

GENERAL SCIENCE

Scientists Enter Politics

Scientist-legislators in Congress lag behind Soviet scientist-legislators in numbers, but they are taking a leading role in national and international affairs.

By LILLIAN LEVY

► SCIENCE plays a major role in domestic and international politics today, but few representatives in Congress are scientists. More than 25% of the deputies of the Supreme Council of the Soviets are scientists, while only 15 members, or less than three percent, of the U. S. House of Representatives and the Senate have had any extensive scientific training or background.

Two are Senators: pharmacist Hubert H. Humphrey (D.-Minn.) and Dr. Ernest Gruening (D.-Alaska), a physician. The House has four doctors, three chemists, two pharmacists, two members with degrees in forestry, one agronomist and one psychologist. Representation on both sides of the political aisle is almost equal.

One-third of the scientist-legislators are active in foreign affairs and involved in problems ranging from world health to nuclear disarmament and the international aspects of space exploration. These include Sen. Humphrey; Rep. Walter H. Judd (R.-Minn.), a surgeon; Rep. Marguerite Stitt Church (R.-Ill.), a former consulting psychologist; Rep. William H. Meyer (D.-Vt.), a forester; and Rep. Thomas E. Morgan (D.-Pa.), a surgeon and currently chairman of the House Committee on Foreign Affairs.

Various factors led these scientists into politics, and many have found they favor the role of politician over that of scientist.

Dr. Morgan, for example, found that he preferred dealing with the body politic than with the human body. He has adopted politics as a full-time career.

Unlike Dr. Morgan, Dr. Judd prefers dealing with the illnesses of the human body, mind and spirit, because "they are

easier to diagnose than the illnesses that plague the body politic."

Dr. Judd said he felt duty-bound to enter politics. As both a doctor and a missionary for more than a decade in the Far East, Dr. Judd has a wide knowledge and understanding of the problems in that area. Before Pearl Harbor, he warned against selling scrap and other materials for munitions to Japan. After Pearl Harbor his neighbors remembered his warnings and proposed him for Congress.

On international affairs, his main concern is the threat and spread of the danger of nuclear war. Locally, he believes the health of the American Indian has been "shamefully neglected" and hopes to introduce legislation to correct this.

Trained in Chemistry

Also concerned with the threat of nuclear war is Rep. Frank Kowalski (D.-Conn.), a West Point graduate and holder of an M.S. in chemistry from the Massachusetts Institute of Technology. Trained in the art of warfare, he is the author of inventions with military application.

Yet Rep. Kowalski has said: "If I have any objective, it is to see what we can do to achieve world peace."

He has seen first-hand the havoc wreaked by conventional arms in the bombing of Berlin and the awesome destruction of Hiroshima with the atom bomb. Others may question our military capability, but Rep. Kowalski seriously questions the human capability for peace.

He has said, "I don't know if humanity is stable enough, intelligent enough or honest enough to accept peace; but if we don't want the horror of Hiroshima re-

peated many times over, we'd better develop a capability for peace."

Like Dr. Judd, Rep. Kowalski also has had extensive experience in the Far East, where he was a military governor in Japan for close to five years, after Hiroshima. He now lends his experience to the House Armed Services Committee.

Rep. Meyer led a House fight to pass legislation which would prevent transfer of atomic weapons to other countries. Active in research in forestry and land use until his election to Congress last term, Rep. Meyer favors caution in developing nuclear power that may contaminate our lands and forests. He is an advocate of more biological investigation in pesticides and fertilizers as well as in atomic fallout.

Pharmacist Is Active

Rep. Larry Brock (D.-Nebr.), pharmacist, is active in the area of interstate and foreign commerce dealing with licensing and sale of drugs.

Rep. Gordon L. McDonough (R.-Calif.), industrial chemist in the field of munitions and explosives, is active on the House Committee on Science and Astronautics.

Although maintaining his interest in science, Rep. McDonough has put aside his professional career as a chemist for politics. So have nine other members of the scientific minority in Congress. Those who have found political science the most satisfying of the sciences include the two Senators, Humphrey and Gruening; Rep. Church, Rep. Morgan, Rep. Leroy H. Anderson (D.-Mont.), a chemical engineer; Rep. Clifford Guy McIntire (R.-Me.), agronomist; Dr. Ivor D. Fenton (R.-Pa.), a physician; pharmacist Rep. Carl Thomas Durham (D.-N.C.), who is vice chairman of the Joint Committee on Atomic Energy; and former forester Rep. Walter Mann Mumma (R.-Pa.), who said that he found his way "out of the woods a long time ago" and dis-



Left to right: Rep. Clifford Guy McIntire (R.-Me.), agronomist; Rep. William H. Meyer (D.-Vt.), forester; Rep. Carl Thomas Durham (D.-N.C.), pharmacist; Rep. T. Dale Alford (D.-Ark.), ophthalmologist; Rep. Gordon L. McDonough (R.-Calif.), industrial chemist; Rep. Larry Brock (D.-Nebr.), pharmacist; Rep. Leroy H. Anderson (D.-Mont.), chemical engineer.



Left to right: Rep. Thomas E. Morgan (D.-Pa.), surgeon; Rep. Ivor D. Fenton (R.-Pa.), physician; Rep. Frank Kowalski (D.-Conn.), chemist; Sen. Ernest Gruening (D.-Alaska), physician; Rep. Walter H. Judd (R.-Minn.), surgeon; Sen. Hubert H. Humphrey (D.-Minn.), pharmacist; Rep. Walter Mann Mumma (R.-Pa.), forester.

covered that he "prefers political timber to any other kind."

Rep. T. Dale Alford (D.-Ark.), an ophthalmologist and a freshman in Congress, still maintains his practice. Like his colleagues, he may frown on politics in science, but favors science in politics.

These scientist-legislators believe, as Rep. Meyer has said, that "in these times, when science plays so dominant a role in world and national affairs, more scientists should enter into politics."

The legal profession presently dominates the United States legislative branch, numbering 60% of the members of both houses. Businessmen and farmers elected to Congress number about 18%. Newspapermen and teachers are less than 10%. The remainder, including nine of the 11 women in Congress, come from a variety of professions and occupations ranging from ministers to morticians. Two of the women are lawyers.

The U. S. legislative make-up contrasts sharply with that of the USSR. The majority of the 1,378 members of both Soviet legislative houses are workers and peasants, with 831 (60%) included in these two categories.

According to Igor Bubnov, information officer of the Soviet Embassy in Washington, almost half of these deputies are actively engaged in agricultural production and industry.

But more than 25% of the Supreme Council are "working scientists," the Soviet spokesman said. This category would include engineers, agronomists, doctors, public health specialists, chemists, physicists, dentists, botanists, biologists and representatives of many other science fields.

Lawyers are virtually unrepresented in the Supreme Council. Rep. McIntire, Congress' sole agronomist, a member of the House Agricultural Committee and a farmer, said, "It is not surprising that lawyers are so little represented in the Soviet Council. In the totalitarian communist state, men—not laws—are supreme. The United States is a nation of laws, not men. Lawyers naturally would tend to dominate and lead in the government of a country such as ours."

While appreciating the function and need for lawyers in government, Rep.

McIntire pointed out that legal training by itself is not necessarily a qualification for a successful political career. Scientific training may be an even better preparation for Congress, he said, judging by the activity and political leadership offered by the scientific minority in Congress. In serving on their Congressional committees, they have taken a lead in domestic and foreign affairs involving nuclear disarmament, test suspension, world health and the national and international aspects of space exploration.

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MEDICINE

Overseas Medical Aid Improves U. S. Health

► THE FEDERAL GOVERNMENT spends more than three billion dollars annually for health and health-related activities.

Of this amount, more than \$150,000,000 is for health activities abroad.

The pay-off in scientific knowledge from this large investment was stressed by physicians and health authorities in testimony before the Subcommittee on Reorganization and International Organizations of the Senate Committee on Government Operations. The Subcommittee chairman is Sen. Hubert H. Humphrey (D.-Minn.).

U. S. support for international cooperative research in cardiovascular diseases alone has provided significant advances in understanding the causes of heart disease, Dr. Paul Dudley White, president of the International Society of Cardiology Foundation, told the Committee.

The United States and Finland have the highest frequency of coronary heart disease in the world. In 1958, heart diseases accounted for more than 30% of all deaths in the United States, including accidents.

Dr. White said international cooperation to determine the various factors in living habits and customs that are related to the frequency of coronary failure in a particular human community is necessary "for the sake of our own health, not just to aid other countries."

Dr. Albert B. Sabin of the University of Cincinnati, who developed a live, oral polio virus vaccine, said that field trials with the

vaccine on a large scale were not possible in the U. S. because of the earlier extensive use of the Salk vaccine. The large-scale foreign trials were made possible only by cooperation and work with the World Health Organization.

Dr. Edward L. Bortz, president of the medical staff of Lankenau Hospital in Philadelphia, and an authority on geriatrics, said the United States has valuable information that can contribute to the health and welfare of older individuals, and that international medical cooperation would help spread this beneficial knowledge.

He urged a long-range international research program to "accelerate the discovery of new facts leading to a more efficient control of the diseases and deteriorations that affect aging individuals."

Dr. Jonas Salk, whose vaccine was one of the great breakthroughs in conquering polio, wrote the Subcommittee that "our attitude about the problem of international health, and, more importantly, what we do about it, could influence greatly some of the most urgent world problems."

The Subcommittee under Sen. Humphrey currently is inviting public appraisal of the work it has done and is trying to plan guidance for future U. S. policy in international medical cooperation.

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ENGINEERING

U. S. Engineering Schools Spent \$71 Million on R&D

► UNITED STATES ENGINEERING schools spent \$71,000,000 for sponsored research and development in fiscal year 1958, the National Science Foundation reported.

Of this, \$48,600,000 was given the schools by the Federal Government. Industry supplied \$10,300,000. The schools themselves spent \$10,500,000 of their own funds for research and development. An additional \$3,500,000 of their own funds were used to cover the indirect, extra costs of grants and contracts mainly supported by outside sources.

The survey covered 129 engineering schools. Of the total spent, 57% went for basic research. In the last study in 1954, only 45% was spent on basic research.

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