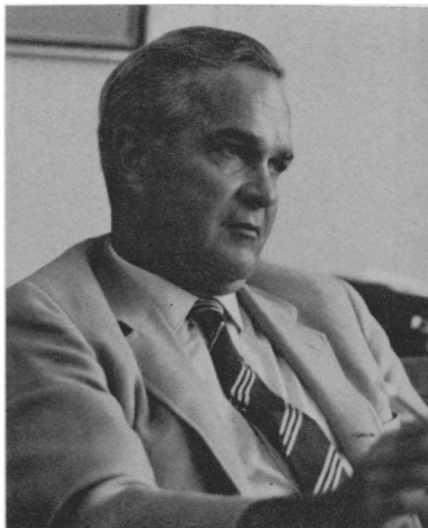
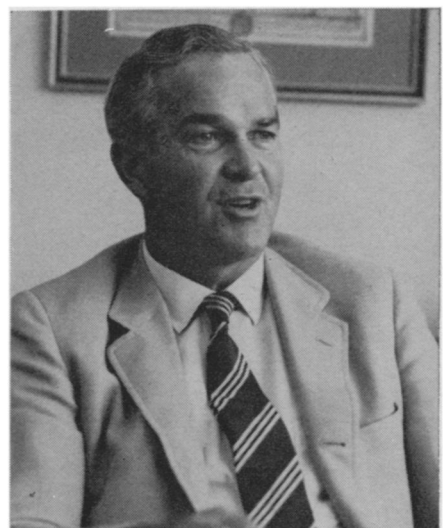


Marston: "Rare new ideas . . .



on the edge of mystery.



A requirement for research . . .

Marston in for Shannon as health research chief

New director brings to NIH experience in health services and education plus a soft spot for basic biological science

The man who directs the National Institutes of Health controls a billion-dollar budget that supports half the biomedical research done in the United States.

For the past 13 years that man has been Dr. James A. Shannon, a sometimes abrasive and always forceful defender of pure science and of knowledge as its own justification. He has built the institutes from a \$100 million-a-year agency into the billion-dollar mammoth it now is.

Dr. Shannon's retirement has been looming for some time, and scientists and bureaucrats alike have been wondering who would be able to follow his individualistic administration. Earlier this July one shoe fell; Dr. Shannon said he would step down Sept. 1. A few days after this announcement President Johnson dropped the second: The institutes' reins go to Dr. Robert Q. Marston.

The appointment surprised almost everybody. Government insiders had not considered him a candidate for the job. An unofficial list of finalists that made the rounds in the last few months did not include his name.

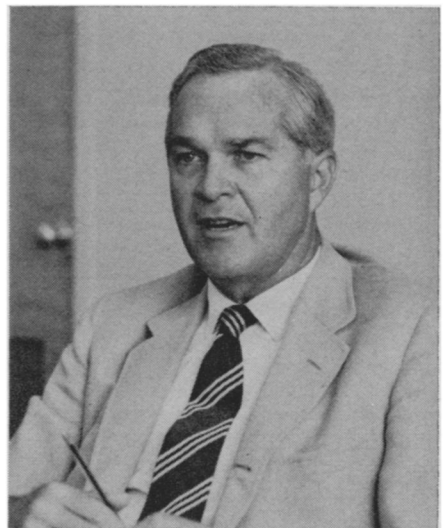
The reason for this was that only last May Dr. Marston had been appointed chief of the new Health Services and

Mental Health Administration, a post separate-but-equal to the NIH directorship (SN: 4/13, p. 353).

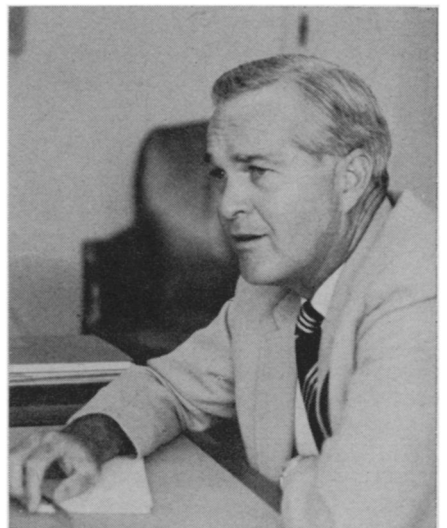
Dr. Marston, 45, had gone to that job from two years as chief of the institutes' Regional Medical Programs—President Johnson's effort to spread small centers of research around the nation.

Dr. Marston got the centers off to a sound start against fairly heavy odds. At first local medical societies looked on the program with somewhat more horror than they viewed Medicare, fearing that the centers would draw away private patients. Dr. Marston was able to overcome this prejudice and win their support. When the program was reorganized out of NIH and into the health services administration, Dr. Marston was considered a prime choice to whip the new agency into shape.

Thus Dr. Marston's whole governmental experience up till now has been oriented toward the application of biomedical knowledge and the provision of health services to the public. It was not considered likely that a service-oriented administrator would be placed over the agency with the main responsibility for basic biomedical research—particularly since the institutes' one service responsibility, the regional medical centers, were



a climate of creativity . . .



different than for service."

3 august 1968/vol. 94/science news/105

taken from it in the reorganization of the Federal health agencies.

Further, Dr. Marston has hardly been able to clutter his desk in a job for which he has expressed enthusiasm and for which he seemed well qualified.

Wilbur J. Cohen, secretary of Health, Education and Welfare, asked to explain the logic of Dr. Marston's sudden shift, said, "If everything I did were governed by logic . . ." and ended with a noncommittal answer.

But Cohen praised Dr. Marston's achievements and abilities and said he was, if not the only man in the country, then the only one HEW could find with the qualifications and the willingness to take on what President Johnson has termed a "staggering job."

Nobody in Government outside the White House and the top echelon at HEW appears to know what happened to the seven or eight so-called finalists, or if indeed they were that final. There is educated speculation that the logic involved in the choice of Dr. Marston may have been the logic of compromise.

Dr. Marston is a proven administrator. The very reasons for his unlikelihood for the post suggest that he was the favorite of no power group.

Health philanthropist Mary Lasker, for instance, has been attempting for some time to have Dr. Michael E. de Bakey, the heart surgeon, named to succeed Dr. Shannon. Opposition to this choice within HEW may have led to the selection of Dr. Marston, whom everyone would be able to accept without losing face.

Dr. Shannon is known to have wanted to name his own successor from within the research establishment, which might not have chosen Dr. Marston, but can accept him for his university background. Dr. Marston came to NIH in 1966 from the posts of vice chancellor of the University of Mississippi, dean of the School of Medicine, and director of the university's medical center.

Initially there was some fear among scientists on the Bethesda, Md., campus of NIH that the appointment presaged a change in the attitude toward basic research which Dr. Shannon nurtured. This is a point on which budget-wary scientists are skittish. The institutes appear this year to be sharing the fiscal fate of basic science generally, having suffered their first budget reduction on Capitol Hill in a decade (SN: 7/6, p. 8).

Further, there is some Congressional dissatisfaction with the institutes' management and independence of higher bureaucratic echelons. This has led to pressure to rein in NIH and make it in fact as well as name an integral part of HEW. Some see Dr. Marston's appointment as in part serving this purpose, and many feared there might be bureau-

cratic insistence on payoffs instead of basic research.

Dr. Marston quickly sought to quiet such fears.

"Working only on things you know will pay off cannot really be called research," he says. Just as great paintings cannot be analyzed according to the artist's economy in using paint, "you have to analyze creative research from the standpoint that its purpose is to look for rare new ideas on the edge of mystery. There is a requirement for research, a climate of creativity, that is different than for service."

Nevertheless, he says, "I have never worked with a scientist who would have been disappointed if what he had discovered turned out to be useful." He points out that the tradition in this country has been to develop institutions that blend research, education and service. In biomedical research especially there is no easy way to draw lines between test-tube experiments, animal experiments, experiments with human subjects, and actual applications.

His reassurances have succeeded in calming the fears of research enthusiasts, at least on the NIH campus. Scientists there show a change from wait-and-see to wholehearted approval of the appointment.

The recent reorganizations of the department's health activities added an educational dimension to NIH and a responsibility for the provision of health manpower. As a former academician Dr. Marston should be equipped to develop close cooperation between NIH and the universities.

Other aspects of the reorganization, notably virtual dismemberment of the Public Health Service of which NIH was part, were considered only a partial victory for the independence-minded Dr. Shannon, who would have liked NIH to be as unhampered of overlying bureaucracy as possible.

Dr. Marston believes that his new charge now has enough independence to function effectively. He says what was needed before was organizational access to the political arena, without intervening layers of career civil servants. Now the NIH director reports to the surgeon general, who reports to the assistant secretary for health and scientific affairs, who reports to the secretary, who deals with the White House and Congress.

Dr. Shannon, required to go through several layers before even reaching the surgeon general, whom he regarded as service-oriented anyway, cut all the corners and dealt directly with powerful friends on Capitol Hill.

This was regarded as the stimulator of the Congressional largesse that year after year bestowed on the institutes even more than Shannon officially could ask for.

COMMUNICATIONS

Order in the spectrum

The battle over Federal machinery for allocating radio frequencies among users dates back essentially to 1951, when the Truman Administration issued a report which called for a major overhaul.

Since then the Federal Communications Commission, the Director of Telecommunications Management of the Office of Emergency Planning, broadcast executives, engineers, radio astronomers and others have been increasingly critical of both the funds and the machinery to do the job.

The problem could be attacked by reallocating the spectrum more efficiently, or by pushing technology to expand the available channels.

At stake is some \$17 billion worth of industrial and commercial access to the radio frequency spectrum. And any proposal that comes down for reallocation of the limited available wavelengths is bound to meet, as many have, more resistance than proposals for the expansion of technology.

Research and technological expansion are a keystone of the report on the spectrum just issued by a joint committee of the Institute of Electrical and Electronic Engineers and the Electronic Industries Association.

It may also be a main pillar of another report—of a Presidential Task Force on Communications Management—expected to be issued momentarily. At least the same levels of expertise are going into both reports, and Federal communications officials have already indicated their approval of the IEEE/EIA effort.

"The report supports everything I've ever said on the subject," comments Federal Communications Commissioner Robert T. Bartley. "I hope it helps Congress see the need."

The six-pound document, based on a four-year joint study by more than 200 specialists in the use of the radio spectrum, recommends a centralized, well-planned engineering approach to spectrum management.

It cites numerous instances of saturation of the radio spectrum:

- Police work in urban areas is hampered because of lack of available radio channels. During emergencies such as riots the police need additional channels which can be kept clear of routine traffic.

- Applications of radio in business have skyrocketed. In some cities, 30 or more different users share the same channel.

- Automobile telephone service is limited to relatively few people since channels are limited.