

MEDICAL BULLETIN

UNIVERSITY OF *Minnesota*

Post and Exchange File
University of Minnesota
Library, Room 1



in this issue

- ANNUAL REPORT, UNIVERSITY HOSPITALS
- FACULTY ROSTER,
COLLEGE OF MEDICAL SCIENCES
- ANNUAL REPORT, MINNESOTA
MEDICAL FOUNDATION

Annual Report Issue

VOLUME XXXVII, NUMBER 1

SEPTEMBER 1965

EDITORIAL STAFF

W. ALBERT SULLIVAN, JR., M.D.
Editor

EIVIND HOFF, JR.
Managing Editor

ADMINISTRATIVE SPONSORS

University of Minnesota Hospitals
GERTRUDE M. GILMAN, *Director*

Minnesota Medical Foundation

VERNON D. E. SMITH, M.D., *President*

KARL W. ANDERSON, M.D., *Vice-President*

N. L. GAULT, JR., M.D., *Secretary-Treasurer*

EIVIND HOFF, JR., *Executive Director*

University of Minnesota Medical School

O. MEREDITH WILSON, *President*
University of Minnesota

ROBERT B. HOWARD, M.D., *Dean*
College of Medical Sciences

H. MEAD CAVERT, M.D., *Associate Dean*

N. L. GAULT, JR., M.D., *Associate Dean*

ROBERT J. MCCOLLISTER, M.D., *Assistant Dean*

Minnesota Medical Alumni Association

JAMES C. MANKEY, M.D., *President*

ROBERT H. MONAHAN, M.D., *Vice-President*

DUANE C. OLSON, M.D., *Vice-President*

L. G. IDSTROM, M.D., *Secretary*

KENNETH P. MANICK, M.D., *Treasurer*

UNIVERSITY OF MINNESOTA
Medical Bulletin

Official Publication of
UNIVERSITY OF MINNESOTA HOSPITALS
MINNESOTA MEDICAL FOUNDATION
MINNESOTA MEDICAL ALUMNI ASSOCIATION
Circulation this issue 6,500

VOLUME XXXVII

September 1965

NUMBER 1-10

CONTENTS

STAFF MEETING REPORTS

*Annual Report; University of Minnesota
Hospitals, 1964-65*

GERTRUDE M. GILMAN 2

FACULTY ROSTER

COLLEGE OF MEDICAL SCIENCES 33

STAFF MEETING REPORTS

The University Medical Center and the Community

EDWARD C. DEFOE, M.D. 49

A Community Services Project

ROBERT SOLL, M.D. 51

MEDICAL SCHOOL NEWS 53

LETTERS 59

MEDICAL FOUNDATION NEWS 60

ALUMNI DEATHS 63

Published monthly from September through June at Minneapolis, Minn. No advertising accepted. Second class postage paid. Address all correspondence to The Editor, University of Minnesota Medical Bulletin, 1342 Mayo Bldg., University of Minnesota, Minneapolis, Minn. 55455.

Staff Meeting Report

University of Minnesota Hospitals Annual Report 1964-65*

The 55th year of operation since the Hospitals' founding in 1909 has been one of advance in the Hospitals' endeavors in teaching, research and service. The University Hospitals now comprises thirteen units with a combined total capacity of 775 beds.

The education of students in the various medical and para-medical disciplines is provided in the Hospitals by a staff composed of both full-time and part-time faculty members. These staff members are responsible to the State of Minnesota through the University for the teaching of students and the care of patients. This arrangement has proved adequate, not only for the education of students, but also as an economical means for the State to care for many of its indigent sick. Many staff doctors are also engaged in research, a most important function of a university medical facility.

THE MINNESOTA GENERAL HOSPITAL, also known as the "Main" Hospital, is the core of the University Medical Center. This area, of which the Mayo Memorial is a part, contains most of the diagnostic and therapeutic facilities, as well as most of the beds for the care of patients with acute illnesses. The Outpatient Department, within this same area, recorded 123,056 patient visits to its 55 specialty and sub-specialty clinics during the past year. The University Health Service, adjacently located, with its own director, staff and budgets, uses one nursing station of University Hospitals for the hospitalization of University students.

Systematic renovation of the existing building is continuing under the plan developed when the Mayo Memorial Building was built in 1954. The first phase of remodeling four nursing stations in the Todd and Christian wings is now complete and the second phase is proceeding according to schedule. We look forward to the completion of the second phase during 1966. The completion of the anonymously donated Meditation Chapel will

*From a report to the Staff Meeting of University Hospitals on October 1, 1965
†Director, University of Minnesota Hospitals

MSDH

9A16

THE MEDICAL BULLETIN



provide a lovely setting where hospital patients, their relatives and friends may go to find a quiet sustaining interlude. Soon to be started is a remodeling project for the nursery and obstetrics stations. Expansion of the hospital laboratories area and renovation of the Hospitals admission and business offices is in progress at the present time.

THE MASONIC MEMORIAL HOSPITAL is a parahospital, primarily for cancer patients. Patients in phases of chronic illness which

require hospitalization are admitted or transferred to it from the Main Hospital. Its charges are about one-third less than those in other sections of University hospitals. A total of 21,683 days of patient care were given at the Masonic Memorial Hospital in 1964-65.

Construction of a two-floor, \$1,100,000 addition, to provide 40 more beds for patient care and a complete floor for research laboratories, was begun in early June of this year. The Masons of Minnesota have donated the entire amount for this addition to the Masonic Memorial Hospital.

THE VARIETY CLUB HEART HOSPITAL provides care for cardiac patients, both adult and children. The same patient classification and referral procedures are used as for the Main Hospital. This facility provided 23,016 days of patient care to 1,672 patients last year.

The addition to the Variety Club Heart Hospital, now under construction, will provide facilities for the conduct of more diagnostic and therapeutic procedures for cardiac patients. It will also increase the amount of laboratory space which will be used for heart disease research. A gift of \$500,000, representing a substantial portion of the funds needed, has been contributed by the Variety Club of the Northwest.

THE MEDICAL BULLETIN

THE CHILDREN'S REHABILITATION CENTER is a recently completed unit which has been in operation since October of 1964. The center provides pediatric inpatient and outpatient services. Hospital facilities for Physical Medicine and Rehabilitation of



adult patients, and four schoolrooms to provide continuing elementary and secondary education to hospitalized children, are also part of this unit.

ADMISSIONS POLICY AND PROCEDURE

All patients, except emergency and obstetrical patients, are admitted to University Hospitals only by referral of their private physicians. Adherence to this policy enables the staff to coordinate the care of patients with that provided by their doctors in their home communities. It tends to insure availability of care for patients who will benefit most from specialized services, provides the Hospitals and the Outpatient Department with patients necessary for teaching, and avoids criticism that the staff of the University Hospitals is in competition with the private physicians of the State. This system continues to be a satisfactory one and furnishes the Hospitals with an average of 623 inpatients and 492 outpatients per day.

Approximately 30% of our patients are not able to pay for their medical care. The expenses of their hospitalization are shared equally by the State and the County which authorizes

their care. No charge is made for professional medical services furnished to them. These patients must have, in addition to the medical referral from their doctor, an approval from the Welfare Department of their home county to obtain either outpatient or inpatient care.

"Pay" patients — also referred to as "Per diem" patients — are those not able to afford the services of both a private doctor and a private hospital. They are not charged any professional fees for the services of the medical faculty but are expected to pay for their hospital care at the same rates charged State-County patients. During the past year about 30% of our patients were "pay" patients.

"Private" patients now comprise about 35% of the patient census at University Hospitals. These patients pay both hospital charges and physicians' fees. The hospital rates for private patients are approximately 10% more than for "State-County"



patients, and are comparable to charges in other Twin Cities hospitals. University Hospitals determines the classification when patients are admitted.

THE MEDICAL BULLETIN

The State of Minnesota, through direct appropriations, partially subsidizes the care of patients with multiple sclerosis, psychiatric illness, and those needing extensive physical rehabilitation. The Eustis Fund provides financial assistance for care of some children. An annual gift from the Variety Club of the



Northwest helps provide for care of children and adults in the Variety Club Heart Hospital.

Patients are not segregated according to their ability to pay. All are accommodated in single, double, three-bed or four-bed rooms. It is a policy of the Hospitals that all patients be teaching patients. This policy is one which seems to be understood and accepted very well by most of them.

STATISTICS AND OUTLOOK

The number of days of patient care provided in 1964-65 was slightly greater than that of last year. The increase was 402 days,

making a total of 227,557 days of care given. The number of admissions was 703 less, decreasing from 16,685 to 15,982. The average length of stay per patient increased from 13.6 days to 14.2.

There was a decrease of 8,051 in the number of total patient visits to the Outpatient Department, last year's figure being 131,107, and this year's 123,056. It is anticipated that this decrease, similar to ones seen occasionally in past years, will not alter significantly the long-term trend of an increasing number of outpatients.

There were 725 deaths in the University Hospitals during the last year, a mortality rate of 4.7 per cent. Of these deaths, 95 occurred within 48 hours after admission to the Hospitals. An autopsy was obtained on 83.9 per cent of all Hospital deaths.

Last year's Annual Report indicated two areas of concern of the University Hospitals staff. One was the possible effect on this hospital's patient census of the conversion of Minneapolis General Hospital to a county hospital. To date this has not been a serious problem. Approximately the same volume of patients from Hennepin County continue to come here for their medical and hospital care.

Secondly, we were concerned with the difficulty of recruiting professional hospital staff. This has been a chronic summer problem, especially for the Nursing Services Department. Their report last year indicated that the outlook for the future appeared encouraging, and this has proved to be true. This year we have operated the hospital at full capacity all summer. There are, however, serious shortages of other professional people. It has been most difficult to secure the services of physical therapists and medical social workers.

The Hospitals has never participated in providing care under the federally supported "Categorical Aid Programs." Since these programs are becoming more inclusive and are assisting many more citizens of the State, especially following the adoption of the *Medical Assistance for the Aged* Program, the Hospitals has accepted some patients with categorical aid authorizations. We expect the number of patients provided care here with support from these programs will continue to increase. The influence of the new *Medicare* Program on the University Hospitals is difficult to predict at this time. Since this State has provided so well for the health needs of its aged, we do not anticipate a major change in the number of patients referred to the University Hospitals, or in the kind of services we will need to provide.

A few months ago President Wilson of the University ap-

pointed a committee for the Study of Physical Facilities of the Health Sciences, to develop a long-range plan. We expect that this comprehensive plan, describing the future roles, goals, and needs of the University Hospitals, will be completed in 1965.

Though our total patient days of hospital care did not increase appreciably, and our outpatient clinic visits decreased, our total services to patients continue to mount. We constantly make efforts to improve the care of the patients who come here. The Hospitals' staff enjoys the opportunity to assist in the education of students in the health sciences, and in the exciting developments of medical research. Our continued growth has contributed to better health care for patients in our own state as well as for patients across the nation and from foreign countries.

ACKNOWLEDGMENTS

The University of Minnesota Hospitals enjoys the support of many individuals and groups of individuals who evince loyal and sustaining interest in its activities and operation.

We wish to thank the Masons of Minnesota, their affiliated organizations, and the Variety Club of the Northwest for their generosity; the Auxiliary of the Variety Club, the Masonic Hospital Auxiliary and its branches, the Hospital Auxiliary Section, together with other sections of the Faculty Women's Club; Crippled Child Relief for gifts of money and service which provide the "extras" that give comfort and happiness to patients; Robinson School of Beauty Culture; directors, staffs, and members of the county welfare departments; Minnesota State Department of Welfare; Minneapolis Department of Relief; Hennepin County Commissioners; Minnesota Society for Crippled Children and Adults; Greater Minneapolis Council of Churches; Hennepin County Chapter of the American Red Cross; the State Division of Vocational Rehabilitation; Family and Children's Service of Minneapolis; Combined Nursing Service of Minneapolis; Family Nursing Service of St. Paul; Hennepin and Ramsey County Nursing Services; State Board of Health; Community Information Service; Our Lady of Good Counsel Hospital; the private nursing and boarding homes; Foster Club; Phillips 66 Men's Club; Volunteer Service Bureau; Needlework Guild; International Sunshine Society; the Traffic Club for the Christmas gifts and entertainment they provide our patients; those who have donated to service and research funds; and the many other persons and organizations who have contributed to the well-being of our patients.

We also wish to recognize volunteer workers who perform



The Volunteer Service Department of University Hospitals gets assistance from three auxiliary groups, and supplementary help from 250 individuals and 32 community organizations. Each week an average of 210 volunteers work in playrooms, nursing stations, reception areas, and other hospital locations. Their ages range from 76 teenagers in blue-and-white striped pinafores, to many retired employes of the Medical Center, who return as volunteers.

Above, auxiliary members load up the Library Cart for another of its frequent trips through the hospitals, bringing a selection of reading material directly to the patients.

Below, volunteers lend a hand in a beauty treatment for a hospitalized patient.





services for our patients and assist our staff so cheerfully and generously. We give special thanks to our chaplains for their dedication to the spiritual needs of our patients.

The Administration desires finally to express its gratitude to the members of our professional and service staffs for their loyalty, helpfulness, and cooperation in meeting the exacting needs of patient care in a kind and considerate manner.

A report of all departments, following the format of previous years, may be obtained from the Office of the Director. A condensed statistical report of the University Hospitals operation for the year ending June 30, 1965 follows on pages 16-32.

1909



1965

UNIVERSITY of MINNESOTA HOSPITALS



THEN...





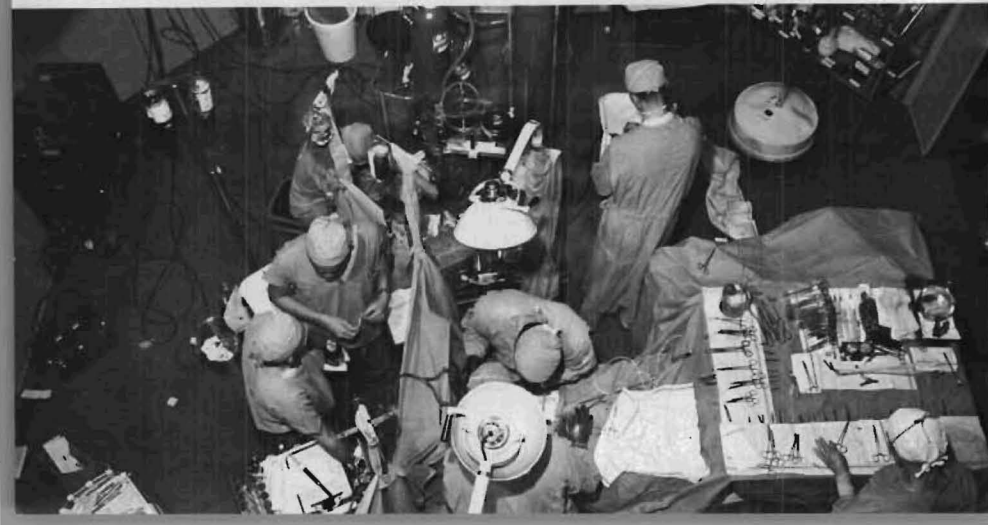
Opposite, top and center—Views of original University Hospital—Elliot Memorial—in 1911. Bed capacity was 100. Service Wing added in 1915 raised capacity to 192.

Opposite, bottom—1927 photo shows addition of Todd-Christian Wing, adding 90 more beds.

Above, top—Outpatient department lobby circa 1930.

Above, middle—Outpatient being treated in Outpatient Building, erected in 1928.

and NOW





Opposite, top — Masonic Memorial Hospital, a contribution of the Masons of Minnesota in 1958.

Opposite, middle — Variety Club Heart Hospital, built in 1951 with gifts of the Variety Club of the Northwest.

Opposite, bottom — Surgery being performed in one of 13 operating rooms at University Hospitals.

Above — The Mayo Building built by the citizens of Minnesota in 1954 as a memorial to the Mayo brothers.

A YEAR AT UNIVERSITY HOSPITALS

	1963-64	1964-65
Admissions		
Inpatients	16,685	15,982
Outpatients	26,050	24,957
Average Daily Census	620	623
Average Length of Stay	13.6	14.2
Total Patient Days of Hospital Care	227,155	227,557
Patient Visits to Outpatient		
Department	131,107	123,056
Patient Treatments in Rehabilitation		
Department	59,587	62,697
Patients assisted by the Social Service		
Department	15,099	13,421
Hours given by Volunteers	21,659	22,637
Surgical Operations	10,855	11,695
Prescriptions filled by Pharmacy	332,506	367,206
Hospital Laboratories Examinations and Procedures		
.	758,389	843,681
Radiographic Examinations		
.	68,930	71,932
X-ray and Cobalt Therapy Treatments		
.	15,565	13,642
Medical Records used for all purposes		
.	228,163	248,271
Medical Records used for research		
.	49,160	32,408
Meals Served	921,063	934,648
Number of Employees	1,776	2,088
Cost of Operation		
Outpatient	\$ 1,387,658.29	\$ 1,388,844.00
Inpatient	11,642,535.10	12,936,222.87

UNIVERSITY OF MINNESOTA HOSPITALS
Statement of Income and Expenditures — June 30, 1965

Income

County and State Reimbursement	\$4,633,766.14
Pay Bed	6,770,770.42
Minnesota Hospital and Home for Crippled Children	120,016.00
Health Service	308,102.17
Variety Club Heart Hospital	55,000.00
Outpatient Department	380,563.66
Psychopathic Hospital	783,387.00
Child Psychiatry	303,779.00
Rehabilitation	628,249.00
University Funds	341,316.00
TOTAL	\$14,324,949.39

Expenditures

Salaries and Wages	\$8,515,099.79
Supplies and Expense	5,809,967.09
TOTAL	\$14,325,066.88
(OD)	\$ —117.49

Cost of Operation

<i>Year</i>	<i>Out-Patient Department</i>	<i>In-Patient Department</i>	<i>Out-Patient Visit</i>	<i>Hospital Day</i>
1961-62	\$1,151,992.78	\$ 9,510,980.48	\$ 9.22	\$41.86
1962-63	1,240,076.75	10,232,355.25	9.64	44.70
1963-64	1,387,658.29	11,642,535.10	10.58	51.25
1964-65	1,388,844.00	12,936,222.87	11.29	56.85

COMPARATIVE TWELVE-MONTHS REPORT

In-Patient Department

Service	Admissions		Patient days		Average length stay	
	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65
Surgery, General	2,612	2,276	38,718	39,265	13.5	15.5
Neurosurgery	679	794	8,569	8,572	13.0	11.4
Orthopedics	628	639	9,907	9,063	16.5	14.6
Urology	756	607	8,722	7,763	11.8	12.9
	4,675	4,316	65,916	64,663	13.6	14.8
Medicine	2,617	2,666	42,885	40,007	17.7	16.1
Dermatology	113	92	2,155	2,271	19.2	26.7
	2,730	2,758	45,040	42,278	17.7	16.5
Psychiatry	486	405	22,752	23,260	44.9	53.4
Neurology	714	664	8,548	8,326	12.7	13.5
Child Psychiatry	117	111	5,664	5,581	49.3	48.5
	1,317	1,180	36,964	37,167	28.5	31.9
Ophthalmology	372	535	3,170	4,750	8.8	9.1
Otolaryngology	463	496	3,020	2,956	6.7	6.4
	835	1,031	6,190	7,706	7.6	7.8
Gynecology	851	840	12,415	12,576	14.9	15.1
Obstetrics	1,105	967	6,020	5,688	5.4	5.9
Newborn (Pediatrics)	933	802	5,512	5,182	6.1	6.4
Pediatrics (General)	2,721	2,454	37,186	36,710	13.6	15.1
Health Service	1,430	1,497	5,404	6,082	3.8	4.1
Rehabilitation	85	133	6,102	9,394	47.7	54.3
Anesthesia	3	4	406	101	67.7	33.7
TOTALS	16,685	15,982	227,155	227,557	13.6	14.2

COMPARATIVE TWELVE-MONTHS REPORT
In-Patient Department, cont'd.

		1963-64	1964-65			1963-64	1964-65
<i>Total Patients Admitted</i>				<i>Average Days Per Patient</i>			
County	.....	4,118	3,704	County	.....	16.9	1.70
Pay and Per Dem	..	10,090	9,808	Pay and Per Dem	..	10.7	11.8
Student Health Service		1,446	1,512	Student Health Service		4.1	4.2
Psychiatry	.....	196	152	Psychiatry	.....	47.8	64.0
Psychiatry (Pay and Per Diem)		290	254	Psychiatry (Pay and Per Diem)		40.7	41.9
Child Psychiatry	....	45	29	Child Psychiatry	....	56.7	55.5
Child Psychiatry (Pay and Per Diem)		72	82	Child Psychiatry (Pay and Per Diem)		36.1	43.0
Free	.....	240	252	Free	.....	5.9	7.1
Eustis	.....	188	189	Eustis	.....	9.3	7.9
TOTALS	.....	16,685	15,982	Average Length Stay per Patient	.....	13.6	14.2
<i>Total Days Hospital Care</i>				<i>Daily Average Number Patients</i>			
County	.....	80,834	73,290	County	.....	221.5	200.8
Pay and Per Diem	..	108,749	115,559	Pay and Per Diem	..	297.9	316.6
Student Health Service		5,796	6,303	Student Health Service		15.9	17.3
Psychiatry	.....	14,255	14,466	Psychiatry	.....	23.3	24.1
Psychiatry (Pay and Per Diem)		8,497	8,797	Psychiatry (Pay and Per Diem)		23.3	24.1
Child Psychiatry	....	3,176	2,749	Child Psychiatry	....	8.7	7.7
Child Psychiatry (Pay and Per Diem)		2,488	2,832	Child Psychiatry (Pay and Per Diem)		6.8	7.5
Free	.....	1,487	1,870	Free	.....	4.1	5.1
Eustis	.....	1,873	1,691	Eustis	.....	5.1	4.6
TOTALS	.....	227,155	227,557	Daily Average Census	..	620.6	623.4

COMPARATIVE TWELVE-MONTHS REPORT
Out-Patient Department

Service	New Patients		Revisits		Totals	
	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65
<i>Medicine</i>						
General	2,797	2,520	5,152	3,230	7,949	6,750
Allergy	38	32	1,235	1,588	1,273	1,620
Arthritis	44	48	865	885	909	933
Cardiac (Adult)	124	254	1,871	1,649	1,995	1,903
Chest	26	36	294	284	320	320
Chemotherapy	20	21	552	712	572	733
Diabetic	24	39	1,007	896	1,031	935
Gastro-intestinal	14	25	237	303	251	328
Hematology	26	23	612	550	638	573
Metabolism	29	24	427	465	456	489
Peripheral Vascular	21	6	34	40	55	46
<i>Dermatology and Syphilology</i>						
	890	847	2,837	2,626	3,727	3,473
<i>Neurology</i>						
General	358	364	868	761	1,226	1,125
Cerebral Vascular	23	21	302	160	325	181
Convulsive Disorder	14	25	745	775	759	800
Multiple Sclerosis	7	35	337	341	344	374
Muscle Disease	2	3	56	20	58	23
<i>Psychiatry</i>						
	462	365	7,494	6,398	7,956	6,763
Day Care	20	14	451	930	471	944
<i>Surgery</i>						
General	382	380	1,472	1,456	1,854	1,836
Culdoscopy	58	54	1	5	59	59
Plastic	69	44	223	221	292	265
Proctology	726	588	565	601	1,291	1,189
Orthopedic	442	394	2,436	2,112	2,878	2,506
Amputation			36	50	36	50
Urology	222	175	901	732	1,123	907
Urology-Tumor	28	51	185	366	213	417
Neurosurgery	125	174	747	873	872	1,047
<i>Eye</i>						
General	1,489	1,644	7,191	8,083	8,680	9,727
Orthoptic	187	166	410	303	597	469
Squint	4	21	349	399	353	420

COMPARATIVE TWELVE-MONTHS REPORT
Out-Patient Department, cont'd.

Service	New Patients		Revisits		Totals	
	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65
<i>Ear, Nose and Throat</i>	1,085	1,196	3,081	3,162	4,166	4,358
Audiology	1,149	1,542	759	913	1,908	2,455
<i>Gynecology</i>						
General	373	260	1,074	916	1,447	1,176
Gynecology-Tumor	114	120	1,743	1,949	1,857	2,069
<i>Obstetrics</i>	506	422	3,652	3,028	4,158	3,450
<i>Pediatrics</i>						
General	1,150	952	3,134	2,570	4,284	3,522
Allergy	9	10	245	124	254	134
Cardiac	409	445	1,462	1,233	1,871	1,678
Convulsive Seizure	3		218		221	
Endocrine	5	3	504	522	509	525
Fibrocystic	13	12	442	513	455	525
Hematology	3	1	1,146	1,092	1,149	1,093
Muscle Disease	1	1	10	65	11	66
Neurology	36	90	1,155	1,301	1,191	1,391
Renal	30	51	672	629	702	680
Rheumatic	33	44	751	734	784	778
Child Development Study			1,756	1,887	1,756	1,887
Well Baby		1	544	999	544	1,000
<i>Child Psychiatry</i>	430	336	1,399	1,534	1,829	1,870
<i>Tumor</i>	103	109	1,430	1,240	1,533	1,349
<i>Emergency</i>	4,104	4,225	16,560	14,428	20,644	18,653
<i>Nutrition</i>	1,695	1,597	2,859	2,086	4,554	3,683
<i>Dental</i>	1,156	950	715	598	1,871	1,548
<i>North Clinic</i>	3,092	2,578	16,369	14,602	19,461	17,180
<i>Physical Medicine and Rehabilitation</i>	1,880	1,621	3,485	3,160	5,365	4,781
TOTALS	26,050	24,957	105,057	98,099	131,107	123,056

COMPARATIVE TWELVE-MONTHS REPORT
Hospital Laboratories

<i>Laboratory</i>	<i>Number of Determinations</i>	
	<i>1963-64</i>	<i>1964-65</i>
Bacteriology	47,997	53,483
Blood Bank	228,973	251,783
Cancer Detection	28,258	26,692
Chemistry	127,480	171,418
Clerks	3,615	3,803
Electrocardiography and Basal Metabolism ..	12,508	14,094
Electroencephalography	2,282	2,436
Heart Catheterization	9,078	8,273
(Heart Catheterization Cases)	(514)	(494)
Heart Hospital	22,107	23,365
Hematology	134,331	144,763
Hematology, Special	2,317	3,457
Medical Genetics		250
North Clinic	5,770	5,671
Out-Patient	57,026	51,239
Parasitology	668	764
Serology	7,157	7,749
Tissues		
Specimens		
(Autopsy)	(622)	(601)
(Surgical)	(4,781)	(4,978)
Blocks		
Autopsy	14,405	14,815
Surgical	15,627	15,481
Cytology	3,526	3,672
Special Stains	278	315
Extra Slides	1,980	1,754
Frozen Sections	1,063	1,040
Cornification Count	16	38
Urinalysis	31,927	37,326
TOTALS	<u>758,389</u>	<u>843,681</u>

COMPARATIVE TWELVE-MONTHS REPORT
X-Ray Department

<i>Radiographic Examinations</i>	1963-64	1964-65
Abdomen	2,280	2,767
Bones and Joints (excluding spine and pelvis) ..	6,083	6,612
Cardio-Respiratory		
Chest	28,338	28,946
Bronchogram	66	45
Heart	2,242	2,437
Kymogram	19	15
Cine Examination	242	591
Gastro-Intestinal		
Esophagus, Stomach, Duodenum	5,285	4,990
Small Bowel	410	561
Colon	2,951	2,751
Gall Bladder	837	883
Cholangiogram	312	335
Head and Neck		
Skull	3,803	3,646
Sinuses, Mastoids	653	590
Sinus Tract Injection	52	33
Encephalogram	302	249
Ventriculogram	35	31
Cerebral Angiogram	398	425
Thalamotomy	68	47
Teeth	4	1
Sialogram	8	16
Obstetrics and Gynecologic Radiology		
Pelvimetry	201	199
Placentogram	1	6
Hysterosalpinogram	61	48
Spine, Pelvis and Hips	6,662	7,132
Myelogram	406	416
Discogram	2	0

COMPARATIVE TWELVE-MONTHS REPORT
X-Ray Department, cont'd.

<i>Radiographic Examinations</i>	1963-64	1964-65
Urological Radiography Examinations		
Cystogram, Urethrogram	516	866
Intravenous Urogram	3,212	3,647
Urinary Tract (KUB only)	873,	981
Urogram (Retrograde)	336	317
Miscellaneous	23	36
Vascular Radiography		
Angiocardiogram	279	67
Aortogram	137	114
Peripheral Arteriogram	193	234
Celiac Catheterization	2	0
Heart Catheterization	226	84
Hepatic Catheterization	15	0
Hypogastric Catheterization	19	7
IV CO ₂ Study	12	12
Lymphangiogram	32	60
Mammogram	25	26
Needle Biopsy	5	2
Phlebogram	13	9
Planigram	540	613
Special Vascular Study	45	52
Splenoportogram	10	18
Venacavagram	14	29
Venogram	45	39
Ventriculogram and Aortogram (Retrograde) ...	637	947
TOTAL RADIOGRAPHIC EXAMINATIONS ..	68,930	71,932
Patients Examined		
In-Patients	33,267	32,043
Out-Patients	19,038	20,844
TOTAL PATIENTS EXAMINED	52,305	52,887

COMPARATIVE TWELVE-MONTHS REPORT
X-Ray Therapy Department, cont'd.

<i>Type of Treatment</i>	<i>1963-64</i>	<i>1964-65</i>
<i>Deep X-Ray Treatment</i>		
Out-Patient Treatments	5,301	4,402
In-Patient Treatments	9,792	9,036
Total Treatments	15,093	13,438
Total Patients Treated	692	840
Average Treatments per Patient ...	21.8	15.9
<i>Superficial X-Ray Treatments</i>		
Out-Patient Treatments	349	193
In-Patient Treatments .. 6	123	11
Total Treatment	472	204
Total Patients Treated	92	43
Average Treatments per Patient ...	5.2	4.7
<i>Radium</i>		
Total Treatments	160	181
New Patients Treated	155	176
<i>Strontium (Beta Ray)</i>		
Total Treatments	55	63
New Patients Treated	13	16
<i>Radioisotope Laboratory</i>		
<i>Radioiodine</i>		
New Tracer Studies	441	457
Repeat Tracer Studies	149	166
Total Studies and Treatments	590	623
Total Patients Treated	24	28

COMPARATIVE TWELVE-MONTHS REPORT
X-Ray Therapy Department

<i>Type of Treatment</i>	1963-64	1964-65
Urinary Excretion and Conversion Ratio Studies		
T-3 Studies	80	89
Miscellaneous	23	21
Total Studies	103	110
Radiophosphorous		
Eye Tumor Diagnosis Studies	21	14
Thyroid Nodule Studies	21	7
Total Studies	42	21
Total Patients Treated	22	6
RIHSA Blood Volume Studies	94	159
Radioactive Chromium Red Cell Survival Studies	73	91
Radioactive Gold Liver Scans	24	93
Cobalt 57-B-12 Studies	203	260
<i>Special Diagnostic Studies using Radioactive Iodine, Selenium and Mercury</i>		
Brain Scans using Hg-203, Hg-197 and RIHSA	356	557
Liver Scans using I-131, Rose Bengal and I-131 Colloidal Albumin	152	96
Renograms using I-131 Hippuran	334	1,042
Echograms		241
Miscellaneous*	76	166

*Including Rose Bengal Clearance, Differential Diagnosis, Tests for Jaundice; Renoscans using Hg-203 and Hg-197; Rb-86 Coronary Flow; Sr-85 Scans; Heart Scans using Hippuran I-131 and Cholografin; Pancreas Scans using Se-75)

COMPARATIVE TWELVE-MONTHS REPORT

Operating Room

	<i>Major</i>		<i>Minor</i>		<i>Totals</i>	
	1963-64	1964-65	1963-64	1964-65	1963-64	1964-65
<i>Department of Surgery</i>						
General	1,643	2,126	719	577	2,863	2,852
X-Ray (Diagnostic)			479	149		
Pediatrics and Medicine (Research)			22			
Neurosurgery	527	573	52	56	659	727
X-Ray (Diagnostic)			80	98		
Urological Surgery	226	310	39	30	265	340
Orthopedics	484	520	221	179	1,259	1,190
Casts (on Operatives)			174	178		
Casts (on Non-operatives)			380	310		
X-Ray (Diagnostic)				3		
<i>Department of Gynecology</i>	242	209	445	410	687	619
<i>Department of Otolaryngology</i>						
Otolaryngology	380	443	489	477	869	920
Dentistry	5	28	30	14	35	42
X-Ray				12		12
Casts				1		1
<i>Department of Ophthalmology</i>	294	486	66	83	360	569
Neurology				2		2
Pediatrics				4		4
X-Ray (Diagnostic)				439		439
X-Ray Therapy				19		19
Physiology				1		1
TOTALS	3,801	4,695	3,196	3,042	6,997	7,737
<i>Cystoscopy Department</i>						
TURs and Operative Procedures	254	147			254	147
Minor (without X-Ray)			2,124	2,164	2,124	2,164
Minor (with X-Ray)			531	564	531	564
X-Ray			949	1,083	949	1,083
TOTALS	254	147	3,604	3,811	3,858	3,958
COMBINED TOTALS	4,055	4,842	6,800	6,853	10,855	11,695
<i>Summary</i>						
	<u>1963-64</u>	<u>1964-65</u>				
Majors	4,055	4,842				
Minors	6,800	6,853				
TOTALS	<u>10,855</u>	<u>11,695</u>				

Table 1
 PHYSICAL MEDICINE AND REHABILITATION
 Summary of Physical Medicine and Rehabilitation Services

	1954-55			1963-64			1964-65			Percent Increase Over 1954-55
	Out-Pt.	In-Pt.	Total	Out-Pt.	In-Pt.	Total	Out-Pt.	In-Pt.	Total	
Patients Treated	415	1,612	2,027	820	3,920	4,740	783	4,118	4,901	142
Patient Visits	6,822	33,018	39,840	8,668	50,919	59,587	9,400	53,297	62,697	57
Total Treatments	14,045	49,620	63,665	33,674	117,845	151,519	27,977	125,336	153,313	141
Treatments by Sections:										
Physical Therapy	11,516	19,685	31,201	23,010	66,979	89,989	17,950	75,178	93,128	198
Occupational Therapy*	1,174	28,318	29,492	1,977	45,494	47,571	3,798	46,944	50,742	72
Speech Therapy	723	339	1,062	1,816	1,274	3,090	2,026	895	2,921	175
Prevocation	93	503	596	5,529	3,394	8,923	3,410	1,854	5,264	783
Vocational Counseling	539	775	1,314	1,342	604	1,946	793	465	1,258	4
*Occupational Therapy (Sub-totals):										
Rehab. Center Units	1,174	8,382	9,556	1,256	14,180	15,436	1,423	21,210	22,633	137
Special Service Units		19,936	19,936	721	31,414	32,135	2,375	25,734	28,109	41

Table 2
 PHYSICAL MEDICINE AND REHABILITATION, Cont'd.

<i>Occupational Status of Patients Discharged from Rehabilitation Center</i>	
Resumed previous educational or occupational activity	2,059
Started on a new occupation or training	102
Further vocational services required	67
Unemployable or retired	165
Deceased	62
Discharged temporarily or transferred	345
No treatment	155
TOTAL	2,955

Table 3
 Comparative Report of Patients Discharged from the Rehabilitation Center

	1963-64	1964-65		Total
	Total	Adult	Children*	
Total days of treatment in Rehabilitation Center	4,200	3,761	1,218	4,979
Average days of treatment per patient	29	26	28	27
Census				
Male	97	83	24	107
Female	51	62	19	81
TOTALS	148	145	43	188

*Covers period from October 1, 1964 to June 30, 1965.

Table 4

PHYSICAL MEDICINE AND REHABILITATION, Cont'd.

*Categories of Disease or Disabilities of Patients Admitted
for Treatment by Physical Medicine and Rehabilitation Service*

	1964-65		Total
	Adult	Children*	
Infection diseases	33	4	37
Neoplasms	892	97	989
Allergies, endocrine, metabolic and nutritional diseases	145	62	207
Blood dyscrasias	37	59	96
Mental, psychoneurotic and personality disorders	590	131	721
Diseases of the nervous system and sense organs	460	233	693
Diseases of the circulatory system	162	45	207
Diseases of the respiratory system	34	14	48
Diseases of the digestive system	94	56	150
Diseases of the genito-urinary system	67	182	249
Diseases of the skin	82	19	101
Diseases of the bone and organs of movement	329	60	389
Congenital malformations	70	122	192
Symptomatic and ill-defined conditions	99	29	128
Accidents, poisoning, and traumatic injuries	293	43	336
Adults and children			
A. Amputations	36, 1		
B. Fractures	76,12		
C. Sprains, strains	120		
D. Lacerations	23, 1		
E. Burns	16,26		
F. PPNI	22, 3		
Speech disorders	18	30	48
TOTAL	3,405	1,186	4,591

*Covers period from October 1, 1964 to June 30, 1965.

Age Classification of Patients Admitted 1964-65

5 and under	511
6 to 15	1,088
16 to 51	1,722
52 to 64	785
65 and over	485
TOTAL	4,591

**SOCIAL SERVICE DEPARTMENT
1964-65 Report**

<i>Medical Social Work Cases</i>		
Medicine	1,181	
Surgical Services	809	
Pediatrics	722	
Obstetrics and Gynecology	1,417	
Physical Medicine and Rehabilitation	874	
Neurology	612	
Heart Hospital	963	
Masonic Hospital	593	
Other Services	1,794	
Total Medical Social Work Cases		8,965
<i>Psychiatric Social Work Cases</i>		4,456
Group Work Service		302*
TOTAL CASES		13,421

*Included in Psychiatric figure

**COMPARATIVE TWELVE-MONTHS REPORT
Variety Club Heart Hospital**

<i>Department</i>	<i>1963-64</i>	<i>1964-65</i>
<i>Out-Patient Service</i>		
Clinic Attendance		
Adult	2,012	1,901
Pediatrics	3,342	3,123
TOTALS	5,354	5,024
Heart Hospital X-Ray Procedures	5,546	5,474
Heart Catheterizations	1,262	1,215
Laboratory Procedures	22,107	23,365
<i>In-Patient Service</i>		
Admissions	1,836	1,672
Transfers (In)	573	683
Transfers (Out)	655	667
Discharges	1,638	1,607
Deaths	107	96
Patient Days	23,148	23,016
Average Census	63.3	63.1
Occupancy (Percent)	81.3	84.8
Average Length of Stay	12.6	13.8

COMPARATIVE TWELVE-MONTHS REPORT
Masonic Memorial Hospital

<i>Department</i>	<i>1963-64</i>	<i>1964-65</i>
<i>In-Patient Service</i>		
Admissions	489	541
Transfers (In)	533	532
Transfers (Out)	191	188
Discharges	687	749
Deaths	146	128
Patient Days	21,675	21,683
Average Census	59.2	59.4
Occupancy (percent)	78.2	74.3
Average length of stay	21.2	20.3



College of Medical Sciences Faculty

1965 - 66

ADMINISTRATION

COLLEGE OF MEDICAL SCIENCES

Robert B. Howard,
Dean

H. S. Diehl,
Dean Emeritus

N. L. Gault, Jr.,
Associate Dean

Raymond N. Bieter,
Director, Division of
Special Educational
Services

MEDICAL SCHOOL

H. Mead Cavert,
Associate Dean

Robert J. McCollister
Assistant Dean

UNIVERSITY OF MINNESOTA HOSPITALS

Gertrude M. Gilman
Director & Professor

Ray M. Amberg
Distinguished Service
Director Emeritus

Gerard W. Frawley
Associate Director &
Assistant Professor

Glenn R. Mitchell
Associate Director &
Assistant Professor

Ames Early
Assistant Director &
Instructor

Thomas La Motte
Assistant to the Director
& Instructor

McCollum Brasfield
Assistant to the Director

Sister Mary Eleanora
Hospital Administrative
Resident

Merle McGrath
Fiscal Services Manager
& Instructor

Helborg Gilbertson
Secretary to the Director,

Ethel Harrington
Personnel Officer

Philip W. Hursh
Hospital Health Officer

Florence Julian
Professor & Director
of Nursing Services

Betty Pederson
Associate Director of
Nursing Services &
Associate Professor
Annie Laurie Baker
Director & Professor of
Social Service

Angeline Felknor
Director of Hospital
Nutrition Service &
Professor

Audrey Coulter
Associate Director of
Hospital Nutrition Service
& Associate Professor

Charles Dopking
Supervisor of
X-Ray Services

Grace Mary Ederer
Assistant to Director,
Hospital Laboratories &
Assistant Professor

Hazel Foss
Senior Supervisor,
Telephone Operation

Irene Foster
Volunteer Service
Coordinator

Mildred Jackson
Director, Powell Hall

Leonard Leipus
Hospital Central
Services Supervisor

Margaret McHugh
Executive Housekeeper

John Parker
Assistant Professor &
Director of Medical
Illustration &
Photography

Marie Perrault
Chief Pharmacist

Conrad Thompson
Assistant Chief
Pharmacist

Walter Petrykowski
Hospital Maintenance
Supervisor

Bertha Pfenninger
Chief Medical
Records Librarian

Glenn Cullickson
Director of
Rehabilitation Center

ANATOMY

Arnold Lazarow
Professor & Head

Professor Emeritus
E. A. Boyden

Professor
Anna-Mary Carpenter
R. Dorothy Sundberg
Lemen J. Wells

Associate Professor
William J. L. Felts
Carl B. Heggstad
Morris Smithberg
Richard L. Wood

Assistant Professor Emeritus
Shirley P. Miller

Assistant Professor
G. Eric Bauer
Padmakar Dixit
Arnold W. Lindall
Hugh P. Stanley

Research Associate
Elmo Brekhuis
Katherine Goodman
Lucille J. Hoiland
Donald Norris
Edna Speidel

Instructor
David Kvistberg
Leonard R. Murrell
Lois Neukirch
Joseph L. Rigatuso
Engenio S. Siruno

Research Fellow
Jovita Baker
Stuart H. Heald
Philip A. Jedlicka
Julia Morrison
Mary Mueller
Arnold Schultz, Jr.
Joe Weiler

Non-Service Fellow
Harold Hofstrand
David L. Wright

Teaching Assistant
Dean Abrahamson
Herbert D. Bodley
Bruce M. Carlson
Caroline Czarnecki
Stanley L. Erlanson
John Grewe
Orion Hegre
Virgil Hoftiezer
Carl F. Huser
Lois Karl
James L. Miller
Wayne V. Moore
James Nettleton
Terrill Olsen

THE MEDICAL BULLETIN

Donald W. Robertson
Robert Sorenson
Larry W. Weiss
Mary E. Whitmore
Henry M. Yoshihara

ANESTHESIOLOGY

Frederick H. Van Bergen
Professor and Head
Professor Emeritus
Ralph T. Knight
Professor
Joseph J. Buckley
Associate Professor
John R. Gordon
James H. Matthews
Assistant Professor
Van S. Lawrence
Earl A. Schultz
Hugh D. Westgate
Clinical Assistant Professor
Russell W. Bagley
J. Albert Jackson
Robert C. Knutson

Instructor
Alan D. Espelien
Edward G. Hustad
Egon Marte
Nyel Moss
John S. Rydberg
Boris Symchych

Medical Fellow Specialist

Florendo Asuncion
James F. Cumming
Earl Eli
J. R. Enman
Barbara Gokcen
Ralph Hoover
Donald B. Hulteng
Ji-Chia Liao
Loreta Mendoza
Elsie Nickorick
Allen Porter
Jose Reyes
Kermit Roux
P. J. Scanlan
John R. Scharf
Po Myat Ya

Research Fellow
William Sargent

BIOCHEMISTRY

Wallace D. Armstrong
Professor & Head

Professor

Ellis S. Benson
Ivan D. Frantz, Jr.
Helmut R. Gutmann
Ralph T. Holman
Joseph Larner
Leon Singer

Associate Professor

Robert W. Bernlohr
Charles W. Carr
James F. Koerner
Frank Ungar
John F. Van Pilsun
Richard W. Von Korff
Donald B. Wetlaufer

Assistant Professor

Mary E. Dempsey
Ronald D. Edstrom
Ernest D. Gray
Bernard Pollara
Quenton T. Smith

Lecturer

William E. Marshall
Ulysses S. Seal

Research Associate

Norman E. Brown, Jr.
John C. Colla
Itzhac Gedalia
Ronald C. Roberts
Carlos Villar-Palasi
James J. Vogel

Research Fellow

Eugene J. Barry
Major L. Cohn
Robert J. Ertel
William Fogarty, Jr.
Franciscus Huijing
Charlotte Ovechka
Research Assistant
Abdul Ahmed
William P. Cane
John E. Elam
Sally E. Jorgensen
Thekke V. Nair
Agnes W. H. Tan

Teaching Assistant

Nancy Ashbach
Mildred V. Carlson
Valerie Dupre
James Funderburgh
Gwenda L. Greer
Jane A. Idell
Frances Kwiatkowski
Mary C. Ritter
H. Gerritt Rosenthal
Velta Sparmins
Robert O. Webster
Non-Service Fellow
Dorr Dearborn
Ronald Elin

COMPREHENSIVE CLINIC

Richard M. Magraw
Director & Professor of
Social Medicine &
Psychiatry
Edward C. Defoe
Assistant Director

CONTINUATION MEDICAL EDUCATION

W. Albert Sullivan, Jr.
Director & Associate
Professor of Surgery

INTERNAL MEDICINE

Cecil J. Watson
Distinguished Service
Professor & Head

Professor Emeritus

Moses Barron
George E. Fahr
J. Arthur Myers
S. Marx White

Clinical Professor Emeritus

Reuben A. Johnson

Professor

Ivan D. Frantz
Wendell H. Hall
James F. Hammarsten
Robert B. Howard
Alvin L. Schultz
Wesley W. Spink
Louis Tobian, Jr.
Leslie Zieve

Professor of Social Medicine

Richard M. Magraw

Research Professor

Samuel Schwartz

Clinical Professor

Reuben Berman
John F. Briggs
E. P. K. Fenger
Arthur C. Kerkhof
Thomas Lowry
Herbert W. Schmidt
A. Boyd Thomes
R. S. Ylvisaker

Associate Professor

Carl S. Alexander
James B. Carey, Jr.
N. L. Gault, Jr.
Frederick C. Goetz
Dennis Kane
B. J. Kennedy
Frank M. MacDonald
Harold G. Muchmore
M. J. Murray
Naip Tuna
Yang Wang
Ralph C. Williams, Jr.
C. Paul Winchell
Horace H. Zinneman

Clinical Associate

Professor Emeritus
James B. Carey, Sr.
Carl B. Drake
Donald McCarthy
C. A. McKinlay

THE MEDICAL BULLETIN

Clinical Associate Professor

Donald S. Amatzio
 Karl W. Anderson
 Rolf L. Andreassen
 Paul J. Bilka
 Joseph F. Borg
 Sumner S. Cohen
 David M. Craig
 William R. Fifer
 Richard J. Frey
 Delmar R. Gillespie
 Robert A. Green
 Mark C. L. Hanson
 Douglas P. Head
 William H. Hollinshead
 Howard L. Horns
 Milton M. Hurwitz
 Wyman E. Jacobson
 John W. LaBree
 Harold E. Miller
 J. C. Miller
 O. L. Norman Nelson
 Herbert F. R. Plass
 Dean K. Rizer
 George C. Roth
 L. Raymond Scherer
 Philip H. Soucheray
 H. B. Sweetser, Jr.
 Lowell W. Weber
 Macnider Wetherby
 Asher A. White

Assistant Professor

Arnold Adicoff
 Richard B. Davis
 Alfred Doscherholmen
 Alfred Eichenholz
 Robert S. Eliot
 Abraham Falk
 John Jenne
 James P. Lillehei
 Robert J. McCollister
 Robert O. Mulhausen
 Jack A. Vennes
 John Yarbrow

Clinical Assistant Professor

Robert D. Blomberg
 Henry B. Blumberg
 Donald G. Bohn
 Paul F. Bowlin
 James P. Dahl
 Robert E. Doan
 Edmund Eichhorn
 John G. Fee
 Benjamin F. Fuller, Jr.
 Albert J. Greenberg
 Earl Hill
 John E. Holt
 Wayne L. Hoseth
 Martin E. Janssen
 Herbert W. Johnson
 John W. Johnson
 David G. Jones
 Walter F. Larrabee, Jr.

George X. Levitt
 Robert E. Lindell
 Charles E. Lindemann
 Russell C. Lindgren
 Paul T. Lowry
 James C. Mankey
 Dwight L. Martin
 Frank E. Martin
 William F. Mazzitello
 Charles N. McCloud, Jr.
 Burtis J. Mears
 Johannes K. Moen
 James G. Myhre
 Valentine O'Malley
 William E. Petersen
 Paul D. Redleaf
 Fred A. Rice
 A. McDonald Richards
 Alan P. Rusterholz
 Joseph M. Ryan
 Raymond W. Scallen
 Marguerite Schwyzer
 Andrew W. Shea
 Donald B. Swenson
 Francis B. Tiffany
 Richard B. Tregilgas
 Frank A. Ubel
 A. Cabot Wohlrahe

Instructor

Graham Beaumont
 Ausma S. Blumentals
 Thaddeus Chao
 Stuart T. Chen
 Richard P. Doe
 Joyce L. Funke
 Robert P. Gruninger
 Clarence Guenter
 Maynard E. Jacobson
 Henry A. Johnsen, Jr.
 Sidney E. Johnson
 Gerald B. Lee
 John I. Levitt
 Byron U. Musa
 Richard Neidballa
 Frank Q. Nuttall
 Robert E. Olson
 Harold G. Richman
 Ronald J. Rosandich
 Jane Self
 Marcus B. Shook
 Alec M. Sloane
 William R. Swaim
 Fred L. Shapiro
 Luigi Taddeini
 Frederick W. Walker
 Solomon J. Zak

Clinical Instructor

Alfred F. Anderegg
 David Berman
 Henry S. Bloch
 Malcolm N. Blumenthal
 John C. Bradley
 Rene Braun

Robert Breitenbucher
 John H. Brown
 John M. Burns
 John B. Cardle
 Malcolm D. Clark
 Ephraim B. Cohen
 Henry W. Cohen
 Donald E. Derauf
 David K. Drill
 Donald A. Duncan
 Hugh A. Edmondson
 Rodney W. England
 John N. Ferguson
 David L. Fingerma
 Stanley A. Fruchtman
 A. Sigrid Gilbertsen
 Muharrem Gokcen
 David Gold
 Benjie Goldfarb
 William L. Hedrick
 Wilbert J. Henke
 Rodney W. Hill, Jr.
 Kjeld O. Huesby
 Harold B. Kaiser
 Harold A. Kaplan
 Markle Karlen
 James N. Karmegis
 Everett H. Karon
 Joseph R. Kelly
 Charles P. Kolars
 Elliot M. Latts
 Arthur T. Lindeland
 Jeanette K. Lowry
 Aaron L. Mark
 Robert A. Maslandsky
 James L. McKenna
 Harold D. Miller
 Winston R. Miller
 Gerald T. Mullin, Jr.
 William D. Nessel
 Franklin C. Norman
 William F. Nuessle
 William A. O'Brien
 Earl T. Opstad
 William J. Paule
 Frank S. Preston, Jr.
 David A. Randell
 Thomas M. Recht
 William D. Remole
 Rudolph J. Ripple
 James A. Ronan, Jr.
 Richard Pfohl
 William Schoenwetter
 Richard W. Swenson, Jr.
 Donald G. Vellek
 Harold M. Wexler
 F. Douglas Whiting
 Richard C. Woellner
 Donald W. Woodley

Lecturer

Henry W. Blackburn, Jr.
Clinical Assistant
 David L. Rosen
 Donald O. Schultz

THE MEDICAL BULLETIN

(University Hospitals)

Medical Fellow

Joseph L. Allain
Ernesto Arosemena
Robert J. Bache
Victor E. Badertscher
Max A. Boller
Albert Clarysse
Charles W. Drage
Paul V. Engstrom
Francis J. Everhart
George A. Falk
Arthur From
Vincent L. Fromke
Henry M. Hawkins, Jr.
Robert B. Howe
George Ibrahim
Thomas G. Lawrence
Richard B. Moore
John C. Mueller
Thomas F. Mulrooney
Dennis S. O'Leary
Donald W. Oines
Jack L. Reddin
George A. Sarosi
Leonard Schloff
Boleslav Starzecki
John P. Whitecar, Jr.
I. Dodd Wilson

(Mount Sinai Hospital)

Mario Andres, Jr.
Exequiel Bravo
Jose Canto
Jorge Carvajal
Lutgarda Celestino
Waldemar Cruz
Jafer Kuaity
Masashi Mori
Hiltrud S. Muller
Nelson Paguyo
Surendra Sethi
Lorenzo Trajano
Kyuhyun Wang

(Hennepin County General Hospital)

John T. Crosson
Jean Ruth Eckerly
Neil R. Hoffman
Ole M. Jerde
George Kitzmiller
Douglas Kjellson
Russell Payson
Henry Smith
Roger Stenlund
Melvin Stillman
William B. Torp
Robert Van Tassel
Stephen Weisberg

(Ancker Hospital)

Madeline Adcock
Donovan L. Beckman
Alphonso Belsito
Robert Block
Edwin Cunningham
Mario Garcia
Khosrow Jamshidi
Jon W. Kluge
John Lanning
Herbert Lauritzen
John McMullen
Ned B. Nichols
Robert A. Richardson
William J. Semmens
Claude Swayze
Wayne Thalhuber
Jan Tanghe
Martin Welch
Harold Windschitl
Michael Whalen

(Minneapolis V.A. Hospital)

David J. Andrew
Sigrid Bachmann
John G. Bergstrom
George Brodmerkel
David Brown
Curtis E. Davis
Eduardo P. DeSantos
Paul Dickinson
Frederick Gobel
Daniel Gregory
James B. Grant
Loren J. Hall
Henry Horecki
Kamal Jain
Daniel T. Johnson
Arnold P. Kaplan
John J. Kelly
Mohammed Khan
F. E. Lambert
Jerrold Larson
Irving Lerner
Shiang-Ming Liu
Donald Masler
Jose R. Medina
Ronald Messner
John W. Mork
Paul E. Nordlie
Bruce Nydahl
William J. Novak
Earl J. Orth
Morris L. Radack
Phillip Ranheim
Kenneth Robertson
Wilson Salter
Rex B. Shafer
Thomas D. Sweeny
John Swenson
Reinhold Van Uelft
Martin White
Eduardo Wong

(Miller Hospital)

Thomas Layman
Research Fellow
Patricia Ashman
Ber'l Z. Greenberg
William C. Krueger
Zbyslaw Petryka
Terrence Scallen
Research Assistant
Mary Mobberley
Lyle F. Norton
Adjit Sanghvi
Research Associate
Page Edmondson
Richard Joos
Walter J. Runge
F. George Zaki

DIVISION OF DERMATOLOGY

Francis W. Lynch
Professor & Director
Professor Emeritus
Henry E. Michelson
Clinical Professor
Carl W. Laymon
Clinical Associate Professor
Stephan Epstein
Isadore Fisher
Harold G. Ravits
John G. Rukavina
Assistant Professor
Ramon Fusaro
Dorothy B. Windhorst
Clinical Assistant Professor
Frederic T. Becker
Elmer Hill
Irvine M. Karon
Milton Orkin
Elmer M. Rusten
A. S. Zelickson
Clinical Instructor
Charles J. Balogh
Elmer T. Ceder
Manuel Jaffe
Thomas J. Kalb
Sheldon L. Mandel
Kenneth P. Manick
Orville E. Ockuly
Willard C. Peterson, Jr.
Nadine G. Smith
James L. Tuura
C. Gordon Vaughn
Medical Fellow Specialists
Samuel Bean
Raymond Cornford
David Grande
Thomas H. Leavy
Donald R. McIntyre
Arnold Medved
Edward S. Peterka

THE MEDICAL BULLETIN

Edwin G. Rice
 Many Rubin
 Milton Sadd
 John D. Sarbacker
 David Strang
Research Associate
 Quenton T. Smith
Research Fellow
 Saemundur Kjartansson

LABORATORY MEDICINE

Gerald T. Evans
 Professor & Head

Professor

Ellis S. Benson
 R. Dorothy Sundberg

Associate Professor

Robert Bridges
 Paul Lober
 Joseph St. Geme
 Fernando Torres
 Franklin Wallace
 Edmond Yunis
 Jorge Yunis

Assistant Professor

Paul Alexander
 Herbert Polesky
 Andreas Rosenberg
 Paul Strandjord
 Naip Tuna
 Yang Wang

Research Associate and

Assistant Professor
 Lucille Hoilund

Clinical Assistant Professor

Leonard Crowley
 John Raich
 Edward Segal
 Martin Segal

Instructor

G. Mary Bradley
 Richard Brunning
 David Duffell
 Seth Shaw
 Patrick Ward

(Ancker Hospital)

Sidney Auerbach
 Benjamin Lyne

(Hennepin County General Hospital)

Wayne Schrader
 Earl Trucker

Clinical Instructor

Paul Finley
 Aina Galejs
 Seymour Handler
 Norman Horns
 Thomas Swallen

Medical Fellow Specialist

Michael Burke
 John Dyck
 J. Roger Edson
 Roald Fuglestad
 Ed Hendricks
 David Lakatua
 Otto Pflueger
 David Rothwell
 Nancy Staley

Non-Service Fellow

Marlys St. Cyr

DIVISION OF MEDICAL TECHNOLOGY

Ruth Hovde
 Professor & Director

Associate Professor

Esther Freier
 Lorraine Gonyea
 Verna Rausch

Assistant Professor

Patricia Bordewich
 Grace Mary Ederer
 Ben Hallaway

Instructor

Sandra Benson
 Karen Bisset
 Donna Blazevic
 Kathleen Clayson
 Mary Jane Klun
 Jean Linne
 Elizabeth Lundgren
 Barbara Merritt
 Anne Stiene

(Minneapolis V.A. Hospital)

Frances Casey
 E. Marie Dammann
 Arthur Sanders

Teaching Assistant

Donna Dzubay
 Delores Harvey
 Shirley Orth

MICROBIOLOGY

Dennis W. Watson
 Professor and Head

Professor

S. Gaylen Bradley
 K. Gerhard Brand
 Robert A. Good
 Wendell H. Hall
 James J. Jezeski
 Louis H. Muschel
 Joseph C. Olson
 Edwin L. Schmidt
 Lewis Wannamaker

Associate Professor

Robert W. Bernlohr
 Brooks D. Church
 Martin Dworkin
 Robert K. Lindorfer

Gerald Needham
 Palmer Rogers
 Joseph W. St. Geme

Assistant Professor

Dwight L. Anderson
 Russell C. Johnson
 Yoon Berm Kim
 Peter Plagemann
 James T. Prince
 John A. Ulrich

Lecturer

Alfred G. Karlson

Research Associate

William Beggs
 Shyuko Kurcda
 Donald Stahly
 David White

Teaching and Research Assistant

Godehardo B. Calleja
 Nyles Charon
 Shiau-yen Chiu Fu
 Connie Clark
 D. Scott Clark
 William Cooney
 Lance Crombie
 Carol Crossman
 Hazel Cuffey
 Joycelyn Duncan
 Ronald Faanes
 Gregory Germaine
 Raymond Gingrich
 Edgar Hanna
 Herbert Hatcher
 Janet Hauser
 Gerald Hayward
 Lyle Heim
 Ronald Henry
 Henry Hilgard
 Beulah Holmes
 Mary Jane Klun
 Edward Laishley
 L. Charles Landman
 Herbert Lauritzen
 Claus Leitzmann
 William Liljemark
 Sandra Lode
 Charles Marschke
 John Mayo
 Martin McKnealy
 Thomas Miller
 Chee Ping Ng
 Su Shu Pan
 Edward Peterka
 Kem Pomeroy
 James Punch
 W. Scott Ramsey
 Tashmeem Razzaki
 Waid Rogers
 Charles Schachtele
 Abdalrauf Siala
 Gideon Silberman
 Howard Singer

THE MEDICAL BULLETIN

Robert Soll
William Tuominen
Gary Ward
Benjamin Watson
John Wise
Sara Zeece

MINNESOTA
MEDICAL
FOUNDATION

Eivind Hoff, Jr.
Executive Director

SCHOOL OF NURSING

Edna L. Fritz
Professor and Director
Katharine Densford Dreves
Professor and Director
Emeritus

Associate Professor &

Assistant Director

M. Isabel Harris

Associate Professor

Garland K. Lewis

Assistant Professor

Marilyne R. Backlund

Florence M. Brennan

Nancy L. Cook

Frances E. Dunning

Margaret F. Grainger

Helen B. Hansen

Frances D. Moncure

Helen J. Peterson

Eugenia R. Taylor

Dorothy E. Titt

Elizabeth A. Whitney

Instructor

Rosalie Caffrey

Patricia H. Cano

Agnes B. Dempster

Shirley A. Ferry

Joann R. Hubbard

Muriel D. Hudak

Irene A. Martin

Dorothy A. Parnell

Grace M. Sarosi

Marilyn Sime

Marian J. Town

Mary G. Weisensee

OBSTETRICS AND
GYNECOLOGY

John L. McKelvey
Professor & Head

Associate Professor

Konald A. Prem

Assistant Professor

William D. Cohen

Edgar Makowski

Clinical Associate Professor

Alex Barno

Irving Bernstein

Donald Freeman

Mancel Mitchell

Rodney Sturley

Clinical Assistant

Professor Emeritus

C. J. Ehrenberg

R. T. Lavake

Clinical Assistant Professor

John S. Gillam

Erick Y. Hakanson

George W. Janda

Leonard A. Lang

David I. Seibel

William B. Stromme

Instructor

Leon L. Adcock

Henry C. Meeker

William N. Spellacy

Clinical Instructor

Milton Abramson

Melvin P. Baken

James R. Bergquist

Joseph F. Bicek

Ray F. Cochrane

Joseph Goldsmith

John Haugen

Albert F. Hayes

Eugene M. Kasper

Fred A. Lyon

Edward C. Maeder

Owen F. Robbins

Melvin B. Sinykin

Clinical Instructor Emeritus

James Swendson

Clinical Assistant

Paul N. Larson

Charles H. McKenzie

Medical Fellow

Richard P. Bendel

Robert A. Diamond

Laura Edwards

Stanley A. Gall

Charles S. Mahan

Fred E. Mecklenburg

Gerald R. O'Brien

DeLane J. Thyen

William A. Treat

John W. Utrie

Dirk Van Oppen

OPHTHALMOLOGY

John E. Harris

Professor and Head

Associate Professor

William L. Fowls

Assistant Professor

William H. Knobloch

Clinical Professor

John P. Wendland

Professor Emeritus

Erling W. Hanson

Clinical Professor Emeritus

Walter Fink

Clinical Associate Professor

Walter Hoffman

Robert H. Monahan

Karl E. Sandt

Harry Sperling

George T. Tani

Clinical Assistant Professor

Frank Adair

Llewellyn Christensen

Robert Cooper

Robert J. Fink

Harry S. Friedman

Joseph L. Garten

Richard Horns

Bourne Jerome

Douglas L. Johnson

R. O. Leavenworth, Jr.

Vernon L. Lindberg

Winston R. Lindberg

Malcolm A. McCannel

John A. McNeill

Thomas O'Kane

Harry L. Plotke

Robert E. Rocknem

Irving Shapiro

Howard Shaw

Leander T. Simons

Donald Sterner

F. F. Wippermann

Clinical Instructor

William B. Clark

Richard Ellingson

Donald Herrick

Charlotte Hill

Leslie W. Jacobson

Clyde Kitchen

Ernest Larson

Lydia Neiberger

Sidney Nerenberg

Thomas K. Rucker

Richard Student

Byron A. Teska

Frederick C. Wuest

Medical Fellow Specialist

James Berbos

Christopher Brown

Martin Bruhl

Clifford Carlson

Gerald Christensen

Jackie M. Cooper

F. Thomas Ellingson

Richard Ferguson

Raymond Gingrich

James Householder

Robert C. Johnson

Robert Letson

THE MEDICAL BULLETIN

William McClanahan
Richard T. Olson
René Pelletier
John D. Riley
Roy Toyama

OTOLARYNGOLOGY

Lawrence R. Boies
Professor and Head

Professor
Frank M. Lassman
Henry L. Williams, Jr.

Professor Emeritus
Henry V. Hanson

Clinical Professor
Jerome A. Hilger
Robert E. Priest

Clinical Professor Emeritus
Anderson C. Hilding

Associate Professor
W. Dixon Ward

Clinical Associate Professor
Conrad J. Holmberg

Clinical Associate Professor Emeritus
John Hochfilzer

Assistant Professor
Arndt J. Duvall, III

Clinical Assistant Professor
Benjamin Bofenkamp
John Glaeser
Albert Hohmann
Bradley Kusske
Douglas Kusske
Kurt Pollak
Graham Smith
Harold S. Ulvestad

Clinical Assistant Professor Emeritus
George M. Tangen

Instructor
Lawrence R. Boies, Jr.

Clinical Instructor
Barclay Cram
John R. Hilger
John S. Huff
Malcolm R. Johnson
Robert L. Koller
Hyman M. Paisner
Robert Richardson
Douglas G. Robertson
Melvin E. Sigel
George V. Tangen

Medical Fellow
Philip Affleck
David Buran
Richard Carley
Kent Christensen
John Dickson
James Dunn

Morton Kane
Severin Koop
Willis McMillan
Harvey Paley
Charles Prewitt
Robert Stone
Lawrence Winter

PATHOLOGY

James R. Dawson, Jr.
Professor and Head

Professor
Robert Hebbel

Professor Emeritus
Benjamin J. Clawson

Clinical Professor
Jesse E. Edwards

Associate Professor
John I. Coe

Paul H. Lober
Lee W. Wattenberg

Clinical Associate Professor
Nathaniel Lufkin

Professor of Experimental Pathology
Franz Halberg

Instructor
Sidney Aurebach
David R. Duffell
William A. Foley
Donald F. Gleason
Erhard Haus
Benjamin W. Lyne
Kenneth A. Osterberg
Robert E. Rydell
Wayne H. Schrader
Robert L. Strom
Earl B. Trucker
Bertram F. Woolfrey

Clinical Instructors
Charles H. Chedister
Craig Freeman
Seymour Handler
Ellery James
Alan Jay
Allen Judd
Stanley Lofsness
Frederick Lott
Robert J. McClellan
Thomas Semba
Walter Subby
Leo Weiss

Medical Fellow Specialists
Thomas R. Arlander
Calvin M. Bandt
George E. Byers
Owen C. Bolstad
Paul R. David
Daniel Goor
Jerome L. Hartly
Ilhan Imamoglu

Aldridge F. Johnson
Lowell L. Kvam
John E. Kylo
Donn S. Leaf
Donald F. Levi
Homer Russ
Verne A. Schulberg
James E. Stevenson
Thomas A. Stolee

Cancer Trainee
Dennis E. Lofstrom

PEDIATRICS

John A. Anderson
Professor and Head

Professor
Robert A. Good
Reynold A. Jensen
William Krivit
Lewis Wannamaker

Professor Emeritus
Hyman S. Lippman
Max Seham

Clinical Professor
Albert V. Stoesser
Associate Professor
Paul Adams
Ray C. Anderson
Robert A. Bridges
Paul G. Quie
Richard B. Raile
Joseph W. St. Geme

Associate Professor Emeritus
Lillian L. Nye
L. F. Richdorf
Mildred R. Ziegler

Clinical Associate Professor
Arnold Anderson
Stuart L. Arey
Paul F. Dwan
Paul M. Ellwood
Harold B. Hanson
Elizabeth Lowry
Robert L. Wilder

Assistant Professor
Bascom Anthony
Elia Ayoub
Michael Blaw
Charles Branthaver
Barbara A. Burke
Edward C. Defoe
Robert O. Fisch
Ernest D. Gray
Richard Hong
James G. Lawton
James T. Lowman
Alfred Michael
Harriet Morgart
Arthur R. Page
Raymond D. A. Peterson
John W. Reynolds
Kenneth Swaiman

THE MEDICAL BULLETIN

- Homer D. Venters
 Warren J. Warwick
 James G. White
 Francis S. Wright
- Assistant Professor Emeritus*
 Frank G. Hedenstrom
 Alfred Ouellette
 Edwin F. Robb
 Robert Rosenthal
- Clinical Assistant Professor*
 Northrop Beach
 Eldon B. Berglund
 William D. Bevis
 Heinz Bruhl
 Donnell D. Etzwiler
 John J. Galligan
 George Lund
 Edward Nelson
 Theodore Papermaster
 Theodore Smith
 Henry P. Staub
 Edward K. Strem
 William Thompson
 John D. Tobin
- Instructor*
 Max D. Cooper
 Jean Horrobin
 Roswith Lade
 James H. Moller
 George Noren
 Mary Ann South
 Marina T. Yarbro
- Clinical Instructor*
 Don P. Amren
 Sol Austrian
 Alice Brill
 Richard T. Cushing
 Clayton R. Green
 Evelvn E. Hartman
 William Heilig
 Harold Katkov
 George Kimmel
 Stanley Leonard
 Wallace Lueck
 Jack Markovitz
 William Mulholland
 Lloyd Nelson
 Everett Perlman
 Sylvester Sanfilippo
 Francis E. Schaar
 Sidney S. Scherling
 Albert Schroeder
 Eva Shaperman
 Lawrence J. Sheller
 Charles L. Steinberg
 Ellsworth Stenswick
 Norman Sterrie
 Richard Tudor
- Lecturer*
 Allyn Bridge
 Jack A. Hafner
 Lawrence Meskin
- Wentworth Quast
 Richard W. VonKorff
- Research Associate*
 Bernard Pollara
- Research Fellow*
 Margaret DuPont
 Rolf Engel
 Joanne Finstad
 Richard Friberg
 Ann E. Gabrielson
 Edward L. Kaplan
 Richard J. Pickering
 Carol S. Steele
- Clinical Assistant*
 Wallace Anderson
 David Bloom
 Edwin Burkland
 Laurence F. Erickson
 Robert Gibbs
 Gary W. Hughes
 Richard J. Lien
 Richard E. Sand
 Lewis Sher
 Jack L. Strobel
 Edward F. Walsh
 Walter Wilder
- Medical Fellow Specialist*
 Betty Bernard
 C. Carlyle Clawson
 Amos Deinard
 Peter B. Dent
 Alfred J. Fish
 Lloyd A. Fish
 John Fcker
 Henry Gewurz
 Roger C. Herdman
 Ayten A. Imamoglu
 Myron A. Levine
 David S. Lirenman
 Lawrence A. Lockman
 Phillip M. Marden
 Hilaire J. Meuwissen
 John S. Mitchell
 Mark E. Nesbit
 Daniel Y. Perey
 Santiago Prado
 Henry S. Sauls
 Harvey L. Sharp
 Franklin H. Top
- Non-Service Fellow*
 David Friedman
 Charles H. Good
 Henry R. Hilgard
- Research Assistant*
 Joseph J. Ferretti
 Merle Olson
- Medical Fellow*
 Stanford Au
 Edward B. Blau
 Ronald S. Bloom
 John H. Dosssett
 Burton A. Dudding
- Eric J. Eisenklam
 Albert P. Fischer
 Stanley D. Johnsen
 John R. Hoyer
 Trostrur Laxdal
 Arthur S. Levine
 Robert H. McLean
 Bernard Mirkin
 Kenneth B. Reeb
 Gerald D. Reilly
 Barton D. Schmitt
 Thomas C. Shope
 William A. Walker
 Richard S. Wittner
 Richard Chilgren

PHARMACOLOGY

Frederick E. Shideman
 Professor & Head

Professor

Raymond N. Bieter
 Edward J. Cafruny
 Norman O. Holte
 Gilbert J. Mantering
 Amedeo S. Marrazzi
 Wallace F. White

Professor Emeritus
 Harold N. Wright

Associate Professor
 Jack W. Miller
 Akira E. Takemori

Assistant Professor
 Nelson D. Goldberg
 Michael F. Halasz
 Travis I. Thompson
 Ben G. Zimmerman

Instructor
 Harvey Kupferberg

Postdoctoral Fellow
 Faruk Abuzzahab
 Robert Mueller

Research Fellow
 Alvito Alvares
 Kyul Chou
 James Cumming
 Anant Kulkarni
 Hiroyuki Miyawaki

Graduate Trainee
 Lawrence Chakrin
 Patrick Dedge
 Souheir El Defrawy
 Ralph Giles
 Alan Goldberg
 Richard Green
 Robert Grove
 Wayne Harris
 Louis Ignarro
 William Kolbe
 William Kreutner
 Jon Lewis
 Adeeb Makar

THE MEDICAL BULLETIN

Richard Meisch
Thomas Rolewicz
Norman Sladek
Alfred Small
Stephen Smits
Sheldon Sparber
George Spratto
Michael Stenwick
Karl Swingle
Marshall Wallach
Richard Wolfe

**PHYSICAL MEDICINE
AND
REHABILITATION**

Frederic J. Kottke
Professor and Head

Professor

William G. Kubicek
Frank M. Lassman

Clinical Professor

Miland E. Knapp

Associate Professor

Peter F. Briggs
Glenn Gullickson, Jr.
Borghild Hansen
Alan Roberts
Bror S. Troedsson

Clinical Associate Professor

Thomas P. Anderson
Paul M. Ellwood

Assistant Professor

James R. Boen
Theodore M. Cole
Marian L. Eliason
Daniel Halpern
Marvin G. Lepley
Romine E. Matthews
Frank Meelhuysen
Wilbur L. Moen
Martin O. Mundale

Assistant Professor

Helen Skowlund
Harper Willis

Clinical Assistant Professor

W. John Dawson
Ruby G. Overmann
Richard R. Owen
Herbert A. Schoening

Instructor

Helen Dahlstrom
Jerald R. Forster
Sarah Gault
Garland K. Meadows
John E. Quast
Henry C. Wessman

Clinical Instructor

Joseph P. Engel
Roger P. Hallin
Michael Kosiak

Loren Leslie
Arthur B. Quiggle

Research Fellow

John D. Allison
Vivian Hannan
Harriet Lampert
Robert P. Patterson
James F. Pothilla
David A. Witsoe

Medical Fellow

Alan Bensman
Henry T. Dirks
Philip E. Gordon
Sherman Hershfield
Robert Merrill
Mary M. Price
Salvatore Spicuzza
Robert Swezey

PHYSIOLOGY

Maurice B. Visscher
Distinguished Service
Professor & Head

Professor Emeritus

Ernst Gellhorn
Joseph T. King

Professor

Charles Edwards
Eugene Grim
John A. Johnson
Nathan Lifson
Victor Lorber
Carlos Martinez
Carlo A. Terzuolo

Associate Professor

Marvin Bacaner
Irwin J. Fox
Rodney B. Harvey
Rudolfo Llinas

Assistant Professor

James S. Beck
Jui S. Lee
Asher Ilani
Richard Purple
Research Associate
Ali A. Hakim
Y. Chiung Puh Lee
Luigi Rossini

Lecturer

John Love
Maurice W. Meyer

Research Fellow

Joseph Kerkes
H. R. Lorkovic
Takashi Maeno
Richard Stish

Teaching Assistants

Frank Freedman
Philip Weiser
Lorentz Wittmers
Chun K. Loh
Boyd Goetzman

Trainees

Calvin Anderson
Giovanni Ayala
James Bloedel
George Bloom
George Bonewell
Peter Chevalier
Sun Hwan Chi
E. Cornelius
Elaine Handelman
Darrel Hess
Charles Knox
Rolf Lagerquist
Richard Lester
David Levitt
Franco Lioy
Moon J. Pak
William Roberts
Neil Rosenthal
John Salasin
Paul Schmelzer
John Tyberg
Douglas Wangenstein
Kenneth Weber

**PSYCHIATRY AND
NEUROLOGY**

Donald W. Hastings
Professor & Head

DIVISION OF PSYCHIATRY

Professor

Richard W. Anderson
Vera Behrendt Eiden
Robert Hinckley
Richard M. Magraw
Burtrum C. Schiele
Werner Simon
Hugh A. Storrow

Clinical Professor Emeritus

Ernest M. Hammes, Sr.
Joseph C. Michael

Clinical Professor

S. Alan Challman
Otto N. Raths
Clarence J. Rowe
Marvin Sukov

Associate Professor

Carl Koutsky

Clinical Associate Professor

Irving C. Bernstein
Robert Bush
Clifford O. Erickson
Philip Feinberg
Walter Gardner
Gove Hambidge, Jr.
Frank Kiesler
David Vail

Assistant Professor

Edward Bardou
Titus Bellville
Thomas Dredge, Sr.
Daniel Ferguson

THE MEDICAL BULLETIN

Floyd Garetz
G. Wendell Hopkins
James Janecek
William Jenson
Orville H. Johnson
Theodore Larson
Myren Messenheimer
Sonja D. Monson
Anthony Pollock, Jr.
Harper Willis

Clinical Assistant Professor

Jerome Bach
Leslie Caplan
Robert Clark
Louis Flynn
Leonard Goldman
Charles Haberle
Glen Lewis
Joyce S. Lewis, Jr.
J. Benjamin Lund
Donald Mayberg
John Mulvahill
Jennings Peteler
John Regan
Frederic Wilson

Instructor

Ann M. Bailey
Stephen Greenwald
Edward Posey
Ronald Young

Clinical Instructor

Burton Abranson
David Auran
Ronald Berry
Donald Daggett
George Dorsey
James Garvey
William Goodchild
Carl Malmquist
Ilgvars Nagobads
Martin Orbuch
Henry Osekowsky

Research Fellow

John Curran
Luis Tredici

Medical Fellow Specialist

Dorothy Bernstein
Thomas Bieter
Curtis Carlson
Thomas Crowley
Gary Cowan
Robert Cutshall
Arie Dieperink
Leonard Fielding
Robert Fischer
Manuel Gordillo
Leo Grieben
Richard Heilman
Erwin Heist
Rodger Kollmorgan
Deane Manolis
Darlene Martenson
Wilmer L. Pew

Laurence Rivkin
Barlow Smith
James Swensen
Gordon A. Tripp
Robert Zimmers

DIVISION OF NEUROLOGY

A. B. Baker
Professor & Director

Professor

Joseph A. Resch
Hildred Schuell
Fernando Torres

Professor Emeritus

Royal C. Gray

Clinical Professor

Zondal R. Miller
Harold H. Noran
Sidney Shapiro

Associate Professor

James Berry
Michael Blaw
Harold Cohen
John Logothetis
David Webster

Clinical Associate Professor

Paul Elwood, Jr.
Robert L. Meller

Assistant Professor

William Bradley
Milton Ettinger
George Flora
Robert Gummit
Edward Jimenez-Pabon
William Kennedy
Sping Lin
James Moriarty
William Riley
Emanuel Stadlan
Joo Ho Sung
Kenneth Swaiman
Francis Wright

Clinical Assistant Professor

Harold Berris
William Chalgren
Ernest M. Hammes, Jr.
Andrew J. Leemhuis
Robert Stoltz
V. Richard Zarlring

Instructor

Milton Alter
Anna Ellington
Robert J. Goldberg
Richard A. Nelsen
Glen T. Sawyer
Robert Soll

Clinical Instructor

Cecil C. Baker
Lawrence Farber
Maland Hurr

Research Fellow

Christopher Conway
Jess Mottaz
Carol Nelsen
Jean C. Peterson

Medical Fellow Specialist

James Allen
Alberto Aranibar-Zerpa
Lowell Baker
Francisco Baron
Earl Bender
John Brix
Calvin Calhoun
Terrance Capistrant
John Hyde
Richard Johnson
Arthur Klassen
Morton Knazan
Stephen Kcitt
Brian Krasnow
Bernard Lemieux
Thomas McNulty
Jerold Milstein
Robert Pierce
Kenneth Posner
Mason Robins
Lawrence Schut
Stephen Stecker
Barry Tessler
Antonio Trujillano
Pedro Viera
John Wolf

**DIVISION OF
CLINICAL PSYCHOLOGY**

Starke R. Hathaway
Professor & Director

Professor

Norman Garnezy
Gordon Heistad
Paul E. Meehl
William Schefield
Robert D. Wirt

Associate Professor

Peter F. Briggs
Harold Gilberstadt
David T. Lykken
Manfred J. Meier
Daniel Wiener

Assistant Professor

John P. Brantner
Thomas Kiresuk
Jerome Pauker
Naomi Quevillen
Lloyd Sines
Donald Stieper
Auke Tellegen
Travis Thompson

Clinical Assistant Professor

Patricia Good
Gayle K. Lumry

THE MEDICAL BULLETIN

Sherman Nelson
Murray K. Reed
Jon Weinberg

Instructor

Edward Ells
Seymour Gross
James Kincannon
Zigfrids Stelmachers

Clinical Instructor

Baldev Luther
Willard Kehrberg

Research Associate

Felicia Siegel
Norris Vestre

Research Fellow

Margaret Dupont
Richard Friberg
Harold Iretan
Freda Jordan
John Powers
Margaret Taylor

DIVISION OF

CHILD PSYCHIATRY

Reynold A. Jensen
Professor & Director

Clinical Professor Emeritus

Hyman S. Lippman

Associate Professor

A. Jack Hafner
Wentworth Quast

Clinical Associate Professor

Harold B. Hanson

Assistant Professor

George J. Barry
James Lawton, Jr.

Clinical Assistant Professor

Richard Bartman
Leo Hanvik
Fred J. Kane

Instructor

Paul Bransford

Medical Fellow Specialist

Robert Cottor
Harold Eist

SCHOOL OF

PUBLIC HEALTH

Gaylord W. Anderson
Mayo Professor & Director

Professor Emeritus

Ray Amberg
Ruth E. Boynton
J. Arthur Myers
Harold A. Whittaker

PUBLIC HEALTH ADMINISTRATION AND EPIDEMIOLOGY

Professor

Gaylord W. Anderson

Robert K. Anderson
Leonard M. Schuman
Stewart C. Thomson

Associate Professor

Allyn G. Bridge
George E. Williams

Assistant Professor

Edward J. Dvorak
Ruth Stief

Instructor

Warren H. Gullen

Lecturer

Robert N. Barr
Henry Bauer
Lloyd F. Detwiller
Dean S. Fleming
Leslie W. Fcker
Evelyn Hartman
William A. Jordan
Karl R. Lundeberg
Wilford E. Park
Eileen Reardon
A. B. Rosenfield
Lee E. Schacht
John F. Shrouts
Clarence A. Smith
Viktor O. Wilson

ENVIRONMENTAL HEALTH

Professor

Richard G. Bond
George S. Michaelsen
Theodore A. Olson

Associate Professor

John O. Buxell
Harry Foreman
Velv Greene
Harold J. Paulus

Assistant Professor

Gustave L. Scheffler
Rexford Singer
Lee D. Stauffer
Ralph O. Wollan

Instructor

Roger DeRoos
Julius E. Haes
Walter H. Jopke
Orlando Ruschmeyer
Jerome J. Smith
Norman Steere
Donald Vesley

Lecturer

Gerald F. Briggs
Albert W. Buzicky
Paul Ebb
Russell E. Frazier
Jack J. Handy
Elmer Huset
Warren Lawson
Joe L. Mogg
Raymond L. Schreurs
Elmer C. Slagle

Lyle Smith
Robert G. Wissink
Frank L. Woodward

Research Fellow

Myrtle Rueger

PUBLIC HEALTH NURSING

Professor

Marion Murphy

Associate Professor

Ruth vonBergen

Assistant Professor

Eleanor Anderson
Clare Blanchard
Delphie Frelund
Rita Kroska
Marie McIntyre
Alma Sparrow

Instructors

Dorothy Downey
Barbara Leonard
Mary C. Simons
Justine J. Speer

Research Fellow

Joan Boas

Lecturer

Ruth Abbott
Evi Altschuler
Hilda Boyle
Irene Donovan
Margaret Griffin
Vivian Harriman
Vera Lundstrom
Alberta Wilson

HEALTH EDUCATION

Professor

Ruth E. Grout

Assistant Professor

Norman Craig

Lecturer

Marie E. Ford
Helen Starr

PERSONAL HEALTH

Professor

Donald W. Cowan
Stewart C. Thomson

Assistant Professor

Murray B. Bates
Phillip D. Kernan

BIOSTATISTICS

Professor

Jacob E. Bearman
Byron W. Brown
Richard B. McHugh
Associate Professor
Glenn Bartsch
Eugene A. Johnson
Marian W. Thornton

THE MEDICAL BULLETIN

Assistant Professor

James R. Boen
Robert Evans

Instructor

Dorothy Jeffries
Robert Sherman

Research Associate

Alan Treloar

Research Fellow

Yick-Kwong Chan

Lecturer

Robert Hiller
Iver Iversen

**HOSPITAL
ADMINISTRATION**

Professor

James A. Hamilton
James W. Stephan
E. Gartly Jaco

Assistant Professor

Jerome T. Bieter
John C. Dumas
A. Douglas Kincaid, Jr.
Theodor J. Litman
Vernon E. Weckwerth

Instructor

Dennis Countryman
David V. Dumberg
John Kraleswski
Kenneth Kelley
Robert J. Laur

Lecturer

Donald Dunn
Edith Hamilton
Helen L. Knudsen
Fred A. McNamara
Kurt W. Metzner
Telmer O. Peterson
Raymond K. Swanson
John Sweetland, Jr.

Clinical Preceptor

Sr. Mary Ashton
Frederick Diedrich
Bright Dornblaser
David L. Everhart
Richard K. Fox
Gertrude Gilman
Frank S. Groner
Kenneth J. Holmquist
Lloyd L. Hughes
John A. Kelley
Merton E. Knisely
Carl C. Lamley
Sr. Marybelle Leick
Sr. Mary McCarthy
Matthew McNulty
Harold Mickey
Robert Millar
Russell H. Miller
Wade Mountz
Stanley R. Nelson

David E. Olsson

Carl N. Platou
Boone Powell
Jack W. Rivall
Kenneth Shoos
Roger Starn
Owen Stubben
Richard Trenkner
William N. Wallace
Frank S. Walter
Rolland Wick
Russell Williams
Paul Youngdahl

**LABORATORY OF
PHYSIOLOGICAL
HYGIENE**

Professor

Joseph T. Anderson
Francisco Grande
Ancel Keys

Ernst Simonson
Henry L. Taylor

Associate Professor

Henry W. Blackburn, Jr.

Research Associate

Duane Anderson
Charles Baker
Neal Burns
E. Stanton Fletcher
Ernest Klepetar
R. Willis Parlin
Harry Sperling

Research Fellow

G. V. A. Pantulu
Katsumi Kaneko
Charles Keiper
Cesar L. Vasquez
Thomas Strasser
Marjorie L. Schwieger

Instructor

James Hodgson

RADIOLOGY

Harold O. Peterson
Professor & Head

Emeritus Professor

Director
Leo G. Rigler

**DIVISION OF
ROENTGEN DIAGNOSIS**

Professor

Joseph Jorgens

Clinical Professor

J. Richards Aurelius
Samuel B. Feinberg
Oscar Lipschultz

Associate Professor

Kurt Amplatz
Leonard Langer

Clinical Associate Professor

Daniel L. Fink
Sewell Gordon
John P. Medelman
Donald H. Peterson

Assistant Professor

Eugene Gedgaudas
Charles A. Hewel
J. Paul Leonard
John A. Tobin
Shih Hao Tsai
Justin J. Wolfson

Clinical Assistant Professor

O. J. Baggenstoss
Chauncey N. Borman
Lewis S. Carey
Cyrus O. Hansen
Malcolm B. Hanson
Carroll N. Hess

Instructor

Donald C. Hauser
Hans Kuisk
Vernon A. Vix

Clinical Instructor

Eugene Ahern
Heino Alari
Manouchehr Azad
Stanford H. Calin
John B. Coleman
Herman Eelkema
Robert H. Foley
Charles W. Frye
Milton R. Gilchrist
Marvin Goldberg
Gerald A. Gretsch
Barnhard Hall
Harlan Hawkinson
Jule J. Hopperstad
Richard S. Johnson
Thomas E. Johnson
Robert E. Kasper
Warren L. Kump
Andrew Lillie
Thomas B. Merner
Harry Mixer
Ames Naslund
Paul C. Olfelt
Arnold O. Rholl
Norman F. Stone
Richard C. Tucker
Stanley VonDrashek
William A. Wilcox
Hugh J. Williams

Medical Fellow Specialist

H. O. Doumanian
John A. Hcdak
E. David Nordberg
William Wilson

Medical Fellow

Quentin N. Anderson
Paul A. Baumann

Eugene F. Binet
 Walter J. Birnbaum
 Robert Bugby
 Glen G. Cramer
 Donald Dahlstrom
 Fredrick E. Ekberg
 Larry P. Elliott
 Virgil T. Fallon
 James Finstad
 Joseph M. Gilson
 Lawrence H. Gold
 Stephen A. Kieffer
 William Kinney
 H. David Knudsen
 Ronald LaBelle
 Stefan Laxdal
 Philippe L'Heureux
 Charles Lundquist
 James MacGibbon
 Donald Marsh
 Charles Martin
 William F. McCullough
 James McDougall
 Duane Monson
 David L. Moody
 Murray J. Mylrea
 James Y. Nakamura
 Wayne Panning
 Mario Pliego
 Richard Soderberg
 Edward Staab
 Gerald Telander
 Frank M. Walerko
 Charles Walker
 Luther Wigdahl
 John M. Wolff

**DIVISION OF
 RADIATION THERAPY**

Giulio D'Angio
 Professor & Director
Professor Emeritus
 K. Wilhelm Stenstrom
Clinical Professor
 Donn G. Mosser
Associate Professor
 Merle K. Loken
Assistant Professor
 K. K. N. Charyulu
 Baruch S. Jacobson
 James T. Lowman
 Yosh Maruyama
 Arnolds Veinbergs
Clinical Assistant Professor
 Solveig M. Bergh
 Elmer Paulson
Instructor
 Vaughn C. Moore
Research Associate
 Robert Salmon

SURGERY

**DIVISION OF
 GENERAL SURGERY**

Owen H. Wangensteen
 Distinguished Service
 Professor & Chief
Professor
 Joe Bradley Aust
 Claude R. Hitchcock
 Edward W. Humphrey
 William D. Kelly
 C. Walton Lillehei
 John F. Perry, Jr.
 Richard L. Varco
Clinical Professor Emeritus
 James A. Johnson
 Thomas J. Kinsella
 Stanley R. Maxeiner
 Arthur A. Zierold
Clinical Professor
 Orwood J. Campbell
 Tague C. Chisholm
 Lyle J. Hay
 Arnold J. Kremen
 N. Logan Leven
 Charles E. Rea
Associate Professor
 Richard C. Lillehei
 Yoshio Sako
 W. Albert Sullivan
Clinical Associate Professor
 George S. Bergh
 Davitt A. Felder
 Earl C. Henrikson
 N. Kenneth Jensen
 Frank E. Johnson
 Conrad I. Karleen
 Bernard G. Lannin
 Donald C. MacKinnon
 Maynard C. Nelson
 Frederick M. Owens, Jr.
 Carl O. Rice
 Jacob H. Strickler
 Robert W. Utendorfer
*Clinical Associate
 Professor Emeritus*
 William A. Hanson
 Victor P. Hauser
 Martin N. Nordland
 Edward A. Regnier
Assistant Professor
 Karel B. Absolon
 Eugene F. Bernstein
 Aldo R. Castaneda
 Henry Gans
 Victor A. Gilbertson
 Theodor B. Grage
 John J. Haglin
 Arnold S. Leonard
 Donald G. McQuarrie

H. David Root
 Peter A. Salmon
Clinical Assistant Professor
 Stuart W. Arhelger
 Samuel G. Balkin
 Coleman J. Connolly
 John A. Culligan
 Leo C. Culligan
 George D. Eitel
 Edward C. Emerson
 Harrison Farley
 Joseph J. Garamella
 David Gavisier
 Bernard Goott
 John K. Grotting
 William F. Hartfiel
 Laurence D. Hilger
 Samuel Hunter
 John H. Linner
 Stanley R. Maxeiner
 Robert F. McGandy
 Daniel J. Moos
 Nathan C. Plimpton
 Frank Quattlebaum
 Walter R. Schmidt
 William R. Scott
 Abbott Skinner
 Vernon D. E. Smith
 Bernard J. Spencer
 Lyle A. Tongen
 Earl G. Yonehiro
Instructor
 John Delaney
 Herman W. Heupel
 James W. LaFave
 John Lunseth
 Louis Mantini
 Ahmad Nakib
 Demetre Nicoloff
 Cecil L. Provence
 Robert Sellers
 Henry Sosin
Clinical Instructors
 John F. Alden
 Frank J. Ankner
 Manuel R. Binder
 Norman B. Bloom
 John B. Brainard
 Raymond E. Buirge
 Merrill D. Chesler
 Charles T. Eginton
 Robert S. Flom
 Leroy J. Fox
 Jerome T. Grismer
 Donald W. Hannon
 David F. Hickok
 Carter W. Howell
 Clarence V. Kusz
 Donald C. Lamb
 Lawrence M. Larson
 Louis C. Lick
 Walter L. Lynn
 Felix A. McParland

THE MEDICAL BULLETIN

Berton D. Mitchell
 Aaron A. Papermaster
 John C. Parrott
 Theodore A. Peterson
 John H. Rosenow
 Horace G. Scott
 Joseph L. Sprafka
 William E. Stephens
 John E. Twomey
 Richard J. Webber
 George Werner
 Darrell E. Westover

Research Associate
 Nabuko S. Mizuno

Clinical Assistants
 Edwin G. Benjamin
 Harold G. Benjamin
 Frank J. Bonello
 Robert P. Caron
 Lyle V. Kragh
 Hamlin A. Mattson
 Wallace I. Nelson

**DIVISION OF
 NEUROSURGERY**

Lyle A. French
 Professor and Director

Clinical Professor
 Wallace P. Ritchie

Associate Professor
 Shelley N. Chou

Clinical Associate Professor
 Harold F. Buchstein

Assistant Professor
 Jim L. Story

Clinical Assistant Professor
 Paul S. Blake

Robert L. Merrick
 Leonard A. Titrud

Clinical Instructor
 Michael P. Sperl
 Erich S. Wisiol

**DIVISION OF
 ORTHOPEDIC SURGERY**

John H. Moe
 Professor and Director

Professor Emeritus
 Wallace H. Cole

Clinical Professor Emeritus
 Edward T. Evans

Clinical Professor
 Harry B. Hall
 Malvin J. Nydahl

*Clinical Associate
 Professor Emeritus*
 Carl C. Chatterton

Clinical Associate Professor
 Walter Indeck
 Richard H. Jones
 Harvey O'Phelan

Assistant Professor
 William Kane

Clinical Assistant Professor

Paul M. Arnesen
 Frank S. Babb
 Lester W. Carlander
 Edward H. Kelly
 Donald R. Lannin
 D. Keith Millett
 Richard E. Reiley
 Frederick G. Rosendahl

Instructor
 Robert F. Premer

Clinical Instructor

Robert M. Barnett
 John J. Beer
 Michael Davis
 Frederick E. Drill
 Evan S. Ellison
 David Florence
 Paul H. Gislason
 Meyer Z. Goldner
 Richard D. Granquist
 Paul O. Gustafson
 Ramon B. Custilo
 John A. Hartwig
 Richard J. Johnson
 Sheldon M. Lagaard
 William R. Leslie
 Donovan L. McCain
 Donald C. Meredith
 David J. Nelson
 George E. Nelson, Jr.
 Roland F. Neumann
 Theodore A. Peterson
 Edward L. Salovich
 Ehrer R. Salovich
 Irwin F. Schaffhausen
 Ivan Schloff
 Joseph M. Tambornino
 Wayne Thompson
 Robert B. Winter

**DIVISION OF
 PROCTOLOGY**

William C. Bernstein
 Clinical Professor
 and Director

Clinical Associate Professor
 Howard M. Frykman
 Charles A. Neumeister

Clinical Assistant Professor
 Loren E. Nelson
 Lloyd F. Sherman
 William T. Smith
 Robert J. Tenner

Clinical Instructor
 Wendell K. Downing
 Stanley M. Goldberg

**DIVISION OF
 UROLOGY**

C. D. Creevy
 Professor and Director
Clinical Professor Emeritus
 Frederick E. B. Foley
 Theodore H. Sweetser, Sr.

Clinical Professor
 Baxter A. Smith
Associate Professor
 Colin Markland

Clinical Associate Professor
 Samuel S. Beirstein

Assistant Professor
 George T. Mellinger
 Emile Maltry, Jr.

Clinical Professor
 David M. Anderson
 Bruce E. Linderholm
 Hugo E. Miller
 William E. Price
 Milton P. Reiser
 Edward J. Richardson
 Richard S. Rodgers
 Edgar A. Webb

Instructor
 Gerald W. Koos

Clinical Instructor
 Clvde Blackard
 William H. Card
 John P. Cooper
 Robert A. Flynn
 George L. Garske
 Robert W. Geist
 Paul R. Hartig
 Gerald McEllistrem
 Harold A. Reif
 Ragnar T. Scderlind
 Gordon W. Strom
 Theodore H. Sweetser
 Joseph E. Twidwell

**MEDICAL FELLOWS
 IN SURGERY**

University Hospitals

General Surgery
 Manucher Atai
 John Aust
 Ami Barzilai
 Robert Belin
 Aydin Bilgutay
 Jack Bloch
 Ray Bonneau
 John Breen
 Henry Buchwald
 Robert G. Carlson
 D. Scott Clark
 Ira C. Denton, Jr.
 Ronald Dietzman
 Serge Dos
 Richard Edlich

THE MEDICAL BULLETIN

James Engle
 John Feemster
 Randolph Ferlic
 Ronald Fischer
 John Foker
 Paul C. Gannon
 Robert Gilsdorf
 Robert Goodale
 Claude Grondin
 Patrick Hagihara
 Robert Indeglia
 Stanley John
 B. R. Kalke
 Suk-Kyung Koh
 Arnold Lande
 William Lindsay
 Gary Lyons
 Joel Mack
 Arthur Madsen
 William Manax
 A. Mandel
 Charles Mayo
 Arthur McFee
 Martin McKneally
 Frederick Merkle
 Ira D. Miller
 Allan Moberg
 Ernesto Molina
 Charles Murray
 Richard Orahood
 Janice Pearl
 James Pierce
 Wallace Ritchie, Jr.
 Waid Rogers
 Michael Shea
 Robert Simmons
 V. Subramanian
 Ushio Takahashi
 Tawfik Tamimi
 David Todd
 Louis Urdaneta
 K. Visudharom
 Arnold Walder

Neurosurgery

James Ausman
 Michael Carey
 David Danoff
 Donald Erickson
 Fernando Ruiz-Garcia
 Edward Seljeskog
 John L. Seymour
 John Wissinger

Orthopedic Surgery

Wilton Bunch
 Vincent Eilers
 James House
 James Johanson
 David Kettleson
 Lowell Kleven
 Charles Lai
 Dick Lavender
 Paul Patterson
 James Valuska

Proctology

Gary Lewis

Urology

Sergio Bonilla
 Lawrence Hildebrand
 Wendell Long
 Richard McKinley

Ancker Hospital

General Surgery

Jose Barata
 Roger J. Benjamin
 James A. Collinge
 James DeMeules
 Charles W. Hauser
 Philip J. Keizer
 Rolf H. Larson
 David Nelson
 Richard Strate

Urology

Nasser Javادpour
 Rouhollan Kadivar
 Thomas G. Ochsner

Gillette State Hospital

Orthopedic Surgery

Rudolph Klassen
 William Neumann

**Hennepin County
 General Hospital**

General Surgery

Robert C. Andersen
Orn Arnar
 Daniel R. Baker
 Richard C. Baker
 Patrick H. Beckham
 William L. Engle
 Donald L. Foss
 Hovald K. Helseth, Jr.
 Arthur M. McGuire
 Glen D. Nelson
 Rodney Nixon
 Ernest Ruiz
 Lee A. Simso
 Braden Stevenson
 Roger W. Strand
 R. D. Sutherland
 Robert L. Telanders

Urology

Philbin Tackoor
 Everette Duthoy

Minneapolis V.A. Hospital

General Surgery

Gordon L. Addington
 Martin L. Beard
 Helmut H. Behling
 Cassius C. Ellis
 Gary E. Garvis
 Thomas J. Greene
 Arvid F. Johnsen
 Aivar I. Kalnins
 David P. Larson

Judson F. Lloyd
 Martin J. Luceb
 Daniel S. Murphy
 George J. Nemanich
 Alton J. Olson
 Krishna Rao
 Albert L. Reid
 John P. Savaryn
 Sheldon J. Segal
 Alexander Vajcner
 David Van Nestrand
 Gerhard F. Yonkman
 Wilbur L. Zike

Orthopedic Surgery

Roland C. Birkebak
 Robert S. Cairns
 James D. Chambers
 Alfred E. Daly
 John P. Dittrich
 Dwight E. Jaeger
 Lyle O. Johnson
 John E. McMahon
 Clark O. Olsen
 Rodney H. Petersen
 Ronald C. Rudy
 John Wilson

Urology

Stanley J. Antolak
 David J. Dunlap
 Allen J. Hartzell
 John Hoskins
 Roger R. Lundblad
 Alexander McBride
 John A. Ochsner

Neurosurgery

John Wissinger

Mt. Sinai Hospital .

General Surgery

Costas Assimacopoulos
 Emanuel Balcos
 Alex Bernas
 Ernesto Eusebio
 Necito Montaniel
 Samson Velena

**UNIVERSITY
 HEALTH SERVICE**

Donald W. Cowan
 Director

Phillip D. Kernan
 Assistant Director
 (Special Services)

Kenneth P. Malvey
 Assistant Director
 (General Medical Services)

Full-Time Physicians

Wallace R. Anderson
 Edward J. Barden
 Murray Bates
 Elaine M. Benthack
 Helen P. Dahl

THE MEDICAL BULLETIN

Charles E. Davis
 Donald C. Deters
 Edward M. Drissen
 Joyce L. Funke
 Helen L. Haberer
 Robert G. Hinckley
 L. Floyd Hobbs
 Philip W. Hursh
 Donald F. McGavisk
 Myron Messenheimer
 Thomas W. Milroy
 Nicholas Musachio
 V. George Nagobads
 Lydia I. Neibergs
 Stella H. Sikkema
 Hugh J. Thompson
 Sabina S. Zimering

Part-Time Physicians

Richard D. Benjamin
 Catherine Burns
 George E. Byers, Jr.
 Richard B. Ellingson
 Rollin M. Hansen
 Mildred S. Hanson
 George C. Hottinger
 Ayten A. Imamoglu
 Irvine M. Karon
 Robert L. Koller
 Wendla E. Leinonen
 John E. Middlebrook
 Orville E. Ockuly
 Charles D. Officer
 E. Harvey O'Phelan
 Raymond L. Page
 Mary H. Pennington
 Kurt Pollak
 Frank S. Preston
 John T. Smiley
 Floyd J. Swenson
 George V. Tangen
 Robert J. Tenner
 Joseph W. Teynor
 C. Gordon Vaughn

**Interns at the
 University of Minnesota
 Hospitals (1965-1966)**

Medicine

John E. Biddinger
 Univ. of Michigan
 Erskine M. Caperton
 West Virginia Univ.

Cecil H. Chally
 Harvard Univ.
 Stephen R. Crespin
 Harvard Univ.
 Herbert L. DuPont
 Emory Univ.
 Burton P. Golub
 Boston Univ.

George K. Johnson
 Univ. of Utah
 Paul B. Johnson
 Univ. of Minnesota
 Richard A. King
 Jefferson Medical College

Darrel L. Lary
 Univ. of Minnesota

Andrew Mallory
 Harvard Univ.

Stephen H. Martin
 Univ. of Minnesota

Kevin Parent
 Jefferson Medical College

Pediatrics

Jerry M. Bergstein
 Univ. of Minnesota

F. Blanton Bessinger
 Emory Univ.

Michael Blaese
 Univ. of Minnesota

Yong Sung Choi
 Seoul National Univ.

Gregory A. Culley
 Yale Univ.

Patricia Ferrieri
 Univ. of Pittsburgh

Ronald J. Glasser
 Johns Hopkins Univ.

Stanley D. Handmaker
 Albert Einstein Coll.
 of Med.

David M. Keefe
 St. Louis Univ.

Lester L. Lansky
 Univ. of Minnesota
 Michael Lapkin
 New York Med. Coll.

Lowell D. Lutter
 Univ. of Chicago

Leon Satran
 Univ. of Louisville

Surgery

Barry Blum
 Univ. of Rochester

Alan H. Cohen
 N.Y.U. School of Med.

Robert J. Ellis
 Temple Univ.

Edward E. Etheredge
 Yale Univ.

Peter L. Goldman
 Tufts Univ.

Carl E. Hunt
 Yale Univ.

Peter R. Jochimsen
 Marquette Univ.

Harvey N. Mininberg
 Albert Einstein
 Coll. of Med.

Charles R. Nelms, Jr.
 Univ. of Tennessee

Paul H. Pevsner
 Chicago Medical School

Carl R. Reller, Jr.
 Yale Univ.

Andrew B. Weiss
 Univ. of New York—
 Downstate

Richard A. Wiklund
 Tufts Univ.

Ronald F. Young
 Univ. of New York—
 Buffalo

David C. Zanick
 N.Y.U. School of Med.

Staff Meeting Report

The University Medical Center and the Community*

Edward C. Defoe, M.D.†

Each of us is disturbed (to a varying degree) by the development of new unresolved ideologic, social and economic problems which have accompanied the rapid changes occurring in society since World War II. Changes largely brought about by energy, dollar and status emphasis upon research have created a multiplicity of social and cultural credits and debits which the most sophisticated accountant philosopher would find difficult to balance. Man has been particularly slow to measure scientifically the consequences of his individual and collective activities. Technological research has far outdistanced man's research of man. Consequently, the educational base for a sound analysis of the many judgmental problems broadly disseminated to society is less than adequate.

Medicine's growth pattern is similar. Preoccupation with defining basic cellular and molecular function has accomplished wonders in a short period of time but has also meant less scientific activity aimed at promotion of the welfare of the individual and the community.

There has been inadequate consideration of broad disease prevention. Growth in ability to salvage and/or restore partial function has far outrun our ability to maintain near total health in our population. In this day of "scientific plenty" it is ironic we must admit to a rising infant mortality in our large urban populations and a doubling of the suicide rate for teenagers in the last decade.

A contributing basic problem is the separation which has developed since World War II between the two principal spheres of medical activity, the University Center and the Community. This gap has widened in the last 8-10 years, caused in part by a negative emotional charge. The tenuous largely one-way contact that has been maintained through overlapping responsibility

*From a Report to the Staff Meeting of University Hospitals on June 25, 1965

†Assistant Professor, Department of Pediatrics, and Assistant Director, Comprehensive Clinic Program.

for patients and through attendance by practicing professionals at short postgraduate courses has reached a very small segment of the professional population.

Among the consequences of this separation are: (1) inadequate ongoing scientific analysis of community needs by the educational and research centers; (2) lack of realization of the importance of the practicing physician and allied professional personnel in the maintenance of health; (3) lack of training oriented to prevention of common problems; (4) lack of total ongoing support (research as well as educational) of the practicing professional by the educational and research center; (5) lack of support of the practicing professional by the community, (i.e., agencies, individuals, et al.); (6) decreasing enthusiasm on the part of competent professionals for a practicing role; (7) decreasing interest on the part of the student for a career in community medicine; (8) diminution in quality and quantity of care available within some communities; (9) society discontent with inadequate insight concerning the etiology of the discontent; (10) inappropriate and arbitrary legislation.

Paradoxically this separation has occurred in the face of *increased* need for closer coordination between the two areas. Population movement, family disruption, emergence of chronic disease, specialization and increasing expectations of society are all adding to the magnitude of the problem.

Recognition of the interdependence of research and application is the first step toward realistic revocation of trends which are sweeping us rapidly toward a crisis in medical care and education. The University of Minnesota, because of its somewhat monolithic character, is in an excellent position for initiating change.

The Medical School has created in the interdisciplinated Comprehensive Clinic Program a sound foundation for the development of a program of broad medical education. Educational and research programs involving the graduate in training and graduate in practice *within the hospital and community confines* must be built into the total structure for realistic implementation of lifetime professional learning.

Preliminary steps taken in this direction within the Comprehensive Clinic Program include: (1) sabbatical staff appointments for practicing physicians; (2) a residency training program in Pediatrics and Public Health, and (3) a Community Services Program. The first of these began in 1963 and offers to qualified practicing internists, pediatricians and generalists, a full time appointment of 1-3 months as a visiting instructor or assistant professor with primary responsibility for student and

house staff education within the Comprehensive Clinic Program.

The Residency Training Program offers opportunities for pediatricians who wish to gain a broad perspective in family and public health as well as in pediatrics through integration of classroom and field work in public health and the social and natural sciences with pediatric clinical responsibility. Logical program extension may lead to involvement of the internist and psychiatrist and perhaps ultimately to the development of a true "family specialist."

The Community Services Program has as a primary goal integration and education of intra-university hospital disciplines and community-university personnel through the team approach to management of complex patient problems. The ultimate success of this program will depend upon similar cooperative team development for diagnostic and therapeutic measures within the key communities of the state.

In summary, it is essential we rapidly bridge the existing gap between the University Medical Center and the Community. Widespread recognition of the core importance of the community professional group with continuous intellectual and emotional support is necessary for maximum enthusiasm and contribution. Scientific definition and management of educational and service needs through joint effort should provide society satisfaction that it is being expertly and appropriately served.

A Community Services Project*

Robert Soll, M.D.†

*O*ur University of Minnesota Medical Center enjoys high regard among the other medical centers throughout the world. A large amount of research is being accomplished here which is constantly broadening medical horizons. In addition, large medical student classes are being graduated yearly to help fill the increasing demand for more doctors.

Despite these virtues, we have a serious problem with an ever growing need for more direct communications between this medical center and the physicians and other paramedical personnel of the state of Minnesota. When referring physicians send their patients to us, we not only must help these patients by

*From a report to the Staff Meeting of University Hospitals on June 25, 1965

†Instructor, Department of Neurology

utilizing the most recent techniques for diagnosis and treatment, but we also should convey new medical "know-how" to our colleagues throughout the state, firmly place the primary responsibility for the long range maintenance of patients' health in the hands of the community physicians, and aid in the consolidation of professional resources within the community. It is with this in mind that the chief initial emphasis in the Community Services Project has been directed towards multi-disciplinary patient conferences in which the referring physician and other non-physician professionals participate.

We have had 25 such conferences to date involving adult neurological patients, and 24 conferences in which pediatric neurological cases have been discussed. Although the referring physicians have had to leave their busy practices during the day and travel more than 100 miles in many instances, 11 of the physicians with adult patient and 12 physicians having pediatric patients have come to participate. Attendance by other professionals has been equally gratifying.

The family physicians have uniformly expressed interest and satisfaction in the project. All of the patients who have been presented in conference have been direct referrals from private physicians in the state of Minnesota to the University of Minnesota Medical Center. Although some of the referring physicians have come a great distance to participate they have been eager to do so and have enjoyed the opportunity of visiting the University and discussing their clinical problems. Many have commented on the need for a more close relationship between the teaching institution and the practicing physician.

Medical and nursing students and clinical nursing staff have been attending the conferences because of the teaching value which these conferences have offered. Each patient is considered from many facets: diagnosis, treatment, disability, emotions, family, vocational rehabilitation, etc. It is, in effect, a discussion of "total treatment" of a patient. An average of 15-20 people have attended each conference.

In order to help extend the concept of this program to the state's physicians, conferences have been edited and published in *Minnesota Medicine*, the official journal of the Minnesota State Medical Association. Summaries of the conferences themselves are compiled and distributed to everyone concerned with the patient's care, including the private physician.

There is a value to the coordinated team approach in the management of patients. This can be achieved by an active program of continuing medical education for the community physician and non-physician medical personnel, and the organization

of community service teams at the local level. The development of such local community services can be augmented by the participation of our University staff and facilities when necessary for adequate evaluation of the patient. We at the University of Minnesota have this unique opportunity now to lead the way toward realization of all the benefits of modern medicine for everyone.

Medical School News

CYRUS P. BARNUM, JR., DIES AT 51

Dr. Cyrus P. Barnum, Jr., Professor of Biochemistry at the Medical School, died suddenly of a heart attack on July 26, 1965. He was 51 years old, and was held in wide esteem as one of the University of Minnesota's finest teachers and most capable researchers. He is survived by his wife, Anne, and four children living at 35 Barton Ave. S.E., Minneapolis.

Cy Barnum received his B.A. and Ph.D. degrees from the University of Minnesota. He was devoted to teaching, to humanitarianism, and to research in the field of cancer. He joined the faculty of the University of Minnesota in 1942.

In recognition of his scholarship and his contribution to academic medicine, his colleagues and friends have established the CYRUS P. BARNUM, JR., MEMORIAL TEACHING FELLOWSHIP. It will be presented annually in his honor to a worthy teacher in the Department of Biochemistry. Contributions may be directed to the Minnesota Medical Foundation, Box 193, University Hospitals, Minneapolis, Minn. 55455.

The following is a eulogy to Dr. Barnum delivered by Dr. Maurice B. Visscher at a memorial service held in the Mayo Auditorium:

CYRUS PAINE BARNUM, JR.

An Appreciation

Few people have had as much impact on their communities as did Cyrus Paine Barnum, Jr. In science, in education, and in social action he has left important legacies. Since my primary association with him was as a fellow scientist and teacher, I

shall speak about those aspects of his life and work.

Cyrus Barnum became a biomedical scientist because, quite obviously, he was intrigued by the challenge of the as yet unsolved mysteries of life processes. He had an urge to learn, not only what was already known, but in addition what he could himself discover to add to the store of human knowledge. He saw the power of chemical tools in the unravelling of those mysteries and threw himself into the enterprise of research and teaching in biochemistry. He saw in biochemistry a field of great importance not only to medicine and other aspects of applied biology, but also to an understanding of the fundamental nature of life as a process. As a member of a medical faculty and also because he was a person of great human sympathy, it was not unnatural that much of his work would have some basic bearing on problems of human disease. For more than a score of years, his scientific life has been devoted largely to chemical aspects of the cancer problem. His contributions to factual knowledge in this area have been great. He first established the reality of the virus etiology of spontaneous mammary cancer in mice. Very early he employed isotopic tracer techniques to demonstrate the effect of ionizing radiations upon the synthesis of the genetic material DNA in cells. He employed delicate methods of separation of cell particulates in studies of the sites and control of enzyme reactions in normal and cancerous cells and most recently he discovered that certain chemicals, which might be employed clinically, retard tumor growth by interfering with DNA synthesis. In addition to work in these areas, he has made numerous contributions to knowledge in the field of chemical metabolic changes associated with diurnal cycles. Because of his extensive work with the damaging effects of ionizing radiation upon genetic materials he interested himself in the biological effects of radioactive fallout and prepared a scientifically critical report on this problem for the medical profession. This work exemplifies his conviction that scientists have responsibilities and duties in professional and public education.

Immortality is a multivalued word. A scientist can achieve various special kinds of immortality. Successfully creative scientists have an everlasting impact on human progress and welfare through discoveries of facts which permanently increase the store of knowledge which can be used directly to increase our understanding of nature and to apply to the solution of practical problems, as well as to provide the solid foundations upon which new knowledge can be based.

A scientist may also achieve immortality through his work as a teacher, especially as a teacher of teachers. The greatest

satisfaction a scientist-teacher can have is to play a useful part in what one may call the replication process. The continuity of scientific progress depends absolutely upon such reproduction. The teacher who can encourage and guide young minds to be fit to explore new ranges of the unknown has a most satisfying experience.

Cyrus Barnum has earned both of these two kinds of immortality. He has made lasting contributions of importance to world knowledge in biochemistry, and he has been a teacher *par excellence*. His contribution to the replication process can be seen in the eighteen persons for whom he served as major advisor for the Ph.D. degree and the eight more whom he helped in earning the M.S. degree.

Teachers in universities nowadays frequently underrate the importance of elementary, and undergraduate teaching generally. The great emphasis on crash programs of research, especially aimed at early solution of pressing practical problems, has tended to obscure the long-term objectives and functions of a university. Too many scientists have found it easier to achieve superficial success by devoting their energies to research to the neglect of their teaching functions. They have forgotten that a university is an institution devoted to providing opportunity for the young to learn about existing knowledge as well as being a place to ferret out new knowledge.

Cyrus Barnum never forgot the undergraduate student, and as a result he was generally known as one of the best, if not the best, undergraduate teacher in the Medical School of the University of Minnesota. He was well grounded in his science and was systematic, lucid, patient, and helpful in his presentation. The large number of students who were stimulated by him to do advanced work is evidence enough of his success in stimulating his students to want to learn — the mark of a genuine teacher.

It is hoped that the *Cyrus P. Barnum Memorial Teaching Fellowship* which is being established to perpetuate his memory may be well endowed and that it will serve also to perpetuate the Barnum tradition of devotion to complete scholarship — inspiring teaching and devotion to research — in young people who will in addition be sensitive to the rights and the welfare of other people of all races and all social and economic groups as was Cyrus Barnum.

Both the University and the State of Minnesota have taken an especial pride in Cyrus Barnum, and today they feel an especial loss in his death. Doctor Barnum was born in Minneapolis, obtained his undergraduate and graduate training at the University of Minnesota where he was always an honor student,

and where, aside from very short interludes elsewhere, he has spent his entire professional career. I count myself fortunate in having had him as student, colleague and friend for twenty-nine years. I mention this because I want to make it plain that I speak not from hearsay, but from more than a quarter century of association.

In ending these words of appreciation of a life well lived, I cannot refrain from saying that not only you and I, but all the world is poorer because he is gone. However, his influence is not gone. It will be perpetuated in his discoveries, in his pupils, and in the resolve that his life has given you and me and many others who could not be here today to carry on the torch of human enlightenment which he has passed on to us.

MAURICE B. VISSCHER

FREDERICK W. HOFFBAUER DIES

Dr. Frederick W. Hoffbauer, head of the Department of Internal Medicine at Hennepin County General Hospital, died of a heart attack on July 30, 1965. He was a professor of medicine at the Medical School.

Dr. Hoffbauer is survived by his wife, Vivian, who lives at 4701 E. 34th St., Minneapolis. A 1936 graduate of the Medical School, he interned at University Hospitals and was a graduate of its residency program in internal medicine. Dr. Hoffbauer was a member of Alpha Omega Alpha, and for many years served as faculty adviser to its University of Minnesota chapter. He was appointed head of medicine at General Hospital in 1959.

Memorials may be directed to the Scholarship Fund of the Minnesota Medical Foundation, Box 193, University Hospitals, Minneapolis, Minn. 55455.

The following eulogy to Dr. Hoffbauer was spoken by his preceptor, Dr. Cecil J. Watson, at memorial services:

FREDERICK W. HOFFBAUER

Physician, Teacher and Investigator

On a summer evening some 30-odd years ago, I sat on the grassy knoll of the old University campus, for some function

which is now blurred in my memory except for one thing: I had the good fortune to sit next to a young medical student and to talk with him about his plans and hopes, to gain a glimpse of his mind and character. This was my first genuine contact with Fred Hoffbauer. It proved the beginning of a long association and friendship which have been most dear. My impression of him as we set under the stars that night was of a young man who already had a remarkably mature concept of what he wanted to do, a keen and steady perception of the course he was charting.

Fred Hoffbauer was soon to complete his medical curriculum at the University of Minnesota and to commence a two year internship at the University Hospital. He had spent an extra year in Physiology and his research in this department led to the Master of Science degree. This was quite in accord with the high scholastic standing attained in his undergraduate work.

His record as an intern and later as a resident in Medicine was truly exemplary. It was evident early in his career that he was endowed not only with remarkable ability in the technical aspects of medicine but with gentleness and grace in the care of the sick, attributes which inspire confidence and stimulate the will to recover. And, in addition, he had a generous portion of curiosity, imagination and the urge to investigate the processes of disease. Thus he was wanted almost from the outset, as a member of the staff of the Department of Medicine. As an instructor, soon an assistant professor, his activities during the War years when the staff was at a minimum in number offered the strongest support to the whole effort of teaching under the accelerated curriculum, as well as the clinical work.

At quite an early stage he had become deeply interested in diseases of the liver, and shortly after the war he held a Commonwealth Fellowship which permitted him to work with Jess Bollman at the Mayo Clinic, and with Ephraim Shorr in New York, studying new research techniques related to the liver. During the decade 1943-53 he was the Secretary of the Macy Conferences on Liver Injury. These were initiated by the Macy Foundation to aid the war effort, with special reference to chemical, dietary and other forms of liver injury, and to infectious hepatitis. Each meeting was attended by a group of expert research workers in these areas. He was responsible for the annual publication of the Conference throughout this period. These reports were of great value, and the manner in which he prepared them brought him many well deserved compliments. There is no doubt that the Macy Conferences influenced the course of Fred's personal research. The exciting studies of

THE MEDICAL BULLETIN

Charles Best, Paul György, and others, on experimental dietary cirrhosis were highly stimulating and it was in this field that Fred made many of his most significant contributions.

In 1958 Dr. Hoffbauer was promoted from Associate to full Professor rank and in 1959 became Chief of Medicine at the Minneapolis (now Hennepin County) General Hospital. This appointment implied, of course, the strongest confidence in Fred's clinical ability, not alone in the specialty of gastroenterology and liver disease, but in the broad field of Internal Medicine. It required no little ability to teach both undergraduate students and house officers at the bedside, to inspire confidence in his interns and residents and to stimulate them to think beyond the narrower confines of their daily routine. It is safe to say that he was accomplishing these objectives in noble fashion.

Fred was a careful, thorough, meticulous worker in whatever his hand found to do. To accomplish all that he did in a life that was but too short, obviously required hard work and on many occasions to my own knowledge, he turned aside from lighter preoccupation to devote himself to his research, and to his patients and students. How appropriate those words of Milton:

"To scorn delights and live laborious days; but the fair Guerdon when we hope to find, and think to burst out into sudden blaze, comes the blind Fury with th'abhorred shears, and slits the thin spun life. But not the praise; . . . Fame is no plant that grows on mortal soil nor in the glistening foil set off to the world, nor in broad rumour lies but lives and spreads aloft by those pure eyes and perfect witness of all judging Jove; as he pronounces lastly on each deed, of so much fame in Heav'n expect thy meed."

And so the promise evident on that starry night so long ago has been richly fulfilled. His life and character, the warmth of his personality, and his unselfish contributions in so many ways have won him enduring memory in our hearts.

CECIL J. WATSON

EDITOR'S NOTE: Mrs. Vivian Hoffbauer, wife of Frederick W. Hoffbauer, died of cancer on September 19, 1965.

Letters

The Editor:

One further postscript in your "clarifying answer" to Dr. Curtis Hanson, re: MB-MD in our April 1965 MEDICAL BULLETIN. As there were two classes graduated in 1946, I always have to identify myself as of the "December 1946 Class" whenever I'm asked, "what year were you?"

Your note in the MEDICAL BULLETIN did clear up a question in my mind, however . . . now I know I'm Med. '46 (December).

A. H. Bodelson, M.D.
1136 Alpine Ave.
Boulder, Colo.

EDITOR'S NOTE: *There were split graduating classes (March and December) in both 1943 and 1946, as a result of the accelerated wartime curriculum of the Medical School.*

The Editor:

I recently returned from a 4½ month temporary duty assignment and in going through my mail I found a hiatus in my MEDICAL BULLETINS. The missing issues are January, February, and March, 1965. If these are available, would it be possible to send them to me? Thank you.

Ralph F. Wells, M.D. ('57)
Maj., M.C., U.S.A.
Wm. Beaumont Gen. Hosp.
El Paso, Texas

EDITOR'S NOTE: *Within the existing supply, back copies of the MEDICAL BULLETIN are always available on request. Glad to know we've been missed!*

MINNESOTA MEDICAL FOUNDATION

STATEMENT OF CONDITION*

As of June 30, 1965

ASSETS

	June 30, 1965	Sept. 30, 1964
Current Funds		
Unrestricted		
Cash on Hand	\$ 5.00	\$ 5.00
Cash in Bank—Checking Account	3,331.40	7,293.42
Cash in Bank—Savings Account and Certificates	22,528.38	12,230.52
Executive Office Account with University of Minnesota	612.71	(352.45)
Note Receivable	167.44	209.40
Restricted		
Cash in Bank—Checking Account	10,384.69	12,398.10
Cash in Bank—Savings Account and Certificates	55,232.93	24,725.36
General Agency Investment Account		19,267.45
Total Current Funds	<u>\$ 92,262.55</u>	<u>\$ 75,776.80</u>
Endowment Funds		
Cash in Bank—Savings Account and Certificates	\$ 37,354.78	\$ 43,613.59
General Agency Investment Accounts	156,150.82	111,649.04
Medical Research Investment Account	193,620.95	195,456.71
Total Endowment Funds ..	<u>\$387,126.55</u>	<u>\$350,719.34</u>
Student Loan Funds		
Herman M. Johnson Memorial Loan Fund		
Cash in Bank—Checking Account	\$ 490.97	\$ 2,771.83
Cash in Bank—Savings Account		35.48
Notes Receivable	7,518.00	5,205.00
Minnesota Medical Foundation Emergency Loan Fund		
Cash in Bank—Checking Account	154.01	1,370.36
Cash in Bank—Savings Account	1,015.06	
Notes Receivable	1,075.00	760.00
Total Student Loan Funds	<u>\$ 10,253.04</u>	<u>\$ 10,142.67</u>
TOTAL ASSETS	<u>\$489,642.14</u>	<u>\$436,638.81</u>

MINNESOTA MEDICAL FOUNDATION

STATEMENT OF CONDITION*

FUND BALANCES

As of June 30, 1965

	June 30, 1965	Sept. 30, 1964
Current Funds		
Unrestricted Funds	\$ 26,644.93	\$ 19,385.89
Restricted Funds	65,617.62	56,390.91
	\$ 92,262.55	\$ 75,776.80
Endowment Funds		
	\$387,126.55	\$350,719.34
Student Loan Funds		
Herman M. Johnson Memorial Loan Fund	\$ 8,008.97	\$ 8,012.31
Minnesota Medical Foundation Emergency Loan Fund	2,244.07	2,130.36
	<u>\$ 10,253.04</u>	<u>\$ 10,142.67</u>
TOTAL FUNDS	<u>\$489,642.14</u>	<u>\$436,638.81</u>

*Audit by Main Lafrentz & Co., Certified Public Accountants,
Minneapolis, Minnesota.

MINNESOTA MEDICAL FOUNDATION — 1965

In 25 years of service to the Medical School, the Minnesota Medical Foundation has received and expended more than \$5,000,000 for programs of medical education and research at the University of Minnesota.

For the year ended June 30, 1965, the Foundation recorded gifts of \$183,885.69. In the same period, the Foundation distributed \$131,109.04 in grants, transfers of earmarked gifts to the University, and costs of operating. The latter totalled \$22,884.77.

Thus total assets of the Foundation advanced \$52,776.65 during the year to a new high of \$489,682.14. Most of the fiscal gain represented gifts to the Scholarship Endowment Fund. The Foundation's assets are invested principally in quality securities, which returned an average yield of 3.93% in 1965. In terms of market value, the assets of the Foundation are worth nearly \$550,000.00.

The Foundation derives its basic support from the dues and gifts of more than 2,800 members and friends. Among them are alumni, other physicians, private citizens, philanthropists, corporations, medical clinics, and other foundations.

THE MEDICAL BULLETIN

In 1965 the Foundation launched a campaign to raise a Scholarship Endowment Fund of one-half million dollars. Cash and pledges have presently reached \$300,000.00. Friends and alumni are asked to help the Foundation "Find Just 1 Person" who is willing to contribute \$15,000 to \$20,000 for perpetual endowment of a medical scholarship.

Here are other highlights of 1965:

- *Awarding of \$33,250 in scholarships to 60 deserving medical students. The Foundation has now provided more than a quarter million dollars for scholarships.*
- *Establishments of the first Visiting Professor program at the Medical School with a perpetual grant of \$1,000.00 annually, which is guaranteed by a friend of the Foundation.*
- *Loaning of \$35,309.00 in emergency, no-interest loans to medical students.*
- *Awarding of the 5th and 6th Distinguished Teaching Awards, including cash prizes of \$1,000.00 each, to Dr. George C. Flora and Dr. Jack W. Miller of the Medical School Faculty. The student body of the Medical School participated in selecting the recipients, and the Minnesota State Medical Association provided the cash prizes.*
- *Issuance of \$7,600.00 in new grants for medical research by younger faculty members and students.*
- *Publication of 10 issues of the University of Minnesota MEDICAL BULLETIN and circulation to 6,000 readers each month.*
- *A dramatic growth of membership in the Foundation to more than 2,800 persons, of whom 83% are alumni of the Medical School.*

The Foundation expresses its sincere thanks to the more than 3,000 individuals who invested in its work during 1965, as well as the many who have provided its leadership and counsel. We hope to merit your continued confidence and support in the future.

EIVIND HOFF, JR., Executive Director

Alumni Deaths

◆ 1908

Dr. Edward J. Johnston, South Pasadena, Calif. Died February 7, 1965 of pneumonia at the age of 84 years.

◆ 1917

Dr. Rolf Hovde, Winthrop, Minn. Died April 11, 1965, at the age of 72. He had practiced in Winthrop 46 years and was formerly on the clinical faculty of the Medical School.

◆ 1923

Dr. Charles E. Shepard, Palo Alto, Calif. Died July 5, 1965.

Dr. Robert D. Urbahns, Monongahela, Pa. Died April 27, 1965, age 65, of coronary occlusion.

◆ 1927

Dr. J. Arnold Malmstrom, Virginia, Minn. Died August 21, 1965. He had lived in Virginia for 60 years and practiced 38 years there, helping found the Virginia Municipal Hospital, and the East Range Clinics. He was 62 years old and was in general practice of medicine and surgery.

◆ 1928

Dr. Richard M. Davison, Chicago, Ill. Died June 21, 1965, aged 60, of cerebral hemorrhage. He was on the faculty of Stritch School of Medicine, Loyola University.

◆ 1930

Dr. David B. Peterson, St. Paul, Minn. Died July 21, 1965, aged 64, after 33 years of practice in St. Paul. He served in the Navy during World War II.

◆ 1935

Dr. Myron Lysne, Minneapolis, Minn. Suffered a coronary attack and died August 15, 1965 while boating at Rainy Lake, Minn. Dr. Lysne was 60 years old, and had served in the Army during World War II.

◆ 1950

Dr. Philip D. Christenson, Green Bay, Wis. Died May 11, 1965, of myocardial infarction, aged 40. He was a dermatologist.

◆ 1952

Dr. Melvin E. Witthaus, White Bear, Minn. Drowned August 29, 1965 in a sailboating accident on White Bear Lake. He was 38 years old, and had been in general practice in the White Bear Lake, Minn. area since 1953.

Memorial Gifts

The Minnesota Medical Foundation acknowledges with gratitude recent contributions made in memory of:

Cyrus P. Barnum, Jr.
Minneapolis, Minn.

Myron Lysne, M.D.
Minneapolis, Minn.

Mrs. William E. Boker
St. Paul, Minn.

Dwight E. Minnich
Minneapolis, Minn.

George G. Connor
Edina, Minn.

Mrs. Sarah Quinlivan
St. Cloud, Minn.

Mrs. Margaret B. Eichhorn
Minneapolis, Minn.

Max Rappaport
Minneapolis, Minn.

Bernard Gartz
Minneapolis, Minn.

F. Root
Brainerd, N. Y.

F. W. Hoffbauer, M.D.
Minneapolis, Minn.

Alvin W. Thorsen
Minneapolis, Minn.

Mrs. Vivian Hoffbauer
Minneapolis, Minn.

G. Rex Thurber
Hopkins, Minn.

Fred Legg
Minneapolis, Minn.

Mrs. Mary J. Wayne
St. Paul, Minn.

Memorial gifts are a thoughtful means of honoring the memory of a relative, friend, or colleague. They serve the living by strengthening medical education and research at the University of Minnesota Medical School. Gifts may be designated for specific purposes. The Minnesota Medical Foundation acknowledge all gifts to both donor and next of kin.

COMING EVENTS

University of Minnesota Medical School

CONTINUATION COURSES FOR PHYSICIANS

University of Minnesota
Center for Continuation Study

1965

September 9 - 11	Otolaryngology
September 21 - 23	Pediatrics
October 25 - 29	Radiology
November 3 - 5	Ophthalmology (Refraction)
November 11 - 13	Orthopedic Surgery
December 9 - 10	Pulmonary Disease

1966

January 3 - 7	Electrocardiography (Intermediate)
January 17 - 18	Psychiatry
February 14 - 17	Internal Medicine
February 14 - 18	Proctology
February 18 - 19	Neurosurgery
February 21 - 23	Neurology
March 10 - 12	Obstetrics
April 1 - 2	Trauma
May 2 - 4	Ophthalmology
May 19 - 21	Surgery
June 1 - 3	Anesthesiology

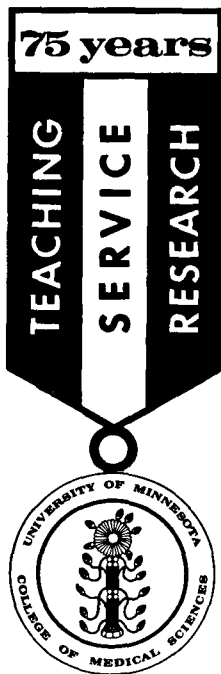
The University of Minnesota reserves the right to change this schedule without notification.

Courses are held at the Center for Continuation Study or the Mayo Memorial Auditorium on the campus of the University of Minnesota. Usual tuition fees are \$50 for a two-day course, \$60 for a 2½-day course, \$70 for a three-day course, and \$100 for a one-week course.

Specific announcements are sent out about two months prior to each course to all members of the Minnesota State Medical Association and to any physicians who request information for a specific course. For further information write to:

DIRECTOR
DEPARTMENT OF CONTINUATION MEDICAL EDUCATION
THE MEDICAL CENTER (Box 193)
UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINNESOTA 55455

Second Class Postage Paid
at Minneapolis, Minnesota



THE UNIVERSITY OF MINNESOTA

COLLEGE OF MEDICAL SCIENCES

cordially invites Alumni and Friends

to attend its

**75th ANNIVERSARY
SYMPOSIUM**

*"Demands on Medicine in the
Modern World"*

November 4-5-6, 1965

MAYO MEMORIAL AUDITORIUM

Minneapolis Campus