

CURRICULUM IN COMPLEMENTARY, ALTERNATIVE AND INTEGRATIVE MEDICINE---PREVENTIVE AND CURATIVE (CAIM)

College of Medicine Learning Objective
Domain of Medical Knowledge:

The competent graduate must have a thorough understanding of the principles, risks and possible benefits of complementary, alternative and integrative medicine.

I. Objectives:

- A. Understand terms of Complementary, Alternative and Integrative Medicine – Preventive and Curative.
- B. Understand the Uses of Complementary, Alternative and Integrative Medicine.
- C. Demonstrate how to ask about and discuss CAIM with patients in a non-judgmental manner.
- D. Discuss the basic tenets of a variety of healing systems.
- E. Assess the literature.

II. Modalities

- A. Whole Medical Systems (e.g. Ayurveda, osteopathy, traditional Chinese Medicine including acupuncture)
- B. Mind-Body (e.g. aromatherapy, guided imagery, preoperative meditation, postoperative pain management, hypnosis, biofeedback)
- C. Biological Based (e.g. Supplements, herbals/botanicals and vitamins and functional foods)

- D. Manipulative/Body Based (e.g. massage, chiropractic), Exercise (martial art, yoga, tai chi)

III. Graduation Competencies Addressed

Patient care

The competent graduate will:

- A1. Consider cultural and socioeconomic factors in management options.
- A2. Form an effective therapeutic relationship.
- A3. Construct a therapeutic plan for relieving pain, ameliorating suffering and directed toward specific solution of health problems.
- A4. Apply the principles of epidemiology and evidence-based medicine.

Medical knowledge

The competent graduate must have a thorough understanding of:

- B1. Principles, risks and possible benefits of complementary and alternative medicine,
- B2. Concepts, principles and applications of evidence-based medicine.
- B3. Psychological, socioeconomic and cultural factors pertaining to health.

Practice-based Learning and Improvement

The graduate must:

- C1. Be committed to lifelong learning.

- C2. Set clear learning goals, pursue them and continuously integrate knowledge gained and apply them to improve medical care.
- C3. Access information effectively and efficiently; critically appraise the information and relate it to the patient's health problems.
- C4. Deal with uncertainty and respect the opinion of others.

Interpersonal and Communication Skills

The competent graduate:

- D1. Communicates clearly with patients and patients' families.
- D2. Works effectively with other members of the interdisciplinary healthcare teams.

Professionalism

The competent graduate:

- E1. Recognizes the need to learn is continuous.

Systems based practice

The competent graduate:

- F1. Describes how to appropriately utilize and integrate the services of multidisciplinary health providers.
- F2. Evaluates and integrates hospital and community resources well.
- F3. Works collaboratively with other health professionals to optimize the quality of care rendered.

IV. Methods

The committee discourages lecturing and strongly urges teachers to use interactive learning formats .

(Red font indicates suggestions only)

A. M-1

1. Orientation: Presentations on the following two topics during orientation week goal is no lecture format:
 - a. Functional Foods and Diet (Dept of Food Science and Human Nutrition) B4.3
 - b. Exercise (delivered by senior students who participate in the following) B4.4
 - Martial Arts in the community
 - Cycling Club (city-wide sports-focused groups)
 - Running (marathons, triathlons)
 - Fitness Facilities (IMPE, CRCE, Ice Arena, Climbing Wall, Tennis)
2. Noon seminars will be optional and food will be provided. Demos will be incorporated as appropriate. Each of the two mentioned disciplines will have one seminar. (2 per semester). Seminars will be designed to supplement M1 courses as appropriate.
 - a. Fall
 - Body Based – Massage B4.4
 - Whole Medical System – Acupuncture B4.1
Or Traditional Chinese Medicine(TCM)
 - b. Spring
 - Biological Based – Aromatherapy B4.3
 - Mind-Body – Meditation B4.2
3. Weekend Workshops with Active Participation; 1 per semester
 - Body Based – Yoga or Tai Chi B4.4
 - Whole Medical System – Osteopathy B4.1
 - Biological Based – Botanical/Herbal Tasting B4.3
 - Mind-Body – Hypnosis or Art B4.2

4. Introduction to Human Disease. Introduce CAIM as a possible clinical personal learning objective. C4; D1
5. Clinical Observorships
 - Option to observe local CAIM practitioners (2-4 hours) B2; F1; F2; F3
6. Summer Research Experience (Gateway and Other) A4; B2; C3; E1
 - Department of Kinesiology
 - Department of Food Science and Human Nutrition
 - Carle Cancer Center

B. M-2:

1. Epidemiology
 - A problem will be addressed which illustrates critical appraisal of the CAIM Literature A4; B2; C3

2. HxPx Dx (Paluska)
CAIM relevant medical interview A1; A2; B1; B; C4; D1

Appreciate the importance of obtaining a history cognizant of CAIM use and acquire skills to gather this information from patients in a sensitive manner.

Discuss the importance and supporting evidence for patient-centered interviewing and be able to conduct interviews in this fashion.

3. Pharmacology (Kemper)
 - Medicinal plants –2 Hours- Donald Briskin, PhD A3; A4; B2; B4.3;
 - Incorporate drug interactions with botanicals and supplements into pre-existing lectures A3; B1; B4.3
4. Tutorials (Hatch – Brewer)
 - **Osteopathy Clinical Rounds (an addition to mental status and physical examination rounds- in the osteopathy clinic at Carle)**
B1; B2; B3; B4.1; D2; F1; F3

C. M3/4:

1. Psychiatry Elective Clerkship-TBD-Aronson

2. Internal Medicine

Nutrition, Karen Chapman-Novakofski, Ph.D. B4.3

3. Medicine Society Course—Physician Wellness-Leichty et al

A. Seminar – 8 hours

B. (Review of literature using CAM literature (Gayed). A4; B2; C1; C3; E1;)

4. Obstetrics & Gynecology Clerkship (Kehl) A1; A2; A3; B2; B3; B4.3; C4; D1; D2

A. Complementary and Alternative treatment for Menopause

- Describe the use of phytoestrogen and herbal supplements for the treatment of vasomotor symptoms
- Understand a nutritional and behavioral approach to the treatment of bone loss in premenopausal and menopausal women.
- Understand what is meant by compounded hormonal medications and the term bioidentical hormones
- Review the use of non-hormonal and nontraditional therapies for the treatment of urogenital atrophy and sexual function decline in menopausal women.

B. Roles of Nurse Midwives B3; D2; F1; F2; F3

CAIM for premenstrual syndrome and dysmenorrhea

5. Pediatrics (Buetow)

A. Supplements and massage therapy for children with behavioral problems, (Charles Morton, MD) A3; B1; B4.3; B4.4; F1; F2; F3

B. **Abdominal pain and complementary medicine** (T. Hatch) A3; B1; B4.3

C. Inappropriate extension of therapies to other ages (children, elderly). B1

6. Psychiatry (Aronson)
 - A. Art -- Sari Aronson, MD and colleagues A3; B4.2; D2; F1; F 2; F3
 - B. Exercise for Depression or massage A3; B4.4; F1; F2
 - C. Spirituality B1.3
Obtain an effective psychosocial spiritual history/assessment from patients with comfort.

7. Surgery Clerkship (Oliphant)
Guided Imagery and Preoperative Medication, Postoperative Pain and Chemotherapy nausea.
A1, A3, B4.b, F1, F2, F3

A Learning Management System (LMS) will be maintained listing faculty and other resources.

V. Evaluation:

A. Evaluation of Curriculum and Faculty

1. Criteria for selection of material for the curriculum. At least one of the following is evident:
 - a. Significant scientific evidence that supports benefit or risk
 - b. Therapy is widely used by patients
 - c. Therapy has potential where conventional therapy is unavailable or ineffective.
 - d. Curricular element focuses on future of field and continued learning or supports other curricular elements (communications, cultural competency, epidemiology, biostatistics).

Materials not meeting these criteria may be provided as extra curricular activities of a Student Interest Group.

2. Survey of attitudes and knowledge will be administered to students at Orientation (M-1) and again during the Medicine and Society Seminar in April of M-3 and Medicine and Society seminars February of M4.
3. Participation will be monitored for observorships, M1 optional elements. Learning Management System use will be recorded.
4. A Steering Team of students, research faculty and clinical faculty will informally assess the curriculum including review of student feedback of curriculum and faculty.
5. A student evaluation of each activity will be available for anonymous comments to Medicine and Society Course Director. (See survey instrument).

B. Evaluation of Students

Students will be assesed in courses in which content is imbedded.

1. **M2 - a.** Competency in medical interview CAIM question. First HxPx Dx recorded patient introduces CAIM use. Reviewing faculty assess student response-formative evaluation.

b. Pharmacology, HxPx Dx, Epidemiology courses will assess competency as part of the course.
2. M1, M-3, and M4 - Survey of attitudes and (?knowledge). Satisfactory completion of M3 and M4 Medicine and Society
3. The Committee recommends that if a senior skills examination were developed that the examination include CAIM objectives.

Management of Curriculum:

This curriculum will be the responsibility of an implementation and coordination team. Each clinical department or equivalent will be represented.

Composition of Team and individuals recommended for 2008-2009 academic year.

- Team Leader – Nancy Bollero,RN
- Operations Managers – Toni Kerney,RN
Linda Moore,MSN
- Clerical Support - Melodee Schweighart
- Student Representatives -
Mai Dang, M-4
Tristan Kraft, M-3
Vitaly Stepensky, M-3
Brian Monroe, M-4
Jennifer Baldwin, M-1

- Faculty -
Sari Gilman Aronson, MD
Donald Briskin, PhD
Karen Chapman-Novakofski, PhD
Wojciech Chodzko-Zajko, PhD
Bharat Gopal, MD
Terry Hatch, MD
Janet Jokela, MD
Byron Kemper, PhD
Janet Leichty, PhD
Hui Liu, MD
Ann Marty, MD
Christian Wagner,MD
Weimo Zhu, PhD

Library Sciences and Informatics
Phoenix Chen
Ryan Rafferty

Grants and Development
Diane Dummitt

References

Gaster, Barak MD; Unterborn, John N. MD; Scott, Richard B.; Schneeweiss, Ronald MB, ChB (October 2007): What Should Students Learn about Complementary and Alternative Medicine? CAM Education. **Academic Medicine. 82(10):934-938, October 2007.**

Ernst,Edzard, editor. The Desktop Guide to Complementary and Alternative Medicine- an Evidence-Based Approach, Hartcourt Publishers Limited, 2001.