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REPORT TO THE SUBCOMMITTEE ON  
INTERGOVERNMENTAL RELATIONS

COMMITTEE ON  
GOVERNMENT OPERATIONS  
HOUSE OF REPRESENTATIVES

RELEASED

Summer Research At Marine  
Laboratories, Per Diem Costs,  
Travel Of Institute Directors, And  
Related Matters

B-174428

National Institutes of Health  
Department of Health, Education,  
and Welfare

BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES

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SEPT 1 1972



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D C 20548

B-174428

Dear Mr Chairman

Pursuant to your request of October 7, 1971, and discussions with your office, this is our report on summer research at marine laboratories, per diem costs, travel of institute directors, and related matters, as administered by the National Institutes of Health, Department of Health, Education, and Welfare. A detailed listing of the information requested by your office is set forth in appendix I of the report

As requested by your office, we did not draw any conclusions or make any recommendations and we did not obtain comments from the Department of Health, Education, and Welfare or from the National Institutes of Health on the matters contained in the report

We plan to make no further distribution of this report unless copies are specifically requested and then only after your agreement has been obtained or public announcement has been made by you concerning the contents of the report.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "R. F. Keller", is written over a faint, larger signature.

Comptroller General  
Acting of the United States

The Honorable L H. Fountain  
Chairman, Subcommittee on  
Intergovernmental Relations  
Committee on Government Operations  
House of Representatives

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### ABBREVIATIONS

GAO	General Accounting Office
HEW	Department of Health, Education, and Welfare
NIH	National Institutes of Health
NINDS	National Institute of Neurological Diseases and Stroke
NIAMD	National Institute of Arthritis and Metabolic Diseases
NIGMS	National Institute of General Medical Sciences

## CHAPTER 1

### INTRODUCTION

The mission of the National Institutes of Health (NIH) is to improve the health of the American people. NIH carries out its mission primarily through grants and contracts awarded to medical research and teaching institutions and through biomedical research performed in its own facilities. In fiscal year 1972 NIH received appropriations of \$2.2 billion.

NIH, a component of the Department of Health, Education, and Welfare (HEW), consists of 10 national research Institutes and three program divisions. The research Institutes conduct biomedical research in their own laboratories and in a commonly shared clinical center facility, located at NIH in Bethesda, Md. Estimated in-house laboratory and clinical research costs for fiscal year 1972 were about \$117 million.

NIH has also negotiated annual contracts to provide facilities and services for a small number of NIH scientists who perform research at laboratories away from NIH. One such laboratory is the Marine Biological Laboratory, Woods Hole, Mass.

### TRAVEL REGULATIONS AND POLICY

Compensation for travel expenses of civilian employees of the United States and persons employed intermittently as consultants or experts is governed by the Standardized Government Travel Regulations issued by the Office of Management and Budget Circular No. A-7. The Standardized Government Travel Regulations require that all travel be either authorized or approved by the head of an agency or by an official to whom such authority has been delegated.

Before October 1971 the regulations stated that it was the responsibility of each department and agency to authorize only such per diem justified by the circumstances affecting the travel and that to this end the department or agency should exercise care to prevent the fixing of per diem in

excess of that required. In October 1971 the Standardized Government Travel Regulations were revised to require that agencies fix per diem, in part, on the basis of actual lodging expenses. For travel within the continental United States, maximum per diem is \$25.

The requirements of the Standardized Government Travel Regulations, along with the requirements of pertinent laws and other regulations, are incorporated in the HEW Travel Manual which sets forth the official policies and procedures of HEW relating to travel. The HEW Travel Manual states that, for travel within the continental United States, per diem cannot exceed \$25 a day for the first 60 calendar days in travel status at one location and \$16 a day for the next 30 days at the same location. No per diem is allowed after 90 days at the same location except when specifically authorized by the operating agency head or his designee.

Travel regulations for members of  
Commissioned Corps of  
U.S. Public Health Service

Approximately 1,200 of the 14,000 employees of NIH are members of the Commissioned Corps of the U.S. Public Health Service which is an organization of professional and scientific personnel in the fields relating to health and biomedical research. The Corps is one of the uniformed services of the United States.

Travel of members of the Commissioned Corps of the Public Health Service is regulated by the Joint Travel Regulations of the Uniformed Services, which differ from the HEW travel regulations. The differences involve, among other matters, per diem and reimbursement for use of privately owned conveyances.

NIH travel policies

NIH does not have its own travel manual but, as a component of HEW, it is governed by the policies and procedures contained in the HEW Travel Manual. According to NIH, as of March 1972, it was preparing a travel policies and procedures manual to supplement the HEW travel regulations.

The Director, NIH, has delegated the authority to approve travel orders and vouchers to the directors and executive officers of all NIH research institutes and has given these officials the authority to redelegate this authority to other designated officials. This authority, in whole or in part, has been redelegated to approximately 100 people in the 10 research Institutes.

From NIH information we estimate that over 12,000 travel orders were issued by the 10 research Institutes in fiscal year 1971. Seven of the 10 research Institutes reported that, in fiscal year 1971, all travel orders issued involving per diem were approved at the maximum rate allowed by the HEW Travel Manual. Of the three Institutes that reported authorizing less than the maximum per diem, one reported that occasionally the total amount of reimbursement a traveler could receive was limited when he was authorized to attend domestic meetings; one reported that the policy on per diem

varied somewhat from one program area to another; the third Institute reported that it always gave careful attention to per diem for personnel who had extended tours away from their home stations. The cost of NIH travel in fiscal year 1971 attributable to the research Institutes was approximately \$3.3 million.

### HEW REVIEW OF TRAVEL

At the request of the Secretary, HEW, a review of travel practices was initiated by HEW in October 1971. On the basis of the preliminary results of this review, several changes in the HEW Travel Manual were made in December 1971.

The portion of the HEW travel review involving NIH was performed by the NIH Management Survey and Review Branch, which submitted two reports on NIH travel to the Secretary, HEW. The first report, sent to the Secretary in November 1971, dealt with travel by NIH employees performing research for at least 2 consecutive weeks away from NIH. The second report, sent to the Secretary in March 1972, dealt with the fiscal year 1971 travel of top NIH officials and a sample of other NIH employees whose travel lasted at least 2 consecutive weeks.

The changes to the HEW Travel Manual and the review of travel by the NIH Management Survey and Review Branch are discussed in chapters 2 and 3 of this report.

### SCOPE OF REVIEW

Our review was directed toward obtaining information on NIH travel practices and policies questioned by the Subcommittee and monitoring that portion of the HEW travel review dealing with NIH and performed by the NIH Management Survey and Review Branch. (See app. I.)

Our review included (1) interviews with NIH officials, (2) an examination of Government and HEW travel regulations, and (3) a review of selected NIH contracts, travel orders, and vouchers. We obtained information from certain marine laboratories in the United States and examined records at, and interviewed officials of, the Marine Biological Laboratory in Woods Hole.



## CHAPTER 2

### NIH RESEARCH AT MARINE LABORATORIES

At the request of the Subcommittee Chairman, HEW prepared a list of NIH employees who had been in travel status for at least 2 consecutive weeks during 1970 and 1971. Our analysis of the list showed that certain NIH scientists spent several weeks during the summer at either the Marine Biological Laboratory in Woods Hole or the Mount Desert Island Biological Laboratory in Salisbury Cove, Maine

### CONTRACTS FOR SPACE AND SERVICES AT MARINE BIOLOGICAL LABORATORY

The Marine Biological Laboratory (1) provides laboratory space and research services, including the collection of marine specimens for research scientists, (2) offers courses in the advanced study of biology and natural history, and (3) provides desk space in its library which covers every field of the biological sciences. NIH has negotiated annual contracts with the Marine Biological Laboratory at least since 1964 to provide laboratory and library space for NIH scientists who have found it necessary to do part of their research there.

In 1969, 1970, and 1971, sole-source, cost-reimbursement contracts were negotiated. According to the NIH justification for the sole-source contracts, the Marine Biological Laboratory is the only contractor on the east coast which has the facilities, space, and access to marine life required for the studies by NIH scientists. In 1970 the NIH justification stated that collaborative research would be undertaken with non-Government scientific personnel who leased laboratory space at the Marine Biological Laboratory during the summer. The amounts negotiated and paid under the contracts with the Marine Biological Laboratory from 1969 through 1971 are shown below

<u>Year</u>	<u>Contract number</u>	<u>Contract amount</u>	<u>Total paid</u>
1969	NIH 69-2143	\$16,400	\$10,152 16
1970	NIH 70-2220	22,650	11,849.22
1971	NIH 71-2277	27,200	19,015.67

During the summers of 1970 and 1971, 15 and 20 NIH scientists, respectively, were on temporary duty assignments at the Marine Biological Laboratory. These scientists were employed by four NIH Institutes, as follows:

	<u>Number of persons</u>		<u>Number of man-days</u>	
	<u>1971</u>	<u>1970</u>	<u>1971</u>	<u>1970</u>
National Institute of Neuro- logical Diseases and Stroke (NINDS)	14	12	1,145	1,070
National Institute of Arthri- tis and Metabolic Diseases (NIAMD)	4	3	193	195
National Institute of General Medical Sciences (NIGMS)	1	-	60	-
National Cancer Institute	<u>1</u>	<u>-</u>	<u>72</u>	<u>-</u>
Total	<u>20</u>	<u>15</u>	<u>1,470</u>	<u>1,265</u>

JUSTIFICATION FOR RESEARCH  
AT MARINE BIOLOGICAL LABORATORY

For several years scientists employed by NINDS have performed research in one or more groups at the Marine Biological Laboratory during the summer months. One group, the Section on Neuronal Interactions, uses retinas from the eyes of the dogfish and the skate in its experiments. According to one of the scientists in this group, the dogfish and skate are used because they have very large retina cells which survive well in isolation and thus permit adequate time for experimentation.

The remaining groups of NINDS scientists use the axon--a nerve cell--of the squid in most of their research. According to one of these scientists, the squid is used in these experiments because it has nerve cells which are 50 to 100 times larger than the largest human nerve cells although both types of cells function in a similar manner. The size of these squid cells permits more accurate measurement and control during the experiments than might otherwise be possible.

According to officials of the Marine Biological Laboratory, the dogfish, skate, and squid are available only during certain months at Woods Hole. The squid is available May 1 to Labor Day, the dogfish May 1 to mid-October, and the skate May 1 to mid-November.

NIH officials stated that NIH had unsuccessfully attempted to transport certain marine specimens to its facilities in Bethesda. One official told us that one of the buildings at NIH had been constructed with an elaborate system for keeping sea water organisms alive and in good condition for use by intramural scientists but this system had never been utilized because the problems associated with the collection and transportation of these organisms remained unsolved. Some marine organisms, such as horseshoe crabs and hard-shell clams, are ordered and received by various scientists at NIH, but these organisms are considered by NIH scientists and officials of the Marine Biological Laboratory to be hardier species than those generally used in research performed at marine laboratories.

The NINDS Director told us that some marine specimens, such as the lobster, could be obtained alive locally but that they were moribund and inadequate for his particular research purposes. He said that, for the results of the research to be meaningful, it was necessary for these specimens to be available in a fresh condition, possible only at a marine laboratory.

We found that the Marine Biological Laboratory did ship a wide variety of marine specimens; however, it does not ship the species of marine specimens most often used by NIH scientists at Woods Hole. An official at the Marine Biological Laboratory told us that it was not feasible to ship certain specimens for research purposes because of a deterioration process which began as soon as the specimen was removed from its natural environment.

We contacted three other marine research facilities, two on the east coast and one on the west coast (the Scripps Institute in La Jolla, Calif.). The scientist who handles shipments of marine specimens at the west coast facility told us that such specimens as the dogfish, skate, and squid could be shipped for use in neurological research. He said, however, that any delays in transporting such specimens must be avoided and that when shipped squid had a high mortality rate. He told us that squid would not live long in captivity and that mortality rates of between 50 and 60 percent should be expected when they were shipped by air freight for distances even as short as 300 miles.

The other two facilities contacted did not provide shipping services and were not able to provide us with any information on the feasibility of shipping these specimens.

DIFFERENT PER DIEM RATES FOR  
SIMILAR TRAVEL TO WOODS HOLE

NIH scientists from different institutes on temporary duty at the Marine Biological Laboratory during the summers of 1970 and 1971 were authorized to receive reimbursement for travel expenses at various rates.

Three NIAMD scientists and 12 NINDS scientists spent 2 weeks or more on temporary duty in Woods Hole in the summer of 1970. The NINDS scientists were all authorized to receive the maximum per diem allowed by the HEW Travel Manual in addition to reimbursement of travel expenses to and from Woods Hole. Two of the NIAMD scientists were authorized to receive only reimbursement for travel expenses to and from Woods Hole with no per diem. The third NIAMD scientist was authorized to receive reduced per diem and reimbursement of travel expenses.

In the summer of 1971, all 14 NINDS scientists who were on temporary duty at Woods Hole were authorized to receive the maximum per diem and two NIAMD scientists received reduced per diem. The other NIAMD scientists and the scientists from NIGMS and the National Cancer Institute were not authorized to receive any per diem. The per diem authorized and type of accommodations obtained for all the NIH scientists who were at the Marine Biological Laboratory during the summer of 1970 and 1971 are shown below.

Type of accommodations obtained	Per diem authorized					
	Summer of 1970			Summer of 1971		
	Max- <u>imum</u>	<u>Limited</u>	<u>None</u>	Max- <u>imum</u>	<u>Limited</u>	<u>None</u>
Family-owned home	2	-	1	2	-	3
Laboratory housing	2	1	-	5	1	-
Other accommodations	<u>8</u>	<u>-</u>	<u>1</u>	<u>7</u>	<u>1</u>	<u>1</u>
Total	<u>12</u>	<u>1</u>	<u>2</u>	<u>14</u>	<u>2</u>	<u>4</u>

It should be noted that one of the investigators, a NIAMD employee, who stayed in a family-owned home and received no per diem, was not considered by NIH to be in travel status, and therefore no determination of per diem was involved. This case will be discussed in detail in chapter 5.

NINDS officials authorized the maximum per diem regardless of the type of lodging obtained by their scientists at Woods Hole. For example, the Marine Biological Laboratory maintains 376 dormitory accommodations, nine apartments, and 53 cottages which may be used by students and investigators. We found that two NINDS investigators and one NIAMD investigator stayed in the Marine Biological Laboratory facilities during the summer of 1970 and that five NINDS investigators did so during the summer of 1971. All the NINDS investigators were authorized to receive the maximum per diem--\$25 for the first 60 days, \$16 for the following 30 days, and nothing thereafter--even though, as shown on page 15, the Management Survey and Review Branch of NIH found that the costs estimated for room and board for six of the seven investigators housed at the facility might, in some cases, have been less than the per diem authorized. The NIAMD investigator was in Woods Hole from June 13 to September 10, 1970, a total of 84 days. His travel order limited per diem to \$950 for his entire time at Woods Hole--an average of \$11.30 a day. Information obtained from this Institute indicates that the per diem for this employee was based on his actual lodging costs while at Woods Hole plus \$25 per diem for 4 days while traveling away from Woods Hole.

We found that two NINDS scientists and three NIH scientists from other Institutes stayed in family-owned residences while on temporary duty at Woods Hole. Both NINDS scientists were authorized to receive the maximum per diem while on temporary duty there. The other NIH scientists were not authorized to receive any per diem while on temporary duty there.

#### Legality of receiving per diem when staying in family-owned residence

Our review disclosed that the NINDS Director had spent about 200 days at Woods Hole from his appointment in August 1968 to October 1971. We found that while at Woods Hole

the Director stayed in a family-owned residence and was authorized a per diem rate of \$25. The amount of per diem for travel to Woods Hole claimed by the Director to October 1971 totaled about \$4,100.

In October 1971 the Secretary, HEW, requested us to render an opinion on the legality of the payments of per diem to the Director of NINDS while on temporary duty at Woods Hole and on the legality and feasibility of a retroactive adjustment of his per diem rate. In a letter to the Secretary dated April 17, 1972, we stated that, because the temporary duty assignment was for official business, because an administrative determination was made as to the necessity for the assignment, and because the Director incurred extra expenses in connection therewith, there was no legal impediment to the per diem payments to the Director. We stated further, however, that it would seem a more thorough administrative review of the per diem rate should have been made and that in the future careful scrutiny should be given to be certain that the per diem rate authorized was not excessive.

The Secretary, HEW, stated in a letter to the Chairman of the Subcommittee that the HEW review of travel had identified certain similar cases at NIH and that disposition of these cases would also depend upon our opinion.

Per diem claimed in comparison  
to estimated costs incurred

The NIH Management Survey and Review Branch made a detailed review of travel costs where per diem appeared to exceed actual expenses. The review included 12 of the 14 NINDS scientists who were at the Marine Biological Laboratory in 1971 and eight of the 12 who were there in 1970. The review disclosed that eight of the 12 NINDS scientists claimed per diem in excess of estimated costs for the summer of 1971 and that five of the eight NINDS scientists claimed per diem in excess of estimated costs for the summer of 1970.

From the information obtained by NIH, we determined that all the NINDS scientists who stayed in laboratory-owned facilities in 1971 claimed per diem in excess of estimated

costs. The NIH review included only one of the two NINDS scientists who stayed in laboratory-owned housing in the summer of 1970; however, this investigator also claimed per diem in excess of estimated costs. The other investigator who stayed in laboratory-owned housing in the summer of 1970 was not included in the review because he was no longer employed by NIH.

In three of the four cases where per diem claimed was less than estimated costs for the summer of 1971, information obtained from the three investigators by the NIH Office of Management Survey and Review indicated that these investigators either rented cottages or were accompanied to Woods Hole by their families. The same was true for all three cases where per diem claimed was less than estimated costs in the summer of 1970. When applicable NIH did not attempt to separate the costs attributable to the investigator from those attributable to his family.

#### RESEARCH PERFORMED AT MOUNT DESERT ISLAND BIOLOGICAL LABORATORY

HEW's list of NIH employees in travel status for at least 2 consecutive weeks showed that five NIH scientists spent 2 weeks or more in 1970 and 1971 at the Mount Desert Island Biological Laboratory. These scientists performed various research projects involving marine specimens. All five scientists were paid the maximum \$25 per diem. NIH paid approximately \$3,300 in 1970 and \$3,800 in 1971 for laboratory space and services at this facility, in addition to the travel expenses for these employees.

The NIH Management Survey and Review Branch reviewed the travel of selected employees on the HEW list. Additional information--which NIH requested from two of the investigators who were at Salisbury Cove in the summer of 1970 and two investigators who were there in the summer of 1971--indicated the per diem claimed by one of these investigators approximated the estimated costs, and in three cases estimated costs exceeded the per diem claimed. In the three cases where estimated costs exceeded the per diem claimed, the investigator rented a cottage and was accompanied there by his family and the costs attributable to the investigator were not separated from those attributable to his family. Three of the employees were from the National Cancer Institute, and one was an employee of the NIH Clinical Center.



## CHAPTER 3

### TRAVEL AND RESEARCH PERFORMED BY INSTITUTE DIRECTORS

At the request of the Subcommittee, we reviewed the travel of the Director of NIH and the Directors of each of the 10 NIH research Institutes. For the Directors of the 10 research Institutes, we obtained (1) information on the intramural research projects in which they were personally involved and (2) the purpose of all official travel performed by them during fiscal year 1971.

#### TRAVEL OF NIH DIRECTOR

In fiscal year 1971 the NIH Director made a total of 18 trips, including four trips to foreign countries. In all cases where per diem was allowed--a total of 45-1/4 days--the maximum was approved.

The costs of two trips made to foreign countries were paid from non-NIH funds. For example, in August and September of 1970, the Director made a trip which included official stops in Japan, Thailand, Pakistan, and England. Per diem and travel expenses to Japan for a meeting of committees of the United States-Japan Cooperative Medical Sciences Program were paid by the Department of State. Tickets for the remainder of the stops on the trip were paid by the Southeast Asia Treaty Organization Cholera Research Laboratory.

#### TRAVEL OF RESEARCH INSTITUTE DIRECTORS

We analyzed the travel of the 10 research Institute Directors during fiscal year 1971. We found that the number of workdays spent in travel status ranged from a minimum of 9 days for the Director of the National Institute of Child Health and Human Development to a maximum of 88 days for the NIAMD Director.

#### Blanket travel orders

The Standardized Government Travel Regulations state that an authorization for travel should usually be issued

before the incurrence of expenses and should specify the travel to be performed as definitely as possible in the circumstances. The official authorization to perform travel, according to the HEW Travel Manual, is the travel order and, in accordance with the Standardized Government Travel Regulations, should specify the travel to be performed and the expenses to be incurred.

The travel of the NIH Director and of eight research Institute Directors during fiscal year 1971 was authorized by blanket travel orders. A blanket travel order, as defined by the HEW Travel Manual, is issued to one person for an extended period of time, not to exceed 1 fiscal year. The travel of six Directors was authorized by fiscal year travel orders; the travel of two Directors was authorized by monthly travel orders.

Blanket travel orders usually do not specify the itinerary, purpose, or estimated cost of the trips, as illustrated by the following example:

"From Bethesda, Maryland to any point in the continental U.S.A., Alaska, Hawaii, Guam, American Samoa, Puerto Rico, Virgin Islands, and Canal Zone, as may be required during Fiscal Year 1971, in connection with the various programs under the National Institute of General Medical Sciences."

Only two Institute Directors--the Director of the National Eye Institute and the Director of the National Institute of Dental Research--were issued specific travel orders. For these two Directors the travel orders provided the information needed to determine travel purposes.

Because travel purposes were not documented when blanket travel orders were used, it was necessary to contact the Director or his staff to determine purposes of trips made during this period. In most cases travel purposes were established through informal records and discussions with the Directors and other Institute officials. We found that, in the large majority of cases, the travel of the Directors involved attendance at professional meetings or seminars and site visits to grantee institutions. In general, the Directors indicated that, where the purposes of travel were

to attend professional meetings, they had given oral presentations. The following table shows the number of trips and total number of workdays away from the Institute for each Director during fiscal year 1971.

<u>Institute</u>	Workdays away from <u>Institute</u>	<u>Number of trips</u>		
		<u>Total</u>	<u>Domestic</u>	<u>Foreign</u>
Cancer	42	23	22	1
Eye	53	29	29	-
Heart and Lung	46	42	42	-
Allergy and Infectious Disease	28	12	11	1
Child Health and Human Development	9	5	5	-
Dental Research	44	27	27	-
Environmental Health Sciences (note a)	20	9	8	1
NIGMS (note b)	22	9	9	-
NIAMD	88	31	27	4
NINDS	<u>79</u>	<u>11</u>	<u>9</u>	<u>2</u>
Total	<u>431</u>	<u>198</u>	<u>189</u>	<u>9</u>

<sup>a</sup>Director appointed March 1971; excludes travel of previous Director.

<sup>b</sup>Director appointed October 1970; excludes travel of previous Director.

We noted that the travel orders of the Institute Directors were usually signed by the Institutes' executive officer or administrative officers. In all cases the travel was authorized by a person who was organizationally responsible to the Director.

### Recent changes in HEW travel regulations

In December 1971 the Secretary, HEW, reported to the Chairman of the Subcommittee that he had decided to substantially tighten HEW rules dealing with blanket travel orders and delegations of authority. The Secretary reported that HEW's review of its travel practices had shown the somewhat widespread use of blanket travel orders, in some cases with less than adequate justifications. In December 1971 HEW issued regulations which limited the use of blanket travel orders to (1) travel within a specified and well-defined geographic area for a stated purpose or purposes and (2) employees who, as an integral part of their work assignment are required repetitively and routinely to perform travel incident to rendering services or supervising activities in restricted geographic areas and who must frequently make trips at their own initiative.

In addition, the Secretary of HEW took action to permit only the highest ranking Department officials, all of whom report directly to the Secretary, to initiate their own travel. On March 7, 1972, NIH issued a memorandum to the directors of all bureaus, Institutes, and research divisions requiring that travel by them be reviewed in advance by the NIH Director and approved by the NIH Associate Director for Administration.

### Use of first-class travel

We found that one Institute Director traveled by commercial air carriers and used primarily first-class accommodations and did not justify their use. Other Directors, who primarily used less-than-first-class accommodations, did not, in some cases, justify them. The Standardized Government Travel Regulations state that persons who use commercial air carriers on official business should use less-than-first-class accommodations. The regulations, however, do provide for the use of first-class accommodations in certain instances, one of which is when such accommodations are necessary for the conduct of the mission.

The NIH Management Survey and Review Branch reviewed this aspect of NIH travel practices in detail and reported in March 1972 that it found several top officials,

including the Institute Director we found, who often used first-class accommodations. According to the report, first-class accommodations were justified for reasons such as (1) preparing for meetings, (2) writing speeches, and (3) doing necessary work. It stated that the HEW Travel Manual permitted first-class accommodations under certain circumstances but that "conduct of the mission" was not specified as a reason. It noted, however, that the HEW Travel Manual did not specifically exclude such reasoning. The report concluded that the reasons given by most of the NIH officials who traveled first class could be construed as covered by the Standardized Government Travel Regulations mentioned above.

The report further noted that, in a large number of the cases reviewed, the HEW travel regulation requiring that the reason for traveling first class be stated on the travel voucher and that such travel be specifically approved by the authorizing official was not satisfied. The report stated that the officials contacted were not aware of the requirement but that the officials indicated they would comply in the future. Because the use of first-class travel justified on the basis of conduct of business was susceptible to abuse, NIH would continue to monitor this practice to insure that such reasoning was used only when justified by the circumstances of travel according to the report.

## RESEARCH BY INSTITUTE DIRECTORS

We found that in addition to their administrative duties, five Institute Directors participated in their intramural research programs. These included the Directors of NINDS, NIAMD, the National Eye Institute, the National Heart and Lung Institute, and the National Institute of Environmental Health Sciences.

According to the NIH Deputy Director, Institute Directors are selected on the basis of their professional and scientific competencies as well as their abilities to manage and administer large research programs. He noted that the NIH Director encouraged the institute directors to enhance their professional interests and relied on each director to determine the extent to which this should be done. An NIH official told us that all researchers, including directors, came to NIH with the understanding that they would continue their research, but that no guidelines were established as to the extent of the research or, among other things, where it would be conducted.

We found that three Directors of Institutes (Eye, Heart and Lung, and NIAMD) involved in the intramural research programs of their institutes worked primarily at the NIH facilities in Bethesda. The research work of the other two Directors of Institutes (NINDS and Environmental Health Sciences) involved the use of marine specimens, and these Directors performed much of their research at the two marine laboratories mentioned in chapter 2. A list of the research projects in which the five Directors participated during fiscal year 1971 follows.

<u>Institute Director</u>	<u>Project title</u>
Eye	Studies of Parameters of Intraocular Pressure
Heart and Lung	Dissociation of Cardiac Inotropic and Membrane Effects of Ouabain
	Effects of Hypoxia on the Cardiac Response to Inotropic Interventions

<u>Institute Director</u>	<u>Project title</u>
	Control of Heart Rate in Hyperthyroid Cats
	Supersensitivity of Hyperthyroid Myocardium to Decreased Extracellular Calcium
	Physiological and Biochemical Characteris- tics of a New Group of Inotropic Agents: Analogues of Angiotensin II
NIAMD	Studies in Bone Metabolism
	Conference on Progress in Methods of Bone Mineral Measurement--Proceedings
	Symposium on Organ Transplantation--Pro- ceedings
	Diet and Nutrition of the Gila River Indians
NINDS	Electroencephalograph Calibrator for use in Determining Electrocerebral Silence
	Synaptic Transmission Between Photoreceptors and Horizontal Cells in the Turtle Retina
	Studies on Visual Pigments Situated in Sin- gle Receptors of the Frog Retina
	Photoreceptor System of the Hard-Shell Clam
Environmental Health Sciences	Comparative Pharmacology of Brain and Cere- brospinal Fluid of Elasmobranchii and Octopus
	Entry of Drugs into Central Nervous System of Teleosts, Particularly as Affected by Fresh Water Salt Water Adaptations

In December 1971 the Secretary of HEW reported to the Chairman of the Subcommittee that the review of travel policy at NIH had raised several substantial and complex policy

issues concerning the interrelationship of administration and management responsibilities with the duties and desires of NIH higher level personnel to conduct scientific investigations. He reported that the answers to these questions were being studied and that he would report the findings to the Chairman of the Subcommittee after the conclusion of the study.

In January 1972 the NIH Director stated in a memorandum to the Directors of the National Institute of Environmental Health Sciences and NINDS that they should not plan on being away from their official duty stations during the summer months to conduct offsite research at biological research stations.



## CHAPTER 4

### RESEARCH PERFORMED AT WOODS HOLE BY NINDS DIRECTOR

The allegations contained in the anonymous letter furnished us by the Subcommittee involved the practice of two NINDS officials spending their summers in Woods Hole at Government expense. We found that, in the summers of 1969, 1970, and 1971, the Director of NINDS and the Director of Intramural Research, NINDS, did spend a considerable amount of time in Woods Hole. We informed the Subcommittee of our findings, and the Subcommittee requested that we answer several specific questions about the operation of NINDS and the travel of its Director to Woods Hole.

The Congress appropriated \$105.8 million in fiscal year 1971 for NINDS. In this same year NINDS spent approximately \$11.5 million on in-house research. At June 30, 1971, NINDS employed 583 permanent, full-time employees.

Research is conducted in NINDS laboratories and clinics on disorders of the brain, spinal cord, and peripheral nerves. In the summers of 1970 and 1971, the Director of NINDS and the NINDS Director of Intramural Research with other NINDS scientists, performed research at the Marine Biological Laboratory.

The NINDS Director stated that he accepted the appointment as Director in August 1968 with the specific understanding that he was to have a small laboratory at NIH and could continue his research at Woods Hole for 2 months each summer. The then Director of NIH told us that the question of research generally and of research at Woods Hole specifically was discussed when the Director of NINDS was hired but that he could not remember the details of these discussions. An NIH official advised us that it was customary to have several meetings with a candidate prior to his appointment as Director of an Institute and that it would not be unusual for a Director to come to NIH with the understanding of continuing his research. This official could not document any preemployment agreements between NIH and the NINDS Director, nor did he know who would have been present at such meetings.

## RESEARCH RESPONSIBILITIES OF NINDS DIRECTOR

The NINDS Director also acts as the head of the Section on Neuronal Interactions, Laboratory of Neurophysiology, NINDS. This section was formed with the approval of the Acting Director of NINDS on September 3, 1970. The functional statement for this section reads as follows:

"Section on neuronal interactions conducts research on synaptic functions as related to nervous integration. Investigates the mechanisms of excitation and inhibition using electrophysiological and pharmacological techniques. Studies the properties of encoding, processing and decoding information in neuronal systems."

The Executive Officer of NINDS advised us in July 1972 that there was no position description for the head of the Section on Neuronal Interactions. Prior to the formation of this section, the Director of NINDS performed his research under what was referred to as the Director's Laboratory. According to the Director of NINDS, he had been advised by the NIH Deputy Director for Science that it would be better if the Director would establish his laboratory formally in the intramural program in order that a laboratory chief would be aware of certain things, such as procurement, and could exercise control in the Director's absence. The NINDS Director told us that he maintained this laboratory to continue research for obtaining new scientific knowledge and to maintain his skills as a scientific investigator. Because he must continually make decisions affecting the future of a research organization, in his opinion, it is highly desirable for him to maintain his skill as a scientist and to have an understanding of laboratory problems.

Three additional scientists work in the Section on Neuronal Interactions, and two of the three spent many days at Woods Hole during the summer of 1971.

The Director stated that, during the period spent at Woods Hole each summer, he worked in the laboratory daily but that he spent less than 5 percent of his time in laboratory work during the remainder of the year. It is the opinion of the NINDS Director that the three scientists assigned to the section need relatively little supervision.

## JUSTIFICATION FOR TRAVEL TO WOODS HOLE

In an August 1971 report written by the NINDS Director, he indicated that, while at Woods Hole in the summer of 1971, he (1) participated in the work of the laboratory on a daily basis and, in particular, improved the techniques being used, (2) repaired and redesigned the research equipment, (3) made plans for the work that would be performed the rest of the year by his section, (4) read many important reports that piled up on his desk throughout the year, (5) studied the NINDS annual report and a collection of important papers on hearing, deafness, speech, and language, and (6) evaluated a number of informal proposals for grants and contracts to determine whether their authors should be encouraged to proceed further.

In this report the Director stated that, in one of the projects undertaken by himself and another scientist in the Section on Neuronal Interactions, it was necessary to develop the apparatus and techniques for these experiments. He reported that his main function was to develop the techniques, build and modify the apparatus, review results, and make plans for the following day's experiment with the other scientist in the laboratory. He reported also that the other scientist performed the actual experiments which required nearly complete darkness and freedom from distraction while the Director was at home either working on apparatus or doing paperwork.

In a memorandum written in October 1971, the NINDS Director reported that he assembled and maintained a full office, laboratory, and machine shop in his home at Woods Hole at his own expense which he used almost exclusively to further the research conducted in his laboratory and to conduct essential Institute business. He stated that these facilities were necessary because the laboratory at the Marine Biological Laboratory was a single small room for three people, half of which must be darkened, making it impossible to engage in construction and maintenance activities and to conduct business over the telephone without annoying those engaged in experimentation.

PRODUCTIVITY REPORTS FOR  
SECTION ON NEURONAL INTERACTIONS

The Subcommittee requested that we review the productivity reports for the Section on Neuronal Interactions and determine what this group of scientists worked on when stationed at Bethesda during the remaining 9 months of the year.

NIH requires all its component organizations to submit an Annual Report of Programs in NIH Direct Operations. The annual report is a comprehensive review and summary of all NIH research operations--intramural, collaborative, and extramural. According to the instructions for preparation of the report, the report covers all such activities occurring during the fiscal year and includes those which began in previous years and which are ending and the ones beginning in the present period

The fundamental components of this annual report are the individual project reports. An individual project report, according to the instructions, is to be prepared for all activities which can be considered as research projects. We reviewed these reports for fiscal year 1971 for the Section on Neuronal Interactions and found four individual project reports. According to the Director, all the projects contained in the report for this section were performed in Bethesda. He stated that the research performed at Woods Hole before this section was formed in September 1970 was not reported on an individual project report but was summarized in a subsection of the Director's report. He said that the research performed in the summer of 1971 at Woods Hole would be included in the fiscal year 1972 annual report.

According to the NINDS Director, research performed at NIH during the remaining 9 months of the year by his section involved such specimens as the frog, turtle, catfish, and goldfish. The Director explained that these specimens were not as good for his particular research purposes as were other marine organisms used at Woods Hole, such as the skate and the dogfish, but that the former could be easily obtained and kept at NIH.

## INVENTIONS OF NINDS DIRECTOR

The NINDS Director stated in August 1971 that, while at Woods Hole in the summer, he was able, among other things, to continue the design and development of new research apparatus. He mentioned such things as an electronic timer assembly, amplifiers, an electroencephalograph calibrator, and modifications to an inexpensive camera--the costs of camera and modifications were reported to be less than \$50--which allows it to replace an expensive recording camera costing from \$350 to \$1,800.

The HEW General Administration Manual (chs. 6 to 10) requires that every Department employee report to the Assistant Secretary for Health and Scientific Affairs every invention made by him (1) which was related to his official duties, (2) which was made, in whole or in any part, during working hours, or (3) which was made with any contribution of Government facilities, equipment, material, funds, information, time, or services of other Government employees on official duty.

An individual project report entitled "Electroencephalograph Calibrator for Use in Determining Electrocerebral Silence," was included in the 1971 NINDS annual report. NINDS records indicated that NINDS sent a patent report on this device to the Chief of the Patent Branch at NIH in April 1971. The NINDS Director told us that patent reports had not been submitted on the other items because their use was limited to his laboratories. He did inform us, however, that he was writing another patent report on a microspectrophotometer developed by him and one of the scientists in his laboratory.

We noted that the Section on Neuronal Interactions had one of the expensive recording cameras and two of the inexpensive camera devices developed by the NINDS Director during the summer of 1971 at Woods Hole. We found that the expensive camera, an oscilloscope recording camera, was requested for the Director in October 1969 and that the total cost of the camera was \$1,475.

## CHAPTER 5

### LIBRARY SPACE USED AT WOODS HOLE BY NIGMS DIRECTOR

#### AND HIS WIFE, AN EMPLOYEE OF NIAMD

The NIGMS Director and his wife, a research chemist with NIAMD, spent approximately 2 months at the Marine Biological Laboratory during the summer of 1971

#### JUSTIFICATION FOR TRAVEL TO WOODS HOLE BY NIGMS DIRECTOR

The NIGMS Director was appointed in October 1970. An official of NIGMS advised us that, at the time the Director was hired, there was an understanding between the NIGMS Director and the NIH Director that the practice of spending summers in Woods Hole by the NIGMS Director would be allowed to continue. NIH could not, however, document this understanding.

A travel order dated July 1, 1971, was issued as an amendment to the blanket travel order of the Director of NIGMS and authorized his travel to Woods Hole during the summer of 1971. An attachment to the travel voucher submitted for payment stated that the Director's travel had the approval of the NIH Deputy Director of Science. According to the attachment, the Director occupied private quarters and, with the exception of per diem while in travel status at locations other than Woods Hole, no other per diem was claimed. The purpose of his visit to Woods Hole was not shown on the amendment to the travel order.

In November 1971 the NIGMS Director prepared a memorandum stating the purposes of his visits to Woods Holes during the previous summer. The most important purpose, according to the Director, was the contact with the world of science and with its scientists. From the information he had obtained from that community of scientists, he had been able to develop new NIGMS programs in genetics and in cell structure and function.

In this memorandum the Director has stated that, during the summer months, there is a shift in the geographic center

of activity in biomedical sciences from Bethesda to other stations, such as the Marine Biological Laboratory. The memorandum notes that, whereas many years ago it was the presence of sea urchins and squid which attracted scientists to Woods Hole, scientists now convened there to compare ideas, listen to each other's presentations of recent scientific advances, and develop plans for science in the future.

#### TIME SPENT AT WOODS HOLE

NIH records showed that the Director of NIGMS was at Woods Hole from June 25 to September 3, 1971, and that transportation expenses for the initial trip to Woods Hole and the final trip from Woods Hole to Bethesda were not reimbursed by the Government. During this period the Director returned to Bethesda on three separate occasions to conduct Institute business. These three trips were made at Government expense, and he spent a total of 7 days during this period in Bethesda. The Director spent a total of 64 days, including weekends, at Woods Hole in the summer of 1971.

In January 1972 the NIH Director stated in a memorandum to the NIGMS Director that he should not plan on being away from his official duty station during the summer months.

#### JUSTIFICATION FOR TRAVEL TO WOODS HOLE BY WIFE OF NIGMS DIRECTOR

According to NIH records the Director's wife was in Woods Hole from July 6 to September 3, 1971, a total of 60 days. The Director's wife received no per diem or travel reimbursement while at Woods Hole, and no travel order was prepared.

A March 8, 1971, memorandum from the NIGMS Executive Officer to the NINDS Administrative Officer requested that the NIGMS Director and his wife be included in the bid solicitation from the Marine Biological Laboratory for summer facilities for NIH staff. The Director's wife did not enter on duty with NIH until June 13, 1971, when she was assigned to the Section on Intermediary Metabolism of NIAMD. NIAMD officials advised us, however, that negotiations with the Director's wife had been initiated approximately 9 months before she actually entered on duty with NIH.

The March 8, 1971, memorandum of the Executive Officer of NIGMS noted that the Director and his wife were requesting table space in the library which would be shared and that they would not require laboratory space or supplies. The memorandum noted also that the Director and his wife planned to be at Woods Hole for the period June 15 through September 14, 1971. According to this memorandum, the \$400 cost of the use of the table was to be charged to NIGMS

On June 25, 1971, the Chief of the Section on Intermediary Metabolism, NIAMD, requested that the wife of the NIGMS Director be placed on official leave at Woods Hole from July 6 through September 3, 1971, at no expense to the Government. NIH officials advised us that the term "official leave" was a misnomer and that in actuality this was a temporary change of duty station. The justification for this request was that the laboratory which was being prepared for her would not be completed before early fall and that crowded conditions in her section would preclude the possibility of her sharing bench or desk space in any other laboratory. A NIAMD official advised us that, when employment negotiations began, NIAMD had anticipated that the laboratory for the Director's wife would be completed in April 1971. Early in 1971 it was found that the laboratory could not be completed by April 1971, and she agreed not to report to work at NIH until June 1971; in the meantime she remained at her former position.

NIAMD officials advised us that she had been working in the NIH library until she left for Woods Hole, and they felt it would be advantageous to her and NIH if she pursued her work in the laboratories at Woods Hole

The Director of Intramural Research and the Executive Officer of NIAMD advised us that they believed that she had performed laboratory research at Woods Hole and that they did not know she had worked in the library at Woods Hole. The Executive Officer stated that he was not aware she had worked in the library at Woods Hole until March 1972. The Executive Officer of NIAMD also told us that he had not been aware that the cost of the table space in the library had been paid for by NIGMS. He informed us that he did not think it unusual that she was not charged for space because he thought that in the past the Marine Biological Laboratory had



provided laboratory space to some investigators at no charge. Therefore he assumed she had been using laboratory space at no cost to the Government.

## INFORMATION REQUESTED BY SUBCOMMITTEE

1. Copies of any articles written during the last 3 years resulting from research performed at Woods Hole by the NINDS Director.<sup>1</sup>
2. Comments on productivity reports for the Section on Neuronal Interactions of the Laboratory of Neurophysiology, NINDS, which the NINDS Director heads.
3. Job descriptions for the Director of Intramural Research, NINDS, and the Director, NINDS. The Director should have two job descriptions, one as Director and the other as head of the Section on Neuronal Interactions.
4. A list of research being performed by other research Institute Directors, including the number of days the other Directors do research away from Bethesda.
5. Whether the Director, NINDS, submitted an invention patent report on the camera he invented.
6. The Section on Neuronal Interactions was established September 3, 1970. A determination whether the NINDS Director had any intramural research responsibility before that time.
7. A determination of why the NINDS Director heads the Section on Neuronal Interactions when, by his own admission, he can not spend much time with the research work.
8. The feasibility of transporting skates, dogfish, and lobsters alive and ready for experimentation from Woods Hole to Bethesda.
9. A determination whether NIH owns or rents laboratory space at Woods Hole.
10. Whether apparatus at the neuronal laboratory are available for keeping fish alive for research purposes.
11. Whether \$25 per diem can be legally claimed by the NINDS Director because he owns a cottage at Woods Hole.

## APPENDIX I

12. Whether the former NIH Director sanctioned, or was he aware of, the travel to Woods Hole by the NINDS Director.
13. An analysis of list furnished the Subcommittee by HEW of all NIH employees that have traveled since January 1, 1970, and have spent 2 or more weeks in any one place.
14. An analysis of the use of blanket travel orders.
15. An analysis of the travel of the research Institute Directors and, when speeches or presentations were made, copies, if possible.<sup>2</sup>
16. The extent of travel during fiscal year 1971 by the Director, NIH.
17. A list of publications resulting from NIH research performed at the Marine Biological Laboratory in Woods Hole from 1968 to the present.<sup>1</sup>
18. Whether the University of Miami, Miami, Fla., or the Scripps Institute, La Jolla, Calif., shipped the biomedical research specimens used by NIH scientists at Woods Hole.
19. Whether the commercially manufactured recording camera used in the Section on Neuronal Interactions was purchased before or after the NINDS Director developed a similar device using an inexpensive camera.
20. In the case of the NIGMS Director's wife, a research chemist with NIAMD, a determination of the purpose of the travel to Woods Hole.
21. A list of officials at preemployment interviews of the present Director of NINDS and the Director of NIGMS when Woods Hole travel was discussed.
22. A list of researchers at Woods Hole in the summer of 1971 who held Government grants.<sup>2</sup>

<sup>1</sup>Furnished to the Subcommittee separately.

<sup>2</sup>To be furnished to the Subcommittee separately.

PRINCIPAL OFFICIALS OF THE  
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
RESPONSIBLE FOR ACTIVITIES  
DISCUSSED IN THIS REPORT

		<u>Tenure of office</u>	
		<u>From</u>	<u>To</u>
SECRETARY OF HEALTH, EDUCATION, AND WELFARE:			
Elliot L. Richardson	June 1970	Present	
Robert H. Finch	Jan. 1969	June 1970	
Wilbur J. Cohen	Mar. 1968	Jan. 1969	
ASSISTANT SECRETARY (HEALTH AND SCIENTIFIC AFFAIRS):			
Merlin K. DuVal	July 1971	Present	
Roger O. Egeberg	July 1969	July 1971	
Philip R. Lee	Nov. 1965	Feb. 1969	
DIRECTOR, NATIONAL INSTITUTES OF HEALTH:			
Robert Q. Marston	Sept. 1968	Present	
James A. Shannon	Aug. 1955	Aug. 1968	