

## Curriculum vitae

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**Naturalized citizen  
United States (1982)  
Birth Date:  
April 17, 1938.  
Birth Place:  
Tumkur, India**

#### Employment:

Professor	1988-Present, Department of Laboratory Medicine and Pathology, Anesthesiology, Lillehei Heart Institute, and Biomedical Engineering Institute, University of Minnesota, Minneapolis, Minnesota 55455
Assoc. Prof.	1981-1988 University of Minnesota, MN
Asst. Prof.	1975-1981 University of Minnesota, Minneapolis
Scientist	1972-1975 University of Minnesota, Minneapolis, MN
Assoc. Sci.	1972-1973 University of Minnesota, Minneapolis, MN

#### Post-Graduate Training:

Post-Doctoral Fellow	1970-1971	University of Minnesota, Minneapolis, MN
Post-Doctoral Fellow	1968-1970	Texas A & M University, College Station, Texas
Graduate Student	1965-1968	Kansas State University, Manhattan, Kansas
Research Fellow	1961-1965	Central Food Technological Research Institute, Mysore, India
Research Fellow	1959-1961	Commonwealth Institute of Biological Control, India

#### Education:

Ph. D.	1968	Kansas State University, Kansas, USA
M. S.,	1959	University of Poona, India
B. Sc., (Honors)	1958	University of Poona, India
B. Sc.,	1957	University of Mysore, India

#### Scholarships:

Graduate Scholarship	1961-1965	Council of Scientific and Industrial Research
Post-Doc Fellow	1971-1972	USPHS, NIH, Toxicology Training Department Pharmacology, University of Minnesota,

**Society Affiliations:**

Member	2003-	Society for Biomaterials, USA
Life Member	1990-	Society for Biomaterials and Artificial Organs (India)
Rotary Club	1999-Todate	Paul Harris Fellow
Life Fellow	1999-Todate	The Commonwealth Association For Mental Handicap and Developmental Disabilities, United Kingdom
Member	1993-Todate	Indian College of Cardiology, India
Founder	1988-Todate	Secretary, South Asian Society on Atherosclerosis and Thrombosis (SASAT)
Member	1988-Todate	American Society for Biochemistry and Molecular Biology (ASBMB)
Member	1988-Todate	The Biochemical Society, London, United Kingdom
Life Member	1984	The Academy of Environmental Biology, India
Member	1986-Todate	The New York Academy of Sciences, NY, USA
Member	1984-1988	American Association for the Advancement of Science (AAAS), USA
Member	1984-1988	American Society of Hematology, USA
Life Member	1980	Friends of Vellore, Christian Medical College, India
Member	1972-1980 (2000-)	American Association of Clinical Chemists (AACC), USA
Member	1982-Todate	National Thrombosis Council, AHA, USA
Member	1980-Todate	International Society for Thrombosis and Haemostasis (ISTH)
Member	1980-1988	American Association of Pathologists (AAP), USA
Life Member	1978	Chronobiological Society of India, India
Member	1980-Todate	Association of Scientists of Indian Origin in America, USA
Fellow	1978-Todate	National Academy of Clinical Biochemists, USA
Member	1972-1982	American Association for Clinical Chemists, USA
Member	1978-Todate	Minnesota Chromatography Forum, USA
Member	1968-1972	Sigma Xi and Gamma Sigma Delta, USA
Founder	1962-Todate	Academy of Pest Control Sciences, India
Life Member	1962	Food and Grain Technologists Research Association, India
Life Member & Fellow	1960	Entomological Society of India, India
Fellow	1960-1965	Royal Entomological Society, London, United Kingdom
Member	2000-	American Association of Blood Banks
Member	2002-	International Society of Blood Transfusion

### Manuscripts (Submitted/Preparation)

1. Chandy T, Das GS, Wilson RF, Rao GHR (In Press). Use of plasma glow for surface engineering biomolecules to enhance blood compatibility of Dacron and PTFE vascular prostheses. *Biomaterials*
2. Chandy T, Das GS, Rao GHR. Fluorouracil loaded chitosan coated polylactic acid microspheres as biodegradable drug carriers for cerebral tumors. *J. Microencapsulation*.
4. Kohler AS, Parks PJ, Mooradian DL, Rao GHR and Furcht LT. (1998 ?). Platelet adhesion on novel phospholipid materials: Modified phosphatidylcholine covalently immobilized to silica, polypropylene and PTFE materials. *J. Biomat. Res.*
5. Rao GHR, Escolar G, White JR, Weiss DJ, Bono A, Ordinas A and White JG. (1998 ?). Differential response of human and bovine platelets to von Willebrand factor and vascular subendothelium. *Thromb. Haemostasis*.
6. Wolf MF, Overend ME, Fogt EJ and Rao GHR. (1998 ?). Responses in human blood following contact with the carmeda immobilized heparin surface.
7. Bandopadhyay P, Rao GHR and Rahman YE. (1998 ?). Evaluation of the endocytosis of liposomes by human blood platelets. I. Establishment of endocytosis and determination of the mechanism of uptake using a novel method.
9. Escolar G, Rao GHR, Nieuwenhuis HK and White JG. (1998?). Ultrastructural expression of p-selectin on the surface of activated platelets.
10. Wallis R, Bhadiraju K, Hansen L, Rao GHR, Mooradian D, Furcht LJ and Gelasco WB. (1998?). Synthesis, characterization and biological activities of polyvinyl saccarides and their sulfates. *Biomaterials* of glycosaminoglycans. *J. Biomed. Mat. Res.*
11. Zhang YY, Yirrel M, Mays J and Rao GHR. (1998?). Improved blood compatibility of self-assembled polyelectrolytes. *J. Biomaterials*.
12. Zhao Q, Fogt E, Wolf M and Rao GHR. (1998?). Detection of activation-dependent changes in platelets using an improved flow cytometric assay and diluted whole blood without anticoagulants. *Blood*
13. Omer Aras, Michael Y. Tsai, Naomi Q Hanson, Robert Bailey, Gundu H. R. Rao, Donald B. Hunninghake: Cystatin C is an Independent Predictor of Fasting and Post-Methionine Load Total Homocysteine Levels among Stable Renal Transplant Recipients. (*Transplant*)

### Publications (1996-present)

1. Rao GHR, Peller JD, Lee JY, Knopman DS and White JG. (1996). Biochemical and functional responses of platelets from patients with Alzheimer's disease. *Ind. J. Physiol. Pharmacol.* 40, 5-14.
2. Padoni E, Alexandre A, Cavalline L, Rao GHR and Doni MG. Human platelet activation is inhibited by the occupancy of glycoprotein IIb/IIIa receptor. *Arch. Biochem. Biophys.* 333, 407-413, 1996.
3. Escolar G, Rao GHR, Nieuwenhuis K and White JG. Ultrastructure expression of p-selectin on surface activated platelets. *Platelets* 7, 297-301, 1996.
4. White JG and Rao GHR. (1996). Thrombin-induced inhibition of platelet agglutination by von Willebrand factor (vWF): Reversal by ionized calcium. *Platelets* 7, 321-328.
5. White JG and Rao GHR. Aggregated-disaggregated, refractory platelets retain sensitivity to resocetin. *Thromb. Res.* 84, 253-256, 1996.
6. Rao GHR, Peller JD and White JG. Influence of ionized calcium on thrombin-induced down-regulation of GPIIb/IX receptors in human platelets. *Thromb. Res.* 85, 23-31, 1997.
7. White JG, Krumweide MD, Cocking-Johnson DJ, Burriss S and Rao GHR. Influence of cytochalasin B (CB) on GPIIb distribution after thrombin or TRAP and before surface activation. *Platelets* 8, 53-60, 1997.
8. Rao GHR and White JG. Epinephrine and platelet function. *J. Lab. Clin. Med.* 130, 238-239, 1997
9. White JG and Rao GHR. Microtubule coils versus the surface membrane cytoskeleton in maintenance and restoration of platelet discoid shape. *Am. J. Pathol.* 152, 597-609, 1998.
10. Rao GHR: Role of platelet adhesion and aggregation on thrombus formation. *Thromb. Haemost.* 79, 454-455, 1998.
11. Chandy T, Vasudev SC and Rao GHR: Changes in pericardial calcification due to anti-platelet agents: in vitro studies. *Art. Org.* 22:666-71, 1998.
12. Chandy T, Mooradian DL and Rao GHR: Chitosan/polyethylene glycol-alginate microcapsules for oral delivery of hirudin. *J. Applied Polymer Sci.* 70:2143-53, 1998.
13. Chandy T, Mooradian DL and Rao GHR: Platelet adhesion and spreading on protein coated surfaces. Variations in behavior in washed cells, PRP and whole blood. *J. Biomat. Appl.* 13:46-65, 1998
14. Chandy T, Vasudev SC, Rao GHR and Sharma CP: Pericardial calcification: Changes due to

antiplatelet agents. *Cardiovas. Eng.* 3:79-85,1998.

15. Escolar G, Lozano M, Diaz-Ricart M, Rao GHR, Ordinas A and White JG. Modifications in accessibility of membrane glycoproteins binding specific ligands and coagulation factors V during the activation of platelets in blood emerging from bleeding time wounds. *Am J Hematol* 60:260-67, 1999.
16. Rao GHR, Chandy. (1999). Role of platelets in blood-biomaterial interactions. *Bull of Mater Sci.* 22: 101-107.
17. Chandy T, Das GS, Wilson RF, Rao GHR(1999). Surface immobilized biomolecules on albumin modified porcine pericardium for preventing thrombosis and calcification. *Intern J. Artif. Organs* 22:547-558, 1999.
18. Chandy T, Mooradian DL Rao GHR (1999). Evaluation of modified alginate-PEG microcapsules for cell encapsulation *Artif. Organs* 23:894-903.
19. Chandy T, Das GS, Rao GHR: 5 Fluorouracil-loaded chitosan coated polylactic acid microspheres as biodegradable drug carriers for cerebral tumours. *J. Microencapsulation.* 17: 625-638, 2000
20. Rao, GHR, Escolar G, White JR, Weiss DJ, Burris S, Ordinas A, White JG: Differential response of human and bovine platelets to bovine von Willebrand factor and vascular subendothelium. *Platelets* 12: 150-155, 2001.
21. Chandy T, Wilson RF, Rao GHR and Das GS: Chnages in Cisplatin Delivery Due to Surface-Coated Poly (Lactic Acid) /Poly (e-Carpolactone) Microspheres. *J. Biomat. Appl.*16: 275-292, 2002.
22. Chandy T and Rao GHR: Preparation of surface-Engineered Elastin/Lamin Nerve Guide Tubes of Poly (lactic acid)/Poly (ethylene vinyl acetate). *J. Bioacitve & Comp Polymers* 17: 183-195, 2002.

#### **Publications (1991-1995)**

1. Rao GHR, Fareed J and White JG. (1991). Influence of heparins on inositol 1, 4, 5-trisphosphate-induced calcium mobilization in permeabilized human platelets. *Biochem. Med. Met. Biol.* 45, 171-180.
2. Rao GHR, Wilson RF, White CW and White JG. (1991). Influence of thrombolytic agents on human platelet function. *Thromb. Res.* 62, 319-334.
3. Bonebrake FL, Bertha B, Folts JD and Rao GHR. (1991). Verapamil combined with aspirin for inhibiting epinephrine-stimulated platelet thrombus formation in stenosed canine coronary arteries. *Cor. Art. Dis.* 2, 487-492.
4. Prikyl P, Siegelova J, Comelissen G, Dusek J, Dankova E, Fiser B, Vacha J, Ferrazzani S, Tocci A, Carusso A, Rao GHR, Fink H and Hallberg F. (1991). Chronotherapeutic treatment daily low-dose aspirin. *University of Minnesota-Medtronic Chronobiology Sem Ser.* 3, 1-8.

5. Kahmann RD, Donohue JM, Bradford DS, White JG and Rao GHR. (1992). Platelet function in adolescent idiopathic scoliosis. *Spine* 17, 145-148.
6. Rao GHR. (1992). The role membrane lipid in the platelet storage lesion. Commentary. *Blood Cells* 18, 498-500.
7. Rao GHR, Smith CM II and White JG. (1992). Influence of calcium antagonists on thrombin-induced calcium mobilization and platelet-vessel wall interactions. *Biochem. Med. Met. Biol.* 47, 226-231.
8. Rao GHR, Ericson DG, Weiss DJ, Parks PG and White JG. (1992). Influence of aspirin and carbacyclin on bovine platelet function. *ASAIO J.* 38, 830-834.
9. Rao GHR. (1992). Influence of storage on signal transduction pathways and platelet function. *Blood Cells* 18, 383-396.
10. Rao GHR, Rao ASC and White JG. (1992). Influence of low-dose enteric coated aspirin on platelet function. *Ind. Heart J.* 44, 365-371.
11. MacFarlane GD, Herzberg MC, Zhao QI and Rao GHR. (1992). The role of dense granule secretate and arachidonic acid metabolites in streptococcus sanguis-induced platelet aggregation. *Blood* 80, 2774-2780.
12. Smith CM II, Burris SM, Rao GHR and White JG. (1992). Detergent-resistant cytoskeleton of the surface activated platelet differs from the suspension-activated platelet cytoskeleton. *Blood* 80, 2774-2780.
13. Rao GHR (1993). Signal transduction, second messengers and platelet function. *J. Lab. Clin. Med.* 121, 18-22.
14. Sugihara T, Rao Ghr and Hebbel RP. (1993). Diphenyllanine: An unusual antioxidant. *Free Rad. J.* 14, 381-387.
15. Rao GHR, Escolar G and White JG. (1993). Biochemistry, physiology and function of platelets stored as concentrates. *Transfusion* 33, 766-778.
16. Rao GHR, Escolar G, Smith CM and White JG. (1993). Influence of heat on platelet biochemistry, physiology and function. *J. Lab. Clin. Med.* 122, 455-465.
17. Rao GHR, Gerrard JM, Murthy Mand White JG. (1993). Possible mechanisms of epinephrine actions in human platelets that are refractory to arachidonic acid. *Biochem. Med. Met. Biol.* 50, 322-337.
18. Rao GHR, Tate M, Hebbel R and White JG. (1994). Influence of antioxidants on arachidonic acid

metabolism and platelet function. *Biochem. Med. Met. Biol.* 51, 74-79.

19. Rao GHR, Escolar G and White JG. (1994). Monitoring signal transduction and cytoskeletal alterations by fluorescent imaging and confocal microscopy. *Ann. NY Acad. Sci.* 714, 297-300.
20. Murthy, M, Rao GHR, and Reddy S. (1994). 1, 3-dicotonoyl glycerol (1, 3-diC<sub>8</sub>) is as effective as 1, 2-diC<sub>8</sub> in priming phospholipase A<sub>2</sub> activation in human platelets and neutrophils. *Biochem. Med. Met. Biol.* 52, 89-96.
21. Reddy S, Rao GHR and Murthy. (1994). Differential effects of phorbol 12-myristate 13-acetate and diacylglycerols on thromboxane A<sub>2</sub>-dependent phospholipase A<sub>2</sub> in collagen-stimulated human platelets. *Biochem. Med. Met. Biol.* 51, 118-128.
22. Rao GHR and White JG. (1994). Influence of various doses of aspirin (in vivo) on platelet arachidonic acid metabolism (ex vivo) and function. *Prost. Leuk. Essen. Fatty Acids* 51, 63-69.
23. Rao GHR, Smith CM II, Doni MG and White JG. (1994). Intracellular calcium to adherent human platelets. *Arterioscler. Thromb.* 5, 95-105.
24. Rao GHR, Fields CM, White JG and Fields G. (1994). Promotion of human platelet adhesion and aggregation by a synthetic, triple-helical minicollagen. *J. Biol. Chem.* 269, 13899-13903.
25. Rao GHR. (1994). Signal transduction, second messengers and platelet pharmacology. *Pharmacol (Life Sci.)* 13, 39-44.
26. Rao GHR, Peller JD, Prakash YS, Doni MG and White JG. (1994). Monitoring signal transduction and cytoskeletal alterations in adherent platelets. *Arterioscler. Thromb.* 5, 155-165.
27. Rao GHR. (1994). Physiology of blood platelet activation. *Ind. J. Physiol. Pharmacol.* 37, 263-275.
28. Rao GHR and Rao AT. (1994). Pharmacology of platelet inhibitory drugs. *Ind. J. Physiol. Pharmacol.* 38, 69-84.
29. Rao GHR. (1994). Circadian variations and coronary artery disease. *Chronobiologia* 21, 63-64.
30. Rao GHR, Peller JD, Prakash YS, Doni MG and White JG. (1994). Monitoring signal transduction and cytoskeletal alterations in adherent platelets. *Arterioscler. Thromb.* 5, 155-168.
31. Murthy M, Rao GHR, Robinson P and Reddy S. (1995). Influx of extracellular calcium and agonist-coupling appear essential for the activation of thromboxane A<sub>2</sub>-dependent phospholipase A<sub>2</sub> in human platelets. *Prost. Leuko. Essen. Fatty Acids.* 53, 31-39.
32. Reddy S, Bose R, Rao GHR and Murthy M. (1995). Phospholipase A<sub>2</sub> activation in human neutrophils requires influx of extracellular calcium and leukotriene B<sub>4</sub>. *Am. J. Physiol.* 268, C138-C146.

33. Rao GHR. (1995). Physiology and pharmacology of platelets. *Internat. J. Prog. Cardiovas. Sci.* 2, 108-110.
34. White JG, Krumwiede MD, Cocking-Johnson D and Escolar G. (1995). Retention of GPIb/IX receptors on external surfaces of thrombin-activated platelets in suspension. *Blood* 86, 3468-3478.

#### **Publications (1986-1990)**

35. Rao GHR, Peller JD, Semba CP and White JG. (1986). Influence of the calcium sensitive fluorophore Quin 2 on platelet function. *Blood* 67, 354-361.
36. Rao GHR, Hill TD, John V, Vennerstrom JL, White JG and Holmes TJ. (1986). Inhibition of platelet aggregation by novel triphenylethylene analogs. *Thromb. Res.* 44, 527-538.
37. Rao GHR, Escolar G and White JG. (1986). Epinephrine reverses the inhibitory influence of aspirin on platelet-vessel wall interaction. *Thromb. Res.* 44, 65-74.
38. Rao GHR, Kishore NP and White JG. (1987). Differential effects of lipoxygenase inhibitors on arachidonic acid metabolism in cell free and intact platelet preparations. *Prst. Leuko. Med.* 26, 281-290.
39. Rao GHR, White JG and Cox CA. (1987). Influence of a calcium-dependent protease inhibitor on platelet activation and secretion. *Thromb. Res.* 47, 625-637.
40. Burris SM, Smith CM, Rao GHR and White JG. (1987). Aspirin treatment reduces platelet resistance to deformation. *Arteriosclerosis* 7, 385-388.
41. Rao GHR. (1987). Polyenoic acids and platelet function. *Recent Advances in essential fatty acid research* (Das UN, Ed.), Academic Press, India, pp.36-49.
42. Rao GHR. (1987). Influence of anti-platelet drugs on platelet-vessel wall interactions. *Prost. Leuko. Med.* 30, 133-145.
43. Rao GHR. (1987). Influence of calmodulin antagonist (stelazine) on agonit-induced calcium mobilization and platelet activation. *Biochem. Biophys. Res. Commun.* 148, 768-775.
44. Smith CM, Burris SM, Rao GHR and White JG. (1988). Epinephrine-induced reversal of aspirin effects on platelet deformability. *Thromb. Res.* 51, 35-44.
45. Rao GHR. (1988). Measurement of ionized calcium in normal human blood platelets. *Anal. Biochem.* 169, 400-408.
46. Rao GHR and White JG. (1988). An improved method for measuring endogenous serotonin in platelet of patients with Hermansky-Pudlak syndrome. *Thromb. Res.* 51, 225-227.

47. Authi KS, Rao GHR, Evenden BJ and Crawford N. (1988). Action of guanosine-5-0-[2-thidiphosphate] (GDPBS) on thrombin-induced activation and calcium mobilization in saponized and inact human platelets. *Biochem. J.* 255, 885-893.
48. Folts JD, Rowe GG and Rao GHR. (1988). Problem with aspirin as antithrombotic agent in coronary artery disease. *Lancet* 1, 937.
49. Rao GHR and White JG. (1989). Influence of phospholipase A<sub>2</sub> on human blood platelet  $\alpha$ -adrenergic receptor function. *Thromb. Res.* 53, 427-434.
50. Rao GHR and White JG. (1989). Epinephrine-induced platelet membrane modulation. In: *Platelet Amine Storage Granules* (Myers, K. Ed.), Academic Press.
51. Hill TD, White JG and Rao GHR. (1989). Platelet hypersensitivity induced by 1-chloro-2, 4-dinitro-benzene, hydroperoxides and inhibition of lipoxigenase. *Thromb. Res.* 53, 447-457.
52. Hill TD, White JG and Rao GHR. (1989). The influence of glutathione depleting agents on human platelet function. *Thromb. Res.* 53, 457-467.
53. Hill TD, White JG and Rao GHR. (1989). Role of glutathione and glutathione peroxidase in human platelet arachidonic acid metabolism. *Prostaglandins* 38, 21-32.
54. Schorer AE, Kaplan ME, Rao GHR and Moldow CF. (1989). Interleukin 1 stimulated endothelial cell tissue factor production and expression by a prostaglandin-independent mechanism. *Thromb. Haemosta.* 56, 256--259.
55. Grouse LH, Rao GHR, Weiss DJ, Perman V and White JG. (1990). Surface activated bovine platelets do not spread, they unfold. *Am. J. Pathol.* 136, 399-408.
56. Rao GHR, Raij L, Lester B and White JG. (1990). Inhibition of agonist-induced human platelet activation by nitric oxide. *Proc. Royal Society Sym.* (Moncada S and Higgs EA, Eds.), Elsevier Publishing Company Inc., NY, pp. 355-367.
57. Krishnamurthi S, Wheeler-Jones CPD, Patel Y, Sadowska K, Kakkar VV and Rao GHR. (1990). Nitroprusside inhibits platelet function primarily by inhibiting calcium mobilization. *Biochem. Soc. Trans.* 18, 468-470.
58. Rao GHR, Krishnamurthi S, Raij L and White JG. (1990). Influence of nitric oxide on agonist-mediated calcium mobilization in platelets. *Biochem. Med. Met. Biol.* 43, 271-275.
59. Weiss DJ, McClay CB, Smith CM II, Rao GHR and White JG. (1990). Platelet function in the racing through-bred. Implications for exercise-induced hemorrhage. *Vet. Clin. Pathol.* 19, 35-39.
60. Witkop CJ, Babcock MN, Rao GHR, Gaudier F, Summers CG, Shanahan F, Harmon KR, Townsend

D, King RA, Sedano HO, Cal SX, Krumwiede M, Almadovar C, Cruz H, Piners B and White JG. (1990). Albinism and Hermansky-Pudlak Syndrome in Puerto Rico. *Biol. Assoc. Med. Puerto Rico* 82, 333-339.

61. Rao GHR and White JG. (1990). Aspirin, PGE<sub>1</sub> and Quin-2 AM induced platelet dysfunction. Restoration of function by norepinephrine. *Prost. Leuk. Essen. Fatty Acids* 39, 141-146.

62. Rao GHR, Escolar G, Zavoral J and White JG. (1990). Influence of adrenergic receptor blockade on aspirin-induced inhibition of platelet function. *Platelets* 1, 145-150.

#### **Publications (1981-1985)**

63. Peterson DA, Gerrard JM, Rao GHR and White JG. (1981). Salicylic acid inhibition of the irreversible effect of acetylsalicylic acid on prostaglandin synthetase may be due to competition for the enzyme-cationic-binding site. *Prost. Med.* 6, 161-164.

64. Rao GHR, Reddy KR and White JG. (1981). Modification of human platelet response to sodium arachidonate by membrane mediation. *Prost. Med.* 6, 75-90.

65. Rao GHR, Johnson JM, Einzig S and White JG. (1981). Effect of amrinone: A cardiostimulant drug on hemodynamics and platelet function. *Prost. Med.* 6, 75-90.

66. Peterson DA, Gerrard JM, Peller J, Rao GHR and White JG. (1981). Interaction of zinc with arachidonic acid. *Prost. Med.* 6, 91-99.

67. Rao GHR, Gerrard JM, Wikop CJ and White JG. (1981). Platelet aggregation independent of ADP release or prostaglandin synthesis in patients with the Hermansky-Pudlak syndrome. *Prost. Med.* 6, 472.

68. Rao GHR, Reddy KR and White JG. (1981). Low dose aspirin, platelet function and prostaglandin synthesis: Influence of epinephrine and alpha-adrenergic blockade. *Prost. Med.* 6, 485-494.

69. Rao GHR, Cox CA, Gerrard GM and White JG. (1981). Alpha-tocopherol quinone (TQ): A potent inhibitor of platelet activation. *Prog. Lipid Res.* 20, 549-552.

70. Peterson DA, Gerrard JM, Rao GHR and White JG. (1981). Reduction of heme by lipid peroxides and its potential relevance to understanding the control of cyclooxygenase activity. *Prog. Lipid Res.* 20, 299-302.

71. Gerrard JM, Rao GHR, Stuart MJ and White JG. (1981). Alterations in the balance of thromboxane and prostacyclin synthesis in platelet and the vessel wall in a diabetic model. In: *The Effects of Platelet Active Drugs on the Cardiovascular System* (Hirsch J, Steele PP and Vemier RL, Eds.), University of Colorado Press, pp. 207-223.

72. Rao GHR and White JG. (1981). Epinephrine potentiation of arachidonate-induced aggregation of cyclooxygenase deficient platelets. *Am. J. Hematol.* 11, 355-366.
73. Rao GHR, Peller JD and White JG. (1981). Rapid separation of platelet nucleotides by reverse-phase, isocratic, high pressure liquid chromatography with a rapidly compressed column. *J. Chromatography* 226, 466-470.
74. Rao GHR, Johnson GJ, Reddy KR and White JG. (1981). Rapid return of cyclooxygenase active platelets in dogs after a single oral dose of aspirin. *Prostaglandins* 22, 761-772.
75. Peterson DA, Gerrard JM, Glover SM, Rao GHR and White JG. (1982). Epinephrine reduction of heme: Implication for understanding the transmission of an agonist stimulus. *Science* 215, 71-73.
76. Einzig S, Rao GHR, Pierpont ME and White JG. (1982). Acute effects of amrinone on regional myocardial and systemic blood flow distribution in the dog. *Can. J. Physiol.* 60, 811-818.
77. Rao GHR, Schmid HHO, Reddy KR and White JG. (1982). Human platelet activation by an alkyl-acetyl analogue of phosphatidylcholine. *Biochim. Biophys. Acta* 715, 205-214.
78. Rao GHR, Peller JD, Richards KL, McCullough J and White JG. (1982) Rapid separation of nucleotides from granulocytes by isocratic, reverse-phase, high performance liquid chromatography. *J. Chromatography* 229, 205-210.
79. Rao GHR, Reddy KR and White JG. (1982). Effect of acetoaminophen and salicylate on aspirin-induced inhibition of human platelets cyclooxygenase. *Prost. Leuko. Med.* 9, 109-115.
80. Rao GHR, Reddy KR and White JG. (1982). A simple method for the separation of monohydroxy fatty acid metabolites of arachidonic acid metabolism. *J. Chromatography* 232, 176-179.
81. Rao GHR and White JG. (1982). Platelet activating factor (PAF) causes human platelet aggregation through the mechanism of membrane modulation. *Prost. Leuko. Med.* 9, 459-472.
82. White JG and Rao GHR. (1983). Effects of microtubule stabilizing agent on the response of platelets to vincristine. *Blood* 60, 474-483.
83. White JG and Rao GHR. (1983). Influence of microtubule stabilizing agent on platelet structural physiology. *Am. J. Pathol.* 112, 217.
84. Rao GHR, Johnson GJ, Reddy KR and White JG. (1983). Ibuprofen protects platelet cyclooxygenase from irreversible inhibition by aspirin. *Arteriosclerosis* 3, 384-388.
85. Gragg A, Einzig S, Castanedo-Zuniga W, Amplatz K, White JG and Rao GHR. (1983). Altered vessel wall arachidonate metabolism after angioplasty: Possible mediators of prostaangioplasty vasospasm.

Am. J. Cardiol. 51, 1441-1445.

86. White JG, Reddy KR and Rao GHR. (1983). Pencillin induced human platelet dysfunction and its reversal by epinephrine. *Prost. Leuko. Med.* 11, 199-211.

87. Rao, GHR, Radha E and White JG. (1983). Effect of docosahexaenoic acid (DHA) on arachidonic metabolism and platelet function. *Biochem. Biophys. Res. Commun.* 117, 549-556.

88. Cox AC, Carroll RC, White JG and Rao GHR. (1984). Recycling of platelet phosphorylation and cytoskeletal assembly. *J. Cell Biol.* 98, 8-15.

89. Rao GHR, Radha E, Johnson GJ and White JG. (1984). Enteric-coated aspirin, platelet cyclooxygenase activity and function. *Prost. Leuko. Med.* 13, 3-12.

90. Rao GHR and White JG. (1985). Heme-polyenoic acid interaction and prostaglandin synthesis. In: *Prostaglandins, Leukotrienes and Lipoxins* (Bailey JM, Ed.), Plenum Publications Corporation, pp. 357-371.

91. Rao GHR and White JG. (1985). Role of arachidonic acid metabolism in human platelet activation and irreversible aggregation. *Am. J. Hematol.* 19, 339-347.

92. Rao GHR and White JG. (1985). Disaggregation and reaggregation of irreversibly aggregated platelets: A method for more complete evaluation of antiplatelet drugs. *Agents and Actions* 16, 425-434.

93. Rao GHR and White JG. (1985). Comparative pharmacology of cyclooxygenase inhibitors. *Prost. Leuko. Med.* 18, 119-131.

94. Einzig S, Borgwardt B, Noren GR, Staley NA, White JG and Rao GHR. (1985). Arachidonic metabolism in thrombocytes and vascular tissues of turkeys. *Prostaglandins* 30, 999-1018.

95. Rao GHR, Radha E and White JG. (1985). Irreversible platelet aggregation does not depend on lipoxygenase metabolites. *Biochem. Biophys. Res. Commun.* 131, 50-57.

96. Rao GHR, Peller JD and White JG. (1985). Measurement of ionized calcium in blood platelets with a new generation calcium indicator. *Biochem. Biophys. Res. Commun.* 132, 652-657.

97. Radha E, Hill TD, Rao GHR and White JG. (1985). Glutathione levels in human platelets display a circadian rhythm in vitro. *Thromb. Res.* 40, 823-831.

#### **Publications (1976-1980)**

98. Rao GHR. (1976). Microbial insecticides. Chapter in *Current Topics in Applied Microbiology*.

99. Rao GHR. (1976). Fungal toxins in foods. Chapter in *Current Topics in Applied Microbiology*.

100. Rao GHR, White JG, Jachimowicz AA and Witkop CJ Jr. (1976). An improved method for the

extraction of endogenous platelet secretion. *J. Lab. Clin. Med.* 87, 129-137.

101. Gerrard JM, White JG, Rao GHR and Townsend D. (1976). Localization of platelet prostaglandin production in the platelet dense tubular system. *Am. J. Pathol.* 83, 283-299.

102. Horns DJ, Gerrard JM, Rao GHR, Krivit W and White JG. (1976). Smoking and labile platelet aggregation stimulating substance (LASS) synthesizing activity. *Thromb. Res.* 9, 661-668.

103. Rao GHR, Friedland M, Gerrard JM and White JG. (1977). The influence of metabolites on the assay of platelet serotonin. *Thromb. Res.* 10, 791-802.

104. Gerrard JM, Rao GHR and White JG. (1977). The influence of reserpine and ethylenediaminetetraacetic acid (EDTA) on serotonin storage organelles of blood platelets. *Am. J. Pathol.* 87, 633-646.

105. White JG, Rao GHR and Gerrard JM. (1977). Effects of nitroblue tetrazolium and vitamin E on platelet ultrastructure, aggregation and secretion. *Am. J. Pathol.* 88, 387-402.

106. Kuettner JF, Dreher KL, Rao GHR, Eaton JW, Blackshear PL and White JG. (1977). Influence of the ionophore, A23187, on the plastic behavior of normal erythrocytes. *Am. J. Pathol.* 88, 81-94.

107. Gerrard JM, Stoddard SF, Shapior RS, Coccia PF, Ramsay NKC, Nesbit ME, Rao GHR, Krivit W and White JG. (1978). Platelet storage pool deficiency and prostaglandin synthesis in chronic myelogenous leukemia. *J. Haematol.* 40, 597-607.

108. Peterson DA, Gerrard JM, Rao GHR, Krick RP and White JG. (1978). Ferrous iron-mediated oxidation of arachidonic acid. Studies employing nitroblue tetrazolium (NBT). *Prostaglandins and Medicine* 1, 304-317.

109. Schollmeyer JV, Rao GHR and White JG. (1978). An actin binding protein in human platelets: Interaction with actin on gelatin of actin and the influence of cytochalasin B. *Am. J. Pathol.* 93, 443-6.

110. Johnson GJ, Rao GHR and White JG. (1978). Platelet dysfunction induced by parenteral carbenicillin and ticarcillin: Studies of the dose-response relationship and mechanism of action in dogs. *Am. J. Pathol.* 91, 85-166.

111. Rao GHR, Gerrard JM, Eaton JW and White JG. (1978). Arachidonic acid peroxidation, prostaglandin synthesis and platelet function. *Photochemistry and Photobiology* 28, 845-850.

112. Repine JE, Rao GHR, Beall GD and White JG. (1978). Inhibition of human neutrophil oxidative metabolism and degranulation invitro by nitroblue tetrazolium and vitamin E. *Am. J. Pathol.* 90, 659-674.

113. Rao GHR, Gerrard JM, Eaton JW and White JG. (1978). The role of iron in prostaglandin synthesis: Ferrous iron-mediated oxidation of arachidonic acid. *Prostaglandins and Medicine* 1, 55-70.

114. Rao GHR, Burris SM, Gerrard JM and White JG. (1979). Inhibition of prostaglandin (PG) synthesis in sheep vesicular gland microsomes (SVGM) by nitroblue tetrazolium (BT) and vitamin E. *Prost. Med.* 2, 203-216.
115. Butler AM, Gerrard JM, Peller J, Stoddard SF, Rao GHR and White JG. (1979). Vitamin E inhibits the release of calcium from a platelet membrane fraction in vitro. *Prostaglandins and Medicine* 2, 203-216.
116. Peterson DA, Gerrard JM, Rao GHR and White JG. (1979). Inhibition of ferrous iron induced oxidation of arachidonic acid by indomethacin. *Prostaglandins and Medicine* 2, 97-108.
117. Johnson GJ, Leis LA, Rao GHR and White JG. (1979). Arachidonate-induced platelet aggregation in the dog. *Thromb. Res.* 14, 147-154.
118. Rao GHR, Einzig S, Reddy KR and White JG. (1979). Tranlycypromine-induced hypertension is not mediated by the inhibition of prostacyclin synthesis. *Prostaglandins and Medicine* 3, 201-211.
119. White JG, Rao GHR and Gerrard JM. (1979). Vitamin E and platelets: Cooperative interactions with nitroblue tetrazolium on the inhibition of adhesion, aggregation and secretion. *Seminars in Hematology. Am. J. Ped. Hem./Onc.* 1, 155-168.
120. Paterson DA, Gerrard JM, Rao GHR, Mills EL and White JG. (1980). Interaction of arachidonic acid heme iron in the synthesis of prostaglandins. *Adv. Prost. Thromboxane Res.* 6, 157-161.
121. Rao GHR, Cox AC, Gerrard JM and White JG. (1980). Effects of 2, 2'-dipyridil and related compounds on platelet prostaglandin synthesis and platelet function. *Biochim. Biophys. Acta* 628, 479.
122. Johnson GH, Rao GHR, Leis LA and White JG. (1980). Effects of agents which alter cyclic AMP on arachidonic-induced platelet aggregation in the dog. *Blood* 55, 722-729.
123. Peterson DA, Gerrard JM, Rao GHR and White JG. (1980). Reduction in ferric heme to ferrous by lipid peroxides: Possible relevance to the role of peroxide tone in the regulation of prostaglandin synthesis. *Prostaglandins and Medicine* 4, 73-79.
124. Rao GHR, Reddy KR, Hagert K and White JG. (1980). Influence of pH on the prostacyclin (PGI<sub>2</sub>)-mediated inhibition of platelet function. *Prostaglandins and Medicine* 4, 263-273.
125. White JG, Rao GHR and Gerrard JM. (1980). Platelet stimulus activation contraction secretion coupling: A frequently fractured chain of events. In: *The Regulation of Coagulation* (Mann, Taylor, Eds.), Elsevier /North Holland Inc. pp. 363-376
126. Gerrard JM, Peterson DA, Rao GHR and White JG. (1980). Some recent advances in understanding the tangle of biochemical events involved in thromboxane-dependent and -independent aggregation. In: *The Regulation of Coagulation*. Elsevier/North Holland Inc. pp. 399-408.

127. Cox AC, Rao GHR, Gerrard JM and White JG. (1980). The influence of vitamin E quinone on platelet structure, function and biochemistry. *Blood* 55, 907-916.
128. Gerrard JM, Studart MJ, Rao GHR, Ssteffes MM, Mauer SM, Brown DM and White JG. (1980). Alteration in the balance of prostaglandin and thromboxane synthesis in diabetes. *J. Lab. Clin. Med.* 95, 950-957.
129. Einzig S, Rao GHR and White JG. (1980). Differential sensitivity of regional vascular beds in the dog to low dose prostacyclin infusion. *Can. J. Physiol. Pharmacol.* 58, 940-946.
130. Rao GHR, Reddy KR and White JG. (1980). The influence of epinephrine on prostacyclin (PGI<sub>2</sub>) induced dissociation of ADP aggregated platelets. *Prostaglandins and Medicine* 4, 385-397.
131. Rao GHR, Johnson GJ and White JG. (1980). Influence of epinephrine on the aggregation response of aspirin-treated platelets. *Prost. Med.* 5, 45-58.
132. Rao GHR, Krick TP and White JG. (1980). Preparation, separation and characterization of vitamin E quinone. *J. Chromatography* 196, 506-511.
133. Einzig S, Sotomora R, Rao GHR, Gerrard JM, Foker JE and White JG. (1980). Prostacyclin does not increase blood flow in acute ischemic canine myocardium. *Prost. Med.* 5, 209-221.
134. White JG, Hagert K, Nipper JHJ and Rao GHR. (1980). Functional platelets after storage in vitro for fifteen to twenty days. *Am. J. Pathol.* 101, 613-634.
135. Rao GHR, Reddy KR and White JG. (1980). Influence of trifluoperazine on platelet aggregation and disaggregation. *Prost. Med.* 5, 221-234.
136. Gerrard JM, Phillips DR, Rao GHR, Flow EF, Walz DA, Ross R, Harker LA and White JG. (1980). Biochemical studies of two patients with the gray platelet syndrome: Selective deficiency of platelet alpha granules. *J. Clin. Invest.* 66, 102-109.
137. Peterson DA, Gerrard JM, Rao GHR and White JG. (1980). Epinephrine and other activators of prostaglandin endoperoxide synthetase can reduce Fe<sup>3+</sup> heme to Fe<sup>2+</sup> heme. *Prost. Med.* 5, 357-365.
138. White JG, Rao GHR and Gerrard JM. (1980). Prostaglandins in platelet activation. In: *Platelets-Cellular Response Mechanisms and Their Biological Significance* (Rothman AN, Meyers FA, Gitler C and Silberg A, Eds.), John Wiley & Sons Ltd., pp. 201-211.

#### **Publications (1962-1975)**

139. Bano A, Rao GHR and Majumdar SK. (1962). Food preference of *Sitophilus* and *Bruchus*. In: *Proc.*

of the Second Congress in Zoology. P. 393-397.

140. Majumdar SK and Rao GHR. (1962). Possible use of food preferences of an insect as a factor for its control in stored commodities. *Curr. Sci.* 31, 238-239.

141. Rao GHR and Majumdar SK. (1963). Repellency of *Kaemferia galanga* Linn. (Zingiberaceae) to adults of *Tribolium Castaneum*. In: *Proceedings Symp. Med. Plants. Sci and Cult* 32, 461-462.

142. Rao GHR and Majumdar SK.(1964). Intergranular space as a limiting factor for growth of pulse beetles, a new principle for pest control. *J. Econ. Entomol.* 57, 1013-1014.

143. Rao GHR and Majumdar SK. (1965). Repellency of species, aromatic materials and essential oils to adults of *Tribolium castaneum*. In: *Proc. Symp. Med. Plants, Jammu, India.*

144. Keeley LL, Rao GHR and Hazal LG. (1969). Isolation and purification of *Heliothis nuclear polyhedra* and virions by density-gradient techniques. *Agri. Expt. Stn. Bull. PR-2704*, Texas A & M University, College Station, Texas.

145. Muthu M, Rao GHR and Majumdar SK. (1971). A bio-assay method for determining the fumigant concentration in air. *Int. Pest Control* 13, 11-14.

146. Rao GHR, Eugenio C, Christensen CM, De Las Casas E and Harein PK.(1971). Survival & reproduction of confused flour beetles exposed to fungus metabolites. *J. Econ. Entomol.* 64, 1563-1565.

147. Rao GHR and Wilbur DA. (1972). Loss of weight in wheat caused by the feeding of lesser grain borer. *J. Kan. Entomol. Soc.* 45, 238-241.

148. Rao GHR and Harein PK. (1972). Dichlorvos as an inhibitor of Aflatoxin production on wheat, corn, rice and peanuts. *J. Econ. Entomol.* 65, 988-989.

149. Harein PK and Rao GHR. (1972). Dichlorvos and Gardona as protectants for stored wheat against granary weevil infestations in laboratory studies. *J. Econ. Entomol.* 65, 1402-1406.

150. Rao GHR and Anders MW. (1973). Inhibition of microsomal drug metabolism by anticholinesterase insecticides. *Bull Env. Cont. Toxicol.* 9, 409.

151. Rao GHR and Anders MW. (1973). Aflatoxin detection by high-speed liquid chromatography and mass spectrometry. *J. Chromatography* 84, 402-406.

152. Rao GHR and Harein PK. (1973). Dichlorvos as an inhibitor of aflatoxin production on wheat, corn, rice and peanuts. In: *Ann. Technol. Agri. Wet Harvested Grains, Paris, France, 22*, 477-481.

153. Rao GHR and Harein PK. (1974). Inhibition of aflatoxin and zearalenone biosynthesis with dichlorvos. *Bull. Env. Toxicol.* 10, 112-115.

154. White JG, Rao GHR and Estensen RD. (1974). Investigation of the release reaction in platelets exposed to phorbol myristate acetate. *Am. J. Pathol.* 75, 301-314.
155. Rao GHR, Jachimowicz AA and White JG. (1974). Rapid separation of tumor-promoting agents, phorbol and phorbol myristate acetate (12-o-tetradecanyl phorbol-13-acetate) by high pressure liquid chromatography. *J. Chromatography* 96, 151-154.
156. Rao GHR, White JG, Jachimowicz AA and Witkop CJ Jr. (1974). Nucleotide profiles of normal and abnormal platelets by high pressure liquid chromatography. *J. Lab. and Clin. Med.* 84, 839-850.
157. White JG, Rao GHR and Gerrard JM. (1974). Effects of the ionophore, A23187, on blood platelets. I. Influence on aggregation and secretion. *Am. J. Pathol.* 77, 135-149.
158. Gerrard JM, White JG and Rao GHR. (1974). Effects of the ionophore, A23187, on blood platelets. II. Influence on aggregation and secretion. *Am. J. Pathol.* 77, 151-160.
159. Rao GHR and De Las Casas E. (1974). Effect of *Chaetomium* Spp. On *Tribolium confusum*. In: North Central Meetings, Entomological Society of America, Des Moines, Iowa.
160. Rao GHR and White JG. (1975). Influence of esterase inhibitors on platelet aggregation and release induced by phorbol myristate acetate. *Biochem. Pharmacol.* 24, 293-295.
161. Gerrard JM, White JG, Rao GHR, Krivit W, and Witkop CJ, Jr. (1975). Labile aggregation stimulating substance (LASS): The factor from storage pool deficient platelets correcting defective aggregation and release of aspirin-treated normal platelets. *Brit. J. Haematol.* 29, 411- 420.
162. Clawson CC, Rao GHR and White JG. (1975). Platelet interaction with bacteria. IV. Stimulation of the release reaction. *Am. J. Pathol.* 81, 411-420.
163. White JG, Matlack C, Mundschenk D and Rao GHR. (1975). Platelets disorders in normal and a bleeder horse. First International Symposium on Equine Hematology, pp 209-221.

#### **Reviews/Book Chapters**

1. White JG, Matlack C, Mundschenk D and Rao GHR. (1975). Platelet studies in normal and a bleeder horse. First International Symposium on Equine Hematology, pp. 209-221.
2. Rao GHR. (1976). Microbial insecticides. Chapter in *Current Topics in Applied Microbiology*.
3. Rao GHR. (1976). Fungal toxins in foods. Chapter in *Current Topics in Applied Microbiology*.
4. White JG, Rao GHR and Gerrard JM. (1980). Platelet stimulus activation contraction secretion coupling: A frequently fractured chain of events. In: *The Regulation of Coagulation* (Mann, Taylor, Eds.), Elsevier /North Holland Inc. pp. 363-376.

5. Gerrard JM, Peterson DA, Rao GHR and White JG. (1980). Some recent advances in understanding the tangle of biochemical events involved in thromboxane-dependent and -independent aggregation. In: The Regulation of Coagulation. Elsevier/North Holland Inc. pp. 399-408.
6. White JG, Rao GHR and Gerrard JM. (1980). Prostaglandins in platelet activation. In: Platelets-Cellular Response Mechanisms and Their Biological Significance (Rothman AN, Meyers FA, Gitler C and Silberg A, Eds.), John Wiley & Sons Ltd., pp. 201-211.
7. Gerrard JM, Rao GHR, Stuart MJ and White JG. (1981). Alterations in the balance of thromboxane and prostacyclin synthesis in platelet and the vessel wall in a diabetic model. In: The Effects of Platelet Active Drugs on the Cardiovascular System (Hirsch J, Steele PP and Vemier RL, Eds.), University of Colorado Press, pp. 207-223.
8. Rao GHR and White JG. (1985). Heme-polyenoic acid interaction and prostaglandin synthesis. In: Prostaglandins, Leukotrienes and Lipoxins (Bailey JM, Ed.), Plenum Publications Corporation, pp. 357- 371.
9. Rao GHR. (1987). Polyenoic acids and platelet function. Recent Advances in essential fatty acid research (Das UN, Ed.), Academic Press, India, pp.36-49.
10. Rao GHR, Kishore NP, Peller JD and White JG. (1987). Influence of polyenoic acids on arachidonic acid metabolism and platelet function. Cardiovascular Disease (Gallo L, Ed.), NY, Plenum Press, pp. 495-505.
11. Rao GHR, Hordinsky M, Witkop CJ and White JG. (1987). Influence of psoralen and ultraviolet therapy on platelet function and arachidonic acid metabolism in patients with vitiligo. Prostaglandins and Lipid Metabolism in Radiation Injury (Walden TL., Jr, and Hughes HN, Eds.), NY, Plenum Press, pp. 179-184.
12. Rao GHR, Cox CA, Witkop CH and White JG. (1987). Influence of UV light (250 nm) on platelet activation. Prostaglandin and Lipid Metabolism in Radiation Injury (Walden TL., Jr, and Hughes HN, Eds.), NY, Plenum Press, pp. 339-344.
13. Rao GHR, Gerrard JM, Witkop CJ and White JG. (1988). Origin and role of calcium in platelet activation contraction-secretion coupling. Cell Calcium Metabolism (Fiskum G, Ed.), NY, Plenum Publications, pp. 411-427.
14. Rao GHR, Cox CA, Mahadevappa VG and White JG. (1989). Influence of GDP( $\beta$ )S on agonist-induced calcium mobilization and platelet function. In: Biology of Cellular Transducing Signals (Franklin J, Ed.), Plenum Press, pp. 343-353.
15. Rao GHR, Mahadevappa VG, Hill TD and White JG. (1990). Arachidonic acid oxidation and platelet function (Reddy CC, Hamilton GA and Madyasta KM, Eds.), Biological Oxidation Systems, Academic Press, 770-790.

16. Rao GHR. (1992). Influence of storage on signal transduction pathways and platelet function. *Blood Cells* 18, 383-396.
17. Rao GHR and White JG. (1992). Epinephrine-induced platelet membrane modulation. In: *The Platelet Amine Storage Granule* (Meyers KM and Barnes CD, Eds.), CRC Press, Boca Baton, pp. 117-195.
18. Rao GHR, Escolar G and White JG. (1993). Biochemistry, physiology and function of platelets stored as concentrates. *Transfusion* 33, 766-778.
19. Rao GHR and White JG. (1993). Coronary artery disease: risk factors-an overview. *Ind. Heart J.* 145, 143-153.
20. Rao GHR, Rao ASC and White JG. (1993). Aspirin in ischemic heart disease: An overview. *Ind. Heart J.* 45, 73-79.
21. Rao GHR and Doni MG. (1993). Influence of nitrovasodilators on platelet function. *Thromb. Athero.* 4, 293-305.
22. Rao GHR. (1994). Physiology of blood platelet activation. *Ind. J. Physiol. Pharmacol.* 37, 263-275.
23. Rao GHR. (Press). Signal transduction, second messengers and pathogenesis of cardiovascular disease. *Proc. Fourth Internat. Conf. Health Diseases, India.*
24. Rao GHR. (1994). Signal transduction, second messengers and platelet pharmacology. In: *Environ. Physiol.* (Mallick BN and Singh R, Eds.), Narosa Publishing House, Delhi.
25. Rao GHR and Rao AT. (1994). Pharmacology of platelet inhibitory drugs. *Ind. J. Physiol. Pharmacol.* 38, 69-84.
26. Rao GHR. (1994). Signal transduction, second messengers and platelet pharmacology. *Pharmacology (Life Sci.)* 13, 39-44.
27. Rao GHR. (1994). Circadian variations and coronary artery disease. *Chronobiologia* 21, 63-64.
28. Prikryl P, Siegelova J, Cornelissen G, Dusek J, Dankova E, Ferrazzani S, Tocci A, Caruso A, Rao GHR, Fink H, and Halberg F. (1994). Chronotherapeutic piolet on 6 persons may guide tests on thousands: toward a circadian optimization of prophylactic treatment with daily low-dose aspirin. In: *Chronobiology and Chronomedicine, Humans in Time and Cosmos* (Otsuka K, Cornelissen G and Halberg F, Eds.), Life Science Publishing Co., pp. 113-117.
29. Rao GHR. (1995). Physiology and pharmacology of platelets. *Int. J. Prog. Cardiovas. Sci.* 2, 108-

110.

30. Rao GHR. (1996). Effect of exercise on platelet physiology and pharmacology. In: *Pharmacology in Exercise and Sports* (Somani SM, Ed.), CRC Press, Boca Baton, pp. 211-234.
31. Song CW, Kim GE, Lynos JC, Makepeace CM, Griffin RJ, Rao GHR and Cragoe EJ. (In Press). Thermosensitization by increasing intracellular acidity with amiloride and its analogs. *Int. J. Radiation Oncol. Biol. Phys.*
32. Rao GHR. (1996). Clinical relevance of platelet research in thrombosis and hemostasis. *Int. J. Cardiovas. Sci.* 3, 21-24.
33. Rao GHR and Parthasarathy S. (1996). Antioxidants, atherosclerosis and thrombosis. *Prost. Leuko. Essen. Fatty Acids.* 54, 155-166.
34. Rao GHR. (1997). Mechanism of platelet activation. *Int. J. Cardiovas. Sci.*
35. Rao GHR, Mohanty D and Rao ASC. (1997). Coronary heart disease: risk factors for Indian men and women. *Ind. J. Hematol. Blood Trans.* 15, 3-8.
36. Rao GHR. (1999). *Platelet Physiology and Pharmacology: An Overview*. In: *Platelet physiology and Pharmacology* (Rao GHR, Ed.), Kluwer Academic Publishers, USA.
37. Rao GHR. (1998). Platelets as a risk factor for coronary artery disease. In: *Coronary artery disease in South Asians: epidemiology, risk factors and prevention* (Rao GHR, Ed.).
38. Rao GHR. (1998). Aspirin and coronary artery disease. In: *Coronary Artery Disease in South Asians: Epidemiology, Risk Factors and Prevention* (Rao GHR, Ed.).
39. Chandy T and Rao GHR. (1999). Platelet biomaterial interactions. In: *Platelet Physiology and Pharmacology* (Rao GHR, Ed.), Kluwer Academic Publishers, USA.
40. Rao GHR. (1988). Platelets, Prostaglandins and Thrombosis. *Med. Update: Assoc. Phys. Ind.* 8, 33-38, 1998.
41. Rao GHR, Chandy T: Role of platelets in blood-biomaterial interactions. *Bull Mater Sci* 22: 101-107, 1999.

## BOOKS

1. Rao GHR: *Handbook of Platelet Physiology and Pharmacology*, Kluwer Academic Publishers.

ISBN #0 7923 8538-1 (Ed. Gundu H. R. Rao) 1999.

2. Rao GHR: Coronary artery disease in South Asians: epidemiology, risk factors and prevention. Jaypee Medical Publishers, New Delhi ISBN #81 7179-811-X (Ed; Gundu H. R. Rao), 2001

### Abstracts

1. Rao GHR. (1969). Tests for repellency of oils, lubricants and waxes to *Tribolium castaneum*. *Tribolium* 11, 79.
2. Rao GHR. (1969). Biology behavior and frass analysis of the lesser grain borer (*Rhyzopertha dominica*). (f.) Diss Abst. 30.
3. Lieberman JR, Wolf JC, Rao GHR and Harein PK. (1971). Inhibition of F-2 (zearalenone) biosynthesis and peritheca production in *Fusarium roseum* Graminearum. # 7599 Sci. J. Ser. Minn. Agri. Expt. Stn.
4. Rao GHR and White JG. Measurement of platelet serotonin. (1973). *Fed. Proc.* 52, 3524.
5. White JG, Goldberg ND, Estensen RD, Haddox MK and Rao GHR. (1973). Rapid increase in platelet 3', 5-guanosine monophosphate (cGMP) levels in association with irreversible aggregation, degranulation and secretion. *J. Clin. Invest.* 52, 89.
6. Rao GHR and White JG. (1974). Influence of esterase inhibitors on platelet aggregation induced by phorbol myristate acetate (PMA). *Fed. Proc.* 33, 612.
7. White JG, Gerrard JM and Rao GHR. (1974). Effects of calcimycin on platelets. Council on Thromb. Natl. Conf. Thromb. Haemost, Dallas, Texas., USA
8. Gerrard JM, White JG, Rao GHR, Krivit W and Witkop CJ, Jr. (1974). Labile aggregation stimulating substance (LASS) in the interaction of Hermansky-Pudlak (HP0 and aspirin-treated platelets. *Circ.* 50, 290 (Suppl. 3).
9. White JG, Gerrard JM and Rao GHR. 1974. Stimulation-excretion coupling in blood platelets. Influence of an ionophore on platelet aggregation, excretion and ultrastructure. International Symposium on Blood Platelets, Istanbul, Turkey.
10. White JG, Gerrard JM, Rao GHR, Edson JR and Witkop CJ, Jr. (1975). Differences in platelet storage pool deficiency (SPD) of Hermansky-Pudlak Syndrome (HPS) and nonalbinos (NA). Fifth Congress of the International Society of Thrombosis and Haemostasis, Feb. 27, 1975.
11. Johnson GJ, White JG and Rao GHR. (1975). Studies of the dose-response relationship and mechanism of platelet dysfunction induced by carbenicillin (CARB) and ticarcillin (TIC). *Am. Soc. Hematol.* 1975.
12. Gerrard JM, White JG and Rao GHR. (1975). The relationship between the platelet dense tubular

system and platelet prostaglandin synthesis. Amer. Soc. Hematol., 1975.

13. White JG, Rao GHR and Mundschenk DD. (1975). Effects of a calcium ionophore, A23187, on the surface morphology of normal erythrocytes. Amer. Soc. Hematol., 1975.
14. White JG, Gerrard JM, Rao GHR and Witkop CJ. (1975). Differences in platelet storage pool deficiency (SPD) of Hermansky-Pudlak Syndrome (HPS) and nonalbinos (NA). 5 th Congress Intern. Society of Thrombosis and Haemostasis, Paris, France, Abstract 137, p. 154.
15. Schollmeyer JE, Rao GHR and White JG. (1976). A platelet actin-binding protein. Second National Conference on Thrombosis and Haemostasis, Miami, 1976.
16. Rao GHR, Gerrard JM, Eaton JW and White JG. (1976). Detection of arachidonic acid (AAO) free radical formation, an essential step in platelet prostaglandin (PG) biosynthesis. Am. Soc. Hematol., Boston.
17. Rao GHR and White JG. (1977). Effects of vitamin E and nitroblue tetrazolium (NBT) on platelet ultrastructure and aggregation. FASEB, Chicago.
18. Rao GHR, Gerrard JM, Eaton JW and White JG. (1977). Arachidonic acid peroxidation, prostaglandin synthesis and platelet function. International Conference on Singlet Oxygen and Related Species in Chemistry and Biology, Pinawa, Manitoba, Canada.
19. Rao GHR, Gerrard JM, Eaton JW, Clawson CC and White JG. (1978). The role of iron in prostaglandin synthesis: Ferrous iron mediated oxidation of arachidonic acid. FASEB, Atlantic City.
20. Peterson DA, Burriss SM, Gerrard JM, Rao GHR, Page A and White JG. (1978). The role of iron in prostaglandin synthesis studies using nitroblue tetrazolium (NBT). FASEB, Atlantic City.
21. Johnson GJ, Leis LA, Rao GHR and White JG. (1978). Prostaglandin synthesis remains intact in nonaggregating carbenicillin-treated platelets. Circulation 58, 11-125.
22. Johnson GJ, Rao GHR and White JG. (1979). Epinephrine potentiation of arachidonate-induced do platelet aggregation: Effect of agents which alter platelet cAMP. Am. Fed. Clin. Res.
23. Rao GHR, Cox AC, Gerrard JM and White JG. (1979). Role of iron in prostaglandin (PG) synthesis: Effects of 2, 2-dipyridyl (DP) on platelet PG production and function. International Prostaglandin Conference, Washington, DC.
24. Peterson DA, Gerrard JM, Rao GHR, Mills EL and White JG. (1979). Interaction of arachidonic acid and heme iron in the synthesis of prostaglandins. International Prostaglandin conference. Washington, D. C.
25. Nipper JHJ, Rao GHR, Gerrard JM and White JG. (1979). Computer assisted hihg-pressure liquid

chromatographic (HPLC) analysis of platelet adenine nucleotides (AN). 11th International Congress of Biochemistry, Toronto, Canada.

26. Cox AC, Rao GHR, Gerrard JM and White JG. (1979). Vitamin E quinone: A phospholipase A<sub>2</sub> inhibitor and more potent antagonist of platelet function than vitamin E. XIth International Congress of Biochemistry, Toronto, Canada.

27. Gerrard JM, Phillips DR, Rao GHR, Plow EF, Walz DW, Ross LA, Hanker LA and White JG. (1979). The role of alpha granules and their contents in platelet function. Studies of the gray platelet syndrome, a selective deficiency of fuse organelles. *Blood* 54, 656A (ASOH).

28. Johnson GJ, Rao GHR, Leis LA and White JG. (1979). Effects of agents which alter cAMP on arachidonic acid-induced platelet aggregation in the dog. *Blood* 54, 670A.

29. Rao GHR and White JG. (1979). PH influence on prostacyclin-mediated inhibition of platelet function. *Blood* 54, 705A.

30. Rao GHR and White JG. (1980). Influence of temperature and pH on the stability of prostacyclin. Fed. Amer. Soc. Exp. Biol., Anaheim.

31. Rao GHR and White JG. (1980). Epinephrine enhancement of arachidonic acid (AA)-induced aggregation of cyclooxygenase deficient platelets. *Am. Fed. Clin Res.*

32. Rao GHR, Cox AC, Gerrard JM and White JG. (1980). Alpha tocopherol quinone (TQ): A potent inhibitor of platelet function. Golden Jubilee International Congress on EFA and Prostaglandins.

33. Brown DM, Gerrard JM, Peller J, Rao GHR and White JG. (1980). Glomerular prostaglandin metabolism in diabetic rats. Annual Meetings Diabetes 29, 291A.

34. Peterson DA, Gerrard JM, Rao GHR and White JG. (1980). Reduction of heme by lipid peroxides and its potential relevance to understanding control of cyclooxygenase acitivity. Golden Jubilee Intern. Congress on EFA and Prostaglandins.

35. Johnson GJ, Rao GHR and White JG. (1980). Epinephrine potentiation of thromboxane-stimulated platelet aggregations. *Circulation* 62, 050A.

36. Rao GHR and White JG. (1980). Disaggregation and reaggregations of irreversibly aggregated platelets. *Circulation* 62, 1053A.

37. Rao GHR and White JG. (1981). Arachidonate metabolism and platelet disaggregation-reaggregation. VIII International Congress on Thrombosis and Hemostasis, Toronto, Canada, *Thromb. Haemost.* 46, 856A.

38. Johnson GJ, Rao GHR and White JG. (1981). Thromboxane A<sub>2</sub>-stimulated platelet aggregation is potentiated by epinephrine acting via alpha adrenergic receptors. *Thromb. Haemost.* 46, 1344A.
39. Peterson DA, Gerrard JM, Rao GHR and White JG. (1981). Does epinephrine activate platelets by binding to a receptor and then reducing heme in a membrane enzyme to transmit the activating signal. *Thromb. Haemost.* 46, 0855A.
40. Rao GHR, Schmid HHO and White JG. (1981). Epinephrine-induced corrections of the response of aspirin treated platelets to arachidonate is not mediated by platelet activating factor (PAF). *Blood* 58, 721A.
41. Rao GHR and White JG. (1982). Role of arachidonic acid metabolism in human platelet activation and irreversible aggregation. Fifth International Conference on Prostaglandins, Florence, Italy.
42. Rao GHR and White JG. Epinephrine-induced membrane modulation restores the response of human platelets to platelet activating factor (PAF). *Circulation* 66, 1194 A.
43. Coc CA, Carroll RC, White JG and Rao GHR. (1982). Recycling of platelet phosphorylation and cytoskeletal assembly. *Circulation* 66, 703A.
44. Einzig S, Cragg A, Rao GHR, Casteneda-Zuniga W, Amplatz K and White JG. (1982). Vasospasm and angioplasty. *Circulation* 66, 16A.
45. Richards KL, White JG, Rao GHR, Graff R and McCullough J. (1982). Nucleotide and cyclic nucleotide levels of fresh and stored granulocytes. *Transfusion* 22, 428 A.
46. Rao GHR and White JG. (1983). Mechanisms involved in membrane modulation. *Fed. Proc.* 42, 4297A.
47. Rao GHR and White JG. (1983). Role of arachidonic acid metabolism in platelet membrane modulation, activation and irreversible aggregation. *Fed. Proc.* 42, 4297A.
48. Rao GHR, Einzig S, Noren GH, Staley NA and White JG. (1983). Vascular and thrombocytes arachidonic acid metabolism in the turkey. Ninth International Congress on Throm. and Haemost.
49. Rao GHR, Peterson DA, Gerrard JM and White JG. (1983). Heme arachidonic acid interaction and prostaglandin synthesis. Ninth International Congress on Throm. and Haemost.
50. Rao GHR, Einzig S, Graff A, Castenda-Zuniga W, Amplatz K and White JG. (1984). Angioplasty-induced alterations in the vascular arachidonic acid metabolism. *Thromb. Haemost.* 50, 0293A.
51. Rao GHR, Einzig S, Noren GH, Staley NA and White JG. (1984). Vascular and thrombocyte arachidonic acid metabolism in the turkey. *Thromb. Haemost.* 50, 0905A.

52. Johnson GJ, Rao GHR and White JG. (1984). The response of dog platelets to platelet aggregating factor. *Thromb. Haemost.* 50, 0105A.
53. Rao GHR, Peterson DA, Gerrard JM and White JG. (1984). Heme arachidonic acid interaction and prostaglandin synthesis. *Thromb. Haemost.* 50, 0906A.
54. Rao GHR, Johnson GJ and White JG. (1984). Separation of secretion from prostaglandin synthesis in ibuprofen-treated platelets. *Blood* 62, 965A.
55. Rao GHR and White JG. (1983). Membrane modulation corrects the platelet dysfunction caused by vincristine and colchicine. *Blood* 62, 966A.
56. Rao GHR and White JG. (1983). Thromboxane-independent calcium mobilization in storage pool deficient (SPD) platelets. *Blood* 62, 967A.
57. Rao GHR, Radha E and White JG. (1984). Effect of polyenoic acid on platelet arachidonic acid metabolism and function. *Prostaglandins and Leukotrienes Symposium*, Washington, D. C.
58. Rao GHR and White JG. (1984). Arachidonate induced platelet secretion independent of thromboxane synthesis. *Circulation*.
59. Rao GHR and White JG. (1984). Comparative pharmacology of platelet cyclooxygenase inhibitors. *Kyoto Conference on Prostaglandins*, Kyoto, Japan.
60. Schorer AE, Moldow CF, Rao GHR, Oken M and Kaplan ME. (1984). Interleukin (IL-1) promotes tissue factor expression in human endothelial cells. *Blood* 64, 989A.
61. Rao GHR and White JG. (1985). Polyenoic acid metabolism and platelet function. *Thromb. Haemost.* 54, p89A.
62. Schorer AE, Kaplan ME, Rao GHR and Moldow CF. (1985). Procoagulant effects in interleukin-1. *Thromb. Haemost.* 54, P1132A.
63. Rao GHR and White JG. (1985). Measurement of ionized calcium in blood platelets with a new generation of calcium indicators. *Blood* 66, 1133A.
64. Burris SM, Smith CM, Rao GHR and White JG. (1985). Aspirin treatment reduces platelet resistance to deformation. *Blood* 66, 1089A.
65. Patch BG, Herzberg MC, Rao GHR, White JG, Erickson PF and MacFarlane GD. (1986). Selective inhibitors of arachidonate metabolism and streptococcus sanguis-induced platelet aggregation. *Am. Assoc. Dental Res.*

66. Kotasek D, Malbrain S, Rao GHR, White JG, Jacob HS and Vercellotti GM. (1986). Fura-2, a new generation of calcium indicator. Measurement of cytosolic ionized calcium in polymorphonuclear leukocytes (PMN). Clin Res. 34, 461A.
67. Rao GHR and White JG. (1986). Origin and role of calcium in platelet activation-contraction-secretion coupling. Fed. Proc. 45, 407A.
68. Radha E, Peller JD, Hill TD, White JG, George RY and Rao GHR. (1986). Krill as a dietary source of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) in the prevention of cardiovascular disease. Fed. Proc. 45, 1158A.
69. Rao GHR and White JG. (1986). Influence of polyenoic acids on arachidonic acid metabolism and platelet function. Cardiovascular Disease 1986, Sixth International Washington Spring Symposium, Washington, DC.
70. Rao GHR and White JG. (1986). Influence of fish oil on arachidonic acid metabolism and platelet function. Sixth International Conference on Prostaglandins and Related Compounds, Florence, Italy.
71. Rao GHR and White JG. (1986). Differential effects of lipoxygenase inhibitors on human neutrophils and platelets. Sixth International Conference on Prostaglandins and Related Compounds, Florence, Italy.
72. White JG, Rao GHR, Escolar G and Rutzsky J. (1986). Giant platelet membrane inclusion disorder associated with low basal calcium and defective calcium flux. Ped. Res. 20, 801A.
73. Rao GHR, Cox CA, Witkop CJ and White JG. (1986). Influence of UV light (250 nm) on platelet activation. Int. Conf. On Prostanoids and Lipid Metabolism in Radiation Injury, Washington, DC.
74. Rao GHR, Hordinsky C, Witkop CJ and White JG. (1986). Influence of psoralen and ultraviolet therapy on platelet function and arachidonic acid metabolism in patients with vitiligo. Int. Conf. On Prostanoids and Lipid Metabolism in Radiation Injury, Washington, DC.
75. White JG, Smithson WA, McCafferey LA and Rao GHR. (1986). Platelet hypercalcemia and giant dense bodies. A new familial disorder. ASOH.
76. Rao GHR, White JG and Cox CA. (1987). Influence of calcium-dependent protease inhibitor on platelet activation and secretion. Fed. Proc., Washington, DC.
77. Rao GHR and White JG. (1987). Origin and role of calcium in human platelet activation. Calcium metabolism, Washington Spring Symposium.
78. Rao GHR and White JG. (1987). Influence of calcium flux on ability of platelet macro tubule coils. 11<sup>th</sup> Int. Cong. Thromb. Haemost., Brussels.

79. Rao GHR, Gerrard JM and White JG. (1987). Epinephrine-induced potentiation of arachidonate aggregation in Quin 2-loaded platelets is not mediated by elevation of cytosolic calcium. 11<sup>th</sup> Int. Cong. Thromb. Haemost., Brussels.
80. Rao GHR and White JG. (1987). Microtubule coils and platelet function. 11<sup>th</sup> Int. Cong. Thromb. Haemost., Brussels.
81. White JG, Rao GHR and Breton-Gorius J. (1987) The dense tubular system is present in bovine platelets. 11<sup>th</sup> Int. Cong. Thromb. Haemost., Brussels.
82. Rao GHR and White JG. (1987). Stimulus activation-contraction-secretion coupling in human platelets. Sixth World Cong. Haematol, Bombay, India.
83. Authi KS, Rao GHR and Crawford N. (1988). Inhibitory action of guanosine 5'-0-(2-thiodiphosphate) on thrombin-induced activation in intact and permeabilized platelets. J. Cell Biochem. (Suppl. 12), 5503.
84. Rao GHR and White JG. (1988). Influence of GDP( $\beta$ )S on agonist-induced calcium mobilization and platelet function. Gordon Conference, Andover, New Hampshire.
85. Rao GHR, Authi KS, Crawford N and White JG. (1988). Variable mechanisms of calcium mobilization in human platelets. FASEB 12, 598A.
86. Rao GHR, Escolar G, Zavoral J and White JG. (1988). Influence of adrenergic receptor blockade on aspirin induced inhibition of platelet function. Circulation 76, 2065A.
87. Rao GHR, Wilson RF, White CW and White JG. (1988). Do all thrombolytic agents alter platelet function ? Circulation 76, 2184A.
88. Smith CM, Burris SM, Rao GHR and White JG. (1988). Epinephrine-induced reversal of aspirin effect on platelet deformability. Blood 70, 1299A.
89. Rao GHR, Authi KS, Crawford N and White JG. (1989). Influence of GDP( $\beta$ )S on agonist-induced calcium mobilization. George Washington University Spring Symposium.
90. Rao GHR and White JG. (1989). Influence of heparin on human platelet function. ISTH, Tokyo.
91. Rao GHR, Lester B, Raij Land White JG. (1989). Influence of nitric oxide on human platelet function. ISTH, Tokyo.
92. Rao GHR, Lester B, Raij Land White JG. (1989). Inhibition of agonist-induced human platelets activation by nitric oxide. Royal Society Meetings, London.
93. Hill TD, White JG and Rao GHR. (1989). Platelet hypersensitivity induced by 1-chloro-2, 4-dinitrobenzene hydroperoxides and inhibition of lipoygenase. Inter. Symposium on Biol. Oxid., India.

94. Hill TD, White JG and Rao GHR. (1989). The influence of glutathione depleting agents on human platelet function. Inter. Symposium on Biol. Oxid., India.
95. Rao GHR and White JG. (1990). The role of cGMP in platelet function. FASEB, Washington, DC.
96. Rao GHR and White JG. (1990). Elevation of cytosolic calcium is not essential for platelet aggregation. ASBMB, New Orleans.
97. Rao GHR and White JG. (1990). Elevation of cytosolic calcium is not essential for platelet aggregation. Sixth Inter. Symp. on Cellular Endocrinol. Lake Placid.
98. Rao GHR, Escolar G and White JG. (1990). Factors influencing the binding and translocation of fibrinogen-gold on spread platelets. Arteriosclerosis 10, 915A.
99. Rao GHR and White JG. (1990). Influence of calcium antagonists on human platelet activation. Arteriosclerosis 10, 950A.
100. Rao GHR, Wilson RF, Singh P and White JG. (1990). Influence of nitrous compounds on human platelet function. Arteriosclerosis 10, 950A.

Listing of Abstracts Discontinued in 1990.