

SCIENTIA INTERNATIONAL

NOVAS DEL MENSE IN INTERLINGUA

Recerca e Disveloppamento.—Le trends del passate 15 annos permette le prediction que in 1962 le Statos Unite va investir al minus 15 milliardos dollars in "recerca e disveloppamento." Le campos specialmente interessate va esser — probabilissimamente — illos del physica atomic, del chimia industrial e pharmaceutic, del electronica (incluse le vaste ramificationes del problemas de communication), e del metallos rar. Al minus 60% del expensas va esser portate per le governmento federal, le resto per le industria private. In 1945, le summa total investite in "recerca e disveloppamento" in le Statos Unite esseva minus que duo milliardos. Un trend de interesse major es le accentuation progressive del "recercas fundamental." in 1956, le summa total investite in recercas scientific in le Statos Unite se divideva in 77 partes pro recercas applicate e 23 partes pro recercas fundamental. In 1960, iste proportion ha devenite 69 a 31.

Oceanologia.—Microparticulas de materia, precipitate ab le atmosphaera ad le superficie del oceanos e descendente in lente sedimentation sin abandonar completamente lor micro-inveloppe de aere, es possibilmente responsabile pro le continue re-oxygenation del aqua marin a profundores ubi nulle altere provision de oxygeno pare possibile. Iste theoria esseva derivate per W. R. Turner, de Silver Spring (Maryland), ab su recercas in microbullas de gas in liquidos, i.e. bullas de diametros de minus que 15 micrones. Un characteristica de tal bullas es que illos non ascende in aqua quite como plus grande bullas lo face. Le theoria del microparticulas explicarea iste comportamento non-orthodoxe.

Poliomyelitis.—Al Secunde Conferentia International Super Vaccinos de Virus Poliomyelitic Vive a Washington, un gruppo de specialistas russe reportava excellentes resultados obtenite in lor pais per medio del vaccino disveloppate per Dr. A. B. Sabin de Cincinnati (Ohio). In le Statos Unite, le vive (attenuate) vaccino del Sabin es non ancora licentiate. In su loco on usa le vaccino morte de Salk, ben que—secundo le rusos—illo es inefficace, costose, e difficile a producer in forma garantitemente innocente. Le vaccino de Salk require injectiones. Illo de Sabin es administrate per via oral.

Pesos de Mesuras.—Le Camera del Representantes in le Congresso del Statos Unite va tosto considerar un bill que instrueria le Bureau National de Standards de studiar le desirabilitate e le practicabilitate de reimplaciar le systema de mesurationes nunc usate in iste pais per le systema metric.

Transporto.—Le compania Ford experimenta con un specie de ferrovia revolutionari que promitte attinger un velocitate de 700 a 800 km per hora. Illo functiona sin friction (e sin rotas) e in motion es levate supra le rails a un distantia de alicun millimetros.

Education Medical.—Statisticas financiari publicate per le Association American de Collegios Medical monstas que le studente medical medie in le Statos Unite expende \$2,911 per anno o \$11,642 in le curso del quatro annos que ille visita le collegio. Le familia del studente e le studente mesme paga 82 pro cento del total. Le remanente 18 pro cento es coperite per burasas e subventiones ab varie fontes. Le alte costo del education medical es responsabile pro le factor que 43 pro cento del studentes de medicina veni de familias con revenitos annual de \$10,000 o plus. Solmente 14 pro cento veni de familias con revenitos annual de minus que \$5,000. Iste cifras, compilate pro le anno 1959, signala le urgente necessitate de un reforma "plus democratic" del education medical. Un

detalio interessante es que (in le anno 1959) 16 pro cento del studentes medical recipeva nulle supporto del toto ab lor familias e que 8 pro cento succedeva a ganiar plus que \$6,000 per anno in varie occupationes accessori, generalmente sin relation con le medicina.

Cosmospeculation.—Dr. F. J. Dyson de Princeton (New Jersey) regarda como possibile que avantiatissime creaturas intelligente in altere systemas solar ha solvite lor problemas de spatio e de energia per le construction de enorme sphaeras cave circum lor sol como centro. Le correspondente projecto pro nos terranos essera de utilizar le materia de Jupiter in le construction de un balla cave de un tenuissime spissitate de 3 a 4 m e un extensissime diametro de duo vices le diametro del orbita del terra. Le superficie interior de un tal balla poterea supportar un humanitate fantasticamente numerose, e iste humanitate haberea a su disposition omne le energia del sol, con solmente le perdita de un micre quantitate de radiation de calor al exterior. Dr. Dyson non propone un tal projecto pro nos, sed ille nota que si de facto altere, plus avantiatissime creaturas ha reconstruite lor systemas solar in iste maniera, nos pote discoperir lo solmente per deteger le supra-mentionate radiation de calor.

Statistica Medical.—In 1959, circa 3500 medicos moriva in le Statos Unite. Le numero total del medicos cresceva nonobstante per circa 4800, proque le profession admitteva 8269 nove membros, incluse 1626 con trainamento e education foras del pais.

Astronautica.—Le cyclo del die de 24 horas, que determina le rhythmo de multes de nostre activitates e habitudes, va perder su fortia natural pro le astronauta del futuro. Dr. N. Kleitman del Universitate Chicago ha experimentate con altere cyclos e crede poter predicere que plus longe cyclos va resultar in plus alte grados de efficacia durante le horas de labor e in plus complete relaxation durante le horas de somnio.

Radiation Ionisante.—Le tri-laminat helice violette in un campos jalne, usate deposit plure annos per le statounitese Commission de Energia Atomic como symbolo signalante le presentia de radiation, ha essite adoptate con le mesme function per le Association American de Normas. Su uso es recommendate in signos identificante certe installationes e in etiquettas indicante le natura del contento de paccos e vehiculos.

Hypnose.—Le Academia American de Practica General condemna le abuso del hypnose pro objectivos de divertimento in general e in programmas de television in particular. Secundo le Academia, spectatores de television qui ha experientiate hypnotisation a distantia curre grave riscos que pote ben resultar in significative effectos psychopathologic.

Ornithologia.—Varie species de aves, incluse per exemplo le cardinal, es incontrate in regiones progressivemente plus septentrional in le Statos Unite. Un simile phenomeno es reportate ab Europa. Certe aves, traditionalmente regardate como mediterranee, ha essite observate usque a in le latitude de Scandinavia.

Astronomia.—Le cintura de radiation circum le planeta Jupiter es multo plus intense (e periculose) que illo circum le terra. Le proportion es cento billiones (10^{14}) a 1, secundo recercatores al Instituto Technologic de California.

Virologia.—Le crescentia de un certe typo de virus esseva promovite per le addition de aqua pesante (oxydo de deuterium) al medio de culturation.

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GENERAL SCIENCE

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