



Bruce D. Gaynor, M.D.

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EDUCATION:

1978-1982 University of Michigan, Ann Arbor, Michigan; A.B. in English Literature and Botanical Science with Honors
1985-1989 Chicago Medical School, Chicago, Illinois.; M.D.

CLINICAL AND RESEARCH EXPERIENCE:

1989-1992 Intern, Resident, Internal Medicine, Albert Einstein College of Medicine, Bronx, NY
1992-1993 Chief Resident, Internal Medicine, Albert Einstein College of Medicine, Bronx, NY
additional year after 3-year categorical internal medicine residency
extensive administrative responsibilities and management of medical service in two large hospitals
responsible for teaching over 100 residents & medical students
1993-1995 Postdoctoral Research Fellowship, Department of Microbiology & Immunology, Albert Einstein College of Medicine, Bronx, NY
described 5 new human immunoglobulin genes
developed patented treatment strategy for systemic lupus erythematosus
performed molecular techniques including PCR, DNA library construction and screening, DNA sequencing, phage library construction, ELISA, southern and western blot, cell culture
1995-1998 Resident, Ophthalmology, Lenox Hill Hospital/New York University, New York, NY
1998-2000 Fellowship in Refractive Surgery, Cornea, External Disease & Uveitis, Francis I. Proctor Foundation/Department of Ophthalmology, University of California, San Francisco, CA

LICENSURE:

State of New York #184144, 1990 to present
State of California #G84535, 1998 to present

CERTIFICATION:

The American Board of Internal Medicine, 1992-2002
The American Board of Ophthalmology, 2002-2012

ACADEMIC APPOINTMENTS:

Clinical Instructor of Ophthalmology
Francis I. Proctor Foundation & The Department of Ophthalmology
University of California, San Francisco, 2000-2002

Assistant Clinical Professor of Ophthalmology
Francis I. Proctor Foundation & The Department of Ophthalmology University of California, San Francisco, 2002-present

AWARDS & HONORS:

University of Michigan, Max H. Cutcheon Research Award for Honors Thesis

American Society of Hematology Award for Poster Presentation

Albert Einstein College of Medicine, Leo M. Davidoff Society Award for excellence in teaching of medical students and residents

NIH National Research Service Award

PATENTS:

Gaynor B, Diamond B, Scharff M, Valadon P. Peptides for the treatment and diagnosis of systemic lupus erythematosus. U.S. Patent, Serial No. 08/531,832, December 14, 1999.

This invention provides:

- a method for identifying a peptide which binds to an anti-double stranded DNA antibody
- a class of peptides identified by the method of the present invention which bind to anti-double stranded DNA antibodies and compositions containing these peptides
- methods for the diagnosis and treatment of systemic lupus erythematosus utilizing the peptides of the present invention

PROFESSIONAL SOCIETIES:

American Academy of Ophthalmology

American Academy of Ophthalmology Refractive Surgery Interest Group

American Association for the Advancement of Science

American Society of Cataract and Refractive Surgery

California Academy of Ophthalmology (Board Member)

California Medical Association

Castroviejo Cornea Society

Cordis Society, University of California at San Francisco

Eye Bank Association of America

H. Bruce Ostler Association of Proctor Fellows, University of California at San Francisco

-President 2004 to present

Ocular Microbiology and Immunology Group

Ophthalmologic Society of the Redwood Empire

Sonoma County Medical Association

Volunteer: Community Free Clinic of Sonoma County
 National Eye Care Project
 Sebastopol Education Foundation (Board Member)
 Prevent Blindness Northern California (Board Member)
 -local chapter of Prevent Blindness America
 California Academy of Ophthalmology (Board Member)
 Simply Soccer, Sebastopol, California- Soccer Coach

PUBLICATIONS- Journal Articles & Book Chapters:

1. Gaynor, B: Hybridization in Michigan white oaks (*Quercus* Subg. *Lepidobalanus*) with emphasis on two new hybrids. *Michigan Botanist* 1987;26:63-77. (non-medical)

2. Lipper B, Bell A, Gaynor B: Recurrent hypotension immediately after seizures in nortriptyline overdose. *Amer J Emer Med* 1994;12:452-3.

3. Irigoyen M, Manheimer-Lory A, Gaynor B, Diamond B: Molecular analysis of the human immunoglobulin V lambda II gene family. *J Clin Invest* 1994;94:532-8.
4. Lipper B, Gaynor B: Value of serum tricyclic antidepressant levels with massive nortriptyline overdose and persistent hypotension. *Amer J Emer Med* 1995; 13:107.
5. Manheimer-Lory A, Irigoyen M, Gaynor B, et al: Analysis of V kappa I and V lambda II light chain genes in the expressed B-cell repertoire. *Annals NY Acad Sci* 1995;764:301-11.
6. Manheimer-Lory A, Monhian R, Splaver A, Gaynor B, Diamond B: Analysis of the V kappa I family: germline genes from an SLE patient and expressed autoantibodies. *Autoimmunity* 1995;20:259-65.
7. Spatz L, Iliev A, Saenko V, Jones L, Irigoyen M, Manheimer-Lory A, Gaynor B, et al: Studies on the structure, regulation, and pathogenic potential of anti-dsDNA antibodies. *Methods* 1997;11:70-8.
8. Gaynor B, Putterman C, Valadon P, Spatz L, Scharff M, Diamond B: Peptide inhibition of glomerular deposition of an anti-DNA antibody. *Proc Nat Acad Sci* 1997;94:1955-60.
9. Gaynor B, Starr M: Antimicrobial prophylaxis in ophthalmology. *Duane's Foundations of Clinical Ophthalmology* (chapter) 1998; Lippincott-Raven Publishers.
10. Gaynor B, Margolis T, Cunningham ET: Advances in herpes keratouveitis diagnosis and management. *International Ophthalmology Clinics* 2000;40:85-109.
11. Gaynor B, Stamper R, Cunningham, ET: Presumed activation of Herpetic keratouveitis following argon laser peripheral iridotomy. *American Journal of Ophthalmology*, 2000;130:665-7.
12. Gaynor B, Wade NK, Cunningham ET: Herpes simplex virus-1 associated acute retinal necrosis following encephalitis. *Retina*, 2001;21:688-690.
13. Gaynor B, Yi Elizabeth, Lietman, T: Rationale for Mass Antibiotic Distribution for Trachoma Elimination. *International Ophthalmology Clinics*, 2002;42:85-92.
14. Fry AM, Jha HC, Lietman TM, Chaudhary JSP, Bhatta RC, Elliott J, Hyde T, Schuchat A, Pokhrel RP, Gaynor B, Dowell S. Secondary effects of mass chemoprophylaxis with azithromycin to eliminate blindness due to trachoma in Nepal: Adverse and Beneficial Effects. *Clinical Infectious Disease*, 2002;35:395-402.
15. Jha H, Chaudary JSP, Bhatta R, Miao Y, Osaki-Holm S, Gaynor B, Zegans M, Bird M, Yi E, Holbrook K, Whitcher J, Lietman T. Disappearance of trachoma from western Nepal. *Clinical Infectious Disease*, 2002;35:765-8.
16. Gaynor B, Holbrook K, Whitcher J, Osaki-Holm S, Stephens RS, Jha HC, Chaudhary JSP, Bhatta RC, Fry A, Lietman T. Community treatment with azithromycin for trachoma is not associated with antibiotic resistance in *Streptococcus pneumoniae* at one year. *British Journal of Ophthalmology*, 2003;87:147-8.
17. Gaynor B, Obstbaum S. Nuclear Cracking Techniques. *Ophthalmic Surgery: Principles and Practice*, 3rd Edition, Chapter, Harcourt Health Sciences, 2002.

18. Melese M, Wondu A, Gaynor B, Yi E, Whitcher J, Lietman T. What more is there to learn about trachoma? *British Journal of Ophthalmology*, 2003;87:521-2.
19. Gaynor B, Miao Y, Cevallos V, Jha H, Chaudary J, Bhatta R, Osaki-Holm S, Yi E, Schachter J, Whitcher J, Lietman T. Eliminating Trachoma in Areas with Limited Disease, *Emerging Infectious Diseases*, 2003;9:596-598.
20. Gaynor B, Cevallos V, Jha H, Chaudary J, Bhatta R, Miller K, Osaki-Holm S, Yi E, Whitcher J, Lietman T. Elimination may not be too high a goal for trachoma programs. *Revue Internationale du Trachome*, 2003;80:261-266.
21. Miller K, Schmidt G, Melese M, Alemayehu W, Yi E, Cevallos V, Donnellan C, Olinger L, Fantaye D, Gaynor B, Whitcher J, Lietman T. How reliable is the clinical exam in detecting ocular chlamydial infection? *Ophthalmic Epidemiology*, 2004;2:255-262.
22. Miller K, Pakpour N, Yi E, Melese M, Alemayehu W, Bird M, Schmidt G, Cevallos V, Olinger L, Chidambaram J, Gaynor B, Whitcher J, Lietman T. Pesky trachoma suspect finally caught. *British Journal of Ophthalmology*, 2004;88:750-1.
23. Melese M, Chidambaram J, Alemayehu W, Lee D, Yi E, Cevallos V, Zhou Z, Donnellan C, Saidel M, Whitcher J, Gaynor B, Lietman T. Feasibility of eliminating ocular *Chlamydia trachomatis* with repeat mass antibiotic treatments. *JAMA*, 2004;292:721-725.
24. Chidambaram J, Melese M, Alemayehu W, Yi E, Prabripataloong T, Lee D, Cevallos V, Zhou Z, Whitcher J, Gaynor B, Lietman T. Mass antibiotic treatment and community protection in trachoma control programs. *Clinical Infectious Diseases*, 2004;39:e95-e97.
25. Chidambaram J, Bird M, Schiedler V, Fry A, Porco T, Bhatta R, Jha H, Chaudary J, Gaynor B, Yi E, Whitcher J, Osaki-Holm S, Lietman T. Trachoma decline and widespread use of antimicrobial drugs? *Emerging Infectious Diseases*, 2004;10:1895-1899.
26. Lietman T, Gaynor B, Porco T. Single-Dose Azithromycin for Trachoma. *New England Journal of Medicine*, 2005;352:414-5.
27. Gaynor B, Cevallos V, Miao Y, Yi E, Jha H, Bhatta R, Chaudary J, Whitcher J, Osaki-Holm S, Fry A, Holbrook K, Lietman T. Topical ocular antibiotics induce systemic resistance at extraocular sites. *British Journal of Ophthalmology*, 2005;89:1097-1099.

PUBLICATIONS- Posters & Abstracts

1. Lazar E, Heiman M, Lazar J, Dobkin J, Douchy C, Mitzner A, Gaynor B, et al. Does the a/A ratio predict successful extubation. American College of Chest Physicians, Annual Meeting, 1990.
2. Gaynor B, Dutcher J, Paietta E, Wiernik P. Carboplatin plus mitoxantrone therapy in relapsed/refractory acute leukemia and blast crisis of chronic myeloid leukemia. *Blood* 1991;78(Suppl 1):31a.
3. Gaynor B, Valadon P, Scharff M, Diamond B. Defining a peptide epitope recognized by a pathogenic murine anti-double stranded DNA antibody. International Business Communications Epitope Conference. La Jolla, 1994.
4. Gaynor B, Abbott R, Hwang D, Holsclaw, D. Bacterial keratitis following photorefractive keratectomy. Ocular Microbiology and Immunology Group, 32nd Annual Meeting, New Orleans, LA, 10/98.
5. Gaynor B, McDonald T, Wade N, Cevallos V, Whitcher J, Holsclaw D. The prevalence of bacterial pathogens on the lids and conjunctiva and the incidence of corneal ulceration in ocular cicatricial pemphigoid. The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 5/11/99.

6. Wade N, Gaynor B, Holsclaw D. Serial conjunctival biopsies to assess systemic immunomodulation of ocular cicatricial pemphigoid (OCP). The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 5/11/99.
7. Gaynor B, Rasmussen-Lathrop SJ, Dawson CR, Schachter J, Stephens, RS. Interleukin-8 is elevated in active trachoma. Ocular Microbiology and Immunology Group, 33rd Annual Meeting, Orlando, FL, 10/23/99.
8. Gaynor B, Rasmussen-Lathrop SJ, Dawson CR, Schachter J, Stephens, RS. Cytokines in active trachoma. VI Ophthalmological Congress of South Asian Association for Regional Cooperation Countries, Kathmandu, Nepal, 11/20/99
9. Gaynor B, Holbrook KH, Osaki S, Stephens RS, Whitcher JP, Leitman TL. Community treatment with azithromycin for trachoma is not associated with antibiotic resistance in *Streptococcus pneumoniae* at one year. The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 5/1/00
10. Gaynor B, Cevallos V, Miao Y, Yi E, Jha H, Bhatta R, Chaudary J, Whitcher J, Osaki-Holm S, Fry A, Lietman T. Can topical ocular antibiotics induce systemic resistance? Ocular Microbiology and Immunology Group, 36th Annual Meeting, Orlando, FL, 10/19/02.
11. Gaynor B, Jha H, Miller K, Yi E, Chidambaram J, Osaki-Holm S, Whitcher J, Lietman T. Elimination may not be too high a goal for trachoma programs. Ocular Microbiology and Immunology Group, 37th Annual Meeting, Anaheim, CA, 11/15/03
12. Lee D, Melese M, Alemayehu W, Chidambaram J, Yi E, Cevallos V, Zhou Z, Whitcher J, Gaynor B, Lietman T. How frequently do we need to repeat mass antibiotic distributions to eliminate trachoma in Ethiopia? The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 4/26/04.
13. Chidambaram J, Melese M, Alemayehu W, Cevallos V, Donnellan C, Zhou Z, Yi E, Whitcher J, Gaynor B, Lietman T. Do untreated children receive an indirect, protective effect following mass antibiotic treatment for trachoma? The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 4/28/04.
14. Lee S, Wondu A, Muluken M, Lee D, Yi E, Zhou Z, Cevallos V, Donnellan K, Chidambaram J, Gaynor B, Whitcher J, Lietman T. Eliminating trachoma: fly control or antibiotics? Ocular Microbiology and Immunology Group, 38th Annual Meeting, New Orleans, LA, 10/23/04.
15. Saidel M, Melese M, Alemayehu W, Cevallos V, Yi E, Friedly L, Chidambaram J, Gaynor B, Whitcher J, Lietman T. Trachoma infection in children predicts infection in the rest of the community. The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 5/5/05.
16. Chidambaram J, Melese M, Alemayehu W, Cevallos V, Yi E, Donnellan C, Zhou Z, Gaynor B, Whitcher J, Lietman T. Monitoring trachoma infection after mass antibiotic treatment: the long lag time of the clinical examination. The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 5/5/05.
17. Lee S, Melese M, Lee D, Yi E, Cevallos V, Donnellan K, Chidambaram J, Gaynor B, Whitcher J, Lietman T. Treatment with antibiotics drastically reduces importance of flies as a vector for trachoma. The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 5/5/05.
18. Cevallos V, Donnellan C, Zhou Z, Yi E, Melese M, Alemayehu W, Lee S, Gaynor B, Whitcher J, Lietman T. Conjunctival flora in patients with trichiasis due to trachoma. The Association for Research in Vision and Ophthalmology, Annual Meeting, Fort Lauderdale, FL, 5/5/05.

Lectures & Symposia:

1. *Pasteurella Keratitis*. Grand Rounds, Department of Ophthalmology, University of California at San Francisco, 9/24/98
2. *Acanthamoeba Keratitis*. Grand Rounds, Department of Ophthalmology, University of California at San Francisco, 2/11/99
3. *Infectious Crystalline Keratopathy*. Seminars in Advanced Cornea and External Disease, Francis I. Proctor Foundation, University of California at San Francisco, 3/24/99
4. *Bacterial Keratitis following Photorefractive Keratectomy*. Frederick C. Cordes Eye Society, Annual Meeting, University of California at San Francisco, 4/8/99
5. *Bacterial Keratitis*. Seminars in Advanced Cornea and External Disease, Francis I. Proctor Foundation, University of California at San Francisco, 6/16/99
6. *Pasteurella Keratitis*. Annual meeting, Society of Francis I. Proctor Foundation Fellows, Asilomar, California, 6/12/99
7. *Cytokines in Trachoma*. Annual meeting, Society of Francis I. Proctor Foundation Fellows, Asilomar, California, 6/13/99
8. *Herpetic Keratouveitis*. Grand Rounds, Department of Ophthalmology, University of California at San Francisco, 9/23/99
9. *Mass treatment of children versus targeted household treatment for active trachoma*. VI Ophthalmological Congress of South Asian Association for Regional Cooperation Countries, Kathmandu, Nepal, 11/19/99
10. *From the Ebers Papyrus to the Genome: Ocular Infection with Chlamydia*. Seminar, Cornea & External Disease, Jules Stein Eye Institute, University of California at Los Angeles, 2/23/00
11. *Does community-wide treatment for trachoma provide antibiotic resistance?* Frederick C. Cordes Eye Society, Annual Meeting, University of California at San Francisco, 4/14/00
12. *The Corneal epithelium*. Seminars in Advanced Cornea and External Disease, Francis I. Proctor Foundation, University of California at San Francisco, 5/24/00
13. *Scleral coloboma*. Annual meeting, Society of Francis I. Proctor Foundation Fellows, Asilomar, California, 6/10/00.
14. *Community-wide treatment with azithromycin for trachoma does not cause bacterial resistance at one year*. Annual meeting, Society of Francis I. Proctor Foundation Fellows, Asilomar, California, 6/10/00.
15. *Mass Antibiotic Administration for Trachoma*. The Third International Symposium on Ophthalmology in the Developing World, Francis I. Proctor Foundation, University of California at San Francisco, San Francisco, 3/23/01.
16. *Will the last trachoma case please stand up?* Department of Ophthalmology, University of California, San Francisco, December Course, Hotel Nikko, San Francisco, CA, December 5, 2002
17. *Eradication is not too high a goal for trachoma programs*. Trachoma Scientific Informal Workshop, WHO Alliance for the Global Elimination of Blinding Trachoma by 2020, World Health Organization, Prevention of Blindness & Deafness, Geneva, Switzerland, 1/4/03.

18. *Three years of mass antibiotic administrations: the case for emerging resistance.* Cordes Society, Department of Ophthalmology, University of California, San Francisco, Bank of America Building, April 3, 2003.
19. *Elimination may not be too high a goal for trachoma programs.* International Organization Against Trachoma, Et Ligue Francaise Contre Le Trachome, 109^{ème} Congres De La Societe Francaise D'Ophtalmologie, Paris, France, 11 May 2003
20. *Elimination may not be too high a goal for trachoma programs.* Annual meeting, Society of Francis I. Proctor Foundation Fellows, Asilomar, California, 6/20/03.
21. *Causes of blindness worldwide.* Earl Baum Center for the Blind. Santa Rosa, CA, November 21, 2003.
22. *Treating Eye Disease from Santa Rosa to Africa and Asia.* Friends House, Santa Rosa, California. December 4, 2003
23. *Can repeated mass antibiotics eliminate a bacterial disease?* Santa Rosa Memorial Hospital, Grand Rounds, January 23, 2004
24. *Do flies transmit chlamydial DNA?* Trachoma Scientific Informal Workshop. World Health Organization, Geneva, Switzerland. March 26, 2004.
25. *Can mass antibiotic administrations eliminate a bacterial disease?* Cordes Society, Department of Ophthalmology, University of California, at San Francisco, San Francisco, CA April 1, 2004.
26. *A fly in the eye.* Annual meeting, Society of Francis I. Proctor Foundation Fellows, Asilomar, California, 6/26/04.
27. *Career options in ophthalmology.* Department of Biology, Sonoma State University, Rohnert Park, CA, November 12, 2004
28. *Is once a year enough?* Trachoma Scientific Informal Workshop. World Health Organization, Geneva, Switzerland. March 18, 2005.
29. *Eliminating ocular chlamydia trachomatis with mass antibiotic treatments.* Medicine and Health in the Tropics Congress. Marseille, France, September 14, 2005.
30. *Prevention of blinding corneal infectious disease: a global perspective.* Ocular Microbiology and Immunology Group, Symposium on Evolving Concepts in Ocular Infectious Disease. American Academy of Ophthalmology, Annual meeting. Chicago, October 17, 2005.
31. *Allergic and atopic eye disease.* Instruction course. American Academy of Ophthalmology. Annual meeting, Chicago, October 18, 2005.
32. *Adjunctive use of newer diagnostic tools.* Instruction course. American Academy of Ophthalmology. Annual meeting. Chicago, October 18, 2005.
33. *Trachoma in children in Nepal.* Sutter Medical Center of Santa Rosa. Pediatric Grand Rounds, October 21, 2005.