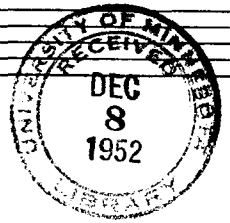


M



Bulletin of the
University of Minnesota Hospitals
and
Minnesota Medical Foundation



Masked Schizophrenia

BULLETIN OF THE
UNIVERSITY OF MINNESOTA HOSPITALS
and
MINNESOTA MEDICAL FOUNDATION

Volume XXIV

Friday, December 5, 1952

Number 9

INDEX

	<u>PAGE</u>
I. MASKED SCHIZOPHRENIA	211 - 217
FRANK KIESLER, M.D., Assistant Professor, Department of Psychiatry and Neurology University of Minnesota Medical School	
II. MEDICAL SCHOOL NEWS	218
III. WEEKLY CALENDAR OF EVENTS	219 - 224

Published weekly during the school year, October to June, inclusive

Editor

Robert B. Howard, M.D.

Associate Editors

Wallace D. Armstrong, M. D.
Erling W. Platou, M. D.
Howard L. Horns, M. D.

Craig Borden, M. D.
Richard L. Varco, M. D.
W. Lane Williams, M. D.

James L. Morrill, President, University of Minnesota
Harold S. Diehl, Dean, The Medical School, University of Minnesota
Ray M. Amberg, Director, University of Minnesota Hospitals
O. H. Wangenstein, President, The Minnesota Medical Foundation
Wesley W. Spink, Secretary-Treasurer, The Minnesota Medical Foundation

The Bulletin is sent to members of the Minnesota Medical Foundation.
Annual membership fee - \$10.00.

Address communications to: Staff Bulletin, 3330 Powell Hall, University
of Minnesota, Minneapolis 14, Minn.

I. MASKED SCHIZOPHRENIA

Frank Kiesler, M. D.

It could be said that everyone is potentially schizophrenic; and that the distance any person is at any moment from personality disintegration is a function of his integrative capacity at that moment. Integrative capacity can be simply defined as the ability of the individual to organize his behavior for effective reality-adjusted action. The less capable the individual is of pulling himself together for effective action, the nearer he is to schizophrenic fragmentation of personality functions. Some persons, because of failure to develop a personality structure with integrative reserves in depth, live their lives only a jump or two ahead of schizophrenic decompensation. As long as the situations in which they live permit the use of and support what integrative functions they have, they do not show overt signs of schizophrenia.

Recently, Medicine and Psychiatry saw a 56 year old woman who had returned to the University Hospitals for the fourth time. She was first seen in 1928 when she was delivered of a still-born child. Her next visits were in 1938 and 1939. Her complaints were "weakness, tiredness, headaches, and various other body pains." The medical clerk wrote, "Ancient complaints--going back over 30 years." Diagnoses of psychoneurosis and bromide dermatitis were made, and for the next year she was followed by what was then known as "N and M" Clinic and Dermatology. Because during that year she remained entirely unchanged, she was finally admitted to the hospital for more intensive psychiatric observation. There, for the next 3 weeks, she continued to present the same picture of hypochondriacal semi-invalidism. Because she was so handicapped by her neurosis, the possibility of state hospital care was considered. Following discharge, she was seen once, but appeared no different. In 1945 she returned again with the same complaints. The examiner described the neurotic picture and then wrote parenthetically, "(Could this be

psychosis?)". Again her ability to get along outside the hospital was questioned, but it was felt that her family should decide whether or not she could continue at home. Nothing more was heard from her until this fall. In Medical Clinic she presented the same complaints as she had in 1938 and 1945. In addition, however, she told of having had a cold for which her physician had given her pills. She was convinced that the pills had caused her to be "filled with passion and plagued with a constant burning desire for sexual intercourse." At the same time she described having been "changed" so that she had no more worries, that she was now completely "in the hands of God," and that it was her mission to make us understand how wonderful it was to be for the first time free! Her discourse was scattered and contradictory, and it was obvious that what she was saying and feeling was not being tested adequately against reality. Medical Clinic made a tentative diagnosis of schizophrenia which was confirmed in Psychiatry Clinic. In the course of 3 contacts with her she was intermittently in and out of focus with reality. When in focus, her old neurotic pattern was in operation and she was the tired, weak, pain-wracked, longsuffering person demanding to be given rest and tenderly nursed. It was as though she alternately pulled her old neurotic behavior taut across the face of her disorganization, or let her neurosis flap in the breeze with her schizophrenic process * Clearly showing.

Two questions immediately arise: How had this woman succeeded in maintaining a protective, reasonably integrative cover over her latent schizophrenia this long; and, what was responsible for the

* It must be kept in mind that schizophrenic behavior consists not only of fragmentation products, but also includes attempts at reintegration--reconstitution of functioning unity. Thus, when a schizophrenic person says, "I am a person with a mission," or "I am Napoleon," it is an attempt to establish some unitary identity, and better than having no identity at all.

failure of her integrative apparatus and the ultimate unmasking of her schizophrenia? Both questions can be answered by looking at her life history. She could not remember a day in her life that she felt really well and adequate. As a child she suffered from lassitude and headaches. As she grew older, she did not keep up with other children in play activities. She did well in school, but as time went on, her symptoms forced her to be absent more and more until she finally dropped out entirely while in the eighth grade. Her activities were fairly well restricted to the home where she was regarded as sickly since birth. The secondary gains of her condition took the form of her being able to continue in the position of the family invalid, the perpetual child. During adolescence and later she intermittently did housework for neighbors. At the age of 26 she was married to an old family friend, 28 years her senior. There were three pregnancies and two living children, both of whom are now grown and married. Throughout her marriage she continued to take the semi-invalid role, being essentially her husband's eldest and most privileged child. When periodically she was overwhelmed by her symptoms, she took to bed where she was taken care of by her husband. She complained that her children never understood her and came largely to ignore her.

In late August of this year her husband died. With her husband no longer available to support her neurosis, she turned in several directions in attempts to reconstitute the old neurosis-sustaining situation so that she could continue in the only reality-adjusting role she had. Rebuffed by her children who would have nothing to do with her on those terms, and finding her doctor unavailable for the type of relationship she wanted, she answered the magazine advertisement of a faith healer. Since her religion had always been a source of strength, she secluded herself with her new religious literature and turned completely to God in a desperate attempt to establish with Him the sustaining relationship she needed. However, because her turning to God came in the setting of a rapidly failing neurosis, the rela-

tionship took a psychotic form in which certain aspects of reality were simply denied. With her neurosis no longer helping her keep organized to deal effectively with internal pressures by lidding them over or disguising them, sexual * feelings which she did not know how to handle alone (without her neurosis and her husband) flooded in upon her and threatened to disrupt her integration even more. She could save herself only by denying responsibility for them and projecting responsibility for their disturbing presence onto the doctor and his pills in a paranoid fashion. She came to the University Clinics expressly asking that something be done to counteract the effect of the pills. What she really wanted was help in reconstituting her former neurotic control of internal pressures through establishing with us the old neurosis-supporting relationship. She wanted us to help put the neurotic mask back on.

In a paper presented at the 107th annual meeting of the American Psychiatric Association, May 9, 1951, Victor W. Eisenstein¹ wrote of a "class of patients who are descriptively neurotic, but dynamically psychotic." This group of patients was also described in an article by Hoch and Polatin² entitled "Pseudo-neurotic Forms of Schizophrenia." Sensing the underlying condition, doctors have often applied the terms schizoid personality, latent schizophrenia, incipient psychosis, or ambulatory schizophrenia to these patients. Perhaps more frequently the surface phenomena have occupied the focus of clinical attention and have led to diagnostic labeling such as functional, psychosomatic or psychoneurotic. All varieties of neurotic symptomatology may be seen. These patients may show anxiety, hypochondriacal preoccupation with physical manifestations, vegetative disturbances (cardio-

* Although she described these as sexual feelings in the adult sense, further exploration suggested they were more properly tremendous surges of longing for more primitive physical relational contact (in the child wanting to be held close by mother sense).

vascular, gastro-intestinal, etc.), hysterical sensory or motor phenomena, obsessive ruminations, compulsive activity, "behavior problems," or mixtures of any of these. They may live what appear to be fairly ordinary lives in the sense of going to school, working, having social and cultural interests, marrying, and producing children; but through the whole of their lives, and providing the matrix for current problems bringing them to the doctor, runs an undercurrent of incompleteness. In Eisenstein's words¹, they "suffer from deficient emotional contact and from a seriously impaired sense of reality. Clinically, they complain of varying degrees of boredom, depression or free anxiety and present abortive paranoid features, transient feelings of reference or depersonalization--often with acute exacerbations--that are dynamically rooted in serious psychopathology." They feel unsettled, unsatisfied, often lonely and not a part of anything. They are unsure of themselves and the people around them, and at times the only solid meaningful realities are the neurotic symptoms and the responses of others to the symptoms. They are severely handicapped in making relational contact in their own right, and largely do so through the medium of the neurosis which involves in some degree every aspect of personality activity. If the doctor succeeds in getting through the neurotic cover, he finds himself trying to deal with an amorphous, shifting structure that he can not readily contact in a workable fashion. Without the neurosis, these people are infants helplessly caught in the crossfire of stimuli from within and stimuli from without. They lack a sufficiently developed personality apparatus to accomplish the organizing job necessary for consistently making effective responses.

Another patient seen by Medicine and Psychiatry last spring further illustrates the point. She was a 37 year old housewife and mother of an 11 year old daughter. Her husband was a travelling salesman, 27 years her senior. When she was 2 years of age, her mother ran away from the patient's father, dumped her at the home of her maternal grandparents in a

distant part of the country, and disappeared. She lived with her grandparents until she was 11. Her mother, who had by that time remarried, then took her, but paid little attention to her. Later the mother's marriage broke up and shortly the patient found herself on her own, making her own way as best she could. She finished high school, beauty school, and secretarial school, and worked as a beauty operator before her marriage at age 20. Insofar as could be determined, there were no physical disturbances of note until 15 years ago when she developed a duodenal ulcer. The existence of the ulcer was repeatedly confirmed by x-ray studies. Medical management resulted in periodic temporary remissions when she cooperated. The patient's neurosis primarily took the form of a character disturbance. She had always been a self-centered, narcissistic person who never had enough satisfactions. She never felt comfortable unless she was meeting reality head-on, and people were actively reacting to her behavior. It seemed to make little difference whether the reactions were positive or negative, although she seemed prone to stir up the latter, possibly because they were easier to elicit and more definite. She married a rigid, suspicious, hostile, punitive man who was hypersensitive to her provocative behavior. When he was away on business trips, she was bored and restless and had affairs with other men. He usually found out about them and reacted with verbal violence. He repeatedly threatened her with divorce.

Basically, this woman had a deep fear of being nothing--of not being a real person to whom others would react spontaneously. All her life she had been trying to reassure herself that she was a real person by forcing others to react to her strongly enough for her to feel it. Vigorous contact was necessary to make up for her deficiency of contact capacity. Her neurosis took the form of attempting to act out the solution for her earliest infantile problems with her unresponsive mother. Inside the shell of her neurotic behavior she had not developed sufficient personality organization to have concrete identity as a per-

son in her own right.

She was referred to the University Clinics after she had been unable to get along with four successive doctors who had tried to treat her ulcer. The resident who saw her accurately sensed the core problem, but only in its immediate context. He recognized her need for positive contact, for self-esteem, but thought of it in adult terms -- as a marital problem. After the initial examination session, he had her return for a "long interview," during which she poured out her great longings for love and affection and her tremendous feelings of frustration (apparently talking about her relationship with her husband). He made another appointment for the following week to continue what looked to be a simple catharsis (not realizing that he had a beginning prolapse of the whole emotional gut on his hands). Two nights later she appeared in W212 -- near panic, extremely tense and aggressive, complaining of paroxysms of right upper quadrant pain. Examination cleared her abdomen, but it took intravenous sodium amytal to quiet her down. After sleeping for an hour in W212, she went home with a supply of phenobarbital and nembutal. Two days later she returned to W212 in the morning, frantically demanding attention and complaining of feeling faint from lack of food. She was seen by the resident who found her in shaky contact with reality and in such amorphous condition that he immediately called for psychiatric consultation. She went on to become frankly delusional and showed an overt schizophrenic reaction. Subsequently, after a week of hospitalization with only supportive help, including an ulcer regime, she reconstituted her neurotic integration and schizophrenic behavior disappeared.

Both of the foregoing cases were "proved" in the sense that the underlying schizophrenic structure was exposed through failure of the covering neurotic integration. The two patients following have never shown overt schizophrenic behavior.

The first, a 29 year old, single

woman was referred by her physician at her request in October because of "nervousness, irritability, tiredness, facial twitchings, and psychic problems." The medical clerk wrote, "This young lady believes she has been nervous most of her life. For the past several years she has had frequent spells manifested by trembling, numbness in the hands, shortness of breath, tension, palpitation, and fear that her heart will stop. Lately she has awakened at night all numb on one side. She relates an incident about 10 years ago of numbness of the body from the waist up. She has had a nervous tic of blinking her eye since she was age 5. Most of her difficulties come on in tense situations, when confronted with people. Her problem is lack of poise and an 'inferiority complex.' She just has not been able to make friends and get along with people. She is apparently quite dependent upon her parents. The spells caused her to quit her stenography position one year ago and she has not worked since, living at home. She has had a limited heterosexual experience, occasionally going out on dates, but her 'inferiority complex' makes things difficult for her with men. She possibly has some paranoid feelings as she feels that some people talk ill about her." On system review, the clerk noted that she had had epigastric burning sensations last winter. X-rays showed no abnormalities. Bantnine gave prompt relief. In addition, she described menstrual irregularity and said she usually needed "shots" to get her periods started. Except for repeated tic-like blinking of the right eye, no abnormalities were demonstrated on physical examination. Eye and Gynecology pronounced her condition "functional."

On referral to Psychiatry she protested mildly, saying that no amount of talking was going to help her condition, that her trouble was with her eyes and glands. She felt she knew herself through reading books on neurotic conditions. She spoke further of herself as a person who had always wanted to be by herself. She found it hard to mix with people and felt that people did not take to her. She could not carry out the sug-

gestion made by the Mayo Clinic two years ago that she "go out among people more." She complained of being dissatisfied and unhappy with "being on the outside of everything," but in a relatively passive, affectless way. Clinically, she could not be said to have a depression, but there was a diffuse, free-floating, depressive tone in her behavior which was more apathetic than anything else. It was our impression that the picture we were seeking had been characteristic of her for most of her life, and that her neurotic organization was her main protection against schizophrenic loss of contact. Because she was thinking of moving to the city and getting a job, she was told that if she wanted to contact us after getting established, we would re-evaluate the possibility of providing help for her with her personal problems. Her neurosis should never be actively treated in the sense of trying to eliminate it. If we are able to offer anything, it will be therapy aimed at maintaining her capacity for relational contact.

The second, a 24 year old, single girl, was referred by a physician last April. She had seen him three times because of her nervousness. The medical clerk wrote, "Has been nervous for 5 years. First had trouble sleeping, was dieting, and thought food deficiency may have brought on nervousness. During day spends all of time worrying about whether she will be able to sleep. Has worried about having leukemia or cancer." (One sibling died of leukemia.) "Feels that people have been against her but now says she knows they aren't. Right now her chief concern is her job (tiring and nervousness on the job)." On system review she added that when tired she became nauseated, and that she was constipated much of the time. She sometimes awakened in the middle of the night in a near-panic state, sweating profusely. During periods of continued heightened nervousness her menstrual cycles tended to be two or three weeks longer than usual. She was described as a "very attractive, smartly dressed young woman" who, though outwardly composed and self-assured, was quite anxious and concerned about herself. Physical examination and

routine laboratory work produced no further evidence of abnormalities. EMR was 0. A diagnosis of anxiety neurosis was made.

On referral to Psychiatry she said that she had been worried about cancer when she came and was relieved to learn that she was physically all right. She told of having had constant feelings of inadequacy, uncertainty, tiredness, and general nervousness since graduation from high school. Later she said that she had had these feelings as long as she could remember and that she had always been sensitive, easily hurt, and often crushed by negative feelings of others toward her. She liked the farm because she liked nature and being alone. She used to brood a lot, but lately felt she must get away from that part of herself. She complained that there was never anyone to whom she could talk, that she had never been close enough to her mother to let her mother know how she felt, that she had not really known her father (he died when she was 16) and that her several high school girl friends were never close friends. In high school she had no dates, but went to parties and dances with her brothers. Later she dated many boys. Although she liked most of them, she saw none of them more than 2 or 3 times. She liked having them call several times for more dates, feeling it indicated that she was a likeable person, but still she had no desire to see them again. She spoke of dating as "kind of a game."

For about a year after high school she stayed at home on the farm with her mother just because she felt she should, since her older sisters had done so. She was bored and didn't know what to do with herself. For the next two and a half years she worked for an insurance company, liked it there, but really didn't care whether or not she was doing a good job. She quit, and after a summer working at Yellowstone Park, became a nurses' aide for a year at a large private hospital. The work was strenuous, she was always tired; so she again quit, went home for a month, and then returned to the city to work as a department store

clerk. She lived with an older sister and stated she was content to stay at home, knit, and listen to the radio.

Preliminary psychiatric impression was that she had never grown up enough to handle mature relationships, particularly with men, in a comfortable, sustained fashion. It was suggested that she was incapable of trying to function as a person in her own right without considerable anxiety. She seemed basically unsure of her own identity--who she really was and what her own capacities were in relation to others. Her unsureness did not seem to be essentially a problem in adult relationships, but an extension into the adult situation of unsureness probably arising from a deep level of the early maternal relationship so that she had never developed a solid sense of her own identity. She had only outwardly taken on the characteristics and identity of an adult person; inside she was still a confused, fumbling, frightened, frustrated, preverbal child. The problem of relating to men was largely a red-herring. It was a real problem, but a superimposed one covering the basic problem of relating at all.

The first doctor she saw in Psychiatry was one of our most competent junior students. He did an excellent job of exploring her problems with her, never pushing her to bring up material that he and she could not handle. In the three times he saw her before she was transferred to a psychiatric resident for definitive psychotherapy, he demonstrated a high degree of professional skill and maturity of judgment. Even then something came up that the patient could not handle and successfully maintain her initial position with the student. First of all, the student was a nice-looking young man who appreciated a nice-looking young woman. Second, he was an overtly friendly person who treated her in a most congenial and solicitous fashion, spontaneously exhibiting what is still called a "good bedside manner." It was too much for the patient. Her ability to relate as an adult woman was contained only in her outer shell and not solidly rooted in the depths of

her personality structure. Her identity as a woman was only superficially established so that she was more comfortable assuming it than testing it. Her reserves for relating to a man were shallow, and beneath the shell was a child. However, in meeting the problem of having to continue to relate to the student, she did not slough her adult shell and become a child. She preserved her identity as an adult through taking another nominally adult role. The anxiety generated by having to sustain a relationship with a man resulted in a worsening of her symptoms; so, with marked distress, she called him on the telephone to tell him how sick she was and to ask him for a prescription. Thus, in changing her role, she was also altering his. She was making herself less of a woman and more of a patient and him less of a man and more of a doctor. Now, this is a typical neurotic defensive maneuver, and in itself does not in any way suggest a closely underlying schizophrenic potentiality.* In this case, the student quickly recognized what was responsible for her change in behavior, and took the pressure off the patient by becoming entirely business-like (all doctor).

No attempt was made to interpret any of this to the patient for several reasons. Of greatest importance was the possibility that an interpretation might force her to try to use still another role, and we did not want to tamper with her adult shell in any way that could result in her using up all her integrative roles (exhausting her adult reserve). At the same time, the student would have been beyond his professional depth in attempting to proceed beyond the interpretation. Even if she had been already settled with a therapist who could actually have gone ahead with her, it was too early. Assessment of her capacities was more important than actively doing something with them at that stage.

These, then, are the "shell people."

* The fact that it occurred after the first interview is worthy of note, however.

Superficially integrated as adults, with neurotic defenses either actively maintaining integration or in reserve, they live an imitation of life. They do many of the things "real people" do, but without conviction, without solid satisfactions. They are incomplete. Their adult capacities are rooted in a shell superimposed upon and containing the relatively unorganized strivings of the eternal infant. That the containment of the infantile strivings can break down through loss of a sustaining environmental situation or through too vigorous therapeutic interference with the operation of the covering neurosis has been illustrated. When breakdown occurs, it can be likened to an evisceration. Once the evisceration has occurred, there is nothing to do but attempt to put it back and close the wound. If the process of evisceration has so disrupted the shell that it cannot be pulled and sewed back together again, it may be possible only to protect the evisceration and hope the shell will grow back around it again. State Hospitals are full of chronic personality eviscerations.

If the potential eviscerator can be recognized, it may be possible to avoid doing things that interfere with his ability to keep his shell intact and his schizophrenic potentialities contained. It will be recognized that his reality

functioning has to depend to a great extent upon his neurotic integrative capacities until his structure can be altered in the direction of improved integration in depth. It will be recognized that in many cases the structure cannot be altered, and that a holding operation is the only practical possibility. It will be recognized that, in those cases where structural alteration with improvement in capacity is possible, the treatment methods must be different from those used in treating a neurosis not having the ever-present danger of schizophrenic dissolution. There are no tricks involved in recognizing the "shell people." They can be identified by keeping their frequent existence in mind, through careful history-taking, and through the use of an educated sensitivity which enables the doctor to see the schizophrenic protoplasm beneath the neurotic mask.

References

1. Eisenstein, V. W.
Differential Psychotherapy of Borderline States.
Psychiatric Quarterly, July, 1951.
2. Hoch, Paul; and Polatin, P.
Psychoneurotic Forms of Schizophrenia.
Psychiatric Quarterly, April, 1949.

II. MEDICAL SCHOOL NEWS

Coming Events

- December 5 Journal-Lancet Lecture; "Some Studies on Experimental Diabetes,"
Dr. Wright J. Ingle, Senior Research Scientist, Research Division,
The Upjohn Company, Kalamazoo, Michigan; Owre Amphitheater;
8:00 p.m.
- December 15 Seminar on History of Medicine; "The Foundations of Twentieth Cen-
tury Surgery," Dr. Donald C. Balfour, Professor Emeritus, De-
partment of Surgery, Mayo Foundation and University of Minnesota
Medical School; Todd Amphitheater; 7:30 p.m.
- January 8 - 10 Continuation Course in Anesthesiology for General Physicians
- January 19 - 24 Continuation Course in Ophthalmology for Specialists
- January 26 - 31 Continuation Course in Pediatric Neurology for Pediatricians, Neu-
rologists, and General Physicians

* * *

Child Psychiatry Unit Opens

On October 6 the Child Psychiatry Service at the University Hospitals opened a new hospital unit for emotionally disturbed children. The present capacity will accommodate twelve patients, and when the building program of the Mayo Memorial is completed, the Unit will be expanded to 24 beds. While a very limited number of patients will be accepted for treatment and observation the primary function of the new unit is to be of as much service as possible by helping others define the basic difficulties encountered in disturbed children. It is anticipated that the average length of hospitalization will be about one month. All patients referred to Child Psychiatry are admitted to the clinics and hospitals in the same manner as any other patient.

The facility will operate as a part of the Department of Pediatrics, under the direction of Dr. Irvine McQuarrie. Dr. Reynold A. Jensen, Professor of Pediatrics and Psychiatry, is Medical Director. Associated with him are Dr. Jack Wallinga, Instructor in Pediatrics and Psychiatry; Wentworth Quast, Senior Clinical Psychologist, and Speech Clinician, Ellsworth Stenswick. Hospital services are under the direction of Ray M. Amberg, Director of the University of Minnesota Hospitals.

* * *

Faculty News

Colorado Springs, Colorado, was the site of the recent meeting of the Association of American Medical Colleges. Minnesotans attending this meeting included Dean Diehl and Doctors Howard Horns, Robert Howard, George Moore, Robert Good, and Fred-eric Kottke. Dr. George N. Aagaard, formerly Director of Continuation Medical Edu-cation at the University and now Dean of Southwestern Medical School in Dallas, Texas, was among those present. He asked to be remembered to his many friends and colleagues in Minnesota.

Dr. Claude R. Hitchcock, Director, Cancer Detection Center, attended the Tis-sue Transplantation Conference of the Morphology and Genetics Section of the National Institute of Health on October 7 and 8 in New York. He spoke on "The General Prob-lems of Tissue Transplantation."

* * *

III.

UNIVERSITY OF MINNESOTA MEDICAL SCHOOL
WEEKLY CALENDAR OF EVENTS

Physicians Welcome

December 8 - 13, 1952

Monday, December 8

Medical School and University Hospitals

- 9:00 - 9:50 Roentgenology-Medicine Conference; L. G. Rigler, C. J. Watson and Staff; Todd Amphitheater, U. H.
- 9:00 - 10:50 Obstetrics and Gynecology Conference; J. L. McKelvey and Staff; W-612, U. H.
- 10:00 - 12:00 Neurology Rounds; A. B. Baker and Staff; Station 50, U. H.
- 11:30 - Tumor Conference; Doctors Kremen, Moore, and Stenstrom; Todd Amphitheater, U. H.
- 11:30 - 12:30 Physical Medicine Seminar; Neurological Aspects of Osteoarthritis of the Cervical Spine; Russell Blanchard; Heart Hospital Auditorium.
- 12:15 - Obstetrics and Gynecology Journal Club; Staff Dining Room, U. H.
- 12:30 - 1:30 Physiology Seminar; "The Objectives of the American Physiological Society's Survey of Physiology"; Maurice B. Visscher; 214 Millard Hall.
- 1:30 - 2:30 Pediatric-Neurological Rounds; R. Jensen, A. B. Baker and Staff; U. H.
- 4:00 - 5:30 Seminar on Fluid and Electrolyte Balance; Gerald T. Evans; Todd Amphitheater, U. H.
- 4:00 - 5:00 Pediatric Seminar; Fluid and Electrolyte Therapy in Burns; Elizabeth Drake; Sixth Floor West, U. H.
- 4:30 - ECG Reading Conference; James C. Dahl, et al; Staff Room, Heart Hospital
- 4:30 - Public Health Seminar; 15 Owre Hall.
- 4:30 - 6:00 Physiology 114A and Cancer Biology 140 -- Research Conference on Cancer, Nutrition, and Endocrinology; Drs. Visscher, Bittner, and King; "a-Tocopherol Effects"; R. McClintock; 129 Millard Hall.
- 5:00 - 6:00 Urology-Roentgenology Conference; C. D. Creevy, O. J. Baggenstoss, and Staff; Eustis Amphitheater.

Minneapolis General Hospital

- 9:30 - Pediatric Rounds; Eldon Berglund; Newborn Nursery, Station C.
- 10:30 - 12:00 Tuberculosis and Contagion Rounds; Thomas Lowry; Station M.
- 11:00 - Pediatric Rounds; Erling Platou; Station K.
- 12:30 - Surgery Grand Rounds; Dr. Zierold; Sta. A.
- 1:00 - X-ray Conference; Classroom, 4th Floor.
- 2:00 - Pediatric Rounds; Robert A. Ulstrom; Stations I and J.

Monday, December 8 (Cont.)

Ancker Hospital

- 8:30 - 10:00 Chest Disease Conference
- 1:00 - 2:00 Medical Grand Rounds.

Veterans Administration Hospital

- 8:00 - 9:00 Neuroradiology Conference; J. Jorgens, R. C. Gray; 2nd Floor Annex.
- 9:00 - G.I. Rounds; R. V. Ebert, J. A. Wilson, Norman Shriffter; Bldg. I.
- 11:30 - X-ray Conference; J. Jorgens, Conference Room, Bldg. I.
- 2:00 - Psychosomatic Rounds; Bldg. 5.
- 3:30 - Psychosomatic Rounds; C. K. Aldrich; Bldg. I.

Tuesday, December 9

Medical School and University Hospitals

- 9:00 - 9:50 Roentgenology-Pediatric Conference; L. G. Rigler, I. McQuarrie and Staff; Eustis Amphitheater, U. H.
- 9:00 - 12:00 Cardiovascular Rounds; Station 30, U. H.
- 12:30 - 1:20 Pathology Conference; Autopsies; J. R. Dawson and Staff; 102 I. A.
- 12:30 - 1:30 Physiology 114D -- Current Literature Seminar; 129 Millard Hall.
- 4:00 - 5:00 Pediatric Rounds on Wards; I. McQuarrie and Staff; U. H.
- 4:30 - 5:30 Clinical-Medical-Pathological Conference; Todd Amphitheater, U. H.
- 4:30 - ECG Reading Conference; James C. Dahl, et al; Staff Room, Heart Hospital.
- 5:00 - 6:00 X-ray Conference; Presentation of Cases from Minneapolis General Hospital; Drs. Lipschultz and Blank; Eustis Amphitheater, U. H.

Ancker Hospital

- 8:00 - 9:00 Fracture Conference; Auditorium.
- 8:30 - 9:30 Medical-Roentgenology Conference; Auditorium.
- 1:00 - 2:30 X-ray - Surgery Conference; Auditorium.

Minneapolis General Hospital

- 10:00 - Pediatric Rounds; Spencer F. Brown; Stations I and J.
- 10:00 - Cardiac Rounds; Paul F. Dwan; Station I, Classroom.
- 10:30 - 12:00 Medicine Rounds; Thomas Lowry and Staff; Station F.
- 12:30 - Grand Rounds; Fractures; Sta. A; Willard White, et al.
- 12:30 - Neuroroentgenology Conference; O. Lipschultz, J. C. Michael and Staff.
- 12:30 - EKG Conference; Boyd Thomes and Staff; 302 Harrington Hall.
- 1:00 - Tumor Clinic; Drs. Eder, Cal, and Lipschultz.

Tuesday, December 9 (Cont.)

Minneapolis General Hospital (Cont.)

1:00 - Neurology Grand Rounds; J. C. Michael and Staff.

Veterans Administration Hospital

- 7:30 - Anesthesiology Conference; Conference Room, Bldg. I.
8:30 - Infectious Disease Rounds; Dr. Hall.
8:45 - Surgery Journal Club; Conference Room, Bldg. I.
9:00 - Liver Rounds; Drs. Nesbitt and MacDonald.
9:30 - Surgery-Pathology Conference; Conference Room, Bldg. I.
10:30 - Surgery Tumor Conference; L. J. Hay, J. Jorgens; Conference Room, Bldg. I.
1:00 - Chest Surgery Conference; Drs. Kinsella and Tucker; Conference Room, Bldg. I.
2:00 - 2:50 Dermatology and Syphilology Conference; H. E. Michelson and Staff; Bldg. III.
3:30 - 4:20 Autopsy Conference; Conference Room, Bldg. I.

Wednesday, December 10

Medical School and University Hospitals

- 8:00 - 9:00 Roentgenology-Surgical-Pathological Conference; Paul Lober and L. G. Rigler; Todd Amphitheater, U. H.
11:00 - 12:00 Pathology-Medicine-Surgery Conference; Medicine Case; O. H. Wangensteen, C. J. Watson and Staff; Todd Amphitheater, U. H.
12:30 - 1:20 Radioisotope Seminar; Effects of P³² and Aureomycin on Growth of Bones in the Rat; Leonard Rosenthal; 110 Botany Building.
1:30 - 3:00 Physiology 114B -- Circulatory and Renal System Problems Seminar; Dr. M. B. Visscher, et al; 214 Millard Hall.
4:00 - 5:30 Physiology 114C -- Permeability and Metabolism Seminar; Nathan Lifson; 214 Millard Hall.
4:30 - ECG Reading Conference; James C. Dahl, et al; Staff Room, Heart Hospital.
5:00 - 5:50 Urology-Pathological Conference; C. D. Creevy and Staff; Eustis Amphitheater, U. H.
8:00 - 10:00 Dermatological-Pathology Conference; Review of Histopathology Section; R. Goltz; Todd Amphitheater, U. H.

Ancker Hospital

- 8:30 - 9:30 Clinico-Pathological Conference; Auditorium.
2:00 - 4:00 Medical Ward Rounds;
3:30 - 4:30 Journal Club; Surgery Office.

Wednesday, December 10 (Cont.)

Minneapolis General Hospital

- 8:30 - 9:30 Grand Rounds; William P. Sadler and Staff; Station C.
9:30 - Pediatric Rounds; Max Seham; Stations I and J.
10:30 - 12:00 Medicine Rounds; Thomas Lowry and Staff; Station D.
11:00 - Pediatric Seminar; Arnold Anderson; Classroom, Station I.
11:00 - Pediatric Rounds; Erling S. Platou; Station K.
12:30 - Pediatric Staff Meeting; Fluid and Electrolyte Therapy in Burns; Elizabeth Drake; Classroom, Station I.
1:30 - Visiting Pediatric Staff Case Presentation; Station I, Classroom.

Veterans Administration Hospital

- 8:30 - 10:00 Orthopedic X-ray Conference; E. T. Evans and Staff; Conference Room, Bldg. I.
8:30 - 12:00 Neurology Rehabilitation and Case Conference; A. B. Baker
2:00 - 4:00 Infectious Disease Rounds; Main Conference Room, Bldg. I.
4:00 - 5:00 Infectious Disease Conference; W. Spink; Conference Room, Bldg. I.
4:00 - Combined Medical-Surgical Conference; Conference Room, Bldg. I.
7:00 p.m. Lectures in Basic Science of Orthopedics; Conference Room, Bldg. I.

Thursday, December 11

Medical School and University Hospitals

- 8:00 - 9:00 Vascular Rounds; Davitt Felder and Staff Members from the Departments of Medicine, Surgery, Physical Medicine, and Dermatology; Heart Hospital Amphitheater.
9:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; E-221, U. H.
11:00 - 12:00 Cancer Clinic; K. Stenstrom and A. Kremen; Todd Amphitheater, U. H.
12:30 - Physiological Chemistry Seminar; Antituberculosis Drugs; James Jarvis; 214 Millard Hall.
1:30 - 4:00 Cardiology X-ray Conference; Heart Hospital Theatre.
4:00 - 5:00 Physiology-Surgery Conference; Todd Amphitheater, U. H.
4:30 - 5:20 Ophthalmology Ward Rounds; Erling W. Hansen and Staff; E-534, U. H.
4:30 - ECG Reading Conference; James C. Dahl, et al; Staff Room, Heart Hospital.
5:00 - 6:00 X-ray Seminar; The Relation of Radiation Sickness to Adrenal Status; Elliott C. Lasser; Eustis Amphitheater, U. H.
7:30 - 9:30 Pediatric Cardiology Conference and Journal Club; Review of Current Literature 1st hour and Review of Patients 2nd hour; 206 Temporary West Hospital.

Thursday, December 11 (Cont.)

Ancker Hospital

4:00 - Medical-Pathological Conference; Auditorium.

Minneapolis General Hospital

9:30 - Neurology Rounds; Heinz Bruhl; Station I.

10:00 - Pediatric Rounds; Spencer F. Prown; Station K.

10:00 - Psychiatry Grand Rounds; J. C. Michael and Staff; Sta. H.

1:00 - Fracture - X-ray Conference; Dr. Zierold; Classroom.

1:00 - House Staff Conference; Station I.

Veterans Administration Hospital

8:00 - Surgery Ward Rounds; Lyle Hay and Staff; Ward 11.

8:00 - Surgery Grand Rounds; Conference Room, Bldg. I.

11:00 - Surgery-Roentgen Conference; J. Jorgens; Conference Room, Bldg. I.

Friday, December 12

Medical School and University Hospitals

8:00 - 10:00 Neurology Grand Rounds; A. B. Baker and Staff; Station 50, U. H.

9:00 - 9:50 Medicine Grand Rounds; C. J. Watson and Staff; Todd Amphitheater, U. H.

10:30 - 11:50 Medicine Rounds; C. J. Watson and Staff; Todd Amphitheater, U. H.

10:30 - 11:50 Otolaryngology Case Studies; L. R. Boies and Staff; Out-Patient Department, U. H.

11:45 - 12:50 University of Minnesota Hospitals Staff Meeting; Current Application of Tissue Cultures in Medicine; William F. Scherer; Powell Hall Amphitheater.

1:00 - 2:50 Neurosurgery-Roentgenology Conference; W. T. Peyton, Harold C. Peterson and Staff; Todd Amphitheater, U. H.

3:00 - 4:00 Neuropathological Conference; F. Tichy; Todd Amphitheater, U. H.

4:00 - 5:00 Physiology 124 -- Seminar in Neurophysiology; Ernst Gelhorn; 113 Owre Hall.

4:30 - ECG Reading Conference; James C. Dahl, et al; Staff Room, Heart Hospital.

5:00 - Urology Seminar and X-ray Conference; Eustis Amphitheater, U. H.

Ancker Hospital

1:00 - 3:00 Pathology-Surgery Conference; Auditorium.

Minneapolis General Hospital

9:30 - Pediatric Rounds; Wallace Lueck; Station J.

10:30 - Pediatric Surgery Conference; Oswald Wyatt; Tague Chisholm; Station I, Classroom.

Friday, December 12 (Cont.)

Minneapolis General Hospital (Cont.)

- 12:00 - Surgery-Pathology Conference; Dr. Zierold, Dr. Coe; Classroom.
- 1:00 - 3:00 Clinical Medical Conference; Thomas Lowry; Classroom, Station M.
- 1:15 - X-ray Conference; Oscar Lipschultz; Classroom, Main Bldg.
- 2:00 - Pediatric Rounds; Robert Ulstrom; Stations I and J.

Veterans Administration Hospital

- 1:00 - Pathology Slide Conference; E. T. Bell; Conference Room, Bldg. I.
- 10:30 - 11:20 Medicine Grand Rounds; Conference Room, Bldg. I.

Saturday, December 13

Medical School and University Hospitals

- 7:45 - 8:50 Orthopedic X-ray Conference; W. H. Cole and Staff; M-109, U. H.
- 9:00 - 10:30 Pediatric Grand Rounds; I. McQuarrie and Staff; Eustis Amphitheater.
- 9:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; Heart Hospital Amphitheater.
- 9:15 - 10:00 Surgery-Roentgenology Conference; L. G. Rigler, J. Friedman, Owen H. Wangenstein and Staff; Todd Amphitheater, U. H.
- 10:00 - 11:30 Surgery Conference; Todd Amphitheater, U. H.
- 10:00 - 12:50 Obstetrics and Gynecology Grand Rounds; J. L. McKelvey and Staff; Station 44, U. H.

Ancker Hospital

- 8:30 - 9:30 Surgery Conference; Auditorium.

Minneapolis General Hospital

- 11:00 - 12:00 Medical - X-ray Conference; O. Lipschultz, Thomas Lowry, and Staff; Main Classroom.

Veterans Administration Hospital

- 8:00 - Proctology Rounds; W. C. Bernstein and Staff; Bldg. III.
- 8:30 - 11:15 Hematology Rounds; Drs. Hagen, Goldish, and Aufderheide.
- 11:15 - 12:00 Morphology Dr. Aufderheide.