

MEDI 800B - Research (Medicine)**Departmental Section Chiefs & Faculty (Please contact specific attending)**

3, 4 or 6 wks; maximum length of 12 wks; offered year round

Directly supervised/Patient care or non-patient care.

Maximum enrollment varies*

Prerequisites: Medicine 803

Goals: To provide interested students research opportunities within the various Sections of the Department of Medicine.

Format: Since research is an ongoing function of all Sections, students may check with the various Section Chiefs for information on the research possibilities offered. Specifically, the Section of Cardiology is interested in offering research opportunities to individual students. Students should check with Dr. Gordon Ewy, 626 6332, Chief of the Section, to arrange for this research elective.

Evaluation Methods: The students' attainment of the goals set by their research preceptor as well as the achievement of personally set goals.

*No maximum number can be listed since all research would be an individually arranged elective

MEDI 800C - Research (Cancer)

Drs. A.M. Lopez, F. Ahmann, D. Alberts, M. Bishop, A. Briggs, R. Dorr, T. Dragovich, S. Ebbinghaus, E. Epner, H. Garewal, L. Garland, E. Hersh, A. List, M. Lobell, T. Miller, A. Stopeck, C. Taylor, D. Von Hoff (626 6276)

6 wks, maximum length of 24 wks; offered year round

Directly supervised/Non-patient care.

Maximum enrollment of 2

Prerequisites: none

Goals: The approach to scientific investigation will be emphasized. No previous research experience is necessary. By the end of the clerkship the student will have participated in a specific area of one of the general areas listed below, will have designed a specific experiment, carried out the basic investigations, analyzed the data he/she has obtained, and if appropriate, will present it at a seminar to our hematology/oncology group.

Format: The experience will be an intensive 6-24 week experience in scientific investigation. The student will work directly under one of the investigators listed above on a specific problem related to the general areas outlined below. The student will also participate in our twice weekly scientific seminars. He/she will also be exposed to the major activities of the other investigators. General areas of research that are being investigated in our group include:

1. The testing of new agents and biological modifiers (such as interleukin 5, chemo-therapeutic agents, vitamins, etc.) in vitro using a tumor stem cell assay.
2. Tumor immunology and immunotherapy.
3. Gene therapy of cancer.
4. Karotypic changes in solid tumors.
5. Control of leukemia cell growth.
6. Pharmacology of new anticancer agents.
7. Mechanisms of drug resistance.
8. Regulatory influences of bone marrow fibroblasts on hematopoiesis.
9. Growth and regulation of prostate cancer.
10. Scientific basis and design of clinical anticancer trials.
11. Models of bone marrow transplantation.
12. Models for behavior modification and treatment outcomes.

Evaluation Methods: Students are evaluated according to performance in preparing, designing and participating in the research project which the student undertakes. Evaluation is independent of obtaining conclusive results.

*Length: 6-24 wks preferred. All applicants must speak with selected mentor before applying and must have approval of one of the faculty members to work in his laboratory.

MEDI 800M - Introduction to Molecular Biology Research

Drs. C. Adamson (626 2216), J.J. Bahl

4 wks, offered June-August, February, April

Directly supervised

Maximum enrollment of 4

Prerequisites: none

Goals: This class is a workshop-based tutorial designed to familiarize the students with research applications utilizing molecular and cellular biology techniques. Selected techniques used in contemporary research papers will be explained, and in some cases, demonstrated or performed by the students in a laboratory. Upon successful completion, the students will be able to perform basic recombinant DNA techniques, and will demonstrate greater understanding of the literature.

Format: The course will consist of short lectures followed by laboratory exercises in basic molecular biology and research methodology. Topics will include: plasmid DNA preparation, restriction analysis, gel electrophoresis, polymerase chain reaction (PCR), and tissue culture. Additionally, research papers will be discussed with invited guest faculty.

Evaluation Methods: Students will be evaluated on performance in the laboratory, and in discussion sessions. Additionally, students will be asked to fill out a course evaluation upon completion of the course.

MEDI 811Aa (sect 1) - Internal Medicine

Drs. T. Boyer & B. Johnson 626-9660

4 or 6 wks; maximum length of 6 wks; offered year round - except in July

Directly supervised/Patient care

Maximum enrollment of 2

Prerequisites: Successful completion of Medicine 803

Goals: A four-six week assignment to a general medical ward at AHSC. Students will function in an intern-like capacity. Students will improve the process skills of medical interview and physical examination and differentiate diagnosis through actual hands on care and clinical problem solving. Students will feel more comfortable caring for sick patients in the hospital environment.

Format: Students will determine the diagnostic work-up and write orders under direct supervision of a resident and a member of the faculty. They will be responsible for documenting the database, preparing the problem list, instituting an assessment and plan, and continuing care in a follow-up clinic when appropriate. Note: No withdrawals permitted after final schedules are distributed to the students except when the student arranges for a replacement. Since these are patient care experiences, scheduling is in conjunction with housestaff scheduling and changes are impossible. Vacations or internship trips should not be scheduled during this time.

Evaluation Methods: Attending physician and resident monitoring of actual performance with emphasis on thoroughness, reliability, efficiency and analytic soundness.

MEDI 811Ad (sect 3) - Internal Medicine (VAH, Tucson)

Dr. M. Habib 626-1848

4 or 6 wks; maximum length of 6 wks; offered year round- except in July

Directly supervised/Patient care

Maximum enrollment of 2

Prerequisites: Medicine 803

Goals: A four-six week assignment to a general medical ward at VAH. Students will function in an intern-like capacity.

Format: Students will determine the diagnostic work-up and write orders under direct supervision of a resident and a member of the faculty. They will be responsible for documenting the data base, preparing the problem list, instituting an assessment and plan, and continuing care in a follow-up clinic when appropriate. Note: No withdrawals permitted after final schedules are distributed to the students except when the student arranges for a replacement. Since these are patient care experiences, scheduling is in conjunction with housestaff scheduling and changes are not possible. Vacations or internship trips should not be scheduled during this time.

Evaluation Methods: Attending physician and resident monitoring of actual performance with emphasis on thoroughness, reliability, efficiency and analytic soundness.

MEDI 811C (sect 1) - Coronary Care Unit

Dr. G. Ewy & Section of Cardiology Faculty (Debbie Young 626 2000)

2 or 4 wks; maximum length 4 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 2

Prerequisites: Successful completion of third-year of medical school

Goals: To allow the senior student to function as an acting intern on the CCU service under the direct supervision of a medical resident and cardiology faculty. To provide an internship like experience in the coronary care unit.

Format: Work rounds with resident in the early morning, followed by attending rounds. Mini-lectures offered at various times throughout the week. The student will be responsible for the workup of a selected number of patients admitted to CCU service. In-hospital on call every third night.

Evaluation Methods: Via daily case presentation to attending. Review of work-up and suggested plan for therapy.

MEDI 811D - Intensive Care Medicine

Dr. J. Bloom, S. Kroper, & Pulmonary/Critical Care Medicine Faculty

4 wks *only*; not offered during period 4S1 (July)

Directly supervised/Patient care

Maximum enrollment of 2

Prerequisites: Successful completion of third-year of medical school

Goals: To allow the senior student to function as an acting intern on the ICU service of University Medical Center under the direct supervision of senior house officers and the pulmonary/critical care medicine faculty. To provide an “internship-like” experience in the intensive care unit.

Format: Work rounds with house officers 7-8:00 AM, ICU mini-conference 8:30-9:00 AM, attending rounds 9-10:00 AM. Work up a selected number of patients admitted to the ICU service. In-hospital on call every third night.

Evaluation Methods: Via daily care presentation to attending. Review of work-up and suggested plan for therapy.

MEDI 811Nd - Non-Traumatic Emergency Care (VAH, Tucson)

Dr. C. Freyberg (freyberg@va.gov 792 1450 x6219)

3, 4 or 6 wks; maximum length 6 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 1

Prerequisites: Fourth-year medical student

Goals:

1. Develop advanced skills at clinical assessment and problem solving in acutely ill patients in the Ambulatory setting.
2. Develop skills in acute intervention in the care of acutely ill patients in an emergency setting.

Format: Direct patient responsibility in the VA LSU (emergency area) and Urgent Care Clinic. Supervision by attendings with additional supervision by second-year Medicine residents. Will participate in weekly Ambulatory Care conferences.

Evaluation Methods: All patient contact will be evaluated by chart review as well as direct observation of the student/patient interaction. Minimal didactic teaching will be used for this elective, with the primary focus on direct student/patient interaction with a tutorial style of teaching.

MEDI 815A (sect 1) - Clinical Cardiology

Drs. L. Mackstaller (Coordinator), G.A. Ewy (UMC), S. Goldman (VAH, Tucson), M. Friedman (UPH Kino), J.S. Alpert, S. Butman, P.E. Fenster, K.B. Kern, F.I. Marcus, E. Morkin, R. Movahed, P. Ott, W.R. Roeske, P. Serlin, M. Slepian, H. Thai, E. Dick, M. Sharon, V. Sorrell, J. Indik (Debbie Young 626 2000)

4 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 7 (UMC - 3; VAH - 3; Kino - 1)

Prerequisites: Medicine 803

Goals: Clinical cardiology will emphasize the following student skills: Knowledge of basic facts related to management of patients with cardiovascular disease, clinical data gathering including medical interviews and performing cardiovascular physical examinations, problem solving and decision making. An introduction to cardiology testing procedures. The student will obtain basic skills in physical diagnosis, and interpreting ECG and arrhythmias.

Format: Cardiology programs are run at VAH, UMC and Kino Community Hospital. A four week experience is offered. A total of seven students will be accepted. Assignments to the different hospitals will be made on the first day of the elective. Students will evaluate cardiac patients as consultants under the supervision of the staff, receive training in interpretation of electrocardiograms, and evaluate patients in cardiology clinics. The cardiology patient simulator and multimedia computer assisted laser disc interactive instructional programs will be available for student use. Opportunity to observe diagnostic cardiology examinations, such as cardiac catheterizations, echocardiography and exercise stress testing will be provided.

Evaluation Methods: Knowledge of basic cardiovascular facts will be assessed by an examination given at the end of the elective. Skills will be evaluated using the Cardiology Patient Simulator. Clinical skills will be evaluated by ratings by the faculty and housestaff associated with the student during the elective. Requirements for “Honors” available on request.

Awards: One or two outstanding student(s) each year receive the Zenas B. Noon, M.D. Award.

MEDI 815B (sect 1) - Clinical Dermatology (CLOSED)

Dr. R. Hansen

3 wks (must be approved by department); maximum length of 4 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 5

Prerequisites: none

Goals:

1. Acquisition of language skills including knowledge of basic terminology and classification.
2. Use of these skills in patient presentations and in diagnostic problem solving.
3. Mastery of the problem oriented algorithm for skin conditions (Lynch) and knowledge of the most common dermatologic disorders.
4. Incorporation of socio-economic, personal and psychologic factors in patient management.
5. The development of effective interpersonal relationships with patients and staff.

Format: This elective will be based on a preceptor-preceptee experience utilizing the clinics of UMC, VAH and Kino Community Hospital. The private offices of the practicing dermatologists in Tucson will also be utilized. The degree of

responsibility given the students will vary considerably from physician to physician. **Required Reading:** Dermatology For The House Officer (Lynch)

Recommended Resource: CD-ROM Program - *Integumentor*

Evaluation Methods: Observation of students and informal questioning as they participate in the clinical care of patients. Written test (self assessment) required at end of rotation.

MEDI 815C (sect 1) - Endocrinology

Dr. D. Johnson (Linda Lorent 626 6376)

4 or 6 wks; maximum length of 12 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 2

Prerequisites: Medicine 803

Goals: To acquire basic factual information and theories about common endocrine and metabolic diseases and to apply this knowledge to handling patients with these diseases. Specifically, at the end of the six-week clerkship the student should be able to assess and manage patients with diabetes mellitus, hypertension, hyperlipoproteinemia and common thyroid diseases.

Format: The students will spend their time working up and managing patients with metabolic and endocrine diseases by participating in endocrine outpatient clinics and consultations, conferences, and subspecialty clinics (thyroid, including nuclear medicine, diabetes, hyperlipoproteinemia, hypertension, pediatric endocrinology and gynecologic endocrinology). Students will be able to work up new and old outpatients and do consultations on in-patients with endocrine and metabolic problems both at VAH and UMC. The work-up of patients seen by the students will be supervised by the medical resident rotating through the service or by the faculty. On Tuesday and Friday an hour conference is held to discuss problems seen in the clinic, provide pertinent medical references and review current medical literature.

Evaluation Methods: Students will be evaluated on the basis of how well they use the information and theories acquired in their studies to assess and manage patients with common endocrine and metabolic disorders. Since the students will share responsibility with the faculty for these patients, their skill in performing this task will be apparent. No written examination will be given.

MEDI 815D (sect 1) - Clinical Gastroenterology

Dr. B. Bamergee (Lucy Contreras 626 1574)

4 wks *only*; offered year round

Directly supervised/Patient care

Maximum enrollment of 4

Prerequisites: Completion of required clerkships and Medicine 803

Goals: To learn how to approach common clinical GI problems. Exposure to a wide spectrum of gastrointestinal and hepatic disorders with emphasis on acquiring skills in diagnosis and management of the common problems encountered in practice. Pathophysiology, interpretation of medical history and physical findings, laboratory studies, GI X-rays and histopathology will be emphasized. Flexible sigmoidoscopy will be learned and familiarity with routine GI procedures gained.

Format:

1. Close interaction with GI trainees and staff at UMC and VAH regarding evaluation and management of in-patients, OPD patient evaluation in GI Clinics, active participation in diagnostic procedures, patient care rounds and in teaching conferences such as GI Grand Rounds, Medical Surgical GI Conferences, X-ray and Histopathology Conferences and Current Literature Review.
2. The student will be provided with a syllabus containing updated reference material and will be expected to read about a variety of gastrointestinal diseases for a series of teaching sessions with GI faculty members.

The structure will be informal and the student will be given responsibility proportionate to interest and ability.

Evaluation Methods: Day-to-day contact with staff, trainees and residents, review of presentations, consultation reports and active participation in conferences and ongoing patient care will suffice to show evidence of the student's progress.

MEDI 815E (sect 1) - Hematology/Oncology

Dr. R. Swart (Karen Childs 626 2816 kchilds@azcc.arizona.edu)

3 or 4 wks; maximum length of 4 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 1 - 2 (clinic based)

Prerequisites: Medicine 803

Goals:

1. Medical Oncology. The approach to the total medical management of patients with malignant disease including oncologic pharmacology, medical complication of cancer, organ-specific clinical experiences and multidisciplinary approaches will be stressed.
2. Hematology. The approach to the clinical evaluation of hematologic disorders including basic coagulation and the

fundamentals of hematopoiesis with appropriate emphasis on laboratory parameters and therapeutic trials.

Format: An intensive four week experience in all aspects of clinical Hematology and Oncology is offered. The student will have an active role in seeing patients at the Arizona Cancer Center. Subspecialty clinics designed for breast cancer, melanoma, sarcoma, lung cancer, GI cancer, head and neck cancer, hematologic malignancies (leukemia, lymphoma, and myeloma), general oncology and benign hematology are held each week under supervision of faculty members with special interests in each area. Students will have the opportunity to evaluate new and follow-up patients with attending supervision. Students will have the opportunity to evaluate new and follow-up patients with attending supervision. Students may elect to attend inpatient rounds at UMC with the Hematology/Oncology team. Opportunity is provided for experience on the Bone Marrow Transplant Unit if the student so desires. Students will be encouraged to pursue areas of interest in-depth. The student will have the opportunity to observe the approach to clinical investigation which is one of the hallmarks of the Hematology-Oncology service of The University of Arizona College of Medicine. Students will also participate in several weekly conferences.

Evaluation Methods: At the beginning of the elective each student will meet with the Course Director and receive a syllabus containing course- objectives and review articles in Hematology/Oncology. Students will undergo a written pass-fail evaluation.

MEDI 815G (sect 1) - Infectious Diseases

Drs. S. Klotz, & L. Gastelum (626 6887)

4 or 6 wks; maximum length of 12 wks; offered year round.

Directly supervised/Patient care

Maximum enrollment of 4

Prerequisites: Completion of required clerkships

Goals: Understanding of management of common infectious disease problems.

Format: The program will consist of patient consultations, ward rounds with an attending physician, clinical pharmacologist, clinical conferences and instruction in the central clinical microbiological laboratory. Students will be provided core curriculum outline and current literature references. Scheduled events during the rotation will include:

1. Clinical microbiology rounds with Dr. Ryan for students at AHSC three times a week and with Dr. Marion Wieden for students at VAH.
2. Infectious Disease subspecialty noon conferences monthly at VAH and Infectious disease Grand Rounds monthly at AHSC.

Evaluation Methods: Faculty evaluation of performance in conferences and patient work-up.

MEDI 815I - Evidence-Based Medicine

Dr. W.P. Johnson (626 7000; wpj@u.arizona.edu)

3 wks *only* (only offered in February)

Must be coordinated by calling 626 9660 prior to enrollment

Directly supervised/Non-patient care.

Maximum enrollment of 6 Prerequisites: Fourth-year student.

Goal: To educate students and residents about a new paradigm for medical practice called evidence-based medicine which de-emphasizes intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision making and stresses the examination of evidence from clinical research.

Format:

1. Learn to identify reliable medical resources.
2. Learn how to search the literature efficiently.
3. Learn how to apply formal rules of evidence evaluation to the clinical literature.
4. Learn how to organize your references so that they may be accessed efficiently.
5. Learn how to assess data derived from the clinical examination for precision and accuracy.

Evaluation Methods: Discussions. Homework review daily.

MEDI 815J (sect 1) - Pulmonary Consultation Service

Drs. S. Knoper, J. Bloom & Pulmonary Staff (Helen 626 6114)

3, 4 or 6 wks; maximum length of 6 wks; offered year round

Directly supervised/Non-patient care

Maximum enrollment of 2-4*

Prerequisites: Medicine 803

Goals: To provide the student with basic information relevant to the evaluation and management of common pulmonary diseases, including gathering of an adequate data base, utilization of physiological testing methods and methods of problem solving and decision making.

Format: The experience will consist of either a three, four or six-week assignment to the Pulmonary Disease Sections' Hospital Services and outpatient clinics. Students will work either at VAH or at AHSC under the direct supervision of

one of the Fellows in Pulmonary Diseases and an attending physician. They will participate in rounds and conferences, be expected to evaluate patients requiring a pulmonary disease consultation, work in a pulmonary disease outpatient clinic and work in the pulmonary laboratory learning to perform and interpret lung function tests.

Evaluation Methods: The student will prepare a written and oral clinical report on each patient and this will be reviewed by the Pulmonary Fellow or Attending. A performance summary is prepared by the responsible faculty at the end of the experience.

*More than two students will be taken only for brief overlap periods by consent of instructor

MEDI 815K (sect 1) - Nephrology, Renal Diseases

Dr. B. Kaplan (Kathy Glockner 626-6371)

3, 4 or 6 wks; maximum length of 6 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 2

Prerequisites: Medicine 803

Goals:

1. Acquisition of basic theories, principles and medical knowledge in the field of nephrology.
2. Experience in acquiring a suitable data base for problem solving and decision making in patients with renal diseases.
3. Performance and interpretation of urine analysis, and interpretation of arterial blood gas analysis, renal panel, creatinine clearance, FE Na, TTKG and other renal functions.
4. Application of data base, laboratory and clinical studies to problem solving in renal patients.
5. Utilization of social and psychological factors in management planning and implementation.

Format: Students will spend 70% of their effort in clinical evaluation and management of out-patients and in-patients with renal disease, including patients on regular maintenance hemodialysis and renal transplant recipients. These activities will be accomplished by means of consultations, clinics and daily management rounds with a staff nephrologist at UMC or VAH. All students will spend 10% of their effort preparing for and attending regularly scheduled conferences including the weekly Renal Grand Rounds Nephrology Research and monthly Renal Biopsy Conference. Students are expected to spend 20% of their effort reviewing textbook sections and current literature pertinent to clinical problems encountered.

Evaluation Methods: Students will be evaluated on the basis of their written patient consultations and clinic notes, and on the basis of their acquired knowledge of their patients, their patients' problems and approach to and management of their patients' problems. The latter will be assessed by the staff nephrologist in his/her daily contact with the student. Students will also be evaluated on the basis of participation in and contribution to conferences. No written exam will be given.

MEDI 815L (sect 1) - Pediatric and Adult Clinical Allergy and Immunology (CLOSED)

Drs. J. Pinnas, Goldstein & Schultz

4 or 6 wks; maximum length of 6 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 1

Prerequisites: Medicine 803

Goals:

1. To obtain a deeper understanding of clinical allergy.
2. To achieve an understanding of the relationship of office and laboratory immunology techniques to disease manifestations.

Format: The student will help in the evaluation and management of adult and pediatric allergy patients in office settings. There will be regular informal conferences on pertinent patient problems. Hospitalized patients may be seen in consultation. The office and laboratory investigation of allergic and immunologic diseases will be discussed. There will be adequate time for surveying the literature.

Evaluation Methods: Informal examinations throughout the elective and student evaluation of elective.

**Crosslisted with PED 815L (MEDI 815L is home)*

MEDI 815NI - Physical Medicine & Rehabilitation (Physiatry Associates, Tucson)

Dr. J. Larson & Associates (Nell 795 8371)

3, 4 or 6 wks; maximum length of 6 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 2

Prerequisites: Fourth-year medical students

Goals: To offer beginning experience in Rehabilitation, Physical Medicine and Electrodiagnosis.

Format: The Rehabilitation segment will concentrate on rehabilitation techniques and philosophies with exposure to the interdisciplinary team approach to patient management. The individual should have exposure to common rehabilitation problems during this time, including spinal cord injury, closed head trauma and cerebral vascular disease. The Physical Medicine portion would include evaluation and treatment of acute and chronic musculoskeletal as well as pain problems and allow exposures to the various physical therapy modalities. It would also include a review of sports medicine and re-

lated problems as well as a review of functional anatomy. The Electrodiagnostic exposure would be directed at providing the student with an overview of the various techniques available and a basis for establishing personal referral criteria.

Evaluation Methods: Instructor's impressions through demonstration of proficiency in patient management problems.

MEDI 815P (sect 1) - Critical Care Medicine

Drs. C. Otto & J. McCoy (626 7141)

4 wks *only*; offered year round

Directly supervised/Patient care

Maximum enrollment of 1

Prerequisites: Completion of junior clerkships. Students must sign up through Dr. Otto's office.

Goals: To provide the student with an introduction to the management of the patient with severe multiple system disease in the surgical intensive care unit setting. Major emphasis will be placed on providing an understanding of the diagnosis and management of acute respiratory failure, fluid, electrolyte, cardiovascular and neurological disorders.

Format: The experience will consist of a four- or six-week assignment to the Critical Care Service. Students will work under the supervision of residents and fellows of this service and an attending physician. They will participate in patient consultations and follow-up, rounds and conferences.

Evaluation Methods: Evaluation by supervising faculty member.

**Crosslisted with ANES 815P (home) & SURG 815P*

MEDI 815S (sect 1) - Rheumatology (Arthritis & Clinical Immunology)

Dr. B. Vaz (Terri Buchanan 694 0622)

4 or 6 wks; maximum length of 6 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 3

Prerequisites: Medicine 803

Goals: The purpose of the elective is to enable the student to acquire knowledge and skills related to diagnosis and management of arthritis as well as immunological disorders.

Format: The student will gather knowledge by reading, discussions with faculty and surveying the appropriate literature. Clinical data will be obtained by patient interview and physical examination. The student will be involved in outpatient clinics and will share in taking consultations in hospital-ward cases. As part of the team the student will participate in patient management. The student will participate in weekly Rheumatology Conferences and rounds and will have the opportunity to do laboratory work if the student wishes. Conferences include basic skills for students, radiology, clinical and basic topics.

Evaluation Methods: Students will be evaluated for the knowledge and skills they develop in the care of patients with rheumatic diseases and immunologic illnesses. They will be evaluated on patient care, presentation and questions during clinics, rounds and conferences.

MEDI 815V - Clinical Evaluation & Treatment of Sleep Disorders

Dr. R. Bootzin and Sleep Disorders Center Faculty (Maria Kacias 626 6795)

3 wks; maximum length of 6 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 2

Prerequisites: none

Goals: Familiarize students with the spectrum of clinical sleep disorders and approaches to the evaluation and treatment of these disorders, as well as the use and interpretation of polysomnograms. The areas of insomnia, narcolepsy and sleep apnea will be stressed but a broad range of other sleep disorders will be examined as well. We will also aim to provide students with a better understanding of normal sleep patterns and mechanisms against which clinical aberrations can be judged.

Format: Students will be given several informal talks on normal sleep and the evaluation and treatment of insomnia, narcolepsy and sleep apnea. Students will be expected to spend time studying a provided reading list. Students will have supervised time weekly in the insomnia and sleep disorders clinics seeing patients with various sleep disorders, assisting in their evaluation and formulating treatment plans. Students will spend time with faculty reviewing polysomnograms to learn the rudiments of polysomnogram interpretation.

Evaluation Methods: Students will be evaluated by the coordinating faculty based on their performance in the clinical setting and a brief written test at the end of the elective session.

MEDI 815W (sect 1) - Issues in Women's Health**Dr. A.M. Lopez & Faculty (626 2271; alopez@azcc.arizona.edu)**4 wks; Period 4W3 *only*

Directly supervised/Patient care

Maximum enrollment 4

Prerequisites: Completion of third year clerkships

Goals: To learn about the following elements of women's health:

1. Coronary Diseases
2. Osteoporosis
3. Cancer
4. Menopause
5. Contraception
6. Infertility
7. Sexually Transmitted Disease and
8. Clinical Trials.

In addition, an optional segment on pregnancy termination will be available. Clinical and seminar experiences will focus on psychosocial, cross-cultural, and communication issues as they pertain to women's health.

Format: A combination of didactic and clinical experiences, readings of review articles, and small group discussions. (Important: Concurrent enrollment in other electives not permitted without prior consent of instructor.)

Evaluation Methods: Student attendance and participation in discussions. Direct clinical experiences at community clinical sites. A student presentation and paper will be required.

*Co-convened with OB G 815W and INDR 815A, which is home***MEDI 815Z - Pulmonary Function Lab****Dr. Beeler (ebeeler@umcaz.edu)**

3 wks; maximum length 3 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 2

Goals: Learn the indications, procedures, and interpretation of pulmonary function tests. Experience them as a patient, technician, and physician using them for diagnosis and treatment follow-up.

Format: The student will be tested as a patient for spirometry (before and after bronchodilator), forced inspiratory flow for asthma, static lung volumes, diffusing capacity, maximal respiratory pressures, methacholine challenge, and exercise oxygen consumption and oxygen saturation. The student will watch these tests being done on several patients and will learn to administer the screening spirometry test, administer bronchodilators by nebulizer and metered dose inhaler, and use the pulse oximeter. The student will participate in arterial blood gas punctures, both single sticks and from arterial lines, and observe ABG analysis and quality control checks. The student will interpret the PF test reports with the Medical Director. The student will review the medical chart and radiographs of selected patients with classic pulmonary diseases and patterns of pulmonary function abnormality, and the indications and cost of each commonly performed PF test.

Evaluation Methods: 50 multiple-choice questions.

MEDI 816B - Native American Medicine and Cardiology**Drs. J. Galloway & E. Brody (Juanita 694 7000)**

3 or 4 wks; maximum length 4 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 1 per month

Goals: To enhance understanding and treatment of patients with complex internal medicine and cardiovascular problems. To enhance understanding of appropriate use of invasive and non-invasive diagnostic cardiology procedures. To increase awareness and cultural sensitivity in caring for patients from diverse socio-cultural and socio-economic backgrounds.

Format: Evaluation and follow-up of inpatients on the Native American Cardiology service. Outpatient evaluations. Potential travel to reservation Indian Health Service facilities for additional outpatient experience, specifically designed to enhance understanding of patient socio-cultural and socio-economic conditions and how this relates to medical care both on the reservation and in a tertiary care setting.

Evaluation Methods: Direct observation of bedside skills, progress notes and outpatient evaluations. Participation in teaching rounds.

MEDI 816E - End of Life Care (Va- Tucson)**Drs. M.C. Bishop & H. Ahner**

4 wks; maximum length 4 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 4

Prerequisites: Third year Medicine Clerkship. Completion of all third year clerkships.

Goals: Students will understand and describe philosophy and goals of hospice and palliative care. Students will also understand and describe principles of effective pain management in hospice and palliative care. They will understand the difference between palliative symptom management and curative medical intervention, care of the terminally ill, and

appropriateness for referral of non-cancer and cancer patients. Students will learn to communicate appropriately with terminally ill patients and families, demonstrate knowledge of psycho-spiritual issues faced by terminally ill patients and families. The student will achieve the understanding of the role of the physician as a member of the hospice care team. Students will participate in on call home visits and participates in referral and admission process.

Format: In this didactic and clinical experience, students will participate in patient evaluations in the inpatient hospice and palliative care unit with various team members, and homecare hospices. Students will participate in interdisciplinary team conferences, discuss significant ethical issues, and demonstrate clinical problem solving and competency at initial and ongoing consults for the hospice and palliative patient admitted. They will round daily with the team on the hospice in-patients. Direct clinical experience will be supplemented by lectures, e.g. pain management and other hospice and palliative care topics listed in curriculum, and relevant readings. The faculty will supervise all activities.

Evaluation Methods: Students will receive a pre-test and a post-test. Standard Division of Academic Resources evaluation forms will be used.

MEDI 816H - Geriatric Outpatient Primary Care Clinic (VAH, Tucson) (CLOSED)

Dr. J. LeRoy (629 4674)

3, 4 or 6 wks, offered year round

Directly supervised

Maximum enrollment of 1

Prerequisites: none

Goals: This elective will provide the student an opportunity to acquire a basic foundation in geriatric medicine that includes: improving the student's knowledge of normal and abnormal aging; managing both acute and chronic problems; dealing with ethical dilemmas.

Format: The elective will be based in the Geriatric Primary Care clinic at the Tucson VAH. The student will help evaluate and treat patients with scheduled appointments and "walk-ins". The elective will not require call. According to the students level and ability, they will also be integrated as a member of the Geriatric Evaluation Management Team as well as the Geriatric Interdisciplinary Primary Care Team.

Evaluation Methods: Students will receive ongoing feedback and a written evaluation by the attending physician at the conclusion of the elective. No formal examination will be given.

MEDI 816Iy - Geriatric Medicine/Internal Medicine Elective (Yuma)

Dr. D.L.P. Wong (928 344 5455; 344 5465 - fax)

4 wks, offered September-November, February-April

Not directly supervised

Maximum enrollment of 1

Prerequisites: none

Goals: Upon successful completion of this elective, students will be able to do a comprehensive history and physical examination of a complex geriatric patient and will become familiar with the geriatric giants (delirium, dementia, falls, urinary incontinence and polypharmacy.)

Format: The student will do clinical evaluations of outpatients and inpatients. Reading assignments, video-teaching and bedside teaching by the preceptor will be used to complement and verify the clinical evaluations.

Evaluation Methods: Oral questioning and presentation of histories and physicals will be used to assess the student's learning of the comprehensive evaluation.

MEDI 816J - Hematology/Oncology In-Patient Care

Dr. R. Swart (Karen Childs kchilds@azcc.arizona.edu 626 2816)

4 weeks, max 4 weeks; offered year round

Directly supervised

Maximum enrollment of 2, minimum of 1

Prerequisites: Medicine 803

Goals: Students will acquire an in-depth understanding of the management of patients with hematological and oncological diseases requiring in-patient therapy; including a better understanding of the clinical needs of cancer patient; improve diagnostic skills; and improve differential diagnoses assessments with respect to the patient who presents with a blood disorder or a suspected tumor.

Format: A 4 week clinical experience offered in the Hematology/Oncology in-patient service. The senior student with an interest in complex malignant and hematological disease will experience the opportunity to work as an active member of the Hematology/Oncology in-patient team. The student will actively participate in morning rounds, teaching conferences and on-going patient care including consultation services. Students will also observe and perform bone marrow core and aspirate procedures.

Evaluation Methods: Evaluation is based upon daily presentations to attendings, chart reviews and direct observation of student-patient interaction in a tutorial style format.

MEDI 816K (sect 1) – Care of the Older Adult

Drs. M.J. Fain & L. Tomasa (629 1838, mindy.fain@med.va.gov)

3 or 4 wks; maximum length of 8 wks; offered year round

Directly supervised/Patient care

Maximum enrollment 2

Prerequisites: Fourth year medical student, with consent from instructor prior to registering

Goals: To provide the student with a clinical and community-based experience with older adults. Emphasis will be placed on the multifaceted aspects of aging as well as the interdisciplinary approach to geriatric care. Students will be exposed to a continuum of care from the least restrictive to most restrictive environments.

Format: Students will work under the direct supervision of a geriatrician/gerontologist as a member of a multi-disciplinary team. The continuum of care will be provided in both institutional and community based settings. The experience will address cross-cultural aspects of aging, health promotion, and the maintenance of functional abilities. Students will be exposed to home care, a comprehensive geriatric evaluation clinic, assisted living, and hospice care.

Students may focus on areas of interest that include rural health, community-based care, optimal aging, and home visits with elders. A plan and schedule will be developed to meet the student's learning objectives as well as cover basic principles of care for older adults. A reading syllabus will be provided.

Evaluation Methods: Direct observation and feedback by preceptors will occur at the various clinical sites. Students will keep a journal and will make a presentation on a health topic to a group of older persons or community group.

Crosslisted with FCM 816K

MEDI 891Ai/891Au - General Medicine and/or Sub-specialties

Dr. W.P. Johnson (626 9660; wpj@u.arizona.edu)

3, 4 or 6 wks; maximum length of 12 wks; offered year round

Directly supervised/Patient care Prior approval.

Maximum enrollment of 1

Prerequisites: Medicine 803

Goals: Through the sponsorship of a member of the Department of Medicine, a student may apply for a preceptorship experience in hospitals throughout the world. Students seeking unique preceptorships in any aspect of Internal Medicine must first consult with a member of the Department of Medicine here. This faculty member, preferably, would be familiar with the student's area of interest and with the particular hospital in which the student desires the preceptorship. Next, discuss the proposed preceptorship with Dr. Barbee to see if credit can be obtained. Usually there is no problem granting credit if the elective is taken in a Department of Medicine at a medical school in the United States, Canada and England or at the National Institutes of Health. A letter will be sent to the individual in charge of the elective at the outside institution specifying the dates the student want to work there and asking them to indicate their willingness to accept the student for training and to evaluate the student. The student is responsible for furnishing the Student Records Office with the name and address of the supervisor at the outside institution.

Format: As determined by the preceptor.

Evaluation Methods: The form issued by the College of Medicine may be used; however, arrangements can be made to accept evaluation forms from institutions that will not use our forms.

MEDI 891I - Rural Health Professions Program

Dr. C. Galper (626 2351)

3, 4 or 6 wks; maximum length 12 wks; offered year round

Directly supervised/Patient care

Maximum enrollment of 15, minimum of 1

Prerequisites: Open only to students formally admitted in the Rural Health Professions Program

Goals: The Rural Health Professions Program(RHPP) was designed to provide medical students with quality educational experiences in selected rural settings. The goals of this course are as follows:

1. Continue development of clinical patient care skills
2. Understand the public health and medical care issues in a rural community
3. Investigate the range of factors that influence individual, family health and community-oriented care
4. Develop a working knowledge of community-based health and social support services and resources, and learn how to draw upon these resources in caring for patients

Format: Students will participate in patient care providing service in the practices of their preceptors. In addition, students will investigate social service and other health care agencies to gain a more complete knowledge of services available as well as health and social issues in their communities. Students will work with their assigned physician preceptors in their practices located in rural Arizona.

Evaluation Methods: Assist in the provision of patient care at a level congruent with training. Maintain the Memorable Patient Contact Book. Complete and return the provided RHPP evaluation form to the RHPP administration. Physician

preceptors will complete an evaluation of students' performance and submit to the RHPP administration.

**Crosslisted with INDR 891I, which is home; OB G 891I, PED 891I, SURG 891I & FCM 891A1*

MEDI 896A- Mind-Body Medicine Skills Group Program

Mark D. Gilbert, MD (mdg@email.arizona.edu)

12 weeks; January - March; 2 credits

Directly supervised/Non-Patient care

Maximum enrollment of 9, minimum enrollment 8

Prerequisites: Completion of third year clinical clerkships

Goals: To teach medical students how to incorporate mind-body skills into their professional and personal practices, and to increase their life/professional satisfaction through the use of these skills.

Format: The Mind-Body Medicine Skills Group Program is a 12 week (two 6-week blocks), 2.5 hour per week experiential program that teaches medical students a healing, transformative model of health care, while providing proven techniques to prevent burnout and refine professional purpose within a supportive confidential group setting. Students will learn about the history of Mind-Body Medicine, research regarding stress/depression and psychoneuroimmunology, imagery, relaxation techniques, biofeedback, emotional and cognitive awareness exercises, humor and health, nutritional awareness, spiritual connection, issues of death and dying, forgiveness and other topics related to the field. Students will practice meditation, imagery and other techniques, and will have the opportunity to explore the personal meaning, trials, fears and ideals of becoming a physician.

Evaluation: Students performance will be evaluated based on multiple criteria. Attendance and level of participation as well as the student's ability to demonstrate understanding of the uses and specific techniques of Mind-Body skills.

MEDI 896K - Topics in Surgery and Medicine (CLOSED)

Dr. J. Alpert

Offered January - April; M, 3-5 PM; 1-2 credits

No Maximum enrollment, minimum of 3

Prerequisites: Year IV medical students only

Goals:

1. Students will examine a number of topics in medicine and surgery that relate to intensive care medicine, inpatient medicine and serious medical and surgical illnesses.
2. Students will learn how to deal with seriously ill patients and rapidly evolving situations.
3. Topics will include the diagnosis and management of specific disease processes such as: cardiac, pulmonary, renal, infectious, GI, endocrine, hemotologic and neurologic as well as drug overdoses, shock and trauma, transplantation and nutritional topics.

Format: Two-hour long interactive seminar-type discussions facilitated by faculty in Surgery and Medicine once a week. There will be assigned reading material each week as well as the seminar-type discussions. Participation is the key to success of this program.

Evaluation Methods: Participation in seminar discussions every week. Faculty will evaluate the degree of student participation and level of contribution to seminar discussions.

MEDI 696U/896U - Cardiovascular Pathophysiology

Dr. P. McDonagh and Faculty from the Departments of Surgery and Medicine.

Offered April-May; TTh, 1-3PM; 2 credits

Directly supervised/Non-patient care.

Maximum enrollment of 20, Minimum of 6

Prerequisites: Open to third and fourth-year medical students, **Registration Deadline - December 17**

Goals: This six week seminar course is designed to help medical students form a solid foundation of knowledge of diseases of the heart and circulation.

Format: The course will consist of lectures, readings, case presentations and demonstrations. The students will utilize *Pathophysiology of Heart Disease* by Leonard Lilly, M.D. as a primary source as well as selected readings from the instructors. Each two-hour seminar period will cover a specific topic. Included in each period will be a review of the underlying pathobiology and pathophysiology, signs and symptoms, special diagnostic techniques, pharmacologic and, when appropriate, surgical management of the cardiovascular disorder under discussion.

The topics will be:

1. Review of Cardiovascular Structure and Function
2. Heart Sounds, Murmurs and Physical Diagnosis
3. Diagnostic Cardiovascular Imaging
4. Atherosclerosis
5. Hypertension
6. Ischemic Heart Disease
7. Myocardial Infarction

- 8. Heart Failure
- 9. Peripheral Arterial Disease
- 10. Peripheral Venous Disease
- 11. Cardiovascular Pharmaceuticals
- 12. Cardiothoracic Surgery and Transplantation

Evaluation Methods: Students will be evaluated weekly by their demonstrated preparation for each seminar and by active participation in discussions. Students will also be required to select a specific topic, review recent literature in that area and write a report on "Current Concepts in the Etiology and Management of"

**Crosslisted with MED 696U/896U, PSIO 696U/896U and SURG 696U/896U*

MEDI 899 - Independent Study

Dr. W.P. Johnson (626 9660; wpj@u.arizona.edu)

3 or 6 wks; maximum length of 18 wks; offered year round

Directly supervised/Patient care or non-patient care.

Maximum enrollment varies

Goals: The goal of this elective is to allow the student to work with a particular faculty member in pursuit of a particular field of study in internal medicine.

Format: As arranged between student and instructor.

Evaluation Methods: As arranged.