

# CURRICULUM VITAE

Name: Bruce Merchant

Date and Place of Birth: March 26, 1935; Elgin, Nebraska

## Education:

1964 Ph.D., Pathology, University of Chicago

1963 M.D., University of Chicago

1957 B.A., Nebraska Wesleyan University

## Brief Chronology of Employment:

1996 - Present	Principal, Merchant-Taylor International Inc. Encinitas, CA and Princeton, NJ
1994 - Present	Principal, Clin/Regs Associates San Diego, CA
1990 - 1994	Vice Present for Clinical Development and Regulatory Affairs Viagene Inc., San Diego, CA
1984 - 1990	Director of Medical and Regulatory Affairs, Hybritech Incorporated, San Diego, CA
1973 - 1984	Director, Immunoematology Branch, Division of Blood and Blood Products, Bureau of Biologics, Food and Drug Administration
1966 - 1973	Career Scientist, Laboratory of Immunology, NIAID, National Institutes of Health
1964 - 1966	Staff Associate, Laboratory of Immunology, NIAID, National Institutes of Health
1964 - 1984	Military Service USPHS Commissioned Corps, Bethesda, MD
1963 - 1964	USPHS Postdoctoral Trainee
1959 - 1961	USPHS Predoctoral Trainee in Immunopathology, University of Chicago

## Professional Societies:

Sigma Xi  
American Association of Immunologists  
American Medical Association  
American Society of Zoologists  
New York Academy of Science

## Research Interests:

Antibody formation; Immunogenetics; Regulation of the Immune Response; Kinetics of Immunoglobulin Synthesis and Secretion; Immune Response to Chemical Haptens; Transplantation; Graft-versus-Host Reactions; Transition and Modulation of Immunocyte Function; Ontogeny of the Immune Response; Natural Antibody Production, Microbial and Environmental Antigens; Immune responsiveness in aneuploid and athymic animals; Autoimmune diseases; Transfer Factor; Anti-Lymphocyte Globulin; Hybridoma applications; Liposome Immunogens.

## Community Activities:

Tenor Soloist, North Bethesda Methodist Choir, 1968 - 1980  
Vice President, North Bethesda Grove Civic Association: 1968 - 1969  
President, North Bethesda Grove Civic Association: 1969 - 1970  
Flower Valley PTA: 1972 - 1977  
Member, Board of Directors, Lake Land 'or Citizens Association: 1975 - present  
Vice President, Lake Land 'or Citizens Association: 1977 - 1978  
President, Lake Land 'or Citizens Association: 1979 - 1980  
Tenor Soloist, St. James Catholic Choir, 1985 - 1994

## Special Scientific Lectures and Presentations:

See Appendices 1, 2 and 3.

Honors and Other Special Scientific Recognition:

Distinguished Citizen Award, Nebraska Centennial Commission, 1967

Faculty member, Department of Microbiology and Immunology, of the Foundation of the Advanced Education on the Sciences, National Institutes of Health, 1969-1982

Equal Employment Opportunity Counselor for NIAID, 1971 - 1973

Project Officer, NIAID Task Force on Immunology and Diseases, 1972 - 1973

Special Assistant - Allergy and Immunology Branch, Extramural Programs, NIAID, December 1972 - April 1973

Chairman, Office of Biologics, Hybridoma Committee, 1982 - 1984

Advisory Editor: Immunochemistry, 1976 - 1980

Editorial Board, Infection and Immunity, 1972 - 1974

Member, National Research Council, Committee on Nude Mouse in Biomedical Research, 1975 - 1976

Member, Bureau of Biologics Clinical Review Committee, 1977 - 1984

Vice Chairman, Bureau of Biologics Clinical Review Committee, 1979 - 1982

Chairman, Office of Biologics Clinical Research Review Committee, 1982 - 1984

Member, Bureau of Biologics, Committee on Interferon Testing Guidelines, 1979 - 1983

Chairman, Office of Biologics, Hybridoma Committee, 1982 - 1984

Represented Association of Biotechnology Companies (ABC) in testimony given to Sullivan/Edwards Committee Investigating the FDA, 1990

Co-Chairman Association of Biotechnology Companies (ABC) Biologics Working Group, 1990

Two on One Session with David Kessler, Commissioner of FDA ( 1 1/2 hrs), 1990

Board of Directors Association of Biotechnology Companies (ABC), 1991

Testified before President's Council on Competitiveness, 1991

Testified before the U.S. House Appropriations Committee in support of FDA Budget (represented ABC), 1991

Honors and Other Special Scientific Recognition: (continued)

Presented Viagene's Gene Therapy Program for AIDs to National Advisory Committee. Received Unanimous Approval, 1992

Gave keynote address at Associates for Clinical Pharmacology (ACP) meeting in San Francisco, "Biotechnology and It's Impact on Health Care in the Coming Decade," 1993

Initiated first commercial clinical trial of Gene Therapy for AIDs, 1993

Elected to Board of Directors of the Emerging Companies Section of Biotechnology Industry Organization (BIO), 1993

Presented Viagene's third clinical protocol for Gene Therapy of AIDs to Recombinant Advisory Committee of NIH. Received Unanimous Approval, 1993

Presented Joseph Ingraham Memorial Lecture, University of Indiana Department of Microbiology, 1999

Ph.D. Thesis

Conventional and passive transfer modified heterologous antibodies against antigens of the Ehrlich tumor. University of Chicago, 1964.

## BIBLIOGRAPHY

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2. Liacopoulos, P., et Merchant, E.B.: Inhibition de la maladie homologue chez la souris a traitement des donneurs avec divers antigenes. Acad. Sci., Paris, France. 261: 280-283, July, 1965.
3. Merchant, B. and Hraba, T.: Lymphoid cells producing antibody against simple haptens. Science 152: 1378-1379, 1966.
4. Liacopoulos, P., Merchant, B. and Harrell, B.E.: Inhibition of the graft-versus-host reaction by pretreatment of donors with various antigens. Transplantation 5: 1423-1435, 1967.
5. Harrell, B.E. and Merchant, B.: A hemolytic plaque technique for enumeration of cells producing antibody against penicillin. Int. Arch. Allergy and Applied Immunol. 32:21-26, 1967.
6. Barth, R.F. and Merchant, B.: Adaptation of the hemolytic plaque technique for enumeration of immune cells responding to heterologous immunoglobulin antigens. Proc. Soc. Exp. Biol. and Med. 125: 307-309, 1967.
7. Smith, A.M., Potter, M. and Merchant, B.: Hemolytic antibody-forming cells in the pronephros of the teleost, *Lepomis macrochirus*. J. of Immunol. 99: 876-882, 1967.
8. Liacopoulos, P., Merchant, B. and Harrell, B.E.: Effect of donor immunization with somatic polysaccharides on the graft-versus-host reactivity of transferred donor splenocytes. Proc. Soc. Exp. Biol. and Med. 125: 958-962, 1967.
9. Hraba, T. and Merchant, B.: Immunological tolerance to sulfanilic acid assessed by the hapten-specific plaque technique. J. of Immunol. 102:229-240, 1969.
10. Harrell, B.E., Wright, W. and Merchant, B.: Cells producing antibody to penicillin. Int. Arch. Allergy and Applied Immunol. 32: 282-287, 1967.
11. Liacopoulos, P., Merchant, B., and Harrell, B.E.: Inhibition of homologous disease by treatment of donor mice with bacterial antigens. Pathol. et Biol. 15: 587-592, 1967.
12. Merchant, B. and Petersen, B.: Comparative sensitivities of the hemolytic plaque-in-agar and microchamber assays for detection of rabbit immune cells. J. of Immunol. 101: 860-867, 1968.

13. Liacopoulos. P. and Merchant, B.: Effet du traitement des donneurs avec desendotoxines sur la maladie homologue des receveurs adultes irradiés. In La Structure et Les Effets Biologiques des Produits Bacteriens Provenent de Germes Gram-Negatifs. Editions du centre national de la recherche scientifique. Paris VII<sup>e</sup>, 1969.
14. Merchant, B.: Comet plaques: Evidence for storage of low efficiency hemolysins by indirect plaque-forming cells. J. of Immunol. 104:1565-1568. 1970.
15. Merchant, B. and Brahmi, Z.: Duplicate plating of immune cell products: Analysis of globulin class secretion by single cells. Science. 167: 69-71. 1970.
16. Hanna. E. and Merchant, B.: Secretion of Monospecific Anti-Hapten IgG Antibodies by Rabbit Immunocytes. J. of Immunol. 107: 172-184. 1971.
17. Merchant, B. and Liacopoulos. P.: Paradoxical Cellular and Serologic Responses Following Antigenic Competition. Int. Arch. Allergy and Applied Immunol. 42: 516-532. 1972.
18. Rouques, R., Inman, J.K. and Merchant, B.: Detection of cells secreting antibodies more reactive with an alternate structure than with the immunizing hapten. Int. Arch. Allergy and Applied Immunology 42: 852-870, 1972.
19. Merchant, B., Inman, J.K. and Claflin, L.: Evidence for genetic control of spontaneous hapten-specific IgM antibody production. Landy, M. and McDevitt, H. (Eds.): Genetic Control of Immune Responsiveness in Relation to Disease Susceptibility, Academic Press, New York, 1972.
20. Claflin, L. and Merchant, B.: Restricted maturation of antibody binding characteristics for hapten-specific IgM plaque-forming cells in mice. Cell Immunology 5: 209-220, 1972.
21. Claflin, L., Merchant, B. and Inman. J.: Antibody binding characteristics at the cellular level: I. Comparative maturation of hapten-specific IgM and IgG plaque-forming cell populations. J. Immunol. 110: 214-252, 1973.
22. Claflin, L. and Merchant, B.: Antibody binding characteristics at the level: II. Presence of cells secreting high affinity IgG antibody at the onset of the immune response. J. Immunol. 110:252-261, 1973.
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24. Inman, J.K., Merchant, B., Claflin, L. and Tacey, S.E.: Coupling of large haptens to proteins and cell surfaces: Preparation of stable optimally sensitized erythrocytes for hapten-specific, hemolytic plaque assays. Immunochemistry 10: 165-174, 1973.

25. Sher, N.A., Chaparas, S.D., Greenberg, L.E. and Merchant, E.B.: The Response of Congenitally Athymic (Nude) Mice to Infection with Mycobacterium Bovis (Strain BCG). J. Nat'l. Cancer Inst. 54: 1419-1426, 1975.
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Carriers Bearing Lipid Groups. Immunology 34: 947-954, 1977.

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43. Snippe, H., Merchant, B., Lizzio, E.F., and Inman, J.K.: Localization of <sup>125</sup>I-Labeled DNP-Ficoll on Normal and Defective Hybrid Progeny of CBA/N Mice. Int. Arch. of Allergy and Appl. Immunol. 62: 168-178, 1980.
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48. Snippe, H., Merchant, B., Lizzio, E.F. and Inman, J.K.: Functional Antigen Binding by the Defective B Cells of CBA/N x C3H/HeN F<sub>1</sub> Male Mice. J. of Immunogenetics 7: 409-420, 1980.
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51. Schott, C.F., Lizzio, E.F. and Merchant, B.: Murine Immune Memory to a TI-2 Antigen, DNP-Ficoll: Carrier Specificity, Genetic Enhancement and Phenotypic Dominant Inheritance. J. of Immunogenetics 8: 459-462, 1981.
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- Membranes in Mice: VII. Synergistic Responses to Haptenated Liposomes and Haptenated Thymus Dependent Antigens in CBA/N Mice. Immunology 45: 613-620, 1982.
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  66. Merchant, B.: Monoclonal Antibody Products: Regulatory Concerns. In Proceedings of the Toxicology Forum 1983 Annual Summer Meeting. (I.Maimon, ed.) pp. 149-167, Toxicology Forum, Washington, D.C., 1983.
  67. Snippe, H., van Houte, A.3., Inman, 3.K., Lizzio, E.F., and Merchant, B.: Hpaten-Specific B Cell Blockade of the Immune Response to a Thymus-Independent Antigen Produced by Concomitant Administration of a Thymus-Independent-2 Antigen. Immunology 52: 87-95, 1984.
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84. Abdel-Nabi, H., Doerr, R., Chan, H., Farrell, E., Evans, N., Spaulding, M., Schweighardt, S., and Merchant, B.: Safety and Role of Repeated Administrations of Indium-111-Labeled Anti-carcinoembryonic Antigen Monoclonal Antibody ZCE 025 in the Postoperative Follow-up of Colorectal Carcinoma Patients. J Nucl Med 33:14-22, 1992.
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86. Haubrich, R., Warner, J., Anderson, CG., Holdredge, R., Peters, C., Baud, C., Merritt, J., Merchant, B., Jacobsen, C., and McCutchan, JA: Phase I Study of an HIV IIIB env/rev encoding retroviral vector in HIV seropositive patients with CD4>200 35th ICAAC Abstract, 1995.
87. Merritt, J., Peters, G., Anderson, CG, Heiner, L., Freeman, K., Cole, V., Klump, W., Merchant, B., Warner, J., Casciato, D., and Galpin, J: HIV-IT (V) Stimulates HIV-1 specific cytotoxic T-lymphocytes following intramuscular administration to HIV-seropositive volunteers 35th ICAAC Abstract, 1995.
88. Ziegner, U., Peters, G., Jolly, D., Mento, S., Galpin, J., Prussak, C., Barber, J., Hartnett, D., Bohart, C., Klump, W., Sajjadi, N., Merchant, B., and Warner, J.:

Cytotoxic T-lymphocyte induction in asymptomatic HIV-1 infected patients immunized with Retroviral Vector-transduced autologous fibroblasts expressing HIV-1 III<sub>B</sub> env/rev proteins. AIDS 9:43-50, 1995.

Books:

1. Anti-thymocyte Globulin in Human Organ Transplantation  
312 pages (B. Merchant ed.) U.S. Government Printing Office, 1981.
2. Immune Defects in Laboratory Animals Vol. I, 357 pages  
(M.E. Gershwin and B. Merchant, eds.) Plenum Press, New York, 1981.
3. Immune Defects in Laboratory Animals Vol. II, 379 pages  
(M.E. Gershwin and B. Merchant, eds.) Plenum Press, New York, 1981.

## Appendix 1

FY 1982 Scientific Lectures, Briefings and Presentations - B. Merchant, MD, Ph.D.

<u>Date</u>	<u>Topic</u>	<u>Audience</u>
10-9-81	Monoclonal Antibodies for Clinical Use:	Blood Products Advisory Committee
10-21-81	Native Immunity:	FAES Course Immunology 401
10-22-81	Inflammation & Pathogenesis of Immune Injury:	FAES Course Immunology 401
10-28-81	Antigens and Hapten:	FAES Course Immunology 401
10-29-81	Phylogeny of Immunology:	FAES Course Immunology 401
11-4-81	Ontogeny of Immunity:	FAES Course Immunology 401
11-5-81	Dynamics of Antibody Formation:	FAES Course Immunology 401
11-17-81	Monoclonal Abs. Clinical Prospects and Regulatory Problems:	FDA Science Colloquium
12-10-81	Hybridoma Technology & Monoclonal Antibodies.	FDA Commissioner's Staff Conference
12-16-81	Clinical and Regulatory Aspects of Monoclonal Ab Products:	Food & Drug Law Institute
1-6-82	Immune Tolerance:	FAES Course Immunology 401
1-7-82	Transplantation Immunity:	FAES Course Immunology 401
1-12-82	Briefing on Hybridomas & Monoclonal Antibodies:	Commissioner FDA & Director, CDC
2-10-82	Hybridoma Technology & Update on Monoclonal INDs:	BoB Vaccine Panel
3-22-82	Briefing on Prospects for Monoclonal Antibody Products:	Asst. Sec. for Health, Edward Brandt
4-7-82	Briefing: History of Regulation of HLA Antisera:	DBBP Consultant Panel
4-12-82	Regulatory Issues Concerning Monoclonal Ab Products:	Biologics Section, PMA
5-11-82	Prospects and Problems for Monoclonal Ab Products:	Blood Resources Advisory Committee, Heart & Lung Institute
5-18-82	Testify Regarding Sheep Cell Therapy:	Md. State Committee on Medica Discipline
5-27-82	Clinical Uses of Monoclonal Antibodies:	Naval Medical Research Institute
6-9-82	Clinical Aspects of Monoclonal Antibodies: Prospects & problems:	Plasma Forum
6-14-82	Briefing on Hybridoma Technology:	FDA, EDRO Field Officers
6-29-82	Testify Regarding Sheep Cell Therapy:	MD State Committee on Medical Discipline
7-23-82	Applications of Monoclonal Antibodies:	Gordon Conference, Plymouth, 1

## Appendix 2

FY 1983 Scientific Lectures, Briefings and Presentations - B. Merchant, MD, Ph.D.

<u>Date</u>	<u>Topic</u>	<u>Audience</u>
9-7-82	Testify Regarding Sheep Cell Therapy:	Md. State Committee on Medicine Discipline
9-14-82	Clinical Uses of Monoclonal Antibodies:	FDA, EDRO Field Officers
9-15-82	Testify Regarding Sheep Cell Therapy	Md. State Committee on Medica Discipline
9-24-82	Monoclonal Antibodies: General Overview and Clinical Prospects	Blood Products Adv. Committee Workshop on Molecular Integrity
11-4-82	Monoclonal Antibody Products: Regulatory Concerns	So. Calif. Branch of American Soc. for Microbiology
11-10-82	Monoclonal Antibodies: Clinical Applications	NCI BRMP Retreat on Monoclonal Antibodies
11-29-82	Regulation of Monoclonal Antibodies	NCI BRMP Decision Network Committee
1-31-83	Special Delivery Systems with Monoclonal Antibodies	International Conference on Drug Delivery Systems, Paris, France
3-7-83	Monoclonal Antibodies: Regulatory Concerns	NCI Monoclonal Antibody Working Group
3-15-83	A Particularly Labile Monoclonal Antibody	DBBP Research Seminar Series
3-22-83	Special Delivery Systems with Monoclonal Antibodies	International Conference on Drug Delivery Systems, White Plains, New York
4-14-83	General Overview of Monoclonal Antibodies	Div. of Metabolism and Endocrine Drug Products, NCDB, FDA
4-20-83	Monoclonal Antibodies: Technology and Applications	FDA Sigma Xi Scientific Research Society
4-28-83	Regulation of Monoclonal Antibodies	Div. of Metabolism and Endocrine Drug Products, NCDB, FDA
5-10-83	Viral Contaminants in Monoclonal Antibodies	NCI BRMP Workshop on Monoclonal Antibodies
6-20-83	Regulation of Monoclonal Antibodies	FDA, Field Supervisors, Leesburg, VA
6-28-83	Monoclonal Antibodies: Regulatory Concerns	Toxicology Forum, Aspen, CO
6-29-83	Clinical Applications of Monoclonal Antibodies	Dept. of Pharmacology, U. of Illinois, Chicago, IL

### Appendix 3

Scientific Lectures and Presentations - B. Merchant, MD, Ph.D.

<u>Date</u>	<u>Topic</u>	<u>Audience</u>
11-1-84	Safety Concerns for In Vivo Monoclonal Antibodies	S. California ASM, San Diego, CA
5-14-85	Regulatory Concerns for Injectable Monoclonal Antibody Products	MIT-FDA Inspectors Training Course, Boston, MA
10-16-85	The Regulatory Implications of Commercializing Injectable Monoclonal Antibody Products	Regulatory Affairs Professional's National Workshop, San Francisco, CA
11-14-85	Importance of Antibody Specificity in Tumor Management	Health Industry Manufacturer's Assoc. Educational Seminar, Arlington, VA
12-4-85	The Role of Monoclonal Antibodies in Future Drug Delivery	Eighth Annual Eino Nelson Memorial Conference, St. Thomas, U.S. Virgin Islands
12-12-85	The Goals of Radioimmunolocalization for Imaging Human Melanomas	Hybritech Clinical Workshop U. of Colorado, Denver
2-7-86	The Future for Monoclonal Antibody Imaging of Prostatic Carcinoma	Hybritech Prostate Cancer Symposium, Tucson, Arizona
3-3-86	Anti-CEA Imaging of Colon Carcinoma: General Perspective	Hybritech Colon Cancer Workshop, San Diego, CA
3-4-86	Clinical Evaluation of Two <sup>111</sup> In Labelled Monoclonal Antibodies for Imaging of Malignant Melanoma	Melanoma Imaging Symposium, San Diego, CA
3-5-86	Clinical Investigations of MoAb-Based Lymphoscintigraphy for Tumor Imaging	Lymphoscintigraphy Workshop, San Diego, CA
4-6-86	Regulation of Monoclonal Antibody Products for Injection by the FDA	UCLA Symposium on Regulation of Biotechnology Produced Agents: Keystone, CO
4-17-86	Monoclonal-based Imaging of Human Melanoma	CALGB Annual Clinical Meeting, Montreal, Canada
4-22-86	Regulation of Injectable Monoclonal Antibodies by the FDA	Eli Lilly/Hybritech Technical Seminar, San Diego
5-6-86	Bifunctional Antibodies for use in Tumor Imaging	American Society of Clinical Oncologists, Los Angeles
5-21-86	Monoclonal Antibody Imaging of Human Tumors	San Diego Neurological Society, San Diego, CA
6-5-86	Regulatory Concerns for Injectable Monoclonal Antibody Products	Los Angeles-FDA Inspector's Training Course, Los Angeles, CA

### Appendix 3 (cont'd)

Scientific Lectures and Presentations - B. Merchant, MD, Ph.D.

<u>Date</u>	<u>Topic</u>	<u>Audience</u>
6-19-86	Regulation of Biotechnology Produced Biologicals	Eli Lilly Seminar on Drug Regulatory Policies, Indianapolis, IN
9-11-86	Immunoligands for use in Imaging of Human Tumor Xenografts	American Chemical Society Annual Meeting, Anaheim, CA
10-29-86	Anti CEA-Imaging of Human Colorectal Carcinoma	Hybritech Clinical Workshop, Dallas, TX
3-21-87	<sup>111</sup> In-Labeled Monoclonal Antibody Imaging of Colorectal Carcinoma	Soc. of Nuclear Medicine, Winter High Mountain Meeting, Vail CO
4-16-87	Radioimmunotherapy of Human Colon Xenografts in Nude Mice	NCI-Navy Oncology Seminar, Bethesda, MD
6-24-87	<sup>111</sup> In Labeled Anti CEA Monoclonal Antibody Imaging of Human Colorectal Carcinoma	Office of Biologics Staff, Bethesda, MD
7-20-87	Imaging of Human Colon Carcinoma	American Assoc. of Clinical Chemists, San Francisco, CA
9-11-87	Monoclonal Antibody-based Imaging of Human Colorectal Carcinoma	Interscience Symposium on Regulation of Biotechnology Agents, Paris, France
9-12-87	Radioimmunotherapy of Colon Carcinoma Regulation of in a Preclinical Model	Interscience Symposium on Biotechnology Agents, Paris, France
10-6-87	Imaging of Human Colorectal Carcinoma with <sup>111</sup> In Labeled ZCE-025	Monoclonal Antibody Steering Committee, Indianapolis, IN
11-19-87	<sup>111</sup> In Labeled Monoclonal Antibody Imaging of Colon Carcinoma	Surgical Oncology Workshop, City of Hope Medical Center, Duarte, CA
12-4-87	Monoclonal Antibody-Based Imaging of Frontiers Human Colon Carcinoma	BBI Sponsored Symposium, New in Diagnostic Imaging, Chicago, IL
2-4-88	Radioimmunoimaging of Human Colon Carcinoma	Scripps Clinic Tenth Annual Conf. on Clinical Laboratory Molecular Analysis, San Diego, CA

### Appendix 3 (cont'd)

Scientific Lectures and Presentations - B. Merchant, MD, Ph.D.

<u>Date</u>	<u>Topic</u>	<u>Audience</u>
2-6-88	Imaging of Human Colorectal Carcinoma with an Indium-labeled Anti-CEA Monoclonal Antibody	Third International Conference on Monoclonal Immunoconjugates for Cancer, San Diego, CA
3-28-88	Chaired & moderated session at which the three participating speakers were Dr. Frank Young, Commissioner of the FDA, and Dr's. David Jeffries & David Pope, the FDA "Commissioner" counterparts for the United Kingdom and Canada respectively.	Plenary Session of Association of Biotechnology Companies Second Int'l Meeting: Washington, D.C.
3-29-88	Imaging of Colorectal Carcinoma with a CEA-reactive Monoclonal Antibody.	Endocrine Division Staff, National Center for Drug Evaluation & Review, Rockville, MD
4-7-88	<sup>111</sup> In Labelled Anti-CEA Imaging of Colon Carcinoma.	Providence Hospital Medical Staff, Portland, OR
4-7-88	Monoclonal Antibody-based Imaging of Human Colon Tumors.	Veterans Administration Hospital Staff, Portland, OR
4-19-88	Imaging of Recurrent Occult Colorectal Carcinoma with an <sup>111</sup> In Labeled Anti-CEA Monoclonal.	M.D. Anderson Hospital Combined Surgical and Oncological Staff, Houston, TX
4-21-88	Surgical Evaluation of Tumor Imaging with an <sup>111</sup> In Labeled Monoclonal Anti-CEA Antibody.	Northwestern University Medical Center, Surgery and Nuclear Medicine Staffs, Chicago, IL