

PROGRAM PLANNING COMMITTEE

William C. Eckelman
David M. Goldenberg (*Chairman*)
Edgar Haber
Thomas Hoffman
Steven M. Larson
Stanley E. Order
Howard Sands
Mette Strand

PROGRAM

Introduction to the Second Conference on Radioimmuno-detection and Radioimmunotherapy of Cancer. <i>David M. Goldenberg</i>	778s
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SESSION I

Radiochemistry of Antibodies

Chairperson: William C. Eckelman

Development of Radiochemically Pure Antibodies. <i>W. C. Eckelman</i>	780s
Improving the Tumor Retention of Radioiodinated Antibody: Aryl Carbohydrate Adducts. <i>Seham A. Ali, Stephen D. Warren, Karen Y. Richter, Christopher C. Badger, Janet F. Eary, Oliver W. Press, Kenneth A. Krohn, Irwin D. Bernstein, and Wil B. Nelp</i>	783s
Stable Bifunctional Chelates of Metals Used in Radiotherapy. <i>Min K. Moi, Sally J. DeNardo, and Claude F. Meares</i>	789s
Preclinical Evaluation of an "Instant" ^{99m} Tc-labeling Kit for Antibody Imaging. <i>Hans J. Hansen, Anastasia L. Jones, Robert M. Sharkey, Ruth Grebenau, Nancy Blazejewski, Arthur Kunz, Michael J. Buckley, Edward S. Newman, Frank Ostella, and David M. Goldenberg</i>	794s
^{99m} Tc Labeling of Proteins: Initial Evaluation of a Novel Diaminedithiol Bifunctional Chelating Agent. <i>Kwamena E. Baidoo, Ursula Scheffel, and Susan Z. Lever</i>	799s
Disulfide Bond-targeted Radiolabeling: Tumor Specificity of a Streptavidin-biotinylated Monoclonal Antibody Complex. <i>Renato B. del Rosario and Richard L. Wahl</i>	804s

SESSION II

Experimental Studies of Radioimmuno-detection

Chairpersons: Howard Sands and Jeffrey Schlom

Experimental Studies of Radioimmuno-detection of Cancer: An Overview. <i>Howard Sands</i>	809s
Physiological Barriers to Delivery of Monoclonal Antibodies and Other Macromolecules in Tumors. <i>Rakesh K. Jain</i>	814s
Innovations That Influence the Pharmacology of Monoclonal Antibody Guided Tumor Targeting. <i>Jeffrey Schlom, Patricia Horan Hand, John W. Greiner, David Colcher, Shashi Shrivastav, Jorge A. Carrasquillo, James C. Reynolds, Steven M. Larson, and Andrew Raubitschek</i>	820s
Comparison of Tumor Targeting in Nude Mice by Murine Monoclonal Antibodies Directed against Different Human Colorectal Cancer Antigens. <i>Robert M. Sharkey, David V. Gold, Rosarito Aninipot, Rae Vagg, Cathy Ballance, Edward S. Newman, Frank Ostella, Hans J. Hansen, and David M. Goldenberg</i>	828s
Pharmacokinetics of ^{99m} Tc-Metallothionein-B72.3 and Its F(ab') ₂ Fragment. <i>Beverly A. Brown, Cynthia B. Dearborn, Cynthia A. Drozynski, and Howard Sands</i>	835s
Mechanisms of Tissue Uptake and Metabolism of Radiolabeled Antibody—Role of Antigen:Antibody Complex Formation. <i>J. David Beatty, Barbara G. Beatty, Margaret O'Conner-Tressel, Tulan Do, and Raymond J. Paxton</i>	840s

Mechanism of Decreasing Liver Uptake of ¹¹¹ In-labeled Anti-Carcinoembryonic Antigen Monoclonal Antibody by Specific Antibody Pretreatment in Tumor Bearing Mice. <i>Barbara G. Beatty, Margaret O'Conner-Tressel, Tulan Do, Raymond J. Paxton, and J. David Beatty</i>	846s
Uptake and Metabolism of ¹¹¹ In-labeled Monoclonal Antibody B6.2 by the Rat Liver. <i>Peter L. Jones, Beverly A. Brown, and Howard Sands</i>	852s
Site-specifically Radioiodinated Antibody for Targeting Tumors. <i>Douglas W. Rea, Michiel E. Ultee, Benjamin A. Belinka, Jr., Daniel J. Coughlin, and Vernon L. Alvarez</i>	857s
Radiolocalization of Monoclonal Antibodies in Hepatic Metastases from Human Colon Cancer in Congenitally Athymic Mice. <i>Kazuhiko Yoshida, Michel Rivoire, Chaitanya Divgi, Sydney Welt, Alfred M. Cohen, and Elin R. Sigurdson</i>	862s
Monoclonal Antibody Targeting of Human Non-Small Cell Carcinoma of the Lung. <i>Rhona Stein, Robert M. Sharkey, and David M. Goldenberg</i>	866s
Carcinoembryonic Antigen and α -Fetoprotein Expression and Monoclonal Antibody Targeting in a Human Hepatoma/ Nude Mouse Model. <i>Zhifu F. Wang, Rhona Stein, Robert M. Sharkey, and David M. Goldenberg</i>	869s
Comparative Pharmacokinetics of a Murine Monoclonal Antibody to a Rat Colon Tumor in Rats and Nude Mice. <i>Jorge Laborda, Jean-Yves Douillard, Elaine F. Lizzio, and Thomas Hoffman</i>	873s
Radioimmunodetection of Hepatic Metastases from Human Colon Cancer in Nude Mice with a Gamma-detecting Probe. <i>Michel Rivoire, Kazuhiko Yoshida, Chaitanya Divgi, Sydney Welt, Alfred Cohen, and Elin R. Sigurdson</i>	877s
Patterns of Antigen Distribution in Human Carcinomas. <i>M. Jules Mattes, Pierre P. Major, David M. Goldenberg, Arnold S. Dion, Robert V. P. Hutter, and Kenneth M. Klein</i>	880s
Use of Whole-Body Autoradiography in Cancer Targeting with Radiolabeled Antibodies. <i>Irwin Fand, Robert M. Sharkey, and David M. Goldenberg</i>	885s

SESSION III

Clinical Studies of Radioimmunodetection

Chairpersons: Steven M. Larson and Abass Alavi

Clinical Radioimmunodetection, 1978–1988: Overview and Suggestions for Standardization of Clinical Trials. <i>Steven M. Larson</i>	892s
Tumor Immunoscintigraphy by Means of Radiolabeled Monoclonal Antibodies: Multicenter Studies of the Italian National Research Council—Special Project “Biomedical Engineering”. <i>Antonio G. Siccardi</i>	899s
Radioimaging of Melanoma Using ^{99m} Tc-labeled Fab Fragment Reactive with a High Molecular Weight Melanoma Antigen. <i>Lamk M. Lamki, Alexander A. Zukiwski, L. Joy Shanken, Sewa S. Legha, Robert S. Benjamin, Carl E. Plager, Darrell F. Salk, Robert W. Schroff, and James L. Murray</i>	904s
Clinical Studies of Cancer Radioimmunodetection with Carcinoembryonic Antigen Monoclonal Antibody Fragments Labeled with ¹²³ I or ^{99m} Tc. <i>David M. Goldenberg, Hildegard Goldenberg, Robert M. Sharkey, Edith Higginbotham-Ford, Robert E. Lee, Lawrence C. Swayne, Karen A. Burger, Diane Tsai, Jo Ann Horowitz, Thomas C. Hall, Carl M. Pinsky, and Hans J. Hansen</i>	909s
Presurgical Imaging with Indium-labeled Anti-Carcinoembryonic Antigen for Colon Cancer Staging. <i>J. David Beatty, Lawrence E. Williams, David Yamauchi, Blaine A. Morton, L. Robert Hill, Barbara G. Beatty, Raymond J. Paxton, Bruce Merchant, and John E. Shively</i>	922s
Breast Tumor Radioimmunodetection with a ¹¹¹ In-labeled Monoclonal Antibody (MA5) against a Mucin-like Antigen. <i>Pierre P. Major, Arnold S. Dion, Charlene J. Williams, M. Jules Mattes, Taqui Wang, and Leonard Rosenthal</i>	927s
Human Biodistribution of ¹¹¹ In-labeled B72.3 Monoclonal Antibody. <i>Steven J. Harwood, Robert G. Carroll, William B. Webster, Linda M. Zangara, David L. Laven, Michele A. Morrissey, and Barbara J. Sinni</i>	932s
Immunolymphoscintigraphy and Immunoscintigraphy of Ovarian and Fallopian Tube Cancer Using F(ab') ₂ Fragments of Monoclonal Antibody OC 125. <i>Pentti Lehtovirta, Kalevi J. A. Kairemo, Kristian Liewendahl, and Markku Seppälä</i>	937s
Lymphoscintigraphy in Melanoma: Initial Evaluation of a Low Protein Dose Monoclonal Antibody Cocktail. <i>Richard L. Wahl, Monica Liebert, John Headington, Barry S. Wilson, Barry L. Shulkin, Jon W. Johnson, Shirley Mallette, Ronald B. Natale, William Coon, Mary East, Robertson Davenport, M. B. Brown, John T. Niederhuber, and Neil A. Swanson</i>	941s
Immunolymphoscintigraphy with ^{99m} Tc-labeled Monoclonal Antibody (BW 431/26) Reacting with Carcinoembryonic Antigen in Breast Cancer. <i>Kalevi J. A. Kairemo</i>	949s

Radioimmunodetection in Rhabdo- and Leiomyosarcoma with ¹¹¹ In-Anti-Myosin Monoclonal Antibody Complex. <i>André Planting, Jaap Verweij, Peter Cox, Mike Pillay, and Gerrit Stoter</i>	955s
Detection of Thrombophlebitis with ¹¹¹ In-labeled Anti-Fibrin Antibody: Preliminary Results. <i>Abass Alavi, Naresh Gupta, Harold I. Palevsky, Mark A. Kelley, Allison D. Jatlow, Ann A. Byar, and Harvey J. Berger</i>	958s

SESSION IV

Prospects for Therapy, I: Experimental

Chairperson: Mette Strand

Radioimmunotherapy in Experimental Animal Models: Principles Derived from Models. <i>David A. Scheinberg and Mette Strand</i>	962s
Biological Considerations for Radioimmunotherapy. <i>Robert M. Sharkey, Rosalyn D. Blumenthal, Hans J. Hansen, and David M. Goldenberg</i>	964s
Current Status of Animal Radioimmunotherapy. <i>Barry W. Wessels</i>	970s
Targeting and Therapy of Human Glioma Xenografts <i>in Vivo</i> Utilizing Radiolabeled Antibodies. <i>Jeffery A. Williams, Barry W. Wessels, James A. Edwards, Kenneth A. Kopher, Philip M. Wanek, Moody D. Wharam, Stanley E. Order, and Jerry L. Klein</i>	974s
Imaging and Therapy of Small Cell Carcinoma Xenografts Using ¹³¹ I-labeled Monoclonal Antibody SWA11. <i>Alan Smith, Peter Groscurth, Robert Waibel, Gerrit Westera, and Rolf A. Stahel</i>	980s
Radioimmunotherapy of Peritoneal Human Colon Cancer Xenografts with Site-specifically Modified ²¹² Bi-labeled Antibody. <i>R. Bruce Simonson, Michiel E. Ultee, Jo A. Hauler, and Vernon L. Alvarez</i>	985s
Radioimmunotherapy of Human Colon Carcinomatosis Xenograft with ⁹⁰ Y-ZCE025 Monoclonal Antibody: Toxicity and Tumor Phenotype Studies. <i>Jose M. Esteban, David M. Hyams, Barbara G. Beatty, Bruce Merchant, and J. David Beatty</i>	989s
Comparative Binding and Preclinical Localization and Therapy Studies with Radiolabeled Human Chimeric and Murine 17-1A Monoclonal Antibodies. <i>Donald J. Buchsbaum, Pamela G. Brubaker, David E. Hanna, Arthur A. Glatfelter, Valeri H. Terry, Dianne M. Guilbault, and Zenon Steplewski</i>	993s
Tumor Spheroid Model for the Biologically Targeted Radiotherapy of Neuroblastoma Micrometastases. <i>K. A. Walker, R. Mairs, T. Murray, T. E. Hilditch, T. E. Wheldon, A. Gregor, and I. M. Hann</i>	1000s
Use of Hematopoietic Growth Factors to Control Myelosuppression Caused by Radioimmunotherapy. <i>R. D. Blumenthal, R. M. Sharkey, L. M. Quinn, and D. M. Goldenberg</i>	1003s
Role of Bone Marrow Transplantation in ⁹⁰ Y Antibody Therapy of Colon Cancer Xenografts in Nude Mice. <i>Blaine A. Morton, Barbara G. Beatty, Angeles P. Mison, Philip M. Wanek, and J. David Beatty</i>	1008s

SESSION V

Prospects for Therapy, II: Clinical

Chairperson: Stanley E. Order

Radiolabeled Antibodies: Results and Potential in Cancer Therapy. <i>S. E. Order, A. M. Sleeper, G. B. Stillwagon, J. L. Klein, and P. K. Leichner</i>	1011s
Fractionated Radioimmunotherapy of B-Cell Malignancies with ¹³¹ I-Lym-1. <i>Gerald L. DeNardo, Sally J. DeNardo, Lois F. O'Grady, Norman B. Levy, Gregory P. Adams, and Stanley L. Mills</i>	1014s
High Dose Radiolabeled Antibody Therapy of Lymphoma. <i>Irwin D. Bernstein, Janet F. Eary, Christopher C. Badger, Oliver W. Press, Fredrick R. Appelbaum, Paul J. Martin, Kenneth A. Krohn, Wil B. Nelp, Bruce Porter, Darrell Fisher, Richard Miller, Sherrie Brown, Ronald Levy, and E. Donnall Thomas</i>	1017s
Radioimmunotherapy of Human B-Cell Lymphoma with ⁹⁰ Y-conjugated Antiidiotype Monoclonal Antibody. <i>Barbara A. Parker, Artemios B. Vassos, Samuel E. Halpern, Richard A. Miller, Homer Hupf, Diane G. Amox, Joseph L. Simoni, Robin J. Starr, Mark R. Green, and Ivor Royston</i>	1022s
Estimation of Monoclonal Antibody-associated ⁹⁰ Y Activity Needed to Achieve Certain Tumor Radiation Doses in Colorectal Cancer Patients. <i>Lawrence E. Williams, Barbara G. Beatty, J. David Beatty, Jeffrey Y. C. Wong, Raymond J. Paxton, and John E. Shively</i>	1029s
Intraperitoneal Immunoconjugates. <i>Thomas W. Griffin, Jeffrey Collins, Faran Bokhari, Mark Stochl, A. Bertrand Brill, Tsunao Ito, Georgette Emond, and Howard Sands</i>	1031s

Tumor, Red Marrow, and Organ Dosimetry for ¹³¹ I-labeled Anti-Carcinoembryonic Antigen Monoclonal Antibody. <i>Jeffry A. Siegel, David A. Pawlyk, Robert E. Lee, Norma L. Sasso, Jo Ann Horowitz, Robert M. Sharkey, and David M. Goldenberg</i>	1039s
Dosimetric Model for Antibody Targeted Radionuclide Therapy of Tumor Cells in Cerebrospinal Fluid. <i>W. T. Millar and A. Barrett</i>	1043s

SESSION VI

Host Responses and Complications

Chairperson: Thomas Hoffman

Anticipating, Recognizing, and Preventing Hazards Associated with <i>in Vivo</i> Use of Monoclonal Antibodies: Special Considerations Related to Human Anti-Mouse Antibodies. <i>Thomas Hoffman</i>	1049s
Immunoglobulin Class and Immunoglobulin G Subclass Analysis of Human Anti-Mouse Antibody Response during Monoclonal Antibody Treatment of Cancer Patients. <i>Herve M. Blottière, J. Y. Douillard, H. Koprowski, and Z. Steplewski</i>	1051s
Human Immune Response to Anti-Carcinoembryonic Antigen Murine Monoclonal Antibodies. <i>Michele J. Losman, Robert L. DeJager, Marc Monestier, Robert M. Sharkey, and David M. Goldenberg</i>	1055s
Author Index	1059s

COVER LEGEND



Pictured are five of the scientists who made critical contributions to the development of radioimmunodetection and radioimmunotherapy. Phil Gold (*far left*), codiscoverer of carcinoembryonic antigen, which has served as the prototype cancer marker and target for labeled antibodies, is currently Physician-in-Chief, Montreal General Hospital, Montreal, Canada. David Pressman (*second from left*), deceased, is credited with having made the early and seminal observations of organ and cancer targeting with antibodies against rodent tumors. David M. Goldenberg (*center*), who is President of the Center for Molecular Medicine and Immunology, Newark, New Jersey, organized the first and second conferences and provided the first demonstration in animals and humans of cancer imaging with radiolabeled antibodies against carcinoembryonic antigen, as well as a number of other cancer markers. William F. Bale (*second from right*), deceased, also was an early pioneer of animal studies of tumor localization with radiolabeled antibodies and pursued fibrin clot imaging and tumor therapy with radiolabeled anti-fibrin antibodies. Stanley E. Order (*far right*), who was one of the first proponents and innovators of radioimmunotherapy, is currently Professor and Director of Radiation Oncology, Johns Hopkins Cancer Center, Baltimore, Maryland. This photograph was made at the UICC Workshop on Radioimmunodetection of Cancer, Lexington, Kentucky, July 19–21, 1979.

The publication of the first conference held on the subject of cancer imaging and therapy with radiolabeled antibodies appeared as a supplement to the August 1980 issue of *Cancer Research* and has served as a frequently cited reference for the past 10 years.

Cancer Research

The Journal of Cancer Research (1916–1930) | The American Journal of Cancer (1931–1940)

50 (3 Supplement)

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