Correction

Contents

Asterisks preceding the title refer to studies in humans.

1263 In Vitro-in Vivo Studies on the Susceptibility of the Solid Yoshida Sarcoma to Drugs and Hyperthermia (42°C).
John A. Dickson and Mohammad Suzangar.

1275 Sea Urchin Egg Development under the Action of Benzo(a)pyrene and 7,12-Dimethylbenz(a)-anthracene.
Ernesto de Angelis and Giovan Giacomo Giordano.

1281 Oligonucleotides of Ribosomal 28 S RNA in Human Leukemic Cells and Normal Lymphocytes.
Siegfried Seeber, Klaus-Peter Bruck, Joachim Kading, Carl-Gottfried Schmidt, and Harris Busch.

1289 Inhibition of Normal Allogeneic Responder Cells in Mouse Mixed Leukocyte Culture by Long-Passage AKR Leukemic Lymphoblasts.
Glenn E. Rodey, John C. Sprader, and Mortimer M. Bortin.

1295 5'-Nucleotide Phosphodiesterase Activity in Rat Hepatoma.

1299 Prevention by Testosterone of the Intestinal Toxicity Caused by the Antitumor Agent 3-Dezaauridine.
A. Bloch, G. Dutschman, G. Grindey, and C. L. Simpson.

1304 Stimulation of Sterol Synthesis in Peripheral Leukocytes of Leukemic Mice.
Harry W. Chen and Hans-Joerg Heiniger.

1308 α-(N)-Heterocyclic Carboxaldehyde Thioresemicarbazones Inhibitors of Ribonucleoside Di-Phosphate Reductase.
Barbara A. Booth, Krishna C. Agrawal, E. Colleen Moore, and Alan C. Sartorelli.

1315 The Relative Carcinogenic Activities of a Series of 5-Methylchrysene Derivatives.
Maurice M. Coombs, Tarlochan S. Bhatt, Maureen Hall, and Charles J. Craft.

1319 Virus Oncogenesis and Tumor Immunogenicity in the Mouse Mammary Tumor System.
Jan Vange and Daniel Medina.

1325 * Decreased in Vivo and in Vitro Erythropoiesis Induced by Plasma of Ten Patients with Thymoma, Lymphosarcoma, or Idiopathic Erythroblastopenia.
Joanne H. Jepson and Magdalene Vas.

1335 * Human in Vitro System for the Detection of Uterine Cervical Preinvasive Carcinoma.

1344 The Transport and Localization of Benzo(a)-pyrene-Hematite and Hematite-2LOPo in the Hamster Lung following Intratracheal Instillation.
Ann R. Kennedy and John B. Little.

1353 Comparison of the L-Asparaginases from Escherichia coli and Erwinia carotovora as Immunosuppressants.
Leslie A. E. Ashworth and Alastair P. MacLennan.

1360 The Binding of Tritium-labeled Phorbol Esters to the Macromolecular Constituents of Mouse Epidermis.

1366 Modulation of Fetal Antigen(s) in Mouse Leukemia Cells.
John R. Ortaldo, C. C. Ting, and R. B. Herberman.

1372 Data from Eleven United States and Canadian Colleges of Veterinary Medicine on Pancreatic Carcinoma in Domestic Animals.
W. A. Priester.

1376 * In Vitro Determination of Thymidine-3H Labeling Index in Human Solid Tumors.
Robert B. Livingston, Ulo Ambus, Stephen L. George, Emil J Freireich, and Jacqueline S. Hart.

1381 β-Aminoisobutyric Acid, a New Probe for the Metabolism of DNA and RNA in Normal and Tumorous Tissue.
Henrik Rist Nielsen, Knud-Erik Sjölin, Kaare Nyholm, B. S. Baliga, Rosemary Wong, and Ernest Borek.

1385 A Scanning Microscope Study of the Topography of HeLa Cells.
Keith R. Porter, Virginia Fonte, and Gary Weiss.

1395 Prolonged Remissions of Lymphatic Leukemia in DBA/2 Mice Induced with Endogenously Produced Lactate Dehydrogenase Antibody.
George Lakatos, Aaron Streifling, Ramon R. Joseph, and Daisy S. McCann.

1401 Correlations between the DNA Content Distribution and Tritiated Thymidine Studies in Relation to Population Size in Sarcoma 180 in Vitro.
S. E. Shackney and S. S. Ford.

1408 Concanavalin A-induced Agglutination and
Tumorigenicity in Virally and Spontaneously Transformed Cells Derived from BALB/c Mice.

Gary A. Van Nest and William J. Grimes.

1413 Relationship of Rat α1-Fetoprotein to Growth Rate and Chromosome Composition of Morris Hepatomas.

Stewart Sell and Harold P. Morris.

1418 Effects of Carcinogens and Other Agents on Histone Methylation by a Histone Arginine Methyltransferase Purified from Rat Liver Cytoplasm.

C. Stuart Baxter and Paul Byvoet.

1424 Effects of Carcinogens and Other Agents on Histone Methylation in Rat Liver Nuclei by Endogenous Histone Lysine Methyltransferase.

C. Stuart Baxter and Paul Byvoet.


Robert S. Verbin, Gloria Diluiso, and Emmanuel Farber.

1435 * Isozyme Variations in Human Malignant Melanoma.


1439 Isozymes of Pyruvate Kinase in Liver and Hepatomas of the Rat.


1447 In Vivo Metabolism of Testosterone-3H in R-3327, an Androgen-sensitive Rat Prostatic Adenocarcinoma.

Walter Voigt and W. F. Dunning.

1451 The Measurement of Blood Perfusion in Experimental Tumors by Uptake of 32P.

G. D. Zanelli and J. F. Fowler.

1457 Isolation of a Transplantable Cell Line Induced by the MC29 Avian Leukosis Virus.


1465 Localization of Intracytoplasmic A Particles in Mouse Tumors by Light Microscopy.

Harutaka Tanaka, Daijiro Tsujimura, and Kunie Nakamura.

1475 Quantitative Studies on Intracytoplasmic A Particles Formed in DBA/2 Mouse Leukemias.

Daijiro Tsujimura and Harutaka Tanaka.

1487 An Animal Model for the Study of Small-Bowel Tumors.


1495 Metabolic Regulation and Adenyl Cyclase Activity of Adrenocortical Carcinoma Cultured Cells.


1503 Mechanism of Reaction, Tissue Distribution, and Inhibition of Arylhydroxamic Acid Acyltransferase.

Charles M. King.

1516 Letters to the Editor:

"Working Groups" in Cancer Etiology.

E. L. Wynder.


Michael B. Shimkin.

1521 Announcements.

1523 Errata.

COVER LEGEND

Kenneth DeOme was born in 1906 in Kalkaska, Michigan. After completing his early academic studies in Michigan and his graduate studies at the Berkeley campus of the University of California, he received his Ph.D. in 1938. He then joined the faculty of the Division of Veterinary Science at Berkeley as an instructor in comparative pathology. In 1950, DeOme was appointed Professor of Zoology, and the University established the Cancer Research Genetics Laboratory (since renamed the Cancer Research Laboratory) under his directorship. Dr. DeOme retired as director in 1973.

From the beginning, DeOme’s intent was to gather scientists from varying disciplines to focus on the study of a single type of tumor: the mammary carcinoma of the mouse. He felt that scientific achievement would result from the collaboration of pathologists, endocrinologists, virologists, cytologists, immunologists, and biochemists, each bringing his own experimental approaches to the study of a single system. The group photograph (pictured) shows DeOme (far left) with three senior coworkers, all professors at the University (second from the left to right): Phyllis B. Blair, Satyabrata Nandi, and Howard A. Bern.

The Cancer Research Laboratory is housed adjacent to Warren Hall (pictured) on the Berkeley campus. The Laboratory is perhaps best known for the studies done there on the preneoplastic hyperplastic alveolar nodule of the mouse mammary gland. DeOme, with his colleagues and students, delineated many of the factors affecting the induction of the preneoplastic nodule, its maintenance, and its transformation to carcinoma. A basic advance was the development of a technique for the transplantation of nodules into gland-free mammary fat pads (Cancer Res., 19:515-520, 1959). This technique permits growth and transformation in an accessible and easily manipulated site. A recent review on mammary neoplasia in mice by Nandi and McGrath (Adv. Cancer Res., 17:353-414, 1973) includes the contributions of DeOme’s group. With the collaboration of his faculty associates, DeOme also developed a teaching program in tumor biology which not only provides comprehensive training for advanced students of tumor biology but also provides younger students with an introduction to the field.

Dr. DeOme has long been a participant and consultant in national and international cancer research organizations. Since 1954, he has served as Executive Secretary of the Cancer Research Coordinating Committee, which is responsible for the allocation of cancer research funds to investigators on the nine campuses of the University of California. In 1969, he received the Doctor of Medicine and Surgery degree (Honoris Causa) from the University of Perugia, Italy.

Although Dr. DeOme has relinquished his administrative duties as director of the Cancer Research Laboratory, his retirement will not reduce his involvement in teaching and research. We wish him many long and productive years.
Contents

Asterisks preceding the title refer to studies in humans.

1525 Upon Man and Beast—Adventures in Cancer Epidemiology: Presidential Address. Michael B. Shimkin.


1564 Inhibition of the Effects of Methylenecholanthrene on Mouse Prostate in Organ Culture by Vitamin A and Its Analogs. Ilse Lasnitzki and DeWitt S. Goodman.


1577 Polyamines in Normal and in Virus-transformed Chick Embryo Fibroblasts. Uriel Bachrach, Shraga Don, and Haviva Wiener.


1586 Cardiac and Pulmonary Effects of High Doses of Cyclophosphamide and Isophosphamide. Theodore X. O'Connell and Morris C. Berenbaum.


1600 The Catabolism of 2(20)-Fetoprotein and Albumin in Rats Bearing Morris Hepatoma 7777. Stewart Sell.


1616 Survival Responses of Dividing and Non-dividing Mammalian Cells after Treatment with Hydroxyurea, Arabinosylcytosine, or Adriamycin. S. C. Barranco and J. K. Novak.

1619 Interaction of Thymidylate Synthetase and Dihydrofolate Reductase Enzymes in Vitro and in Vivo. Mutsufumi Kawai and Brian L. Hillcoat.


1632 Diurnal Distribution of Motor Activity and Feeding during Growth of Tumors. S. D. Morrison.

1636 A Comparison of Phenylalanyl-tRNA Synthetase from Rat Liver and a Minimal Deviation Hepatoma. Andrew J. Ouellette and Milton W. Taylor.


1646 Retinoblastoma-like Tumors Induced by Human Adenovirus Type 12 in Rats. Shoji Kobayashi and Noritsugu Mukai.
graduated in 1932 from the University of Rochester, New York, with a doctorate in medicine. Initially an internist, he trained in pathology under Dr. Shields Warren at Pondville Hospital and was pathologist to Age and Pathology.

Katherine Seibert, Morris Pollard, and Albert Nordin.

Trial of a Bacterial Screening System for Rapid Detection of Mutagens and Carcinogens.

Daniel S. Longnecker, Thomas J. Curphey, Susan T. James, Douglas S. Daniel, and Nicholas J. Jacobs.


Chemotherapeutic, Carcinogenic, and Cell-regulatory Effects of Triazenes.

Franz A. Schmid and Dorris J. Hutchison.

Serological Analysis of Immune Response to Friend Virus-induced Leukemia.

Chou-Chik Ting and Ronald B. Herberman.

Cell-mediated Immunity to Friend Virus-induced Leukemia.

Chou-Chik Ting, Grace Shiu, Dennis Rodrigues, and Ronald B. Herberman.

Evidence for Bile Acid Synthesis by Transplantable Hepatomas.

Glen E. Mott, Henry C. Pitot, and Stanley Goldfarb.

A Determination of the Outer Dimensions of Oncornaviruses by Several Electron Microscopic Procedures.

Ronald B. Luftig, Paul N. McMillan, Kenneth Culbreth, and Dani P. Bolognesi.

Some Aspects of Humoral Immunity in Germ-free and Conventional SJL/J Mice in Relation to Age and Pathology.

Katherine Seibert, Morris Pollard, and Albert Nordin.

Activity and Hormone Responsiveness of Adenyl Cyclase during Induction of Tumors in Rat Liver with 3'-Methyl-4-dimethylaminobenzene.

Helen Boyd, C. J. Louis, and T. J. Martin.

Therapy with Allogeneic Immune Peritoneal Cells.


Membrane Effects of Phorbol Esters.

C. E. Wenner, J. Hackney, H. K. Kimelberg, and E. Mayhew.

Chemotherapy and Rate of Kill of Tumor Cells in a Mouse Plasmacytoma.

Raymond N. Hiramoto and Vithal K. Ghanta.

Budget and The National Cancer Program (NCP).

Frank J. Rauscher, Jr.

Protective Effect of Immunization with Polyniosinic-Polyribitidic Acid Complexed with Methylated Bovine Serum Albumin against Friend Leukemia Virus in Mice.

Alain Fourcade, Charlotte Friend, Fanny Lacour, and J. Gilbert Holland.

Letter to the Editor:

Biological Contaminants and Scientific Misinterpretations.

Vernon Riley.

Correspondence.

Albert J. Dalton.


Books Received.

Announcements.

Errata.

Instructions to Authors.

the queen of Iran.

Juan A. del Regato was born in 1909 in Camagüey, Cuba, and received his doctorate in medicine at the University of Paris in 1937; he trained in radiotherapy under the noted instruction of Regaud, Coudard, and Lacassagne. In 1938, he came to the United States, where he served as a radiotherapist at Ellis Fischel Cancer Hospital from 1943 to 1948. From 1949 until 1973, he was director of the Penrose Cancer Hospital in Colorado Springs, Colorado, and professor of radiobiology at the University of Colorado. Currently he is at the University of South Florida College of Medicine, Tampa, where he is Professor of Radiology. Dr. del Regato is chairman of the Commission on Radiation Therapy of the American College of Radiology. Contributions of his include: initial observations on dental lesions occurring after irradiation of the salivary glands; transvaginal roentgentherapy; and radiotherapy of carcinoma of the maxillary sinus, nasopharynx, bladder, and prostate. Dr. del Regato has received an honorary doctor of science from Colorado College, the Gold Medal of the Radiological Society of North America, the Gold Medal of the American College of Radiology, and the Gold Medal of the Inter-American College of Radiology.

The portraits of Ackerman and del Regato were taken during the late 1940's. The photograph of the four editions of "Cancer" and its translations into Spanish and Polish is by Tom Schuster.