

CURRICULUM VITA

NAME David Gordon Nathan
ADDRESS 192 Brattle Street, Cambridge, MA 02138
DATE OF BIRTH May 25, 1929
PLACE OF BIRTH Cambridge, MA

EDUCATION

1951 Harvard College, B.A. cum laude
1955 Harvard Medical School, M.D. cum laude

POSTDOCTORAL TRAINING

Internships and Residencies

1955-56 House Officer in Medicine,
Peter Bent Brigham Hospital, Boston, MA
1958-59 Senior Resident in Medicine,
Peter Bent Brigham Hospital, Boston, MA

Research Fellowships

1956-58 Clinical Associate,
National Cancer Institute, Bethesda, MD
1959-61 Fellow of the Medical Foundation, Boston, MA

LICENSURE AND CERTIFICATION

1959 Massachusetts License #25743
1962 American Board of Internal Medicine #20198
1974 American Board of Pediatrics #16934

AWARDS AND HONORS

1976 Honorary Member Phi Beta Kappa Society, Harvard
1983 Fellow, American Academy of Arts and Sciences
1989 Institute of Medicine, National Academy of Sciences

ACADEMIC APPOINTMENTS

1959-63	Research Associate in Medicine, Harvard Medical School, Boston, MA
1963-66	Associate in Medicine, Harvard Medical School, Boston, MA
1965-66	Research Associate in Hematology, Children's Hospital Medical Center, Boston, MA
1966-70	Assistant Professor of Pediatrics, Harvard Medical School, Boston, MA
1970-73	Associate Professor of Pediatrics, Harvard Medical School, Boston, MA
1973-77	Professor of Pediatrics, Harvard Medical School
1974	Visiting Professor, Department of Biology, Massachusetts Institute of Technology
1977-	Robert A. Stranahan Professor of Pediatrics, Harvard Medical School, Boston, MA

HOSPITAL APPOINTMENTS

1959-61	Assistant in Medicine, Peter Bent Brigham Hospital, Boston, MA
1961-63	Junior Associate in Medicine, Peter Bent Brigham Hospital, Boston, MA
1963-67	Associate in Medicine Children's Hospital Medical Center, Boston, MA
1966-68	Associate in Hematology, Children's Hospital Medical Center, Boston, MA
1967	Senior Associate in Medicine, Peter Bent Brigham Hospital, Boston, MA
1968-73	Chief, Division of Hematology, Children's Hospital Medical Center, Boston, MA
1968-85	Senior Associate in Medicine, Children's Hospital Medical Center, Boston, MA
1974-84	Chief, Division of Hematology and Oncology, Children's Hospital Medical Center and Dana Farber Cancer Institute, Boston, MA
1974-85	Pediatrician-in-Chief, Dana Farber Cancer Institute, Boston, MA
1985	Physician-in-Chief, Department of Medicine, The Children's Hospital, Boston, MA

HARVARD MEDICAL SCHOOL COMMITTEES

1973-77	Curriculum Committee (Subcommittee on Electives, Chairman)
1974-78	Board of Syndics, Harvard University Press
1977-80	Subcommittee of Professors
1978-80	Faculty Council
1980-	Chairman, Alumni Fellowships Committee
1981-85	Dunham Lecture Committee
1985-88	Subcommittee of Professors

VISITING PROFESSORSHIPS AND HONORARY LECTURESHIPS

- 1970 Austin Weisberger Visiting Fellow
Case Western Reserve University
Cleveland, Ohio
- 1976 Visiting Professor
Royal Children's Hospital
Melbourne, Australia
- 1976 Visiting Professor,
Hadassah University
Jerusalem, Israel
- 1979 Martin C. Rosenthal Visiting Professor,
Mount Sinai Medical School
New York, New York
- 1980 Ayrey Fellow,
Royal Postgraduate Medical School
London, England
- 1981 Fink Memorial Lecturer
Yale New Haven Medical Center
New Haven, Connecticut
- 1981 W.T. Connell Memorial Lecturer
Queen's University
Kingston, Canada
- 1981 Coopersmith Visiting Professor,
Johns Hopkins University School of Medicine
Baltimore, Maryland
- 1982 Annual George E. Cartwright Lecturer
University of Utah
Salt Lake City, Utah
- 1983 Kirsty McDermott Visiting Professor
Auckland, New Zealand
- 1983 Gosse Lecturer
Dalhousie University
Halifax, Nova Scotia
- 1983 Brown Lecturer,
Hospital for Sick Children
Toronto, Ontario
- 1984 Aggeler Lecturer,
San Francisco General Hospital
San Francisco, California
- 1985 Litchfield Lecturer,
Oxford University
Oxford, England
- 1986 Annual Guest Lecturer,
Leukaemia Research Fund
London, England
- 1988 Jason Bennette Memorial Lecturer
Mount Sinai School of Medicine
New York, New York
- 1988 Philip Bondy Lecturer
Yale University
New Haven, Connecticut
- 1988 Guest Lecturer
The California Academy of Medicine
San Francisco, California
- 1989 Ernst Meyer Lecturer
University of Michigan

1989	Robert A. Hettig Visiting Professor Baylor College of Medicine Houston, Texas
1989	Clausen Lecturer University of Rochester Medical Center Rochester, New York
1989	State-of-the-Art Lecturer Association of American Physicians
1989	Metzger Lecturer American Clinical and Climatological Society

SOCIETY MEMBERSHIPS

	American Association for Advancement of Science American Association for Cancer Research American Federation for Clinical Research Society for Pediatric Research American Pediatric Society American Academy of Pediatrics American Society for Clinical Investigation American Society for Clinical Oncology Association of American Physicians International Society for Experimental Hematology Massachusetts Medical Society Red Cell Club American Clinical and Climatologic Society Peripatetic Club Medical Exchange Club
1972	Co-Founder, Boston Sickle Center American Society of Hematology
1976-80	Councillor
1976-80	Public Affairs Committee
1980	Chairman, Scientific Affairs Committee
1985	Vice President
1986	President
1970-73	National Institutes of Health Hematology Training Grant Committee, NIAMD
1974-78	Hematology Study Section
1982-85	Blood Diseases and Resources Advisory Committee, NHLBI
1974-80	The Medical Foundation Chairman, Research Committee
1975	Board of Directors
1982-84	President
1973	Review Committee, Basil O'Connor Starter Awards National Foundation - March of Dimes
1976-80	Member, Massachusetts Commission on Human Clinical Investigation and Experimental Therapy
1985	Loran Commission, Harvard Community Health Plan

EDITORIAL BOARDS

1970-80	<i>Blood</i>
1973-77	<i>Pediatrics</i>
1974	Co-Editor, <i>Hematology of Infancy and Childhood</i>
1974-76	<i>Series Hematologica</i>
1975-79	<i>Cancer Treatment Reports</i>
1976-86	<i>Clinics in Hematology</i>
1976-	<i>Hemoglobin</i>
1976-81	<i>Journal of Clinical Investigation</i>
1976-	<i>Proceedings of Experimental Biology and Medicine</i>
1980-	<i>International Journal of Cell Cloning</i>
1981	Co-Editor, <i>Hematology of Infancy and Childhood, 2nd Ed.</i>
1981-	<i>New England Journal of Medicine</i>
1982-	<i>European Journal of Paediatric Haematology and Oncology</i>
1982-	Consulting Editor, <i>Cecil Textbook of Medicine</i>
1983	<i>Clinics in Haematology: Bone Marrow Transplantation</i>
1987	Co-Editor, <i>Hematology of Infancy and Childhood, 3rd Ed.</i>
1987	Consulting Editor, <i>Cecil Textbook of Medicine</i>
1987	Consulting Editor, <i>Oxford Textbook of Medicine</i>
1989	Editor, <i>Current Opinion in Pediatrics</i>
1989	Co-Editor, <i>Hematology of Infancy and Childhood, 4th Ed.</i>

PUBLICATIONS

ORIGINAL ARTICLES

1. Nathan, D.G., Rodkey, F.A.: A colorimetric procedure for the determination of blood ammonia. *J. Lab. Clin. Med.* 49:779-798, 1957.
2. Nathan, D.G., Davidson, J.D., Waggoner, J.D., Berlin, N.I.: The counting of barium carbonate in a liquid scintillation spectrometer. *J. Lab. Clin. Med.* 52:915-917, 1958.
3. Warren, K.S. and Nathan D.G.: The passage of ammonia across the blood-brain-barrier and its relation to blood pH. *J. Clin. Invest.* 37:1724-1728, 1958.
4. Nathan, D.G., Berlin, N.I.: Studies of the production and life span of erythrocytes in myeloid metaplasia. *Blood* 14:668-682, 1959.
5. Nathan, D.G., Berlin, N.I.: Studies of the rate of production and life span of erythrocytes in acute leukemia. *Blood* 14:935-949, 1959.
6. Nathan, D.G., Warren, K.S.: A colorimetric method for the measurement of brain ammonia of the mouse: the effect of glutamine on the total measurable ammonia. *Arch. Biochem. Biophys.* 81:377-381, 1959.
7. Condit, P.T., Berlin, N.I., Nathan, D.G.: Studies on the folic acid vitamins. VI. The effect of amethopterin on erythropoiesis in man. *Cancer* 13:245-249, 1960.
8. Nathan, D.G., Piomelli, S., Gardner, F.H.: The synthesis of heme and globin in the maturing human erythroid cell. *J. Clin. Invest.* 40:940-946, 1961.

9. Aronow, S., Avery, N., Coleman, R., Ervin, F.R., Geiger, J., Glazier, J.B., Leeman, C., Leiderman, P.H., Lown, B., Mendelson, J.H., Nathan, D., Shohet, S.: Human and ecologic effects in Massachusetts of an assumed thermonuclear attack on the United States. Symposium on the Medical Consequences of Thermonuclear War. *N. Engl. J. Med.* 266:1126-1155, 1174, 1962.
10. Gabuzda, T.H., Nathan, D.G., Gardner, F.H.: Comparative metabolism of haemoglobins A and F in thalassaemia. *Nature* (London) 196:781-782, 1962.
11. Gevartz, N.R., Nathan, D.G., Berlin, N.I.: Erythrokinetic studies in primary hypersplenism with pancytopenia. *Amer. J. Med.* 32:148-152, 1962.
12. Piomelli, S., Nathan, D.G., Cummings, J.F., Gardner, F.H.: The relationship of total red cell volume to total body water in octogenarian males. *Blood* 19:89-98, 1962.
13. Nathan, D.G., Gardner, F.H.: Erythroid Cell maturation and hemoglobin synthesis in megaloblastic anemia. *J. Clin. Invest.* 41:1086-1093, 1962.
14. Gabuzda, T.G., Nathan, D.G., Gardner, F.H.: The turnover of hemoglobins A, F, and A₂ in the peripheral blood of three patients with thalassemia. *J. Clin. Invest.* 42:1678-1688, 1963.
15. Nathan, D.G., Cahill, G.F., Jr., Gardner, F.H.: The effect of large doses of testosterone on the body fat of elderly men. *Metabolism* 12:850-862, 1963.
16. Nathan, D.G., Gabuzda, T.G.: Liquid scintillation counting of C¹⁴-labeled hemoglobin and hemin by a modified Schöniger technique. *J. Lab. Clin. Med.* 62:511-516, 1963.
17. Nathan, D.G., Piomelli, S., Cummings, J.F., Gardner, F.H., Limauro, A.L.: The effect of androgens on some aspects of body composition and erythropoiesis in octogenarian males. *Ann. N.Y. Acad. Sci.* 110:965-977, 1963.
18. Gabuzda, T.G., Nathan, D.G., Gardner, F.H.: Thalassaemia trait. Genetic combinations of increased fetal and A₂ hemoglobins. *N. Engl. J. Med.* 270:1212-1217, 1964.
19. Nathan, D.G.: Thalassaemia as a proliferative disorder. *Medicine* 43:779-782, 1964.
20. Nathan, D.G., Schupak, E., Stohlman, F., Jr., Merrill, J.P.: Erythropoiesis in anephric man. *J. Clin. Invest.* 43:2158-2165, 1964.
21. Oski, F.A., Nathan, D.G., Sidel, V.W., Diamond, L.K.: Extreme hemolysis and red-cell distortion in erythrocyte pyruvate kinase deficiency. I. Morphology erythrokinetics and family enzyme studies. *N. Engl. J. Med.* 270:1023-1030, 1964.
22. Shahidi, N.T., Nathan, D.G., Diamond, L.K.: Iron deficiency anemia associated with an error of iron metabolism in two siblings. *J. Clin. Invest.* 43:510-521, 1964.
23. Gabuzda, T.G., Nathan, D.G., Gardner, F.H.: The metabolism of the individual C¹⁴-labelled hemoglobins in patients with H-thalassaemia, with observations on radiochromate binding to the hemoglobins during red cell survival. *J. Clin. Invest.* 44:315-325, 1965.
24. Gardner, F.H., Nathan, D.G.: Androgens and erythropoiesis. III. Further evaluation of testosterone treatment of myelofibrosis. *N. Engl. J. Med.* 274:420-426, 1965.
25. Nathan, D.G., Gardner, F.H.: Effects of large doses of androgen on rodent erythropoiesis and body consumption. *Blood* 26:411-420, 1965.

26. Nathan, D.G., Oski, F.A., Sidel, V.W., Diamond, L.K.: Extreme hemolysis and red cell distortion in erythrocyte pyruvate kinase deficiency. II. Measurements of erythrocyte glucose consumption, potassium flux and adenosine triphosphate stability. *N. Engl. J. Med.* 272:118-123, 1965.
27. Nathan, D.G.: Comments on treatment of polycythemia vera: leukemia as a complication of polycythemia vera. *Sem. Hematol.* 3:230, 1966.
28. Nathan, D.G.: Thalassemia. *N. Engl. J. Med.* 275:219-220, 1966.
29. Nathan, D.G., Gardner, F.H.: Effects of erythroid hyperplasia on patterns of glycine- $2C^{14}$ uptake in heme and globin of human peripheral blood in vivo. *Blood* 28:303-313, 1966.
30. Nathan, D.G., Gunn, R.B.: Thalassemia: the consequences of unbalanced hemoglobin synthesis. *Amer. J. Med.* 41:815-830, 1966.
31. Nathan, D.G., Oski, F.A., Sidel, V.W., Gardner, F.H., Diamond, L.K.: Studies of erythrocyte spicule formation in haemolytic anaemia. *Brit. J. Haematol.* 12:385-395, 1966.
32. Baehner, R.L., Nathan, D.G.: Leukocyte oxidase: defective activity in chronic granulomatous disease. *Science* 155:835-836, 1967.
33. Gabuzda, T.G., Nathan, D.G., Gardner, F.H.: Hemoglobin F and beta thalassemia. *Science* 157:1079, 1967.
34. Hampers, C.L., Streiff, R., Nathan, D.G., Snyder, D., Merrill, J.P.: Megaloblastic hematopoiesis in uremia and in patients on long-term hemodialysis. *N. Engl. J. Med.* 276:551-554, 1967.
35. Schwartz, E., Nathan, D.G.: New methods of counting C^{14} -labeled hemoglobin and hemin. *J. Lab. Clin. Med.* 70:841-848, 1967.
36. Schwartz, E., Smith, D., Nathan, D.G.: Loci of human haemoglobin genes. *Lancet* i:1422-1423, 1967.
37. Baehner, R.L., Nathan, D.G.: Quantitative nitroblue tetrazolium test in chronic granulomatous disease. *N. Engl. J. Med.* 278:971-976, 1968.
38. Gardner, F.H., Nathan, D.G., Piomelli, S., Cummins, J.F.: The erythrocythaemic effects of androgen. *Brit. J. Haematol.* 14:611-615, 1968.
39. Kan, Y.W., Nathan, D.G.: Beta thalassemia trait: detection at birth. *Science* 161:589-590, 1968.
40. Kan, Y.W., Schwartz, E., Nathan, D.G.: Globin chain synthesis in the alpha thalassemia syndromes. *J. Clin. Invest.* 47:2512-2522, 1968.
41. Nathan, D.G.: Lysosomes and the Chediak-Higashi syndrome. (Editorial.) *N. Engl. J. Med.* 278:434, 1968.
42. Nathan, D.G., Beck, L.H., Hampers, C.L., Merrill, J.P.: Erythrocyte production and metabolism and anephric and uremic men. *Ann. N.Y. Acad. Sci.* 149:539-543, 1968.
43. Nathan, D.G., Oski, F.A., Miller, D.R., Gardner, F.H.: Life span and organ sequestration of the red cells in pyruvate kinase deficiency. *N. Engl. J. Med.* 278:73-81, 1968.
44. Shohet, S.B., Nathan, D.G., Karnovsky, M.D.: Stages in the incorporation of fatty acids into red blood cells. *J. Clin. Invest.* 47:1096-1108, 1968.

45. Zarkowsky, H.S., Oski, F.A., Sha-afi, E., Shohet, S.B., Nathan, D.G.: Congenital hemolytic anemia with high sodium, low potassium red cells. I. Studies of membrane permeability. *N. Engl. J. Med.* 278:593-600, 1968.
46. Blum, S.F., Shohet, S.B., Nathan, D.G., Gardner, F.H.: The effect of amphotericin B on erythrocyte membrane cation permeability: its relation to in vivo erythrocyte survival. *J. Lab. Clin. Med.* 73:980-987, 1969.
47. Nathan, D.G.: Mild thalassemia —s guide to therapy. (Editorial.) *N. Engl. J. Med.* 281:1363-1364, 1969.
48. Nathan, D.G.: Rubbish in the red cell. (Editorial.) *N. Engl. J. Med.* 281:558-559, 1969.
49. Nathan, D.G., Baehner, R.L., Weaver, D.K.: Failure of nitroblue tetrazolium reduction in phagocytic vacuoles of leukocytes in chronic granulomatous disease. *J. Clin. Invest.* 48:1895-1904, 1969.
50. Nathan, D.G., Stossel, T.P., Gunn, R.B., Zarkowsky, H.S., Laforet, M.T.: Influence of hemoglobin precipitation on erythrocyte metabolism in alpha and beta thalassemia. *J. Clin. Invest.* 48:33-41, 1969.
51. Oski, F.A., Naiman, J.L., Blum, S.F., Zarkowsky, H.S., Whaum, J., Shohet, S.B., Green, A., Nathan, D.G.: Congenital hemolytic anemia with high-sodium low-potassium red cells. Studies of three generations of a family with a new variant. *N. Engl. J. Med.* 290:909-916, 1969.
52. Altay, C., Alper, C.A., Nathan, D.G.: Normal and variant isoenzymes of human blood cell hexokinase and the isoenzyme patterns in hemolytic anemia. *Blood* 36:219-227, 1970.
53. Baehner, R.L., Nathan, D.G., Karnovsky, M.L.: Correction of metabolic deficiencies in the leukocytes of patients with chronic granulomatous disease. *J. Clin. Invest.* 49:865-870, 1970.
54. Kan, Y.W., Nathan, D.G.: Mild thalassemia: the results of alpha and beta thalassemia genes. *J. Clin. Invest.* 49:635-642, 1970.
55. Mentzer, W.C., Lubin, B.H., Nathan, D.G.: Screening for sickle cell trait and G6PD deficiency. (Editorial.) *N. Engl. J. Med.* 282:1155-1156, 1970.
56. Nathan, D.G., Beck, L.H., Hampers, C.L., Button, L.N.: Hematopoiesis in renal failure. In: *Kidney Hormones*. New York, Academic Press, 1970, pp. 411-429.
57. Nathan, D.G., Shohet, S.B.: Erythrocyte ion transport defects and hemolytic anemia: "hydrocytosis" and "desiccytosis." *Sem. Hematol.* 7:381-408, 1970.
58. Rosenthal, A., Nathan, D.G., Marty, A.T., Button, L.N., Miettinen, O.S., Nadas, A.S.: Acute hemodynamic effects of red cell volume reduction in polycythemia of cyanotic congenital heart disease. *Circulation* 13:297-307, 1970.
59. Shohet, S.B., Nathan, D.G.: Incorporation of phosphatide precursors from serum into erythrocytes. *Biochem. Biophys. Acta* 202:202-205, 1970.
60. Zarkowsky, H.S., Nathan, D. G.: Influence of erythrocyte membrane adenosinetriphosphatase on the metabolism of hemolysates. *J. Lab. Clin. Med.* 76:231-239, 1970.
61. Baehner, R.L., Nathan, D.G., Castle, W.B.: Oxidant injury of Caucasian glucose-6-phosphate dehydrogenase-deficient red blood cells by phagocytosing leukocytes during infection. *J. Clin. Invest.* 50:2466-2473, 1971.
62. Eckstein, M.R., Baehner, R.L., Nathan, D.G.: Amino acid oxidase of leukocytes in relation to H₂O₂-mediated bacterial killing. *J. Clin. Invest.* 50:1985-1991, 1971.

63. Feig, S.A., Shohet, S.B., Nathan, D.G.: Energy metabolism in human erythrocytes. I. Effects of sodium fluoride. *J. Clin. Invest.* 50:1731-1737, 1971.
64. Gelfand, E.W., Abramson, N., Segel, G.B., Nathan, D.G.: Buffy coat observations and red cell antibodies in acquired hemolytic anemia. *N. Engl. J. Med.* 284:1250-1252, 1971.
65. Lubin, B.H., Baehner, R.L., Schwartz, E., Shohet, S.B., Nathan, D.G.: The red cell peroxide hemolysis test in the differential diagnosis of obstructive jaundice in the newborn period. *Pediatrics* 48:562, 1971.
66. Maisels, M.D., Pathak, A., Nelson, N.M., Nathan, D.G., Smith, C.A.: Endogenous production of carbon monoxide in normal and erythroblastotic newborn infants. *J. Clin. Invest.* 50:1-8, 1971.
67. Mentzer, W.C., Baehner, R.L., Schmidt-Schonbein, H., Robinson, S.H., Nathan, D.G.: Selective reticulocyte destruction in erythrocyte pyruvate kinase deficiency. *J. Clin. Invest.* 50:688-699, 1971.
68. Nathan, D.G., Lodish, H.L., Kan, Y.W., Housman, D.G.: Beta thalassemia and translation of globin messenger RNA. *Proc. Natl. Acad. Sci. USA.* 68:2514-2518, 1971.
69. Rosenthal, A., Button, L.N., Nathan, D.G., Miettinen, O.S., Nadas, A.S.: Blood volume changes in cyanotic congenital heart disease. *Amer. J. Cardiol.* 27:162-167, 1971.
70. Rosenthal, A., Mentzer, W.C., Eisenstein, E.B., Nathan, D.G., Nelson, N.M., Nadas, A.S.: The role of red blood cell organic phosphates in adaptation to congenital heart disease. *Pediatrics* 47:537-547, 1971.
71. Segel, G.B., Feig, S.A., Baehner, R.L., Nathan, D.G.: Fluorometric analysis of glycolytic intermediates and pyridine nucleotides in peripheral blood cells. *J. Lab. Clin. Med.* 78:969-976, 1971.
72. Shohet, S.B., Livermore, B.M., Nathan, D.G., Jaffe, E.R.: Hereditary hemolytic anemia associated with abnormal membrane lipids: mechanism of accumulation of phosphatidyl choline. *Blood* 38:445-456, 1971.
73. Alter, B.P., Kan, Y.W., Nathan, D.G.: Reticulocyte survival in sickle cell anemia — effect of cyanate. *Blood* 40:733-739, 1972.
74. Baehner, R.L., Johnston, R.B., Jr., Nathan, D.G.: Comparative study of the metabolic and bactericidal characteristics of severely glucose-6-phosphate dehydrogenase-deficient polymorphonuclear leukocytes and leukocytes from children with chronic granulomatous disease. *J. Reticuloendothel. Soc.* 12:150, 1972.
75. Feig, S.A., Nathan, D.G., Zarkowsky, H.S., Gerald, P.S.: Congenital methemoglobinemia: the result of age-dependent decay of methemoglobin reductase. *Blood* 39:407-414, 1972.
76. Feig, S.A., Segal, G.B., Shohet, S.B., Nathan, D.G.: Energy metabolism in human erythrocytes. II. Effects of glucose depletion. *J. Clin. Invest.* 51:1547-1554, 1972.
77. Jensen, M.C., Bunn, H.F., Halikas, G.C., Nathan, D.G.: Oxygen affinity independent action of cyanate and 2,3, DPG on sickling. *Adv. Exp. Med. Biol.* 40:733-739, 1972.
78. Kan, Y.W., Dozy, A.M., Alter, B.P., Frigoletto, F.D., Nathan, D.G.: Detection of the sickle gene in the human fetus. *N. Engl. J. Med.* 287:1-5, 1972.
79. Kan, Y.W., Forget, B.G., Nathan, D.G.: Gamma-beta thalassemia: a cause of hemolytic disease of the newborn. *N. Engl. J. Med.* 286:129-134, 1972.
80. Kan, Y.W., Nathan, D.G., Lodish, H.F.: Equal synthesis of α - and β -globin chains in erythroid precursors in heterozygous thalassemia. *J. Clin. Invest.* 51:1906-1909, 1972.

81. Li, F.P., Alter, B.P., Nathan, D.G.: The mortality of acquired aplastic anemia in children. *Blood* 40:153-162, 1972.
82. Lodish, H.F., Nathan, D.G.: Regulation of hemoglobin synthesis: Preferential inhibition of alpha and beta globin synthesis. *J. Biol. Chem.* 247:7822-7829, 1972.
83. Lubin, B.H., Shohet, B.G., Nathan, D.G.: Changes in fatty acid metabolism after erythrocyte peroxidation: stimulation of membrane repair process. *J. Clin. Invest.* 51:344-388, 1972.
84. Nathan, D.G.: Thalassemia. (Review.) *N. Engl. J. Med.* 286:586-594, 1972.
85. Rosenthal, A., Nathan, D.G., Nadas, A.S.: Observations on the compensatory response to hypoxemia in a case of reversed differential cyanosis. *Pediatrics* 49:911-915, 1972.
86. Ségel, G.B., McCaffrey, R.P., Feig, S.A., Wells, R., Bunn, H.F., Shohet, S.B., Nathan, D.G.: Effects of urea and cyanate on sickling in vitro. *N. Engl. J. Med.* 287:59-64, 1972.
87. Alter, B.P., Nathan, D.G.: Acquired aplastic anemia in childhood. In: *Androgens in the Anemia of Bone Marrow Failure*. Necheles, T. (ed.), Palo Alto, California, Syntex Laboratories, Inc., 1973, pp. 59-61.
88. Jensen, M., Bunn, H.F., Halikas, G., Kan, Y.W., Nathan, D.G.: Effects of cyanate and 2,3-diphosphoglycerate on sickling. Relationship to oxygenation. *J. Clin. Invest.* 52:2542-2547, 1973.
89. Jensen, M.C., Nathan, D.G., Bunn, H.F.: The reaction of cyanate with the alpha and beta subunits in hemoglobin: effects of oxygenation, phosphates and carbon dioxide. *J. Biol. Chem.* 248:8057-8063, 1973.
90. Jensen, M.C., Shohet, S.B., Nathan, D.G.: The role of red cell energy metabolism in the generation of irreversibly sickled cells in vitro. *Blood* 42:835-842, 1973.
91. Nathan, D.G.: Thalassemia: a progress report in applied molecular biology. *N. Engl. J. Med.* 288:1122-1123, 1973.
92. Shohet, S.B., Nathan, D.G., Livermore, B.M., Feig, S.A., Jaffe, E.R.: Hereditary hemolytic anemia associated with abnormal membrane lipid. II. Ion permeability and transport abnormalities. *Blood* 42:1-8, 1973.
93. Alter, B.P., Kan, Y.W., Nathan, D.G.: Inhibition of hemoglobin synthesis by cyanate in vitro. *Blood* 43:57-68, 1974.
94. Alter, B.P., Kan, Y.W., Nathan, D.G.: Toxic effects of high dose cyanate in rodents. *Blood* 43:69-77, 1974.
95. Camitta, B.M., Nathan, D.G., Forman, E.N., Parkman, R., Rapoport, J.M., Orellana, T.D.: Post-hepatic aplastic anemia — an indication for early bone marrow transplantation. *Blood* 43:473-483, 1974.
95. Chang, H., Hobbins, J.C., Cividalli, G., Frigoletto, F.D., Mahoney, M.J., Kan, Y.W., Nathan, D.G.: In utero diagnosis of hemoglobinopathies. Hemoglobin synthesis in fetal red cells. *N. Engl. J. Med.* 290:1067-1068, 1974.
96. Cividalli, G., Nathan, D.G.: Sodium and potassium concentration and transmembrane fluxes in leukocytes. *Blood* 43:861-869, 1974.
97. Cividalli, G., Nathan, D.G., Kan, Y.W., Santamarina, B., Frigoletto, F.D.: Relation of beta to gamma synthesis during the first trimester: an approach to prenatal diagnosis of thalassemia. *Pediatr. Res.* 8:553-560, 1974.

98. Cividalli, G., Nathan, D.G., Lodish, H.F.: Translational control of hemoglobin synthesis in thalassemic bone marrow. *J. Clin. Invest.* 53:955-963, 1974.
99. Glader, B.E. Fortier, N., Albala, M.M., Nathan, D.G.: congenital hemolytic anemia associated with dehydrated erythrocytes and increased potassium loss. *N. Engl. J. Med.* 291:491-496, 1974.
100. Kan, Y.W., Nathan, D.G., Cividalli, G., Crookston, M.C.: Concentration of fetal red blood cells from a mixture of maternal and fetal blood by anti-i serum — an aid to prenatal diagnosis of hemoglobinopathies. *Blood* 43:411-415, 1974.
101. Nathan, D.G.: NBT reduction by human phagocytes. (Editorial.) *N. Engl. J. Med.* 290:280, 1974.
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BOOKS

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5. *Hematology of Infancy and Childhood*, 4th Ed. Nathan, D.G. and Oski, F.A. (eds.), Philadelphia, W.B. Saunders, in preparation.

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Candidate for M.S. in Science Communications, Boston University, College of
Communications
Participant in one-week workshop "Communicating Technical Information,"
MIT, June 1984
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STRENGTHS

Community work, organizational & communications skills, teaching experience
Text editing and formatting, technical report production (80+ wpm keyboard)
Language competence: native English, fluent French, good Portuguese,
some German and Spanish

WORK EXPERIENCE

Senior editorial assistant, ANNALS OF PHYSICS, MIT, 1984-present (30 hours/week),
responsible for processing manuscripts submitted to the journal and for contact
with authors, reviewers, editors, and press personnel. Also various free-lance
editing/word-processing projects during this time

Technical instructor, MIT Writing Center, 1986 spring (part-time)

Senior secretary, Department of Electrical Engineering and Computer Science, MIT,
1983-84, responsible for memo series and assisted in planning a conference
attended by 400 researchers from the US and abroad

Word processing operator, Energy Resources Co. Inc., Cambridge, 1980-83

English as a Second Language (ESL) instructor, Kennedy School, Title VII, Cambridge,
1979, and ESL instructor, University of Coimbra, Coimbra, Portugal, 1977-78

Secretary, Meteorology Department, MIT, 1976-77, and legal secretary, Anderson
Secretary Service, Boston, 1975-76

GED (high school equivalency) instructor, Harrington Community School,
Cambridge, 1974-75

ESL teacher, elementary and secondary levels, Cambridge 1968-71, and ESL instructor,
Employee Development Program, John Hancock Insurance Co., Boston, 1968

Supervisor, Harvard University Language Laboratory, 1966-68

ESL instructor, Bourguiba Institute of Modern Languages, Tunis, Tunisia, 1963-64

ORGANIZATIONAL AND COMMUNICATIONS EXPERIENCE

- Involved as parent participant and leader, Straight New England, long-term family treatment program for drug- and alcohol-using young people, 1987-present
- Initiated the renovation of Rindge Field and adjacent streetscape as a member of the North Cambridge Stabilization, 1981-present (presently volunteer gardener)
- Exhibited design for Rindge Field in the Quality of Life Competition of the Cambridge Arts Council, 1976
- Developed and wrote Title VII proposal for first bilingual education program in Cambridge, 1970
- Co-authored and produced English as a Second Language proficiency level and curriculum outline for the Cambridge School Department, 1969
- Wrote manual, recorded orientation tape for students, and presented orientation sessions for instructors at Harvard University Language Laboratory, 1966-68

I would like to be considered as a consumer representative on the Cambridge Health Policy Board. My varied concerns in the health field include nutrition, fitness, and addiction/recovery issues, the latter because my oldest son was seriously involved in drugs and alcohol for over two years. He now has over a year of sobriety and this fall will again be attending the Pilot School at Cambridge Rindge and Latin School as a drafting major in the vocational/technical program. My other two sons also attend Cambridge public schools, one a junior at the Pilot School, the other entering third grade at the Agassiz. Also part of my household is an Ethiopian student who is a senior at the Pilot School.

My teaching experience in Cambridge was in the Portuguese community and I taught English in Portugal for a year. I was involved the early effort to begin Portuguese instruction in the Cambridge schools.

Two people very close to me are presently residing at Neville Manor, so I also have an interest in health-related questions affecting the elderly.

I have been a Cambridge resident for over 20 years and would attend the required board and subcommittee meetings.

Eric Colborne Sullivan

August 28, 1989

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WORK EXPERIENCE:

1989 - Present **MANAGER, HEALTH SERVICES BRANCH, MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH, BOSTON, MASSACHUSETTS.**

Primary senior executive responsibility to assist the Deputy Commissioner with the day to day management of the Branch. The Health Services Branch consists of the seven State Public Health Hospitals, the Health Care Systems Bureau and the Divisions of Substance Abuse and AIDS Health Services. The Branch, with an annual budget of \$200 million, employs over 3,200 full time personnel.

- . Designed and administered systems for policy development and planning, program operations, resource utilization, staff development, and budget preparation and management.
- . Planned and directed AIDS health services initiatives and programs.
- . Served as Project Officer for the AIDS Health Services Planning Grant.
- . Conceptualized and directed the development of a grant proposal to the federal Health Resources and Health Services Administration to conduct a statewide AIDS health planning initiative. This effort resulted in an \$185,000 award (5th largest award in the Nation) to the Department of Public Health.
- . Worked to expand programs and services for underserved special client populations.
- . Contributed to the development and final analysis of the Hospital Assessment Initiative designed to define the missions of the State's seven Public Health Hospitals.

1987 - 1989

DIRECTOR, OFFICE FOR PURCHASE OF SERVICE, MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH.

Charged with the overall management of the Department's \$90 million purchase of service system; directed a staff of 15. The Purchase of Service Office is responsible for all aspects of contracts administration, including RFP development and assessment, technical assistance and training, performance based contracting, vendor assistance, audit resolution, and data management.

- . Directed the centralization of the Department's contracting functions, which included the establishment of new purchase of service policies and procedures.
- . Developed administrative systems to improve the efficiency and quality of contract operations, RFP development and review, audit resolution, as well as technical assistance and training of community based organizations.
- . Designed and implemented a performance based contracting system.
- . Served as the DPH representative on several interagency committees to develop innovative approaches to finance health services in the state purchase of service system.

1986 - 1987

DIRECTOR OF ADMINISTRATION, CENTER FOR HEALTH PROMOTION AND ENVIRONMENTAL DISEASE PREVENTION, MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH.

Responsible for the administration of the Center for Health Promotion and Environmental Disease Prevention. The Center directed a statewide program to reduce morbidity and mortality from heart disease, stroke and cancer. Managed a budget of \$3 million and a staff of 12.

- . Prepared budget requests, developed requests for proposals, reviewed proposals for health promotion programs and evaluation initiatives and made site visits to applicant agencies.
- . Developed, negotiated, and administered contracts with Federal agencies and community based organizations.
- . Directed and managed the development of a \$5 million grant proposal submitted to the Centers for Disease Control to conduct environmental and epidemiological studies in Woburn, Massachusetts.
- . Participated in the development of several grant proposals to pursue funding for innovative environmental and community based health promotion programs.

1985 - 1986 **REGIONAL SUPERVISOR, BOSTON CASE MANAGEMENT UNIT,
DIVISION OF FAMILY HEALTH, MASSACHUSETTS DEPARTMENT
OF PUBLIC HEALTH.**

Directed the Case Management Unit, supervising a team of three professional staff, in the Boston Region, which was responsible for providing services to approximately 200 children and families.

- . Managed the day to day operations of the Unit to ensure delivery of coordinated and integrated services to children and families.
- . Participated on several Division subcommittees to evaluate the feasibility of reorganizing the delivery and financing of public health services provided to handicapped children and families as a result of the Project Serve Report.
- . Chaired a committee that designed a management information system for the statewide Case Management Services Program.
- . Represented the Department on several interagency committees that addressed the health service needs of children and families.

1984 - 1985 **HEALTH COORDINATOR, HEALTH UNIT, NEW YORK CITY
DEPARTMENT FOR THE AGING, NEW YORK, NEW YORK.**

Project Stay Well, jointly sponsored by the Department for the Aging and the New York Academy for Medicine, provided health promotion services to elderly adults in New York City. Responsible for the development and implementation of the "Stay Well" program in the Bronx and Harlem communities.

1982 - 1984 **SPECIAL ASSISTANT TO THE ASSOCIATE COMMISSIONER OF
THE NEW YORK STATE DEPARTMENT OF PUBLIC HEALTH, NEW
YORK, NEW YORK.**

Responsible for assisting the Associate Commissioner with the overall management of the Maternal and Child Health Section of the American Public Health Association to prepare for the 1982 and 1983 Annual Public Health Conferences.

ROSEMARIE M. HENSON

Page Four

1980 MENTAL HEALTH COUNSELOR, CENTRAL HOSPITAL,
 SOMERVILLE, MASSACHUSETTS.

1979 - 1980 PSYCHIATRIC CASEWORKER, GLENSIDE HOSPITAL, JAMAICA
 PLAIN, MASSACHUSETTS.

EDUCATION:

Columbia University, Graduate Schools of Public Health and
Social Work.
M.S.S.W., 1983, Concentration: Health/Mental Health
M.P.H., 1982, Concentration: Population and Family
Health
Internships:
New York Hospital/Cornell Medical Center, 1982-1983.
Columbia University-Presbyterian Medical Center,
Babies Hospital, 1981-1982.

Northeastern University

B.S., 1979, Major: Human Services
Cum Laude, Kappa Delta Pi Honor Society

PROFESSIONAL AFFILIATIONS AND ACTIVITIES:

Co-Chairperson, Massachusetts Department of Public Health host
committee for the 116th APHA Conference, 1988.

Member, Black Health Caucus Program Planning Committee/APHA, 1988.

Governing Council Member, Maternal and Child Health Section
(MCH)/APHA, 1986-1988.

Assistant Chairperson, MCH Section's Program Planning
Committee/APHA, 1985-1987.

Secretary, MCH Section/APHA 1984-1986.

Member, Maternal and Children Steering Committee, Columbia
University School of Public Health, 1986-Present.

October 19, 1989

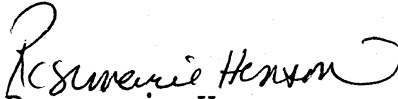
Ms. Ann Gardner
Cambridge Department
Of Health
1493 Cambridge Street
Cambridge, Ma. 02139

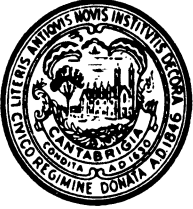
Dear Ms. Gardner:

It was a pleasure to speak with you a couple of weeks ago regarding the Cambridge Health Policy Committee. As a resident of Cambridge and public health professional, I am interested in becoming involved with community initiatives that address public health issues in Cambridge. Ms. Lynn Harding suggested that the Health Policy Committee would provide me with this opportunity.

As per your request, I have enclosed a copy of my resume for your consideration. I look forward to hearing from you in the near future. You may reach me at 727-5030 (days) or 547-7970 (evenings) should you wish to speak with me.

Sincerely,


Rosemarie Henson



CITY OF CAMBRIDGE
CAMBRIDGE, MASSACHUSETTS 02139
TEL. 498-9011

EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

RICHARD C. ROSSI
Deputy City Manager

February 26, 1990

To The Honorable, The City Council:

Please be advised that I have appointed the following people to serve for a three year period beginning February 23, 1990 and expiring on February 22, 1993, as Members of the Cambridge Health Policy Board:

David Gordon Nathan
192 Brattle Street
Cambridge, MA

Eve Odiorne Sullivan
144 Pemberton Street
Cambridge, MA

Rosemary M. Henson
108 Pleasant Street
Cambridge, MA

Very truly yours,

Robert W. Healy
City Manager

RWH/mev
enclosure

Appointment of three persons as
members of the Health Policy
Board.

In City Council,
February 26, 1990

Placed on file