

BIOGRAPHICAL SKETCH

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NAME Phipps, Richard P.	POSITION TITLE Professor of Environmental Medicine and of Microbiology and Immunology
eRA COMMONS USER NAME RPHIPPS	

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Loyola College, Baltimore, MD	B.S.M.T.	1977	Medical Technology
Medical College of Virginia, Richmond, VA	Ph.D.	1980	Microbiology/Immunol.
Medical College of Virginia, Richmond, VA	Postdoc.	1980-81	Immunology
Duke University Medical Center, Durham, NC	Postdoc.	1981-83	Immunology

A. Positions and Honors.**Research and Professional Experience**

1977-1980	Predoctoral Fellow, Department of Microbiology & Immunology, Medical College of Virginia, Richmond, VA (Advisor - Dr. J.G. Tew).
1979-1980	Visiting PhD Student, The Walter & Eliza Hall Institute of Medical Research, Melbourne, Australia (Advisors - Drs. T. E. Mandel and G.J.V. Nossal).
1980-1981	Postdoctoral Fellow, Department of Microbiology & Immunology, Medical College of Virginia, Richmond, VA (Advisor - Dr. J.G. Tew).
1981-1983	Postdoctoral Fellow, Division of Immunology, Department of Microbiology, Duke University Medical Center, Durham, NC. (Advisor - Dr. D.W. Scott).
1983-1984	Senior Instructor, Cancer Center and Department of Microbiology & Immunology, University of Rochester School of Medicine and Dentistry, Rochester, NY.
1984-1989	Assistant Professor, Cancer Center and Department of Microbiology & Immunology, University of Rochester School of Medicine and Dentistry, Rochester, NY.
1989-1994	Associate Professor, Cancer Center and Departments of Microbiology & Immunology & Pediatrics, University of Rochester School of Medicine and Dentistry, Rochester, NY.
1994-1996	Associate Professor, Cancer Center and Departments of Microbiology & Immunology, Pediatrics and Environmental Medicine, Co-Director Thoracic Oncology Program, University of Rochester School of Medicine and Dentistry, Rochester, NY.
1996-2001	Professor, Cancer Center and Departments of Microbiology & Immunology, Pediatrics and Environmental Medicine, Co-Director Thoracic Oncology Program, University of Rochester School of Medicine and Dentistry, Rochester, NY.
2001-present	Professor of Environmental Medicine, Ophthalmology, Microbiology & Immunology, Oncology, Pediatrics, Obstetrics & Gynecology, and Pathology and Laboratory Medicine. Director, Lung Biology and Disease Program. University of Rochester School of Medicine and Dentistry, Rochester, NY.

Honors and Awards

1973-1977	Loyola College Scholarship, Maryland Senatorial Scholarship, Cummins Scholarship
1977	Graduated Magna cum laude, Loyola College
1977-1980	Predoctoral Fellowship, Department of Microbiology, Medical College of Virginia
1979-1980	Visiting PhD student at the Walter & Eliza Hall Institute of Medical Research, Melbourne Australia
1980	First Prize, Microbiology Section, Virginia Academy of Science
1981-1982	Postdoctoral Fellowship, Division of Immunology, Duke University Medical Center
1982-1987	Arthritis Foundation Fellowship and Investigatorship
1993	Medical College of Virginia - VCU Award for distinguished research accomplishments
1998	Arthur Kornberg Research Award
1999	Burroughs-Wellcome Foundation Faculty Scholar
2002	University of Rochester Pre and Postdoctoral Student Mentoring Award

Selected Memberships, Editorial Boards and Advisory Committees

1983-present: The American Association of Immunologists

1990-present: The American Thoracic Society
 1990-1992 Editor: CRC Press, Pulmonary Fibroblast Heterogeneity
 1990-2000 Associate Editor: The Journal of Immunology
 1991-present Editorial Board: Clinical Immunology
 NIH study sections: Radiation (1992-1993), Immunobiology (1994-1995), Lung Biol. and Pathology (1997-1998), NIDCR (1997), NHLBI Special Reviewer (2000-Present), Veterans Admin. (1995-present)

B. Selected peer-reviewed publications (in chronological order). (Selected from more than 150) publications)

Adawi A, Zhang Y, Baggs R, Williams J, Rubin P, Finkelstein J, **Phipps RP**: Blockade of CD40-CD40 ligand interactions protects against radiation-induced pulmonary inflammation and fibrosis. *Clin Immunol Immunopathol*, 89: 222-230, 1998.

Phipps RP: Atherosclerosis: The emerging role of inflammation and the CD40-CD40 ligand system. *Proc Natl Acad Sci, USA*. 97: 6930-6932, 2000

Padilla J, Kaur K, Cao JH, Smith TJ, **Phipps RP**: Peroxisome Proliferator Activator Receptor- γ Agonists and 15-Deoxy- $\Delta^{12,14}$ -PGJ₂ Induce apoptosis in Normal and Malignant B-Lineage Cells. *J Immunol*, 165: 6941-6948, 2000.

King A, Kelly R, Critchley H, Malmstrom A, Sennstrom M, **Phipps RP**: CD40 expression in uterine tissues: A key regulator of cytokine expression by fibroblasts. *J Cell Mol Endocrinol*, 86: 405-412, 2001.

Harris S, **Phipps RP**: The nuclear receptor PPAR γ is expressed by mouse T lymphocytes and PPAR γ agonists induce apoptosis. *E J Immunol*, 31:1098-1105, 2001.

Phipps RP, Kaufman J, Blumberg N.: Platelet derived CD154 (CD40L) and transfusion reactions. *Lancet*, 357: 2023-2024, 2001.

Phipps RP, Koumas L, Leung E, Reddy S, Blieden T, Kaufman J: The CD40-CD40 ligand system: A potential therapeutic target in atherosclerosis. *Curr Opin Investig Drugs*, 2: 773-777, 2001.

Kaufman J, Graf B, Leung E, Pollock S, Koumas L, Reddy S, Blieden T, Smith T, **Phipps RP**: Fibroblasts as sentinel cells: Role of the CD40-CD40 ligand system in fibroblast activation and lung inflammation and fibrosis. *Chest* 120:53-55, 2001.

Padilla J, Leung E, **Phipps RP**: PPAR γ and 15d-PGJ₂ induce human B lineage cell death. *Clin Immunol*, 103:22-23, 2002.

Harris SG, **Phipps RP**: Prostaglandin D₂ its metabolite 15d-PGJ₂, and peroxisome proliferator activated receptor- γ agonists induce apoptosis in transformed, but not normal, human T lineage cells. *Immunol* 105 23-24, 2002.

Harris SG, Smith RS, **Phipps RP**: 15-Deoxy- $\Delta^{12,14}$ -PGJ₂ Induced IL-8 Production in Human T Cells by a Mitogen-Activated Protein Kinase Pathway. *J Immunol*, 168: 1372-1379, 2002.

Smith RS, Kelly R, Iglewski B, **Phipps RP**: The Pseudomonas autoinducer 3O-C12-HSL induces cyclooxygenase-2 and PGE₂ production in human lung fibroblasts: Implications for inflammation. *J Immunol* 169: 2636-2642, 2002.

Harris S, Padilla J, Koumas L, Ray D **Phipps RP**: Prostaglandins as modulators of immunity. *Trends Immunol*, 23(3): 144-150, 2002.

Blumberg N, **Phipps R P**, Kaufman J, Heal J: The causes and treatment of reactions to platelet transfusions. *Transfusion*, 43:291-292. 2003.

Koumas L, Smith TJ, Feldon S, Blumberg, **Phipps RP**: Thy-1 expression in human fibroblast subsets defines myofibroblastic or lipofibroblastic phenotypes. *A J Pathol*, 163:4 1291-1300, 2003.

Kaufman J, Sime PJ, **Phipps RP**: Expression of CD154 (CD40 Ligand) by Human Lung Fibroblasts: Differential Regulation by IFN- γ and IL-13, and Implications for Fibrosis. *J Immunol*, 172: 1862-1871, 2004.

Akbiyik F, Ray DM, Gettings KF, Blumberg N, Francis CW, **Phipps RP**: Human bone marrow megakaryocytes and platelets express PPAR γ and PPAR γ agonists blunt platelet release of CD40 ligand and thromboxanes. *Blood*, 104: 1361-1368 2004.

Ray D, Bernstein S, **Phipps RP**: Human multiple myeloma cells express PPAR γ and undergo apoptosis upon exposure to PPAR γ ligands. *Clin Immunol*, 113:203-213, 2004.

Ryan ER, Pollock SJ, Murant T, Bernstein SH, Felgar RE, **Phipps RP**: Activated Human B lymphocytes express cyclooxygenase-2 and cyclooxygenase inhibitors attenuate antibody production. *J Immunol*, 174: 5134-5135, 2005.

Ray D, Akbiyik F, Bernstein S, **Phipps RP**: CD40 engagement prevents PPAR γ agonist-induced apoptosis of B lymphocytes and B lymphoma cells by an NF κ B dependent mechanism. *J Immunol*, 174: 4060-4069, 2005.

Kaufman, J., Schultz, E., Blumberg, N., and **Phipps, R.P.**: Release of biologically active CD154 during collection and storage of platelet concentrates prepared for transfusion. *Journal of Thrombosis and Haemostasis* In Press, 2006.

C. Research Support
Ongoing Research Support

R01 DE11390-19-23 Phipps (PI) 07/01/05-06/30/10
 NIH/NIDCR
 "Regulation of Immunity by Prostaglandins"
 The goals of this project are to: determine the mechanisms whereby prostaglandins of the J-series bind a receptor-transcription factor complex and regulate normal and malignant B cell growth.

R01 EY11708-06 Smith (PI) 04/01/02-03/31/07
 NIH/NEI
 "Functional Diversity of Orbital Fibroblasts"
 *Subcontract. This project will determine the role of fibroblast heterogeneity in the pathogenesis of Graves' ophthalmopathy.
 Role: Investigator

Philip Morris External Research Program 09/01/03-08/31/06
 Phipps (PI)
 "Cigarette smoke induction of the cyclooxygenase and prostaglandin pathway: implications for lung inflammation and cancer"
 This project studies how cigarette smoke activates human fibroblasts to produce lipid mediators associated with lung inflammation and cancer.

EPA Airborne Particulate Matter Center Oberdörster (PI) 09/01/05-08/31/10
 EPA
 "Ultrafine particles: Characterization, health effects and pathophysiological mechanisms"
 The Rochester PM center is composed of a multidisciplinary team to study the effects of ultrafine particles on human health. This is accomplished by clinical, preclinical, and in vitro studies.
 Role: (PI of Immunology/Cardiovascular Core Facility)

R03 EY014564 Feldon (PI) 04/01/03-03/31/06
 NEI
 "A Novel in vitro Model of Thyroid Ophthalmopathy"
 This study will determine the subset(s) of peripheral blood T cells that are key for stimulating human orbital fibroblast proliferation and differentiation to adipocyte-like cells.
 Role: Investigator

R01-HL078603 Phipps (PI) 09/01/04-08/30/08
 NIH/NHLBI
 "Platelet Activation and Inflammatory Mediators"
 The objectives of this application are to study human and mouse platelets and to determine the mechanisms whereby platelets influence inflammation.

R01-HL75432
 NIH-NHLBI Sime (PI) 09/30/05-06/30/10
 "Modulation of Silica-Induced Pulmonary Fibrosis"
 The goals of this project are to study how to prevent lung fibrosis using novel approaches to block fibroblast to myofibroblast differentiation.
 Role: Investigator

The Leukemia and Lymphoma Society Bernstein (PI) 10/01/05-09/30/08
 "Targeting the PPAR γ pathway as a novel approach for non-Hodgkin's Lymphoma"
 This project will test novel small molecules for efficacy against non-Hodgkin Lymphoma.
 Role: Investigator

Completed Research Support
 Phipps00Z0 Phipps (PI) 12/01/00-11/30/03
 Cystic Fibrosis Foundation
 "Lung Inflammation and the Pseudomonas Autoinducer"
 The objective of this small grant was to define the molecular mechanisms whereby *Pseudomonas* PAI-1 activates lung fibroblasts to produce immuno-regulatory cytokines.