

**College of Dentistry**  
**CURRICULUM COMMITTEE**

**June 28, 2013**

**Present:** Cunningham-Ford, (Chair), Burke, Eckert, Gratton, Hoffmann, Holmes, Justman, Kayser, Lindquist, Marshall, Schneider, Solow, Weistroffer

**Absent:** Caplan, Cowen, Eckhardt, Finkelstein, Gratton, Harris, Hernandez, Stemper, Straub-Morarend

**1.0 Approval of May 31, 2013 Minutes**

The motion was made and seconded to approve the minutes from the May 31, 2013 meeting as written (Justman/Weistroffer).

**2.0 Interprofessional Education Program for 2014 (Solow/Weistroffer)**

The IPE Clinical Beginnings ended on June 28<sup>th</sup>. Eight Dentistry faculty and D. Hoffmann were small group facilitators. The case was effective in touching on all disciplines. Our students did a great job of representing dental issues in the case discussions. Dentistry was relevant throughout the case. The standardized patients were very good in incorporating dental issues. The discussions focused on discharge scenarios and on health education.

Ms. Cunningham-Ford reported that each group she worked with was a different mix of students (i.e., PT, Pharmacy, Nursing, Medical & Dental). In both groups the dental student did a superb job of bringing in dental issues to the case. They also did a fine job of promoting that low cost dental services were available at the College—many did not know about this.

The entire D2 class was required to attend the program. Surveys about the program have been distributed to the participating students. They will provide new data because all disciplines were included this year. In addition Dentistry students are completing a reflection assignment about their experiences in the program.

Students provided positive verbal feedback about the program.

2014 program dates have not been determined. The same week as this year (last week of classes) would work best for the College of Dentistry. That week in the D2 2013-14 schedule has been blocked out.

In addition, this fall our D1 students will participate in an evening IPE event at IMU & the students will follow that case in a social media format. This program will be evaluated. Dr Weistroffer & Assoc Dean Solow will keep the Curriculum committee informed of developments in the IPE curriculum.

**2.1 IPE Strategic Plan**

Dean Solow distributed a draft of the executive summary of the IPE Steering committee. The Dentistry, Nursing, Medicine, Public Health and Pharmacy colleges, as well as Library Sciences and Physician's Assistant programs comprise the participants. She reported that it has been a positive experience working with faculty from across the Health Sciences campuses. The group is developing a structure, goals and outcomes for the overall program. The "tipping point" will be whether the IPE will move ahead in a sustainable way on the UI campus or be discontinued. IPE is now one of Dentistry's accreditation standards, and it is in other health professions as well.

Dean Solow reviewed the four competency domains: Values and ethics, roles and responsibilities, communication, and team work. The working group has set goals for 4 major areas to determine progress:

1. Logistics and sustainability
2. Faculty development
3. Development of curriculum and outside learning opportunities
4. Student engagement, which is the most advanced component: a student organization has been formed and several events around cases have taken place.

### 3.0 Revisions to Collegiate Competencies (Cunningham)

Ms. Cunningham-Ford distributed a draft of the proposed revisions to the Collegiate Competencies. During the departmental mapping project presentations, it became evident that CODA standard 5: “Patient Care” needs to be added to the Collegiate competencies document. Standard 5 includes regulatory standards (i.e., HIPPA, infection control protocols), Radiology standards, EBD, CPR. In the proposed draft (attached), none of the competency numbers have changed (i.e., 1 to 13), but 8 references to CODA standard #5 (Patient Care) were added.

**3.1 Foundation Knowledge (FK) statements.** These are quite broad and were included in our previous competency document because they were included in the 2011 draft of ADA integrated National Board exam guidelines. The College is not required to comply with them as CODA standards. Ms. Cunningham-Ford proposed deleting them with the exception of the FK statement #8 regarding: Pharmacology (3e) because Pharmacology is not included in the CODA standards. The FK statements are also not included in the curriculum mapping database.

**3.2 Preclinical Pediatric Dentistry** competencies were added (5j. CODA 2-22).

**3.3 Patient care competencies** were added to Competency 5h (radiology, CODA 5-7) and in Competency 6a. (Managing the practice of dentistry, CODA 5-3, 5-8, 5-9); Competency 9# EBD (CODA 5-2);

Competency #10a. (patient assessment, CODA 5-1, 5-3); Competency # 10m. dental emergencies (CODA 5-5, 5-6); Competency # 13 emerging technology (CODA 5-2: intent statement).

**3.4 Competency #10 e** was updated to add “local” anesthesia as per CODA Standard 2-23e.

**The motion was made and seconded to approve changes to the Collegiate Competencies (Hoffmann/Justman).**

**Discussion:**

Dr Hoffmann agreed that the Foundation Knowledge (FK) statements in the 2012 document (related to basic sciences) were too broad to be useful in the Collegiate Competencies document.

**The motion passed unanimously.**

These revisions will be updated in the mapping database and in the IntraDent. Ms. Cunningham-Ford will inform Dean Johnson of the Curriculum committee’s vote on the revision, request his approval and then email the revision to all faculty for use this summer as they update their syllabi.

### 4.0 Basic Sciences Faculty Retreat (Hoffmann)

The Basic Sciences Faculty Retreat will be held on August 7. The main goals of the morning session are 1) welcome 3 new course directors, provide an introduction to Dentistry, and 3) connect them with dentistry clinical partners to start to build course materials /activities that can be integrated across the basic science and Dentistry courses.

Some suggested pairings were Periodontics and Microbiology; Dental Therapeutics and Biochemistry, Gross Anatomy/Histology and Oral Pathology.

Lunch time discussion topics will include, but not limited to, the curriculum mapping project, grading scales and policies.

The afternoon session will be devoted to learning methods:

- Small group teaching within a large group in a lecture hall.
- Flipped classroom pedagogy. How to develop **incremental steps** when building a FLIP class. The goal of the exercise is for participants to identify one class session where this technique could be applied. Also, identify what students need to do before class time and what will be done in class.
- A tentative topic is process-oriented guided inquiry learning (POGIL) as a model for teaching science.

## **5.0 Proposed 2013-14 Meeting Dates (see attachment)**

Bruce Justman noted that the proposed Aug 23 meeting conflicts with the Freshman luncheon and the Feb proposed date conflicts with the Chicago mid-winter meeting. We will not have August meeting. First meeting will be Sept 27.

Suggested topics for the 2013-14 academic year:

- Gross anatomy survey results.
- Summer enrichment program review
- Biochemistry course revision (Spring 2014)
- Point of care coordination
- Review of standardized syllabus

## **6.0 Comments**

No comments were offered.

## **7.0 Next Meeting**

The next Curriculum Committee meeting will be on **September 27, 2013**, 12:00-1:00 p.m. in the Deans Conference Room

Minutes respectfully submitted by Mary Lynn Eckert.

### I. Executive Summary

In the past decade, collaborative, team-based interprofessional education (IPE) has gained increasing national and international recognition as the standard for preparing health professions students to practice effectively in clinical and community-based settings. Many national health organizations, health professional associations, academic accrediting bodies, academic institutions and health-focused private foundations have adopted IPE as the framework for teaching core competencies required for our evolving system of healthcare delivery.

The University of Iowa boasts a nationally recognized and resource-rich Health Sciences campus that comprises five colleges: dentistry, medicine, nursing, pharmacy and public health. For more than fifteen years, interprofessional education developed as an important, though uncoordinated, teaching approach in the Health Science Colleges (HSC). In 2012, the University of Iowa Health Sciences Policy Council (HSPC) recommitted to developing a comprehensive, coordinated IPE plan and created an IPE Steering Committee to address this goal. The Steering Committee, consisting of faculty representatives from all the HSC, undertook a nine-month, in-depth strategic planning process that has produced a comprehensive IPE framework and plan. The *IPE Strategic Plan: 2013-2016* is anchored to four competency domains established by the Interprofessional Education Collaborative:

- Values and Ethics for Interprofessional Practice
- Roles and Responsibilities
- Interprofessional Communication
- Teams and Teamwork

The Steering Committee identified and evaluated the current status, opportunities and challenges of establishing an IPE program in the HSC, utilizing faculty development and strategic planning subcommittees, two targeted surveys, consultation with IPE experts on faculty development, and student and Steering Committee feedback. Those efforts produced goals in four strategic areas:

#### Strategic Area 1: Logistics and Sustainability

Goal: Establish a central, comprehensive IPE administrative unit with authority to implement curriculum and other education-related activities across the HSC and with dedicated resources that ensure the ability to effectively implement the IPE plan.

#### Strategic Area 2: Faculty Development

Goal: Create a recognized cadre of faculty with expertise in teaching IPE competencies.

#### Strategic Area 3: Curricula and Learning Opportunities

Goal: Establish competency-based IPE as the standard for educating health professions students.

#### Strategic Area 4: Student Engagement

Goal: Encourage and facilitate student-led leadership and learning in interprofessional education.

This collaborative, interactive planning process has already generated notably positive outcomes including new interest and learning opportunities by students and faculty, establishment of a student-led organization- Students for Interprofessional Education, and a website disseminating timely information on UI IPE activities, and resources, as well as national developments. HSC faculty and students have demonstrated strong enthusiasm and leadership for advancing comprehensive IPE.

This strategic plan will serve as a foundational blueprint and immediate catalyst to integrate existing IPE resources, implement a coordinated curriculum, support faculty development and innovation, and create a sustainable learning infrastructure and environment. Now is the time for the HSPC and HSC to convert a promising opportunity into a solid, rewarding reality.

## **Collegiate Competencies - University of Iowa College of Dentistry – 2012**

**(highlighted for revisions- June 2013)**

### **1. Critical thinking**

Students must demonstrate competence in the use of critical thinking & problem-solving, including their use in the comprehensive care of patients, scientific inquiry & research methodology. (\*CODA 2-9)

### **2. Self-assessment & self-directed lifelong learning**

Students must demonstrate the ability to self-assess, including the development of professional competencies and the demonstration of professional values and capacities associated with self-directed, lifelong learning. (CODA 2-10)

### **3. Foundations in Biomedical Sciences**

- a. Biomedical science instruction in dental education must ensure an in-depth understanding of basic biological principles, consisting of a core of information on the fundamental structures, functions & interrelationships of the body systems. (CODA 2-11)
  - Human Physiology (MPB 8115)\*\*
  - Biochemistry (BIOC 8101)\*\*
  - Human Gross Anatomy (ACB 8120)\*\*
  - Histology for Dental Students (ACB 8121)\*\*
  - Dental Microbiology (MICR 8230)\*\*
- b. The biomedical knowledge base must emphasize that the oro-facial complex is an important anatomical area existing in a complex biological interrelationship with the entire body. (CODA 2-12)
- c. In-depth information on abnormal biological conditions must be provided to support a high level of understanding of the etiology, epidemiology, differential diagnosis, pathogenesis, prevention, treatment and prognosis for oral and oral –related diseases. (CODA 2-13)
  - Human General Pathology (PATH 8133)\*\*
  - Oral Pathology (OPRM 8235)\*\*
- d. Students must demonstrate competence in the application of biomedical science knowledge in the delivery of patient care. (CODA 2-14)
- e. Students must apply knowledge of pharmacology in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health. (FK8)\*\*\*
  - Basic Pharmacology for Dental Students (PCOL 8240)\*\*
  - Applied Pharmacology/Dental Therapeutics (DENT 8368)\*\*

FK1: Students must apply knowledge of molecular, biochemical, cellular, and systems level development, structure and function to the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health. (Human Gross Anatomy & Histology, Human Physiology, Biochemistry)

FK2: Students must apply knowledge of physics and chemistry to explain normal biology and pathobiology in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health. (Human

## Physiology, Biochemistry, Human Pathology)

FK4: Students must apply knowledge of the principles of genetic, congenital and developmental diseases and conditions and their clinical features to understand patient risk in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health. (Human Gross Anatomy, Histology for Dental Students, Human Pathology)

FK5: Students must apply knowledge of the cellular and molecular basis of immune and non-immune host defense mechanisms in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health. (Dental Microbiology)

FK6: Students must apply knowledge of general and disease-specific pathology to assess patient risk in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health. (Human General Pathology and Oral Pathology)

FK7: Students must apply knowledge of the biology of microorganisms in physiology and pathology in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health. (Dental Microbiology, Human Physiology, Human General Pathology)

~~(FK refers to “Foundation Knowledge” statements in ADA Committee for an Integrated Examination (CIE) – Draft (Nov 2011) “Foundation Knowledge for the General Dentist” (FK1 thru FK 8))~~

## 4. Foundations in Behavioral Sciences –

a. Students must demonstrate competence in the application of the fundamental principles of behavioral sciences as they pertain to patient-centered approaches for promoting, improving and maintaining oral health. (CODA 2-15)

b. Students must demonstrate competence in managing a diverse patient population and have the interpersonal and communications skill to function successfully in a multicultural work environment.

(CODA 2-16)

## 5. Foundations in Dental Sciences

Students must demonstrate preclinical competence (as defined by the Course Director) in each of the following areas:

- a. Dental Anatomy (OPER 8120)\*\*
- b. Preclinical Operative Dentistry (OPER 8122)\*\*(CODA 2-23f)
- c. Preclinical Prosthodontics (CODA 2-23h)
- d. Preclinical Periodontics (didactic)(PERI 8140 and PERI 8230)\*\*(CODA 2-23i)
- e. Preventive Dentistry skills (PCD 8116 and PCD 8118)\*\*
- f. Preclinical Endodontics (ENDO 8241)\*\*(CODA 2-23j)
- g. Anesthesia & Pain control (OMFS 8115)\*\* (CODA 2-23e)
- h. Oral and Maxillofacial Radiology (OPRM 8120 and OPRM 8245)\*\*(CODA 5-7)
- i. Preclinical Orthodontics (ORDN 8235)\*\* (CODA 2-23n)
- j. Preclinical Pediatric Dentistry (PEDO 8240)\*\*(CODA 2-22)

## **6. Managing the practice of dentistry**

- a. Students must demonstrate competence in applying legal and regulatory concepts related to the provision and /or support of oral health care services. (CODA 2-17, 5-3, 5-8, 5-9)
- b. Students must demonstrate competence in applying the basic principles and philosophies of practice management , models of oral health care delivery and how to function successfully as a leader of the oral health care team. (CODA 2-18)

## **7. Interprofessional health care**

Students must demonstrate competence in communicating and collaborating with other members of the health care team to facilitate the provision of health care. (CODA 2-19)

## **8. Ethical practice of dentistry**

Students must demonstrate competence in the application of the principles of ethical decision making and professional responsibility. (CODA 2-20)

## **9. Evidence-based dentistry**

Students must demonstrate competence in the five steps of EBD (to ask the question, to access, critically appraise, & apply) and communicate scientific and lay literature as it relates to providing evidence-based patient care. (CODA 2-21 and CODA 5-2)

## **10. Comprehensive General Dentistry**

Students must demonstrate competence in providing oral health care within the scope of general dentistry to patients in all stages of life. (CODA 2-22)

At a minimum, students must demonstrate competence in providing oral health care within the scope of general dentistry, as defined by the school, including: (CODA 2-23)

**10a:** Patient Assessment, diagnosis, comprehensive treatment planning, prognosis & informed consent (CODA 2-23a, 5-1, 5-3)

**10b:** screening & risk assessment for head & neck cancer (CODA 2-23b)

**10c:** recognizing the complexity of patient treatment & identifying when referral is indicated (CODA 2-23c)

**10d:** health promotion & disease prevention, including diet (CODA 2-23d)

**10e:** local anesthesia & pain & anxiety control (CODA 2-23e)

**10f:** restoration of teeth (CODA 2-23f)

**10g:** communicating & managing dental laboratory procedures in support of patient care (CODA 2-23g)

**10h:** replacement of teeth including fixed, removable & dental implant prosthodontic therapies (CODA 2-23h)

**10i:** periodontal therapy (CODA 2-23i)

**10j:** pulpal therapy (CODA 2-23j)

**10k:** oral mucosal & osseous disorders (CODA 2-23k)

**10l:** hard & soft tissue surgery (CODA 2-23l)

**10m:** dental emergencies (CODA 2-23m, 5-5, 5-6)



<b>10n:</b> malocclusion & space management (CODA 2-23n)
<b>10o:</b> evaluation of the outcomes of treatment, recall strategies & prognosis (CODA 2-23o)
<b>10p:</b> screening & risk assessment for caries and periodontal disease
<b>11. Patients with special needs</b> Students must demonstrate competence in assessing the treatment needs of patients with special needs (CODA 2-24).
<b>12. Community-based learning experiences</b> Students must participate in community-based learning experiences. (CODA 2-25)
<b>13. Emerging Technology in Dentistry</b> Students should be able to evaluate, assess and apply current and emerging science and technology. (CODA 2-23: Intent statement and CODA 5-2: Intent statement)

\*CODA refers to Commission on Dental Accreditation standards – effective July 1, 2013

\*\*course numbers @ University of Iowa

\*\*\**(FK refers to “Foundation Knowledge” statements from ADA Committee for an Integrated Examination (CIE) –*

*(April 2013)- “Foundation Knowledge for the General Dentist”. <http://www.ada.org/5553.aspx>*

## **2013-14 CURRICULUM COMMITTEE**

### **MEETING DATES**

#### **2013**

September 27

November 22

December 13

#### **2014**

January 31

February 28

March 28

April 25

May 30

June 27

All meetings will be held on Fridays at 12:00 p.m. to 1:00 p.m. in the Dean's Conference Room unless otherwise indicated.

Invitations to meetings and meeting minutes will be sent by email.

Additional meetings will be scheduled as needed.