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- * 1861 **Release of Estrogen-induced Glycoprotein with a Molecular Weight of 52,000 by Breast Cancer Cells in Primary Culture.** Frédéric O. Veith, Françoise Capony, Marcel Garcia, Jean Chantelard, Henri Pujol, François Veith, Antoine Zajdela, and Henri Rochefort.
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- * 1880 **Meeting Report: Carcinogenesis Studies Using Cultured Human Tissues and Cells.** C. C. Harris.

CLINICAL INVESTIGATIONS

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- 1891 **Evidence of a Treatment Dose Response in Acute Nonlymphocytic Leukemias Which Occur after Therapy of Non-Hodgkin's Lymphoma.** Mark H. Greene, Robert C. Young, John M. Merrill, and Vincent T. DeVita.
- 1899 **Tritiated Thymidine (ϕ_p , ϕ_h) Labeling Distribution as a Marker for Hereditary Predisposition to Colon Cancer.** Martin Lipkin, William E. Blattner, Joseph F. Fraumeni, Jr., Henry T. Lynch, Eleanor Deschner, and Sidney Winawer.
- 1905 **Suppressor Cell Activity among the Peripheral Blood Leukocytes of Selected Homosexual Subjects.** Evan M. Hersh, Peter W. A. Mansell, James M. Reuben, Jess Frank, Adan Rios, Ruth LaPushin, and Guy Newell.
- 1910 **Fecal Neutral Steroids in Two Japanese Populations with Different Colon Cancer Risks.** Abraham M. Y. Nomura, Tracy D. Wilkins, Sigetosi Kamiyama, Lance K. Heilbrun, Akio Shimada, Grant N. Stemmermann, and Howard F. Mower.
- 1914 **Molecular Identification of the TCA Alloantigen as the Transferrin Receptor on T-Cells of a Leukemic Patient with Serum from a Monozygotic Twin Brother.** Jos P. A. Derks, Lilian Hofmans, Hans W. Bruning, and Jon J. van Rood.

1921 Metabolic Fate of an Oral Dose of ¹⁵N-labeled Nitrate in Humans: Effect of Diet Supplementation with Ascorbic Acid. David A. Wagner, Dale S. Schultz, William M. Deen, Vernon R. Young, and Steven R. Tannenbaum.

1926 Prospective Clinical Trial of a Human Tumor Cloning System. Daniel D. Von Hoff, Gary M. Clark, Brian J. Stogdill, Michael F. Sarosdy, Michael T. O'Brien, James T. Casper, Douglas E. Mattox, Carey P. Page, Anatolio B. Cruz, and John F. Sandbach.

1932 Leukocyte Migration Inhibition Responses to MCF-7, Murine Mammary Tumor Virus, and Thomsen-Friedenreich Antigen in a Series of Cancer Patients. Michael I. Bernhard, Harold J. Wanebo, Jack Helm, Ronald C. Pace, and Donald L. Kaiser.

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