CURRICULUM VITAE
Erik L. Hewlett, M.D.

PERSONAL INFORMATION

Business Address: Box 800419, School of Medicine
University of Virginia
Charlottesville, VA 22908
[redacted]

Home Address: [redacted]

Birthplace and Date: Memphis, Tennessee; November 10, 1946

Marital Status: Married - [redacted]

Children: [redacted]

Education: B.A. in Philosophy and Biology, Westminster College,
Fulton, Missouri, 1964-68

M.D., Johns Hopkins University School of Medicine
Baltimore, Maryland 1968-72

CURRENT ACADEMIC POSITIONS

Professor of Medicine, Department of Internal Medicine, Divisions of Infectious Diseases and International Health, University of Virginia School of Medicine, July 1985 – present (change from Geographic Medicine and Clinical Pharmacology to Division of Infectious Diseases and International Health in 2003)

Professor of Pharmacology, Department of Pharmacology, University of Virginia School of Medicine, July 1987 -present

Senior Associate Dean for Research, University of Virginia, School of Medicine, November 1992 – present (change of title from Associate Dean to Senior Associate Dean in 2003)
.

PREVIOUS ACADEMIC POSITIONS AND TRAINING

Intern in Medicine, New York Hospital - Cornell Medical Center and Memorial Hospital - Sloan Kettering Cancer Center, New York, New York, 1972 - 1973

Resident in Medicine, New York Hospital - Cornell Medical Center and Memorial Hospital - Sloan Kettering Cancer Center, New York, New York, 1973 - 1974

Clinical Associate, National Institute of Arthritis, Metabolism and Digestive Diseases, National Institutes of Health, Bethesda, Maryland, July 1974 - August 1978

Assistant Professor of Medicine, Division of Geographic Medicine, Department of Medicine, Case-Western Reserve University School of Medicine, Cleveland, Ohio, September 1978 - August 1980

Assistant Professor of Pharmacology, Department of Pharmacology, University of Virginia School of Medicine, September 1980 - June 1984

Associate Professor of Medicine, Divisions of Clinical Pharmacology and Geographic Medicine, Department of Internal Medicine, University of Virginia School of Medicine, September 1980 - June 1985

Associate Professor of Pharmacology, Department of Pharmacology, University of Virginia School of Medicine, July 1984 - June 1987

Head, Division of Clinical Pharmacology, Department of Internal Medicine, University of Virginia School of Medicine, July 1984 – June 2003

Professor of Medicine, Department of Internal Medicine, Divisions of Clinical Pharmacology and Geographic Medicine, University of Virginia School of Medicine, July 1985 – June 2003

Associate Dean for Research, University of Virginia School of Medicine, November 1992 – June 2003

ACADEMIC AND ADMINISTRATIVE ACTIVITIES

Previous Intramural Committees

Director, Division of Geographic Medicine Traveler's Clinic, University Hospitals, Cleveland, Ohio, 1978 - 1980

Director, Division of Geographic Medicine Traveler's Clinic, Department of Internal Medicine, University of Virginia, September 1980 - June 1984

Coordinator, Clinical Pathology Conference, Department of Internal Medicine, University of Virginia School of Medicine, July 1982 - June 1988 and September 1992 - May 1995

Member, Faculty Forum for Research, University of Virginia, July 1983 - June 1987

Director, Core Laboratories Program, University of Virginia Diabetes and Endocrine Research Center, July 1984 - May 1994

Chairman, Lymphocyte Culture Center Oversight Committee, University of Virginia School of Medicine, April 1987 - December 1990

Associate Director, University of Virginia Diabetes and Endocrine Research Center, April 1987 - May 1996

Chairman, Search Committee for Directorship of University of Virginia Diabetes Center, 1989 - 1990

Director, Introduction to Clinical Medicine Course, March 1990 - May 1995

Director, Physical Diagnosis Course, March 1990 - May 1995

Acting Director, University of Virginia Diabetes and Endocrine Research Center, June 1990 - January 1991

Member, Board of Directors, Salem Research Institute, Salem VA Hospital, Salem, Virginia, 1994 - 2000

Chair, Organizing Committee for 1996 School of Medicine Research Retreat, June 1995 - January 1996

Member, Search Committee for Chair of the Department of Internal Medicine, October 1995 - June 1997

Chair, Medical Student Thesis Option Committee, April 1996 - November 1996

Member, Search Committee for Director of the Center for Comparative Medicine, January 1997 - June 1997

Chair, Organizing Committee for 1999 School of Medicine Faculty Research Retreat, November 1997 – January 1999

Chair, Organizing Committee for 2002 School of Medicine Faculty Research Retreat, January 2001-February 2002

Chair, Search Committee for Head of the Division of Infectious Diseases, Department of Medicine, March 2001-May 2001.

Present Intramural Committees

Vice-Chair, General Clinical Research Center Advisory Committee, November 1992 - present

Member, Medical Scientist Training Program Executive Committee, November 1992 - present

Member, Medical Advisory Committee, University of Virginia School of Medicine, November 1992 - present

Member (ex officio), Pratt Committee, University of Virginia School of Medicine, November 1992 - present

Member (ex officio), Research and Development Committee, University of Virginia, School of Medicine, November 1992 - present

Member, Board of Directors, University of Virginia Patent Foundation, January 1994 - present

Member, School of Medicine Strategic Plan Steering Committee, December 1998

Chair, Board of Directors, Spinner Technologies, Inc., subsidiary of University of Virginia Patent Foundation, 2001- present

Chair, Board of Directors, University of Virginia Patent Foundation, 2005 – present

Co-chair (with Dr. Ray Costabile), School of Medicine Conflict-of-Interest Task Force, October 2007- present

Extramural Committees

Member, Project Advisory Group, Contract for Determining the Nature, Severity, and Rates of Adverse Reactions Caused by the Administration of Vaccines Containing a Pertussis Component, Bureau of Biologics, F.D.A., 1977 - 1980

Member, Project Advisory Group, Contract for Biochemical and Genetic Characterization of *Bordetella pertussis*, Bureau of Biologics, F.D.A., 1978

Member, National Institute of Allergy and Infectious Diseases Task Force on Pertussis, 1989 - present

Ad hoc Reviewer, Bacteriology and Mycology-1 Study Section, National Institutes of Health, June 1990

Member, Bacteriology and Mycology-1 Study Section, National Institutes of Health, October 1991 - June 1995

Consultant (Special Government Employee), Vaccines and Related Biologicals Products Advisory Committee, Food and Drug Administration, 1995 - present

Vice-Chair, Gordon Research Conference on Microbial Toxins and Pathogenesis, July 1996

Member, Data Monitoring and Safety Committee, Acellular Pertussis Vaccine Trial in Adults, March 1997 – present

Chair, Gordon Research Conference on Microbial Toxins and Pathogenesis, July 1998

Organizer (with Drs. Alison Weiss and Duncan Maskell), Seventh International Symposium on Pertussis, Cambridge, U.K., September18-22, 2002

Chair, National Institute of Allergy and Infectious Diseases Special Emphasis Panel, review of Biodefense and Emerging Infectious Disease Research Opportunities, December 2003

Chair, Centers for Disease Control and Prevention Special Emphasis Panel, review of proposals on Cost Effectiveness of Pertussis Vaccination among Healthcare Workers, June 2006

Organizer (with Dr. Nicole Guiso) International Symposium on Bordetellae, Institute Pasteur, Paris, France, November 8-10, 2006

Participant and session chair, CDC International *Bordetella pertussis* Assay Harmonization and Standardization Meeting, Centers for Disease Control, Atlanta, Georgia, July, 2007

HONORS AND AWARDS

College:	Biology Prize, 1968 Alpha Phi Omega Honor Society Graduated Summa Cum Laude Westminster College Alumni Achievement Award
Medical School:	Alpha Omega Alpha Phi Beta Kappa
Professional Career:	University of Virginia School of Medicine Award for Excellence in Teaching, 1990-91 Division B Lecturer, American Society for Microbiology, Atlanta, Georgia, May1998 Chair, Gordon Research Conference on Microbial Toxins and Pathogenesis, Andover, New Hampshire, July 1998

BOARD CERTIFICATION

Diplomat, American Board of Internal Medicine, 1976

LICENSURE

Virginia 0101-032514; Maryland (inactive) D14269; New York (inactive) 118033

SOCIETY MEMBERSHIPS

American Society for Microbiology, 1978-present
American Federation for Medical Research, 1978-present
American Society of Tropical Medicine and Hygiene, 1978-1992
Infectious Diseases Society of America, Member 1979-1989, Fellow 1989-present
American Society for Clinical Investigation, 1990-present
NIH Alumni Association, 1996-1999
American Association for Advancement of Science, 1997-present
John Hopkins Medical and Surgical Association, 1998-present
Association of American Physicians, 1999-present
Medical Society of Virginia, 1999-present

POSTGRADUATE COURSES AT NIH

Basic Principles of Immunology, Fall 1974
Radiologic Health for Radionuclide Users, two weeks, Nov. 1974
Structure and Function of Proteins, Fall 1975
Introduction to Epidemiologic Methods and Principles, Fall 1976
Advanced Topics in Microbiology, Spring 1977
Statistics for Biomedical Scientists I, Fall 1977

PATENTS

Richard D. Pearson and Erik L. Hewlett. Protozoacidal Activity of Phenothiazines. No. 4,407,800; 10/04/83

PARTICIPATION IN NATIONAL AND INTERNATIONAL MEETINGS, SYMPOSIA, AND WORKING GROUPS ON PERTUSSIS

Third International Symposium on Pertussis, Bethesda, Maryland, 1978

Pertussis Toxin Conference, NIH, Bethesda, Maryland, September 1984

Fourth International Symposium on Pertussis, Geneva, Switzerland, October 1984

Pertussis Discussion Group Organizer, Annual Meetings of the American Society for Microbiology, 1985-97

Workshop on Acellular Pertussis Vaccine, Bethesda, Maryland, February 1988 (Panel Member)

FEMS-Symposium on Pertussis, Berlin, GDR, April 1988

International Workshop on *Bordetella pertussis*, Rocky Mountain Laboratories, Hamilton, Montana, August 1988

Fifth International Symposium on Pertussis, Copenhagen, Denmark, September 1988

Indo-U.S. Vaccine Action Program Vaccine Conference, New Delhi, India, October, 1989

Task Force on Pertussis, NIAID, NIH, 1989 - present

Institute of Medicine (National Academy of Sciences) Workshop on the British National Childhood Encephalopathy Study, Washington D.C., November 1989 (Panel member)

Sixth International Symposium on Pertussis, Bethesda, Maryland, USA, September 1990

Expert panel for DTP vaccine cost-benefit analysis, Division of Immunization, Centers for Prevention Services Center for Disease Control and Prevention/Battelle, Atlanta, February 22, 1993

Meeting on the Results of NIAID Sponsored Placebo Controlled Pertussis Vaccine Trials in Italy and Sweden, Swedish Institute for Infectious Disease Control, Stockholm, Sweden, July 13, 1995

International Symposium on Pertussis Vaccine Trials, Rome, Italy, October 30 - November 1, 1995

National Institutes of Health Pertussis Conference. Acellular Pertussis Vaccine Trials: Results and Impact on U.S. Public Health, Washington, D.C., June 3-5, 1996

Seventh International Symposium on Pertussis: Genome, Immunity and Pathogenesis, (organizer with Drs. Alison Weiss, and Duncan Maskell) Cambridge England, September 18-22, 2002

American Society for Microbiology Annual Meeting, Symposium on One Hundred Years of Pertussis (organizer and co-chair with Dr. Alison Weiss), Orland Florida, May 2006

Eighth International Symposium on Bordetellae (organizer with Dr. Nicole Guiso), Institute Pasteur, Paris, France, November 8-10, 2006

Participant and session chair, CDC International *Bordetella pertussis* Assay Harmonization and Standardization Meeting, Centers for Disease Control, Atlanta, Georgia, July, 2007

INVITED PRESENTATIONS (SINCE 1990)

Martha Jefferson Hospital, Pediatric Section, Charlottesville, Virginia, June 12, 1990

1990 Gordon Conference on Microbial Toxins and Pathogenesis, Plymouth State College, New Hampshire, July 16, 1990

Sixth International Symposium on Pertussis, National Institutes of Health, Bethesda, Maryland, September 26, 1990

Fifth European Workshop on Bacterial Protein Toxins, Veldhoven, Netherlands, July 3, 1991

First International Workshop on Pore Forming Toxins, Castel Ivano, Trento, Italy, September 28, 1991

U.S.-Japan Cooperative Medical Science Program Workshop on Acute Respiratory Infections, National Institute of Health, Bethesda, Maryland, July 21, 1993
Wayne State University, Department of Immunology and Microbiology, Detroit, Michigan, August 23, 1993

Charlottesville-Albemarle Health Department, Charlottesville, Virginia, November 5, 1993

University of Maryland School of Medicine, Department of Microbiology and Immunology, Baltimore, Maryland, December 15, 1994

Albemarle County Medical Society, Charlottesville, Virginia, February 1, 1996

Harvard Medical School, Department of Microbiology and Molecular Genetics, Boston, Massachusetts, February 6, 1996

University of North Carolina at Chapel Hill, Department of Microbiology and Immunology, Chapel Hill, North Carolina, February 22, 1996

University of Alberta/University of Calgary International Conference on Infectious Diseases, Kananaskis Lodge, Kananaskis Village, Alberta, Canada, May 6, 1996

1996 Gordon Research Conference on Microbial Toxins and Pathogenesis, Proctor Academy, Andover, New Hampshire, July 16, 1996

Czech Academy of Sciences, Cellular and Molecular Microbiology Division, Prague, Czech Republic, September 30, 1996

Virginia Academy of Preventive Medicine and Public Health, Charlottesville, Virginia, October 3, 1996

University of Texas Health Science Center at San Antonio, Department of Microbiology, October 28, 1996

Virginia Chapter of the American Society for Microbiology, Virginia Beach, Virginia, December 7, 1996

University of Virginia School of Medicine, Medical Center Hour, Charlottesville, Virginia, February 12, 1997

Anhui Medical University, Hefei, China, March 30, 1997

Shanghai Institute for Biological Products, Shanghai, China, April 2, 1997

Beijing Children's Hospital, Beijing, China, April 4, 1997

Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), New and Emerging Pathogens II, Toronto, Canada, September 28 - October 1, 1997

Division B Lecture, American Society for Microbiology, Atlanta, Georgia, May 17 - 21, 1998

Caring for Children in the 21st Century, Pediatric Immunization Conference, Athens, Greece, October 21, 1998

Instituto Nacionale De Diagnostico y Referencia Epidemiologicos, Mexico City, Mexico, November 20, 1998

Virginia Maryland Regional College of Veterinary Medicine, 11th Annual Research Symposium, Blacksburg, Virginia, May 26, 1999

ETOX 9, Ninth European Workshop on Bacteria Protein Toxins, Ste. Maxime, France, June 27 - July 2 1999

Department of Clinical Veterinary Medicine, University of Cambridge, January 2005

Department of Biochemistry and Immunology, Trinity College, Dublin, Ireland, January 2005

Department of Cell and Molecular Biology, Institute of Microbiology, Czech Academy of Sciences, Prague. Czech Republic, February 2005

Department of Veterinary and Biomedical Sciences, Penn State University, February 2006

Clinical Endocrinology Branch, National Institue of Diabetes and Digestive and Kidney Diseases, Bethesda, Maryland, April 2006

Department of Microbiology and Immunology, Uniformed University for the Health Sciences, Bethesda, Maryland, April 2006

"Pertussis: Reducing transmission of a deadly disease—at all stages of life,"CME Symposium at the annual meeting of the American Association of Family Practice, Washington, D.C., September 2006

Southeast Washington Chapter, American College of Physicians CME Program, September 2006

Department of Medicine Grand Rounds, Beth Israel Hospital, NYC, February 2007

CDC International *Bordetella pertussis* Assay Harmonization and Standardization Meeting, Centers for Disease Control, Atlanta, Georgia, July, 2007

FASEB Summer Research Conference on Microbial Pathogenesis:Mechanisms of Infectious Disease, Snowmass Village, Colorado, July 2007

Faculty Seminar, The Johns Hopkins University School of Nursing, Baltimore, Maryland, January 2008

Medical Center Hour, University of Virginia School of Medicine, February 2008

OTHER ACTIVITIES

Editorial Board: Infection and Immunity, 1991-2003

Reviewer (since 1990): American Journal of Pathology, American Journal of Pediatric Research, American Journal of Physiology, Annals of Internal Medicine, Antimicrobial Agents and Chemotherapy, Archives of Biochemistry and Biophysics, Biochemistry, Clinical Infectious Diseases, Clinical Microbiology Reviews, Epidemiologic Reviews, Gastroenterology, Infection and Immunity, Journal of the American Medical Association, Journal of Biological Chemistry, Journal of Clinical Investigation, Journal of General Microbiology, Journal of Immunology, Journal of Infectious Diseases, Journal of Laboratory and Clinical Medicine, Journal of Leukocyte Biology, Microbiological Reviews, Molecular Microbiology, New England Journal of Medicine, Proceedings of the National Academy of Science USA, Science, Trends in Biochemical Sciences, and Trends in Microbiology, USDA National Research Initiative Competitive Grants Program

GRADUATE STUDENTS AND POST-DOCTORAL FELLOWS TRAINED

Valery M. Gordon, Ph.D. in Pharmacology, 1989. Currently Extramural Human Subjects Research Policy Officer, Office of Extramural Research, NIH
Ingrid E. Ehrmann, Ph.D. in Pharmacology, 1991. New Castle-Upon-Tyne, England, UK
Nancy J. Maloney, M.S. in Pharmacology, 1992, M.D., 1996. Currently Private Practice, Hillsborough, NC
Kathleen Sindt, Ph.D. in Pharmacology, 1996. Career Counseling, University of Maryland, College Park, MD
Kee Jun Kim, Ph.D., Currently Postdoctoral Fellow, Department of Pediatrics The Johns Hopkins University School of Medicine, Baltimore, MD
Sang-Jin Lee. Ph.D. in Pharmacology, 2001.
Franca M. Zaretzky, Ph.D. Currently U.S. Naval Medical Research, Bethesda, MD
Jeffrey M. Tessier, M.D., Infectious Diseases Fellow, University of Virginia School of Medicine (currently Assistant Professor, Division of Infectious Diseases and International Health, University of Virginia
Joshua C. Eby, M.D., Infectious Diseases Fellow, University of Virginia School of Medicine
Matthew A. Crawford, Department of Microbiology (Microbiology, Immunology, Infectious Diseases Program)

DOCTORAL THESIS COMMITTEES

Robert Daniel Moylan, Department of Pharmacology, M.D., Ph.D., August 1981
John Kenneth Crane, Department of Pharmacology, M.D., Ph.D., May 1983

Bonnie Fay Pobiner, Department of Pharmacology, Ph.D., January 1986
Janet Marie Rausch Harrison, Department of Pharmacology, Ph.D., August 1987
Judith Whipple-Leef, Department of Microbiology, Ph.D., April 1993
Julie Sue Moyers, Department of Microbiology, Ph.D., January 1994
Teresa Quitugua, Department of Microbiology, University of Texas at San Antonio, Ph.D., October 1996
Moria Resnick, Department of Pharmacology, Ph.D., September 1997
Amy Brownawell, Department of Pharmacology, Ph.D., September 1997
Christopher Robert Rhodes, Deparrment of Chemistry, Ph.D., May 1999
Kimberly Jefferson, Department of Microbiology, Ph.D., March 2001
David L. Beck, Department of Microbiology, Ph.D., January 2004
Teresa Elena Urban, Department of Microbiology, Ph.D., May 2004
Nicole Ark, Department of Microbiology-current
Jennifer Scarff, Department of Microbiology-current

ORIGINAL REFEREED PUBLICATIONS

1. Hewlett, E.L., R.L. Guerrant, D.J. Evans Jr., and W.B. Greenough III. Toxins of *Vibrio cholerae* and *Escherichia coli* stimulate adenylate cyclase in rat fat cells. Nature 249:371-373, 1974.

2. Levy, A.G., J.W. Benson, E.L. Hewlett, J.R. Herdt, J.L. Doppman, and R.S. Gordon Jr. Saline lavage: a rapid, effective, and acceptable method for cleansing the gastrointestinal tract. Gastroenterology 70:157-161, 1976.

3. Hewlett, E.L., and J. Wolff. Soluble adenylate cyclase from the culture medium of *Bordetella pertussis*: purification and characterization. J Bacteriol 127:890-898, 1976.

4. Hewlett, E.L., M.A. Urban, C.R. Manclark, and J. Wolff. Extracytoplasmic adenylate cyclase of *Bordetella pertussis*. Proc Natl Acad Sci USA 73:1926-1930, 1976.

5. Hewlett, E.L., C.R. Manclark, and J. Wolff. Adenyl cyclase in *Bordetella pertussis* vaccines. J Infect Dis 136 Suppl:S216-219, 1977.

6. Hewlett, E.L., A. Spiegel, J. Wolff, G. Aurbach, and C.R. Manclark. *Bordetella pertussis* does not induce B-adrenergic blockade. Infect Immun 22:430-434, 1978.

7. Hewlett, E.L., L.H. Underhill, G.H. Cook, C.R. Manclark, and J. Wolff. A protein activator for the adenylate cyclase of *Bordetella pertussis*. J Biol Chem 254:5602-5605, 1979.

8. Cowell, J.L., E.L. Hewlett, and C.R. Manclark. Intracellular localization of the dermonecrotic toxin of *Bordetella pertussis*. Infect Immun 25:896-901, 1979.

9. Andrews, J.S. Jr., and E.L. Hewlett. Protection against infection with *Giardia muris* by milk containing antibody to *Giardia*. J Infect Dis 143:242-246, 1981.

10. Goldhammer, A.R., J. Wolff, G.H. Cook, S.A. Berkowitz, C.B. Klee, C.R. Manclark, and E.L. Hewlett. Spurious protein activators of *Bordetella pertussis* adenylate cyclase. Eur J Biochem 115:605-609, 1981.

11. Hewlett, E.L., 0.Y. Hamid, J. Ruffier, and A.A.F. Mahmoud. *In vivo* suppression of delayed hypersensitivity by thiabendazole and diethyl-carbamazine. Immunopharmacology 3:325-332, 1981.

12. Hill, D.R., E.L. Hewlett, and R.D. Pearson. Lectin binding by *Giardia lamblia*. Infect Immun 34:733-738, 1981.

13. Olveda, R.K., J.S. Andrews Jr., and E.L. Hewlett. Murine giardiasis: localization of trophozoites and small bowel histopathology during the course of infection. Am J Trop Med Hyg 31:60-66, 1981.

14. Hewlett, E.L., J.S. Andrews Jr., J. Ruffier, and F.W. Schaefer. Experimental infection of mongrel dogs with *Giardia lamblia* cysts and cultured trophozoites. J Infect Dis 145:89-93, 1982.

15. Pearson, R.D., A. Manian, J.L. Harcus, D. Hall, and E.L. Hewlett. Lethal effect of phenothiazine neuroleptics on the pathogenic protozoan *Leishmania donovani*. Science 217:369-371, 1982.

16. Hill, D.R., R.L. Guerrant, R.D. Pearson, and E.L. Hewlett. *Giardia lamblia* infection of suckling mice. J Infect Dis 147:217-221, 1983.

17. Hewlett, E.L., G.A. Myers, and R.D. Pearson. Susceptibility of *Bordetella* species to growth inhibition and killing by chlorpromazine. Antimicrobial Agents and Chemotherapy 23:201-206, 1983.

18. Burns, D.L., E.L. Hewlett, J. Moss, and M. Vaughan. Pertussis toxin inhibits enkephalin stimulation of GTPase of NG108-15 cells. J Biol Chem 258:1435-1438, 1983.

19. Bokoch, G.M., T. Katada, J.K. Northup, E.L. Hewlett, and A.G. Gilman. Identification of the predominant substrate for ADP-ribosylation by islet activating protein. J Biol Chem 258:2072-2075, 1983.

20. Cronin, M.J., G.A. Myers, R.M. MacLeod, and E.L. Hewlett. Pertussis toxin uncouples dopamine agonist inhibition of prolactin release. Am J Physiol 244:E499-504, 1983.

21. Hewlett, E.L., K.T. Sauer, G.A. Myers, J.L. Cowell, and R.L. Guerrant. Induction of a novel morphological response in Chinese hamster ovary cells by pertussis toxin. Infect Immun 40:1198-1203, 1983.

22. Cronin, M.J., A.D. Rogol, G.A. Myers, and E.L. Hewlett. Pertussis toxin blocks the somatostatin-induced inhibition of growth hormone release and adenosine 3',5'-monophosphate accumulation. Endocrinology 113:209-215, 1983.

23. Hewlett, E.L., C.O. Roberts, J. Wolff, and C.R. Manclark. Biphasic effect of pertussis vaccine on serum insulin in mice. Infect Immun 41:137-144, 1983.

24. Cronin, M.J., W.S. Evans, E.L. Hewlett, A.D. Rogol, and M.O. Thorner. Luteinizing hormone secretion is enhanced by pertussis toxin, cholera toxin, and forskolin: evidence for the involvement of the cyclic AMP-generating system. Neuroendocrinology 37:161-163, 1983.

25. Olansky, L., G.A. Myers, S.L. Pohl, and E.L. Hewlett. Promotion of lipolysis in rat adipocytes by pertussis toxin: reversal of endogenous inhibition. Proc Natl Acad Sci USA 80:6547-6551, 1983.

26. Weiss, A.A., E.L. Hewlett, G.A. Myers, and S. Falkow. Tn*5*-induced mutations affecting virulence factors of *Bordetella pertussis*. Infect Immun 42:33-41, 1983.

27. Tuomanen, E.I., J. Nedelman, J.O. Hendley, and E.L. Hewlett. Species specificity of *Bordetella* adherence to human and animal ciliated respiratory epithelial cells. Infect Immun 42:692-695, 1983.

28. Moss, J., S.J. Stanley, D.L. Burns, J.A. Hsia, D.A. Yost, G.A. Myers, and E.L. Hewlett. Activation by thiol of the latent NAD-glycohydrolase and ADP-ribosyltransferase activities of *Bordetella pertussis* toxin (islet-activating protein). J Biol Chem 258:11879-11882, 1983.

29. Elks, M.L., P.A. Watkins, V.C. Manganiello, J. Moss, E. Hewlett, and M. Vaughan. Selective regulation by pertussis toxin of insulin-induced activation of particulate cAMP phosphodiesterase activity in 3T3-L1 adipocytes. Biochem Biophys Res Comm 116:593-598, 1983.

30. Cronin, M.J., G.A. Myers, R.M. MacLeod, and E.L. Hewlett. Pertussis toxin actions on the pituitary-derived 235-1 clone: effects of PGE_1, cholera toxin, and forskolin on cyclic AMP metabolism and prolactin release. J Cyc Nucleotide and Prot Phos Res 9:245-258, 1983.

31. Hsia, J.A., J. Moss, E.L. Hewlett, and M. Vaughan. ADP-ribosylation of adenylate cyclase by pertussis toxin: effects on inhibitory agonist binding. J Biol Chem 259:1086-1090, 1984.

32. Cronin, M.J., W.S. Evans, E.L. Hewlett, and M.O. Thorner. LH release is facilitated by agents that alter cyclic AMP-generating system. Am J Physiol 246:E44-51, 1984.

33. Watkins, P.A., J. Moss, D.L. Burns, E.L. Hewlett, and M. Vaughan. Inhibition of bovine rod outer segment GTPase by *Bordetella pertussis* toxin. J Biol Chem 259:1378-1381, 1984.

34. Pearson, R.D., A.A. Manian, D. Hall, J.L. Harcus, and E.L. Hewlett. Antileishmanial activity of chlorpromazine. Antimicrobial Agents and Chemotherapy 25:571-574, 1984.

35. Hsia, J.A., J. Moss, E.L. Hewlett, and M. Vaughan. Requirement for both choleragen and pertussis toxin to obtain maximal activation of adenylate cyclase in cultured cells. Biochem Biophys Res Comm 119:1068-1074, 1984.

36. Cronin, M.J., E.L. Hewlett, W.S. Evans, M.O. Thorner, and A.D. Rogol. Human pancreatic tumor growth hormone (GH)-releasing factor and cyclic adenosine 3',5'-monophosphate evoke GH release from anterior pituitary cells: the effects of pertussis toxin, cholera toxin, forskolin, and cycloheximide. Endocrinology 114:904-913, 1984.

37. Tuomanen, E.I., L.A. Zapiain, P. Galvan, and E.L. Hewlett. Characterization of antibody inhibiting adherence of *Bordetella pertussis* to human respiratory epithelial cells. J Clin Microbiol 20:167-170, 1984.

38. Weiss, A., E.L. Hewlett, G.A. Myers, and S. Falkow. Pertussis toxin and extracytoplasmic adenylate cyclase as virulence factors of *Bordetella pertussis*. J Infect Dis 150:219-222, 1984.

39. Adashi, E.Y., C.E. Resnick, M.J. Cronin, and E.L. Hewlett. "Antigonadal" activity of the neurohypophysial hormones in cultured rat testicular cells: abolition by pertussis toxin. Endocrinology 115:839-841, 1984.

40. Schettini, G., M.J. Cronin, E.L. Hewlett, M.O. Thorner, and R.M. MacLeod. Human pancreatic tumor growth hormone releasing factor stimulates anterior pituitary adenylate cyclase activity, cyclic AMP accumulation and growth hormone release in a calmodulin-dependent manner. Endocrinology 115:1308-1314, 1984.

41. Long-Krug, S.A., C.S. Weikel, K.T. Tiemens, E.L. Hewlett, M.M. Levine, and R.L. Guerrant. Does enteropathogenic *Escherichia coli* produce heat-labile enterotoxin, heat-stable enterotoxins a or b, or cholera toxin A subunits? Infect Immun 46:612-614, 1984.

42. Tsai, S.-C., R. Adamik, Y. Kanaho, E.L. Hewlett, and J. Moss. Effects of guanyl nucleotides and rhodopsin on ADP-ribosylation of the inhibitory GTP-binding component of adenylate cyclase by pertussis toxin. J Biol Chem 259:15320-15323, 1984.

43. Moss, J., P. Bruni, J.A. Hsai, S.-C. Tsai, P.A. Watkins, J.L. Halpern, D.L. Burns, Y. Kanaho, P.P. Change, E.L. Hewlett, and M. Vaughan. Pertussis toxin-catalyzed ADP-ribosylation: effects on the coupling of inhibitory receptors to the adenylate cyclase system. J Recept Res 4 (1-6):459-474, 1984.

44. Ravdin, J.I., C.F. Murphy, R.A. Salata, R.L. Guerrant, and E.L. Hewlett. N-acetyl-D-galactosamine-inhibitable lectin of *Entamoeba histolytica*. I. Partial purification and relation to amoebic virulence *in vitro*. J Infect Dis 151:804-815, 1985.

45. Judd, A.M., K. Koike, G. Schettini, I.S. Login, E.L. Hewlett, T. Yasumoto, and R.M. MacLeod. Dopamine decreases 7315a tumor cell prolactin release induced by calcium mobilization. Endocrinology 117:1215-1221, 1985.

46. Hsia, J.A., E.L. Hewlett, and J. Moss. Heterologous desensitization of adenylate cyclase with prostaglandin E_1 alters sensitivity to inhibitory as well as stimulatory agonists. J Biol Chem 260:4922-4926, 1985.

47. Wade B.H., G.G. Wright, E.L. Hewlett, S.H. Leppla, and G.L. Mandell. Anthrax toxin components stimulate chemotaxis of human polymorphonuclear neutrophils. Proc Soc Exp Biol Med 179:159-162, 1985.

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