Evidence-Based Practice at Baylor College of Dentistry:
A work in progress

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Specific Aims

Aim 1: To provide instruction and experiences throughout the DDS curriculum to train students in the principles and skills of scientific inquiry and clinical research.

Aim 2: Provide additional instruction and experiences for a select group of dental students who wish to engage in clinical or translational dental research as part of their dental academic research careers.

Aim 3: Enhance the educational skills of all BCD faculty for teaching students the scientific rationale for the incorporation of new information and technologies into oral healthcare.
CUSPID*: A Curriculum To Create Science-Oriented Dentists and Future Academicians

*Clinicians Using Science Produce Inspired Dentists
D1 Course: *Principles of Evidence Based Dentistry and Clinical Research*

- **Fall semester**
  - ✓ tools to compare groups of people/ how to assess variation
  - ✓ types of research designs (descriptive, observational, experimental)
  - ✓ sampling & bias

- **Spring semester**
  - ✓ detecting disease
  - ✓ how to review a paper
  - ✓ how to ask an evidence-based question
  - ✓ searching methods
  - ✓ Critically-Appraised Topics (CATS)
D1 Course: *Principles of Evidence Based Dentistry and Clinical Research*

**Mode of instruction is**

- heavily Blackboard-intensive with ‘homework’ questions
- lecture-based, but highly interactive
- frequent use of ‘clickers’ to gauge student understanding of homework and ongoing lecture
D1 Course: *Principles of Evidence Based Dentistry and Clinical Research*

**Small group sessions**

- "Lab" in which to practice the skills they are learning
- Around 16 students per group
- Discuss a paper on a clinically-relevant topic using a standardized format
- Topics: breastfeeding & caries; fluoride in water & hip fracture; tobacco use & tooth loss; fluoride varnish & caries prevention
Goals for Faculty Development

- Increase visibility of EBD ‘culture’ for all full-time faculty
- EBD training for interested clinical faculty
- Cultivate EBD leaders
EBD Training for Clinical Faculty

- Audit the D1 course *Intro to EBD*
- Small group instruction by EBD ‘expert’
- Other ???????

Following this training, clinical faculty could:
- Participate in/ lead a small group session
- Introduce EBD content into their course (e.g., CATs)
The Dental Scholars Program

- **Premise**
  - Nourish and energize a subset of dental students with a strong interest in clinical research and a career in dental academics

- **Activities**
  - Engagement in a spectrum of roles played by clinician-scientists in an academic setting
    - Researcher
    - Mentor
    - Teacher
Assess... Assess... Assess!

• Survey to be administered this semester to all FT faculty and D1 & D2 students

• Baseline against which changes in ‘EBD culture’ can be evaluated

• Questions regarding:
  ✓ Practices (sources of evidence)
  ✓ Experience (formal training in research methodology, participation in research)
  ✓ Attitudes (beliefs about EBD)
  ✓ Knowledge (questions derived from structured abstract of clinically-relevant research)