Section on Operative Dentistry and Biomaterials Program:

*Dental Biomaterials: Integrating Science into the Clinical Curriculum with Instruction Beyond the Classroom*

April 1, 2008
Dallas, Texas
2007 National CODE Agenda:
Teaching Dental Biomaterials in North American Dental Schools
Responses: 49/68 schools (72%)

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Medical College of Georgia
School of Dentistry
Does your school have a distinct academic entity known as Dental Biomaterials or other similar title?

Yes 64%  No 36%

(n=49)

If yes, what is it called?

Biomaterials 34%
Dental Materials 25%
Dental Biomaterials 9%

Also: Biomaterials &: Bio-Eng, Bio-Mech, Bio-Mimetics
Dental Biomechanics, Biomaterial Science
If you have an entity, how is it classified?

Division 44%
Section 25%
Department 22%
Discipline, Center (n= 32)

If it is a subset of another dept, ID it:

Restorative / Operative
General / Comp Dentistry
Dental Research
Biological Science
How many & what type of faculty teach DBM in a 1° or 2° role?

Full-time, 1° teaching responsibility
1.44 avg. (0 – 5) range

Full-time, co-teach
2.29 (0 – 12)

Part-time teach
1.23 (0 – 5)
<table>
<thead>
<tr>
<th>Taught which year(s)</th>
<th>Taught how many yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman year 92%</td>
<td>1 year only 12%</td>
</tr>
<tr>
<td>Soph year 73%</td>
<td>2 years 20%</td>
</tr>
<tr>
<td>Junior year 69%</td>
<td>3 years 29%</td>
</tr>
<tr>
<td>Senior year 51%</td>
<td>all 4 years 39%</td>
</tr>
</tbody>
</table>

(taught in >1 year)
How is DBM taught at your school?  (n = 49)

Separate Course(s) only
8%
(Fr only, Fr & Soph, Fr & Sr)

Part of another Course(s) only
12%

Combination (sep. & part of others)
80%
What format, setting, and method is used to teach DBM? (n=49)

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>94%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>78%</td>
</tr>
<tr>
<td>Clinic</td>
<td>31%</td>
</tr>
<tr>
<td>Seminar (&gt; 10)</td>
<td>22%</td>
</tr>
<tr>
<td>Sm. Groups (1-5)</td>
<td>24%</td>
</tr>
<tr>
<td>Individ CD/DVD</td>
<td>6%</td>
</tr>
<tr>
<td>Individ Web</td>
<td>31%</td>
</tr>
<tr>
<td>Textbook</td>
<td>73%</td>
</tr>
<tr>
<td>School Manual</td>
<td>24%</td>
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</tbody>
</table>

Aides / Strategies
- PBL
- VitalSource
- Lectures on web
- Clinic Manual
- Blackboard
- Videos
- Restor. Labs
Textbooks used to teach DBM

Phillips
Craig
Obrien
Von Noort
McCabe

Operative Texts
Journals
Did your school experience a curriculum revision in last 7 yrs?

If Yes, what is the level of importance of DBM since revision?

3.375
(Scale: 1-5; low-high)

Was this rating an increase or decrease vs. pre-revision?

Increase 42%
Decrease 18%
No change 40%
(n = 33)
<table>
<thead>
<tr>
<th>Does your school make a specific effort to integrate DBM into clinic?</th>
<th>How is it done?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Lectures in clin yrs.</td>
</tr>
<tr>
<td>73%</td>
<td>Research Proj.</td>
</tr>
<tr>
<td>No</td>
<td>Faculty in-service</td>
</tr>
<tr>
<td>27%</td>
<td>Common Faculty</td>
</tr>
<tr>
<td>(n = 49)</td>
<td>Integrated curric</td>
</tr>
<tr>
<td></td>
<td>Tx planning</td>
</tr>
</tbody>
</table>
Are you satisfied with the overall time and effort allotted to teaching DBM?

Yes 52%    No 48%

(n =46)
If NOT satisfied, what would you change?

• More time
• Clinical reinforcement
• Better curriculum correlation
• Earlier Experiences
• Hands-on lab time
• More faculty
• Student interest level
• Advanced topics course
Summary

• 2/3’s NA Dent Schools: BM, DM, or DBM unit
• A Divis., Sect., or Dept. assoc with Restorative
• Taught by: 1 FT, 2 FT-co, 1 PT Faculty
• Taught: all 4 yrs, Fr. most, & with other courses
• Lecture, lab, & textbook most common
• Import: 3.3 / 5 & Incr or No change last 7 yrs
• 70% clinic: Jr/Sr Courses, Faculty, Integr Curric
• ½ Satisfied but; more time, fac., & clin correl.
Acknowledgements

• Dr. Larry Haisch, National CODE Director
• Regional CODE Directors & Hosts
• Responding Schools
• Section on Operative Dentistry & Biomaterials