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RICHARD K. ROOT, M.D.

CURRICULUM VITAE

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Born: December 1, 1937, New York, New York

Marital Status: Married 1960 - Marilyn Parletta (Deceased 2001)

Children: Richard Allen, 1960
David Lawrence, 1963
Daniel Christopher, 1968

Education:

1959 Wesleyan University, B.A. Cum Laude (Biology)

1963 Johns Hopkins University, M.D. (Medicine)

Postgraduate Training and Fellowship Appointments

1963-64 Intern in Medicine, Massachusetts General Hospital, Boston, MA.

1964-65 Assistant Resident in Medicine, Massachusetts General Hospital, Boston, MA.

1965-67 Clinical Associate, United States Public Health Service, Laboratory of Clinical Investigation,
National Institutes of Health, Bethesda, Maryland (Military Service)

1967-68 Clinical Investigator, Laboratory of Clinical Investigation, National Institute of Allergy and
Infectious Disease, National Institutes of Health, Bethesda, MD

1968-69 Chief Resident and Instructor, Department of Medicine, University Hospital, University of
Washington, Seattle, Washington

Faculty Appointments

- 1969-71 Senior Investigator, Laboratory of Clinical Investigation, National Institute of Allergy and Infectious Disease, National Institutes of Health, Bethesda, MD.
- 1971-73 Assistant Professor of Medicine, Department of Medicine, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania
- 1973-75 Associate Professor of Medicine, Department of Medicine, University of Pennsylvania School of Medicine, Philadelphia, PA
- 1974 Visiting Associate Professor of Medicine, Pahlavi University School of Medicine., Shiraz, Iran (August-October)
- 1975-82 Professor of Medicine, Yale University School of Medicine, New Haven, CT.
- 1982-85 Professor of Medicine, University of Washington School of Medicine, University of Washington, Seattle, WA.
- 1985-91 Professor of Medicine, University of California, San Francisco, CA.
- 1990 Visiting Professor of Medicine, Oxford University, Oxford, UK (April-July)
- 1991-2002 Professor of Medicine, University of Washington, Seattle, WA
- 1998 Visiting Professor of Medicine, University of Geneva, Geneva, Switzerland (Feb-June)
- 2002 Emeritus Professor of Medicine, University of Washington, Seattle WA

Hospital Positions Held

- 1971-75 Chief, Infectious Disease Section, Department of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania
- 1975-82 Chief, Infectious Disease Section, Department of Internal Medicine, Yale University School of Medicine, New Haven, Connecticut
- 1980-82 Vice Chairman, Department of Medicine, Yale University School of Medicine, New Haven, Connecticut
- 1982-85 Chief, Medical Service, Seattle Veterans Administration Medical Center, Seattle, Washington
- 1982-85 Vice Chairman, Department of Medicine, University of Washington School of Medicine, University of Washington, Seattle, Washington
- 1985-89 Physician-in-Chief, University of California, San Francisco Medical Center, San Francisco, CA
- 1985-89 Chairman, Department of Medicine, University of California, San Francisco, San Francisco, CA
- 1989-91 Associate Dean for Clinical Education, School of Medicine, University of California, San Francisco, California
- 1991-2001 Chief, Medical Service, Harborview Medical Center, Seattle, Washington
- 1991-2001 Vice Chairman, Department of Medicine, University of Washington School of Medicine, Seattle, Washington
- 2001- Attending Physician, Division of Allergy and Infectious Disease Medical Science, Harborview Medical Center, Seattle, Washington

Honors

1959 Sigma Xi
1962-63 Dennison Scholar, Johns Hopkins University School of Medicine
1963 Phi Beta Kappa
1963- Alpha Omega Alpha
1972-75 NIH Research Career Development Award (A1 70052)
1973 Master of Arts (Hon.) University of Pennsylvania
1975-2001 American Society for Clinical Investigation
1975 Master of Arts (Hon.) Yale University
1977 Fellow, American College of Physicians (046011)
1979-2001 Emeritus, Association of American Physicians
1980-82 Paul B. Beeson Professor of Medicine, Yale University School of Medicine
1982 Medical Housestaff Teacher of the Year Award, Yale University School of Medicine

Board Certification:

1969- Diplomate, American Board of Internal Medicine (No. 31852)

Liscenses to Practice:

Current: Washington and California

Previously held: Connecticut, Pennsylvania, Massachusetts, Maryland

Professional Organizations:

- 1966-2002 American Federation for Clinical Research
 - Councilor, Eastern Section, 1976-78
 - President, Eastern Section, 1978-79
- 1969 Fellow, Infectious Diseases Society of America
- 1979-2002 American Society for Hematology
- 1979- Fellow American College of Physicians
- 1980-2002 Association of American Immunologists
- 1980 American Society of Microbiology
- 1980-85 ICAAC Program Committee
- 1981-82 Board of Trustees, Hospice of Connecticut, Branford, CT.
- 1981-82 Board of Trustees, Yale-China Association, Yale University School of Medicine
- 1983 Western Association of Physicians
 - Councilor, 1987-89
 - President-elect, 1996-97
 - President, 1997-98
 - Past President, 1998-99
- 1984-89 American Board of Internal Medicine, Infectious Disease Subcommittee
- 1985-97 Association of Professors of Medicine
- 1988-93 American Clinical and Climatological Association
- 1993-2002 Society for General Internal Medicine
- 1996 - The Infectious Diseases Society of Washington
- 2000- Seattle Academy of Internal Medicine, Seattle, WA
- 2000- Physicians for Social Responsibility

Editorial Responsibilities

- 1974-84 Antimicrobial Agents and Chemotherapy
1978-79 Infectious Disease Board, Medical Knowledge Self-Assessment Program V (MKSAP V).
American College of Physicians
1982-92 Medicine
1990-93 Annals of Internal Medicine
1991-92 Advisor The Internal Medicine Resident (Bi-monthly journal)
1992-95 The American Journal of Medicine
1992-94 Section Editor, Infectious Diseases Subcommittee, Medical Knowledge Self-Assessment
Program X (MKSAP X), American College of Physicians
1993- Scientific Therapeutics Information, Inc.: The Neutrophil: Importance in Host Defense
(Monograph series).

Contemporary Issues in Infectious Diseases Churchill-Livingstone, New York

- 1984 Vol. 1. New Dimensions in Antimicrobial Therapy
RK Root, MA Sande, Eds.
1984 Vol. 2. Endocarditis
MA Sande, D Kaye, RK Root, Eds.
1985 Vol. 3. Bacterial Meningitis
MA Sande, AL Smith, RK Root, Eds.
1985 Vol. 4. Septic Shock
RK Root, MA Sande, Eds.
1985 Vol. 5. Respiratory Infections
MA Sande, L. Hudson, RK Root, Eds.
1987 Vol. 6. New Surgical and Medical Approaches
RK Root, D. Trunkey, MA Sande, Eds.
1987 Vol. 7. Parasitic Infections
MA Sande, J. Leech, RK Root, Eds.
1987 Vol. 8. Immunization
RK Root, K. Warren, JM Griffiss, MA Sande, Eds.
1992 Vol. 9. Treatment of Serious Infections in the 1990s
MA Sande, RK Root, Eds.
1993 Vol. 10. Viral Infections
MA Sande, RK Root, Eds.

Western Journal of Medicine

1987 Epitome Series, (Ed.) RK Root

Harrison's Principles of Internal Medicine. McGraw-Hill, New York, 1990, 12th Edition. (Eds.)
Braunwald E, Isselbacher KJ, Petersdorf, RG., Wilson JD, Martin JB, Fauci AS, and Root RK.

Harrison's Principles of Internal Medicine. Companion Handbook. Mc-Graw-hill, New York, 1991,
12th Edition. (Eds.) Braunwald E., Isselbacher KJ, Petersdorf RG, Wilson JD, Martin JB, Fauci AS,
and Root RK.

Clinical Infectious Diseases: A Practical Approach. Oxford University Press, New York, 1999. 1st
Edition, Root RK, (Editor-in-Chief), (Eds) Waldvogel F, Corey L, and Stamm WE.

Special National Responsibilities

- 1976-78 Ad hoc Study Section, National Institutes of Allergy and Infectious Diseases. National Institutes of Health, Bethesda, Maryland
- 1978-79 Bacteriology and Mycology Study Section (AHR), National Institute of Health
- 1979-81 Microbiology Study Section, National Institutes of Health
- 1985-87 Scientific Subcommittee on Leukocyte Physiology, American Society Hematology
- 1986-88 NIAID Director AIDS Advisory Committee
- 1986-91 Member, University wide Task Force on AIDS, University of California, chair, 1990-91
- 1987-89 NIAID/NIH Advisory Committee on AIDS
- 1991 Ad Hoc Committee on Housestaff Participation, Association of American Medical Colleges, Washington, D.C.
- 1994 -96 In-Trainings Examination Committee, American College of Physicians

Special Local Responsibilities:

University of Pennsylvania School of Medicine, 1971-75

- 1971-75 Attending Physician, Hospital of the University of Pennsylvania , Philadelphia, PA
- 1971-75 Consulting Physician, VAMC, Philadelphia, PA
- 1971-75 Consulting Physician, Philadelphia General Hospital, Philadelphia, PA
- 1971-75 Chairman, Infections Committee, Hospital of the University of Pennsylvania, Philadelphia, PA
- 1971-75 Member, Pharmacy and Therapeutics Committee, Hospital of the University of Pennsylvania, Philadelphia, PA
- 1972-75 Member, Executive Committee, Department of Medicine, University of Pennsylvania, Philadelphia, PA
- 1972-75 Member, Internship Selection Committee, Department of Medicine, University of Pennsylvania School of Medicine, Philadelphia, PA
- 1973-75 Member, Medical Board, Hospital of the University of Pennsylvania , Philadelphia, PA
- 1973-75 Member, Professional Staff Committee, Hospital of the University of Pennsylvania, Philadelphia, PA

Yale University School of Medicine, 1975-82

- 1975-82 Attending Physician, Yale-New Haven Hospital, New Haven, CT
- 1975-82 Consulting Physician, VAMC, West Haven, CT
- 1975-82 Member, Executive Committee, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1975-81 Member, Appointments and Promotions Committee, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1976-77 Chairman, In-Patient Planning Committee, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1977-80 Member, Infections Committee, Yale-New Haven Hospital, New Haven, CT
- 1977-80 Member, Committee on the Status of Women, Yale University School of Medicine, New Haven, CT
- 1977-82 Member, Clinical Education Committee, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1978-81 Member, Planning and Priorities Committee, Yale University School of Medicine, New Haven, CT

- 1979-82 Member, Medical Committee, Yale-China Association, Yale University School of Medicine, New Haven, CT
- 1980-82 Chairman, In-Patient Planning Committee, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1980-82 Chairman, Space Committee, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1980-82 Member, Internship Selection Committee, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1980-81 Member, Task Force on Governance, Yale-New Haven Hospital, New Haven, CT
- 1980-82 Vice-Chairman, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1980-82 Assistant Chief of Medicine, Yale-New Haven Hospital, New Haven, CT
- 1981-82 Acting Chairman, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT
- 1981-82 Acting Chief of Medicine, Yale-New Haven Hospital, New Haven, CT
- 1981-82 Member, Medical Board, Yale-New Haven Hospital, New Haven, CT
- 1981-82 Member, Executive Committee, Yale-New Haven Hospital, New Haven, CT
- 1981-82 Member, Executive Committee, Faculty Practice Plan, Yale University School of Medicine, New Haven, CT

University of Washington, 1982-85

- 1982-85 Member, Steering Committee, Department of Medicine, University of Washington, Seattle, WA
- 1982-85 Member, Internal Medicine Residency Selection Committee, Department of Medicine, University of Washington, Seattle, WA
- 1983-85 Member, Appointments and Promotions Committee (Associate Professors), Department of Medicine, University of Washington, School of Medicine, Seattle, WA
- 1983-85 Chairman (1984), Appointments and Promotions Committee (Professors) Department of Medicine, University of Washington School of Medicine, Seattle, WA
- 1984-85 Member, University of Washington Affiliated Hospital Network Medical Directors, University of Washington School of Medicine, Seattle, WA
- 1984-85 Member, Department of Psychiatry Chairman Search Cm., University of Washington School of Medicine, Seattle, WA

VA Medical Center, Seattle, 1982-85

- 1982-85 Member, Clinical Executive Board, Veterans Administration Medical Ctr, Seattle, WA
- 1982-85 Member, Research and Development Cm., Veterans Administration Medical Ctr, Seattle, WA
- 1982-85 Member, Position Management Committee, Veterans Administration Medical Ctr, Seattle, WA
- 1982-85 Member, Professional Standards Board, Veterans Administration Medical Center, Seattle, WA
- 1982-85 Chairman, Female Veterans Health Care Cm., Veterans Administration Medical Ctr, Seattle, WA
- 1982-83 Member, Chief of Hematology Search Committee, Veterans Administration Medical Ctr, Seattle, WA
- 1982-83 Member, Chief of Dermatology Search Cm., Veterans Administration Medical Center, Seattle, WA
- 1983-84 Chairman, Chief of Staff Search Cm., Veterans Administration Medical Center, Seattle, WA
- 1983-84 Chairman, Chief of Gerontology Search Cm., Veterans Administration Medical Ctr, Seattle, WA
- 1983-84 Member, Chief of Neurology Search Cm., Veterans Administration Medical Ctr, Seattle, WA

University of California, San Francisco, 1985-91

- 1985-86 Member, Committee on Patient Care, University of California, San Francisco, San Francisco, CA
- 1985-86 Member, Dean's AIDS Advisory Committee, University of California, San Francisco, San Francisco, CA
- 1985-87 Member, Surgery Chairman Search Cm, University of California, San Francisco, S. Fran., CA
- 1985-89 Chief, Medical Service, Moffitt/Long Hospitals, University of California, San Francisco, San Francisco, CA
- 1985-89 Member, Joint Planning Committee, UCSF/Mt. Zion Medical Center, University of California, San Francisco, San Francisco, CA
- 1985-89 Member, Committee on Research of the Academic Senate, University of California, San Francisco, San Francisco, CA
- 1985-89 Member, Dean's Advisory Cm, University of California, San Francisco, San Francisco, CA
- 1985-89 Member, Dean's Executive Cm, University of California, San Francisco, San Francisco, CA
- 1985-89 Member, Professional Services Steering Committee, University of California, San Francisco, San Francisco, CA
- 1985-89 Member, Society of Professional Association Nomination Committee, University of California, San Francisco, San Francisco, CA
- 1985-90 Member, Residency Selection Committee, Department of Medicine, University of California, San Francisco, San Francisco, CA
- 1985- Member, Governing Board of Continuing Medical Education, University of California San Francisco, San Francisco, CA
- 1985-91 Member, Cm. on Educational Policy, University of California, San Francisco, S. Fran., CA
- 1986-87 Member, Pediatric Chairman Search Cm, University of California, San Francisco, San Francisco, CA
- 1986-87 Member, Ad Hoc Peer Review, University of California, San Francisco, San Francisco, CA
- 1987-89 Dean's Committee to Review New and Existing Programs, University of California, San Francisco, San Francisco, CA
- 1987-89 Member, Executive Cm, Clinical Practice Organization, University of California, S. Fran., CA
- 1987-89 Chairman, Cardiac Catheterization Laboratory Utilization Review Committee, Department of Medicine, University of California, San Francisco, San Francisco, CA
- 1987-89 Member, Howard Hughes Medical Institute Committee, University of California, San Francisco, San Francisco, CA
- 1988-89 Chairman, Universitywide Task Force on AIDS, University of California Systemwide
- 1988-89 Member, Dean's Search Committee, University of California San Francisco, San Fran., CA
- 1988-91 Member, Chancellor's AIDS Coordinating Council, University of California San Francisco, San Francisco, CA
- 1988-91 Member, William K. Hamilton Visiting Lectureship Committee, University of California, San Francisco, San Francisco, CA
- 1989-91 Member, Chancellor's Distinguished Lectureship Committee, University of California, San Francisco, San Francisco, CA
- 1989-90 Member, UCSF/Mt. Zion Clinical Planning Committee, University of California San Francisco, San Francisco, CA
- 1989-90 Chairman, Ad Hoc Grading Policies Cm., University of California San Francisco, S. Fran., CA
- 1989-90 Member, Curriculum Committee, University of California San Francisco, S. Fran., CA
- 1989-90 Chairman, Subcommittee for Ambulatory Care Longitudinal Clinic, University of California San Francisco, San Francisco, CA

- 1989-90 Chairman, Search Committee for Associate Director of Pulmonary/Vice Chairman, Department of Medicine, Department of Medicine, University of California San Francisco, San Francisco, CA
- 1989-90 Member, 1990 International AIDS Conference Program and Planning Committee, University of California San Francisco, San Francisco, CA
- 1989-91 Chairman, Post Doctoral Advisory Committee, University of California, San Francisco, San Francisco, CA
- 1989-91 Member, Ad Hoc Faculty Review Committee, University of California San Francisco, San Francisco., CA
- 1989-91 Member, Undergraduate Medical Education Cm., University of California San Francisco, San Francisco, CA
- 1990-91 Member, Biosafety Committee, School of Medicine, University of California, San Francisco, San Francisco, CA,
- 1990-91 Member, Physicians' Well Being Committee, University of California, San Francisco, San Francisco, CA
- 1990-91 Promotions Committee, University of California, San Francisco, San Francisco, CA
- 1990-91 Member, University of California, Berkeley/University of California, San Francisco Joint Medical Program Committee, University of California, San Francisco, San Francisco, CA
- 1990-91 Chief, Department of Medicine Firm System for In-Patient Care, University of California, San Francisco, San Francisco, CA

University of Washington, Seattle, Washington, 1991-

- 1991 - Attending Physician, University of Washington Medical Center Harborview Medical Center, Seattle, WA
- 1991 - Member, Distinguished Society Committee, Department of Medicine, University of Washington School of Medicine, Seattle, WA
- 1991- Member, Clinical Competence Committee, Department of Medicine, University of Washington School of Medicine, Seattle, WA
- 1991 - Member, Intern Selection Committee (Traditional Program), Department of Medicine, University of Washington School of Medicine, Seattle, WA
- 1992-97 Member, Committee to Review Disability Insurance Options for Housestaff, University of Washington School of Medicine, Seattle, WA
- 1992 Chairman, Residency Advisory Committee, Department of Medicine, University of Washington School of Medicine, Seattle, WA
- 1992-93 Member, Appointments and Promotions Committee, Department of Medicine, University of Washington, Seattle, WA
- 1992-93 Chairman, Medicine/Psychiatry Residency Training Program Committee, Department of Medicine, University of Washington, Seattle, WA
- 1992-95 Chairman, Head of General Internal Medicine Division Search Committee, Department of Medicine, University of Washington, Seattle, WA
- 1992-95 Member, Dean's Council on Scientific Affairs, School of Medicine, University of Washington, Seattle, WA
- 1993 Member, Professors' Review Committee, Department of Medicine, University of Washington, Seattle, WA
- 1994 Member, Cardiothoracic/Cardiology Long Range Planning Committee, Department of Medicine, University of Washington, Seattle, WA

- 1995 Member, Ad Hoc Committee for Recommendations Regarding Size and Primary Location for Residency Training Program, Department of Medicine, University of Washington, Seattle, WA
- 1996-98 Member, Dean's Council on Academic Affairs, School of Medicine, University of Washington, Seattle, WA
- 1999- Member, Steering Committee, Health Science Partnerships in Clinical Education (HSPICE)

Harborview Medical Center 1991 –

- 1991 Member, Joint Harborview Medical Center/University of Washington Medical Center AIDS Clinical Task Force, University of Washington School of Medicine, Seattle, WA
- 1991 Member, Ad Hoc Cm. for Harborview Medical Center Governance, Harborview Medical Center, Seattle, WA
- 1991 Member, Ambulatory Care Center Coordinating Cm., Harborview Medical Center, Seattle, WA
- 1991 Member, Search Committee, Chief, Cardiology, Harborview Medical Center, Seattle, WA
- 1991 Member, Finance Committee, Harborview Medical Center, Seattle, WA
- 1991 Member, Long Range Capital Improvement Project, Harborview Medical Center, Seattle, WA
- 1991 Member, Medical Executive Board, Harborview Medical Center, Seattle, WA
- 1991-95 Member, Quality Assurance Committee, Harborview Medical Center, Seattle, WA
- 1991 Member, Review Committee for STD-HIV Strategic Planning At Harborview Medical Center, Seattle, WA
- 1992 Member, Joint University of Washington School of Medicine/Harborview Medical Center
- 1992 Chairman, Search Committee, Chief, Radiology Service, Harborview Medical Center, School of Medicine, University of Washington, Seattle, WA
- 1992 Chairman, Search Committee, Associate Administrator for Patient Care Services Search Committee, Harborview Medical Center, Seattle, WA
- 1995 Member, Search Committee, Chief Family Medicine, Harborview Medical Center, Seattle, WA
- 1999-2000 Acting Chief, Section of General Internal Medicine, Harborview Medical Center, Seattle, WA
- 2001 Chair, Safety Net Task Force, Harborview Medical Center

Research Interests

Host defense mechanisms in infection
 Human phagocytic cell function
 Pathogenesis and management of sepsis and septic shock
 Epidemiology, management and outcomes of community acquired pneumonia
 Use of colony-Stimulating factors in the treatment of infectious diseases

Visiting Professorships

- April 1983 Brainerd Visiting Professorship, University of California, San Francisco, S. Fran., CA
- October 1985- George W. Thorn Visiting Professorship, Brigham and Women's Hospital, Harvard University, Boston, MA
- May 1986 Paul B. Beeson Visiting Professorship, Yale University, New Haven, CT
- October 1986 Bowman Visiting Professorship, University of Virginia, Charlottesville, VA
- April 1987 William J. Harrington Visiting Professorship, University of Miami, Miami, FL
- October 1987 Cyris Sturgis Visiting Professorship, University of Michigan, Ann Arbor, MI

January 1988	John S. Lawrence Visiting Professorship, UCLA, University of California, Los Angeles, Los Angeles, CA
December 1988	Howard Hiatt Visiting Professor, Harvard Medical School, Boston, MA
March 1989	University of New South Wales Visiting Professorship, University of New South Wales, Sydney, Australia
May 1996	Philip Bondy Visiting Professorship, Yale University Sch. Med., New Haven, CT
March 2000	John A. Burns School of Medicine/Queens Hospital Visiting Professor

Bibliography

a. Peer-Reviewed Publications

1. Drachman RH, Root RK, and Wood WB, Jr.: Studies on the effect of experimental nonketotic diabetes mellitus on antibacterial defense. 1. Demonstration of a defect in phagocytosis. *Journal of Experimental Medicine* 124:227-240, 1966.
2. Wolff, SM, Kimball HR, Perry S, Root RK, and Kappas A: The biologic properties of etiocholanolone. *Annals of Internal Medicine* 67:1268-1295, 1967.
3. Root RK, and Wolff SM: Pathogenetic mechanisms in experimental immune fever. *Journal of Experimental Medicine* 128:309-323, 1968.
4. Kammermeyer JK, Root RK, Stites DP, Glade PR, and Chessin LN: The detection and characterization of phagocytic cells in established human cell lines synthesizing immunoglobulins. *Proceedings of the Society of Experimental Biology and Medicine* 129:522-527, 1968.
5. Root RK, Nordlund JJ, and Wolff SM: Factors affecting the quantitative production and assay of human leukocytic pyrogen. *Journal of Laboratory and Clinical Medicine* 75:670-693, 1970.
6. Nordlund JJ, Root RK, and Wolff SM: Studies on the origin of human leukocytic pyrogen. *Journal of Experimental Medicine* 131:727-743, 1970.
7. Mickenberg ID, Root RK, and Wolff SM: Leukocytic function in hypogammaglobulinemia. *Journal of Clinical Investigation* 49:1528-1538, 1970.
8. Root RK, Wolff SM, and Baer H: Skin reactivity of human subjects to a polysaccharide component of BCG culture filtrates. *Proceedings of the Society of Experimental Biology and Medicine* 136:403-406, 1971.
9. Mickenberg ID, Synderman R, Root RK, Mergenhagen SE, and Wolff SM: Immune fever in the rabbit: responses of the hematologic and complement systems. *Journal of Immunology* 107:1457-1465, 1971.
10. Mickenberg ID, Synderman R, Root RK, Mergenhagen SE, and Wolff SM: The relationship of complement consumption to immune fever. *Journal of Immunology* 107:1466-1476, 1971.
11. Mickenberg ID, Root RK, and Wolff SM: Bactericidal and metabolic properties of human eosinophils. *Blood* 39:67-80, 1972
12. Wolff SM, Dale DC, Clark RA, Root RK, and Kimball HR: The Chediak-Higashi syndrome: studies of host defenses. *Annals of Internal Medicine* 76:293-306, 1972
13. Stossel TP, Root RK, and Vaughn M: Phagocytosis in chronic granulomatous disease and the Chediak-Higashi syndrome. *New England Journal of Medicine* 286:120-123, 1972

14. *Root RK, Rosenthal AS, and Balestra DJ: Abnormal bactericidal, metabolic, and lysosomal functions of Chediak-Higashi syndrome leukocytes. *Journal of Clinical Investigation* 51:649-665, 1972.
15. Diamond RD, Root RK, and Bennett JE: Factors influencing killing of *Cryptococcus neoformans* by human leukocytes in vitro. *Journal of Infectious Diseases* 125:367-376, 1972.
16. Herzig GP, Root RK, and Graw RG, Jr.: Granulocyte collection by continuous-flow filtration leukopheresis. *Blood* 39:554-567, 1972.
17. Root RK, Ellman L, and Frank MD: Bactericidal and opsonic properties of C4-deficient guinea pig serum. *Journal of Immunology* 109:477-486, 1972.
18. Rudd FV, Root RK, Skoglund RW, Jr., and Ansel JS: Tumor-induced hypercalcemia. *Journal of Urology* 107:986-989, 1972.
19. Rhame FS, Root RK, MacLowry JD, Dadisman TA, and Bennett JV: *Salmonella cholerae-suis* septicemia outbreak caused by platelet transfusions from a hematogenous carrier. *Annals of Internal Medicine* 77:633-641, 1973.
20. Clark RA, Root RK, Kimball HR, and Kirkpatrick CH: Defective neutrophil chemotaxis and cellular immunity in a child with recurrent infections. *Annals of Internal Medicine* 78:515-519, 1973.
21. Bujak JS and Root RK: The role of peroxidase in the bactericidal activity of human blood eosinophils. *Blood* 43:727, 1974.
22. *Root RK and Stossel TP: Myeloperoxidase-mediated iodination by granulocytes: intracellular site of operation and some regulating factors. *The Journal of Clinical Investigation* 53:1207-1215, 1974.
23. Bagdade JD, Root RK, Bulger RJ: Impaired leukocyte function in patients with poorly controlled diabetes. *Diabetes* 23:9-15, 1974.
24. Root RK, Harris MB, MacGregor RR, and Djerassi I: In vitro function of granulocytes collected by continuous-flow filtration leukopheresis. *Proceedings of Leukocyte Transfusion Symposium*, London, England, 1975.
25. Harris MB, Djerassi I, Schwartz E, and Root RK: Polymorphonuclear leukocytes prepared by continuous-flow filtration leukopheresis: viability and function. *Blood* 44:707, 1974.
26. *Root RK, Metcalf J, Oshino N, and Chance B: H_2O_2 release from human granulocytes during phagocytosis I. Documentation, quantitation, and some regulating factors. *Journal of Clinical Investigation* 55:945-955, 1975.

27. Murphy SA, Hyams JS, Fisher AB, and Root RK: Effects of oxygen exposure on in vitro function of pulmonary alveolar macrophages. *Journal of Clinical Investigation* 52:505-512, 1975.
28. Goodhart GL, Abrutyn E, Watson R, Root RK, and Egert J: Community-acquired Acinetobacter calcoaceticus var anitratus pneumonia. *JAMA* 238:1516, 1977.
29. Harley JB, Grinspan S, and Root RK: Paraquat suicide in a young woman: results of therapy directed against the superoxide radical. *The Yale Journal of Biology and Medicine* 50:481-488, 1977.
30. Abrutyn E, Solomons NW, St. Clair L, MacGregor RR, and Root RK: Granulocyte function in patients with chronic renal failure: surface adherence, phagocytosis, and bactericidal activity in vitro. *Journal of Infectious Disease* 135:18, 1977.
31. Alavi JB, Root RK, Djerassi I., et al: A randomized clinical trial of granulocyte transfusions for infection in acute leukemia. *New England Journal of Medicine* 296:706-711, 1977.
32. Dvorak VD, Root RK, and MacGregor RR: Host-defense mechanisms in hidradenitis suppurative. *Archives of Dermatology* 113:450-453, 1977.
33. *Root RK and Metcalf JA: H_2O_2 release from human granulocytes during phagocytosis: Relationship to superoxide anion formation and cellular catabolism of H_2O_2 . *Journal of Clinical Investigation* 60:1266-1279, 1977.
34. Malech HL, Root RK, and Gallin JJ: Structural analysis of human neutrophil migration: centriole, microtubule and microfilament orientation and function during chemotaxis. *Journal of Cell Biology* 75:666, 1977.
35. Nathan CF and Root RK: Hydrogen peroxide release from mouse peritoneal macrophages: dependence on sequential activation and triggering. *Journal of Experimental Medicine* 146:1648-1662, 1977.
36. Hyams JS, Donaldson MH, Metcalf JA, and Root RK: Inhibition of human granulocyte function by methotrexate. *Cancer Research* 38:650-655, 1978.
37. Zakhireh B and Root RK: Unusually high occurrence of drug reactions with nafcillin. *Yale Journal of Biological Medicine* 51:449-455, 1978.
38. Cadman E, Cohen MS, Root RK, Ryan JL, and Minor DR: Impaired response to pneumococcal vaccine in Hodgkin's disease. *New England Journal of Medicine* 299:1317-1318, 1978.
39. Cohen MS, Steere AC, Baltimore R, Von Gravenitz A, Pantelick E, Camp B, and Root RK: Nosocomial transmission of group Y *Neisseria meningitidis* among cancer patients. *Annals of Internal Medicine* 90:7, 1979.
40. Goodhart GL and Root RK: Preparation and function of ^{125}I -labelled mononuclear phagocytes. *Journal of Reticuloendothelial Society* 26:115-120, 1979.

41. Clark M and Root: Glucose-6-phosphate dehydrogenase deficiency and infection: A study of hospitalized patients in Iran. *Yale Journal of Biological Medicine* 52:169-179, 1979.
42. Cohen MS, Zakhireh B, Metcalf JA, and Root RK: Granulocyte function during lithium therapy. *Blood* 53:913-915, 1979.
43. Zakhireh B, Thakur ML, Malech HL, Cohen MS, Gottshalk A, and Root RK: Viability, random migration, chemotaxis, bactericidal capacity and ultrastructure of indium-III labeled human polymorphonuclear leukocytes. *Journal of Nuclear Medicine* 20:741-747, 1979.
44. Zakhireh B and Root RK: Development of oxidase activity by human bone marrow granulocytes. *Blood* 54:429-439, 1979.
45. Murphey SA, Root RK, and Schreiber AD: The role of antibody and complement in phagocytosis by rabbit alveolar macrophages. *Journal of Infectious Disease* 140:986-993, 1979.
46. Cohen MS, Zakhireh B, Metcalf JA, and Root RK: Granulocyte function in patients receiving lithium carbonate: lithium effects on granulopoiesis and immune function. *Advances in Experimental Medicine and Biology* 27:335-346, 1980.
47. Ryan JL, Pachner A, Andriole VT, Root RK. *Annals of Internal Medicine* 95:293-301, 1981.
48. Yourtee EL, Bia FJ, Griffith BT, and Root RK: Neutrophil response and function during acute cytomegalovirus infection in guinea pigs. *Infection and Immunity* 36:11-16, 1982.

49. Snyder EL, Root RK, Hezzey A, Metcalf JA, and Palermo G: Effect of microaggregate blood filtration on granulocyte concentrates in vitro. *Transfusion* 23:25-29, 1983.
50. Nauseef WM, Metcalf JA, and Root RK: Role of myeloperoxidase in the respiratory burst of human neutrophils. *Blood* 61:483-492, 1983.
51. Coleman DL, Root RK, and Ryan JL: Enhancement of macrophage Fc dependent phagocytosis by nonactivated thymocytes. *J Immunol* 130:2195-2199, 1983.
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