

SCIENTIA INTERNATIONAL

NOVAS DEL MENSE IN INTERLINGUA

► **Medicina Experimental.**—Drs. A. F. Rasmussen, J. T. Marsh, e N.Q. Brill del Universitate California reporta que in experimentos con muses stress emotional produceva augmentate grados de susceptibilitate a infectiones per le virus de herpete simplece. Le stress esseva applicate in le forma de choc electric o confinemento in un sacco de filo metallic.

► **Physica Atomic.**—Le periculo cancerogene de strontium-90 in le skeleto human devini acute—secundo le conception nunc generalmente acceptate—a un nivello de 100 micro-microcuries per gramma de calcium. Un studio de 1000 specimens de osso human, colligite per 30 stationes in omne partes del mundo, ha revelate (1) que si tests atomic es continueat al intensitate currente, strontium-90 in le skeleto human va attinger duo vices lo nivello permisibile in le anno 2100, (2) que si le tests es arrestate immediatamente, le strontium-90 jam propellite a in le spatio circumterramce va continuare descedere lentemente e attinger in le skeleto human un nivello quadruplicate in 1977, ancora non plus que un micrissime fraction del valor permisibile, (3) que personas nunc de etate adulte absorbe quasi nulle strontium-90 proque lor skeletos se renova con un rapiditate de non plus que un o duo pro cento per anno, e (4) que le distribution geographic del periculo de strontium-90 es satis uniforme in despecto del facto que le tests atomic es plus o minus localizate.

► **Climatologia.**—Le cauda de muses devini plus longe si le animales es elevate sub condicions de alte temperatura. Lor peso decresce. Isto esseva observate in experimentos controlate, execute per Dr. M. A. El-R. Ashoub del Universitate Cairo.

► **Meteorologia.**—Le studio de grande volumenes de aere colligite al summitates del montes Mauna Loa e Haleakala in Hawai ha ducite Dr. H. Pettersson del Universitate Hawai al conclusion que le atmosphera del terra contiene plus que 26.000.000 tonnas metric de pulvere de origine meteoric. Omne duo annos—dice le autor mentionate—le micrometeorites in le atmosphera se renova completamente. Isto significa que 13.000.000 tonnas de materia cosmic se depone annuemente super le terra.

► **Textiles.**—Le firma Italian Montecatini reporta que super le base de recercas per Prof. G. Natta del departamento de chimia industrial al Instituto Polytechnic Milano, illo ha perfectionate un nove fibra artificial que se comporta como lana, que es hydro-repellente como nylon, que pote esser repassato a alte temperaturas, e que es minus costose que omne le altere nunc existente textiles synthetic. Le nove fibra va esser lanceata al mercato in circa un anno. Su nomine va esser Moplen. Su materia prime es un nove plastico, identificate como polypropylene isotactic.

► **Zoologia.**—In le curso de 23 septimanas de hibernation, un adulte tortuga feminin—observeate per T. J. Hunt del Societe Zoologic de London—regenerava le osso e le carne de un portion mancante de su mandibula inferior. Le caso es remarcabile proque usque nunc il esseva generalmente supponite que un tal regeneration require un augmento del temperatura corporee.

► **Phonetica.**—Super le base del labores de un gruppo de experimentatores frances, Dr. Esti D. Freud—filia affin del defuncte Dr. S. Freud—ha avantiante le theoria que le chordas vocal vibra in responsa a impulsos cerebro-neural e non in consequentia del passage de currentes de aere per le larynge. Le function del aere es solmente transportar sed non generar le sonos vocal. Le experimentos mentionate pare haber

demonstrate que le chordas vocal pote vibrar in le absentia de currentes de aere sed non in le absentia de un certe nervo in le larynge.

► **Drogas Tranquillisante.**—Al Laboratorios de Recerca Horner a Montreal in Canada, cattos esseva tractate con certes del si-appellate drogas tranquillisante post que illos habeva essite conditionate (per le applicatione de un choc electric) a abstiner se ab capturar muses presentate a illos. Le effecto del drogas esseva le complete elimination del conditionamento. Le cattos recomenciava capturar muses in despecto del choc electric. Illos sentiva le choc de maniera normal, sed le sensation pareva esser sin interesse pro illos.

► **Vitaminologia.**—Drs. E. J. Adair e H. S. Vishniac del Universitate Yale reporta que le fungo marin *Thraustochytrium globosum* es un excellent organismo laboratorial pro essayos del contento de vitamina B-12 in aqua marin. Illo es le prime fungo in que le requiremente de vitamina B-12 ha essite constatare. Illo non pote synthetizar lo e se distingue ab altere organismos usate in simile experimentos per le facto que illo non accepta substantias analoge in loco del vitamina.

► **Anthropologia.**—Secundo le studios de Dr. E. E. Hunt del Universitate Harvard, le hodierni studentes a ille institution es plus alte, plus muscular, e minus obese que lor patres esseva al mesme etate. Le studio indica etiam que in le generation del filios le periodo de rapide crescencia occorre a un etate plus juvane e que le altor final es plus grande. Simile studios execute in Anglaterra constatava similemente que le acceleration del crescencia del filios occorreva a un etate plus juvane que in le patres, sed in Anglaterra le altor finalmente attingite esseva equal pro ambe generationes.

► **Genetica.**—Graffos cutanee ab un animal a un altere resulta in reaciones antigenic que pote esser mesurate per le efecto super le numeration leucocytic. Dr. J. E. Berry del Collegio Statal Kansas a Manhattan specula que basse intensitates del reaction antigenic in graffos cutanee indica alte grados de consanguinitate del animales concernite e vice versa. Dr. Berry crede que le studio de graffos cutanee ha un function importante in le elevage scientific de bestial. Le intensitate del reaciones antigenic indica le grado de consanguinitate de duo animales, e isto pote servir como base pro le prediction del characteristicas de lor progenie.

► **Recercas de Cancere.**—Le reimplacamiento de esophagos canceroso per aortas human (obtenite ab un “banca de arterias”) ha essite effectuate con bon successo in duo casos per Dr. J. Pressman del Universitate California. Post su transplantation le aorta serviva como base de un processo de reconstruction organic. Illo mesme esseva lentemente absorbite e eliminate.

► **Chirurgia.**—Le firma Ethicon de New Jersey emplea un forma de energia atomic pro le sterilisation de filos de catgut que es destinate al uso in suturas chirurgic. Un bombardamento de electrones de alte velocitate destrue omne bacterios in le filos jam incapsulate sed non cambia lor structura molecular e non produce ulle radioactivitate in illos.

► **Recercas de Cancere.**—In muses, alte grados de immunitate contra un specific tumor canceroso esseva effectuate per le injection de extractos ab le mesme typo de crescentia morbida. Le injectiones contineva nulle cellulas intacte. Iste constatacion es reportate per Dr. A. B. Novikoff de New York. Dr. Novikoff non vide un application immediate de su disoperta al therapia de cancere in humanos.

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GENERAL SCIENCE

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ZOOLOGY

Blood Tests Show Animal Relationships

► THE FAMILY cat may not be as closely related to the tiger in the zoo as has been believed.

Using a number of different blood sera tests, scientists have shown that the cat might even belong to a different genus than do the tiger and mountain lion. Strangely enough, however, the cheetah, a fast-moving, spotted feline, is closely related to the cat, showing a 76% relationship while the tiger showed only a 50% relationship.

In other antisera tests made to determine the relationship between the cat and other animals outside its family, “extremely weak” relationships were found with all but the hyena.

A sampling of carnivores or meat-eaters were tested in the experiment and some unexpected results reported. Black bear anti-serum gave higher cross-reactions with sea lion antigen than it did with raccoon, red fox and skunk. This indicates a closer relationship between the bear and sea lion than is shown in present classification systems. There is also some evidence that the black bear and polar bear may be more closely related.

Ludwig K. Pauly and Harold R. Wolfe, department of zoology, University of Wisconsin, report results of their research in *Zoologica* (Dec. 31, 1957), published by the New York Zoological Society. Changes and clarification in the system currently used to classify the order Carnivora could be made, they report, on the basis of further, more detailed serological studies.

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