Patient Oriented Research Curriculum

1. REQUIRED LECTURE:

"Biobehavioral Research in Cancer Prevention and Control" (by G. Morrow)

Topics: Issues of recruitment, sampling, design, assessment points, primary and secondary endpoints, patient assessment burden, forms design, database development, aspects of implementing and conducting cancer control clinical trials in a medical setting.

2. REQUIRED CORE COURSES:

(1) Social and Behavioral Medicine (PM 426) The course will focus on: 1) the application of behavioral, sociological, and anthropological science approaches to the etiology, prevention, treatment, and management of physical disease and illness; and 2) the identification of relationships among behavioral, sociological, anthropological, and biological factors in health. Students will acquire a familiarity with current theoretical and methodological issues in social and behavioral medicine, develop an understanding of evidence-based health promotion/disease prevention interventions in different content areas, consider cross-cultural perspectives, and develop critical thinking skills necessary to evaluate the research literature in these areas. **(D. Ossip-Klein is course coordinator, G. Morrow, J. Roscoe and others have taught sections)**

(2) Design of Clinical Trials (BST 465) Design, conduct, and analysis of clinical trials. Sample size, power, randomization. Coordination, data management, compliance, interim analysis, and reporting procedures. **(H. Zhao)**

3. ELECTIVE COURSES:

- Biopsychology of Social and Clinical Behaviors (PSY 113)
- Social Psychology and Individual Differences (CSP 161)
- "He said...She said...:" Gender Differences in Communication (PSY 192Q)
- Neuropsychology (BCS 242)
- Behavioral Medicine (CSP 283)
- Exploring Research in Family Psychology I (PSY 377)

- Research in Motivation (PSY 398)
- Psychology of Health (CSP 568)

4. REQUIRED CORE SEMINARS:

Introduction to Clinical Research at the University of Rochester (July of 1st year)

This series constitutes four one-hour seminars, which will introduce the trainee to opportunities for transdisciplinary investigation within the University of Rochester and its Medical Center. These initial seminars will provide an overview of the types of clinical research taking place at the University, including patient oriented research, epidemiology, behavioral sciences and health services research. The goal of these sessions is to initiate the planning for each trainee's individual curriculum and research project as early as possible, and facilitate the identification of local research resources, populations, and databases. **(T. Pearson, Coordinator)**

Enhancing Clinical Research Skills

In the second semester of Year 1 (16 weeks) and the fall of Year 2 (14 weeks), weekly workshops will be held to improve the trainee's skills in clinical research. In Year 1, the skills of scientific communication will be the focus of the seminars. Trainees will initiate a writing project (e.g., a literature review, scientific proposal, case study, manuscript of prior research) which will be reviewed for clarity, organization, and content. Skills in critiquing a manuscript will also be taught at this time. Trainees will learn the principles of presentation of scientific work, including public speaking, working with the media, preparation of abstracts, preparation of slides, and the development of posters.

Techniques of computer-based presentation, including an introduction (or more advanced instruction, as befits the individual trainee) to software programs such as PowerPoint will be included. At the end of this series, the trainee will be able to prepare and present his/her results in written, visual, or oral form clearly and concisely. Under the supervision of their mentors, they will prepare and submit an abstract of some aspect of their ongoing research for presentation at a relevant scientific meeting such as the Society of Behavioral Medicine (SBM), Multinational Association for Supportive Care in Cancer (MASCC), American Society of Clinical Oncology (ASCO) or another. **(T. Pearson and others)**

Community Clinical Oncology Program (CCOP) Research Base

Current NCI-approved URCC CCOP cancer control:

- Oral Antibiotic Prophylaxis of Early Infection in Multiple Myeloma
- Dyspnea in Cancer Patients
- A Phase II/III Randomized, Controlled Clinical Trial of Ginger (*Zingiber Officinale*) for Nausea Caused by Chemotherapy for Cancer
- Control Of Vasomotor Symptoms In Women Treated For Breast Cancer
- A Prospective Randomized Controlled Multicenter Study of the Effect of Dalteparin on Quality of Life in Unresectable Pancreatic Cancer

- Phase III Randomized, Placebo-Controlled, Double-Blind Trial of the Effect of Modafinil on Fatigue in Cancer Patients Receiving Chemotherapy
- Treatment of Delayed Nausea: What Works Best?
- Group Therapy and PSA Changes in Men Following Radical Prostatectomy
- Sandostatin LAR® Depot (octreotide acetate) for Prevention of Chemotherapy-Induced Diarrhea in Colorectal Cancer Patients

Individual Mentor Research Opportunities

The listing of a mentor's research within one of the three focus areas is somewhat artificial since many of the interests and active research projects span a couple of the areas as can be seen from the sponsored grants. The program is designed to have this multidisciplinary view adopted by the trainees.

- Mechanisms of nausea, with a focus on the autonomic nervous system; cytokine involvement in the development of fatigue; effectiveness of ginger as an antiemetic in chemotherapy nausea (G. Morrow)

- Pain control in cancer and its treatment (B. Dworkin)

- Multi-center trial for the reduction of diarrhea as a result of chemotherapy; optimizing placebo response to enhance antiemetic effectiveness (J. Roscoe)

- Assessment of fatigue, determination of the efficacy of celecoxib in prevention of actinic keratoses, the role of Cyclooxygenase-2 in normal skin physiology and the pathophysiology of skin repair/injury after UV exposure (A. Pentland)

- Chronic and terminal illness in children, problem-solving skills training, cognitive remediation in cancer survivors, and the use of complementary medicine in allopathic practice; music therapy and immune function in transplantation (O. J. Sahler)