Contents

Resolution of the Board of Directors of the AACR. 803
Letter to the Editor. 808
Effect of Sex on the Development of Melanoma in Hybrid Fish of the Genus Xiphophorus. 813
Michael J. Siciliano, Alfred Perlmutter, and Edward Clark.
Effect of Ozone on Benzyrene Hydroxylase Activity in the Syrian Golden Hamster. 817
Michael S. Palmer, Donald H. Swanson, and David L. Coffin.
The Adoptive Transfer of Concomitant Immunity to Murine Tumor Isografts with Spleen Cells from Tumor-bearing Animals. 821
Peter J. Deckers, Bradford W. Edgerton, Bernard S. Thomas, and Yosef H. Pilch.
Enzyme Patterns in a Group of Transplantable Mouse Hepatomas of Different Growth Rates. 826
Light Microscopic Observations of Morris Hepatomas. 830
Microbodies of Morris Hepatomas. 834
Transfer RNA Methyalse Activity in Normal Rat Liver and Some Morris Hepatomas. 841
Bertram Sheid, Susan M. Wilson, and Harold P. Morris.
Activation of the Carcinogen, N-Hydroxy-2-fluorenylbenzenesulfonamide, by Desulfonation to N-2-Fluorenylhydroxylamine in Vivo. 847
Nucleolar Morphology, Nucleic Acid Syntheses, and Growth Rates of Experimental Tumors. 851
Milan Potmesil and Anna Goldfeder.
Inhibition of Migration of Human Autogenous and Allogeneic Leukocytes by Extracts of Patients' Cancers. 854
William H. Wolberg.
of Spontaneous Mammary Gland Tumors in the Mouse.

*J. E. Bruni and D. G. Montemurro.*

864 Phytohemagglutinin Unresponsiveness in Mouse Spleen Cells Induced by Methylcholanthrene Sarcomas.


868 Melanotic and Amelanotic Melanomas in Xiphophorin Fish.

*Jürgen Vielkind, Ursula Vielkind, and Fritz Anders.*

876 Temporal Changes in DNA and RNA Synthesis in the Regenerating Liver of Hydrocortisone-treated Rats.

*Arturo J. Rizzo, Paul Heilpern, and Thomas E. Webb.*

882 Studies on Cellular and Humoral Immunity to Tumor-specific Antigens in Polyoma Virus-induced Tumors of Rats.

*Surjit K. Datta and Michel Vandeputte.*

890 Tumor-specific Immunity in the Course of Primary Polyoma and Rous Tumor Development in Intact and Immunosuppressed Rats. *Hans O. Sjögren and Kirstine Borum.*

901 Metabolism of Cyclophosphamide by Rat Hepatic Microsomes. *N. E. Sladek.*

909 In Vivo Inhibition of Pyrimidine Catabolism by 5-Cyanouracil. *Glenn A. Gentry, Paul A. Morse, Jr., and Marion T. Dorsett.*


917 Letter to the Editor: Susceptibility of the Guinea Pig to Chemical Carcinogenesis. *Mary F. Argus.*

919 Announcements.

919 Erratum.

**COVER LEGEND**

Claudius Regaud (1870—1940), professor of histology at the University of Lyon, was a distinguished exponent of radiobiology and curietherapy and the founder of the Radium Institute (Institut du Radium) of the University of Paris in 1906. He developed original staining techniques and wrote a thesis on the lymphatics of the testes (Les vaisseaux lymphatiques du testicule. Compt. Rend. Soc. Biol., 49: 659—661, 1897). Regaud became an early student of Emile Roux at the Pasteur Institute. This led him to research on the effects of ionizing radiations on various tissues; with Blanc he discovered the varied radiosensitivity of the testicular tubular cells (Action des rayons X sur les diverses générations de la lignée spermatique. Extrême radiosensibilité des spermatogonies à ces rayons. Compt. Rend. Soc. Biol., 61: 163—165, 1906). With Nogier he studied radiophysiological effects on irradiated skin and described moisie radioépidermique (Les effets produits sur la peau par les hautes doses de rayons X. Arch. d'Élect. Med., 20: 321—334, 1912). In 1912, he was chosen to organize the biomedical services of the Radium Institute in a twin building to the one in which Madame Curie pursued her physicochemical research. Mobilized by World War I, he recruited his future collaborators (Lacassagne, Coutard, Ferroux, Monod, and Roux-Berger). With Debierne he developed an early system of radium dosimetry (Sur l'emploi de l'emanation condensée en tubes cés et sur le dosage en millicuries détruits. Compt. Rend. Acad. Sci., 161: 422—424, 1915). Using the ram testes as an experimental model, he proved the advantage of a dose of radiation fractionated in ten days over a greater total dose administered in a single exposure (Influence de la durée d'irradiation sur les effets déterminés dans le testicule par le radium. Compt. Rend. Soc. Biol., 86: 787—790, 1922). This observation on the time-dose relationship became the most important radiobiological contribution to modern radiotherapy. Regaud was also responsible for the development of gadgets (Colpostat, Columbia paste) and of techniques of interstitial and intracavitary radium therapy which have been widely accepted.

Henri Coutard (1876—1950), radiotherapist of the Radium Institute of Paris, the Chicago Tumor Institute, and the Penrose Cancer Hospital of Colorado Springs, did early work on the utilization of radium emanation (Sur l'éméthan de radium et son utilisation thérapeutique. Congress of the Association Française pour l'Avancement des Sciences, Nimes, August 1912); in 1919, he joined the staff of the Radium Institute. With a single piece of radiological equipment and interchangeable tubes, he studied experimental radiophysiology and radiodiagnosis and practiced radiotherapy. In 1922, he described the mucous membrane reaction which he named radio-épithélite (Sur les délais d'apparition et d'évolution des réactions de la peau, et des muqueuses de la bouche et du pharynx, provoquées par les rayons X. Compt. Rend. Soc. Biol., 86: 1140—1141, 1922). He originated the radiographic study of the larynx (Note préliminaire sur la radiographie du larynx normal et larynx cancéreux. J. Radiol. d'Électrol., 8: 461—465, 1924). Refusing to accept the theoretical limitations of Regaud's fractionation, Coutard dared to extend the daily irradiation of patients to periods of several weeks. His unprecedented results in the treatment of cancer of the larynx attracted world-wide attention (Considérations sur le cancer de la bande et de la cavité ventriculaire du larynx. Ann. des Mal. de l'Oreille, 46: 467—521, 1927). This method was dubbed the protracted-fractional treatment. His contributions are now indistinguishably incorporated into the everyday practice of radiotherapy (Principles of X-ray Therapy of Malignant Diseases. Lancet, 2: 1—12, 1934). Coutard was primarily responsible for placing radiotherapy on a clinical footing.

We are indebted to Dr. J. A. del Regato for both the portraits and the legend. Regaud is shown on the left; Coutard, on the right.