

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Cornelia L. Dekker		POSITION TITLE Professor of Pediatrics	
eRA COMMONS USER NAME DEKKER.CORNELIA			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Michigan State University, E. Lansing, MI	B.S.	1973	Micro & Pub Health, Clinical Medicine
Michigan State University, E. Lansing, MI	M.D.	1976	Medicine
Duke University Medical Center, Durham, NC	-	1976-1979	Pediatric Residency
Duke University Medical Center, Durham, NC	-	1979-1982	Fellow, Ped. Inf. Dis.
Stanford Univ. School of Medicine, Stanford, CA	-	1998-1999	Post-doctoral Fellow, Peds ID

A. Positions and Honors.

1979-1981 Post-Doctoral Fellow, Wellcome Research Laboratories, RTP, NC
1982-1983 Senior Clinical Research Scientist, Wellcome Research Labs, RTP, NC
1983-1985 Chercheur Étranger, INRS, Villejuif, France
1985-1988 Assoc. Director Clinical Research, Lederle Biologicals, Pearl River, NY
1988 Deputy Director Clinical Research, Lederle Biologicals, Pearl River, NY
1988-1992 Medical Director, Chiron Corporation, Emeryville, CA
1992-1997 Vice President, Clinical Research & Medical Affairs., Chiron Vaccines, Emeryville, CA
1997-1998 Consultant, Oakland, CA
1999-2000 Staff Physician, Stanford University Medical Center, Stanford, CA
1999-present Medical Director, Stanford-LPCH Vaccine Program, Stanford University School of Medicine
2000-2007 Associate Professor of Pediatrics, Stanford University School of Medicine, Stanford, CA
2005-present Member, National Vaccine Advisory Committee
2007-present Professor of Pediatrics, Stanford University School of Medicine, Stanford, CA

B. Selected publications (in chronological order)

- Langenberg A, Burke R, Adair S, Sekulovich R, Tigges M, Dekker C, Corey L. A recombinant glycoprotein vaccine for herpes simplex type 2: safety and immunogenicity. *Ann Intern Med* 122: 889-898, 1995.
- Keefer MC, Graham BS, McElrath MJ, Matthews TJ, Stablein DM, Corey L, Wright PF, Lawrence D, Fast PE, Weinhold K, Hsieh RH, Chernoff D, Dekker C, Dolin R. Safety and immunogenicity of Env 2-3, a human immunodeficiency virus type 1 candidate vaccine, in combination with the novel adjuvant, MTP-PE/MF59. *AIDS Res Hum Retroviruses* 12 (8): 683-693, 1996.
- Black S, Shinefield H., Bergen R, Hart C., Kremers R, Laveteer A, Lemesurier J, Morozumi P, Ray P, Lewis E, Fireman B, Schwalbe J, Hallam P, Shandling M, Dekker C, Granoff D, Izu A, Podda A. Safety and immunogenicity of Chiron/Biocine® recombinant acellular pertussis-diphtheria-tetanus vaccine in infants and toddlers. *Pediatr Infect Dis J* 16:53-58, 1997.
- Straus SE, Wald A, Kost RG, McKenzie R, Langenberg AG, Hohman P, Lekstrom J, Cox E, Nakamura M, Sekulovich R, Izu A, Dekker C, Corey L. Immunotherapy of recurrent genital herpes with recombinant herpes simplex virus type 2 glycoproteins D and B: results of a placebo-controlled vaccine trial. *J Infect Dis* 176(5):1129-34, 1997.
- Corey L, Langenberg A, Ashley R, Sekulovich R, Izu A, Douglas J, Handsfield H, Warren T, Marr L, Tyring S, DiCarlo R, Adimora A, Leone P, Dekker C, Burke, R, Leong, W, Straus S and the Chiron HSV Vaccine Study Group. Recombinant glycoprotein vaccine for the prevention of genital HSV-2 infection: two randomized controlled trials. *JAMA* 282:331-340, 1999.

6. Dekker CL, Prober CG. Pediatric uses of valacyclovir, penciclovir and famciclovir. *Pediatr Infect Dis J* 20: 11:1079-81, 2001.
7. Dekker CL, Prober CG. Antiviral agents effective against herpesviruses. In: Remington JS, Swartz MN, eds. *Current Clinical Topics in Infectious Diseases*. Vol. 21. Malden, MA: Blackwell Science, 2001:271-301.
8. Chen SF, Tu W-W, Sharp MA, Tongson EC, He X-S, Greenberg HB, Holmes TH, Wang Z, Kemble G, Manganello AM, Adler SP, Dekker CL, Lewis DB, Arvin AM. Antiviral CD8 T cells in the control of primary human cytomegalovirus infection in early childhood. *J Infect Dis* 189:1619-27, 2004.
9. Tu W, Chen S, Sharp M, Dekker C, Manganello AM, Tongson EC, Maecker HT, Holmes TH, Wang Z, Kemble G, Adler S, Arvin A, Lewis DB. Persistent and selective deficiency of CD4+ T-cell immunity to cytomegalovirus in immunocompetent young children. *J Immunol* 172(5):3260-7, 2004.
10. Bass D, Cordoba E, Dekker C, Schuind A, Cassady C. Intestinal imaging of children with acute rotavirus gastroenteritis. *J Pediatr Gastroenterol Nutr*. 39(3):270-4, 2004.
11. He X-S, Draghi M, Mahmood K, Holmes TH, Kemble GW, Dekker CL, Arvin AM, Parham P, Greenberg HB. T cell-dependent production of interferon- γ by natural killer cells in response to influenza A virus. *J Clin Invest* 114:1812-19, 2004.
12. Drohan L, Harding JJ, Holm B, Cordoba-Tongson E, Dekker CL, Holmes T, Maecker H, Mellins E. Selective developmental defects of cord blood antigen presenting cell subsets. *Human Immunology* 65:1356-1369, 2004.
13. Klein NP, Holmes TH, Sharp MA, Heineman TC, Schleiss MR, Bernstein DI, Kemble G, Arvin A and Dekker CL. Variability and gender differences in memory T cell immunity to varicella-zoster virus in healthy adults. *Vaccine* 24: 5913–5918, 2006.
14. He X-S, Holmes TH, Zhang C, Mahmood K, Kemble GW, Lewis DB, Dekker CL, Greenberg HB and Arvin AM. Cellular immune responses in children and adults receiving inactivated or live attenuated influenza vaccines. *J Virol* 80:11756-11766, 2006.
15. Sasaki S, Jaimes MC, Holmes TH, Dekker CL, Mahmood K, Kemble GW, Arvin AM, Greenberg HB. Comparison of the influenza-specific effector and memory B cell responses to immunization of children and adults with influenza vaccines. *J Virol* 81(1):215-28, 2007.
16. Zeman AK, Holmes TH, Stamatis S, Tu W, He X-S, Bouvier N, Kemble G, Greenberg HB, Lewis DB, Arvin AM, Dekker CL. Humoral and cellular immune responses in children given annual immunization with trivalent inactivated influenza vaccine. *Pediatr Infect Dis J* 2(26): 107-115, 2007.
17. Klein NP, Fireman B, Enright A, Ray P, Black S and Dekker CL. A role for genetics in the immune response to the varicella vaccine. *Pediatr Infect Dis J* 26: 4: 300-305, 2007.
18. Klein NP, Massolo ML, Greene J, Dekker CL, Black S and Escobar GJ for the Vaccine Safety Datalink. Risk factors for developing apnea following immunization in the NICU. *Pediatrics* 121(3):463-9, 2008.
19. Bernstein DI, Edwards KM, Dekker CL, Belshe R, Noah DL, He F, Hill H. Effects of Adjuvants on the Safety and Immunogenicity of an Avian Influenza (H5N1) Vaccine in Adults. *J Infect Dis* 197(5):667-675, 2008.
20. He XS, Holmes TH, Mahmood K, Kemble GW, Dekker CL, Arvin AM, Greenberg HB. Phenotypic changes in influenza-specific CD8(+) T Cells after immunization of children and adults with influenza vaccines. *J Infect Dis* 197(6): 803-811, 2008.
21. Talbot HK, Keitel W, Cate TR, Treanor J, Campbell J, Brady RC, Graham I, Dekker CL, Ho D, Winokur P, Walter E, Skeljo M, Bennet J, Formica N, Hartel G, Edwards KM. Immunogenicity, safety and consistency of new trivalent inactivated influenza vaccine. *Vaccine* 26:4057–4061, 2008.
22. Wood R, Berger M, Dreskin S, Setse R, Engler R, Dekker C, Halsey N. An algorithm for management of patients with hypersensitivity reactions following vaccines. *Pediatrics* (in press).
23. He X-S, Holmes TH, Sasaki S, Jaimes MC, Kemble GW, Dekker CL, Arvin AM and Greenberg HB. Baseline levels of influenza-specific CD4 memory T-Cells affect T-Cell responses to influenza vaccines. *PLoS ONE* 3(7): e2574. doi:10.1371/journal.pone.0002574, 2008.
24. Sasaki S, He X-S, Holmes TH, Dekker CL, Kemble GW, Arvin AM, Greenberg HB. Influence of prior influenza vaccination on antibody and B-cell responses. *PLoS ONE* 3(8): e2975. doi:10.1371/journal.pone.0002975, 2008.
25. Klein NP, Edwards KM, Sparks RC, Dekker CL. Recurrent sterile abscesses following aluminum adjuvant-containing vaccines. *BMJ Case Reports*, in press.

C. Research Support
Ongoing Research Support

RFA-AI-08-014 (Davis, P.I.) 04/01/09-03/31/14
"Influenza Immunity: Protective Mechanisms against a Pandemic Respiratory Virus"
This grant proposes to use vaccine-induced influenza A immunity as a model for comprehensive, integrated analyses of adaptive and innate immune mechanisms and antimicrobial protection of the respiratory tract of children and adults. Genetic factors influencing response will be examined through use of a twin registry for some studies.
Role: Co-Investigator, Project Leader, Clinical Core

N01-AI-80007-DMID 05-0050 (Edwards, P.I.) 09/01/08-12/31/11
NIH/NIAID, Subcontract from Vanderbilt University
Protocol DMID 05-0050, entitled "A Phase I Randomized, Controlled Dosage-Escalation Trial to Evaluate the Immunogenicity, Safety, and Reactogenicity of an Adenovirus Type 35 Based Circumsporozoite Malaria Vaccine in Healthy Adults 18-45 Years of Age"
This contract is for the continuation of a Phase I malaria vaccine clinical trial begun under the previous subcontract for VTEU "Evaluation of Control Measures Against Diseases Other Than AIDS".
Role: P.I. Stanford subcontract

200-2002-00732 (Dekker, P.I.) 02/01/03-09/30/10
CDC via America's Health Insurance Plans
"Clinical Immunization Safety Assessment Centers (CISA)"
The goal of this CISA Center contract is to create an infrastructure to further our understanding of the nature of adverse events that may occur following immunization. The specific objective is to enhance the understanding of the pathophysiology of these events, especially their immunologic and genetic mechanisms, and to define other predisposing factors that make otherwise healthy individuals vulnerable to such reactions.
Role: P.I.

1U19 AI057229 (Arvin, P.I.) 09/30/03-03/31/09
NIH/NIAID
"Protective Mechanisms Against Pandemic Respiratory Virus"
This grant proposes to use vaccine-induced and naturally acquired influenza A immunity as a model for comprehensive, integrated analyses of adaptive and innate immune mechanisms and antimicrobial protection of the respiratory tract of children and adults.
Role: Co-Investigator, Project Leader, Clinical Core

Completed Research Support (within last three years)

5R01 A1053589 (Dekker, P.I.) 07/01/03-12/31/07
NIH/NIAID No-cost ext. through 12/31/08
"Health Impact of Congenital Cytomegalovirus Infection"
This grant proposes to screen 20,000 newborn infants for congenital HCMV infection over a 3-year period. Those identified will be enrolled into a prospective study of medical visits and hearing screening at 4, 8, 12, 24 and 36 months of age. Immune responses to HCMV will be collected to determine CD4+ and CD8+ T-cell responses at 4, 12 and 36 months of age.
Role: P.I.

RFP NIH-NIAID-DMID-02-01 (Edwards, P.I.) 02/14/03-12/31/08
NIH/NIAID
Subcontract from Vanderbilt University
"Evaluation of Control Measures Against Diseases Other Than AIDS"

The major goal of this project is to conduct prophylactic studies on candidate vaccines, therapeutic vaccines and other biologicals and drugs for Phase I and II clinical investigations.

Role: P.I. Stanford subcontract

CDC via America's Health Insurance Plans (Dekker, P.I.)
"Influenza Public Health Genomics Initiative"

10/01/06-09/30/08

This contract proposed to describe and implement a public health genomics initiative to investigate the human and pathogen genetic and immunologic factors in influenza susceptibility, transmission, and natural history; amenability to prophylaxis; response to treatment; priority groups for intervention; side effect of drugs and vaccines; adverse long-term sequelae; and drug resistance.

Role: P.I.

VaxGen, Inc. (Dekker, P.I.)

09/01/04-10/30/06

"A Phase 1/Phase 2, Randomized, Double-blind, Controlled, Multicenter Trial to Evaluate the Safety and Immunogenicity of a Modified Vaccinia Vaccine (LC16m8)"

This protocol will compare the safety and immunogenicity of the LC16m8 vaccine to Dryvax in healthy adults 18-34 years of age who have not previously been vaccinated against smallpox.

Role: P.I.

Pending Research Support

March of Dimes Birth Defects Foundation (Dekker, P.I.)

06/06/09-05/31/12

"Extended Follow-up of Young Children with Congenital HCMV Infection"

Follow-up of children identified as having congenital HCMV infection as part of the R01 study "Health Impact of Congenital Cytomegalovirus Infection".

Role: P.I.

R21HD061709-01 (Dekker and Enns, Co-PIs)

07/01/09-6/30/11

NIH/CDC: "Metabolic and Immune Responses to Flu Vaccine in Mitochondrial Disease Patients"

This pilot study proposes to describe metabolic and detailed immune responses in adolescents and adults with mitochondrial disorders, young healthy adults and elderly adults > 80 yrs who are susceptible to accumulating mitochondrial mutations.

Role: Co-P.I.