

# MEDICAL BULLETIN

UNIVERSITY OF *Minnesota*



*in this issue*

- UNIVERSITY HOSPITALS ANNUAL REPORT
- FACULTY ROSTER,  
COLLEGE OF MEDICAL SCIENCES
- STUDENT CENTER DEDICATION

VOLUME XXXVI, NUMBER 1

SEPTEMBER 1964

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

CORRIN H. HODGSON, M.D., *President*

VERNON D. E. SMITH, 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

NEIL M. PALM, M.D., *President*

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

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

DUANE C. OLSON, M.D., *Secretary*

L. G. IDSTROM, 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 XXXVI

*September 1964*

NUMBER 1

---

**C O N T E N T S**

STAFF MEETING REPORT

*Annual Report; University of Minnesota  
Hospitals, 1963-64*

GERTRUDE M. GILMAN ..... 2

FACULTY ROSTER,

COLLEGE OF MEDICAL SCIENCES ..... 30

STUDENT CENTER DEDICATED ..... 46

ALUMNI NOTES ..... 48

---

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, 1963-64\*

GERTRUDE M. GILMAN†

The University of Minnesota Hospitals was established in 1909 by the Minnesota State Legislature to furnish a means for the University of Minnesota to train students in the multiple fields of medical care. Teaching is provided in the Hospitals by a competent staff composed of 648 full time and 1,356 part time faculty members. These staff members are responsible to the State through the University for both teaching of students and 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 faculty.

There are now 13 units of University Hospitals with a combined capacity of 775 beds.

THE MINNESOTA GENERAL HOSPITAL, also known as the "Main" Hospital, is the central core of the University Medical Center. This area, of which the Mayo Memorial Hospital 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 131,107 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 budget, uses one nursing station of University Hospitals for the hospitalization of University students.

THE MASONIC MEMORIAL HOSPITAL is a para-hospital primarily for cancer patients. Patients in chronic phases of long term illnesses are admitted or transferred to the Masonic Hospital from the Main Hospital. Its charges are about one-third less than those in other sections of University Hospitals. A

\*From a report to the Staff Meeting of University Hospitals on October 2, 1964.  
This report covers the year ended June 30, 1964.

†Director, University of Minnesota Hospitals.



A young rehabilitation patient gets help from a physical therapist in the Rehabilitation Center.

total of 1,022 patients received 21,675 days of care at the Masonic Memorial Hospitals in 1963-64.

THE VARIETY CLUB HEART HOSPITAL provides care for cardiac patients, both adults and children. The same patient classifications and referral procedures are used as for the Main Hospital. This facility provided 23,148 days of care to 1,836 patients last year.

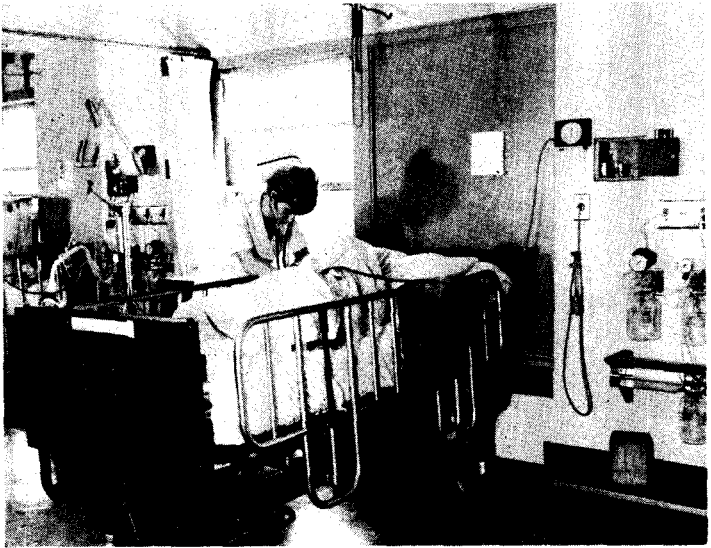
THE CHILDREN'S REHABILITATION CENTER is a recently constructed unit which is scheduled for full operation on October 1, 1964. This center will house the Pediatric In-Patient and Out-Patient services

for the Department of Physical Medicine and Rehabilitation, and has three school rooms to provide continuing elementary and secondary education of hospitalized children.

#### 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 Hospital and its 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 provides the Hospitals with an average of 620 inpatients and 520 outpatients per day.

Approximately 30% of our patients are not able to pay for



The Intensive Care Unit with its special equipment accommodates patients needing highly skilled nursing care.

their medical care. The expenses of their hospitalization are shared equally by the State and the County authorizing 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 final classification when it admits these patients.

The State of Minnesota, through direct appropriations, par-

THE MEDICAL BULLETIN

tially subsidizes the care of patients with multiple sclerosis, psychiatric illnesses 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.

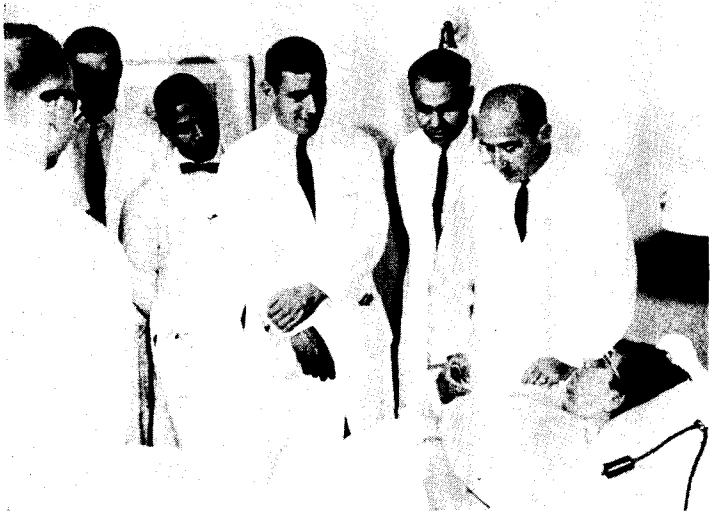
Patients are not segregated according to their ability to pay. All are accommodated in single, double, three- or four-bed rooms.

It is a policy of the hospital that all patients be teaching

A YEAR AT UNIVERSITY HOSPITALS

Admissions	1962-63	1963-64
Inpatients	16,929	16,685
Outpatients	24,928	26,050
Average Daily Census	627	620
Average Length of Stay	13.5	13.6
Total Patient Days of Hospital Care	228,890	227,155
Patient Visits to Outpatient Department	128,585	131,107
Patient Treatments in Rehabilitation Department	57,915	59,587
Patients assisted by the Social Service Department	14,360	15,099
Hours given by volunteers	21,651	21,659
Surgical Operations	10,955	10,855
Prescriptions filled by Pharmacy	315,296	332,506
Hospital Laboratories Examinations and Procedures	714,321	758,389
X-ray Examinations and Procedures	77,557	80,508
X-ray and Cobalt Therapy Treatments	20,351	15,565
Medical Records used for all purposes	220,648	228,163
Medical Records used for research	22,516	49,160
Meals Served	953,645	921,063
Number of Employees	1,761	1,776
Cost of Operation		
Outpatient	\$ 1,240,076.75	\$ 1,387,658.29
Inpatient	\$10,232,355.35	\$11,642,535.10

## THE MEDICAL BULLETIN



Clinical teaching rounds are conducted by Dr. A. B. Baker (right), professor and head of the Division of Neurology.

patients. This policy is one which seems to be understood and accepted very well by most of them.

### STATISTICS AND OUTLOOK

The year 1963-64 was a good one for the University Hospitals. The number of outpatient visits increased from 128,585 in 1962-63 to 131,107. During the last 15 years the outpatient visits have shown a steady upward trend from the 95,786 visits recorded in 1949.

Inpatient admissions and patient days decreased slightly last year. The average length of stay increased from 13.5 to 13.6 days per patient. It is interesting to note that the average length of stay has remained almost constant during the past decade. The shorter length of stay in obstetrics, surgery, orthopedics and other services has been countered by the use of the new Masonic Memorial Hospital and additional psychiatric beds where the length of stay is longer.

There were 756 deaths in the University Hospitals during the last year, 4.5 deaths for every 100 patients admitted. Of these, 117 deaths occurred within 48 hours after admission. There were 628 post mortem examinations performed, resulting in an autopsy rate of 84.5%

Since a significant number of patients come from Hennepin

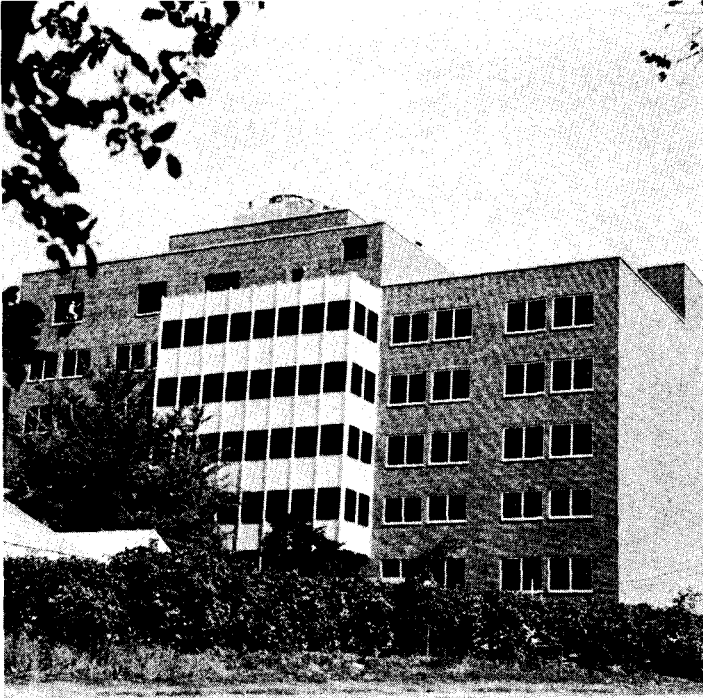


## THE MEDICAL BULLETIN

County, a matter of concern is the effect of the conversion of the Minneapolis General Hospital to county hospital status. During the first six months of its operation as Hennepin County General Hospital, there has been no noticeable effect on the University of Minnesota Hospitals' census. Also of concern is Minnesota's new *Medical Assistance for the Aged* program, which could decrease the number of medically indigent patients who are referred to this Hospital. A matter of national concern for all teaching hospitals, shared by this Hospitals' administration, is the impact of any new federal health care legislation.

During the past year a major construction project, the Children's Rehabilitation Center, was completed. We look forward to its operation at full capacity this Fall.

Now under construction is an addition to the Variety Club Heart Hospital which will house needed additional diagnostic and therapeutic facilities for cardiac patients. It will also in-



The new \$2 million Children's Rehabilitation Hospital, fronting on the East River Road adjacent to the Variety Club Heart Hospital, opened this Fall. It is connected to the Main Hospital by an enclosed walkway.



Studies in the Department of Biochemistry are part of the distinguished research program carried on in all departments at the Medical Center.

crease 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.

Construction of an addition to the Masonic Memorial Hospital will be started next Spring, increasing its capacity from 80 to 120 patients. One of the two new floors will be devoted to cancer research laboratories. The entire \$1,100,000 needed for this construction has been pledged by the Masons of Minnesota.

Remodeling of the older sections of University Hospitals continues under an overall plan which was developed when the Mayo Memorial building was built in 1954. Legislative funds are providing for the remodeling of Station 22, a part of the Elliot Memorial which was built in 1910, and for four nursing stations in the Todd and Christian wings. Remodeling is also planned for the pediatric, obstetrics, and nursery stations, and the hospitals laboratories.

A chronic problem for hospitals, including the University Hospitals, has been the shortage of professional nursing personnel. As indicated in the following excerpt from the Nursing Services Annual Report, the outlook for future staffing at this Hospital appears encouraging:

*“Over the past ten years, we have continued to have the problem of shortage of professional nurses, especially during the summer months. For several years it was necessary to close beds and operating rooms because of the extreme shortage. For the past two years, however, we have been able to operate at full capacity except for the closing of three beds in the Intensive Care Unit during the spring and summer months. In fact, we have had more qualified*

*applicants than vacancies in the Fall of the year. Several factors are probably related to this change. Substantial salary increases for staff nurses and change in graduation dates of some Schools of Nursing from Fall to June no doubt have played a part. Probably more significant, however, is the time and effort expended in recruiting, counseling and assigning staff as well as the improved orientation program."*

The Hospitals' staff continues to make efforts to improve the care of the patients. It enjoys the opportunity to assist in the education of all medical students and students in paramedical fields and to share in the exciting developments of medical research.

#### ACKNOWLEDGEMENTS

The University of Minnesota Hospitals is fortunate in having many devoted individuals and groups of individuals who manifest strong 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, the Hospital Auxiliary Section of the Faculty Women's Club, together with other sections of the Faculty Women's Club, for their gifts of money and service which provide the "extras" which give comfort and happiness to patients; the Robinson School of Beauty Culture; the directors and staffs and members of the county welfare departments; the Minnesota State Department of Welfare; the Minneapolis Department of Relief; Miss Rosa Stadem, Hennepin County Commissioners' Office; the Minnesota Society for Crippled Children and Adults; Travelers Aid Society; the Greater Minneapolis Council of Churches; the Hennepin County Chapter of the American Red Cross; the State Division of Vocational Rehabilitation; the adoption agencies; the Family and Children's Service of St. Paul and Minneapolis; the Combined Nursing Service of Minneapolis; the Family Nursing Service of St. Paul; the Hennepin and Ramsey County Nursing Services; the State Board of Health; the Community Information Service; the Minneapolis Society for the Blind; Booth Memorial Hospital; Our Lady of Good Counsel Hospital; the private nursing and boarding homes; the Foster Club; the Department of Business Administration of the University of Minnesota for their annual Christmas gift of radios; the Phillips 66 Men's Club; Crippled Child Relief; the Interfraternity and Panhellenic Councils of the University; Volunteer Service Bureau; the Needlework Guild; the International Sunshine Society; the Traffic Club; those who have donated to

## THE MEDICAL BULLETIN



The University Hospitals pharmacy dispenses an average of 28,500 prescriptions each month. A staff of nine pharmacists is employed.

service and research funds; and the many other individuals and organizations who have contributed to the well-being of our patients.

We also wish to thank our volunteer workers who perform 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 providing considerate care to our patients.

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, 1964 follows on pages 12-30.

---

**UNIVERSITY OF MINNESOTA HOSPITALS**  
**Statement of Income and Expenditures—June 30, 1964**

---

*Income*

County and State Reimbursement	\$4,893,717.04	
Pay Bed .....	5,934,590.64	
Minnesota Hospital and Home for Crippled Children .....	100,000.00	
Psychopathic Hospital .....	745,519.00	
Child Psychiatry .....	290,095.00	
Out-Patient Department .....	410,067.67	
Student Health Service .....	290,570.04	
Variety Club Heart Hospital .....	50,000.00	
University Funds .....	315,634.00	
TOTAL .....		\$13,030,193.39

*Expenditures*

Salaries and Wages .....	\$7,784,151.85	
Supplies and Expense .....	5,247,480.26	
TOTAL .....		\$13,031,632.11
(OD) .....		\$ 1,438.72

*Cost of Operation*

Year	Out-Patient Department	In-Patient Department	Out-Patient Visit	Hospital Day
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

COMPARATIVE TWELVE-MONTHS REPORT  
In-Patient Department

Service	Admissions		Patient Days		Average Length Stay	
	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64
Surgery, General	2,830	2,612	39,017	38,718	12.6	13.5
Neurosurgery	704	679	9,045	8,569	13.5	13.0
Orthopedics	623	628	9,085	9,907	14.4	16.5
Urology	767	756	8,093	8,722	11.1	11.8
	4,924	4,675	65,240	65,916		
Medicine	2,655	2,617	43,422	42,885	17.5	17.7
Dermatology	116	113	2,703	2,155	28.5	19.2
	2,771	2,730	46,125	45,040		
Psychiatry	408	486	22,740	22,752	51.6	44.9
Neurology	704	714	8,952	8,548	13.4	12.7
Child Psychiatry	113	117	5,522	5,664	48.4	49.3
	1,225	1,317	37,214	36,964		
Ophthalmology	306	372	3,107	3,170	9.9	8.8
Otolaryngology	553	463	3,128	3,020	5.9	6.7
	859	835	6,235	6,190		
Gynecology	778	851	11,885	12,415	15.3	14.9
Obstetrics	1,146	1,105	6,634	6,020	5.8	5.4
Newborn (Pediatrics)	938	933	6,292	5,512	6.8	6.1
Pediatrics (General)	2,792	2,721	36,694	37,186	13.1	13.6
Health Service	1,433	1,430	5,778	5,404	4.0	3.8
Rehabilitation	57	85	6,198	6,102	68.1	47.7
Anesthesia	6	3	595	406	74.3	67.7
TOTALS	16,929	16,685	228,890	227,155	13.5	13.6

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

	1962-63	1963-64		1962-63	1963-64
<i>Total Patients Admitted</i>			<i>Avg. Days per Patient</i>		
County	3,895	3,927	County	15.4	16.2
Pay and Per Diem	10,069	9,751	Pay and Per Diem	11.0	11.1
Student Health Service	1,433	1,446	Student Health Service	4.0	4.1
Psychiatry	157	196	Psychiatry	56.3	47.8
Psychiatry (Pay, Per Diem)	251	290	Psychiatry (Pay, Per Diem)	44.5	40.7
Child Psychiatry	50	45	Child Psychiatry	55.3	56.7
Child Psychiatry (Pay, Per Diem)	63	72	Child Psychiatry (Pay, Per Diem)	38.8	36.1
Free	286	240	Free	5.3	5.3
Eustis	232	188	Eustis	10.3	9.3
Variety Club Fund	46	47	Variety Club Fund	14.5	15.6
Rehabilitation	1	0	Rehabilitation	84.0	0
Masonic Hospital County	168	191	Masonic Hospital County	35.4	28.4
Pay, Per Diem	278	292	Pay, Per Diem	20.6	23.0
Free	0	0	Free	20.0	45.0
<b>TOTALS</b>	<b>16,929</b>	<b>16,685</b>	<i>Avg. Length of Stay per Patient</i>	<b>13.5</b>	<b>13.6</b>
<i>Total Days Hospital Care</i>			<i>Daily Avg. No. Patients</i>		
County	66,458	68,327	County	182.0	187.2
Pay and Per Diem	98,747	99,165	Pay Per Diem	270.5	271.7
Student Health Service	5,935	5,796	Student Health Service	16.2	15.9
Psychiatry	14,910	14,255	Psychiatry	40.8	39.1
Psychiatry (Pay, Per Diem)	7,830	8,497	Psychiatry (Pay, Per Diem)	21.4	23.3
Child Psychiatry	3,816	3,176	Child Psychiatry	10.4	8.7
Child Psychiatry (Pay, Per Diem)	1,706	2,488	Child Psychiatry (Pay, Per Diem)	4.7	6.8
Free	1,551	1,307	Free	4.2	3.6
Eustis	2,615	1,873	Eustis	7.2	5.1
Variety Club Fund	668	320	Variety Club Fund	1.9	.9
Rehabilitation	168	276	Rehabilitation	.4	.8
Masonic Hospital County	15,246	12,507	Masonic Hospital County	41.9	34.3
Pay, Per Diem	9,220	8,988	Pay, Per Diem	25.2	24.6
Free	20	180	Free	.1	.5
<b>Totals</b>	<b>228,890</b>	<b>227,155</b>	<i>Daily Average Census for Hospital</i>	<b>627.09</b>	<b>620.6</b>

COMPARATIVE TWELVE-MONTHS REPORT  
**Out-Patient Department**

<i>Service</i>	<i>New Patients</i>		<i>Revisits</i>		<i>Totals</i>	
	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64
<i>Medicine</i>						
General	2,639	2,797	6,259	5,152	8,898	7,949
Allergy	31	38	1,077	1,235	1,108	1,273
Arthritis	33	44	1,038	865	1,071	909
Cardiac (Adult)	122	124	1,921	1,871	2,043	1,995
Chest	22	26	276	294	298	320
Chemotherapy	32	20	746	552	778	572
Diabetic	36	24	942	1,007	978	1,031
Gastro-intestinal	15	14	245	237	260	251
Hematology	16	26	579	612	595	638
Metabolism	25	29	482	427	507	456
Peripheral Vascular		21		34		55
<i>Dermatology and Syphilology</i>						
	918	890	2,774	2,837	3,692	3,727
<i>Neurology</i>						
General	371	358	835	868	1,206	1,226
Cerebral Vascular	14	23	230	302	244	325
Convulsive Disorder	18	14	776	745	794	759
Multiple Sclerosis	9	7	361	337	370	344
Muscle Disease	5	2	62	56	67	58
<i>Psychiatry</i>						
	402	462	6,372	7,494	6,774	7,956
Day Care		20		451		471
<i>Surgery</i>						
General	372	382	1,628	1,472	2,000	1,854
Culdoscopy	29	58	7	1	36	59
Plastic	59	69	282	223	341	292
Proctology	625	726	646	565	1,271	1,291
Orthopedic	470	442	2,236	2,436	2,706	2,878
Amputation	11	0	34	36	45	36
Urology	245	222	1,269	901	1,514	1,123
Urology-Tumor	1	28	20	185	21	213
Neurosurgery	187	125	694	747	881	872
<i>Eye</i>						
General	1,572	1,489	6,619	7,191	8,191	8,680
Orthoptic	188	187	392	410	580	597
Squint	3	4	271	349	274	353
<i>Ear, Nose and Throat</i>						
	1,071	1,085	2,347	3,081	3,418	4,166
Audiology	833	1,149	907	759	1,740	1,908



COMPARATIVE TWELVE-MONTHS REPORT

Out-Patient Department, cont'd.

Service	New Patients		Revisits		Totals	
	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64
<i>Gynecology</i>						
General	365	373	1,106	1,074	1,471	1,477
Gynecology Tumor	95	114	1,703	1,743	1,798	1,857
<i>Obstetrics</i>	529	506	3,525	3,652	4,054	4,158
<i>Pediatrics</i>						
General	1,138	1,150	3,335	3,134	4,473	4,284
Allergy	339	9	407	245	407	254
Cardiac		409	1,745	1,462	2,084	1,871
Convulsions Seizure		3	640	218	640	221
Endocrine		5	449	504	449	509
Fibrocystic	10	13	270	442	280	455
Hematology		3	1,006	1,146	1,006	1,149
Muscle Disease		1	11	10	11	11
Neurology		36	634	1,155	634	1,191
Renal	28	30	472	672	500	702
Rheumatic	39	33	492	751	531	784
Child Development Study	10	0	1,521	1,756	1,531	1,756
Well Baby	1	0	286	544	287	544
<i>Child Psychiatry</i>	639	430	1,144	1,399	1,783	1,829
<i>Tumor</i>	160	103	1,517	1,430	1,677	1,533
<i>Emergency</i>	3,595	4,104	16,665	16,560	20,260	20,664
<i>Nutrition</i>	1,832	1,695	3,029	2,859	4,861	4,554
<i>Dental</i>	900	1,156	1,029	715	1,929	1,871
<i>North Clinic</i>	3,224	3,092	16,586	16,369	19,810	19,461
<i>Physical Medicine and Rehabilitation</i>	1,650	1,880	3,758	3,485	5,408	5,365
TOTALS	24,928	26,050	103,657	105,057	128,585	131,107

COMPARATIVE TWELVE-MONTHS REPORT

Hospital Laboratories

<i>Laboratory</i>	<i>Number of Determinations</i>	
	<i>1962-63</i>	<i>1963-64</i>
Bacteriology	42,204	47,997
Blood Bank	229,445	228,973
Cancer Detection	28,937	28,258
Chemistry	112,885	127,480
Clerks	5,804	3,615
Electrocardiography and Basal Metabolism	11,570	12,508
Electroencephalography	2,250	2,282
Heart Catheterization	6,922	9,078
(Heart Catheterization Cases)	(452)	(514)
Heart Hospital	19,416	22,107
Hematology	116,641	134,331
Hematology, Special	1,631	2,317
North Clinic	5,417	5,770
Out-Patient	57,791	57,026
Parasitology	620	668
Serology	6,712	7,157
Tissues		
Specimens		
(Autopsy)	(652)	(622)
(Surgical)	(4,990)	(4,781)
Blocks		
Autopsy	17,873	14,405
Surgical	14,650	15,627
Cytology	3,316	3,526
Special Stains	412	278
Extra Slides	2,016	1,980
Frozen Sections	1,025	1,063
Cornification Count		16
Urinalysis	26,784	31,927
<b>TOTALS</b>	<b>714,321</b>	<b>758,389</b>

**COMPARATIVE TWELVE-MONTHS REPORT**  
**X-Ray Department**

<i>Parts Examined</i>	<i>1962-63</i>	<i>1963-64</i>
Abdomen .....	2,111	2,280
Ankle, Foot .....	1,235	1,263
Arm, Forearm, Elbow .....	662	736
Arthrogram .....	16	9
Bone Survey .....	27	25
Bronchogram .....	103	66
Chest .....	27,806	28,338
Celiac Catheterization .....		2
Cholangiogram .....	306	312
Cine Examination .....	174	242
Colon .....	2,744	2,951
Discogram .....	6	2
Encephalogram .....	292	302
Facial Bones .....	307	327
Fetogram .....	96	0
Gallbladder .....	678	837
Heart .....	2,052	2,242
Retrograde Ventriculogram and Aortogram .....	350	637
Heart Catheterization .....	316	226
Hepatic Catheterization .....		15
Hip Nailing .....	30	28
Hypogastric Catheterization .....	25	19
Hysterosalpingogram .....	39	61
IV CO <sub>2</sub> Study .....	4	12
Knee, Leg, Thigh .....	1,678	1,557
Kymogram .....	11	19
Lymphangiogram .....	33	32
Mammogram .....		25
Needle Biopsy .....	7	5
Pelvimetry .....	205	201
Pelvis, Hip Joints .....	2,813	2,676
Pharynx and Larynx .....	6	1
Placentogram .....	4	1

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

<i>Parts Examined</i>	1962-63	1963-64
Planigram .....	366	540
Retroperitoneal Air Study .....	1	0
Ribs, Sternum .....	628	723
Radium Implant .....	8	0
Shoulder Girdle .....	515	600
Sialogram .....	16	8
Sinus Tract Injection .....	33	52
Sinuses, Mastoids .....	573	653
Skull, Orbits, Sella Turcica .....	3,689	3,803
Small Bowel .....	285	410
Spine, Sacroiliacs .....	3,717	3,958
Splenoportogram .....	10	10
Myelogram .....	406	406
Stomach, Duodenum, Esophagus .....	5,118	5,285
Teeth .....	3	4
Thalamotomy .....	40	68
Tongue .....	5	4
Ventriculogram .....	58	35
Wrist, Hand .....	1,222	1,170
<i>Urological Radiography Examinations</i>		
Cystogram, Urethrogram .....	445	516
Intravenous Urogram .....	2,763	3,212
Isolated Kidney .....	7	6
Kidney Puncture .....	4	13
Nephrogram .....	4	4
Nephrotomogram .....	3	0
Urinary Tract (KUB) .....	1,041	873
Urogram (Retrograde) .....	283	336
<i>Vascular Radiography</i>		
Angiocardiogram .....	388	279
Aortogram .....	103	137
Arteriogram .....	213	193
Cerebral Angiogram .....	494	398

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

<i>Parts Examined</i>	1962-63	1963-64
Phlebogram .....	11	13
Special Vascular Study .....	45	45
Venacavagram .....	20	14
Venogram .....	30	45
<i>Total Radiographic Examinations</i> ..	66,683	69,262
<i>Photofluorography</i>		
Employees .....	1,280	807
<i>Total</i> .....	1,280	807
<i>Fluoroscopy</i>		
Diagnostic .....	9,594	10,439
<i>Total</i> .....	9,594	10,439
<i>Total Radiographic Procedures</i> .....	77,557	80,508
<i>Radiographic Examinations Done</i>		
Heart Hospital .....	5,069	4,964
Main Hospital .....	55,164	57,337
Main Operating Room .....	4,583	5,120
Urological Department .....	1,867	1,841
<i>Total</i> .....	66,683	69,262
<i>Patients Examined</i>		
Cancer Detection Center .....	4,557	5,282
Heart Hospital .....	4,461	4,313
Hospital .....	21,323	22,914
Urology Department .....	1,594	1,620
Main Operating Room .....	4,033	4,420
Out-Patient Department .....	13,932	13,756
Private .....	14,478*	14,558*
Student Health Service .....	1,015*	1,038*
Employees .....	1,077*	1,115*
<i>Total Patients Examined</i> .....	49,900	52,305
<i>Total X-ray Procedures</i> .....	77,557	80,508

\*Included in "Total Patients"

COMPARATIVE TWELVE-MONTHS REPORT  
X-Ray Therapy Department

<i>Type of Treatment</i>	1962-63	1963-64
<i>Deep X-ray Treatments</i>		
New Patients .....	662	545
Patients Retreated .....	167	147
Total Number of Patients Treated .....	829	692
Hennepin County Patients .....	80	92
Ramsey County Patients .....	27	30
Patients from Other Counties .....	150	132
Total County Patients .....	257	254
Out-Patient Treatments .....	8,601	5,301
House-Patient Treatments .....	11,203	9,792
Total Number of Treatments .....	19,804	15,093
Average Number of Treatments per Patient .....	23.8	21.8
No. Treatments on 250 KV Machine .....	1,891	1,136
No. Treatments on 400 KV Machine .....	1,723	1,252
No. Treatments on Canadian Cobalt Machine ..	9,344	7,394
No. Treatments on Picker Cobalt Machine .....	6,846	5,311
<i>Superficial X-Ray Treatments</i>		
120 KV .....	157	60
100 KV .....	0	412
80 KV .....	4	0
Out-Patient Treatments .....	439	349
House-Patient Treatments .....	108	123
Total Number of Treatments .....	547	472
Total Number of Patients Treated .....	125	92
<i>Radium</i>		
Total Number of Treatments .....	189	160
New Patients Treated .....	180	155
<i>Strontium (Beta Ray)</i>		
Total Number of Treatments .....	30	55
New Patients Treated .....	5	13

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

<i>Type of Treatment</i>	1962-63	1963-64
<b>Radioisotope Laboratory</b>		
<i>Radioiodine</i>		
Number of New Tracer Studies . . . . .	401	441
Number of Repeat Tracer Studies . . . . .	137	149
Number of New Patients Given Treatment . . . . .	20	20
Number of Patients Retreated . . . . .	8	4
Total Studies and Treatments . . . . .	566	614
Total Number of Millicuries Used for Treatment	423.3	566.5
 <i>Urinary Excretion and Conversion Ratio Studies</i>		
Urinary Excretion Studies . . . . .	6	4
Conversion Ratio Studies . . . . .	10	8
T-3 Studies . . . . .	5	80
Triolein Studies . . . . .	19	9
Oleic Acid Studies . . . . .	0	2
 <i>Radiophosphorus</i>		
Total Number of Patients Treated . . . . .	16	22
Number of New Patients Given Treatment . . . . .	9	11
Number of Patients Retreated . . . . .	7	11
Eye Tumor Diagnosis Studies . . . . .	15	21
Total Number of Millicuries Used for Treatment	79.1	98
Total Number of Millicuries Used for		
Eye Studies . . . . .	7.5	10.5
Thyroid Nodule Studies . . . . .	4	21
Total Number of Millicuries Used for		
Nodule Studies . . . . .	2	10.5
 <i>Rihsa Blood Volume Studies</i>		
Number of Studies . . . . .	59	94
 <i>Radioactive Chromium Red Cell and Survival Studies</i>		
Blood Volume Studies . . . . .	19	27
Survival Studies . . . . .	31	46
Cr-51 Albumin Studies . . . . .	2	0

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

<i>Type of Treatment</i>	1962-63	1963-64
<i>Radioactive Gold Liver Scan</i>		
Number of Liver Scans . . . . .	33	24
Number of Millicuries Used for Scans . . . . .	2.275	1.515
<i>Cobalt 57-B-12 Studies</i>		
Number of CO-57-B-12 Studies . . . . .	180	175
Number of CO-57-B-12 Studies, Intrinsic Factor . . . . .	23	28
<i>Special Diagnostic Studies Using Radioactive Iodine, Selenium and Mercury</i>		
Brain Scans Using Hg-203, Hg-197, and RISA . . . . .	205	356
Liver Scans Using I-131 Rose Bengal, I-131 Colloidal Albumin . . . . .	74	152
Renograms Using I-131 Hippuran . . . . .	59	334
Pancreas Scans Using Se-75 . . . . .	7	8
Heart Scans Using Hippuran I-131 and Cholografin . . . . .	2	3
Rose Bengal Clearance . . . . .	9	1
Rose Bengal Differential Diagnosis . . . . .	2	0
Rose Bengal Test for Jaundice . . . . .	0	1
Renoscans Using Hg-203 and Hg-197 . . . . .	0	13
Rb-86 Coronary Flow . . . . .	0	28
Sr-85 Scans . . . . .	0	22
<i>Blood Volume Studies</i> . . . . .	524	539



COMPARATIVE TWELVE-MONTHS REPORT  
Operating Room

	Major		Minor		Totals	
	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64
<i>Department of Surgery</i>						
General	1,963	1,643	448	719	2,594	2,863
X-Ray (Diagnostic)	—	—	172	479	—	—
Cast	—	—	11	—	—	—
Pediatrics and Medicine (Research)	—	—	—	22	—	—
Neurosurgery	610	527	48	52	743	659
X-Ray (Diagnostic)	—	—	85	80	—	—
Urological Surgery	203	226	10	39	214	265
X-Ray	—	—	1	—	—	—
Orthopedics	551	484	150	221	1,227	1,259
Casts on Operatives	—	—	234	174	—	—
Castst on Non-Operatives	—	—	281	380	—	—
X-Ray	—	—	11	—	—	—
<i>Department of Gynecology</i>						
X-Ray	233	242	455	445	689	687
<i>Department of Otolaryngology</i>						
Otolaryngology	384	380	483	489	867	869
Dentistry	31	5	18	30	49	35
X-Ray	—	—	64	—	64	—
<i>Department of Ophthalmology</i>						
Medicine	285	294	60	66	345	360
Neurology	—	—	29	—	29	—
Pediatrics	—	—	15	—	15	—
X-Ray Diagnostic	—	—	8	—	8	—
X-Ray Therapy (Radium Insertion)	—	—	282	—	282	—
	—	—	3	—	3	—
TOTALS	4,260	3,801	2,869	3,196	7,129	6,997
<i>Cystoscopy Department</i>						
TURs and Operative Procedures	245	254	—	—	245	254
Cystoscopies	—	—	2,277	2,124	2,277	2,124
Miscellaneous	—	—	25	—	25	—
X-Ray	—	—	813	949	813	849
Minor (with X-Ray)	—	—	466	531	466	531
TOTALS	245	254	3,581	3,604	3,826	3,858
COMBINED TOTALS	4,505	4,055	6,450	6,800	10,955	10,855
<i>Summary</i>						
	1962-63	1963-64				
Majors	4,505	4,055				
Minors	6,450	6,800				
TOTALS	10,955	10,855				

PHYSICAL MEDICINE AND REHABILITATION  
Summary of Services

	1954-55			1962-63			1963-64			Per cent Increase Over 1954-55
	Out-Pt.	In-Pt.	Total	Out-Pt.	In-Pt.	Total	Out-Pt.	In-Pt.	Total	
Patients .....	415	1,612	2,027	736	3,743	4,479	820	3,920	4,740	134
Patient Visits .....	6,822	33,018	39,840	7,800	50,113	57,913	8,668	50,919	59,587	50
Total Treatments .....	14,045	49,620	63,665	31,872	111,577	143,449	33,674	117,845	151,519	138
Treatments by Sections:										
Physical Therapy .....	11,516	19,685	31,201	20,499	62,778	83,277	23,010	66,979	89,989	188
Occupational Therapy* .....	1,174	28,318	29,492	1,225	45,745	46,970	1,977	45,594	47,571	61
Speech Therapy .....	723	339	1,062	1,585	713	2,298	1,816	1,274	3,090	191
Prevocational .....	93	503	596	6,836	2,002	8,838	5,529	3,394	8,923	1,397
Vocational Counseling .....	539	775	1,314	1,727	339	2,066	1,342	604	1,946	48
*Occupational Therapy .....	(Sub totals):									
Rehabilitation Center Units .....	1,174	8,382	9,556	1,225	11,936	13,161	1,256	14,180	15,436	62
Special Service Units .....	—	19,936	19,936	—	33,809	33,809	721	31,414	32,135	61

PHYSICAL MEDICINE AND REHABILITATION, Cont'd.

*Comparative Report of the Rehabilitation Ward—Station 22*

	1962-63	1963-64
Total days of Rehabilitation Center treatments for discharged patients . . . . .	4,033	4,200
Average days of treatment per patient . . . . .	38	29
Total Rehabilitation Center charges . . . . .	\$35,526.00	\$39,462.25
Average charge per patient . . . . .	\$ 338.34	\$ 266.64
Average daily charge per patient . . . . .	\$ 8.90	\$ 9.20
Census		
Men . . . . .	57	97
Women . . . . .	48	57
	105	148
<i>Occupational Status of Patients Discharged from Rehabilitation Center</i>		
Resumed occupation at previous place of employment . . . . .		277
Resumed occupation at new place of employment . . . . .		4
Resumed previous self-employed occupation . . . . .		17
Resumed previous homemaking activities . . . . .		342
Resumed previous schooling . . . . .		534
Resumed preschool activities . . . . .		177
Unemployed . . . . .		74
Retired . . . . .		146
Started on new occupation at previous place of employment . . . . .		1
Started on a new occupation at a new place of employment . . . . .		21
Started on a self-employed occupation . . . . .		0
Started on homemaking activities . . . . .		0
In college (business or academic) . . . . .		3
In high school (regular or vocational) . . . . .		1
Correspondence course . . . . .		0
Started on-the-job training . . . . .		0
Started in a sheltered or rehabilitation workshop . . . . .		1
Started on a homebound program . . . . .		2
Unemployable . . . . .		27
Ready for placement but not placed at time of discharge . . . . .		30
Further investigation required . . . . .		81
Deceased . . . . .		66
Temporarily discharged from a Rehabilitation Center program . . . . .		231
Transferred to nursing home or another hospital . . . . .		139
No treatment . . . . .		119
<b>TOTAL</b> . . . . .		<b>2,293</b>

PHYSICAL MEDICINE AND REHABILITATION, Cont'd.

Census

*Patients Treated*

	<i>Out-Pt.</i>	<i>In-Pt.</i>	<i>Total</i>
Rehabilitation .....	800	1,658	2,458
Pediatrics Occupational Therapy .....	—	956	956
Child Psychiatry O.T. ....	—	131	131
Adult Psychiatry O.T. ....	20	535	555
Masonic O.T. ....	—	640	640
TOTALS .....	820	3,920	4,740

*Patient Visits*

	<i>Out-Pt.</i>	<i>In-Pt.</i>	<i>Total</i>
Rehabilitation Center .....	7,947	19,505	27,452
Pediatrics Occupational Therapy .....	—	5,643	5,643
Child Psychiatry O.T. ....	—	4,024	4,024
Adult Psychiatry O.T. ....	721	17,135	17,856
Masonic O.T. ....	—	4,612	4,612
TOTALS .....	8,668	50,919	59,587

*Physical Medicine and Rehabilitation Clinic*

	<i>New</i>	<i>Revisit</i>	<i>Total</i>
Out-Patient Clinic .....	1,867	3,492	5,359
In-Patient Consultations .....	1,385	502	1,887
TOTALS .....	3,252	3,994	7,246

*Treatments*

	<i>Out-Pt.</i>	<i>In-Pt.</i>	<i>Total</i>
Physical Therapy Section .....	23,010	66,979	89,989
Occupational Therapy Section .....	1,256	14,180	15,436
Special Service Units .....	721	31,414	32,135
Speech Therapy Section .....	1,816	1,274	3,090
Prevocational Section .....	5,529	3,394	8,923
Vocational Section .....	1,342	604	1,946
Total Treatments, Physical Medicine and Rehabilitation Service			
TOTALS .....	33,674	117,845	151,519

PHYSICAL MEDICINE AND REHABILITATION, Cont'd.  
Census, cont'd.

*Classifications of Patients Admitted 1963-64*

County .....	1,691
Per Diem .....	1,193
Private .....	1,263
Baker Plan .....	—
Special Fund .....	76
SHS .....	151
Teaching and Research .....	62
TOTAL .....	4,436

*Age Classification of Patients Admitted 1963-64*

5 and under .....	507
6 - 15 .....	1,196
16 - 51 .....	1,653
52 - 64 .....	643
65 and over .....	437
TOTAL .....	4,436

*Categories of Disease or Disabilities of Patients Admitted 1963-64*

1. Infections and parasitic diseases .....	51
2. Neoplasms .....	755
3. Metabolism—allergies, endocrine, metabolic and nutritional diseases .....	167
4. Blood dyscrasias—diseases of the blood .....	110
5. Mental, psychoneurotic and personality disorders .....	804
6. Diseases of the nervous system and sense organs .....	622
7. Diseases of the circulatory system .....	190
8. Diseases of the respiratory system .....	49
9. Diseases of the digestive system .....	79
10. Diseases of the genito-urinary system .....	222
11. Diseases of the skin .....	56
12. Diseases of bone and organs of movement .....	361
13. Congenital malformations .....	266
14. Symptomatic conditions—senility and ill-defined conditions .....	182
15. Accidents, poisoning, and traumatic injuries .....	434
A. Amputations .....	56
B. Fractures .....	132
C. Sprains, Strains .....	147
D. Lacerations .....	23
E. Burns .....	59
F. PNI .....	17
16. Speech disorders .....	88
TOTAL .....	4,436

SOCIAL SERVICE DEPARTMENT  
1963-1964 Report

*Medical Social Work*

Medicine .....	2,065	
Surgical Services .....	836	
Pediatrics .....	947	
Obstetrics and Gynecology .....	1,511	
Physical Medicine and Rehabilitation .....	627	
Neurology .....	979	
Heart Hospital .....	916	
Masonic Hospital .....	1,134	
Other Services .....	1,401	
Total Medical Social Work Cases .....		10,416
Psychiatric Social Work .....		4,290
Group Work Service .....		393
<b>TOTAL CASES</b> .....		<b>15,099</b>

COMPARATIVE TWELVE-MONTHS REPORT

Variety Club Heart Hospital

<i>Department</i>	1962-63	1963-64
<i>Out-Patient Service</i>		
Clinic Attendance		
Adult .....	2,043	2,012
Pediatrics .....	2,584	3,342
<b>TOTALS</b> .....	<b>4,627</b>	<b>5,354</b>
Heart Hospital X-Ray Procedures .....	5,154	5,546
Heart Catheterizations .....	1,173	1,262
Laboratory Procedures .....	19,416	22,107
<i>In-Patient Service</i>		
Admissions .....	1,905	1,836
Transfers (In) .....	490	573
Transfers (Out) .....	611	655
Discharges .....	1,675	1,638
Deaths .....	112	107
Patient Days .....	22,493	23,148
Average Census .....	61.5	63.3
Occupancy (Per cent) .....	78.7%	81.3%
Average Length of Stay .....	11.8	12.6

THE MEDICAL BULLETIN  
 COMPARATIVE TWELVE-MONTHS REPORT  
 Masonic Memorial Hospital

	1962-63	1963-64
<i>In-Patient Service</i>		
Admissions .....	446	489
Transfers (In) .....	613	533
Transfers (Out) .....	191	191
Discharges .....	741	687
Deaths .....	137	146
*Patient Days .....	24,487	21,675
Average Census .....	67.0	59.2
Occupancy (Per cent) .....	83.8%	78.2%
Average Length of Stay .....	23.1	21.2

\*14 Beds utilized for Physical Medicine and Rehabilitation from March 22 through June of 1964.



# College of Medical Sciences Faculty

1964-65

## 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,  
Service & Supply, &  
Assistant Professor;  
Manager, Variety Club  
Heart Hospital

Glenn R. Mitchell  
Associate Director &  
Assistant Professor;  
Manager, Outpatient  
Department;  
Fiscal Officer

Ames Early  
Assistant Director;  
Manager, Masonic  
Memorial Hospital

Thomas La Motte  
Assistant to the Director  
McCollum Brassfield  
Hospital Administrative  
Resident

Merle McGrath  
Fiscal Service Manager  
& Instructor

Helborg Gilbertson  
Secretary to the Director,  
University Hospitals

Ethel Harrington  
Personnel Officer

Philip W. Hursh, M.D.  
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 Felkner  
Director of Hospital  
Nutrition Service &  
Professor

Audrey Coulter  
Administrative Dietitian  
& 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  
Coordinator,  
Volunteer Services

Mildred Jackson  
Director, Powell Hall

Leonard Leipus  
Hospital Central  
Supply Supervisor

Margaret McHugh  
Executive Housekeeper

John Parker  
Assistant Professor &  
Director of Medical  
Illustration &  
Photography

Marie Perrault  
Chief Pharmacist

Walter Petrykowski  
Hospital Maintenance  
Supervisor

Bertha Pfenninger  
Medical Records  
Supervisor

Glenn Gullickson, M.D.  
Director of Rehabilitation  
Center

## ANATOMY

Arnold Lazarow  
Professor & Head

*Professor Emeritus*  
E. A. Boyden

*Professor*  
R. Dorothy Sundberg  
Lemen J. Wells

*Associate Professor*  
Anna-Mary Carpenter  
William J. L. Felts

Carl B. Heggstad  
Morris Smithberg  
Richard L. Wood

*Assistant Professor Emeritus*  
Shirley P. Miller

*Assistant Professor*  
Padmakar Dixit  
Frederick Walker

*Research Associate*  
Elmo Brekhus  
Lucille J. Hoiland  
Edna Speidel

*Instructor*  
G. Eric Bauer  
Leonard R. Murrell

*Research Fellow*  
Mary Jane Buckman  
Stuart H. Heald  
Philip A. Jedlicka  
Oscar M. Tangco

*Non-Service Fellow*  
Bruce M. Carlson  
Harold Hofstrand  
David L. Wright

*Teaching Assistant*  
Dean Abrahamson  
Mostafa Aboul-Enein  
Herbert D. Bodley  
Caroline Czarnecki  
Stanley L. Erlanson  
John Grewe  
Virgil Hoftiezer  
Carl F. Huser  
Lois J. Karl  
Dave Kvistberg  
Gordon J. Lester  
James L. Miller  
Wayne V. Moore  
James Nettleton  
Lois Neukirch  
Terrill Olsen  
Joseph L. Rigatuso  
Donald W. Robertson  
Robert Sorenson  
Thomas Uchtyl  
Larry W. Weiss  
Mary E. Whitmore  
Henry M. Yoshihara



## THE MEDICAL BULLETIN

### ANESTHESIOLOGY

Frederick H. Van Bergen  
Professor & Head

*Professor Emeritus*  
Ralph T. Knight

*Professor*  
Joseph J. Buckley

*Associate Professor*  
James H. Matthews  
John R. Gordon

*Assistant Professor*  
Van S. Lawrence  
Earl A. Schultz  
Hugh D. Westgate

*Clinical Assistant Professor*  
Russell W. Bagley  
J. Albert Jackson  
Robert C. Knutson

*Instructor*  
Charles F. Galway  
John S. Rydberg

*Clinical Instructor*  
Edward G. Hustad  
Egon Marte  
Nyel Moss  
Boris Symchych  
Alan D. Espelien

*Medical Fellow*  
Florendo A. Asuncion  
Joseph Belshe  
James Cumming  
Royal DeLany, Jr.  
Donald Destache  
Richard Engwall  
Teofilo L. Evangelista  
Skaidrite Fedders  
Celia Fiennes  
Paul Gilles  
Barbara Gokcen  
Ralph Hoover  
Donald B. Hulteng  
Donald Johnston  
Loreta Mendoza  
Thomas Monaghan  
Rosiland Moses  
Ariga Moussa  
John Park  
Patrick Scanlan  
John Scharf  
Donald Stenzel  
Claude Swayze  
Mein Fa Tchou  
George Wier

### BIOCHEMISTRY

Wallace D. Armstrong  
Professor & Head

*Professor*  
Cyrus P. Barnum, Jr.

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

*Associate Professor*  
Robert W. Bernlohr  
Charles W. Carr  
Frank Ungar  
John F. Van Pilsum  
Richard W. Von Korff  
Donald B. Wetlaufer

*Assistant Professor*  
Curtis H. Carlson  
Ernest D. Gray  
James F. Koerner

*Instructor*  
Mary E. Dempsey

*Lecturer*  
William E. Marshall  
Ulysses S. Seal  
Quenton T. Smith

*Research Associate*  
Norman Brown  
John C. Colla  
Rex E. Lovrien  
Carlos Villar-Palasi  
James J. Vogel

*Research Fellow*  
Eugene J. Barry  
Kim Y. Chang  
Major L. Cohn  
Lidia Filonowich  
William Fogarty, Jr.  
Frank Huijing  
Bernard Pollara

*Research Assistant*  
William P. Cane  
Yung Sung Choi  
John E. Elam  
Sally E. Jorgensen  
Mary Lou Mobberley  
Thekka V. Nair  
Merle S. Olson  
Enayat M. Tewfik

*Teaching Assistant*  
Catherine Bauer  
William C. Buhi  
Helen M. Cost  
Richard L. Kellor  
Patricia M. Lewis  
Glen E. Mott  
Walter Niehaus  
Nell R. Ray

*Non-Service Fellow*  
Dorr Dearborn  
Ronald Elin  
David Peterson

### COMPREHENSIVE CLINIC

Richard M. Magraw  
Director  
Edward 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  
Frederick W. Hoffbauer  
Robert B. Howard  
Samuel Schwartz  
Wesley W. Spink  
Louis Tobian, Jr.  
Leslie Zieve

*Clinical Professor*  
Reuben Berman  
John F. Briggs  
E. P. K. Fenger  
Arthur C. Kerkhof  
Thomas Lowry  
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  
Richard Magraw  
Harold G. Muchmore  
M. J. Murray  
Alvin L. Schultz  
Naip Tuna  
Yang Wang  
C. Paul Winchell  
Horace H. Zinneman

THE MEDICAL BULLETIN

*Clinical Associate*

*Professor Emeritus*

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

*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  
 George C. Roth  
 L. Raymond Scherer  
 Philip H. Soucheray  
 H. B. Sweetser, Jr.  
 A. Boyd Thomes  
 Lowell W. Weber  
 Macnider Wetherby  
 Asher A. White  
 J. Allen Wilson

*Assistant Professor*

Arnold Adicoff  
 Richard B. Davis  
 Alfred Doscherholmen  
 Alfred Eichenholz  
 Edmund Eichhorn  
 Abraham Falk  
 John Jenne  
 James P. Lillehei  
 Robert O. Mulhausen  
 Ralph C. Williams, Jr.

*Clinical Assistant Professor*

Robert D. Blomberg  
 Henry B. Blumberg  
 Donald G. Bohn  
 James P. Dahl  
 Robert E. Doan  
 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  
 Fred A. Rice  
 Dean K. Rizer  
 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 Wohlbrabe

*Instructor*

Graham Beaumont  
 Ausma A. Blumentals  
 John H. Burns  
 Thaddeus Chao  
 Richard P. Doe  
 Robert S. Eliot  
 Joyce L. Funke  
 Robert P. Gruninger  
 Maynard E. Jacobson  
 Henry A. Johnson, Jr.  
 John I. Levitt  
 Robert J. McCollister  
 Harold D. Miller  
 Thomas F. Mulrooney  
 Byron U. Musa  
 Frank Q. Nuttall  
 Richard A. Pfohl  
 Harold G. Richman  
 Jane Self  
 Marcus B. Shook  
 William R. Swaim  
 Nejat Turkbas  
 Frank A. Wollheim  
 John W. Yarbro  
 Solomon J. Zak

*Clinical Instructor*

Alfred F. Anderegg  
 David Berman  
 Henry S. Bloch  
 Paul F. Bowlin  
 John G. Bradley

Rene Braun  
 Robert Breitenbucher  
 John B. Cardle  
 Malcolm D. Clark  
 Ephraim B. Cohen  
 Henry W. Cohen  
 Donald E. Derauf  
 Donald A. Duncan  
 Hugh A. Edmondson  
 Rodney W. England  
 John N. Ferguson  
 David L. Fingerman  
 Stanley A. Fruchtmann  
 A. Sigrid Gilbertsen  
 Mubarem Gokcen  
 David Gold  
 William L. Hedrick  
 Wilbert J. Henke  
 Kjeld O. Huseby  
 Harold B. Kaiser  
 Harold A. Kaplan  
 Markle Karlen  
 Everett H. Karon  
 Charles P. Kolars  
 Arthur T. Lindeland  
 Jeanette K. Lowry  
 Aaron L. Mark  
 Robert A. Maslansky  
 James L. McKenna  
 Winston R. Miller  
 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. Randall  
 Thomas M. Recht  
 Paul D. Redleaf  
 William D. Remole  
 A. McDonnell Richards  
 Rudolph J. Ripple  
 Ronald J. Rosandich  
 Raymond W. Scallen  
 Donald O. Schultz  
 Richard W. Swenson, Jr.  
 Donald G. Veltek  
 J. A. Vennes  
 F. Douglas Whiting  
 Richard C. Woellner  
 Donald W. Woodley

*Lecturer*

Henry W. Blackburn, Jr.

*Clinical Assistant*

Lawrence V. Perlman

*Medical Fellow*

**(University Hospitals)**

Ernesto Arosemena  
 Victor E. Badertscher  
 Albert Clarysse  
 Arie W. Dieperink

## THE MEDICAL BULLETIN

Paul F. Engstrom  
Vincent L. Fromke  
Robert B. Howe  
James N. Karnegis  
Richard S. Kronenberg  
Thomas G. Lawrence  
Thomas Layman  
Richard B. Moore  
Robert E. Olson  
Sheldon R. Pinnell  
Jack L. Reddin  
Howard H. Shear  
Boleslav Starzecki  
David F. Tarmina  
Martin G. White  
Theodore S. Zimmerman

### **(Hennepin County General Hospital)**

Jean R. Eckerly  
Paul W. Herrman  
Paul Q. Hull  
George E. Kitzmiller  
Douglas L. Kjellsen  
Paul E. O'Brien  
Russell Payson  
Robert H. Scott  
Fred L. Shapiro  
Henry T. Smith  
Roger R. Stenlund

### **(Ancker Hospital)**

Madeline Adcock  
Donovan L. Beckman  
Robert T. Block  
Joe P. Chang  
George W. Ibrahim  
John A. Lanning  
John B. McMullen  
Martin H. Welch

### **(Mount Sinai Hospital)**

Waldemar Cruz  
Aaron Kerlow  
Ambrosio Medina  
Surendra Sethi

### **(Minneapolis V.A. Hospital)**

Joseph L. Allain, Jr.  
Sigrid A. Bachmann  
Alphonso Belsito  
George J. Brodmerkel  
David C. Brown  
Stuart T. Chen  
Paul B. Dickinson  
John A. Elstrom  
Mario C. Garcia  
Frederick Cobel  
Daniel H. Gregory  
Charles A. Hall  
Arthur S. Hanson  
Kamal M. Jain  
Daniel T. Johnson  
Sidney E. Johnson

Charles R. Jorgenson  
Arnold P. Kaplan  
Mohammed Khan  
Lowell L. Kvam  
Francis E. Lambert  
Jarrold Larson  
Herbert Lauritzen  
Irving Lerner  
Shiang-ming Liu  
Jose R. Medina  
Thomas A. Neff  
Richard G. Neidballa  
Bruce Nydahl  
Kenneth B. Robertson  
Wilson M. Salter  
Alec M. Sloane  
Pierre Sterlin  
Jan H. Tanghe  
Frederick W. Walker  
Harold Windschitl  
Eduardo P. Wyse

### **(Miller Hospital)**

Arthur H. L. From

### *Research Fellow*

Patricia L. Ashman  
Robert L. Coupe  
Beryl Z. Greenberg  
William C. Krueger  
Zbyslaw J. Petryka  
Terrence Scallen  
Luigi Taddeini

### *Research Assistant*

Mary Moberley  
Lyle F. Norton

### *Research Associate*

Nester Dickie  
Richard Joos  
Ronald C. Roberts  
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  
Robert W. Goltz  
Harold G. Ravits  
John G. Rukavina

### *Clinical Assistant Professor*

Frederic T. Becker  
Elmer Hill  
Irvine M. Karon  
Elmer M. Rusten  
A. S. Zelickson

### *Instructor*

Ramon Fusaro

### *Clinical Instructor*

Charles J. Balogh  
Elmer T. Ceder  
Manuel Jaffe  
Thomas J. Kalb  
Sheldon L. Mandel  
Kenneth P. Manick  
Orville E. Ockuly  
Milton Orkin  
Willard C. Peterson, Jr.  
Nadine G. Smith  
James L. Tuura  
C. Gordon Vaughn

### *Medical Fellow*

David W. Anderson  
Bruce J. Bart  
Raymond Cornford  
David Grande  
Elizabeth Haaland  
Saemundur Kjartansson  
Darlene D. Martenson  
Arnold Medved  
Edward S. Peterka  
Edwin G. Rice  
Manly Rubin  
Milton Sadd  
David J. Strang

### *Research Associate*

Quenton T. Smith  
Dorothy B. Windhorst

## LABORATORY MEDICINE

Gerald T. Evans  
Professor & Head

### *Professor*

Ellis S. Benson  
R. Dorothy Sundberg

### *Associate Professor*

Robert Bridges  
Paul Lober  
Fernando Torres  
Franklin Wallace  
Edmond Yunis

### *Assistant Professor*

Ben Hallaway  
Andreas Rosenberg  
Joseph St. Geme  
Paul E. Strandjord  
Naip Tuna  
Yang Wang  
Jorge Yunis

### *Research Associate and*

### *Assistant Professor*

Lucille Hoilund

### *Clinical Assistant Professor*

Leonard Crowley  
Edward Segal  
Martin Segal

## THE MEDICAL BULLETIN

### *Instructor*

G. Mary Bradley  
Richard Brunning  
John J. Raich

### **(Hennepin County General Hospital)**

Wayne Schrader

### *Clinical Instructor*

Paul Finley  
Aina Galejs

### *Medical Fellow Specialist*

G. Mary Bradley  
David Duffell  
John Dyck  
Ed Hendricks  
William Luft  
Otto Pflueger  
Seth Shaw  
Thomas Swallen  
Patrick Ward

### *Non-Service Fellow*

Marlys St. Cyr

### **DIVISION OF MEDICAL TECHNOLOGY**

Ruth Hovde  
Professor & Director

### *Associate Professor*

Esther Freier

### *Assistant Professor*

Patricia Bordewich  
Grace Mary Ederer  
Lorraine Gonyea  
Kathryn Hammer  
Elaine McMaster  
Verna Rausch

### *Instructor*

Sandra Benson  
Kathleen Clayson  
Joyce Lynn Duncan  
Jean Linne

### **(Minneapolis V.A. Hospital)**

Frances Casey  
E. Marie Dammann  
Arthur Sanders

### **MICROBIOLOGY**

Dennis W. Watson  
Professor & Head

### *Professor*

S. Gaylen Bradley  
Louis Muschel  
Edwin L. Schmidt  
John Spizizen

### *Associate Professor*

Robert W. Bernlohr  
K. Gerhard Brand  
Brooks D. Church

Martin Dworkin  
Palmer Rogers, Jr.

### *Assistant Professor*

Dwight L. Anderson  
Russell C. Johnson  
James T. Prince  
Joseph W. St. Geme  
John E. Verna

### *Instructor*

Terence M. Joys  
Mary E. Pollock  
Waid Rogers

### *Associate Faculty*

Robert A. Good  
James J. Jezeski  
R. K. Lindorfer  
Joseph C. Olson  
Lewis Wannamaker

### *Research Associate*

William Begg  
N. Jacqueline Han  
William Sadler

### *Teaching and Research Assistant*

Robert P. Burchard  
Godchardo Calleja  
Shiau Yen Chiu Fu  
Connie Clark  
William J. Cooney  
Lance B. Crombie  
Hazel Cuffey  
Gregory Germaine  
Edgar E. Hanna  
Herbert J. Hatcher  
Janet Hauser  
Gerald R. Haywood  
Beulah M. Holmes  
Jean A. Hyslop  
Yoon Berm Kim  
Mary Jane Klun  
Robert A. Kolstad  
Edward Laishley  
L. Charles Landman  
Claud Leitzmann  
William F. Liljemark  
John A. Mayo  
Thomas E. Miller  
Bernard Murray  
Chee Ping Ng  
Su Shu Pan  
James D. Punch  
Robert F. Ramaley  
William S. Ramsey  
Charles Schachtele  
A. H. Siala  
Gideon Silberman  
Howard J. Singer  
Robert W. Soll  
Clifford A. Waters  
Benjamin F. Watson  
John A. Wise

### **MINNESOTA MEDICAL FOUNDATION**

Eivind Hoff, Jr.  
Executive Director

### **SCHOOL OF NURSING**

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

*Associate Professor and  
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 J. Peterson  
Eugenia R. Taylor  
Dorothy E. Titt  
Elizabeth A. Whitney

### *Instructor*

Mary Ann L. Baas  
Peggy J. Brown  
Irene L. Bryant  
Margaret J. Clipper  
Agnes B. Dempster  
Edna H. Gilstad  
Helen B. Hansen  
Joann R. Hubbard  
Muriel D. Hudak  
Cecile Kume  
Ruth O. Leo  
Irene A. Martin  
Frances D. Moncure  
Grace M. Sarosi  
Marilyn Sime  
Bette R. Solheim  
Marian J. Town

### **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

## THE MEDICAL BULLETIN

Irving Bernstein  
 Donald W. Freeman  
*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  
 Mancel T. Mitchell  
 David I. Seibel  
 William B. Stromme  
 Rodney F. Sturley  
*Instructor*  
 Leon L. Adcock  
 Fred A. Lyon  
 Henry C. Mecker  
 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  
 Edward C. Maeder  
 Owen F. Robbins  
 Melvin B. Sinykin  
*Clinical Instructor Emeritus*  
 James Swendson  
*Clinical Assistant*  
 Paul N. Larson  
 Charles H. McKenzie  
*Medical Fellow*  
 Thomas A. Beck, III  
 Richard P. Bendel  
 Stephen J. Berestka  
 Robert A. Diamond  
 Laura Edwards  
 Stanley A. Gall  
 David C. Lees  
 Edward C. Maeder, Jr.  
 Fred E. Mecklenburg  
 Gerald R. O'Brien  
 George E. Schaffhausen  
 DeLane J. Thyen  
 Charles A. Tietz  
 William A. Treat  
 John W. Utrie  
 Dirk D. J. Van Oppen

### OPHTHALMOLOGY

John E. Harris  
 Professor & Head

*Professor*  
 John P. Wendland  
*Professor Emeritus*  
 Erling W. Hansen  
*Clinical Professor Emeritus*  
 Walter Fink  
*Clinical Associate Professor*  
 Walter Hoffman  
 Robert H. Monahan  
 Karl Sandt  
 Harry Sperling  
 (Ophthalmic Research)  
*Assistant Professor*  
 William L. Fowiks  
 William H. Knobloch  
*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  
 Bruce L. Kantar  
 R. O. Leavenworth, Jr.  
 Vernon L. Lindberg  
 Winston R. Lindberg  
 Malcolm A. McCannel  
 John A. McNeil  
 Thomas O'Kane  
 Harry L. Plotke  
 Robert E. Rocknem  
 Irving Shapiro  
 Howard Shaw  
 Leander T. Simons  
 Donald Sterner  
 George T. Tani  
 F. F. Wippermann  
*Clinical Instructor*  
 W. J. Bushard  
 Richard Ellingson  
 Donald W. Herrick  
 George Hilgerman  
 Charlotte Hill  
 Robert P. Koenig  
 Ernest Larson  
 Lydia Neibergs  
 Sidney Nerenberg  
 Thomas K. Rucker  
 Richard Student  
 Byron A. Teska  
 Frederick C. Wuest  
*Medical Fellow*  
 James Berbos  
 Christopher Brown  
 Martin Bruhl  
 Charles B. Carter  
 Gerald R. Christensen  
 F. Thomas Ellingson

Raymond Gingrich  
 Farror Griffin  
 Leslie Jacobson  
 James Householder  
 Yale C. Kanter  
 Robert Letson  
 William McClanahan  
 John D. Riley  
 Roy Toyama

### OTOLARYNGOLOGY

Lawrence R. Boies  
 Professor & 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  
*Clinical Instructor*  
 John R. Hilger  
 John S. Huff  
 Malcolm R. Johnson  
 Robert L. Koller  
 Hyman M. Paisner  
 Robert Richardson  
 Douglas C. Robertson  
 Melvin E. Sigel  
 George V. Tangen  
*Medical Fellow*  
 Philip Affleck  
 David Buran  
 Richard Carley

## THE MEDICAL BULLETIN

Kent Christensen  
Barclay Cram  
John Dickson  
John Flannery  
Morton Kane  
Severin Koop  
Willis McMillan  
Charles Prewitt  
Nathaniel Sparrow  
Thomas Stengl

### PATHOLOGY

James R. Dawson, Jr.  
Professor & Head

*Professor Emeritus*  
Benjamin J. Clawson

*Professor*  
Robert Hebbel

*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

*Associate Professor of  
Experimental Pathology*  
Herbert M. Hirsch

*Instructor*  
William A. Foley  
Donald F. Gleason  
Erhard Haus  
Kenneth A. Osterberg  
Robert E. Rydell  
Wayne H. Schrader  
Bertram F. Woolfrey

*Clinical Instructor*  
Charles H. Chedister  
Frederick A. Fox  
Craig Freeman  
Seymour Handler  
Ellery James  
Alan Jay  
Allen Judd  
Stanley Lofsness  
Frederick Lott  
Robert J. McClellan  
Thomas Semba  
Walter Subby

*Cancer Trainee*  
Dennis E. Lofstrom

*Medical Fellow Specialist*  
Thomas R. Arlander  
J. Roald Fuglestad  
Ilhan Imamoglu

David J. Rothwell  
*Medical Fellow*  
Richard W. Anderson  
Owen C. Bolstad  
Calvin M. Bandt  
Robert D. Fedor  
John E. Kylo  
Donald F. Levi  
Arnold I. Rajala  
Joseph C. Rupp  
Verne A. Schulberg  
James E. Stevenson  
Thomas A. Stolee  
John O. Swanson

### PEDIATRICS

John A. Anderson  
Professor & Head

*Professor*

Robert A. Good  
Reynold E. Jensen  
William Krivit  
Robert A. Ulstrom  
Lewis W. Wannamaker

*Professor Emeritus*  
Hyman S. Lippman  
Max Seham

*Clinical Professor*  
Albert V. Stoesser

*Associate Professor*  
Paul Adams  
Ray C. Anderson  
Robert Bridges  
Richard Raile  
Robert L. Vernier

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

*Clinical Associate Professor*  
Arnold Anderson  
Paul F. Dwan  
Harold B. Hanson  
David Siperstein  
Robert L. Wilder

*Assistant Professor*  
Elia Ayoub  
Michael E. Blaw  
Barbara A. Burke  
Edward C. Defoe, Jr.  
Robert O. Fisch  
Ernest D. Gray  
James J. Lawton  
James T. Lowman  
Harriet Morgart  
Arthur Page  
Raymond Peterson  
Paul Quie  
John Reynolds

Joseph St. Geme  
Kenneth Swaiman  
Homer D. Venters  
Warren Warwick  
James C. White  
Francis Wright

*Assistant Professor Emeritus*  
Frank G. Hedenstrom  
Alfred Ouellette  
Edwin F. Robb  
Robert Rosenthal

*Clinical Assistant Professor*

S. Lane Arey  
Northrup Beach  
Eldon B. Berglund  
Heinz Bruhl  
Paul Ellwood  
Donnell Etwiler  
John J. Galligan  
Elizabeth Lowry  
George W. Lund  
Edward Nelson  
Theodore Papermaster  
Theodore Smith  
Willis Thompson

*Instructor*

Max Cooper  
Roswith Lade  
Alfred Michael  
George Noren  
Mary Ann South  
Robert W. ten Bensel

*Clinical Instructor*

Sol Austrian  
William Bevis  
Alice Brill  
Richard T. Cushing  
Clayton R. Green  
Evelyn E. Hartman  
William Heilig  
Harold Katkov  
George Kimmel  
Stanley Leonard  
Wallace Lueck  
Jack Markovitz  
William Mulholland  
Lloyd Nelson  
Everett Perlman  
Sylvester Sanfillippo  
Frances E. Schaar  
Sidney Scherling  
Albert Schroeder  
Eva Shaperman  
Henry Staub  
Ellsworth Stenswick  
Norman Sterie  
Edward K. Strem  
John D. Tobin  
Richard Tudor

*Lecturer*

Allyn Bridge  
Jack A. Hafner

## THE MEDICAL BULLETIN

Lawrence Meskin  
Wentworth Quast  
Richard W. Von Korff

*Research Associate*  
Bernard Pollara

*Research Fellow*  
Richard Condie  
Rolf Engel  
Joanne Finstad  
Ann Gabrielson  
Michael J. Hill  
Rodrigo Urizar

*Clinical Assistant*  
Wallace Anderson  
David Bloom  
Edwin Burkland  
Eunice Anderson Davis  
Laurence F. Erickson  
Robert Gibbs  
Jean Margaret Horrobin  
Richard Lien  
Merl E. Needham  
Lewis Sher  
Edward F. Walsh  
Walter Wilder

*Medical Fellow Specialist*

Bascom Anthony  
Betty Bernard  
David M. Brown  
Peter B. Dent  
Alfred J. Fish  
Lloyd A. Fish  
Henry Gewurz  
Richard C. Hard  
Roger C. Herdman  
Ernest B. Hook  
Kenneth L. Jue  
James H. Moller  
Mark E. Nesbit  
Santiago Prado  
Gunnay Raghbih  
Henry Rikkers  
Henry S. Sauls  
Harvey L. Sharp  
George Skaff  
Franklin H. Top

*Non-Service Fellow*  
David Friedman  
Charles H. Good  
Henry R. Hilgard  
Marina Yarbro

*Research Assistant*  
Joseph J. Ferretti  
Ayten A. Imamoglu  
Merle Olson

*Medical Fellow*  
Stanford Au  
Richard A. Chilgren  
David A. Cimino  
Amos Deinard  
Eric J. Eisenklam  
Albert P. Fischer

Stanley D. Johnsen  
Shirley B. Lansky  
Myron A. Levine  
Lawrence A. Lockman  
Philip M. Marden  
John S. Mitchell  
Betty J. Oseid  
Stephen B. Pakula  
Rodney N. Powell  
Kenneth G. Reeb  
Barton D. Schmitt  
William A. Walker

Helen Skowlund  
Auke Tellegen  
Bror S. Troedsson  
Harper F. Willis

*Clinical Assistant Professor*

Ruby G. Overmann  
Richard M. Steidl  
Richard R. Owen

*Instructor*

Essam A. Awad  
John D. Allison  
Helen Dahlstrom  
Jerald R. Forster  
Sarah Gault  
Garland K. Meadows  
Frank Meelhuysen  
James F. Pohitilla  
John E. Quast  
Allan C. Yater

*Clinical Instructor*

W. John Dawson  
Joseph P. Engel  
Roger P. Hallin  
Michael Kosiak  
Arthur B. Quiggle  
Herbert A. Schoening

*Research Fellow*

Robert P. Patterson  
Jane Rietz  
Mary Price  
David A. Witsoe

*Medical Fellow*

Alan Bensman  
Theodore M. Cole  
Henry T. Dirks  
Sherman Hershfield  
John F. Lane  
Loren R. Leslie  
Salvatore A. Spicuzza  
Elizabeth B. A. Troxil

### PHARMACOLOGY

Frederick E. Shideman  
Professor & Head

*Professor*

Raymond N. Bieter  
Norman O. Holte  
Gilbert J. Mannering  
Amedeo S. Marrazzi  
Wallace F. White  
Harold N. G. Wright

*Associate Professor*

Jack W. Miller

*Assistant Professor*

Michael F. Halasz  
Akira E. Takemori  
Travis I. Thompson  
Ben C. Zimmerman

*Instructor*

Nelson D. Goldberg

### PHYSICAL MEDICINE AND REHABILITATION

Frederic J. Kottke  
Professor & Head

*Professor*

William G. Kubicek  
Frank M. Lassman

*Clinical Professor*

Miland E. Knapp

*Associate Professor*

Peter F. Briggs  
Glenn Gullickson, Jr.  
Eugene A. Johnson

*Clinical Associate Professor*

Paul M. Ellwood, Jr.

*Assistant Professor*

James R. Boen  
Marian L. Eliason  
Daniel Halpern  
Borghild Hansen  
Marvin G. Lepley  
Romine E. Matthews  
Wilbur L. Moen  
Martin O. Mundale

### PHYSIOLOGY

Maurice B. Visscher  
Distinguished Service  
Professor & Head

*Professor Emeritus*

Ernest Gellhorn  
Joseph T. King

*Professor*

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

*Associate Professor*

Marvin B. Bacaner  
H. Mead Cavert  
Charles Edwards  
Irwin J. Fox  
Rodney B. Harvey

THE MEDICAL BULLETIN

*Assistant Professor*

James S. Beck  
Jui S. Lee  
Asher Ilani  
John Walker

*Research Associate*

Ali Aiman Hakim  
Y. Chiung Puh Lee  
Laurence O. Pilgeram  
Luigi Rossini

*Instructor*

Richard Purple  
Daniel Weiner

*Lecturer*

John Love  
Maurice Meyer

*Research Fellow*

Giovanni F. Ayala  
Takehiko Azuma  
Alberto Binia  
H. R. Lorkovic  
Richard Stish

*Teaching Assistant*

David Levitt  
Michael Yablonski  
Paul Schmelzer

*Graduate Trainee*

James Bloedel  
George Bloom  
George Bonewell  
Peter Chevalier  
Sun Hwan Chi  
Eugene Cornelius  
Leslie Cronau  
Serge Dos  
Joseph Fenstermacher  
Frank Freedman  
Boyd Goetzman  
Rolf Lagerquist  
Franco Lioy  
Chun K. Loh  
Moon Jae Pak  
Richard Poppele  
Neil Paul Rosenthal  
Philip Skehan  
Kay Thomas  
John Tyberg  
Douglas Wangenstein  
Kenneth Weber  
Philip Weiser  
Lorentz Wittmers

**PSYCHIATRY AND  
NEUROLOGY**

Donald W. Hastings  
Professor & Head

**DIVISION OF PSYCHIATRY**

*Professor*  
Richard W. Anderson

Vera Behrendt Eiden  
Robert Hinckley  
Burtrum C. Schiele  
Werner Simon

*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*

Ian Gregory  
Carl Koutsky  
Richard M. Magraw

*Clinical Associate Professor*

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

*Assistant Professor*

Titus Bellville  
Thomas Dredge, Sr.  
Daniel Ferguson  
Floyd Caretz  
G. Wendell Hopkins  
James Janecsek  
William Jepson  
Orville H. Johnson  
H. Douglas Lamb  
Theodore Larson  
Myron Messenheimer  
Sonja D. Monson  
Anthony J. Pollock, Jr.  
Harper Willis

*Clinical Assistant Professor*

Leslie Caplan  
Robert Clark  
Louis Flynn  
Leonard Goldman  
Charles Haberer  
Glen Lewis  
Joyce S. Lewis, Jr.  
J. Benjamin Lund  
John Mulvahill  
Robert Pfeiler  
John Regan  
Frederic Wilson

*Instructor*

Ann Margaret Bailey  
Edward Bardon  
Abelardo Mena  
Ronald Young

*Clinical Instructor*

Burton Abramson  
Jerome Bach

Donald Daggett  
George Dorsey  
James Garvey  
William Goodchild  
Carl Malmquist  
Donald Mayberg  
Ilgyars Nagobads  
Martin Orbuch  
Jennings Peteler

*Research Fellow*

Luis Tredici

*Medical Fellow*

David Auran  
Dorothy Bernstein  
Mary Ann Braaten  
Thomas Crowley  
Robert Cutshall  
William Davidson  
Harold Eist  
Leonard Fielding  
Robert Fischer  
Joseph Gendron  
Malka Goodman  
Manuel Gordillo  
Leo Grieben  
John Haas  
Richard Heilman  
Ralph Hirschowitz  
Rodney C. Johnson  
Harvey Kelman  
William Luckey  
Deane Manolis  
Lawrence Mayerle  
Henry Osekowsky  
Edward Posey  
Laurence Rivkin  
Barlow Smith  
Gordon A. Tripp

**DIVISION OF NEUROLOGY**

A. B. Baker  
Professor & Director

*Professor*

Royal C. Gray  
Hildred Schuell  
Fernando Torres

*Clinical Professor*

Zondal R. Miller  
Harold H. Noran

*Associate Professor*

James Berry  
Harold Cohen  
John Logothetis  
Joseph A. Resch  
David Webster

*Clinical Associate Professor*

Paul Elwood, Jr.  
Robert L. Meller  
Sidney K. Shapiro

*Assistant Professor*

Michael Blaw  
William Bradley



## THE MEDICAL BULLETIN

Milton Ettinger  
George Flora  
Robert Gummitt  
Edward Jimenez-Pabon  
William Kennedy  
Sping Lin  
James Moriarty  
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 Zarling

### *Instructor*

Milton Alter  
Anna Ellington  
Hsien-Hwa-Hsieh  
G. Aurebeck Lindseth  
Richard A. Nelson  
Glen T. Sawyer  
Robert Soll

### *Clinical Instructor*

Cecil C. Baker  
Lawrence Farber  
Maland Hurr

### *Research Fellow*

Thomas Martin  
Jess Mottaz  
Gloria Seacat

### *Medical Fellow*

James Allen  
Alberto Aranibar-Zerpa  
Francisco Baron  
Jean G. Blain  
Calvin Calhoun  
Terrance Capistrant  
David Duffell  
Richard Foreman  
John Hyde  
Arthur Klassen  
Stephen Kott  
Brian Krasnow  
Bernard Lemieux  
Thomas McNulty  
Paul Moe  
Robert Pierce  
Kenneth Posner  
William Riley  
Mason Robins  
Roger Ryan  
Lawrence Schut  
Stephen Stecker  
Antonio Trujillano  
John Wolf

### **DIVISION OF CLINICAL PSYCHOLOGY**

Starke R. Hathaway  
Professor & Director

### *Professor*

Norman Garmezay  
Paul E. Meehl  
William Schofield  
Robert D. Wirt

### *Associate Professor*

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

### *Assistant Professor*

John P. Brantner  
Thomas Kiresuk  
Robert Knights  
Jerome Pauker  
Naomi Quevillon  
Lloyd Sines  
Donald Stieper  
Edward Sulzer  
Auke Tellegen  
Travis Thompson

### *Clinical Assistant Professor*

Gayle K. Lumry  
Murray K. Reed  
Jon Weinberg

### *Instructor*

Edward Ells  
Seymour Gross  
Harold Ireton  
James Kincannon  
Zigfrids Stelmachers

### *Clinical Instructor*

Baldev Luther

### *Research Associate*

Audrey Shechtman  
Norris Vestre

### *Research Fellow*

Richard Friberg  
John Powers

### **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*

James Lawton, Jr.

### *Clinical Assistant Professor*

Richard Bartman  
Leo Hanvik  
Fred J. Kane

### *Instructor*

Paul Bransford

### *Medical Fellow*

Robert Cottor  
George J. Barry

## 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  
Leonard M. Schuman  
Stewart C. Thomson

### *Associate Professor*

Allyn C. Bridge  
George E. Williams

### *Assistant Professor*

Edward J. Dvorak  
Ruth Stief

### *Instructor*

Warren H. Gullen

### *Lecturer*

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

### *Research Fellow*

Yick Kwong Chan

## **ENVIRONMENTAL HEALTH**

### *Professor*

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

## THE MEDICAL BULLETIN

### *Associate Professor*

John O. Buxell  
Harry Foreman  
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  
Russell E. Frazier  
Velvl Greene  
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 von Bergen

#### *Assistant Professor*

Eleanor Anderson  
Clare Blanchard  
Delphie Fredlund  
Marie McIntyre

#### *Research Associate*

Betty Bond

#### *Instructors*

Dorothy Downey  
Marilyn Gladitsch  
Mary C. Simons  
Justine J. Speer

#### *Lecturer*

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

### **HEALTH EDUCATION**

#### *Professor*

Ruth E. Groust

#### *Assistant Professor*

Norman Craig

#### *Lecturer*

Alloys F. Branton, Jr.  
Marie E. Ford  
Helen Starr

### **PERSONAL HEALTH**

#### *Professor*

Stewart C. Thomson

Donald W. Cowan

#### *Assistant Professor*

Murray B. Bates  
Phillip D. Kernan

### **BIOSTATISTICS**

#### *Professor*

Jacob E. Bearman  
Joseph Berkson  
Richard B. McHugh

#### *Associate Professor*

Byron W. Brown  
Eugene A. Johnson  
Marian W. Thornton  
Constance van Eeden

#### *Assistant Professor*

James R. Boen  
Robert Evans

#### *Instructor*

Franklin W. Briese  
Ruth B. Loewenson

#### *Research Associate*

Alan Treloar

#### *Lecturer*

Robert Hiller

### **HOSPITAL ADMINISTRATION**

#### *Professor*

James A. Hamilton  
James W. Stephan

#### *Associate Professor*

E. Gartly Jaco

#### *Assistant Professor*

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

#### *Instructor*

David V. Damberg  
Kenneth Kelley  
Robert J. Laur

#### *Research Fellow*

Roy H. Holmberg

#### *Lecturer*

Donald Dunn  
Charles Johnson  
Helen L. Knudsen  
Fred A. McNamara  
Telmer O. Peterson  
Raymond K. Swanson  
John Sweetland, Jr.

#### *Clinical Preceptor*

Sr. Mary Ashton  
Bright Dornblaser  
Marie J. Doud  
Richard K. Fox  
Frank S. Groner  
Alexander Harmon  
Kenneth J. Holmquist  
Lloyd L. Hughes  
Merton E. Knisely  
Carl C. Lamley  
Matthew McNulty  
Harold Mickey  
Robert L. Millar  
Russell H. Miller  
Robert A. Molgren  
Wade Mountz  
Russell A. Nelson  
Stanley R. Nelson  
David E. Olsson  
Carl N. Platou  
Boone Powell  
Jack W. Rivall  
Roger Starn  
Richard Trenkner  
William N. Wallace  
Russell Williams  
Paul David Youngdahl

### **LABORATORY OF PHYSIOLOGICAL HYGIENE**

#### *Professor*

Ancel Keys  
Joseph T. Anderson  
Francisco Grande  
Ernst Simonson  
Henry L. Taylor

#### *Associate Professor*

Henry W. Blackburn, Jr.

#### *Research Associate*

E. Stanton Fetcher  
Ernest Klepetar  
R. Willis Parlin  
Harry Sperling  
Charles Baker

#### *Research Fellow*

G. V. A. Pantulu  
Hironori Toshima  
Cesar L. Vasquez  
Marjorie L. Schwieger

#### *Instructor*

Robert G. Alteveer

## THE MEDICAL BULLETIN

### RADIOLOGY

Harold O. Peterson  
 Professor & Head  
*Emeritus Professor & Director*  
 Leo G. Rigler

#### **DIVISION OF ROENTGEN DIAGNOSIS**

*Clinical Professor*  
 J. Richards Aurelius  
 Samuel B. Feinberg  
 Oscar Lipschultz  
*Associate Professor*  
 Kurt Amplatz  
 Joseph Jorgens  
*Clinical Associate Professor*  
 Daniel L. Fink  
 John P. Medelman  
*Assistant Professor*  
 Eugene Gedgaudas  
 Carroll N. Hess  
 Leonard O. Langer  
 John A. Tobin  
 Justin J. Wolfson  
*Clinical Assistant Professor*  
 O. J. Baggenstoss  
 Chauncey N. Borman  
 Lewis S. Carey  
 Sewell Gordon  
 Cyrus O. Hansen  
 Malcolm B. Hanson  
 Donald H. Peterson

#### *Instructor*

Charles A. Hewel  
 Hans Kuisik  
 Shih H. Tsai

#### *Clinical Instructor*

Eugene Ahern  
 Heino Alari  
 Manouchehr Azad  
 Stanford H. Calin  
 John B. Coleman  
 H. H. Eelkema  
 Robert R. Foley  
 Charles W. Frye  
 Milton R. Gilchrist  
 Marvin E. Goldberg  
 Gerald A. Gretsche  
 Barnard Hall  
 Harlan Hawkinson  
 J. J. Hopperstad  
 Richard S. Johnson  
 Thomas E. Johnson  
 Robert E. Kasper  
 Warren L. Kump  
 Andrew R. Lillie  
 Thomas B. Merner  
 Harry Mixer  
 Leo Nash  
 Ames Naslund

Paul C. Olfelt  
 Arnold O. Rholl  
 Norman F. Stone  
 Richard C. Tucker  
 Stanley C. VonDrashek  
 William A. Wilcox  
 Hugh J. Williams

#### *Medical Fellow Specialist*

Stephen A. Kieffer  
 Charles B. Lundquist  
 John O. F. Roehm, Jr.

#### *Medical Fellow*

Paul Arthur Baumann  
 Walter J. Birnbaum  
 William J. Boardman  
 Robert D. Bugby  
 Glen C. Cramer  
 Donald D. Dahlstrom  
 Sheldon W. Damberg  
 Larry P. Elliott  
 James E. Finstad  
 Joseph M. Gilson  
 Lawrence H. A. Gold  
 Donald C. Hauser  
 John M. Hendrickson  
 John A. Hodak  
 John C. Kelly  
 William N. Kinney  
 H. David Knudsen  
 Ronald L. LaBelle  
 Stefan D. Laxdal  
 James D. MacGibbon  
 Donald G. Marsh  
 Charles F. Martin, Jr.  
 James McDougall  
 Duane G. Monson  
 David L. Moody  
 Donald R. Mueller  
 J. Mylrea Murray  
 James Nakamura  
 Mario Pliego  
 Richard J. Soderberg  
 Edward V. Staab  
 Gerald T. Telander  
 Vernon A. Vix  
 H. Charles Walker  
 Martin G. Weisberg  
 Luther O. Wigdahl

#### **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

#### *Clinical Assistant Professor*

Solveig M. Bergh  
 Elmer Paulson  
 Arnolds Veinbergs

#### *Research Associate*

Robert Salmon

### SURGERY

#### **DIVISION OF GENERAL SURGERY**

Owen H. Wangensteen  
 Distinguished Service  
 Professor & Chief

#### *Professor*

Joe Bradley Aust  
 Claude R. Hitchcock  
 William D. Kelly  
 C. Walton Lillehei  
 Richard L. Varco

#### *Clinical Professor Emeritus*

James A. Johnson  
 Thomas J. Kinsella  
 Stanley R. Maxeiner, Sr.  
 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*

Edward W. Humphrey  
 Richard C. Lillehei  
 John F. Perry, Jr.  
 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 MacKinnon  
 Maynard C. Nelson  
 Frederick M. Owens, Jr.  
 Carl O. Rice  
 Robert Utendorfer

#### *Clinical Associate Professor Emeritus*

William A. Hanson  
 Victor P. Hauser  
 Martin N. Nordland  
 Edward A. Regnier

THE MEDICAL BULLETIN

*Assistant Professor*

Karel B. Absolon  
Eugene F. Bernstein  
Aldo R. Castañeda  
Henry Gans  
Victor A. Gilbertsen  
Bernard Goott  
Theodor Grage  
Ward O. Griffen, Jr.  
Arnold Leonard  
Harlan 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  
Joseph J. Garamella  
David Gavisser  
John K. Grotting  
William F. Hartfiel  
Laurence D. Hilger  
Samuel Hunter  
Esten O. Lindseth  
Stanley R. Maxeiner  
Robert F. McGandy  
Daniel J. Moos  
Nathan C. Plimpton  
Frank Quattlebaum  
Walter R. Schmidt  
William R. Scott  
Abbott Skinner  
Vernon D. Smith  
Bernard J. Spencer  
Jacob H. Strickler  
Lyle A. Tongen  
Earl G. Yonehiro

*Instructor*

John Haglin  
John Lunseth  
Theodore A. Peterson  
David E. Raab  
Neil M. Trotman

*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  
Harrison Farley  
Robert S. Flom  
Leroy J. Fox  
Jerome T. Grismer  
Donald C. Lamb  
Lawrence M. Larson  
Louis C. Lick  
John H. Linner

Walter L. Lynn  
Felix A. McParland  
Berton D. Mitchell  
Aaron A. Papermaster  
John C. Parrott  
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 & Director

*Clinical Professor*  
Wallace P. Ritchie

*Clinical Associate Professor*  
Harold F. Buchstein

*Assistant Professor*  
S. N. Chou  
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  
Clinical Professor &  
Director

*Clinical Professor*  
Harry B. Hall  
Malvin J. Nydahl

*Professor Emeritus*  
Wallace H. Cole

*Clinical Professor Emeritus*  
Edward T. Evans

*Clinical Associate  
Professor Emeritus*  
Carl C. Chatterton

*Clinical Associate Professor*  
Walter Indeck

Richard H. Jones  
Harvey O'Phelan

*Clinical Assistant Professor*

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

*Instructor*

William Kane  
Robert F. Premer

*Clinical Instructor*

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

**DIVISION OF  
PROCTOLOGY**

William C. Bernstein  
Clinical Professor &  
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 & Director

*Clinical Professor Emeritus*  
Frederick Foley  
T. H. Sweetser

## THE MEDICAL BULLETIN

### *Associate Professor*

Colin Markland  
George T. Mellinger

### *Clinical Associate Professor*

Samuel S. Beirstein  
Baxter A. Smith

### *Clinical Assistant 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*

John Pyrris

### *Clinical Instructor*

Clyde Blackard  
Robert A. Flynn  
George L. Garske  
Robert W. Geist  
Paul R. Hartig  
Gerald McEllistrem  
Harold A. Reif  
Ragnar T. Soderlind  
Gordon W. Strom  
Theodore H. Sweetser, Sr.

### MEDICAL FELLOWS IN SURGERY

#### **University Hospitals**

##### *General Surgery*

Manucher Atai  
Robert Belin  
Aydin Bilgutay  
Jack Bloch  
Raymond Bonnabeau  
Henry Buchwald  
Scott Clark  
John Delaney  
Ronald Dietzman  
Raymond Doberneck  
Richard Edlich  
James Engle  
Zvi Eyal  
Randolph Ferlic  
Ronald Fischer  
John Foker  
Paul Gannon  
Robert Gilsdorf  
Robert Goodale  
Claude Grondin  
Patrick Hagihara  
Francisco Hidalgo-Castro  
Robert Indeglia  
Suk-Kyung Koh  
Arnold Landé  
David Long  
Felix Lurgiader  
Gary Lyons  
Arthur Madsen

### William Manax

Louis Mantini  
Arthur McFee  
Martin McKneally  
Donald McQuarrie  
Frederick Merkel  
Ernesto Molina  
Charles Murray  
Demetre Nicoloff  
Ahamad Nakib  
Richard Orahoud  
Janice Pearl  
Edward Peter  
James Pierce  
Wallace Ritchie  
Waid Rogers  
Michael Shea  
Robert Simmons  
Henry Sosin  
Laurence Sterns  
Nelson Stone  
V. Subramanian  
Ushio Takahashi  
Tawfik Tamimi  
David Todd  
Luis Urdaneta  
Arnold Walder

### *Neurosurgery*

Donald Erickson  
Donlin Long  
Fernando Ruiz-Garcia  
Edward Seljeskog

### *Orthopedic Surgery*

Wilton Bunch  
Vincent Eilers  
James House  
Rudolph Klussen  
Dick Lavender  
William Neumann

### *Urology*

Sergio Bonilla  
Lawrence Hildebrand  
Gerald Koos  
Wendell Long

### **Ancker Hospital**

#### *General Surgery*

Jose Barata  
Roger Benjamin  
Robert Blanchard  
James Collinge  
Frederick Ewald  
Charles Hauser  
Philip Keizer  
James LaFave  
Rolf Larson  
Carl McKinley  
Ramon Mendiola  
Wilfredo Mijares  
Richard Siebert

### *Urology*

Nasser Javadpour

### Rouhollah Kadivar

Thomas Ochsner

### **Gillette State Hospital**

#### *Orthopedic Surgery*

Lowell Kleven  
James Valuska

### **Hennepin County General Hospital**

#### *General Surgery*

Robert Andersen  
Orn Arnar  
Daniel Baker  
Richard Baker  
James Bascom  
Patrick Beckham  
James Bitter  
Dennis Collis  
John Debenham  
Donald Foss  
Hovald K. Helseth  
Arthur McGuire  
Glen Nelson  
Rodney Nixon  
David Van Nostrand  
Ernest Ruiz  
Arnold Simso  
Roger Strand  
R. Duncan Sutherland  
Robert Telander

#### *Urology*

Philbin Tackoor

### **Minneapolis V.A. Hospital**

#### *General Surgery*

Stanley Antolak  
Martin Beard  
Everette Duthoy  
Kenneth Gerwin  
Herman Heupel  
Aivar Kalnins  
David Larson  
Judson Lloyd  
Martin Loeb  
Alexander McBride  
John McMahon  
Hugh Muzzal  
Frank Pilney  
Cecil Provence  
Albert Reid  
John Savaryn  
Sheldon Segal  
Laurence Winter  
Wilbur Zike

#### *Neurosurgery*

Michael Carey

#### *Orthopedic Surgery*

Roland Birkebak  
John Dittrich  
John Heisel  
Dwight Jaeger  
Lyle Johnson

THE MEDICAL BULLETIN

Thomas Koelz  
Rodney Peterson  
Ronald Rudy  
Peter Teal  
John Wilson

*Proctology*  
Alton Olson

*Urology*  
David Dunlap  
Orland Eliason  
Allan Hartzell  
John Hoskins  
Rodger Lundblad  
John Ochsner  
Floyd Overby

**Mt. Sinai Hospital**

*General Surgery*  
Costas Assimacopoulos  
Emmanuel Balcos  
Robert Campaigne  
Joao Dovale  
Teodoro Elumba  
Necito Montaneil  
Robert Wengler

UNIVERSITY  
HEALTH SERVICE

Donald W. Cowan  
Director  
Phillip D. Kernan  
Assistant Director  
Special Services  
Kenneth P. Malvey  
Assistant Director  
General Medical Service  
Ruth E. Boynton  
Director Emeritus

*Full-Time Physicians*  
Wallace R. Anderson  
Edward J. Bardon  
Murray Bates  
Elaine M. Benthack  
Charles E. Davis  
Edward M. Drissen  
Joyce L. Funke  
Helen L. Haberer  
Robert G. Hincley  
Philip W. Hursh  
H. Douglas Lamb  
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*  
George E. Byers, Jr.  
Helen P. Dahl  
Richard B. Ellingson  
Charles H. Hale, Jr.  
Rollin M. Hansen  
Mildred S. Hanson  
George Hottinger  
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 (1964-1965)**

*Medicine*  
Robert J. Bache  
Harvard University  
George A. Falk  
Harvard University  
Alan D. Forker  
Kansas University  
Henry M. Hawkins, Jr.  
University of Arkansas  
Stephen B. Hulley  
Harvard University  
John C. Mueller  
Harvard University  
Dennis S. O'Leary  
Cornell University  
Donald W. Oines  
University of Minnesota  
George A. Sarosi  
Harvard University  
Louis H. Weiland  
Marquette University  
John P. Whitecar, Jr.  
Jefferson Medical College

*Pediatrics*  
Edward B. Blau  
St. Louis University

Ronald S. Bloom  
Washington University  
John H. Dossett  
University of Alabama  
Burton A. Dudding, II  
Cornell University  
John R. Hoyer  
Harvard University  
Arthur S. Levine  
Chicago Medical School  
Robert H. McLean  
University of Rochester  
Bernard L. Mirkin  
University of Minnesota  
Thomas C. Shope  
Cornell University  
Richard S. Wittner  
University of Alabama  
Michael L. Wolk  
Duke University

*Surgery*  
Willard E. Andrews  
Columbia University  
John C. Aust  
University of Western  
Ontario  
Robert F. Beller  
Georgetown University  
Robert N. Clark  
University of  
Pennsylvania  
Claude V. DeShazo, Jr.  
University of Mississippi  
James E. DeMeules  
University of Minnesota  
Patrick F. Golden  
Marquette University  
Jay M. Hoppenstein  
Southwestern  
Medical School  
Stephen A. Kramer  
Tufts University  
Donald Minervini  
New York  
Medical College  
Allan W. Moberg  
University of Minnesota  
Michael B. Pliam  
University of Minnesota  
Anthony Rizzo  
New York  
Medical College  
Kernit L. Roux, Jr.  
Tulane University  
John G. Stone  
University of New York  
Downstate  
Jorge Cueto  
Escuela Medico Militar



**MEDALISTS**—Medals of the National Tuberculosis Association were awarded to Drs. Carroll E. Palmer (Med. '27) and J. A. Myers (Med. '20) at NTA's 60th anniversary meeting in 1964. Dr. Palmer (left), director of tuberculosis research with U.S.P.H.S., was honored for distinguished service to respiratory disease. Dr. Myers received the Will Ross medal for contributions to tuberculosis control. He is professor emeritus of public health at the University of Minnesota. It was the first time that graduates of the same medical school were honored with NTA's annual citations.

◆ 1959

Young Song Kim is presently engaged in research in the Department of Surgery, V.A. Hospital, Madison, Wis. He completed surgery and thoracic residencies and is now conducting investigations on immunological aspects of lung tumors and lung transplantation problems under a clinical investigatorship with the Veterans Administration.

◆ 1961

Robert L. Zemke was appointed college physician at St.

Olaf College, Northfield, Minn., from which he received his undergraduate college degree in 1957.

◆ 1963

**John Vener** has begun practice at the Arlington Clinic, Arlington, Minn.

New residents at the Mayo Foundation, Rochester, Minn., starting July 1, 1964 included Lloyd T. Wood (Med. '54), physical medicine & rehabilitation; Rodger K. Nelson (Med. '59), pediatrics; Jerry L. Schottler (Med. '60), colon and rectal surgery; Roderick P. Hood (Med. '61), internal medicine; Michael L. Tuck (Med. '63), internal medicine; and Abe L. Fox, Jr. (Med. '63), pathology.

## *Alumni Deaths*

◆ 1901

**Dr. Edward A. Eberlin**, Glenwood, Minn. Died July 26, 1964 after 63 years of medical practice. He was 86 years old.

◆ 1903

**Dr. Harry G. Irvine**, Minneapolis, Minn. Died August 24, 1964 at the age of 82. He was a practicing physician for more than 50 years, and had won national reputation for his pioneering work in the eradication of venereal diseases.

His career included 44 years on the clinical faculty of the University of Minnesota Medical School, and many years of work with the Boy Scouts of America. He retired from practice four years ago. Survivors include his widow, Mrs. Helen Irvine, 2421 Russell Ave. S., Minneapolis; a daughter; and a son.

◆ 1905

**Dr. Henry W. Goehrs**, St. Cloud, Minn. Died May 15, 1964, aged 87, of heart disease. He was health officer for the city of St. Cloud for many years, and served on the staff of the St. Cloud Hospital.

◆ 1918

**Dr. Arthur Plankers**, Dubuque, Ia. Died August 10, 1964. He was 75 years old, and had practiced as a surgeon in Iowa for nearly 40 years.

◆ 1920

**Dr. Lawrence O. Doyle**, Minneapolis, Minn. Died August 11,



1964. He was 71 years old and was former chief of staff at St. Mary's Hospital, Minneapolis. He practiced 42 years, and for many years was team physician for the University of Minnesota football squads. He was a center on the University football teams of 1917 and 1918, and later taught at the Medical School.

Among his seven children is Dr. Owen P. Doyle (Med. '60), San Francisco, Calif.

◆ 1923

**Dr. Ralph E. Moyer**, Asheville, N.C. Died March 22, 1964, aged 68, of heart disease and chronic emphysema. Most of his medical career was spent with the U.S. Veterans Administration.

**Dr. Warren E. Wilson**, Northfield, Minn. Died February 27, 1964, of cerebral hemorrhage at age of 67. Death occurred in Honolulu, Hawaii.

◆ 1928

**Dr. Harry A. Johnson**, Edina, Minn. Died August 23, 1964 at the age of 62. He practiced for 36 years in Minneapolis and served on the staffs of St. Barnabas and St. Andrew hospitals. A member of Alpha Omega Alpha, he served as a commander in the U.S. Navy during World War II, and is survived by his widow, Mrs. Esther Johnson, 4382 Browndale Ave., Edina, Minn.; a son, Dr. Harry A. Johnson, Jr., Chicago, Ill., and three daughters.

Friends have established the Harry A. Johnson Memorial Fund to provide an annual scholarship in his name at the University of Minnesota Medical School. Contributions may be directed to the *Harry A. Johnson Memorial Endowment Fund, Minnesota Medical Foundation, Box 193, University Hospitals, Minneapolis, Minn. 55455.*

◆ 1930

**Dr. Edwin C. Hanson**, Belleview, Fla. Died April 3, 1964, age 67, of congestive heart failure. He was a veteran of World War I.

◆ 1934

**Dr. Wale S. Wright**, St. Paul, Minn. Died September 16, 1964. He was 55 years old, and had retired a year ago because of illness. Dr. Wright practiced 30 years in Minneapolis, and was on the staff of Swedish Hospital.

◆ 1938

**Dr. Betty Fraser Selverstone**, Brookline, Mass. Died August 22, 1964 of a heart attack at the age of 50 while visiting in Minnesota. She was the daughter of Everett Fraser, dean emeritus of the University's Law School, and sister of Rep. Donald Fraser, Minnesota congressman.

◆ 1939

**Dr. Allan J. Hill, Jr.**, Portola Valley, Calif. Died July 25, 1964 at the age of 49. A pediatrician, Dr. Hill had taught at Tulane University where he was associated with Dr. Ralph Platou. After leaving Tulane Medical School, he went to the University of Oregon where he became Professor and Chairman of the Department of Pediatrics.

## Memorial Gifts

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

**Mrs. George Darrell**  
St. Paul, Minnesota

**Mrs. Georgia F. Bond**  
Minneapolis, Minnesota

**Robert Adler**  
St. Paul, Minnesota

**Donald Wesslund**  
St. Paul, Minnesota

**Prof. Henry C. T. Eggers**  
Minneapolis, Minnesota

**Mrs. Susie B. Momsen**  
St. Paul, Minnesota

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 acknowledges 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

### 1964

September 21 - 23 . . . . .	Pediatrics <sup>4</sup>
October 8 - 10 . . . . .	Dermatology
October 26 - 30 . . . . .	Radiology
November 11 - 13 . . . . .	Ophthalmology (Refraction)
November 12 - 14 . . . . .	Orthopedic Surgery
November 19 - 21 . . . . .	Cardiovascular Diseases

### 1965

January 4 - 8 . . . . .	Electrocardiography (Introductory)
January 18 - 20 . . . . .	Psychiatry
February 1 - 6 . . . . .	Neurology
February 8 - 12 . . . . .	Proctology
March 16 - 19 . . . . .	Internal Medicine
April 2 - 3 . . . . .	Trauma
April 22 - 24 . . . . .	Obstetrics
May 3 - 5 . . . . .	Ophthalmology
May 20 - 22 . . . . .	Surgery
May 26 - 28 . . . . .	Otolaryngology
June 2 - 4 . . . . .	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

## legacies and bequests

Legacies and bequests to the Minnesota Medical Foundation are an important source of long range financial strength for medical education and research at the University of Minnesota Medical School.

Alumni and friends who wish to name the Foundation as a beneficiary in their wills may use the following form:

*"I give to the Minnesota Medical Foundation, established in 1939 and incorporated by the Legislature of the State of Minnesota, and having its principal office at the University of Minnesota, Minneapolis, Minn., the sum of \_\_\_\_\_ dollars, to be applied to the benefit and use of the Foundation in such manner as may be directed by its Board of Trustees, in order to increase its efficiency and general usefulness."*

Funds may be bequeathed for specific purposes within the Foundation. In such case, it is a wise provision for the future to add a statement that, in case a time comes when funds are no longer needed for this specific purpose, the Foundation's trustees may transfer the sum to support its other objectives.

Specific information can be obtained by contacting the Executive Director, Minnesota Medical Foundation, 1342 Mayo Bldg., University of Minnesota, Minneapolis, Minn. 55455.