## Northeastern Ohio Universities

In 1972, three state-supported universities in northeast Ohio, the University of Akron, Kent State University, and Youngstown State University, responded to a challenge offered by the Ohio General Assembly to develop a plan for medical education for that area of the state. A corporation called the Northeastern Medical Education Development Center of Ohio was launched in August of 1972 to develop a comprehensive plan for expanding medical education opportunities in northeastern Ohio. In the following year, the Ohio General Assembly passed legislation establishing a new medical college and on November 26 of that year, the trustees of the Northeastern Ohio Universities College of Medicine were officially installed. Early in 1974, the site at Rootstown was chosen for the basic medical science campus of the College. In 1975, 42 members were selected to the charter class of the six-year B.S./M.D. curriculum. In September 1978, the fourth-year curriculum was taught for the first time. In 1979, the fifth-year core clerkship curriculum was offered for the first time and in the spring of 1981 members of the first class received their M.D. degrees.

One of the stated goals of the curriculum is to provide significant learning experiences in the behavioral sciences. The student is expected to obtain an understanding of the growth and development of an individual's mental, personal and social capabilities. He is taught the art and science of interpersonal communication and how to develop skills in listening and talking with patients.

The behavioral science curriculum is designed to educate medical students in the basic principles of behavior and social science as these relate to the physician's professional role. The content of the curriculum emphasizes the use of behavioral science in medical practice rather than concentrating on theoretical or research issues.

A distinctive feature of this curriculum is its logical development and integrated structure. Concepts covered early in the course are revisited in later sessions. This procedure reinforces earlier learning and assists the student in gaining insight into the relationships among the various topics. It is hoped that this organizational approach will assist students in the retention of this important information and serve as a framework on which to organize behavioral science knowledge learned at a later time.

The required course in Behavioral Science is presented in three terms during the first year for a total of 85 hours. The first term deals with: human adaptation and development; issues in health care delivery; and understanding patients. The term begins with a six-week mini-course that presents the stages and transitions that characterize the course of human life in both the biosocial and family life cycles. The middle three weeks of the term are allotted to issues in health care delivery, such as bioethics; the health status of Americans; epidemiology; and

the hospital industry. The last four weeks of the term are devoted to a mini-course on understanding patients. Students learn the content of patient profiles and how to collect, interpret, and record them.

During the second term, student apply knowledge from the previous term in constructing patient profiles. Systemic interpersonal skill training modules facilitate students' competence in establishing empathic relationships with patients. There is an emphasis placed upon trust through attending behaviors, equalizing the relationship through mutuality behaviors, actively listening to the patient's frame of reference, and responding to patients with accurate meaning and feeling.

The term concludes with each student demonstrating mastery of relationship building skills by videotaping an interview with a coached patient and presenting this performance for peer review. Students wishing to further refine their relationship skills may avail themselves of individual tutorials.

The third term focuses upon problems in living which physicians frequently encounter in their patients. Maladaptive responses to life tasks are examined as part of the continuum underlying mental health and psychopathology. The term begins with a cultural perspective on psychopathology and examination of the social problems of alcohol and violence. The middle section of the term is devoted to the major psychiatric disorders. The term ends with a discussion of behavioral medicine and biostatistics.

Each of the educational units has a set of educational objectives. For example, the class session on "physical growth and language development" has the following objectives: describe the reflexes of the newborn child; delineate and explain Mahler's stages of object relations during the first three years of life; understand the trust in autonomy crises of ego development as portrayed by Erikson; link the development of object relations with that of the ego during the first three years of life; compare and contrast the concepts of attachment and imprinting; list the major milestones of physical growth; recognize linguistic

and auditory milestones during the first three years of life; comprehend the meaning of gender identity; appreciate the complexity and importance of developmental diagnosis; and differentiate object permanence from object constancy. A set of review questions are provided for each of the educational units and there are extensive handout materials.

The course on interviewing skills offered in the second term utilizes a variety of educational techniques. Throughout the unit, the student is expected to assume responsibility for learning about himself as a prospective physician and to acquire skills for communicating with Partners, tutors, small groups, videotapes, lecturers, and a syllabus are provided to maximize student learning and the experience of reciprocity. Each student has an assigned partner. Students work with their partners and follow self-instructional materials on a weekly basis. Older medical students serve as tutors and are available to answer questions or to demonstrate specific skills. are videotapes available at the library. In addition, there are a number of full-length coached patient interviews available on videotape. Three quarters of the curriculum is devoted to practice sessions in small groups. Role playing techniques are utilized as students play the roles of patient and physician.

After the practice sessions are completed, each student is expected to interview a coached patient for 15 minutes. These coached patients may have one of four kinds of problems: (1) a medical problem with underlying emotional components; (2) a psychological reaction to illness; (3) behavioral problem with a psychological base, or (4) ambivalent feelings and need for assistance in making decisions. The overall goal is to establish a trust relationship so that the patient will want to return. In the final section of the course, selected segments from videotape are reviewed in small groups.

In the third term, the course deals with psychopathology and biostatistics. The educational objectives for the session on biostatistics are as follows: explain the basic properties of frequency distributions; define the four skills of measurement; understand five basic statistical tests; apply a problem-solving model for selecting appropriate statistical tests; describe prevalent research designs in medicine; and recognize key statistical terms.

The behavioral science faculty combine didactic lectures with discrimination exercises to reinforce key lecture topics. Class involvement is very important in learning behavioral science materials and it is promoted through personal behavioral assessment exercises, group discussions, and role playing. Because not all the details in the course syllabus can be covered in class time, the faculty selects key ideas to emphasize during each class session. These key ideas are the structure of the curriculum and as such receive the majority of the lecture time. The assigned readings provide related details and supporting facts that faculty members believe students should master.

There is a study design available for each student to facilitate mastery of the course goals. The guide contains a complete description of each class session and includes the following information: (1) purpose of the session; (2) explicit learning objectives that will be assessed by a final examination; (3) assigned readings from the syllabus, handouts, and textbook; (4) lecture outline that identifies the lecturer and specifies the topics and time allotments; and (5) review questions for both the lecture and assigned readings which students may use to evaluate their mastery of the learning objectives. The syllabus for the fall term is 660 pages in length. There are also class handouts. The handouts range from simple one-page reproductions of lecture slides to major sections of the syllabus. The textbook by Simons and Pardes (1981) is required reading.

In the second year, there is considerable behavioral science input to the course titled Principles of Ambulatory Care (242 hours). Students meet in small groups with faculty members to generate and review videotapes dealing with the physician-patient relationships. Behavioral scientists and physicians serve as faculty for these small groups.

A program of required and elective studies in the area of human values in medicine is being developed jointly by members of the faculty of the sponsoring universities and of the special divisions of the College of Medicine. Under the chairmanship of Professor Glenn Saltzman, the inclusion of this program in the curriculum reflects the growing conviction of medical educators that medicine, while offering major benefits from advances in science and technology, still remains a caring profession, in which the physician's chief concern is the welfare of the patient. The physician responsible for the patient's care must be aware of the potential effect of the medical procedure on the person's mental, emotional, as well as physical condition.

There is a Department of Behavioral Science in the division of basic medical sciences at the College. This department is responsible for the required behavioral science course in the first year.

## University of Washington

The School of Medicine at the University of Washington in Seattle was established in 1945. It is the only medical school directly serving the States of Washington, Alaska, Montana, and Idaho. The School currently admits 175 medical students to its first-year class and has a total enrollment of 700 students pursuing M.D. degrees.

The social and behavioral science content can be found in the first year required courses titled System of Human Behavior (30 hours), Ages of Man (36 hours), Epidemiology (20 hours), and Introduction to Clinical Medicine (95 hours).

The course titled Behavioral Science in the Practice of Medicine is given in the spring quarter of the freshman year. The course is organized and conducted by an interdisciplinary course committee. The chairman of the course committee is a medical psychologist. The goals of the course are stated as: to recognize the important contributions to be made from the behavioral sciences in