GENERAL SCIENCE

Ban Wonder Drugs

Sick Russians do not get wonder drugs because of political doctrines. Orthodox Marxians favor treatment of pneumonia patients with novocaine injections.

➤ IF YOU were a sick Russian your life would not be saved by the wonder drugs of western science because of the political doctrines of Marx and Engels revered today by the Soviet controllers of thought.

To the American Association for the Advancement of Science meeting in Philadelphia ideological attacks upon the use of chemotherapy and antibiotics were reported. Instead, orthodox Marxians in official favor urge the treatment of certain types of pneumonia and tumors by the injection of novocaine. According to Communist scientific doctrine, the novocaine cures by working on the central nervous system which supposedly controls the whole body.

Dr. Conway Zirkle of the University of Pennsylvania, who led the discussion of Soviet science, explained that the Russians have reverted to ideas that were outmoded in the western world a hundred years ago. One such idea is that the cell, as the basic unit of living matter, does not need to originate from the division of pre-existing cells. One Soviet idea is that cells develop from the yolk granules in eggs.

Some Soviet scientists seem more interested in life on other planets than they are in earthly plants and animals. There is much attention to what is called astrobotany. The Soviet scientists are sure that life exists on Mars and because they claim that the Martian climate resembles that found in parts of Siberia, the plants of that region are being explored intensively. Presumably these scientists go to Siberia willingly for this purpose.

In the field of cosmic rays, which is also remote from everyday life, the Soviet experts are said to be doing relatively good work.

The mentally ill Russians do not get much help from their doctors due to the dialectical materialistic fiats under which they must work. Pavlov, a great physiologist now dead, is worshipped, and ideas beyond or counter to his theories do not have a chance.

Dr. Ivan D. London, research fellow of Harvard's Russian Research Center, explained that since 1949, the Pavlov centenary, his supposed ideas have been used to stifle progress in physiology, psychology and psychiatry.

In the treatment of patients with severe mental illness, some therapy is accomplished along lines similar to those of the western world, but there are great shortages of competent doctors, technical workers, hospital space and drugs, except for the elite. Hope for the future of Russian psychiatry lies in the probability that their psychiatrists will be more interested in curing their patients than upholding the Pavlovian ideas now in high favor.

Not one new or original idea, either right or wrong, has been produced by the Soviet biologist heroes, Lysenko and Michurin and their followers, Dr. Theodosius Dobzhansky of Columbia University, leading geneticist, told the meeting. Official Soviet biology is now a reactionary movement, regressing to ideas long abandoned by scientists of other nations

Science News Letter, January 5, 1952

ASTRONOMY

Minor Planet Hit Moon

➤ A MINOR planet 125 miles or so across collided with the moon and exploded some 100,000 years ago. Large chunks of matter containing huge pieces of iron-nickel alloy miles long, thrown violently in all directions, tore long grooves in the lunar landscape as they skimmed across the moon's surface. Gray silicates formed ridges radiating outward from the point of impact.

Thus does Dr. Harold C. Urey, Nobelist of the University of Chicago's Institute for Nuclear Studies, picture the formation of Mare Imbrium, the best-known of the "seas" on the moon. Not seas at all, these flat formations are actually vast dry plains.

The moon's surface has been modified but slightly since this collision, Dr. Urey told members of the American Astronomical Society meeting in Cleveland. All of this occurred just about the time the moon became fully formed.

Mare Imbrium is the only big "sea" which contains craters. Even it has none in the region where the collision took place. Such craters as existed at that time probably were drowned by the liquid lava that flowed out of the moon when the asteroid crashed through the newly-formed lunar crust.

Black ridges west of the Copernicus crater may be raw planetary material, Dr. Urey pointed out.

The flying mountain-in-the-making that produced Mare Serenitatis, formed just be-

fore Mare Imbrium, fell directly downward into the moon. It produced the black lavas of Mare Tranquilitatis and later was itself covered by the gray lavas of Imbrium.

Dr. Urey's picture of what happened to the moon in its last days of formation fit in well with the creation of the moon's markings as visualized by Dr. Ralph B. Baldwin, also of the University of Chicago. Both believe that Mare Imbrium is the most recently formed of the "seas."

Science News Letter, January 5, 1952

ANTHROPOLOGY

Communism and Democracy Suppress Inquiries

➤ BOTH SOVIET Russia and the western world refuse to allow their social scientists to make an objective evaluation of the fundamental principles underlying their cultures, Dr. Russell L. Ackoff, research associate of the Case Institute of Technology, Cleveland, declared before the American Association for the Advancement of Science meeting in Philadelphia.

In Russia, as well as in the western nations, the social sciences are forced to play conservative roles, he charged. Propaganda is studied intensively, but basic political, economic and social assumptions underlying each culture are not evaluated scientifically. The time and energies of the experts are spent upon influencing public opinion, attitudes and morale.

In Russia and the Soviet sphere, this suppression has prevented any major extension or changes in the Soviet concept of scientific method since Lenin's formulation of dialectical materialism.

Science News Letter, January 5, 1952

CHEMISTRY

Strange Chemical Isolated, Explodes at Ordinary Heat

A CURIOUS chemical that explodes at ordinary temperature and reacts with everything organic has been isolated and reported to the American Association for the Advancement of Science meeting in Philadelphia by Drs. Alfred Engelbrecht and Aristid V. Grosse of Temple University's Research Institute.

Although this purple-vapored green solid and liquid, permanganyl fluoride in chemical composition, was actually first made over a hundred years ago by the German chemist, Wohler, called the father of organic chemistry, it had not previously been prepared in its pure state.

The Temple chemists used silica-free glass and transparent plastics in their manufacture of the chemical, which corrodes ordinary glass and quartz.

If it is kept at dry ice temperatures, the compound does not explode and can be kept for months.

Science News Letter, January 5, 1952