



CONTENTS§

Asterisks * preceding page numbers refer to studies using human-derived material.

- *1671 Receptor Binding of Human Granulocyte Colony-stimulating Factor to the Blast Cells of Myeloid Leukemia. Yun-Feng Piao and Tetsuro Okabe.
- 1675 Isolation of a Complementary DNA Encoding the Catalytic Subunit of Protein Kinase A and Studies on the Expression of This Sequence in Rat Hepatomas and Regenerating Liver. Jeffrey S. Roth, Ling-Ling Hsieh, Carl Peraino, and I. Bernard Weinstein.
- *1681 Assessment of Tumor Energy and Oxygenation Status by Bioluminescence, Nuclear Magnetic Resonance Spectroscopy, and Cryospectrophotometry. W. Mueller-Klieser, C. Schaefer, S. Walenta, E. K. Rofstad, B. M. Fenton, and R. M. Sutherland.
- *1686 Generation of Human Lymphokine-activated Killer Cells following Brief Exposure to High Dose Interleukin 2. Sharon A. Horton, Robert K. Oldham, and John R. Yannelli.
- 1693 Characterization and Anticancer Activity of the Micelle-forming Polymeric Anticancer Drug Adriamycin-conjugated Poly(ethylene glycol)-Poly(aspartic acid) Block Copolymer. Masayuki Yokoyama, Mizue Miyauchi, Noriko Yamada, Teruo Okano, Yasuhisa Sakurai, Kazunori Kataoka, and Shohei Inoue.
- 1701 High Level, Regulated Expression of the Chimeric P-Enolpyruvate Carboxykinase (GTP)-Bacterial O⁶-Alkylguanine-DNA Alkyltransferase (*ada*) Gene in Transgenic Mice. In Kyoung Lim, Luba L. Dumenco, Jeung Yun, Cheryl Donovan, Berta Warman, Naemi Gorodetzka, Thomas E. Wagner, D. Wade Clapp, Richard W. Hanson, and Stanton L. Gerson.
- 1709 Characteristics of a Novel Transport System for Folate Compounds in Wild-Type and Methotrexate-resistant L1210 Cells. Gary B. Henderson and Brian P. Strauss.
- 1715 Metabolism and Pharmacokinetics of the Camptothecin Analogue CPT-11 in the Mouse. Norimasa Kaneda, Hiroshi Nagata, Tomio Furuta, and Teruo Yokokura.
- 1721 Nonlinear Pharmacokinetics of CPT-11 in Rats. Norimasa Kaneda and Teruo Yokokura.
- 1726 Biochemical and Growth Inhibition Studies of Methotrexate and Aminopterin Analogues Containing a Tetrazole Ring in Place of the γ -Carboxyl Group. John J. McGuire, Cynthia A. Russell, Wanda E. Bolanowska, Cheryl M. Freitag, Christopher S. Jones, and Thomas I. Kalman.
- *1732 Liblomycin-mediated DNA Cleavage in Human Head and Neck Squamous Carcinoma Cells and Purified DNA. Karsten Wassermann, Leonard A. Zwelling, J. William Lown, John A. Hartley, Kiyohiro Nishikawa, Juan-Ru Lin, and Robert A. Newman.
- *1738 Homozygous Deficiency at Autosomal Locus *aprt* in Human Somatic Cells *in Vivo* Induced by Two Different Mechanisms. Masayuki Hakoda, Kusuki Nishioka, and Naoyuki Kamatani.
- 1742 Correlation between *in Vivo* Induction of Cytokine Gene Expression by Flavone Acetic Acid and Strict Dose Dependency and Therapeutic Efficacy against Murine Renal Cancer. Kenneth F. Mace, Ronald L. Hornung, Robert H. Wiltrout, and Howard A. Young.
- *1748 Cellular and Biochemical Characterization of Thioxanthenes for Reversal of Multidrug Resistance in Human and Murine Cell Lines. James M. Ford, Edward P. Bruggemann, Ira Pastan, Michael M. Gottesman, and William N. Hait.
- 1757 Effect of 5-Fluorouracil Substitution on the Self-Splicing Activity of *Tetrahymena* Ribosomal RNA. Peter V. Danenberg, Luke C. C. Shea, and Kathleen Danenberg.
- 1764 Effect of a Calcium-enriched Diet on the Colonic Epithelial Hyperproliferation Induced by *N*-Methyl-*N'*-nitro-*N*-nitrosoguanidine in Rats on a Low Calcium and Fat Diet. Ron Reshef, Paul Rozen, Zvi Fireman, Nachum Fine, Miriam Barzilai, Shaul M. Shasha, and Tamar Shkolnik.
- *1768 Susceptibility to Lysis of Pulmonary Alveolar Macrophages by Human Lymphokine-activated Killer Cells. Renato Zambello, Livio Trentin, Cristina Feruglio, Pietro Bulian, Maria Masciarelli, Angiolo Cipriani, Carlo Agostini, and Gianpietro Semenzato.
- 1774 Purification and NH₂-Terminal Amino Acid Sequence of Guinea Pig Tumor-secreted Vascular Permeability Factor. Donald R. Senger, Daniel T. Connolly, Livingston Van De Water, Joseph Feder, and Harold F. Dvorak.
- *1779 Multidrug Resistance Phenotype of Human BRO Melanoma Cells Transfected with a Wild-Type Human *mdr1* Complementary DNA. Carsten R. Lincke, Alexander M. van der Bliek, Gerrit J. Schuurhuis, Trijntje van der Velde-Koerts, Jaap J. M. Smit, and Piet Borst.
- 1786 Inhibition of DNA Excision Repair by Methotrexate in Chinese Hamster Ovary Cells following Exposure to Ultraviolet Irradiation or Ethylmethanesulfonate. Alexander H. Borchers, Katherine A. Kennedy, and James A. Straw.
- *1790 Antitumor Activity of L/IC2-4-Desacetylvinblastine-3-carboxyhydrazide Immunoconjugate in Xenografts. David A. Johnson, A. Leroy Baker, Bennett C. Laguzza, Daniel V. Fix, and Magda C. Gutowski.
- 1795 Oxidation and DNA Binding of (+)-7,8-Dihydroxy-7,8-dihydrobenzo(a)pyrene in Mouse Epidermis *in Vivo* and Effects of Coadministration of Catechol. Assieh A. Melikian, Kourosh Bagheri, and Dietrich Hoffmann.
- *1800 Detection of pS2 Messenger RNA in Gynecological Cancers. Stanislaw J. Wysocki, Erika Hahnel, Anne Masters, Victoria Smith, Anthony J. McCartney, and Roland Hahnel.
- *1803 Enhanced Delivery of a Monoclonal Antibody F(ab')₂ Fragment to Subcutaneous Human Glioma Xenografts Using Local Hyperthermia. Darrell A. Cope, Mark W. Dewhirst, Henry S. Friedman, Darell D. Bigner, and Michael R. Zalutsky.
- 1810 Metabolism and DNA Single Strand Breaks Induced by 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone and Its Analogues in Primary Culture of Rat Hepatocytes. Lili Liu, Moulay A. Alaoui-Jamali, Najat El Alami, and Andre Castonguay.
- *1817 Transport and Metabolism of 9- β -D-Arabinofuranosylguanine in a Human T-Lymphoblastoid Cell Line: Nitrobenzylthioinosine-sensitive and -insensitive Influx. Karen L. Prus, Devron R. Averett, and Thomas P. Zimmerman.

- *1822 **Radioimmunotherapy of Intracerebral Human Glioma Xenografts with ¹³¹I-labeled F(ab')₂ Fragments of Monoclonal Antibody Mel-14.** Edward V. Colapinto, Michael R. Zalutsky, Gerald E. Archer, Michael A. Noska, Henry S. Friedman, Stefan Carrel, and Darell D. Bigner.
- 1828 **Protein Kinase C-induced Stimulation or Inhibition of Cellular Proliferation in a Murine Macrophage Tumor Cell Line.** Nigel T. Goode, John P. Moore, and Ian R. Hart.
- 1834 **Role of Asialo-G_{M1} Positive Liver Cells from Athymic Nude or Polyinosinic-Polycytidylic Acid-treated Mice in Suppressing Colon-derived Experimental Hepatic Metastasis.** Stefan A. Cohen, Shie-pon Tzung, Ralph J. Doerr, and Martin H. Goldrosen.
- *1841 **Detection and Partial Characterization of Receptors for [D-Trp⁶]-Luteinizing Hormone-releasing Hormone and Epidermal Growth Factor in Human Endometrial Carcinoma.** Gordana Srkalovic, James L. Wittliff, and Andrew V. Schally.
- *1847 **Differences in *in Vitro* Proliferative Responsiveness to Granulocyte Colony-stimulating Factor and Interleukin 2 of Bone Marrow Cells from Mice Treated with Chemotherapeutic Drugs.** Yutaka Mizushima, Toshihiko Morikage, and Saburo Yano.
- *1853 **Increased Local Antitumor Effects of Interleukin 2 Liposomes in Mice with MCA-106 Sarcoma Pulmonary Metastases.** Peter M. Anderson, Emmanuel Katsanis, Arnold S. Leonard, Douglas Schow, Cynthia M. Loeffler, Mitchell B. Goldstein, and Augusto C. Ochoa.
- *1857 **Association of Rare Alleles of the Harvey *ras* Protooncogene Locus with Lung Cancer.** Haruhiko Sugimura, Neil E. Caporaso, Rama V. Modali, Robert N. Hoover, James H. Resau, Benjamin F. Trump, Joyce A. Loneragan, Theodore G. Krontiris, Dean L. Mann, Ainsley Weston, and Curtis C. Harris.
- *1863 **Increased Removal of DNA-bound Platinum in a Human Ovarian Cancer Cell Line Resistant to *cis*-Diamminedichloroplatinum(II).** Hidetaka Masuda, Toshiko Tanaka, Hiroyuki Matsuda, and Izuo Kusaba.
- *1867 **Growth Inhibition of Human Melanoma Tumor Xenografts in Athymic Nude Mice by Swainsonine.** James W. Dennis, Kay Koch, Shida Yousefi, and Ingrid VanderElst.
- *1873 **Glucocorticoid Effects on Myeloma Cells in Culture: Correlation of Growth Inhibition with Induction of Glucocorticoid Receptor Messenger RNA.** Masahiro Gomi, Kaname Moriwaki, Shuichi Katagiri, Yoshiyuki Kurata, and E. Brad Thompson.
- *1879 **Conjugation of 9-Deoxy- Δ^9, Δ^{12} (E)-prostaglandin D₂ with Intracellular Glutathione and Enhancement of Its Antiproliferative Activity by Glutathione Depletion.** Jacob Atsmon, Michael L. Freeman, Michael J. Meredith, Brian J. Sweetman, and L. Jackson Roberts II.
- *1886 **Marital Status and the Incidence of Sarcomas of the Uterus.** Stephen M. Schwartz and Noel S. Weiss.
- *1890 **Suppression of Tumorigenicity of a Human Lung Carcinoma Line by Nontumorigenic Bronchial Epithelial Cells in Somatic Cell Hybrids.** M. Edward Kaighn, Edward W. Gabrielson, Deborah S. Iman, Elisa A. Pauls, and Curtis C. Harris.
- *1897 **Rapid Degradation of Extracellular Matrix Proteins by Normal Human Uroepithelial Cells.** Lynn E. Allen, Louis Dubeau, Ofelia Alvarez, and Peter A. Jones.
- *1905 **Effects of Microinjected Photoreactivating Enzyme on Thymine Dimer Removal and DNA Repair Synthesis in Normal Human and Xeroderma Pigmentosum Fibroblasts.** Len Roza, Wim Vermeulen, Jacqueline B. A. Bergen Henegouwen, André P. M. Eker, Nicolaas G. J. Jaspers, Paul H. M. Lohman, and Jan H. J. Hoeijmakers.
- 1911 **Enzyme-altered Foci in Colons of Carcinogen-treated Rats.** Betty J. Barrow, Mary Ann O'Riordan, Thomas A. Stellato, Beverly M. Calkins, and Theresa P. Pretlow.
- 1917 **Multistage Progression of Abelson Virus-infected Murine Pre-B-Cells to the Tumorigenic State.** Gregory J. Palumbo, Brad W. Ozanne, and John R. Kettman.
- 1924 **Use of Snail Neurons in Developing Quantitative Ultrastructural Parameters for Neurotoxic Side Effects of *Vinca* Antitumor Agents.** Linda J. Müller, Carry M. Moorer-van Delft, Rokus Zijl, and Eric W. Roubos.
- 1929 **Morphological Evidence for an Apparent Lysosomotropic Activity by Unsaturated Putrescine Analogues.** Carl W. Porter, J. Stanek, J. Black, M. Vaughan, B. Ganis, and A. Pleshkewych.
- *1936 **Photosensitization of Human Leukemic Cells by Anthracenedione Antitumor Agents.** John A. Hartley, Stephen M. Forrow, Robert L. Souhami, Krzysztof Reszka, and J. William Lown.
- 1941 **Phenotypic Expression in Spontaneously Transformed Cultured Rat Liver Epithelial Cells.** Ming-Sound Tsao, Jessica Shepherd, and Gerald Batist.
- 1948 **A Monoclonal Antibody to Lewis Lung Carcinoma Variant H-59 Identifies a Plasma Membrane Protein with Apparent Relevance to Lymph Node Adhesion and Metastasis.** William Shestowsky, Lucia Fallavollita, and Pnina Brodt.
- *1954 **Activity of Intrathecal 4-Hydroperoxycyclophosphamide in a Nude Rat Model of Human Neoplastic Meningitis.** Herbert E. Fuchs, Gerald E. Archer, O. Michael Colvin, Sandra H. Bigner, James M. Schuster, Gregory N. Fuller, Lawrence H. Muhlbaier, S. Clifford Schold, Jr., Henry S. Friedman, and Darell D. Bigner.
- 1960 **Pathobiology of Lung Tumors Induced in Hamsters by 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone and the Modulating Effect of Hyperoxia.** Hildegard M. Schuller, Hans-Peter Witschi, Eric Nylen, Priyavadan A. Joshi, Enrique Correa, and Kenneth L. Becker.
- *1966 **Paracrine Stimulation of Polarized Secretion from Monolayers of a Neoplastic Prostatic Epithelial Cell Line by Prostatic Stromal Cell Proteins.** Daniel Djakiew, Mary A. Tarkington, and John H. Lynch.
-
- 1975 **Announcements**
 Eighty-first Annual Meeting of the AACR
 AACR Special Conferences in Cancer Research
 Future Annual Meetings of the AACR
 Recent Deaths
- 1976 **Author Index**

NOTE: AACR forms available in the back of this issue—

- Application for Active and Corresponding Membership
- Application for Associate Membership
- Advance Registration Form for the 81st Annual Meeting

Cancer Research

VOLUME 50 • NUMBER 6

CONTENTS Arranged by Subject Category

BASIC SCIENCES

Biochemistry and Biophysics

- 1757 Effect of 5-Fluorouracil Substitution on the Self-Splicing Activity of *Tetrahymena* Ribosomal RNA. Peter V. Danenberg, Luke C. C. Shea, and Kathleen Danenberg.
- 1774 Purification and NH₂-Terminal Amino Acid Sequence of Guinea Pig Tumor-secreted Vascular Permeability Factor. Donald R. Senger, Daniel T. Connolly, Livingston Van De Water, Joseph Feder, and Harold F. Dvorak.
- * 1817 Transport and Metabolism of 9- β -D-Arabinofuranosylguanine in a Human T-Lymphoblastoid Cell Line: Nitrobenzylthioinosine-sensitive and -insensitive Influx. Karen L. Prus, Devron R. Averett, and Thomas P. Zimmerman.
- * 1879 Conjugation of 9-Deoxy- Δ^9, Δ^{12} (E)-prostaglandin D₂ with Intracellular Glutathione and Enhancement of Its Antiproliferative Activity by Glutathione Depletion. Jacob Atsmon, Michael L. Freeman, Michael J. Meredith, Brian J. Sweetman, and L. Jackson Roberts II.
- * 1905 Effects of Microinjected Photoreactivating Enzyme on Thymine Dimer Removal and DNA Repair Synthesis in Normal Human and Xeroderma Pigmentosum Fibroblasts. Len Roza, Wim Vermeulen, Jacqueline B. A. Bergen Henegouwen, André P. M. Eker, Nicolaas G. J. Jaspers, Paul H. M. Lohman, and Jan H. J. Hoeijmakers.
- * 1936 Photosensitization of Human Leukemic Cells by Anthracenedione Antitumor Agents. John A. Hartley, Stephen M. Forrow, Robert L. Souhami, Krzysztof Reszka, and J. William Lown.

Carcinogenesis

- 1764 Effect of a Calcium-enriched Diet on the Colonic Epithelial Hyperproliferation Induced by *N*-Methyl-*N'*-nitro-*N*-nitrosoguanidine in Rats on a Low Calcium and Fat Diet. Ron Reshef, Paul Rozen, Zvi Fireman, Nachum Fine, Miriam Barzilai, Shaul M. Shasha, and Tamar Shkolnik.
- 1795 Oxidation and DNA Binding of (+)-7,8-Dihydroxy-7,8-dihydrobenzo(a)pyrene in Mouse Epidermis *in Vivo* and Effects of Coadministration of Catechol. Assieh A. Melikian, Kourosh Bagheri, and Dietrich Hoffmann.
- 1810 Metabolism and DNA Single Strand Breaks Induced by 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone and Its Analogues in Primary Culture of Rat Hepatocytes. Lili Liu, Moulay A. Alaoui-Jamali, Najat El Alami, and Andre Castonguay.
- * 1890 Suppression of Tumorigenicity of a Human Lung Carcinoma Line by Nontumorigenic Bronchial Epithelial Cells in Somatic Cell Hybrids. M. Edward Kaighn, Edward W. Gabrielson, Deborah S. Iman, Elisa A. Pauls, and Curtis C. Harris.
- 1911 Enzyme-altered Foci in Colons of Carcinogen-treated Rats. Betty J. Barrow, Mary Ann O'Riordan, Thomas A. Stellato, Beverly M. Calkins, and Theresa P. Pretlow.
- 1941 Phenotypic Expression in Spontaneously Transformed Cultured Rat Liver Epithelial Cells. Ming-Sound Tsao, Jessica Shepherd, and Gerald Batist.
- 1960 Pathobiology of Lung Tumors Induced in Hamsters by 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone and the Modulating Effect of Hyperoxia. Hildegard M. Schuller, Hans-Peter Witschi, Eric Nylen, Priyavadan A. Joshi, Enrique Correa, and Kenneth L. Becker.

Endocrinology

- * 1873 Glucocorticoid Effects on Myeloma Cells in Culture: Correlation of Growth Inhibition with Induction of Glucocorticoid Receptor Messenger RNA. Masahiro Gomi, Kaname Moriwaki, Shuichi Katagiri, Yoshiyuki Kurata, and E. Brad Thompson.

Immunology

- * 1686 Generation of Human Lymphokine-activated Killer Cells following Brief Exposure to High Dose Interleukin 2. Sharon A. Horton, Robert K. Oldham, and John R. Yannelli.
- * 1768 Susceptibility to Lysis of Pulmonary Alveolar Macrophages by Human Lymphokine-activated Killer Cells. Renato Zambello, Livio Trentin, Cristina Feruglio, Pietro Bulian, Maria Masciarelli, Angiolo Cipriani, Carlo Agostini, and Gianpietro Semenzato.
- 1834 Role of Asialo-G_{M1} Positive Liver Cells from Athymic Nude or Polyinosinic-Polycytidylic Acid-treated Mice in Suppressing Colon-derived Experimental Hepatic Metastasis. Stefan A. Cohen, Shie-pon Tzung, Ralph J. Doerr, and Martin H. Goldrosen.

Molecular Biology and Genetics

- 1675 Isolation of a Complementary DNA Encoding the Catalytic Subunit of Protein Kinase A and Studies on the Expression of This Sequence in Rat Hepatomas and Regenerating Liver. Jeffrey S. Roth, Ling-Ling Hsieh, Carl Peraino, and I. Bernard Weinstein.
- 1701 High Level, Regulated Expression of the Chimeric P-Enolpyruvate Carboxykinase (GTP)-Bacterial *O*⁶-Alkylguanine-DNA Alkyltransferase (*ada*) Gene in Transgenic Mice. In Kyoung Lim, Luba L. Dumenco, Jeung Yun, Cheryl Donovan, Berta Warman, Naemi Gorodetzka, Thomas E. Wagner, D. Wade Clapp, Richard W. Hanson, and Stanton L. Gerson.
- * 1738 Homozygous Deficiency at Autosomal Locus *aprt* in Human Somatic Cells *in Vivo* Induced by Two Different Mechanisms. Masayuki Hakoda, Kusuki Nishioka, and Naoyuki Kamatani.
- 1742 Correlation between *in Vivo* Induction of Cytokine Gene Expression by Flavone Acetic Acid and Strict Dose Dependency and Therapeutic Efficacy against Murine Renal Cancer. Kenneth F. Mace, Ronald L. Hornung, Robert H. Wiltrout, and Howard A. Young.
- * 1779 Multidrug Resistance Phenotype of Human BRO Melanoma Cells Transfected with a Wild-Type Human *mdr1* Complementary DNA. Carsten R. Lincke, Alexander M. van der Blik, Gerrit J. Schuurhuis, Trijntje van der Velde-Koerts, Jaap J. M. Smit, and Piet Borst.
- * 1800 Detection of pS2 Messenger RNA in Gynecological Cancers. Stanislaw J. Wysocki, Erika Hahnel, Anne Masters, Victoria Smith, Anthony J. McCartney, and Roland Hahnel.

Preclinical Pharmacology and Experimental Therapeutics

- 1693 Characterization and Anticancer Activity of the Micelle-forming Polymeric Anticancer Drug Adriamycin-conjugated Poly(ethylene glycol)-Poly(aspartic acid) Block Copolymer. Masayuki Yokoyama, Mizue Miyauchi, Noriko Yamada, Teruo Okano, Yasuhisa Sakurai, Kazunori Kataoka, and Shohei Inoue.
- 1709 Characteristics of a Novel Transport System for Folate Compounds in Wild-Type and Methotrexate-resistant L1210 Cells. Gary B. Henderson and Brian P. Strauss.

* Indicates studies using human-derived material.

- 1715 **Metabolism and Pharmacokinetics of the Camptothecin Analogue CPT-11 in the Mouse.** Norimasa Kaneda, Hiroshi Nagata, Tomio Furuta, and Teruo Yokokura.
- 1721 **Nonlinear Pharmacokinetics of CPT-11 in Rats.** Norimasa Kaneda and Teruo Yokokura.
- 1726 **Biochemical and Growth Inhibition Studies of Methotrexate and Aminopterin Analogues Containing a Tetrazole Ring in Place of the γ -Carboxyl Group.** John J. McGuire, Cynthia A. Russell, Wanda E. Bolanowska, Cheryl M. Freitag, Christopher S. Jones, and Thomas I. Kalman.
- *1732 **Liblomycin-mediated DNA Cleavage in Human Head and Neck Squamous Carcinoma Cells and Purified DNA.** Karsten Wassermann, Leonard A. Zwelling, J. William Lown, John A. Hartley, Kiyohiro Nishikawa, Juan-Ru Lin, and Robert A. Newman.
- *1748 **Cellular and Biochemical Characterization of Thioxanthenes for Reversal of Multidrug Resistance in Human and Murine Cell Lines.** James M. Ford, Edward P. Bruggemann, Ira Pastan, Michael M. Gottesman, and William N. Hait.
- 1786 **Inhibition of DNA Excision Repair by Methotrexate in Chinese Hamster Ovary Cells following Exposure to Ultraviolet Irradiation or Ethylmethanesulfonate.** Alexander H. Borchers, Katherine A. Kennedy, and James A. Straw.
- *1790 **Antitumor Activity of L/IC2-4-Desacetylvinblastine-3-carboxyhydrazide Immunoconjugate in Xenografts.** David A. Johnson, A. Leroy Baker, Bennett C. Laguzza, Daniel V. Fix, and Magda C. Gutowski.
- *1803 **Enhanced Delivery of a Monoclonal Antibody F(ab')₂ Fragment to Subcutaneous Human Glioma Xenografts Using Local Hyperthermia.** Darrell A. Cope, Mark W. Dewhirst, Henry S. Friedman, Darell D. Bigner, and Michael R. Zalutsky.
- *1822 **Radioimmunotherapy of Intracerebral Human Glioma Xenografts with ¹³¹I-labeled F(ab')₂ Fragments of Monoclonal Antibody Mel-14.** Edward V. Colapinto, Michael R. Zalutsky, Gerald E. Archer, Michael A. Noska, Henry S. Friedman, Stefan Carrel, and Darell D. Bigner.
- *1841 **Detection and Partial Characterization of Receptors for [D-Trp⁶]-Luteinizing Hormone-releasing Hormone and Epidermal Growth Factor in Human Endometrial Carcinoma.** Gordan Srkalovic, James L. Wittliff, and Andrew V. Schally.
- *1847 **Differences in *in Vitro* Proliferative Responsiveness to Granulocyte Colony-stimulating Factor and Interleukin 2 of Bone Marrow Cells from Mice Treated with Chemotherapeutic Drugs.** Yutaka Mizushima, Toshihiko Morikage, and Saburo Yano.
- *1853 **Increased Local Antitumor Effects of Interleukin 2 Liposomes in Mice with MCA-106 Sarcoma Pulmonary Metastases.** Peter M. Anderson, Emmanuel Katsanis, Arnold S. Leonard, Douglas Schow, Cynthia M. Loeffler, Mitchell B. Goldstein, and Augusto C. Ochoa.
- *1863 **Increased Removal of DNA-bound Platinum in a Human Ovarian Cancer Cell Line Resistant to *cis*-Diamminedichloroplatinum(II).** Hidetaka Masuda, Toshiko Tanaka, Hiroyuki Matsuda, and Izuo Kusaba.
- *1867 **Growth Inhibition of Human Melanoma Tumor Xenografts in Athymic Nude Mice by Swainsonine.** James W. Dennis, Kay Koch, Shida Yousefi, and Ingrid VanderElst.
- 1924 **Use of Snail Neurons in Developing Quantitative Ultrastructural Parameters for Neurotoxic Side Effects of *Vinca* Antitumor Agents.** Linda J. Müller, Carry M. Moorer-van Delft, Rokus Zijl, and Eric W. Roubos.
- 1929 **Morphological Evidence for an Apparent Lysosomotropic Activity by Unsaturated Putrescine Analogues.** Carl W. Porter, J. Stanek, J. Black, M. Vaughan, B. Ganis, and A. Pleshkewych.
- *1954 **Activity of Intrathecal 4-Hydroperoxycyclophosphamide in a Nude Rat Model of Human Neoplastic Meningitis.** Herbert E. Fuchs, Gerald E. Archer, O. Michael Colvin, Sandra H. Bigner, James M. Schuster, Gregory N. Fuller, Lawrence H. Muhlbaier, S. Clifford Schold, Jr., Henry S. Friedman, and Darell D. Bigner.

Tumor Biology

- *1671 **Receptor Binding of Human Granulocyte Colony-stimulating Factor to the Blast Cells of Myeloid Leukemia.** Yun-Feng Piao and Tetsuro Okabe.
- *1681 **Assessment of Tumor Energy and Oxygenation Status by Bioluminescence, Nuclear Magnetic Resonance Spectroscopy, and Cryospectrophotometry.** W. Mueller-Klieser, C. Schaefer, S. Walenta, E. K. Rofstad, B. M. Fenton, and R. M. Sutherland.
- 1828 **Protein Kinase C-induced Stimulation or Inhibition of Cellular Proliferation in a Murine Macrophage Tumor Cell Line.** Nigel T. Goode, John P. Moore, and Ian R. Hart.
- *1897 **Rapid Degradation of Extracellular Matrix Proteins by Normal Human Uroepithelial Cells.** Lynn E. Allen, Louis Dubeau, Ofelia Alvarez, and Peter A. Jones.
- 1917 **Multistage Progression of Abelson Virus-infected Murine Pre-B-Cells to the Tumorigenic State.** Gregory J. Palumbo, Brad W. Ozanne, and John R. Kettman.
- 1948 **A Monoclonal Antibody to Lewis Lung Carcinoma Variant H-59 Identifies a Plasma Membrane Protein with Apparent Relevance to Lymph Node Adhesion and Metastasis.** William Shestowsky, Lucia Fallavollita, and Pnina Brodt.
- *1966 **Paracrine Stimulation of Polarized Secretion from Monolayers of a Neoplastic Prostatic Epithelial Cell Line by Prostatic Stromal Cell Proteins.** Daniel Djakiew, Mary A. Tarkington, and John H. Lynch.

CLINICAL AND EPIDEMIOLOGICAL INVESTIGATIONS

Epidemiological

- 1857 **Association of Rare Alleles of the Harvey *ras* Protooncogene Locus with Lung Cancer.** Haruhiko Sugimura, Neil E. Caporaso, Rama V. Modali, Robert N. Hoover, James H. Resau, Benjamin F. Trump, Joyce A. Lonergan, Theodore G. Krontiris, Dean L. Mann, Ainsley Weston, and Curtis C. Harris.
- 1886 **Marital Status and the Incidence of Sarcomas of the Uterus.** Stephen M. Schwartz and Noel S. Weiss.

-
- 1975 **Announcements**
 Eighty-first Annual Meeting of the AACR
 AACR Special Conferences in Cancer Research
 Future Annual Meetings of the AACR
 Recent Deaths

- 1976 **Author Index**

NOTE: AACR forms available in the back of this issue--

- Application for Active and Corresponding Membership
- Application for Associate Membership
- Advance Registration Form for the 81st Annual Meeting