant from the Austrian Science Fund, Vienna, Austria

07/2019 Reviewer and Co-Chair of the NIH-CSR-ZRG1 MOSS (R02) SEP

06/2019 Reviewer of the NIH-CSR-ZRG1-VH SEP

05/2019 Reviewer of the S19 SPLD VA Grant Review Panel; Washington, DC; Washington, DC May 30, 2019

05/2019 Reviewer of the Research Grant applications in the 2019 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP)

04/2019 Reviewer of the Research Grant applications in the 2019 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP)

03/2019 NIH-CSR F10B NRSA Fellowships Review Panel: ZRG1 F10B–Musculoskeletal and Oral Sciences, Imaging, Surgery, and Informatics; 26-27 March 2019

03/2019 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A–Cardiovascular and Respiratory Sciences; Washington, DC, 6-7 March 2019

12/2018 NIH Director's New Innovator Award DP2 Stage 1 Reviewers' Panel; ZRG1 MOSS-R (70); November-December 2018

12/2018 Reviewer of the Gulf War SPLD VA Grant Review Panel; Washington, DC; December 7, 2018.

11/2018 Reviewer and Co-Chair of the NIH-CSR Special Emphasis Panel/Scientific Review Group-The Lasker Clinical Research Scholar Program; 2019/01 ZRG1 CVRS-S (55) R; Teleconference; 29th November 2018

11/2018 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A–Cardiovascular and Respiratory Sciences; Washington, DC, 6-7 November 2018

10-11/2018 **Chairman** of the Grant Review Panel, 2018 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); Defense Medical Research Program; Heart Disease (HD); October 31 - November 2, 2018; Reston, VA.

10-11/2018 Reviewer of a Grant, Icelandic Research Fund, The Icelandic Centre for Research, Borgartun, Reykjavik, Iceland

08/2018 Grant Reviewer for the Vinmec Healthcare System, Hanoi, Vietnam

07/2018 Reviewer of the Research Grant application in the 2018 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP)

07/2018 NIH-CSR F10B NRSA Fellowships Review Panel: ZRG1 F10B–Musculoskeletal and Oral Sciences, Imaging, Surgery, and Informatics; 10-11 July 2018

06/2018 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A–Cardiovascular and Respiratory Sciences; 21-22 June 2018

06/2018 NIH-CSR Skeletal Muscle and Exercise Physiology (SMEP) study section; 4-5 June 2018

05/2018 Spring 2018 BL/CS Gulf War Veteran's Illnesses (SPLD) Merit Review Subcommittee; May 31, 2018

04/2018 NIH-CSR F10B NRSA Fellowships Review Panel: ZRG1 F10B–Musculoskeletal and Oral Sciences, Imaging, Surgery, and Informatics; 3-4 April 2018

03/2018 Reviewer of the Grant Review Panel, 2017 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); Defense Medical Research Aid Development Program; Wound and Injury–3; 28-29 March 2018

03/2018 Grant Review Panel of the NIH-CSR- Vascular Hematology Special Emphasis Panel/Scientific Review Group 2018/05; ZRG1 (VH); 27th March 2018

03/2018 Grant Review Panel of the NIH-CSR- Musculoskeletal Physiology Special Emphasis Panel/Scientific Review Group 2018/05; ZRG1 MOSS-C (02); 16th March 2018

03/2018 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems; 8-9 March 2018

12/2017 Reviewer of the BLR&D and CSR&D Award for Research on Gulf War Veteran's Illness (GWVI [101]) Grant Review Panel; Veteran Health Administration

12/2017 Mail Reviewer of the NIH Director's New Innovator Award DP2 Grant Review Panel 2017-2018 Stage 1, ZRG1 MOSS-R (70)R

12/2017 Reviewer of the Full Grant Review Panel, 2017 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); PRMRP DIS-Heart Disease Focussed Program; 8-10 December 2017

11/2017 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 26-27 June 2017 (Invited but declined due to schedule conflict)

09/2017 Member of the Program Project Review Panel and Hearing/Interim Evaluation of the Doctoral Programme in "Immunity in Cancer and Allergy" in Vienna, Austria; 29 September 2017

08-09/2017 Online Reviewer of the Grant Review Panel, 2017 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); PRMRP-Disease Focussed Program

06-07/2017 Grant Review Panel of the Czech Science Foundation; Czech Republic

06-07/2017 NIH-NIAID ZAI1 KP-M(S1) Special Emphasis Panel to review R13 applications

06/2017 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 26-27 June 2017

06/2017 US Veterans Administration Merit Reviews: Gulf War Illnesses Grant Review Panel; 06/01/2017

05/2017 Kansas City Area Life Science Institute Patton Trust Grant Review Panel; 05/19/2017

05/2017 Center for Translational and Basic Research Hunter College Seed Funds Grant Review Panel; 05/11/2017

04/2017 NIH-NIAID Extramural Loan Repayment Program for Clinical Research and Pediatric Research (LRP-CR and LRP-PR) – ZAI1-EC-M(S1); 04/17/2017 – 04/21/2017

04/2017 Life Sciences Grant Review Panel of the National Science Centre, Krakow, Poland; 04/03/2017

03/2017 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 23-24 March 2017

02/2017 Grant Review Panel of the NIH-CSR- Vascular Hematology Special Emphasis Panel/Scientific Review Group 2017/05; ZRG1 (VH)

01/2017 Joint Research Projects Grant Reviewer: Austrian Science Fund, Vienna, Austria

12/2016 - 01/2017 Grant Reviewer of the Medical Research Council, United Kingdom

12/2016 United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); PRMRP Focussed Program Panel Reviewer; December 2016

11/2016 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 3-4 November 2016; Arlington, VA

09/2016 Grant Review Panel of the NIH-NIEHS Program Project Special Emphasis Panel/Scientific Review Group 2017/01 ZES1 LWJ-K (S2) 1; 2nd September 2016 IAM

08-09/2016 **Chairman and Reviewer**; United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); Discovery Award- Vascular Malformations (VM) Peer Review Panel; August-September 2016

06-07/2016 Grant Review Panel of the United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); Preapplication - Vascular Malformations (VM) Peer Review Panel; June-July 2016

7/2016 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 18-19 July 2016; Chicago, IL

5/2016 Agence Nationale de la Recherche (ANR), France Programme 2016 grant review panel May-June 2016

4/2016 NIH-NIAID Extramural Loan Repayment Program for Clinical Research and Pediatric Research (LRP-CR and LRP-PR) – ZAI1 AWA-M(S1); 04/24/2016 – 04/30/2016

4/2016 NIH-CSR – NIH Director's Early Independence Award (DP5) – ZRG1 RPHB-W 53 R – mail reviewer 11 April 2016

3/2016 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 9-10 March 2016

2/2016 NIH-CSR Aging Systems and Geriatrics Study section – mail reviewer 29 February – 1 March 2016

12/2015 VA Merit Review Panel - SPLD; 11 December 2015

12/2015 **Chairman and Reviewer**; United States Department of Defense Congressionally Directed Medical Research Programs (CDMRP); Vascular Malformations (VM) Peer Review Panel; December 2, 2015

11/2015 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 23-24 November 2015

10/2015 DoD-CDMRP FY15 Peer Review Panel of Congressionally Directed Medical Research Program, MRMC-BAA Combat Casualty Care; October 2015

10/2015 NIH-CSR Vascular and Hematology (VH) IRG Special Emphasis Panel: 26-27 October 2015

09/2015 United States Army Medical Research and Materiel Command; DoD Broad Agency Announcement for Extramural Medical Research Panel; W81XWH-BAA-15-1; September 2015

07/2015 DoD-CDMRP FY15 Peer Review Panel of Congressionally Directed Medical Research Program, Pre-application Stage of the Congenital Heart Diseases Program; July 2015

07/2015 DoD-CDMRP FY15 Peer Review Panel of Congressionally Directed Medical Research Program, Pre-application Stage of Acute Lung Injury Program; July 2015

07/2015 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 30-31 July 2015

06/2015 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases (HAI) Study Section; 4-5 June 2015

05/2015 NIH-CSR NHLBI Systems Biology Review Panel; 2015/10 ZRG1 VH–D (55) 18-19 May 2015

04/2015 NIH-CSR Members Conflict Special Emphasis Review Panel: ZRG1 VH-N (02)M 23-24 April 2015

03/2015 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 16-17 March 2015

02/2015 NIH-CSR Special Emphasis Review Panel; ZRG1 IMM-D (90)S, “Autoimmune and Airways Inflammatory Disease”; 24 February 2015

02/2015 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases (HAI) Study Section; 5-6 February 2015

01/2015 NIH-CSR NHLBI Systems Biology Grants Review Panel 2015/05 ZRG1 VH-D (55); 22 – 23 January 2015

01/2015 Ministry of Health of the Czech Republic National Priority Health Population P02 Grant Review Panel – 20 January 2015

12/2014 DoD-CDMRP FY14 Peer Review Panel of Congressionally Directed Medical Research Program, Vienna, VA; 8-9 December 2014

12/2014 NIH-CSR F10A NRSA Fellowships Review Panel: ZRG1 F10A– Physiology and Pathobiology of Cardiovascular and Respiratory Systems 1-2 December 2014

10/2014 Member of the Panel for Hearing Evaluation of Program Project Grant of Austrian Science Fund on "Immunity in Cancer and Allergy" in Vienna, Austria; 9 October 2014

10/2014 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases (HAI) Study Section; 9-10 October 2014 (Teleconference from Vienna)

10/2014 NIH-CSR Applications Comparison Pilot Program Panel; 6 October 2014

8/2014 Member of the Grant Review Panel of Austrian Academy of Sciences, Vienna, Austria; August-September 2014

08/2014 NIH-NHLBI Ancillary Study in Clinical Trials (R01)-Special Emphasis Panel ZHL1 CSR-I (M1) 1; 22 August 2014

07/2014 MRC-UK 2014 Grant Review Panel

07/2014 Swiss National Science Foundation 2014 Grant Review Panel

06/2014 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases (HAI) Study Section; 5-6 June 2014

05/2014 Asthma UK Innovation Grants 2014 Review Panel

04/2014 NIH-CSR Member Conflict: Immune Mechanism; Special Emphasis Panel ZRG1 IM-N (03) M; 14 April 2014

04/2014 NIH-NHLBI Ancillary Study in Clinical Trials (R01)-Special Emphasis Panel ZHL1 CSR-I (M1) 1; 11 April 2014

03/2014 NIH-NIMHD Basic and Applied Biomedical Research on Minority Health and Health Disparities (R01)- Special Emphasis Panel ZMD1 MLS (02); 12-13 March 2014

03/2014 NIH-NIAID Investigator Initiated Program Project Applications (P01) 2014/05 ZAI1 BDP-I (M1) 1; 10-11 March 2014

02/2014 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases (HAI) Study Section; 6-7 February 2014

12/2013 American Academy of Allergy, Asthma, and Immunology APFED/ARTrust Hope Award Grant Review Panel

12/2013 NIH-CSR Special Emphasis Panel ZRG1 HAI-D (08)F Airway Hypersensitivity Syndrome; 4 December 2013

12/2013 American Academy of Allergy, Asthma, and Immunology ARTrust K&R Bridge Award Grant Review Panel

11/2013 Grant Review Panel (Winter session) of the Austrian Science Fund, Vienna, Austria on “Investigator Development Award” of Stand-Alone Project

11/2013 NIH-CSR NeuroAIDS and other End-organ Diseases (NAED) Study Section; 14 November 2013

11/2013 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases) Study Section; 14-15 November 2013

8/2013 Grant Review Panel (Summer session) of the Austrian Science Fund, Vienna, Austria on "Investigator Development Award" of Stand-Alone Project

8/2013 LYTMOS: James and Esther King Biomedical Research Program, State of Florida Grant Review Panel

8/2013 NIH-CSR Special Emphasis Panel ZRG1 VH-B (02) S; Vascular and Hematology Grants; 14 August 2013

7/2013 Veteran's Affairs - Grant Review Panel on CSR&D Award for research on Gulf War Veterans Illnesses (GWVI); 25 July 2013

6/2013 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases) Study Section; 6-7 June 2013

5/2013 LYTMOS: Kansas City Area Life Science Institute Patton Research Grant Review Panel

5/2013 Grant Review Panel of the Austrian Science Fund, Vienna, Austria

4/2013 NIH-NHLBI Ancillary Studies to Clinical Trials Review Panel; 23 April 2013, Bethesda, MD

4/2013 American Heart Association Grant Review Panel– Molecular Signaling 3 Study Section

2/2013 Veterans Affairs – Grant Review Panel for Gulf War Illnesses and Military Environmental Exposures; 11 February 2013

2/2013 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases) Study Section; 7-8 February 2013

1/2013 Review Panel of Scientific Programs, Shota Rustaveli National Science Foundation, Tbilisi, Georgia

1/2013 American Academy of Allergy, Asthma, and Immunology APFED/ARTrust HOPE Award Review Panel

12/2012 American Academy of Allergy, Asthma, and Immunology K&R Bridge Grant Award Review Panel

11/2012 NIH-NHLBI BAA-NHLBI-CSV-HV-2013-02-JS Vascular Interventions/ Innovations and Therapeutic Advances (VITA) Stage-A (Concept to Proof and Principle) and Stage B (Proof of Principle to IND or IDE); 15-16 November 2012

10/2012 NIH Special Emphasis Panel/Scientific Review Group; Member Conflicts: Immunologic Mechanisms; 2013/01 ZRG1 IMM-G (02) M meeting; 17 October 2012

10/2012 China-Israel Cooperative Scientific Research jointly with the Ministry of Science and Technology, P.R. China and the Ministry of Science and Technology State of Israel

10/2012 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases) Study Section; 4-5 October 2012

06/2012 CSR-NIH Special Emphasis Panel- Vascular and Hematology Member Conflict- ZRG1 VH-D 90S; 25-26 June 2012

05/2012 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases (HAI) Study Section

05/2012 NIH-CSR Bioengineering, Technology, and Surgical Sciences (BTSS) study section

04/2012 NIH-NHLBI Conference Grant Review Special Emphasis Panel; "NIH Support for Conferences and Scientific meetings (R13); ZHL1 CSR-G M1

04/2012 Standing member of the Grant Review Panel; American Heart Association – Molecular Signaling 3 Section

03/2012 NIH-NHLBI Heart, Lung, and Blood Program Project Review Panel; "Translational Programs in Lung Diseases", ZHL1 CSR-Q M1

02/2012 American Lung Association Research Grant Review Committee, Section B

02/2012 NIH-NHLBI Heart, Lung, and Blood Program Project Review Committee, HLBP 1 Workgroup 024

02/2012 NIH-CSR Hypersensitivity, Autoimmunity, and Immune-mediated Diseases (HAI) Study Section

12/2011 American Academy of Allergy, Asthma, and Immunology K & R Bridge Grant Award Review Panel

11/2011 Member of the Grant Review Panel; South African Medical Research Council, Cape Town, South Africa

10/2011 CSR-NIH Special Emphasis Panel- Vascular and Hematology Member Conflict- ZRG1 VH-90S; 25-26 October 2011

09/2011 Member of the Grant Review Panel; James and Esther King Biomedical Research Program, State of Florida

07/2011-06/2015 **Regular Member of the NIH–HAI (Hypersensitivity, Autoimmunity, and Immune-mediated Diseases)** NIH-CSR Study Section

06/2011 **Chairman** of the CSR-NIH Special Emphasis Panel- Vascular and Hematology Member Conflict- ZRG1VH-J (02) M; 20-21 June 2011

05/2011 Member of the Panel for Hearing/ Interim Evaluation of W 1213-B12:
"Immunity in Cancer and Allergy" in Vienna, Austria; 25-26 May 2011

03-05/2011 Member of the Grant Review Panel; James and Esther King Biomedical Research Program, State of Florida

04/2011 NIH-NIEHS Special Emphasis Panel for Extramural Loan Repayment Program for Clinical Researchers (NOT-OD-10-106)

04-05/2011 NIH-NIEHS Special Emphasis Panel for Extramural Loan Repayment Program for Pediatric Researchers (NOT-OD-10-107)

04/2011 Grant Review Panel; American Heart Association – Molecular Signaling 3 Study Section

04/2011 Grant Review Panel of the American Academy of Allergy, Asthma & Immunology/Merck Two-Year Postdoctoral Fellowship Award in "Heterogeneity of Therapeutic Responses for Respiratory Diseases"

03/2011 CSR-NIH Special Emphasis Panel- Vascular and Hematology Member Conflict- ZRG1VH-B (02) M; 22-23 March 2011

03/2011 Special NIAID-NIH Review Panel for RFA-AI-10-013, "Asthma and Allergic Diseases Cooperative Research Centers (AADCRC) U19 Program Project Grants – ZAI1 PA-I (M1) 1; 9-11 March 2011

02/2011 CSR-NIH Special Emphasis Panel on Vascular Biology and Hematology – ZRG1 VH-D (02) M; 21-22 February 2011

02/2011 CSR-NIH Vascular Cell and Molecular Biology (VCMB) study section; 7-8 February 2011

12/2010 Grant Review Panel of the American Academy of Allergy, Asthma & Immunology, K and R Award

10-11/2010 Grant Review Panel; Asthma Research Foundation of Western Australia, Perth, Western Australia

10/2010 Grant Review Panel; American Heart Association – Molecular Signaling 3 Section

09/2010 Grant Review Panel of the American Academy of Allergy, Asthma & Immunology, CSL/Behring Young Investigator Award for Primary Immunodeficiency

09/2010 NIH-NHLBI Program Project Review Panel ZHL1 SRC (99)

05/2010 NIH–HAI (Hypersensitivity, Autoimmunity, and Immune-mediated Diseases) NIH-CSR Study Section

05/2010 NIEHS-NIH ZES1 LWJ-G (LR) 1 Clinical and Pediatric Loan Repayment Research Review Panel

04/2010 Grant Review Panel of "Asthma UK" Foundation

04/2010 Grant Review Panel; American Heart Association – Molecular Signaling 3 Study Section

03/2010 Grant Review Panel; James and Esther King Biomedical Research Program, State of Florida

02/2010 NIH ZRG1 IMM-E (02) M Study Section; 24 February 2010

02/2010 NIH ZRG1 SBIB-E (02) M Study Section; 11 February 2010

01/2010 American Academy of Allergy, Asthma, and Immunology K & R Bridge Grant Award Review Committee

01/2010 Grant Review Panel (Biological & Medical Sciences), Austrian Science Fund, Vienna, Austria

10/2009 Grant Review Panel of Georgia National Science Foundation, Tbilisi, Georgia

10/2009 National Science Foundation CHE-2/ARI Review Panel, Arlington, VA; 7-8 October 2009

10/2009 NIH-HAI (Hypersensitivity, Autoimmunity and Immune-mediated Diseases) CSR Study Section; 1-2 October 2009

09/2009 Co-chair, NIH ZRG1 CVRS-J (02) M Study Section; 24-25 September 2009

07/2009 NIH-Minority and Health Disparity Grant Review Panel; 22-24 July 2009

06-07/2009 NIH-NHLBI AsthmaNet Grant Review Panel; 30 June - 1 July 2009

06-07/2009 NIH-NIAID ARRA Challenge Grants in Immunology Panel

05/2009 Ad-hoc reviewer, NIH-HAI Study Section

05/2009 Member, Swiss National Science Foundation Grant Review Panel

05/2009 Member, National Grant Review Committee, Austrian Science Fund

04/2009 NIH-NHLBI Special Emphasis Panel on Smooth Muscle Cells in Clinical Asthma, Washington, DC, 14-15 April 2009

11/2008 Ad-hoc reviewer, VA MERIT (Respiration) Panel, Washington, DC

10/2008 Grant Review Panel of Georgian National Science Foundation

06/2008 Grants Review Panel of the Austrian Science Fund, Austria

11/2007 Grant Review Panel of Georgian National Science Foundation

10/2007 Member: NIH-National Institutes of Allergy and Infectious Diseases Special Emphasis Panel for Asthma and Allergic Diseases Cooperative Research Centers (ADCRC)

10/2007 Grants Review Panel of the Austrian Science Fund, Austria

09/2007 Grants Review Panel of the British Lung Foundation

07/2007 Elected member of the "Faculty of 1000 Medicine" in the "Allergy, Clinical Immunology and Rheumatology" section.

2007-2018 Reviewer and Advisory Panel for the "Immunity in Allergy and Cancer" DK Program, Austrian Science Fund, Vienna, Austria

03/2007 – 03/2011 Chairman, Committee on Cells and Mediators of Allergic Airway Inflammation, American Academy of Allergy, Asthma, and Immunology

10/2006 Ad-hoc reviewer for Project EXPORT Center grant, University of Illinois College of Medicine, Rockford, IL

09/2006 Grants Review Panel of the Austrian Science Fund, Austria

08/2006 US-Israel BSF Grant Committee

08/2006 Grants Review Panel of the Research Frontiers and Biotechnology Programs, Science Foundation Ireland, Dublin, Ireland

03/2006 Member: NIH-National Institutes of Allergy and Infectious Diseases Special Emphasis Panel for Asthma and Allergic Diseases Cooperative Research Centers (ADCRC)

02/2006 US-Israel BSF Grant Review Committee

02/2006 Grants Review Panel of the Research frontiers and Biotechnology Programs, Science Foundation Ireland, Dublin, Ireland

01/2006 Peer-Review Panel for Wellcome Trust, United Kingdom

11/2005 Ad-hoc member: NIH Special Emphasis Panel – Cardiovascular IRG Endothelial Cells and Inflammation

10/2005 Ad-hoc member: NIH Hypersensitivity, Autoimmune and Immune-mediated Diseases (HAI) Study Section

07/2005 – 06/2009 Regular Member of the NIH Lung, Cellular and Molecular Immunobiology (LCMI) Study Section

06/2005 Ad-hoc member: NIH Hypersensitivity, Autoimmune, and Immune-mediated Diseases (HAI) Study Section

06/2005 Ad-hoc member: NIH Special Emphasis Panel of the LCMI Study Section

02/2005 Ad-hoc member: NIH Hypersensitivity, Autoimmune and Immune-mediated Diseases (HAI) Study Section

10/2004 Ad-hoc member: NIH Lung Injury, Repair and Remodeling (LIRR) Study Section

10/2004 Ad-hoc member: NIH Hypersensitivity, Autoimmune and Immune-mediated Diseases (HAI) Study Section

07/2004 – 06/2007 **Standing Member, VA Merit Review Panel for RESPIRATION**

07/2004 Ad-hoc Member: NIH Special Emphasis Panel of Renal Physiology, ZRG1 RUS-D

06/2004 Ad-hoc Member: NIH Hypersensitivity, Autoimmune and Immune-mediated Diseases (HAI) Study section

05/2004 Member: Department of Defense – Army Review Panel for Respiratory Diseases & Pulmonary Injury Study section

05/2004 Member: Department of Defense – Army Review Panel for Muscle Function Research & Muscular Dystrophy Study section

03/2004 Ad-hoc Member: NIH Vascular Cell and Molecular Biology (VCMB) Study section

02/2004 Ad-hoc Member: NIH Lung Cellular and Molecular Immunobiology (LCMI) Study section

08/2003 – 06/2004 Ad-hoc Member: VA Merit Review Panel for RESPIRATION

02/1992 - 08/2003 Ad-hoc Reviewer of grant applications from the National Science Foundation,

American Heart Association, Canadian Heart Foundation, Canadian Geriatric Society, Medical Research Council of Canada, NIH, VA Merit Review Grant applications, and BSF and US grant applications.

MEMBERSHIP in PROFESSIONAL SOCIETIES

1986	Member of the American Association for the Advancement of Science (AAAS)
1987	Member of the American Academy of Allergy, Asthma & Immunology (AAAAI)
1987	Member of the American Thoracic Society (ATS)
1988	Member of the American Society for Pharmacology and Experimental Therapeutics (ASPET)
1988	Member of the American Society for Biochemistry & Molecular Biology (ASBMB)
1989-1999	Member of the Phi Beta Delta- Honor Society for International Scholars
1999	Member of the American Heart Association (AHA)
1999	Member of the American Association of Immunologists (AAI)
2000	Member of the European Academy of Allergology and Clinical Immunology (EAACI)
2008	Member of the American Society for Investigative Pathology (ASIP)
2009	Member of the American Society for Bone and Mineral Research (ASBMR))
2009	Member of European Atherosclerosis Society (EAS)
2010	Member of American Physiological Society (APS)
2017	Member of the Society for Biomaterials & Artificial Organs (India)

INVITED FACULTY/LECTURES/KEYNOTE SPEAKER

01/2025	Invited speaker at the Joint International Conference 2025 with the annual meeting of International Academy of Cardiovascular Sciences - India Section, 10 January – 12 January 2025 held at the GMERS Medical College, Sola, **Ahmedabad, India**.
12/2024	Invited speaker at the 2024 World Congress on Chronomedicine, 29 November – 1 December 2024, **Ayodhya, UP, India**
11/2024	Invited speaker at the 54th Annual Conference of Indian Pharmacological Society – 28-30 November 2024 at AIIMS**, New Delhi, India.**
11/2024	Invited keynote speaker at the International Conference in Microbiology and Environmental Factors in Health and Disease, DAV University, **Jalandhar, Punjab, India** 23-24 November 2024.

11/2024 Invited speaker at the World Punjabi Diaspora Conference, DAV University, **Jalandhar, Punjab, India** 21-22 November 2024.

11/2024 Invited speaker at the 13th International Congress of Cardiology & Diabetes, 9-10 November 2024, **New Delhi, India** (**Declined**)

10/2024 Invited keynote speaker at the 10th Meeting of International Academy of Cardiovascular Sciences - European Section, October 28-30, 2024, in **Bratislava, Slovakia**

09/2024 Invited speaker at the 11th Annual Meeting of International Academy of Cardiovascular Sciences – North America Section, September 19-21, 2024, in Texas Heart Institute, **Houston, TX.**

09/2024 Invited Co-Chair of a Symposium and keynote Speaker at the XXIII meeting of the Federation of European Physiological Societies and XLi meeting of the Spanish Society for Physiological Sciences, 4-7 September 2024 **Granada, Spain**. Symposium title: "Environmental Factors in the Pathophysiology of Cardiovascular Diseases".

06/2024 Invited speaker and research discussant with the scientists at the Central Drug Research Institute, 24-27 June 2024, **Lucknow, India**

06/2024 Invited speaker and research discussant with the faculty at the Anand College of Pharmacy, Sharda University, **Agra, UP, India**

06/2024 Invited speaker at the International Forum on Cardiovascular Disease, Stem Cells and Tissue Engineering, 14-17 June 2024, **Taiyuan, Shanxi Province, China**

03/2024 Delivered a lecture as the Visiting Professor, Faculty of Medicine, **University of Kragujevac**, Serbia

02/2024 Invited speaker, 2024 ISHR-IACS-India Annual Conference, **Jodhpur, India**; 16-18 February 2024.

11/2023 Invited speaker at the International Conference on Biomedical Materials and Technology, BioTex 2023, Indian Institute of Technology **Delhi, India**, November 29 – December 01, 2023.

11/2023 International Advisor and Invited keynote Speaker at the International conference titled "One Planet, One Health and One Future", DAV University, **Jallandhar, Punjab, India**, November 22- 23, 2023.

10/2023 Delivered a lecture as the Visiting Professor, Faculty of Medicine, **University of Banja Luka**, Bosnia and Herzegovina

10/2023 Delivered a lecture as the Visiting Professor, Faculty of Medicine, **University of Belgrade**, Belgrade, Serbia

10/2023 Invited keynote speaker at the 9th Meeting of International Academy of Cardiovascular Sciences - European Section, October 4-7, 2023 in **Timișoara, Romania**; Lecture title: "*Novel Therapeutic Targets to Prevent Atherosclerotic Plaque Burden and Rupture"*

09/2023 Invited speaker and Chair of a session, 10th Annual Meeting of the International Academy of Cardiovascular Sciences – North America section, September 7-9, 2023, **Tampa, FL**.

06/2023 Invited speaker (Virtual presentation) at the 12th International Congress of Cardiology and Diabetes, **Kosice, Slovakia**, June 9-10, 2023; Lecture title: "*Cardiovascular complications of Long COVID-19*".

05/2023 Plenary Lecture speaker (Virtually) at the First HiSTCon 2023 – National Conference on Himalyan Science and Technology 2023, Shoolini University, Solan, HP, India, May 20, 2023; Lecture title: "*Translational Science: Sustainable development in the Himalayas*".

02/2023 Invited speaker at the Annual meeting of the IACS-ISHR – India section on "*Advances in Cardiovascular Medicine and Research – 2023*" held at the Postgraduate Institute of Medical Sciences, **Chandigarh, India**; February 16-18, 2023; Lecture title: "*Rejuvenation of "Broken Heart" with Smart Exosomes and Intelligent Hydrogels".*

02/2023 Invited keynote speaker in the Department of Biotechnology, Punjab University, **Chandigarh, India**; 16 February 2023. Lecture *title: "Novel Treatment Strategies to Attenuate Plaque Vulnerability in Atherosclerosis".*

01/2023 Organized a Plenary Session on "*Complications of COVID-19 – Long COVID*", co-chaired and keynote speaker of the session at the Indian Science Congress, **Nagpur, India**; January 03-07, 2023.

10/2022 Invited speaker and chair of a session at the International Society of Adaptive Medicine, **Orlando, FL**; October 25-28, 2022.

09/2022 Invited speaker, Chair of a session, and judge of the poster session at the 8th European Section of the International Academy of Cardiovascular Sciences; **Szeged, Hungary**; September 27 – October 1, 2022.

09/2022 Invited speaker, Chair of a session, Judge of Young Investigator Award, International Academy of Cardiovascular Sciences and International Society of Heart Research annual meeting, **Winnipeg, Canada**; September 05 – September 09, 2022.

08/2022 Invited Plenary Session a keynote speaker, International Congress on Diabetic Foot Ulcer, **Varadero, Cuba;** August 30 – September 04, 2022.

02/2022 Invited Plenary Session a keynote speaker, 6th Nirma Institute of Pharmacy International Conference jointly organized with Indian Pharmacological Society (NIPiCON-IPS) February 19, 2022, **Ahmedabad, India**.

11/2021 Invited speaker, Brigham Young University, Provo, UT; "Pathological Features of Rotator Cuff Tendon Injury: Potential Treatment Strategies to Enhance Healing Response"; November 17, 2021.

09/2021 Invited speaker at the 7th European Section and 8th North American section International Academy of Cardiovascular Sciences; **Banja Luka, Serbia**; September 20-23, 2021

02/2021 Keynote Speaker at the International Seminar on Recent Biochemical Approaches in Therapeutics (RBAT-VII) – 2021; February 9, 2021

09/2020 Invited Speaker at the International Webinar on Science and Technology for Sustainable Development, Indian Science Congress; September 19, 2020

02/2020 Co-Chair and Invited speaker at the International Conference of Cardiovascular Sciences (ICCS-2020) focused on the *"Convergence of Clinicians and Scientists for Cardiovascular Health"*; **Delhi, India**; February 21–23, 2020

02/2020 Invited keynote speaker as an Eminent Scientist at the Guru Nanak Dev University, **Amritsar, Punjab, India** *"Vitamin D Deficiency and Coronary Artery Disease"*; February 19–20, 2020

01/2020 Chair and Invited speaker in a Plenary session at the 107th Indian Science Congress, **Bangalore, India**: 3-7 January 2020.

11/2019 Invited speaker to deliver a lecture on the Pathogenesis and Novel Treatment Strategies at the Central Drug Research Institute, **Lucknow**, **India**, 26-27 November 2019

11/2019 Invited speaker in a series of symposia at the Delhi Pharmaceutical Sciences and Research University, **New Delhi, India**, 21-25 November 2019

08/2019 Invited Speaker at the XIII Intensicardio – Brazilian Congress of Intensive Cardiology in **Brasilia, Brazil**; 14-17 August 2019

09/2019 Invited speaker at the 6th Meeting of European Section and 7th Meeting of North American Section of the International Academy of Cardiovascular Sciences, **Vrnjacka Banja**, **Serbia**; 11-15 September 2019

02/2019 Invited Keynote Speaker at the 11th India Section Meeting of the International Academy of Cardiovascular Sciences (IACS-India), NIHHANS Convention Center, **Bangalore, India**; 15-17 February 2019 (Cancelled due to conflict)

01/2019 Co-convener and speaker, international conference entitled "From Health to Well Being: An Interdisciplinary Approach from Fundamental Sciences to Translational Medicine**";** St. Xavier's College**, Mumbai, India;** 9-11 January 2019

01/2019 Invited speaker in a Plenary session at the 106th Indian Science Congress, **Jallandhar, Punjab, India**; 3-7 January 2019

11/2018 Invited Speaker at the 28th Scientific Forum of the International Congress of Cardiovascular Sciences in **Maceio, Brazil**; 22-24 November 2018

09/2018 Invited speaker at the 4th Congress of Physiological Sciences of Serbia with International Participation: "Current Trends in Physiological Sciences: From cell signals to the biology of aging", University of NIS, **NIS, Republic of Serbia**; 19-23 September 2018

05/2018 Invited speaker at the 5th European Section meeting of the International Academy of Cardiovascular Sciences (IACS-ES): Advances in Cardiovascular Research – from basic mechanisms to therapeutic strategies, **Bratislava, Slovakia**; 23-26 May 2018

04/2018 Invited speaker at the Neurocardiology International Conference, **Dubai, UAE**; 9-11 April 2018 (Declined due to conflict)

02/2018 Invited Speaker at the 10th India Section Meeting of the International Academy of Cardiovascular Sciences (IACS-India), Madurai Kamaraj University, **Madurai, India**; 8-10 February 2018

01/2018 Invited to organize and chair a plenary symposium on cardiovascular and metabolic diseases at the 105th Indian Science Congress, **Hyderabad, India**; 3-7 January 2018 (Postponed to March 2018 – to be held at **Imphal, Manipur, India)**

11/2017 Invited Speaker at the International Conference on Advances in Degenerative Diseases and Molecular Interventions, **Trivandrum, Kerala, India;** 23-24 November 2017

11/2017 Invited Speaker at the International Symposium, "Molecular Medicines for Lifestyle Diseases: Emerging Targets and Approaches"; **CSIR-CDRI, Lucknow, UP, India;** 20-21 November 2017

10/2017 Invited Speaker and Poster Reviewer at the 6th Asian Biomaterial Congress: Innovative Bimaterials: Technologies for Life and Society; **Trivandrum, Kerala, India;** 25-27 October 2017

10/2017 Invited Speaker at the Cardiovascular Research Meeting in **Belgrade, Serbia**, 2-3 October 2017

09/2017 Invited Speaker at the 4th European Section Meeting of the International Academy of Cardiovascular Sciences (IACS-ES), **Pécs, Hungary**; 28-30 September 2017

09/2017 Invited Speaker and Chair of a session at the 5th Annual Midwest Conference on Cell Therapy and Regenerative Medicine, University of Kansas Medical Center, Sheraton Overland Park Hotel, **Overland Park, Kansas**, 15-16 September 2017

08/2017 Invited Speaker at the 5th North American Section Meeting of the International Academy of Cardiovascular Sciences (IACS-NA) in **Orlando, FL**; 31 August - 02 September 2017 (Declined due to conflict in the schedule)

07/2017 Invited speaker at the 5th Argentina-Brazil Postdoctoral Joint Meeting on Cardiovascular Sciences, **Buenos Aires, Argentina**, 21 July 2017

06/2017 Invited Faculty, VCU Interdepartmental Seminar Series for Excellence in Cardiovascular and Kidney Research, Virginia Commonwealth University, **Richmond, VA**; 29-30 June 2017

04/2017 85th European Atherosclerosis Society Congress, **Prague, Czech Republic**, 23-26 April 2017

04/2017 Invited Faculty at the 9th International Congress of Cardiovascular Disease and Diabetes, **Dubai, UAE**; 7-9 April 2017.

03/2017 Invited Speaker at the American Association of Physicians of India – Midwest Chapter; **Omaha, NE**, 11 March 2017

02/2017 Invited speaker at the 9th International Conference of the Academy of Cardiovascular Sciences, **New Delhi, India**; 9-11 February 2017 (declined)

12/2016 Invited speaker at the CSIR - National Institute for Interdisciplinary Science & Technology (NIIST), **Thiruvananthapuram, India**; 7-9 December 2016.

10/2016 Invited speaker at the 7th International Congress of Cardiology, **Cairo, Egypt**, 28-30 October 2016

10/2016 Invited speaker at the annual meeting of the International Academy of Cardiovascular Sciences – South America section, **Belo Horizonte, Brazil**; 22-24 October 2016.

10/2016 Invited speaker at the annual meeting of the International Academy of Cardiovascular Sciences – European section, **Marseille, France** (on the cruise ship); 1-4 October 2016.

09/2016 Invited speaker and Chairman of a session at the annual meeting of the International Academy of Cardiovascular Sciences – North America section, **Sherbrooke, Quebec**, **Canada**; 22-24 September 2016

09/2016 Grand Round Department of Surgery, Creighton University School of Medicne, **Omaha, NE**; "Vulnerable Atherosclerotic Plaques in Carotid Arteries"; 16 September 2016.

06/2016 Keynote invited speaker in the International Congress on Biology and Pathology (ICBP2016), **Guangzhou**, **China**, 25-26 June 2016

05/2016 Oral Presentation at the annual meeting of the European Atherosclerosis Society, **Innsbruck, Austria**, 29 May – June 1, 2016

02/2016 Invited speaker and the Chair of a Plenary Session at the 8th International Conference on Translational Research in Cardiovascular Science; **Anand, Gujarat**, **India**; 5-6 February 2016

01/2016 Invited speaker and the Chair of a Plenary Session at the 103rd Indian Science Congress, **Mysore, Karnataka**, **India**, 3-7 January 2016

11/2015 Invited speaker at the 11th International Congress on Coronary Artery Disease; **Florence, Italy** 29 November – 2 December 2015

11/2015 Invited speaker at the **Scientific Forum** 25th International Congress of Cardiovascular Sciences and South American section of the International Academy of Cardiovascular Sciences**; Vitoria**, **Brazil** 12-14 November 2015

10/2015 Invited speaker at the 26th Great Wall International Congress of Cardiology Asia Pacific Heart Congress 2015: International Congress Cardiovascular Prevention and Rehabilitation 2015, **Beijing, China**; 29 October – 1 November 2015

10/2015 Invited speaker at the 6th International Congress of Cardiology meeting, **Dubai, UAE** 23-24 October 2015

10/2015 Invited speaker at the European Section 2nd European meeting of the International Academy of Cardiovascular Sciences, **Belgrade, Serbia** 8-10 October 2015

09/2015 Invited speaker in the School of Pharmacy, University of Nebraska Medical Center, **Omaha, NE**; 25 September 2015

09/2015 Invited speaker in the Pulmonary & Critical Care Medicine Grand Round, Department of Internal Medicine, University of Nebraska Medical Center, **Omaha, NE**; 17th September 2015

08/2015 Invited speaker at the 8th International Congress of Cardiovascular Diseases, **Recife, Brazil**; 13-15 August 2015

07/2016 Invited speaker at the International Symposium on Surgical Trauma, Colombian Association of Surgery, held at the Central Military Hospital of **Bogota, Colombia** 23-24 July 2015

05/2015 Invited speaker at the Institute for Clinical and Translational Science (iCATS), School of Medicine, University of Missouri at Columbia, MO; 11-13 May 2015

04/2015 Invited speaker at the Regenerative Medicine Symposia, Mahoney State Park Lodge, Omaha, NE; 17 April 2015

04/2015 Invited speaker at the Genetics Seminar, University of Nebraska at Lincoln, NE; 10 April 2015

03/2015 Invited speaker at the First Indo-Canadian Symposium on Heart Failure: Progress and Prospects, held at the Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram, India; 12-14 March 2015

03/2015 Invited speaker at the 7th International Conference on "Recent Advances in Cardiovascular Sciences" held on 10 – 11 March 2015 at The Amity University, UP, India

10/2014 Invited speaker at the Biochemistry & Molecular Biology Department, University of Nebraska Medical Center, Omaha, NE; 26 January 2015

01/2015 Invited speaker at the annual meeting of the Indian Science Congress, Mumbai, India 3-7 January 2015

11/2014 Faculty and Invited speaker at the 5th International Congress of Cardiology, UAE Fujairah City, 21-23 November 2014

11/2014 Faculty and Invited speaker at the XXIV Scientific Forum of the International Congress of Cardiovascular Sciences, Maceio, Alagoas, Brazil; 13-15 November 2014

10/2014 Invited speaker at the Regenerative Medicine Seminar Series, University of Nebraska Medical Center, Omaha, NE; 29 October 2014

09/2014 Faculty and Invited speaker at the 25th Annual Vascular Biology and Hypertension Symposium, University of Alabama at Birmingham, AL; 22-23 September 2014

08/2014 Invited speaker at the 2nd Cardiovascular Forum for Promoting Centres of Excellence and Young Investigators, International Academy of Cardiovascular Sciences, Winnipeg, Canada; 4-7 September 2014

04/2014 Invited speaker at the "Addressing Health Disparities: Focus on Asthma" Symposium at the Health Sciences Multicultural Affairs, Creighton University; 26 April 2014

02/2014 Invited Speaker at the 6th International Conference on Drug Discovery & Therapy in Dubai, UAE; 10-12 February 2014

02/2014 Invited Speaker at the 101st Indian Science Congress, Jammu, India in the Plenary session entitled "Nutrition and Cardiovascular Diseases"; 3-7 February 2014

12/2013 Invited speaker at the annual meeting of the Italian Society of Cardiology, Rome, Italy 14-16 December 2013; "Immunomodulaton of Coronary Artery Disease".

12/2013 Invited speaker at Temple University, Philadelphia, PA in the Pharmacology Seminar series, and the Center for Metabolic Diseases Research, Cardiovascular Research & Thrombosis Research; 10-11 December 2013

10/2013 Invited speaker at the 7th International Congress on Cardiovascular Diseases (ICCD) and the 17th World Congress on Clinical Nutrition (WCCN), Sofia, Bulgaria 24-26 October 2013

08/2013 Invited speaker at the National Jewish Health, Denver, Colorado in the Department of Medicine – Allergy & Immunology Program as an "Accomplished and Distinguished Scientist"; 4-5 August 2013

04/2013 Invited speaker at the Vermont Center for Immunology & Infectious Diseases (VCIID), University of Vermont, Burlington, VT; 18-19 April 2013

04/2013 Invited speaker at the Center for Stem Cell and Regenerative Medicine, University of Nebraska Medical Center, Omaha, NE; 9 April 2013

03/2013 Invited speaker at the University of Tennessee, College of Veterinary Medicine, Atlanta, GA; 16-17 March 2013

01/2013 Invited speaker at the Cardiovascular Research Institute, Morehouse School of Medicine, Atlanta, GA; 9-10 January 2013

11/2012 Invited Speaker at the 22nd National Annual Conference of the Indian Society of Hypertension in conjunction with the International Conference of Cardiovascular Disease Prevention, Mumbai, India to speak on "Vitamin D as an Immunomodulator in Coronary Artery Disease"; 2-4 November 2012

10/2012 Invited speaker in the Anesthesiology Department at Creighton University Medical Center to speak on "Clinical & Translational Research at Creighton – Future Prospects"; 17 October 2012

09/2012 Invited Speaker at the Northwestern University School of Medicine, Chicago, IL to speak on the Molecular Mechanisms of Dendritic Cell Migration in Allergic Asthmatic Lungs; 6-7 September 2012

05/2012 Invited Speaker at the University of Pittsburgh Medical Center, Pittsburgh, PA to speak on Novel Mechanisms in the Pathogenesis of Chronic Asthma; 30 April-1 May 2012

01/2012 Invited Speaker at the 99th Indian Science Congress, Plenary session on Preventive Maternal and Child Health Care; Role of Vitamin D; Bhubaneswar, India, 3-9 January 2012

12/2011 Invited speaker at the 60th annual meeting of the American Society of Tropical Medicine & Hygiene, Philadelphia, PA, 4-8 December 2011

11/2011 Invited speaker at the mid-west regional meeting of the Network of Minority Research Investigators, NIH-NIDDK; November 3-4, 2011

06/2011 Invited speaker at the University of Nebraska Medical Center Immunology Interest Group; the title of my talk was “Novel Mechanisms in the Migration of Lung Dendritic Cells in Allergy and Asthma”

04/2011 Keynote Speaker at the Annual research Day of Creighton University; 5 April 2011; Title of the talk was “Multidisciplinary Knowledge Integration: Challenges and Rewards”

03/2011 Invited speaker and Co-chair at the luncheon seminar on “Th17 cells in Asthma and Autoimmunity”; 20 March 2011

02/2011 Invited Speaker at the annual meeting of the International Academy of Cardiovascular Sciences: Bridging the Gap: Basic Sciences and Clinical Practice, Vadodara, Gujarat, India, 1-3 February 2011

02/2011 Invited Speaker at the 4th World Congress of the International Academy of Cardiovascular Sciences: CIMS-3C-CON, Ahmedabad, Gujarat, India, 4-6 February 2011

01/2011 Invited Speaker at the 98th Indian Science Congress, Medical Sciences section; Chennai, India, 3-9 January 2011

12/2010 Invited Speaker at the Pittsburgh International Conference: LUNG CONFERENCE on the Understanding the Interface between Asthma, Host Defense, and Mucosal immunity, University of Pittsburgh, PA December 10-11, 2010

06/2010 Invited Speaker at the C. S. Medical University (formerly King Georg’s Medical University), Lucknow, India; “Flt3-Ligand, Immunomodulation and Therapy in Asthma”

06/2010 Invited speaker at the Institute of Genomics and Integrative Biology, New Delhi, India; “Newer Treatments in Allergic Asthma”

03/2010 Invited Speaker at the annual meeting of the American Academy of Allergy, Asthma and Immunology, New Orleans, LO, in the Panel Discussion on “Who Dunnit: Which cells drive the asthma phenotype?”

01/2009 Invited speaker, Wayne State University, Detroit, MI; “Vein Graft Disease; why is the internal mammary artery immune to restenosis?”

12/2008 Invited speaker in an International Symposium at the University of Vadodara, India on the Translational Research in Cardiovascular Medicine: From bench to bedside and vice-versa, Vadodara, India on December 11, 2008; "Vein-graft disease: Why is the internal mammary artery almost immune to restenosis?"

12/2008 Invited speaker in the 42nd Annual Conference of the Indian College of Allergy, Asthma and Applied Immunology, Ahmedabad, India on December 12, 2008; "Immunomodulation in the Therapy of Asthma".

12/2008 Invited speaker in the 42nd Annual Conference of the Indian College of Allergy, Asthma and Applied Immunology, Ahmedabad, India on December 13, 2008; "Are Eosinophils Pivotal in Allergic Diseases?"

12/2008 Invited speaker at the Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, India in the Third International Symposium on "Recent Advances in Cardiovascular

Sciences" on December 17, 2008; "Carotid Artery Disease: Why some people are symptomatic and others not?"

12/2008 Chair of a scientific session in the Third International Symposium on "Recent Advances in Cardiovascular Sciences", the Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, India on December 17, 2008.

12/2008 Chair/Judge of the Poster session in International Conference on Translational Pharmacology, New Delhi, India on December 18, 2008.

12/2008 Invited speaker at the All-India Institute of Medical Sciences, New Delhi, India, in the International Conference on Translational Pharmacology, on December 19, 2008; "Mechanisms underlying airway inflammation due to racemic β2-agonists".

11/2008 Invited speaker at the University of Virginia BB Carter center for Immunology Research, Charlottesville, VA on 3rd November 2008; "Flt3-Ligand, Immunomodulation and Therapy in Asthma".

09/2008 Invited Speaker in the Annual Research Forum, Sepracor Inc., New Orleans, LA; 18-20 September 2008; "Comparative effects of the enantiomers of formoterol on importins in human bronchial smooth muscle cells".

04/2008 Invited speaker at the University of Salzburg, Austria, in the 3rd International Symposium on Molecular Allergology – ISMA 2008 (Basic, Translational and Clinical Aspects), Salzburg, Austria, April 18-20, 2008.

03/2008 Invited speaker at the annual meeting of the American Academy of Allergy, Asthma and Immunology, Philadelphia, PA, March 13-18, 2008, to speak on "VEGF and Angiopoietins in Allergic Airway Inflammation and Airway Remodeling in Chronic Asthma".

03/2008 Invited speaker at the International Society for Heart Research – Indian section, held at the Postgraduate Institute of Medical Education and Research, Chandigarh, India, February 29-March 2, 2008.

02/2008 Invited speaker at the at the Delhi Institute of Pharmaceutical Sciences and Research, New Delhi, India to speak in the international symposium on Recent Advances in Cardiovascular Sciences, on February 28, 2008.

12/2007 Invited speaker at the annual meeting of the Indian Association of Clinical Biochemists, held in New Delhi, India, December 17-21, 2007.

08/2007 Invited speaker at the School of Medicine, St. Louis University in the Department of Medicine center for Immunobiology on 6th August 2007; "Novel Therapies in the Treatment of Allergic asthma".

03/2007 Invited speaker at the University of Nebraska Medical Center, Immunology Program on 14th March 2007; "Immunomodulation in Asthma".

11/2006 Invited speaker at the Cardiovascular Research Institute, Morehouse School of Medicine, Atlanta, GA; "Cellular and Molecular Mechanisms underlying Atherosclerotic Plaque Instability".

11/2006 Invited speaker at the International Symposium on Recent Research Advances in Asthma Pathogenesis, Grand Royal Antiguan Beach Resort, St. John's, Antigua, November 19-22, 2006.

10/2006 Invited speaker at the Biomedical Sciences Seminar Series, College of Veterinary Medicine, University of Minnesota, St. Paul, MN

03/2005 Invited speaker at the 3rd TAIHO Pharmaceutical Research Symposium, Pittsburgh, PA

10/2004 Chairman, A major symposium on Eosinophils at the 6th Asia-Pacific Congress of Allergology and Clinical Immunology, Tokyo, Japan.

10/2004 Invited speaker in a luncheon seminar, "Th1/Th2 Polarized Immunity" at the 6th Asia-Pacific Congress of Allergology and Clinical Immunology, Tokyo, Japan.

09/2004 Invited Speaker at the Sepracor, Inc. headquarters, Marlborough, MA

08/2004 Invited Speaker; University of Missouri, Columbia; Title of the talk was "Is the (S)-enantiomer of albuterol a silent bystander or culprit in worsening asthma?"

04/2004 Invited speaker at the 2nd TAIHO Pharmaceutical Research Symposium, Pittsburgh, PA.

01/2004 Invited Speaker at the TAIHO Pharmaceuticals, Tokushima Facility, Japan

01/2004 Invited Speaker, University of British Columbia, Vancouver, BC, Canada

09/2003 Invited speaker at the SEPRACOR Research Forum, New Orleans, LO.

03/2003 Invited speaker in a dinner symposium, "Can the β2-agonists be pro-inflammatory or anti-inflammatory agents?" at the annual meeting of the American Academy of Allergy, Asthma and Immunology, Denver, CO.

11/2002 Invited speaker in a dinner symposium, "Novel concepts in the treatment of allergic rhinitis" at the annual meeting of the American College of Allergy, Asthma and Immunology, San Antonio, TX

10/2002 Chairperson of an oral presentation session on "Asthma" at the 7th Asian Pacific Congress of Respirology, Taipei, Taiwan

10/2002 Invited Speaker in a Symposium on "Innovative Therapies in Asthma" at the 7th Asian Pacific Congress of Respirology, Taipei, Taiwan.

02/2001 Invited speaker at the University of California, Davis, CA.

10/2000 Invited speaker at the 5th Tokyo Allergy Symposium, Tokyo, Japan

06/2000 Invited speaker at the Guidant Corporation, Santa Clara, CA.

11/1999 Invited speaker at the AtheroGenics, Alpharetta, GA.

03/1998 Invited speaker at the Genentech Corp, South San Francisco, CA, to speak on "Mechanisms underlying restenosis/intimal hyperplasia".

10/1996 Invited speaker at the IBC's 3rd International Conference on Restenosis, Cambridge, MA. The title of my talk was "Comparative effects of various stents on restenosis/intimal hyperplasia".

04/1992 Co-Chairperson of a session on "Vascular Smooth Muscle Pharmacology II" at the 1992 FASEB meeting, Anaheim, CA.

10/1991 Chairman of a session on monocyte/macrophage at the XIV International Congress of Allergology and Clinical Immunology, held in Kyoto, Japan, October 13-18, 1991.

02/1991 Chairman of a session on PAF Receptor Antagonists at the Tokyo PAF symposium on Allergic, Respiratory and Cardiovascular Diseases, held in Tokyo, Japan.

02/1991 Invited speaker at the Tokyo PAF symposium on allergic, respiratory and cardiovascular diseases, held in Tokyo, Japan.

05/1987 Invited speaker at the American Thoracic Society Annual meeting symposium on Bronchial Reactivity to speak on "Smooth Muscle: Modulation of Receptors and Response".

09/84–10/85 Postdoctoral fellow of the Canadian Heart Foundation to work on my research in the Faculty of Pharmaceutical Sciences, University of British Columbia, Vancouver, Canada.

07/82–09/84 Postdoctoral fellow of the Canadian Heart Foundation to work on my research project entitled "Alpha-adrenoceptors in vascular smooth muscle and their role in hypertension", at McMaster University, Hamilton, Ontario, Canada.

PROFESSIONAL AND TEACHING EXPERIENCE

A. At Creighton University School of Medicine, Omaha, Nebraska (1985-2019):

1985 - 1993 Didactic lectures- up to 24 lectures per year (PHR 631 and PHR 632) in receptor Pharmacology, calcium channel blockers, autacoids, and respiratory Pharmacology to sophomore medical, pharmacy and junior dental students & graduate students at Creighton University School of Medicine, Omaha, NE

1986 - 2004 Didactic lectures (two contact hours per week) in Immunopharmacology (MIC 737) to medical and graduate students, residents and Allergy/Immunology Clinical Fellows at Creighton University School of Medicine, Omaha, Nebraska.

1996- 2016 Director and the Instructor of the Recent Advances in the Immunopharmacology of Allergic Diseases (MIC 737)

1986 - 1992 Co-director of the Advanced Immunology (three contact hours per week) (MIC 746) course to graduate students

1986 - 2016 Supervision of graduate students in the Departments of Medical Microbiology and Immunology, and Biomedical Sciences, Creighton University School of Medicine, Omaha, NE.

1991 - 2002 Supervision and teaching of biomedical research methods to Department of Surgery residents and research fellows.

1985 - 2019 Teaching biomedical research methods to 3-4 undergraduate/pre-med students per year (up to 20 hours per week).

1996 - 2019 Lectures in the Host-Defense course (Immunology) to first year medical students

1995 - 2004 Clinical tutorials in Pulmonary/Allergy and Immunodeficiency cases to second year medical students

1998 –2010 Director and the Instructor of a graduate course MIC747 (3 contact hours per week), "*Cellular and Molecular Mechanisms of Transmembrane signaling*"

1999 – 2004 Director and Instructor, "*Cellular and Molecular Biology of Cardiovascular Diseases*" to clinical fellows in cardiology

1999 – 2019 Faculty in the Case-based Learning (Tutorial cases) of 1st year medical students (IDC 101)

2000-2001 Faculty in the Case-based Learning (Tutorial cases) of 2nd year medical students (IDC 233)

2004-2012 Lecturer in the Physiology course to Pharmacy students (BMS 404) on *Muscle Physiology*

2005 – 2006 Director, "*Molecular and Cellular Biology*" (IDC101) course to M-1 students

2005- 2019 Lectures in the Molecular and Cell Biology course (IDC101) course to M-1 students

2005- 2019 Director, "*Molecular and Cellular Biology*" course to Post-Bac Pre-Matriculation (Medicine) students before starting the MD Program

2007-2010 Director, BMS791 course on seminar in the Department of Biomedical Sciences, Creighton University

2009-2019 Director, Graduate Program (Graduate Certificate and Master of Science) in Clinical and Translational Science

2010-2019 Co-Director of the course, CTS715- "*Applied Pharmacokinetics and Pharmacodynamics for Clinicians*"

2011 – 2019 Course Director and sole Instructor of the course, CTS747 – "*Transmembrane Signaling in Immune Cells*"

2013 – 2015 Lecturer in the Medical Physiology course (BMS 601)

2017 – 2019 Course Director and sole Instructor of the course, CTS713 – "*The Discipline of Scientific Writing and Preparation of Competitive Grant Applications*"- Graduate level course

B. Teaching at Western University of Health Sciences

2024 Pharmacology Lectures to Optometry students

2025 Courses in Responsible Conduct of Research, Methods for Enhancing Reproducibility, and Discipline of Scientific and Grant Writing

C. Teaching Experience (1973 – 1985)

1984 - 1985 Formal lectures in Pharmacology to the graduate students in the Faculty of Pharmaceutical Sciences, The University of British Columbia, Vancouver, BC, Canada

1980 - 1982 M.D. resource person (as a teaching assistant to Professor EE Daniel) in the field of Pharmacology in the Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada

1977 - 1980 Formal lectures in Chemical Pathology (theoretical and practical aspects) to M.D. and Diploma in Clinical Pathology students in the Postgraduate Department of Pathology & Bacteriology, King George's Medical College, Lucknow, India

1978 - 1980 Research guidance: co-supervised the theses of M.D. and M.S. degrees of the King George's Medical College, Lucknow University, India

1973 - 1980 Chemical Pathology: Seven years' experience in methodology and interpretations of diagnostic investigations in Clinical Biochemistry, King George's Medical College, Lucknow, India

Postdoctoral fellows/Clinical Residents trained in my research laboratory and their current Employment:

1. Avinash C. Dwivedy, Ph.D.; January 1989 - November 1989; currently Scientist and Joint Director, Science & Technology, Government of India

2. Nawab Ali, Ph.D.; January 1990 - September 1991; currently working as an Associate Professor at the University of Arkansas School of Medicine, Arkansas

3. Toshio Numao, M.D., Ph.D.; July 1990 - June 1992; currently Vice President of Utsonomiya Hospital in Japan, and Professor, Department of Medicine and Clinical Immunology, Dokkyo University School of Medicine, Mibu, Tochigi, Japan

4. Worku Abebe, Ph.D.; January 1991 - October 1992; currently an Associate Professor, School of Dentistry, Medical College of Georgia, Augusta, GA

5. Sarita Agarwal, Ph.D.; July 1991 - October 1991; Visiting Scientist and Research fellow; currently a Scientist and Professor at the Sanjay Gandhi Medical Research Institute, Lucknow, India

6. Jane M Rowley, M.D.; Vascular Surgery Research Fellow; July 1992-June 1993; completed a clinical fellowship in the Plastic and Reconstructive Surgery, New York Hospitals, NY; currently a practicing surgeon

7. Paolo Sapienza, M.D.; Vascular Surgery Research fellow from the University of Rome, Italy; July 1992 - August 1993; currently a faculty at the University of Rome, Italy

8. Patrick E McGregor, M.D.; Vascular Surgery Research Fellow; July 1993-June 1994; currently a practicing surgeon in Kansas City, MO

9. Peter S Dovgan, M.D.; Vascular Surgery Research Fellow; July 1994 to June 1995; did fellowship in vascular surgery at Henry Ford Hospital, Detroit, MI; currently a vascular surgeon in Florida

10. Lindsey Chisholm, MB,BS, FRCS; Surgical Research Fellow; August 1994 - September 1995; currently a Registrar in Surgery, United Kingdom

11. Sandhya K. Balaram, M.D.; Vascular Surgery Research Fellow; July 1995 – June 1997 (also a PhD student). She completed fellowship in Cardiothoracic Surgery, and is working as an Associate Professor of Cardiothoracic Surgery, Columbia University, NY

12. Ashwini Dhume, PhD, Postdoctoral Fellowships at the NIH and at the Mount Sinai Hospital, Department of Cardiology, New York, NY; currently a Senior Scientist in one of the Pharmaceutical Industries, New Jersey, USA

13. Gang Cheng. MD, PhD, after 4 years of Senior Research Associate position, Dr. Cheng completed Clinical residency program in Internal Medicine at Medical College of Georgia, Augusta, GA followed by clinical fellowship in Allergy & Immunology

14. Jianhui Yang, MD, PhD, after postdoctoral fellowship in my laboratory, joined NCI-NIH, Bethesda, MD

15. Abdo Ibrahim Berro, Ph.D.; joined a postdoctoral fellow in the division of Allergy & Immunology at Creighton University School of Medicine, Omaha, NE

16. Jehad Edwan, PhD, currently a senior scientist at the NIH-NINDS, Bethesda, MD

17. Arpita Bharadwaj, Ph.D., after graduation joined a postdoctoral fellow at Mount Sinai School of Medicine, New York, NY

18. Kriti Rakesh, Ph.D., after graduation joined a postdoctoral fellow at Duke University Medical Center, Durham, NC.

19. Amit K. Mitra, MBBS, MD, PhD, a postdoctoral fellow in my laboratory from July-December 2007. After that he worked at the Univ. of Nebraska Medical Center, Omaha, NE

20. Anshu Aggarwal, PhD; after graduation, did postdoctoral fellowship at Duke University followed by at the Albany Medical College, Albany, NY; now working as an Instructor in Anatomy & Physiology at Auburn University in Montgomery, AL.

21. Halvor Sim McGee, PhD, after graduation did postdoctoral fellowship in the division of Pulmonary Medicine and Critical Care, Department of Medicine, University of California at San Diego, CA, and at the UIC, Chocago, IL; then worked as an Assistant Professor.

22. Guanghong Jia, MD, PhD, worked as a postdoctoral fellow from 2004 – 2010, and then appointed as a Resident Assistant Professor in the Department of Biomedical Sciences at Creighton University School of Medicine, Omaha, NE until June 2012.

23. Zhifei Shao, MD, PhD: After finishing his PhD, Dr. Shao worked as a postdoctoral fellow for one year from 2009 – 2010, followed by Resident Assistant Professor in the Department of Biomedical Sciences at Creighton University School of Medicine until April 2011. Then, he joined a research associate position at Stanford University and Palo Alto VA Medical Center, CA. Currently working at Genentech as a Principal Scientist.

24. Gleb Ivanov, PhD: worked as a postdoctoral fellow from 2008 – 2010; Currently a scientist in Russia

25. Sameer Goyal, PhD: worked as a postdoctoral fellow from June 2010- October 2010

26. Xiang Wang, Ph.D.: worked as a postdoctoral fellow from November 2008 – November 2010. Currently working in a pharmaceutical company in China.

27. Raj K. Verma, PhD; worked as a postdoctoral fellow from January-August 2011.

28. Suneel Kumar, MBBS; worked as a postdoctoral fellow from January 2011 – June 2012

29. Divya Pankajakshan, PhD, worked as a postdoctoral fellow from November 2008 – April 2012

30. Lanre Makinde, PhD worked as a postdoctoral fellow from September 2009 – April 2012

31. Kajari Dhar, PhD, worked as a postdoctoral fellow September 2010 – April 2012

32. Kush Lohani, MBBS, worked as a postdoctoral fellow April 2013 – June 2014

33. Harit Kapoor, MBBS, worked as a postdoctoral fellow May 2014 – May 2015

34. Lin Tang, MD, PhD, worked as a postdoctoral fellow September 2012 – June 2015

35. Liang Mo, MD, worked as a postdoctoral fellow March 2014 - July 2015

36. Yong You, MD, worked as PhD student (registered in China) March 2014 – July 2015

37. Kai Yin, MD, PhD, worked as a postdoctoral fellow July 2013 – August 2015

38. Mohamed M. Radwan Ahmed, M.D. – July 2011 – 10 January 2016

39. Vickie Swier, Ph.D. – January 3, 2011 – 10 January 2016

40. Christopher Pelham, PhD – August 2012 – 10 January 2016

41. Chandra S. Boosani, PhD - September 2012 – 10 January 2016

42. Amit Kumar Pandya, Pharm D., PhD – May 2012 – 4 February 2016

43. Saurabh Singhal, MBBS, MS – August 2015 – June 2016.

44. Shreya Agarwal, MBBS – July 2015 – May 2016.

45. Jubing Zheng, MD, PhD – September 2015 – 8th September 2016

46. Kokouvi Paul Djossou, M.D. – June 2013 – October 2016

47. Santosh K. Yadav, PhD – January 2016 – December 2016

48. Gopal K. Jadhav, PhD – May 2016 – January 2017

49. Antu Kalathookunnel Antony, PhD – August 2015 – March 3, 2017

50. Velidi Rao, PhD – August 2011 – February 2017

51. Izuagie A. Ikhapoh, Ph.D. – September 2016 – April 2017

52. Lili Huang, M.D. – January 15, 2016 – May 2017

53. Saravanan Subramanian, PhD (in collaboration with Dr. Kalyana Nandipati) – September 2014 – December 2017

54. Zefu Zhang, MD, an Interventional Radiologist – January 2014 – June 2018

55. Palanikumar Gunesekar, M.B.B.S. - March 2015 – June 2019

56. Finosh G Thankam, PhD – August 2015 – July 2019

57. Harbinder Singh, PhD – August 2020 – April 2023

58. Sunil K. Nooti, MBBS, PhD – September 2020 - February 2022

59. Drishtant Singh, PhD – April 2022 – November 2022

60. Yssel Mendoza-Mari, PhD (Senior Research Scientist) – March 2023 - present

61. Merlin Rajesh Lal L.P., PhD – March 2023 – Present

62. Sudharshan S. J., PhD – April 2023 – July 2023

63. Resmi Rajaleskhmi, PhD – November 2023 – present

64. Vinitha Deepu, PhD – November 2023 – November 2024

65. Uglješa Maličević, MD – March 2024 – present

66. Marija Stojanovic, MD, PhD – April 2024 - present

Resident Assistant Professors worked under my mentorship:

1. Zhifei Shao, MD, PhD (January 2011 – December 2011) → now at AMGEN, CA
2. Guanghong Jia, MD, PhD (Janaury 2011 – June 2012)→ now at UMKC
3. Kajari Dhar, PhD (May 2012 – December 2012) → now at UNMC
4. Lanre Makinde, PhD (May 2012 – March 2013)
5. Divya Pankajakshan, PhD (May 2012 – December 2014)→ now at LakePharma, Inc., CA
6. Songcang Chen, MD (September 2013 – October 2016) → now at UCSF
7. Christopher Pelham, PhD (January 2016 – December 2016) → now at Wash U, St. Louis, MO
8. Vicki Swier, Ph.D. (January 11, 2016 – October 2017) → now at Sanford Health, Sioux Falls, SD

Research Associate worked under my direct supervision:

1. Min-Jung Kim, M.S., an electrophysiologist → January 3, 2011 – 31 March 2015
2. Min-Jung Kim, M.S., an electrophysiologist → February 27, 2017 – December 14, 2017

Assistant Professors:

1. Mohamed M. Radwan, MD, FRCS (January 11, 2016 – Present)
2. Finosh G. Thankam, PhD (August 1, 2019 – Present)
3. Vikrant Rai, MBBS, MS, PhD (August 2020 – Present)
4. Chandra S. Boosani, PhD (January 11, 2016 – June 30, 2020)
5. Halvor Sim McGee, PhD (September 2016 – June 30, 2019)
6. Gopal K. Jadhav, PhD (Janaury 2017 – June 30, 2019)

GRADUATE STUDENTS TRAINED UNDER MY DIRECT SUPERVISION AND GRADUATED:

1. Marlin Fugate, M.S. (Microbiology) graduated in May 1991. The title of his thesis was "**Studies on the mechanism of interleukin-2 induced microvascular permeability**". Dr. Fugate is a practicing Radiologist in the State of Kansas.

2. Sharmishtha D. Joshi, M.S. (Pharmacology) graduated in August 1992. The title of her thesis dissertation was "**Guanine nucleotide binding-regulatory proteins in bovine and guinea pig trachea**". Ms. Joshi is a practicing pharmacist in Washington DC/Maryland area.

3. Berdine TY Chong, M.S. (Medical Microbiology and Immunology) –graduated in August 1998; Thesis title "**Beta-adrenoceptor desensitization in the airways following administration of IL-1β and**

chronic β-adrenoceptor agonist". Dr. Chong completed Psychiatry residency in Chicago, IL, followed by Clinical Fellowship in Geriatric Psychiatry, currently a practicing psychiatrist in Hawaii.

4. Sandhya K. Balaram, M.D. - Ph.D. (Medical Microbiology and Immunology) – graduated in December 1999; Dissertation title "**Insulin-like growth factor-1 and cell adhesion molecules in vascular disease**". Dr. Balaram joined the faculty position in Cardiothoracic Surgery at St. Luke's-Roosevelt Hospital Center in New York.

5. Richard Todd Allen, an MD-PhD student; PhD (Medical Microbiology and Immunology); graduated in May 2001. The title of his dissertation was "**Regulation of vascular smooth muscle cell apoptosis by IGF-1: Control of apoptosis induced by *c-myc* and protein kinase inhibition**". After finishing his residency in Orthopedic Surgery at UC San Diego, CA, Dr. Allen joined the faculty position and now is as an Asssistant/Associate Professor in Orthopedic Surgery at UCSD.

6. Michael Hopfenspirger, an MD-PhD student, successfully defended his PhD dissertation in Biomedical Sciences. He received both MD and PhD in May 2003. The title of his dissertation was "**Mycobacterial antigens in the immunomodulation of allergic asthma**". He completed residency in Otorhinolaryngology (ENT) in Minneapolis, MN.

7. Kristopher Krueger, MD-PhD student completed his PhD (Medical Microbiology and Immunology) program and received both MD and PhD degrees in May 2003. The title of his dissertation was "**A comparison of stent-induced stenosis development in central and peripheral arteries in swine: Implications of vascular smooth muscle cell apoptosis**". He completed the clinical fellowship in Cardiology in Minneapolis, MN.

8. Ashwini S. Dhume, B. Pharm, Ph.D. (Biomedical Sciences) program. She received her Ph.D. degree in December 2002. The title of her dissertation was **"Carotid atherosclerosis: Why some patients are symptomatic and others not?"** Dr. Dhume is currently working as a Principal Scientist in a Pharmaceutical Company, New Jersey.

9. John Mose Roberts, M.S. (Biomedical Sciences). He received his M.S. degree in December 2003. The Master's thesis was entitled "**The Role of Bradykinin Antagonists in Experimental Acute Spinal Cord Injury**". Currently Dr. Roberts is a clinical resident after competing MD degree at Loyola University School of Medicine, Chicago, IL.

10. Min-Jung Kim, MS (Biomedical Sciences). She received her M.S. degree in December 2004. Her thesis title was **"Chloride channels in monocytes and macrophage and effect of cytokines**".

11. Jehad Edwan, A Fulbright Scholar, received PhD (Medical Microbiology & Immunology) in December 2004. His dissertation title was "**Flt3-Ligand: a novel immune adjuvant in the therapy of asthma**". Currently a postdoctoral fellow at the National Institutes of Health-NINDS, Bethesda, MD.

12. Abdo Ibrahim Berro received PhD (Medical Microbiology and Immunology) in May 2005. His dissertation title was "**CD30 molecule and Apoptosis of Human Blood Eosinophils**".

13. Thaddeus Kowal - M.S. in Medical Microbiology and Immunology. He successfully defended his thesis in May 2006. The title of his thesis was "**Anti-allergic drug and intracellular signaling mechanisms in human blood eosinophils and airway epithelial cells**".

14. Bharti R. Chaudhary earned Master of Science in Biomedical Sciences in August 2006. The title of her thesis was "**TRAIL and TGF-β1-induced Apoptosis of Human Airway Epithelial Cells**". After finishing her medicine curriculum and clinical residency, Dr. Chaudhary is working as a physician in Emergency Medicine in Fort Worth, TX.

15. Michael Gritzuk, Master of Science in Biomedical Sciences. Successfully defended his thesis in August 2006. The title of his thesis was "**Angiotensin II-induced Apoptosis in Vascular Smooth Muscle Cells: Differential Effects in Human Saphenous Vein and Internal Mammary Artery**". Currently, Mr. Gritzuk completed DDS at Creighton University, Omaha, NE.

16. Arpita Bharadwaj earned PhD (Medical Microbiology and Immunology) in May 2007. Her research dissertation title was **"Reversal of Airway Hyperresponsiveness in Bronchial Asthma by Generation of Semi-mature Dendritic Cells in the Lung Following Flt3-ligand Treatment**". After completing 2.5 years of postdoctoral fellowship at Mount Sinai Medical Center, New York, NY, Dr. Bharadwaj is working as a research scientist in OHSU, Portland, Oregon.

17. Kriti Rakesh, received PhD (Biomedical Sciences) in May 2007. Her research dissertation title was **"Regulation of IGF-1 Signaling by SOCS3 in Human Coronary Artery Smooth Muscle Cells"**. She is currently a postdoctoral fellow at Duke University Medical Center, Durham, NC.

18. Ajeeth Ramanathan received Master of Science in Biomedical Sciences in December 2006. The title of his research thesis was "**Involvement of CLC-3 in Platelet-derived Growth Factor Induced Proliferation of Airway Smooth Muscle Cells**". He is currently working in a Scientific Instrument company in Minneapolis, MN.

19. Amit Mitra, MBBS, MD, received PhD in May 2007 in the Department of Biomedical Sciences. The title of his research dissertation was **"Why Internal Mammary Artery is immune to restenosis as compared to saphenous vein and radial artery?**" Dr. Mitra did a postdoctoral Fellow at the University of Nebraska Medical Center, Omaha, NE.

20. Joseph Michael Franzese successfully defended his thesis for Master of Science (Biomedical Sciences) in July 2007. His research project was "**Suppressors of Cytokine Signaling in Allergic Airway Inflammation**". Mr. Franzese, after MD (Medicine) completed a clinical residency.

21. Himanshu Aggarwal, MBBS, MS (Surgery), a Master of Science degree in Biomedical Sciences, submitted and defended his thesis in May 2008. His research project was **"Lymphoma/Leukemia-Related Factor in Human Prostate Carcinoma**". He completed Urology residency, followed by clinical fellowship in Neuro-Pelvic floor fellowship at UT Southwestern Medical Center, Dallas, TX; now the Chief of Neuro-Pelvic Surgery, Baptist Hospital, Montgomery, AL.

22. Gloria Gilliam, successfully completed M.S. in the Department of Biomedical Sciences, Creighton University School of Medicine, on the "**Mouse model of House dust mite and Cockroach-induced airway hyperresponsiveness and effect of Flt3-ligand in allergic asthma**"; completed all requirements for MS degree in August 2008.

23. Aman Yohannes, submitted and defended M.S. thesis in the Department of Biomedical Sciences, Creighton University School of Medicine, "**Wnt proteins and Connexin 43 in the development of intimal hyperplasia and restenosis**". He has completed all requirements for MS degree in April 2009, did MD and the clinical residency, now a practicing physician in Omaha, NE.

24. Arthur Stallworth III, submitted and defended M.S. thesis in the Department of Biomedical Sciences, Creighton University School of Medicine, "**TH17 cells in the lung: Role in Allergic Airway Inflammation and Airway Hyperresponsiveness due to House Dust Mite**", completed all requirements for MS degree in May 2009.

25. Benjamin Moore, submitted and defended M.S. thesis in the Department of Biomedical Sciences, Creighton University School of Medicine. The title of his M.S. Thesis was "**Regulation of Eosinophil Apoptosis: Role of Voltage-sensitive chloride Channels**"; completed all requirements for MS degree in May 2009.

26. Halvor Sim McGee, received PhD in Biomedical Sciences. The title of his Ph.D. dissertation was **"T-regulatory cells and Immunomodulation in Bronchial Asthma**" → completed all requirements for the PhD degree in August 2009 → joined the laboratory of Professor Patricia Finn, Chief of Pulmonary & Critical Care Medicine at UCSD in November/December 2009, and then at UIC, Chicago; worked as an Assistant Professor at Creighton.

27. Lanre Makinde, received PhD in Biomedical Sciences. The title of his Ph.D. dissertation was "**VEGF and Angiopoietin-1 in Airway Remodeling in Chronic Asthma**" → completed all requirements for the PhD degree in August 2009 → working as a Postdoctoral Fellow and then Research Assistant Professor.

28. Zhifei Shao, MD, received PhD in Biomedical Sciences. The title of his Ph.D. dissertation was "**Effect of Flt3-L on the migration of lung dendritic cells in the Immunomodulation of Allergic Asthma"** → completed all requirements for Ph.D. degree in August 2009 → worked as a postdoctoral fellow in my laboratory for 1 year to publish his research papers. Then, he was appointed Resident Assistant Professor in the Department of Biomedical Sciences at Creighton University School of Medicine. After working at Stanford University, Dr. Shao is currently working as a Scientist at AMGEN.

29. Dalia Youssef successfully defended her thesis for Master of Science (Biomedical Sciences) in May 2010. Her research project was "**Vitamin D and Chemotaxis of Human Blood Eosinophils**".

30. Kelsey Kokubun successfully defended his thesis for Master of Science (Biomedical Sciences) in May 2011. His research project was "**Differentiation of Porcine Mesenchymal Cells into Epithelial Cells as a Potential Therapeutic Application to Facilitate Epithelial Regeneration**". Kelsey completed M.D. program.

31. Adarsh Sai, M.B.B.S. successfully defended his thesis for Master of Science (Clinical & Translational Science) in June 2011. His research project was "**Role of Vitamin D Receptor and Vitamin D Binding Protein Restriction Fragment Polymorphisms in Determining Dose Response to Vitamin D: A randomized Double-Blind Placebo Controlled Trial**". Dr. Sai completed clinical residency in Internal Medicine at the Loma Linda Medical Center, CA; followed by Gastroenterology Fellowship.

32. Laura A. G. Armas, M.D. submitted her thesis for Master of Science (Clinical and Translational Science) in August 2011 and successfully defended in September 2011. Her research project was "**Histomorphometric Analysis of Bone in Healthy, Young Patients with Type 1 Diabetes Mellitus**". Dr. Armas is currently an Associate Professor of Endocrinology at the University of Nebraska Medical Center.

33. Shreya Shetty, MBBS, submitted her thesis for Master of Science (Clinical and Translational Science) in June 2012 and successfully defended in July 2012. Her research project was "**LOCAL INFLAMMATORY RESPONSES IN PSEUDOMYXOMA PERITONEI**". Dr. Shetty was a Chief Clinical Resident in Surgery at CUMC.

34. Gaurav K. Gupta, MBBS, M.D. → received PhD in Biomedical Sciences in August 2012. His research project was to examine the "**Effect of Vitamin D in Angioplasty and In-stent Restenosis in Atherosclerotic Swine Model**". Dr. Gupta was a postdoctoral Fellow at Massachusetts General Hospital, Harvard University, and at Yale University.

35. Tanupriya Agrawal, MBBS → received PhD student in Biomedical Sciences in August 2012. Her research project was to examine the role of "**Importin α-3 and Vitamin D in Allergic**

Airway Inflammation and Asthma". Dr. Agrawal is currently a postdoctoral Fellow at The Boston Children's Hospital, Harvard University.

36. Kannan Baskar, MBBS, submitted his thesis for Master of Science (Clinical & Translational Science) in October 2013 and successfully defended in November 2013. His research project was "**Serotonin Transporters in Coronary Artery Smooth Muscle Cells – Implications in the Pathogenesis of Coronary Artery Disease**" (Co-advisor with Dr. Vidhya Lakshmi Selvaraj)

37. Ryan Trowbridge, MD–MS student in the Clinical & Translational Science Graduate Program. His thesis title is: "**Vitamin D Receptors in Barrett's Esophagus and Adenocarcinoma in the Esophagus**". Completed the Program in August 2014; completed clinical residency in Dermatology at Mass General Hospital, Harvard University, Boston, MA; now an Assistant Professor of Dermatology at UNMC, Omaha, NE.

38. Rohit Gaurav, M.Sc. → PhD in the Department of Biomedical Sciences. His dissertation title was research "**Chloride Channel 3 (CLC3): an immune antiporter in the migration and activation of human eosinophils in allergic asthma**". Completed the program in August 2014; was a postdoctoral research associate at National Jewish Hospital, Denver, CO and at the UNMC, Omaha, NE; now a research scientist in a pharmaceutical company.

39. Ankita Aggarwal, M.Sc. → PhD in the Department of Medical Microbiology & Immunology. Her PhD dissertation title was: "**Immunoregulatory Effects of Vitamin D In Cockroach-induced asthma**". Completed the program in August 2014; joined postdoctoral fellowship in Pharmacology at Creighton University School of Medicine, Omaha, NE; then completed DDS program.

40. Kimberly Fischer → PhD in the Department of Medical Microbiology and Immunology. Her research project entitled: "**Toll-like Receptors and Vitamin D Receptors in Airway Epithelium in Allergy and Asthma**"; Completed the program in August 2015.

41. Vikrant Rai, MBBS → MS in the Clinical & Translational Science Graduate Program. His research project entitled: **"TREM-1 in hepatocellular carcinoma**"; Completed the Program in August 2015 followed by PhD in CTS at Creighton.

42. Austin Nguyen, MD-MS student: in the Clinical & Translational Science Graduate Program. His research project entitled: **"TREM-1 in Malignant Melanoma**"; Completed the MS Program in May 2016. Mr. Austin Nguyen is an MD-MS combined student.

43. Izuagie A. Ikhapoh → PhD in the Department of Medical Microbiology and Immunology. His research project entitled: "**Regulatory Mechanisms underlying the Differentiation of Mesenchymal Stem Cells to Endothelial Cells**"; Graduated in August 2016.

44. Nypiat Martin Ayouk, DDS → MS in the Clinical & Translational Science Graduate Program. Her research project entitled: **"Effect of Vitamin D in Non-alcoholic Steatohepatitis**"; Graduated in May 2016.

67. Swastika Sur, M.Sc. → PhD in the Department of Biomedical Sciences. Her research Project entitled "**Role of Polo-like kinases and MMPs in Vascular Fibroproliferative Disorders**"; Graduated in August 2016; currently a postdoctoral fellow at UCSF, San Francisco, CA.

68. Kouassi Tata Kouassi, MD → MS in the Clinical & Translational Science Graduate Program. His thesis title was: **"Mechanisms underlying Insulin Resistance in Obesity**"; Graduated in August 2016.

69. Yovani Llamas → PhD in the the Clinical & Translational Science Graduate

Program. His dissertation title was: "**Immunomodulatory Role of Vitamin D in the Differentiation of Mesenchymal Stem Cells into Endothelial Cells**"; Graduated in August 2016.

70. Sami Almalki → PhD in the Department of Clinical & Translational Science. His research project is on the "**Matrix Metalloproteinases regulate the Differentiation of Adipose-derived Mesenchymal Stem Cells into Endothelial Cells**"; Graduated in May 2017.

71. Vikrant Rai, MBBS, MS → PhD in the Clinical & Translational Science Graduate Program: His dissertation title was: "**Immunomodulation of inflammatory response in osteoarthritis: Therapeutic potential of blocking IL-33-ST2 receptor**"; graduated in August 2017.

72. Sannette Hall → Ph.D. in the Department of Clinical & Translational Science. Her research project is on the "**TREM-2 and Dendritic Cells in the Pathogenesis of Allergic Airway Inflammation in Bronchial Asthma**". Graduated in May 2018.

73. Joseph Abdo, MS → Completed PhD requirements in May 2018 in the Clinical & Translational Science Graduate Program; His research project was on the "**Discovery of Novel Diagnostic and Therapeutic Markers for Esophageal Adenocarcinoma**"; (Jointly with Dr. Sumeet Mittal); Successfully defended his PhD dissertation in May 2018.

74. Mounika Addula, MBBS → MS in the Clinical & Translational Science Graduate Program. Her thesis title was: **"Effect of Angioplasty and Hypoxia on Mitochondrial Biogenesis and Intimal Hyperplasia in Swine Coronary Artery**"; Graduated in May 2019.

75. Alison D. Ruckstuhl → MS in the Clinical & Translational Science Graduate Program. Her thesis title was: **"Advanced Glycation End Products in Diabetes and Tobacco Affect Collagen Phenotype in Rotator Cuff Injury Healing Response**"; Graduated in May 2019.

76. Wanlin Jiang, MS → Ph.D. in the Department of Clinical & Translational Science. Her research project was on the "**Epigenetics of intimal hyperplasia and in-stent restenosis in coronary artery disease**". (Co-advisor with Dr. Chandra S. Boosani); Graduated in August 2019.

77. Hoangvi Le → Master of Science in the Graduate College of Biomedical Sciences, Western University of Health Sciences, Pomona, CA. Her research project title is: "**Hypercholesterolemia, Chronic Inflammation, and Skeletal Muscle Atrophy in Rotator Cuff Muscle".** (Co-advisor with Dr. Vikrant Rai); Graduated in May 2023.

COMMITTEE SERVICES at Western University of Health Sciences

07/2019 – June 2021	WesternU President's Senior Executive Team (PSET)
03/2020 – 02/2022	WesternU Demobilization Team Task Force
07/2021 – 02/2022	WesternU Senior Administrative Leadership
09/2022 – present	WesternU College of Osteopathic Medicine Admissions Committee
11/2022 – present	Western U College of Osteopathic Medicine Students' Performance Committee

COMMITTEE SERVICES at Creighton University (1985- June 2019)

08/1988 – 08/1991	Health Sciences Library Committee
08/1990 – 08/1993	Committee on Students' Research and Scholarly Activities
01/1992 – 06/1993	Research Task Force, Creighton University
10/1988 – 06/2019	Supervisory Committee of the graduate students in the Departments of Biomedical Sciences, Medical Microbiology and Immunology, and Pharmacology

01/1986 – 06/2004	Interviewer of the applicants for Allergy-Immunology Fellowship at Creighton University Medical Center
09/1996 – 06/2003	Member of the MD/PhD Advisory and Selection committee, School of Medicine, Creighton University
02/1987 – 06/2018	Oral presentation and Poster presentation Judge at the Mid-West Research Forum, organized by Creighton University and University of Nebraska Medical Center
08/1997- 07/1998	Ad-hoc member of the Creighton University Academic Council
03/1997 – 06/1999	Creighton University Service Center Task Force
08/1997 – 08/2000	Rank & Tenure Committee, School of Medicine
10/1997- 08/2000	**Chair**, Committee on Students' Research and Scholarly Activity, School of Medicine.
09/1998 – 08/2000	**Chair**, Committee on Committees, School of Medicine, Creighton University
01/1999 – 04/2003	Research Design Team, Mission-Based Management Project, Creighton University School of Medicine
09/1999 – 08/2000	**Chair**, Rank and Tenure Committee, Creighton University School of Medicine
03/2000 – 05/2000	Ad-hoc Committee on Scientific Fraud and Misconduct, School of Medicine
08/2000– 08/2002	Academic Council, Creighton University
08/2000–08/2003	**Chair**, Committee on Governance and Administration, School of Medicine
11/2000–03/2001	Research Compliance Committee of Creighton University
06/2001	School of Medicine Research Planning Committee
10/2001 - 06/2003	Biosafety Laboratory Facility Committee, School of Medicine
09/2002 – 08/2005	Elected Member of the Rank & Tenure Committee, School of Medicine
09/2002 – 08/2005	Continuing Medical Education Committee, School of Medicine
01/2003 – 09/2003	Member, Search Committee for Chairman of Surgery, Creighton University Medical Center
02/2003 – 10/2003	Member of the LCME committee, Creighton University School of Medicine
10/2003 – 08/2005	**Chair**, Rank & Tenure Committee, Creighton University School of Medicine
01/2004 – 03/2004	Member of the Research Task Force, Creighton University School of Medicine
03/2004 – 10/2004	Member of the Professionalism Committee, Creighton University School of Medicine
08/2004 – 08/2007	**Chair**, Committee on Students' Research and Scholarly Activity, School of Medicine.
08/2004 – 08/2005	Member of the Ad-hoc Committee on developing Promotion and Tenure Guidelines, Creighton University School of Medicine
10/2004 – 01/2005	Member of the Basic Science Departments' Reorganization Task Force, Creighton University School of Medicine
10/2004 – 08/2007	Member - Creighton University Academic Council and Faculty Council
09/2005 – 08/2008	Member, Committee on Continuing Medical Education, School of Medicine
09/2005 – 08/2008	Elected Member - Creighton University Rank & Tenure Committee
07/2006 – 01/2010	**Chair**, Graduate Students' Coordination Committee, Department of Biomedical Sciences, Creighton University
07/2007 – 08/2011	**Director**, Departmental Seminar Series Program, Department of Biomedical Sciences, Creighton University
04/2008 – 12/2008	**Chair**, Graduate and Postdoctoral Education Task Force, School of Medicine, Creighton University
04/2009 – 06/2019	**Chair**, Internal Advisory Panel of the Clinical & Translational Science Program at Creighton
04/2009 – 06/2019	Member, Executive Committee of the Creighton University School of Medicine
07/2009 – 06/2019	Member, Creighton University Research Advisory Council
08/2010 – 07/2013	Member, Rank & Tenure Committee of the School of Medicine, Creighton University
10/2010 – 06/2011	Member, LCME –Self Study Committee of the School of Medicine, Creighton University

08/2010 – 08/2018	Member Graduate School Board, Creighton University
05/2012 – 12/2015	Co-chair, Research Workgroup in Alegent † Creighton Merger
08/2012 – 12/2012	Member, Strategic Planning Committee preparing for Alegent† Creighton Merger
08/2012 – 06/2019	Creighton University School of Medicine Medical School Admissions Committee
08/2014 – 06/2019	Creighton University School of Medicine MD-PhD Admissions Committee

COMMUNITY SERVICES

10/1985 – present	Member of the India Association of Nebraska
07/1992 - 06/1993	**President**, India Association of Nebraska
03/1992	Founding member of the Hindu Temple of Nebraska
03/1992	Member of the Board of Trustees, Hindu Temple of Nebraska
07/1997 – 06/1999	Secretary, Executive Committee of the Hindu Temple of Nebraska
07/1995– present	Volunteer advisor to several local high school and undergraduate students in their academic pursuit
01/1999 – 12/1999	**Chair,** Sports Committee, India Association of Nebraska
07/1999 – 06/2000	**President**, Executive Committee of the Hindu Temple of Nebraska
07/2000 – 06/2001	**Chair**, Long-Range Planning Committee, Hindu Temple, NE
10/1999 – 03/2004	Treasurer, Asha for Education (a non-profit organization promoting education of underprivileged children) Heartland chapter
07/2001– 12/2002	**Chair**, Publication Committee, Executive Committee of the Hindu Temple of Nebraska
07/2002 – 06/2003	**Chair**, Board of Trustees, Hindu Temple of Nebraska
07/2009 – 06/2015	Member, Board of Trustees, Hindu Temple of Nebraska

RESEARCH PUBLICATIONS

A. Ph.D. Theses:

1. Ph.D. (Biochemistry) Dissertation: **STUDIES ON BIOCHEMICAL CHANGES IN TISSUES OF DENGUE VIRUS INFECTED MICE**. Lucknow University, India, 1978. (**Major Advisors**: **Prof. Abhaya Kumar and Prof. R.M.L. Mehrotra)**

2. Ph.D. (Medical Sciences) Dissertation: **ALPHA-ADRENOCEPTORS IN VASCULAR SMOOTH MUSCLE AND THEIR ROLE IN HYPERTENSION**. McMaster University, Hamilton, Ontario, Canada, 1984. **(Major Advisor**: **Prof. Edwin E. Daniel**)

B. BOOKS:

1. "**AIRWAY SMOOTH MUSCLE: RECEPTOR MODULATION AND RESPONSE**", Editors **DK Agrawal** and RG Townley, CRC PRESS, Inc., Boca Raton, FL., 1990.

2. "**INFLAMMATORY CELLS AND MEDIATORS IN BRONCHIAL ASTHMA**", Editors: **DK Agrawal** and RG Townley, CRC Press, Inc., Boca Raton, FL., 1991.

3. "**IMMUNOPHARMACOLOGY OF ALLERGIC DISEASES**", Editors: Robert G Townley and **DK Agrawal**, Marcel Dekker, Inc. New York, NY, 1996.

4. **"STEM CELLS AND COVID-19"**: Editors: Sharma CP, **Agrawal DK**, Thankam FG, Elsevier Academic Press, London UK, 2022. ISBN 978-0-323-89972-7; https://doi.org/10.1016/B978-0-323-09972-7.00013

5. "**ENVIRONMENTAL FACTORS IN THE PATHOGENESIS OF CARDIOVASCULAR DISEASES**": Advances in Biochemistry in Health and Disease 30. Editors: Dragan M. Djuric and **Devendra K. Agrawal**, Springer Nature Switzerland AG, August 2024; https://doi.org/10.1007/978-3-031-62806-1

6. "**FLOW CYTOMETRY**": **Principles, Applications, and Clinical Perspectives**. Editors: Ranbir C Sobti, Awtar Krishan, and **Devendra K. Agrawal**, Springer (Nature) Singapore, 2024; https://doi.org/10.1007/978-981-97-4553-1

7. "**CARDIOVASCULAR TOXICITY: INCIDENCE, PATHOGENESIS, AND TREATMENT STRATEGIES".** Advances in Biochemistry in Health and Disease. Editors: **Devendra K. Agrawal,** Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric, Springer (Nature), May/June 2025.

C. ORIGINAL PEER-REVIEWED FULL-LENGTH PUBLICATIONS (with most recent article listed first)

1. Rostomian E, Ghookas K, Postajian A, Vartanian KB, Hatamian V, Fraix MP, **Agrawal DK**: Innovative Approaches for the Treatment of Spinal Disorders: A Comprehensive Review. *J Ortho Sports Med.* – submitted for publication February 2025.
2. Anderson Enni JB, **Agrawal DK**: Application of Artificial Intelligence and its Subsets in Various Stages of Knee Arthroplasty from Pre-op to Post-op: An Overview. *J Ortho Sports Med.* – submitted for publication February 2025.
3. Parvizi D, Sahafi R, Pisarski T, Kandikattu S, Aavula M, **Agrawal DK**: Risk Factors, Incidence, and Management of Re-Injury following Repair of Shoulder Rotator Cuff. *J Ortho Sports Med.* – submitted for publication February 2025.
4. Xia F, Smith J, Rai V, **Agrawal DK**: Interaction between Perivascular and Luminal Factors in Arteriovenous Fistula in Yucatan Miniswine. *Cardiol Cardiovasc Med*. 2025; 9(1): 44-50. DOI: 10.26502/fccm.92920422; PMID:
5. Stojanovic M, **Agrawal DK**: Cdc42 Regulatory Patterns related to Inflammatory Bowel Disease and Hyperglycemia. *J Bioinform Syst Biol. 2025; 8(1): 17-28. DOI: 10.26502/jbsb.5107098; PMID:*
6. Rajalekshmi R, **Agrawal DK**: Advancing Osteoarthritis Research: Insights from Rodent Models and Emerging Trends**.** *J Ortho Sports Med.* – submitted for publication February 2025.
7. Abdou A, Kades S, Masri-zada T, Asim S, Bany-Mohammed M, **Agrawal DK:** Lumbar Spinal Stenosis: Pathophysiology, Biomechanics, and Innovations in Diagnosis and Management. *J Spine Res Surg.* 2024; 6(4): 114-130. DOI: 10.26502/fjsrs0082; PMID:
8. Melanahalli S, **Agrawal DK**: Transient Ischemic Attack and Stroke in Cardiovascular Toxicity. In: Cardiovascular Toxicity: Incidence, Pathogenesis, and Treatment Strategies. Eds: Devendra K Agrawal, Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric; Chapter 1: Springer (Nature), May/June 2025.
9. Mendoza-Mari Y, **Agrawal DK**: Predisposing Role of Genetic and Epigenetic Factors in the Pathogenesis of Drug-induced Cardiovascular Toxicity. In: Cardiovascular Toxicity: Incidence, Pathogenesis, and Treatment Strategies. Eds: Devendra K Agrawal, Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric; Chapter 28: Springer (Nature), May/June 2025.
10. Maličević U, **Agrawal DK**: Anti-Inflammatory Bowel Diseases Drugs and Cardiovascular Toxicity. In: Cardiovascular Toxicity: Incidence, Pathogenesis, and Treatment Strategies. Eds: Devendra K Agrawal, Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric; Chapter 13: Springer (Nature), May/June 2025.
11. Collins S, Fraix MP, **Agrawal DK**: Modulation of Drug-Induced Oxidative Stress in Cardiovascular Toxicity. In: Cardiovascular Toxicity: Incidence, Pathogenesis, and Treatment Strategies. Eds: Devendra K Agrawal, Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric; Chapter 35: Springer (Nature), May/June 2025.
12. Rajalekshmi R, **Agrawal DK**: Potential Role of Nutraceuticals in the Prevention of Cardiovascular Toxicity. In: Cardiovascular Toxicity: Incidence, Pathogenesis, and Treatment Strategies. Eds: Devendra K Agrawal, Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric; Chapter 39: Springer (Nature), May/June 2025.
13. Stojanovic M, **Agrawal DK**: Effect of Antipsychotic and Antidepressant Drugs in Cardiovascular Toxicity. In: Cardiovascular Toxicity: Incidence, Pathogenesis, and Treatment Strategies. Eds: Devendra K Agrawal, Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric; Chapter 8: Springer (Nature),

May/June 2025.

14. Ahmed Z, Chaudhary F, **Agrawal DK**: Environmental Noise and Outdoor Light Pollution in the Pathogenesis of Cardiovascular Toxicity. In: Cardiovascular Toxicity: Incidence, Pathogenesis, and Treatment Strategies. Eds: Devendra K Agrawal, Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric; Chapter 30: Springer (Nature), May/June 2025.
15. Aavula M, Kandikattu S, **Agrawal DK**, Fraix MP: Physical Medicine and Rehabilitation Strategies in Cancer Treatment-Induced Cardiotoxicity. In: Cardiovascular Toxicity: Incidence, Pathogenesis, and Treatment Strategies. Eds: Devendra K Agrawal, Ranko Škrbić, Miloš P Stojiljković, and Dragan M. Djuric; Chapter 41: Springer (Nature), May/June 2025.
16. Balamurugan S, Shah R, Panganiban K, Lehrack M, **Agrawal DK**: Uterine Artery Embolization: A Growing Pillar of Gynecological Intervention. *J Radiol Clin Imaging*. 2025: 8(1): 1-17. DOI:10.26502/jrci.2809105; PMID:
17. Oo N, **Agrawal DK**: Epidemiology, Pathogenesis, Clinical Manifestations, and Management Strategies of Tuberculous Meningitis. *Arch Intern Med Res.* 2025;8(1):48-58. DOI: 10.26502/aimr.0195; PMID:
18. Pathak A, **Agrawal DK**: Role of gut microbiota in Long COVID: Impact on immune function and organ system health. *Arch Microbiol Immunology* 2025; 9: 32-47. DOI: 10.26502/ami.936500208; PMID:
19. Lam K, **Agrawal DK**: Lifestyle factors in the clinical manifestation and management of atopic dermatitis. *Arch Intern Med Res.* 2025;8(1):25-35. DOI: 10.26502/aimr.0193; PMID:
20. Pillarisetti L, **Agrawal DK**: Semaglutide: Double-edged sword with risks and benefits. *Arch Intern Med Res.* 2025;8(1):01-13. DOI: 10.26502/aimr.0189; PMID: 39902055; PMCID: PMC11790292
21. Patel J, Fraix MP, **Agrawal DK**: Linking pathogenesis to fall risk in multiple sclerosis. *Arch Intern Med Res.* 2025;8(1):36-47. DOI: 10.26502/aimr.0194 ; PMID:
22. Rajalekshmi R, **Agrawal DK:** Therapeutic efficacy of medicinal plants with allopathic medicine in musculoskeletal diseases. *Int J Plant Anim Environ Sci*. 2024;14(4):104-129. DOI: 10.26502/ijpaes.4490170; PMID: 39866300; PMCID: PMC11765655
23. Wais N, **Agrawal DK**: Systemic Lupus Erythematosus: Gene Polymorphisms, Epigenetics, Environmental, Hormonal and Nutritional Factors in the Consideration of Personalized Therapy. *Arch Intern Med Res.* 2024;7(4):331-340. DOI: 10.26502/aimr.0188; PMID: 39866364; PMCID: PMC11759484
24. Rajalekshmi R, Rai V, **Agrawal DK**: 14-3-3ζ: An Optimal Housekeeping Protein for Western Blot Analysis in Swine Rotator Cuff Tendon Studies. *Mol Cell Biochem* – February 2025 – under consideration.
25. Rajalekshmi R, **Agrawal DK**: Transcriptional and Post-Translational Mechanisms of ECM Remodeling in Rotator Cuff Tendons under Hyperlipidemic Conditions. *Life Sciences* – February 2025 – revision submitted.
26. Rai V, Le Hoangvi, **Agrawal DK**: Flow cytometry approach to differentiate resident versus infiltrated macrophages in athgerosclerosis. In: Flow Cytometry: Principles, Applications, and Clinical Perspectives. Eds: RC Sobti, A Krishan, DK Agrawal; Chapter 15: December 2024; Springer (Nature) Singapore.
27. Chaudhary F, **Agrawal DK**: Strategies to Minimize Virus Transmission During Anesthesia Procedures in COVID-19 Patients. *Anesth Crit Care*. 2024;6(4):48-59. doi: 10.26502/acc.071. PMID: 39811573; PMCID: PMC11732266.
28. Chaudhary F, **Agrawal DK**: Racial and Ethnic Disparity in the Administration of General Anesthesia. *Anesth Crit Care*. 2024;6(4):68-76. doi: 10.26502/acc.073. PMID: 39811572; PMCID: PMC11732571.
29. Ahmed Z, Pan J, Eskandar T, **Agrawal DK**: Outcomes and Complications Associated with Mechanical Thrombectomy in the Treatment of Acute Ischemic Stroke. *Cardiol Cardiovasc Med.* 2024;8(6):504-514. Epub 2024 Dec 10. PMID: 39726562; PMCID: PMC11671138.
30. Chaudhary F, **Agrawal DK**: Anesthesia-induced Developmental Neurotoxicity in Pediatric Population. *J Surg Res (Houst)*. 2024;7(4):490-500. doi: 10.26502/jsr.10020400. PMID: 39687550; PMCID: PMC11649317.
31. Xia F, Rai V, **Agrawal DK**: Vascular and Perivascular Role in the Regulation of Angiogenesis: Impact on Arteriovenous Fistula Maturation. *Arch Intern Med Res.* 2024;7(4):284-296. doi: 10.26502/aimr.0185. PMID: 39698202; PMCID: PMC11654682.
32. Sripathi P, **Agrawal DK**: Rotator Cuff Injury: Pathogenesis, Biomechanics, and Repair. *J Ortho Sports Med* 2024; 6(4): 231-248. DOI: 10.26502/josm.511500167; PMID:
33. Aggarwal A, Mendoza-Mari Y, **Agrawal DK**: Cellular and molecular mechanisms and innovative neurostimulation treatments in the management of traumatic brain injury. *J Biotechol Biomed*. November

2024; 7(4): 453-470. DOI: 10.26502/jbb.2642-91280169; PMID:
34. Saber B, Bridger D, **Agrawal DK**: A critical analysis of the factors contributing to anterior cruciate ligament injuries in female athletes. *J Ortho Sports Med* 2024; 6(4): 203-209. DOI: 10.26502/josm.511500163; PMID: 39513086; PMCID: PMC11542867
35. Rajalekshmi R, **Agrawal DK**: Synergistic Potential of Stem Cells and Microfluidics in Regenerative Medicine. *Mol Cell Biochem. 2024 Sep 16;* DOI: 10.1007/s11010-024-05108-8; PMID: 39285093
36. Pan J, Eskandar T, Ahmed Z, **Agrawal DK**: Biophysical and biological mechanisms of tumor treating fields in glioblastoma. *J Cancer Sci Clin Ther*. 2024;8(3):265-270. DOI: 10.26502/jcsct.5079249; PMID: 39364266; PMCID: PMC11448370
37. Rai V, Deepu V, **Agrawal DK**: Targeting RAGE-Signaling Pathways in the Repair of Rotator Cuff Injury. *Molecular and Cellular Biochemistry* 2024 Oct 12. Online ahead of print. DOI: 10.1007/s11010-024-05132-8; PMID: 39395136
38. Li Hoangvi, Rai V, **Agrawal DK**: Inflammation and Fatty Infiltration Correlates with Rotator Cuff Muscle Atrophy in Hypercholesterolemic Yucatan Microswine. *J Ortho Sports Med* 2024; 6(3): 198-213. DOI: 10.26502/josm.511500161; PMID: 39639857; PMCID: PMC11619632.
39. Ahmed Z, Chaudhary F, **Agrawal DK**: Epidemiology, pathophysiology, and current treatment strategies in stroke. *Cardiol Cardiovasc Med.* August 2024; 8(4): 389-404. DOI: 10.26502/fccm.92920399; PMID: 39301121; PMCID: PMC11412115
40. Rajalekshmi R, Rai V, **Agrawal DK**: Deciphering Collagen Phenotype Dynamics Regulators: Insights from In-Silico Analysis. *J Bioinform Syst Biol*. 2024; 7(3): 169-181. DOI: 10.26502/jbsb.5107089; PMID: 39484658; PMCID: PMC11526781
41. Malicevic U, Rai V, Skrbic R, **Agrawal DK**: Modulation of Orosomucoid-like Protein 3 Activity in the Management of Inflammatory Bowel Disease. *J Biotechnol Biomed*. 2024;7(4):433-444. doi: 10.26502/jbb.2642-91280167. PMID: 39619146; PMCID: PMC11606571.
42. Stojanovic M, Rai V, **Agrawal DK**: Effect of electromagnetic field on proliferation and migration of fibroblasts and keratinocytes: Implications in wound healing and regeneration. *J Biotechol Biomed*. September 2024; 7(3): 387-399. DOI: 10.26502/jbb.2642-91280162; PMID: 39364330; PMCID: PMC11448841
43. Lal MR LP, **Agrawal DK**: Biologically enhanced patch in the healing and mechanical stability of rotator cuff tears. *J Biotechnol Biomed*. September 2024; 7(3): 379-386. DOI: 10.26502/jbb.2642-91280161; PMID: 39364329; PMCID: PMC11448454
44. Ramachandran N, Ayoub N, **Agrawal DK**: Integrating Radioprotective Agents into Post-Mastectomy Radiotherapy: Optimization of Reconstructive Outcomes in Breast Cancer. *J Surg Res (Houst).* 2024;7(4):454-465. doi: 10.26502/jsr.10020395. PMID: 39605991; PMCID: PMC11600463.
45. Malicevic U, Rai V, Skrbic R, **Agrawal DK**: NLRP3 inflammasome and gut dysbiosis linking diabetes mellitus and inflammatory bowel disease. *Arch Intern Med Res*. September 2024; 7(3): 200-218. DOI: 10.26502/aimr.0178; PMID: 39328924; PMCID: PMC11426418
46. Eskandar T, Chaudhary F, **Agrawal DK**: Orthopedic dermatopathies: Skin manifestations in orthopedic conditions. *J Ortho Sports Med.* August 2024; 6(3): 171-183. DOI: 10.26502/josm.511500157 PMID: 39399309; PMCID: PMC11469588
47. Batta I, Patial R, Sobti RC, **Agrawal DK**: Computational biology in the discovery of biomarkers in the diagnosis, treatment and management of cardiovascular diseases. *Cardiol Cardiovasc Med.* 2024; 8(5): 405-414. DOI: 10.26502/fccm.92920400; PMID: 39328401; PMCID: PMC11426419
48. Eskandar T, Ahmed Z, Pan J, **Agrawal DK**: The decline of lumbar artificial disc replacement. *J. Spine Res and Surg.* 2024; 6(3): 86-92. DOI: 10.26502/fjsrs0078;PMID: 39267915; PMCID: PMC11392031
49. Chaudhary F, **Agrawal DK**: Ethnic and Racial Disparities in Clinical Manifestations of Atopic Dermatitis. *Archives of Internal Medicine and Research*. 2024;7(2):114-133; DOI: 10.26502/aimr.0170 ; PMID: 38938453; PMCID: PMC11210272
50. Chaudhary F, Ahmed Z, **Agrawal DK**: Critical Assessment of the Neurological Complications during High-Risk Anesthesia Procedures. *Journal of Surgery and Research* 2024;7(2):250-266; https://doi.org/10.26502/jsr.10020367 ; PMID: 38947250; PMCID: PMC11213287
51. Lal MR, **Agrawal DK**: Chronic adaptation of Achilles tendon tissues upon injury to rotator cuff tendon in hyperlipidemic swine. *J Ortho Sports Med.* 2024;6(2):80-88. DOI: 10.26502/josm.511500146 ; PMID: 38939871 ; PMCID: PMC11210446

52. Chaudhary F, Lee W, Eskandar T, **Agrawal DK**: Exploring the Complexities of Atopic Dermatitis: Pathophysiological Mechanisms and Therapeutic Approaches. *Journal of Biotechnology and Biomedicine* 2024; (7(3): 314-328. DOI: 10.26502/jbb.2642-91280155 ; PMID: 39119011**;** PMCID: PMC11309089
53. Chaudhary F, Ahmed Z, Fraix MP, **Agrawal DK**: Air pollution and the pathogenesis of cardiovascular disease. In: Springer (Nature) *Environmental factors in the Pathogenesis of Cardiovascular Diseases*, Advances in Biochemistry in Health and Disease; Eds DM Djuric and DK Agrawal; August 2024; Volume 30; Chapter 4; pp. 133-166. https://doi.org/10.1007/978-3-031-628-1_4
54. Lee W, Chaudhary F, **Agrawal DK**: Environmental Influences on Atopic Eczema. *Journal of Environmental Science and Public Health* 2024; 8(2): 101-115. DOI: 10.26502/jesph.96120209 PMID: 39157262; PMCID: PMC11328973
55. Shanmuganathan G and **Agrawal DK:** Diabetes and Abdominal Aortic Aneurysm: Is the protective effect on AAA due to antidiabetic medications alone, due to the disease alone, or both? *Archives of Internal Medicine and Research*. 2024; 7(2): 104-113. DOI: 10.26502/aimr.0169 ;PMID: 38846325; PMCID: PMC11156236
56. Rajalekshmi R, **Agrawal DK**: Understanding Fibrous Tissue in the Effective Healing of Rotator Cuff Injury. *Journal of Surgery and Research (Hous.)* 2024;7(2):215-228. DOI: 10.26502/jsr.10020363 PMID: 38872898; PMCID: PMC11174978
57. Ahmed Z, Chaudhary F, **Agrawal DK:** Epidemiology, Mechanisms and Prevention in the Etiology of Environmental Factor-Induced Cardiovascular Diseases**.** *Journal of Environmental Science and Public Health*. 2024; 8(2): 59-69. DOI: 10.26502/jesph.96120206 ; PMID:38911615; PMCID: PMC11192553
58. Rajaleskmi R, **Agrawal DK**: Energizing Healing with Electromagnetic Field Therapy in Musculoskeletal Disorders. *J Orthop Sports Med.* 2024; 6(2): 89-106. DOI: 10.26502/josm.511500147 PMID: 39036742**;** PMCID: PMC11258965
59. Deepu V, Rai V, **Agrawal DK**: Quantitative Assessment of Intracellular Effectors and Cellular Response in RAGE Activation. *Archives of Internal Medicine and Research*. 2024; 7(2): 80-103. DOI: 10.26502/aimr.0168 ; PMID: 38784044; PMCID: PMC11113086
60. Trinh J, Jennifer Shin J, Rai V, **Agrawal DK:** Targeting Oncostatin M Receptor to Attenuate Carotid Artery Plaque Vulnerability in Hypercholesterolemic Microswine. *Cardiol Cardiovasc Med.* May 2024; 8(2): 206-214. DOI: 10.26502/fccm.92920380 ; PMID: 38817407; PMCID: PMC11138392
61. Trinh J, Shin J, Rai V, **Agrawal DK**: Therapeutic potential of targeting $p27^{kip1}$ in plaque vulnerability. *Archives of Internal Medicine Research.* 2024; 7(2): 73-79. DOI: 10.26502/aimr.0167 ; PMID: 38737892; PMCID: PMC11087066
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