Contents of Volume 7

JANUARY, 1947. NUMBER 1

A. R. Gopal-Ayengar and E. V. Cowdry. Desoxyribose Nucleic Acid from Isolated Chromosome Threads in Experimental Epidermal Methylcholanthrene Carcinogenesis in Mice .......................................................... 1

Christopher Carruthers and V. Suntzeff. Succinic Dehydrogenase and Cytochrome Oxidase in Epidermal Carcinogenesis Induced by Methylcholanthrene in Mice .... 9

Edward W. Shrigley, Harry S. N. Greene, and F. Duran-Reynals. Growth of Avian Tumors Other Than the Rous Sarcoma in the Anterior Chamber of the Guinea Pig Eye ............................................................. 15

F. Duran-Reynals and J. W. King. Reciprocal Effects of Natural Immune Bodies from Chickens and Ducks on Variants of a Sarcoma Virus ....................... 21

Paul N. Harris. On the Production of Sarcoma with Wheat Germ Oil .................... 26

Paul N. Harris. Production of Sarcoma in Rats with Light Green SF ...................... 35


Abstracts ........................................................................................................ 53-63

Reports of Research .................................................................................. 53-57

Clinical and Pathological Reports .......................................................... 57-63

BOOK REVIEWS ............................................................................................ 64

FEBRUARY, 1947. NUMBER 2

John J. BieseLe and Gabriel Gasic. Sex Hormone Effects on Chromosome Size in Leukemic and Normal Lymphocytes of C58 Mice ........................................ 65

John J. BieseLe. Chromosomes in Lymphatic Leukemia of C58 Mice .................... 70

Alfred Taylor and Nell Carmichael. Stromal Malignancy in Mouse-Grown Transplants of Egg-Cultivated Mouse Mammary Carcinoma ........................................ 78

Paul N. Harris. Production of Tumors in Rats by 2-Aminofluorene and 2-Acetylamino-fluorene. Failure of Liver Extract and of Dietary Protein Level to Influence Liver Tumor Production ....................................................... 88

C. J. Kessler, J. W. Magill, and K. Sigura. The Metabolism of N,N-Dimethyl-p-Aminoazobenzene and Related Compounds .................................................... 95

F. Duran-Reynals. A Study of Three New Duck Variants of the Rous Chicken Sarcoma 99

F. Duran-Reynals. Transmission of Adult Pigeons of Several Variants of the Rous Sarcoma of Chickens .............................................................. 103

Werner G. Jaffé. Carcinogenic Action of Ethyl Urethane on Rats. With an Appendix by Rudolph Jaffe ............................................................... 107

Werner G. Jaffé. The Response of Rats to the Simultaneous Application of Two Different Carcinogenic Agents ......................................................... 113

Werner G. Jaffé. Possible Linkage Between the Development of Local Tumors and Pulmonary Adenomas Induced by Methylcholanthrene in Non-Inbred Mice .... 117

Abstracts ........................................................................................................ 120-128

Reports of Research .................................................................................. 120-122

Clinical and Pathological Reports .......................................................... 122-128

MARCH 1947. NUMBER 3

J. Engelbreth-Holm and R. Rask-Nielsen. On the Sensitivity of Different Tissues in Street Strain Mice to 9, 10-Dimethyl-1, 2-Benzanthracene ......................... 129

W. F. Dunning, M. R. Curtis, and M. E. Madsen. The Induction of Neoplasms in Five Strains of Rats with Acetylaminofluorene .................................................. 134

Henry S. Kaplan. Observations on Radiation-Induced Lymphoid Tumors of Mice .... 141

Cornelia Hoch-Ligeti. Changes in the Succinoxidase Activity of Livers from Rats during the Development of Hepatic Tumors on Feeding p-Dimethylaminobenzene 148

Ruth Cortell. The Production of Tumors in the Livers of Rats Fed m-Methyl-p-Dimethylaminobenzene ......................................................... 158

Paul N. Harris, M. E. Krahl, and G. H. A. Cloew. p-Dimethylaminobenzene Carcinogenesis with Purified Diets Varying in Content of Cysteine, Cystine, Liver
Contents to Volume 7

Extract, Protein, Riboflavin, and Other Factors ........................................... 162
Paul N. Harris, M. E. Krael, and G. H. A. Cloues. The Effect of Biotin upon 
\( p \)-Dimethylaminobenzene Carcinogenesis ........................................... 176
Paul N. Harris. The Effect of Diet Containing Dried Egg Albumin upon 
\( p \)-Dimethylaminoazobenzene Carcinogenesis .................................. 178
Robert Schrek and Herman Lenowitz. Etiologic Factors in Carcinoma of the 
Penis .................................................................. 180
Abstracts .......................................................................................................................... 188-192
Reports of Research ........................................................................................................... 188-190
Clinical and Pathological Reports ...................................................................................... 191-192

April, 1947. Number 4

Gerrit Toennies. Protein-Chemical Aspects of Cancer ........................................... 193
L. T. Larionow. On the Fate of Carcinogenic Hydrocarbons in the Animal Body ........ 230
J. Furlth and M. C. Boon. Induction of Ovarian Tumors in Mice by X-Rays ............. 241
J. Furlth and H. Sobel. Transplantation of Luteoma in Mice and Associated Secondary 
Changes .......................................................................................................................... 246
A. H. M. Kirby. Tumors Induced in Mice with \( p \)-Diazoaminobenzene ............... 263
Abstracts .............................................................................................................................. 268-272
Clinical and Pathological Reports ...................................................................................... 268-272

May, 1947. Number 5

Paul E. Steiner, D. Warren Stanger, and Miriam N. Bolvard. Comparison of the 
Carcinogenic Activity in Extracts of Human Liver and Other Human and Animal 
Organs ................................................................................................................................. 273
Johannes Clemmensen and Thoger Busk. Cancer Mortality among Males and Females 
in Denmark, England and Switzerland. I ................................................................. 281
Johannes Clemmensen and Thoger Busk. Cancer Mortality among Males and Females 
in Denmark, England and Switzerland. II. Danish Towns and Rural Areas .......... 286
Hugh J. Creech, Evelyn L. Oginsky, and F. S. Creever. Immunological Studies of 
Hydrocarbon-Protein Conjugates. I. Precipitin Reactions ........................................... 290
Hugh J. Creech, Evelyn L. Oginsky, and O. N. Allen. Immunological Studies of 
Hydrocarbon-Protein Conjugates. II. Quantitative Results ........................................ 297
Hugh J. Creech, Evelyn L. Oginsky, and Max Tryon. Immunological Studies of 
Hydrocarbon-Protein Conjugates. III. Inhibition Reactions ......................................... 301
J. G. McDonald. Production of Reticulum Cell Sarcoma and Fibrosarcoma by 
Methylcholanthrene Adsorbed on Activated Carbon .................................................. 305
L. A. Strait and K. B. DeOme. Desoxycorticosterone Acetate, Mammary Gland Growth, 
and Carcinogenesis in Mice ............................................................................................ 310
Abstracts .............................................................................................................................. 312-318
Reports of Research ........................................................................................................... 312-314
Clinical and Pathological Reports ...................................................................................... 314-318
Book Reviews ..................................................................................................................... 319-320

June, 1947. Number 6

Maurice M. Black. Changes in the Reducing Power of Serum or Plasma of Patients 
with Malignant Neoplastic Disease ............................................................................. 321
Paul C. Zamecnik and Mary L. Stephenson. Activity of Catheptic Enzymes in \( p \)- 
Dimethylaminobenzene Hepatomas ............................................................................ 326
A. H. M. Kirby. Studies in Carcinogenesis with Azo Compounds. III. The Action of 
(A) Four Azo Compounds in Wistar Rats Fed Restricted Diets; (B) \( N, N \)-Diethyl- 
\( p \)-Aminobenzene in Mice ............................................................................................ 333
M. F. Guyer and P. E. Claus. Tumor of the Lung in Rats Following Injections of Urethane 
(Ethyl Carbamate) .......................................................................................................... 342
Belal Halpert and Charles D. Tool. Anlage Tumors of the Salivary Glands .............. 346
Evelyn A. Potter. The Changing Cancer Death Rates .................................................. 351
J. Stasney, K. P. Mertes, A. Cantarow, and M. S. Rotellar. Studies on the 
Treated with 2-Acetaminofluorene and Sex Hormones. II ........................................... 356
U. S. Atomic Energy Commission Announces Distribution of "Heavy Water" .......... 362
Nathan B. Friedman. Germinoma of the Pineal. Its Identity with Germinoma ("Semi- 
noma") of the Testis ....................................................................................................... 363
Books and World Recovery ............................................................................................... 368
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOSEPH SKAPIER. Therapeutic Use of Anti-Reticular Cytotoxic Serum (A.C.S.) in Hodgkin's Disease</td>
<td>369</td>
</tr>
<tr>
<td>J. ENGELBRETH-HOLM and SIMON IVERSEN. The Effect of Ultraviolet Irradiation on the Carcinogenic Potency of Certain Hydrocarbons</td>
<td>372</td>
</tr>
<tr>
<td>MORTON McCUTCHEON and DALE REX COMAN. Spreading Factor in Human Carcinomas</td>
<td>379</td>
</tr>
<tr>
<td>DALE REX COMAN, MORTON McCUTCHEON, and IRVING ZEIDMAN. Failure of Hyaluronidase to Increase the Invasiveness of Neoplasms</td>
<td>383</td>
</tr>
<tr>
<td>IRVING ZEIDMAN. Chemical Factors in the Mutual Adhesiveness of Epithelial Cells</td>
<td>386</td>
</tr>
<tr>
<td>L. BERENBLUM and R. SCHORNTAL. The Apparent Anticarcinogenic Action of Lanolin</td>
<td>390</td>
</tr>
<tr>
<td>M. PIKOVSKI, G. GOLDHABER, and L. DOLJANSKI. Studies on the Relationship Between Sarcoma and Leukosis in Chickens.</td>
<td>393</td>
</tr>
<tr>
<td>D. L. WOODHOUSE. Chemotherapy Investigations in Cancer. With Reference to the Influence of Certain Organic Dibasic Acids, Diamino Compounds and Nitro Compounds on Tumors in Mice</td>
<td>398</td>
</tr>
<tr>
<td>AMERICAN ASSOCIATION FOR CANCER RESEARCH, INC. Special Meeting of the Board of Directors</td>
<td>402</td>
</tr>
<tr>
<td>ABSTRACTS</td>
<td>404-415</td>
</tr>
<tr>
<td>Reports of Research</td>
<td>404-411</td>
</tr>
<tr>
<td>Clinical and Pathological Reports</td>
<td>411-415</td>
</tr>
<tr>
<td>BOOK REVIEWS</td>
<td>416</td>
</tr>
<tr>
<td>JULY, 1947. NUMBER 7</td>
<td></td>
</tr>
<tr>
<td>JAMES B. MURPHY and ERNEST STURM. The Inhibiting Effect of Ethyl Urethane on the Development of Lymphatic Leukemia in Rats</td>
<td>417</td>
</tr>
<tr>
<td>ALBERT CLAIRE, KEITH R. PORTER, and EDWARD G. PICKELS. Electron Microscope Study of Chicken Tumor Cells</td>
<td>421</td>
</tr>
<tr>
<td>KEITH R. PORTER and HELEN P. THOMPSON. Some Morphological Features of Cultured Rat Sarcoma Cells as Revealed by the Electron Microscope</td>
<td>431</td>
</tr>
<tr>
<td>V. SUNTEZEF, C. CARRUTHERS, and E. V. COWDRY. The Role of Sebaceous Glands and Hair Follicles in Epidermal Carcinogenesis</td>
<td>439</td>
</tr>
<tr>
<td>ROBERT H. WILSON, FLOYD DEEDS, and ALVIN J. COX, JR. The Carcinogenic Activity of 2-Acetaminofluorene. II. Effects of Concentration and of Duration of Exposure</td>
<td>444</td>
</tr>
<tr>
<td>ROBERT H. WILSON, FLOYD DEEDS, and ALVIN J. COX, JR. The Carcinogenic Activity of 2-Acetaminofluorene. III. Manner of Administration. Age of Animals. and Type of Diet</td>
<td>450</td>
</tr>
<tr>
<td>ROBERT H. WILSON, FLOYD DEEDS, and ALVIN J. COX, JR. The Carcinogenic Activity of 2-Acetaminofluorene. IV. Action of Related Compounds</td>
<td>453</td>
</tr>
<tr>
<td>B. R. BURMEISTER. The Cytotoxic Effect of Avian Lymphoid Tumor Antiserum</td>
<td>459</td>
</tr>
<tr>
<td>ELIZABETH C. MILLER and JAMES A. MILLER. The Presence and Significance of Bound Aminoazo Dyes in the Livers of Rats Fed p-Dimethylaminobenzene</td>
<td>468</td>
</tr>
<tr>
<td>AUGUST, 1947. NUMBER 8</td>
<td></td>
</tr>
<tr>
<td>MARGARET ARMSTRONG and ARTHUR HAM. Effects, Particularly Anemia, Produced in Chicks by Growth in Their Yolk Sacs of Mouse Mammary Tumors</td>
<td>481</td>
</tr>
<tr>
<td>HARRY S. N. GREENE. The Use of the Mouse Eye in Transplantation Experiments</td>
<td>491</td>
</tr>
<tr>
<td>HARRY S. N. GREENE, B. L. NEWTON, and ALBERT A. FISK. Carcinoma of the Vaginal Wall in the Rabbit</td>
<td>502</td>
</tr>
<tr>
<td>W. F. DUNNING, M. R. CURTIS, and A. SEACOLOFF. Strain Differences in Response to Diethyldithiocarb and the Induction of Mammary Gland and Bladder Cancer in the Rat</td>
<td>511</td>
</tr>
<tr>
<td>CYRUS P. BARNUM, ZELDA B. BALL, and J. J. BITTNER. Partial Separation of the Mammary Tumor Milk Agent and a Comparison of Various Sources of the Agent</td>
<td>522</td>
</tr>
<tr>
<td>WERNER G. JAFFÉ. The Response of Mice to the Simultaneous Application of Two Different Carcinogenic Agents</td>
<td>529</td>
</tr>
<tr>
<td>F. E. KELSEY and ALEXANDER BRUNSCHEIG. Studies on Drug Absorption. Fixation of Quinine by Neoplastic and Non-Neoplastic Tissues</td>
<td>531</td>
</tr>
<tr>
<td>E. W. McHENRY, E. M. SEMMONS, R. PEARSE, and E. G. MEYER. Observations on the Ketosteroid Content of Urine from Patients with Prostatic Carcinoma and Adenoma</td>
<td>534</td>
</tr>
<tr>
<td>MAHMoud AHmed AFFFI. Cancer Mortality in Egypt</td>
<td>537</td>
</tr>
<tr>
<td>BOOK REVIEW</td>
<td>547</td>
</tr>
</tbody>
</table>
Contents to Volume 7

SEPTEMBER, 1947. NUMBER 9

MIN HSIN LI and W. U. GARDNER. Experimental Studies on the Pathogenesis and Histo-
genesis of Ovarian Tumors in Mice ........................................ 549

ALBERT TANNENBAUM and HERBERT SILVERSTONE. Dosage of Carcinogen as a Modifying
Factor in Evaluating Experimental Procedures Expected to Influence Formation of
Skin Tumors ............................................................ 567

EDWARD W. SHRIGLEY. The Influence of Mammalian Environments on the Tissue Speci-
ficities of the Rous Chicken Sarcoma Virus ............................ 575

ARTHUR M. CLOUDMAN. Organophilic Tendencies of Two Transplantable Tumors of
the Mouse .............................................................. 585

MAURICE M. BLACK. Sulfhydryl Reduction of Methylene Blue. With Reference to Al-
terations in Malignant Neoplastic Disease ............................. 592

ABSTRACTS .............................................................. 595-604

REPORTS OF RESEARCH .............................................. 595-598

CLINICAL AND PATHOLOGICAL REPORTS .............................. 599-604

OCTOBER, 1947. NUMBER 10

IRENE COREY DILLER. Degenerative Changes Induced in Tumor Cells by Serratia marces-
cens Polysaccharide ....................................................... 605

HEINRICH KLUVER and ALEXANDER BRUNSWIG. Oral Carcinoma in a Monkey Colony.
A Report of Two Additional Cases ........................................ 627

P. A. GOKER. Antibody Response to Tumor Inoculation in Mice. With Special Reference
to Partial Antibodies ...................................................... 634

C. J. COSTELLO, C. CARRUTHERS, M. D. KAMEN, and R. L. SIMOES. The Uptake of Radi-
ophosphorus in the Phospholipid Fraction of Mouse Epidermis in Methylcholan-
threne Carcinogenesis .................................................... 642

ALVIN J. COX, JR., ROBERT H. WILSON, and FLOYD DEEDS. The Carcinogenic Activity
of 2-Acetaminofluorene Characteristics of the Lesions in Albino Rats ............ 647

PAUL A. ZAHL and M. L. DRAISHER. Distribution and Growth-Potency of Cells in a Trans-
plantable Sarcoma ....................................................... 658

L. MELVIN LUSKY, HERBERT A. BRAUN, and GEOFFREY WOODARD. Influence of 2, 3-
Dimercaptopropanol (BAL) on the Induction of Skin Tumors in Mice by 3, 4-
Benzyamine ............................................................. 667

NOVEMBER, 1947. NUMBER 11

B. R. BURMESTER and G. E. COTTRAL. The Propagation of Filtrable Agents Producing
Lymphoid Tumors and Osteopetrosis by Serial Passage in Chickens ............. 669

L.-G. LARSSON and BENGT SYLVÉN. The Mast Cell Reaction of Mouse Skin to Some Or-
 ganic Chemicals. I. Estimation of the Relative Number of Mast Cells in Normal
Mouse Skin ............................................................. 676

L.-G. LARSSON and BENGT SYLVÉN. The Mast Cell Reaction of Mouse Skin to Some Or-
 ganic Chemicals. II. The Effect of Common Organic Solvents ................. 680

HJALMAR HOLMGREN and GUNNAR WOHLFART. Mast Cells in Experimental Sarcomas .... 686

V. R. KHANOLKAR. Pigmented Precancerous and Cancerous Changes in the Skin ...... 692

AMERICAN ASSOCIATION FOR CANCER RESEARCH, INC. ........................................ 709-739

PROCEEDINGS OF SCIENTIFIC SESSIONS ..................................... 709-732

PROCEEDINGS OF BUSINESS SESSIONS ..................................... 733-739

DECEMBER, 1947. NUMBER 12

JOHN J. BITTNER. The Transplantability of Mammary Cancer in Mice Associated with
the Source of Mammary Tumor Milk Agent .................................. 741

AUBREY GORBMAN. Thymic and Vascular Changes in Mice Following Chronic
Treatment with Goitrogens and Carcinogens ................................ 746

J. M. WOLFE and A. W. WRIGHT. Cytology of Spontaneous Adenomas in the Pituitary
Gland of the Rat .......................................................... 759

JOSEPH C. TURNER and BARBARA MULLIKEN. Parasitization of Mouse Sarcoma 180
by Vaccine Virus and Its Effect on Tumor Growth .......................... 774

B. R. BURMESTER and E. M. DENINGTON. Studies on the Transmission of Avian
Visceral Lymphomatosis. I. Variation in Transmissibility of Naturally Occurring
Cases ............................................................. 779

II. Propagation of Lymphomatosis with Cellular and Cell-Free Preparations .... 786
GEORGE H. PAFF, WILLIAM MONTAGNA, and FRANK BLOOM. Cytochemical Studies of Normal and Tumor Mast Cells in Tissue and in Vitro ........................................... 798
SIMON IVERSEN. The Elimination of 3,4-Benzpyrene from a Human Being after Intravenous Injection ................................................................. 802
WILLIAM H. FISHMAN and A. J. ANLYAN. β-Glucuronidase Activity in Human Tissues. Some Correlations with Processes of Malignant Growth and with the Physiology of Reproduction .......................................................... 808
MAURICE M. BLACK, ISRAEL S. KLEINER, and HERMAN BOLKER. Energy Mechanisms in Malignant Tumors in Relation to Chemotherapy ......................... 818
E. V. COWDRY. International Cancer Research Commission ........................................... 827
INDEX .................................................................. 833-857