In accordance with the new policy pertaining to promotion at the University of Miami, my Teaching Portfolio and Creative Professional Activities Portfolio are submitted for the purpose of documenting scholarship in support of my application for promotion to Professor of Medicine. Supporting materials are provided in the Appendices contained in the loose-leaf binder.

TEACHING PORTFOLIO

ACADEMIC OUTPATIENT DIALYSIS PROGRAM
(See Appendix 1)

During the past twelve years, I have developed an academic dialysis program for the Division of Nephrology. Our dialysis center is one of the largest in the country, providing health care for 180 to 196 hemodialysis patients and over 90 home, self-care, peritoneal-dialysis patients.

GAMBRO – MIAMI OUTPATIENT DIALYSIS CURRICULUM
This is the major training site for the nephrology fellowship program regarding outpatient chronic dialysis therapies.

CLINICAL RESEARCH
We have an active clinical research program in which nephrology fellows, JMH house officers, and clinical psychology graduate students have participated. For instance, nine fellows have contributed to eighteen research abstracts, and six fellows have presented ten of these projects at national or international meetings. One former fellow and past JMH house officer (Dr. Banerjee) recently won a prestigious national award for “Outstanding Performance in Clinical Research” at the Southern Society for Clinical Investigation, and his work also won a blue ribbon (awarded to the top 20% scores) at the World Congress of Nephrology in Berlin in 2003. (Selected abstracts included in Appendix 1) One JMH house officer currently is involved in an original research project. In addition, doctoral theses of four psychology graduate students have been based on experiences in this dialysis center.

The academic thrust of this outpatient dialysis program recently has expanded owing to the collective efforts of talented and energetic junior faculty members. We are developing a “Center of Excellence” in peritoneal dialysis. Under the leadership of Dr. Asif and Dr. Roth, a model vascular interventional program has been established at this
outpatient dialysis center. Both of these developments offer expanded opportunities for clinical education and clinical research.

**NEPHROLOGY CURRICULUM**  
(See Appendix 2)

**NEPHROLOGY TASK FORCE**
In the spring of 1982, in preparation for planning the Nephrology Mechanisms Course, I convened weekly meetings of the pre-clinical course coordinators under the guise of the “Nephrology Task Force” for the purpose of investigating the curriculum content pertaining to nephrology and planning the Mechanisms course. At the first meeting, the individual course coordinators representing all of the basic science departments introduced themselves to their colleagues, apparently for the very first time. They shared what they were teaching about the kidney, and everybody participated enthusiastically. The attendance was excellent. These meetings continued for a few months and probably contributed to the eventual formation of the first-year and second-year Coordinators Committees, which have been running the curriculum ever since. The formal report of these Nephrology Task Force meetings and recommendations for curriculum modification and future development are included in the Portfolio.

**CURRICULUM RENEWAL IN NEPHROLOGY**
The thrust of my educational efforts in the nephrology mechanisms course was to emphasize the physiologic and pathophysiologic bases of clinical problems rather than descriptions of syndromes in the hope that students would be enabled to apply reason to, or make sense of, a clinical database rather than scroll through their memories for syndrome recognition. I also was interested in fostering integration of clinical issues in the preclinical basic science curriculum. For example, in the early 1980’s, I obtained Dr. Eric Reiss’ support for my proposal to develop an “acid-base week” in the first year curriculum wherein clinicians would work with the biochemists and physiologists to present an integrated multidisciplinary problem-based curriculum regarding acid-base metabolism and clinical derangements. At the meeting of the curriculum committee, Dr. Reiss altered the proposal, in response to resistance from the basic science departments, by recommending that the activity occupy a time slot in the sophomore mechanisms course. We got “acid-base week” but lost the opportunity to work together with the basic science faculty. That goal was delayed for a few years until the “Endocrine Module” was developed. (Dr. Reiss and I contributed a nifty problem-based curriculum for calcium-phosphorus-parathyroid metabolism.)

Innovations in the nephrology mechanisms course included writing: (1) a course pre-test that reviewed the first-year renal physiology course, (2) case-based workshops regarding fluid and electrolyte abnormalities, with detailed answers for both, and (3) case-based examinations that required writing answers and justifications for the answers in long-hand. (Included in Appendix 2)
CLINICAL SKILLS CURRICULUM DEVELOPMENT
(See Appendix 3)

INNOVATIONS IN THE SOPHOMORE PHYSICAL DIAGNOSIS COURSE
In December, 1980, I was appointed Coordinator of the Sophomore Physical Diagnosis Course which met on Wednesday afternoons from January into May. The course content, methods, and goals were expanded substantially, as listed below.

Addition of Introductory Sessions
In preparation for their going to the hospital to examine patients, students were introduced to the complete physical exam, instructed on how to perform the basic exam techniques (inspection, palpation, percussion, and auscultation), and taught to use diagnostic equipment. Subsequently on a weekly basis throughout the course, students were taught the detailed exam of each system. In individualized supervised groups of four, students then practiced systems-specific exams on volunteer patients in clinical settings that included hospitals, community clinics, and office practices.

Introduction of formal instruction in medical interviewing.

Introduction of formal instruction about the medical record, particularly the problem-oriented medical record

Introduction of clinical problem solving and clinical reasoning to the course and to the school curriculum. This initiative progressed to become a cooperative effort with the Mechanism of Disease course in the sophomore curriculum.

Introduction of written exams that assessed clinical reasoning skills.

Introduction of clinical skills training in clinical case presentations.

Introduction of the “Professional Patient Program” wherein students performed supervised and mentored pelvic and breast exams on trained, professional volunteers.

Introduction to the curriculum of clinical skills training by the Departments of Ophthalmology, Otolaryngology, and Neurology.

Introduction of using community clinics serving the underserved for the teaching of basic clinical skills, including psychosocial assessment, to preclinical students.

DEVELOPMENT OF A FIRST-YEAR PHYSICAL DIAGNOSIS EXPERIENCE
In 1982, I had submitted recommendations to the Dean that structured clinical experiences in the curriculum for preclinical students needed to be expanded. Finally, in 1988, I was able to initiate an elective, extra-curricular introductory course in clinical interviewing and physical diagnosis for first-year medical students, with the support and encouragement of the basic science faculty, which was designed to complement the
concurrent basic science curriculum. Senior, and occasionally junior, medical students were recruited to serve as mentors and teachers of physical-exam skills in clinical settings, which in itself was innovative at that time. The departments of Ophthalmology and Otolaryngology each contributed an afternoon to teaching exam skills to the entire first-year class. Patient-interviewing sessions were conducted in the hospital by a diverse faculty culled from Social Work, Psychology, Psychiatry, and Family Medicine. This elective, extra-curricular activity achieved virtually 100% participation and was favorably evaluated by the students.

THE FIRST SEMESTER SOPHOMORE PROPOSAL AND SYLLABUS (1991)
In May, 1991, I was asked by the Dean to construct a clinical physical diagnosis course, to begin in August, for those sophomore students (3/4ths of the class) who were not participating in the new Community Clinical Experience (CCE). Despite major restrictions that were imposed by the faculty (no reading assignments, no tests, course content must complement the concurrent basic science curriculum, student evaluation to be on a pass-fail basis determined solely by participation in small group clinical sessions), this window of opportunity could not be bypassed. This new clinical experience was designed to bridge the clinical skills training of the elective first year physical diagnosis course and the formal, second-semester Sophomore Physical Diagnosis (SPD) course. The effort was as successful as it could be under the imposed restrictions. This new transitional clinical experience offered the opportunity to shift the focus of the traditional SPD course from techniques of data acquisition to data analysis, hypothesis generation, clinical problem solving, and diagnosis. It also offered the opportunity to integrate SPD with the concurrent Mechanisms of Disease course so that the entire second sophomore semester would be focused on pathophysiology and the clinical manifestations of disease states. (See syllabi in Appendix 3.)

CURRICULUM DEVELOPMENT IN CLINICAL REASONING SKILLS
My thrust in the clinical skills curriculum was to promote the biopsychosocial model of medicine by fostering acquisition of interactive communication skills and by developing a patient-centered focus on clinical reasoning and problem-solving skills. With Dr. Reiss’ support, we began with the Cutler problem-solving sessions. (Cutler P. Problem Solving in Clinical Medicine. From Data to Diagnosis.) We then decided to write our own clinical reasoning curriculum, but the sudden and unexpected death of Dr. Reiss resulted in that project being delayed for a few years. Finally, in 1991-1992, the expansion of the clinical skills curriculum provided the opportunity for my writing several original patient-oriented problem-solving cases that could be used in the newly revised second-semester sophomore course. (See Appendix 3 for: (1) Syllabus of the 1992 Sophomore Physical Diagnosis Course, (2) Examples of Learning Objectives for the Second Semester Course, (3) The Final Bedside Clinical Competency Exam, (4) The Final Case-Based Written Exam, (5) Examples of Patient-Oriented Problem Solving Cases.

HEALTH AND HUMAN VALUES PROGRAM
(See Appendix 4)
With my able colleague Judith Benkendorf, the Health and Human Values (HHV) Program was developed in 1984. This was a comprehensive multidisciplinary patient-centered curriculum pertaining to the medical social sciences and humanities. Our objectives were to present the biopsychosocial model of medicine and to enhance the intellectual environment of the medical school by introducing a liberal education model of self-learning that synthesized reading and writing about the human dimensions of medical science. Experiential learning methodologies were extensively utilized. Students were evaluated and awarded grades primarily on the basis of task performance rather than the usual multiple-choice “bubble” exams.

The Health and Human Values (HHV) course was a 100-120 hour course extending throughout the entire first year curriculum that presented the medical social sciences, gerontology, epidemiology and preventive medicine, ethics, and social policy issues. (See HHV syllabus in Appendix 4.) The first semester of this multidisciplinary course presented the biopsychosocial model of medicine, illness behavior (including cross-cultural issues such as health belief systems and explanatory models), psychoneuroimmunology, family systems theory, and developmental psychology throughout the life cycle extending from the psychobiology of pregnancy and attachment through gerontology to death and dying, bereavement and grief, and finally epidemiology and preventive medicine. Virtually every class employed experiential learning methodologies, including interviews of patients, to supplement didactic presentations. There also was a clinical skills portion that focused on clinical interviewing. The second semester was devoted to ethics and social policy issues. In the ethics section, cases involving ethical dilemmas were argued in class by panels of students assigned opposing pro and con positions. The social policy issues that were addressed included addiction, homelessness, malpractice, planning and regulation, medical economics, women and children in poverty, and domestic violence. In the 1980’s, these were highly original and innovative curricular efforts (See Appendix 4 regarding student ethics panels and the social policy curriculum.)

EXPERIENTIAL MEDICAL EDUCATION ACTIVITIES

There were several experiential projects throughout the course. The centerpiece of the HHV course was the Home Visit Program wherein every student visited the home of a patient with a chronic illness or disability at least five times throughout the year. These experiences were reported and discussed in small groups of eight students co-led by a physician and a social scientist (psychologist of social worker). Patients represented in each small group covered the lifespan from childhood to old age, and every group had at least one patient with addiction as the chief health problem. At the end of the school year, each student wrote a detailed narrative about the assigned patient.

In the Community Resources Project, each student visited a community agency that offered a service that would be appropriate for the assigned home visit patient and wrote a brief description of the agency, its services, and how it could assist the patient. They also visited the office of the patient’s physician in order to gain the physician’s perspective on the patient and wrote a brief report of that experience.
Other experiential learning strategies included: (1) **Library Projects** wherein students wrote as many as three brief reports about social science topics of personal interest that were based on research of original scientific data; (2) the **Developmental History Project** wherein students interviewed an adult about the developmental history of a person of their choice (often themselves) extending from before pregnancy to puberty, the purpose being enhance students’ learning about normative developmental tasks and variations thereof; and (3) the **Gerontology Project** wherein students researched a gerontological topic in the library, wrote a brief report or outline, and then gave an oral report of their findings to their respective small groups.

In 1994, the School received a national award for outstanding community service. It should be noted that a significant portion of community involvement by preclinical students was developed in the curricular programs that I directed, as is documented in my CV and Teaching Portfolio. See CV and Appendix 4 regarding “The Community Resources Project”, “Ambulatory Clinics in Underserved Urban Communities as Sites for Learning Physical Diagnosis Skills”, the workshop presented at the SGEA meeting in Houston entitled “The Multiple Roles of the Community in Preclinical and Clinical Learning”, and “The University of Miami School of Medicine and Dade County Area Health Education Center: Working Together for a Clinical Learning Experience in the Preclinical Years”.

The Health and Human Values Program extended beyond the first-year course to include:

1. **“Learning at Lunch”** (For two-years, we presented weekly noon-time sessions featuring speakers, panels, debates, and films.)
2. **Weekly Clinical Ethics Conferences** in the Junior Medicine Clerkship
3. **Addictionology** curriculum, including a fourth-year elective (See Appendix 5)
4. **Literature and Medicine Elective** (See Appendix 6)

**CURRICULUM INNOVATION AND REVISION**

During the years from 1982 to 1992, I introduced numerous curricular innovations in both the physical diagnosis course and the HHV Program. Many of these innovations were presented at both regional and national meetings, pertaining to home visits and small group meetings, community resources project, library projects, addictionology (Appendix 5), ethics panels, use of community clinics and AHEC sites for learning clinical skills (Appendix 4). Many other innovations included acid-base week, clinical-problem-based written exams in nephrology mechanisms and physical diagnosis, weekly radiology quiz, basic science multidisciplinary conferences in the first-year curriculum, “Learning at Lunch”, experimental class-room teaching devices, the developmental survey strategy for learning development psychology, Moot Court (Appendix 4), Literature and Medicine Elective (Appendix 6) and our curricular efforts regarding such issues as thanatology, domestic violence, and the feminization of poverty in inner-city Miami (see HHV syllabus in Appendix 4). It is important to realize that at that time, unlike now, there were absolutely no journals in which to report curriculum innovations. Therefore, we...
reported our work at the regional and national meetings of the Association of American Medical Colleges (AAMC). (See Appendix 4.)

Included in Appendix 4 are:

HEALTH AND HUMAN VALUES SYLLABUS

INNOVATIONS IN MEDICAL EDUCATION PRESENTATIONS AT AAMC

MOCK TRIAL AT THE MEDICAL SCHOOL

GRANT PROPOSAL FOR “THE MEDICAL HUMANITIES & SOCIAL SCIENCES CENTER”

This is a grant proposal submitted in 1990 to the W.K. Kellogg Foundation, as advised by the Office for Development of Medical Affairs. In retrospect, it might have been received more favorably by other private funding agencies, such as Pugh or Macy.

ADDICTIONOLOGY
(See Appendix 5)

The Addictionology Curriculum included the following:

FIRST YEAR CURRICULUM
1. Home Visits to People With Addiction (See Appendix 4.)
2. An Experiential Approach to Learning the Psychosocial Dimensions of Addiction (Presented at the AAMC annual meetings)

FOURTH YEAR CURRICULUM
The Senior Elective Course in Addiction

LITERATURE AND MEDICINE
(See Appendix 6)

In 1987, we initiated a new elective noncredit course for interested faculty and students as part of the Health and Human Values Program. The course had monthly meetings organized and led by Dr. Evelyn Mayerson, Professor of English and award-winning novelist and playwright. For each session, Dr. Mayerson selected short readings from the works of one or more authors, all pertaining to a common theme. The readings were distributed to the participants and then discussed in seminar format. Dr. Mayerson provided a scaffolding of background material to enrich an understanding of the readings, including historical, psychological, sociological, and biographical contexts. The discussions searched for the central metaphors giving organization and direction to the thinking of both the author and readers.

In the Appendix are the developmental history of the course and course description and materials as well as an article that we published. [Mayerson E and JP Pennell. The shared paradigm of literature and medicine. Miami Medicine 59: 25-26, 1988]
ASSOCIATE PROFESSOR, DEPARTMENT OF PSYCHIATRY AND BEHAVIORAL SCIENCES  
(See Appendix 7)

ETHICS CURRICULUM: CLINICAL PSYCHOLOGY INTERNSHIP
About fifteen years ago, I initiated the clinical ethics conference in the JMH psychology internship program. This interactive, case-based ethics program has emerged as a major learning exercise in the psychology internship program and has received excellent critical reviews during site visits and when presented at a national psychology education forum.

PSYCHONEPHROLOGY AT GAMBRO MIAMI
At this dialysis center, I have established model curricula for the teaching of behavioral medicine and clinical ethics in the JMH psychology internship program that have attracted national attention, and in the process I have earned a secondary appointment in the Department of Psychiatry and Behavioral Sciences. The clinical psychology program at our dialysis center is unique and has been extremely effective in assisting our patients, and literally has saved lives. In addition, doctoral theses of four psychology graduate students have been based on experiences in this dialysis center. (See CV) We also have active research projects in clinical psychology.

See Appendix 7 for letters from Dr. Brucker, Chief of the Division of Psychology and from Dr. Efrain Gonzalez, the Director of the Psychology Internship Program for over fifteen years.

CREATIVE PROFESSIONAL ACTIVITIES PORTFOLIO
Since 1992, I have been Medical Director of Gambro Healthcare Miami, which is the outpatient dialysis center of the UM/JMH Medical Center. Located in the JMH Towers building, this is one of the largest dialysis centers in the country, having 28 hemodialysis (HD) stations, with seven shifts (currently 6 1/2) of 180 to 196 HD patients, and a rapidly expanding population (now over 90) of home, self-care, peritoneal-dialysis patients. I am the only faculty person who has been assigned to work in this center. (In the past two years, a few faculty physicians have joined in the care of some of the new peritoneal dialysis patients.) My primary duty since 1992 has been to serve as the primary-care physician for as many as 250 chronic dialysis patients. This is a “24-7”, twelve-month per year clinical responsibility. The management of this dialysis center is accomplished through a relational model incorporating the entire multidisciplinary team of health-care professionals working in cooperation with the Nurse Administrator.

The clinical outcomes of our dialysis program have been very good as evidenced particularly by our low crude and standardized mortality rates. See Appendix for data regarding clinical outcomes.

Since 1996, we have had one of the most sophisticated vascular access surveillance programs in the nation, which has been effective in prolonging access function and in decreasing hospitalizations. And we now are fortunate to have the new Interventional Nephrology vascular program, under the most able leadership of Dr. Asif, located at our center.

The Health Council of South Florida (HCSF) is the regional health care planning agency for Miami-Dade and Monroe counties. I have served on the HCSF’s Ethics Committee since 1990 and was the vice-chair from 1991-1999 and chairperson from 1999 to 2003. During those years, I participated actively in all of the committee’s community outreach projects, including educational community forums and television programs on the ethics of end-of-life care. Three projects in which I had major roles are included in Appendix 9 in the Creative Professional Activities Portfolio: (1) “Why Sovereign Immunity Should not be Extended to Private Physicians”, which was submitted to the Florida legislature as a position paper in 1993 and which I presented at the national meeting of the Society for Health and Human Values in 1993; (2) “The Medical Futility Guidelines of South Florida” which are offered as guidelines to health care institutions that are considering developing policies regarding medical futility, or inappropriate medical treatment; and (3) “Ethical Standards to Promote the Health of the Community”, which were developed.
to guide community leaders as they seek to support healthy living among residents of South Florida. I have been invited to be the keynote speaker at the Sentara Center for Healthcare Ethics Conference regarding “Medically Inappropriate Treatment” in Williamsburg, Virginia, October, 2004. [This is an invitation to speak about the “Guidelines for Medical Futility Policies” (available on the internet at www.healthacouncil.org) developed by the Ethics Committee of the Health Council of South Florida, of which I was the chairperson.]

ETHICS COURSE AT TEMPLE ISRAEL OF GREATER MIAMI
(See Appendix 10)

I co-developed and co-led an ethics course with Dr. Peritz Scheinberg, Emeritus Professor of Neurology, and Rabbi Rex Perlmeter at Temple Israel of Greater Miami. The course and its content are displayed in Appendix 10.

CONTRIBUTIONS TO THE UNIVERSITY COMMUNITY
(See Appendix 11)

Some of my contributions to the University of Miami community are presented here as creative professional activities.

1. FACULTY SENATE REAPPORTIONMENT

2. FACULTY SENATE ATHLETICS COMMITTEE: THE RETURN OF UM BASKETBALL

3. SCHOOL COUNCIL REORGANIZATION: EMPOWERMENT OF THE FACULTY