



# Integrating Periodontal Education in the Predoctoral Dental Curriculum

**DAVID D. ROLF II, D.M.D., M.S.**  
**ASSOCIATE PROFESSOR**

Midwestern University  
College of Dental Medicine-Arizona





# Thank You

Dr. Vanchit John

Shana Berezin

AAP Education Committee

AAP Pre-Doctoral  
Directors Organization



# Midwestern University College of Dental Medicine-Arizona



## Midwestern University Dental Institute

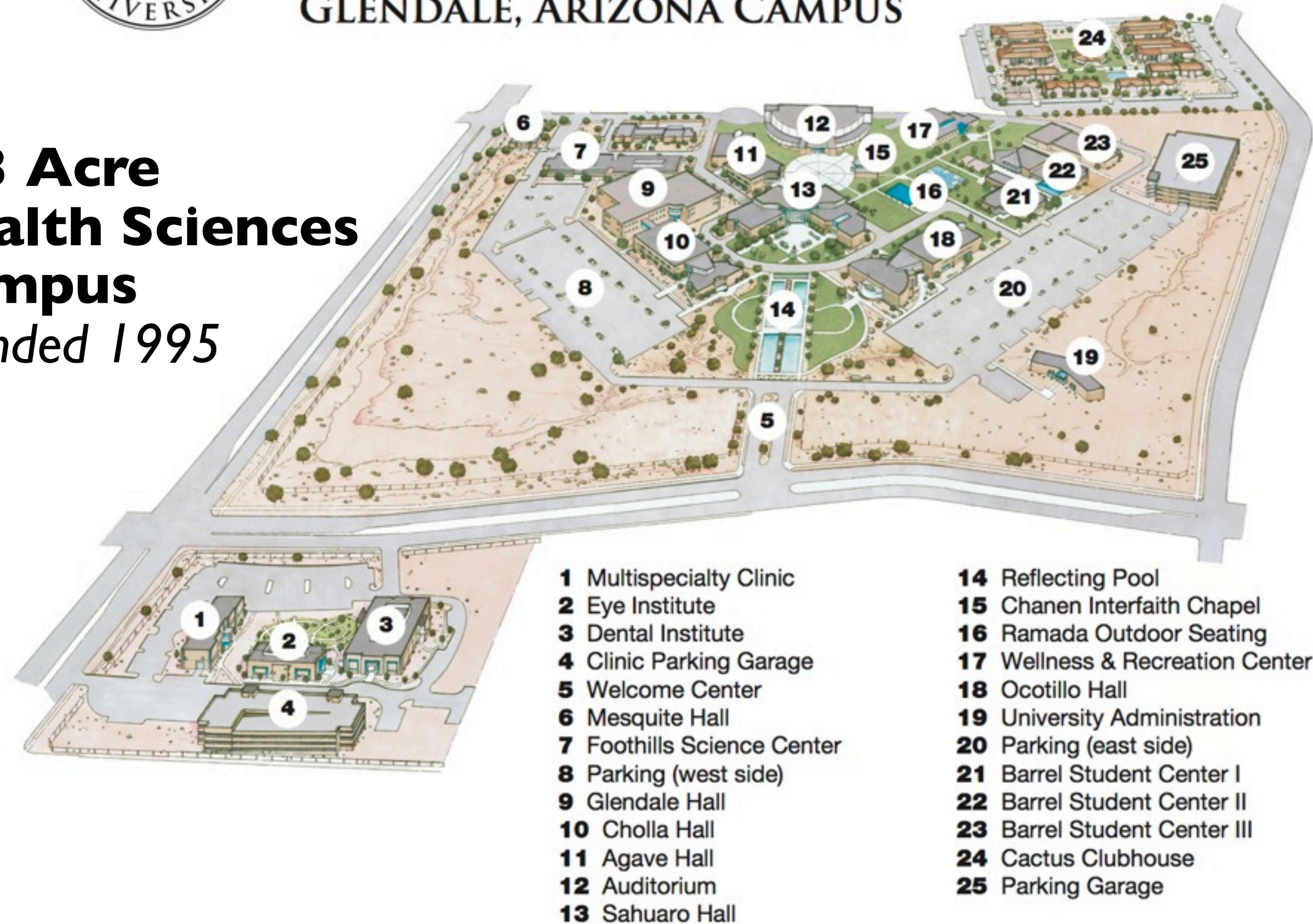




# MIDWESTERN UNIVERSITY

## GLENDALE, ARIZONA CAMPUS

**143 Acre  
Health Sciences  
Campus**  
*Founded 1995*



**5,500 Students**

Dental Medicine/DMD

• OMFS Residency

Osteopathic Medicine/DO

Pharmacy/PharmD

Optometry/OD

Podiatric Medicine/DPM

Physical Therapy/DPT

Occupational Therapy/MOT

Nurse Anesthesia/CRNA

Speech Pathology/MS

Clinical Psychology/PsyD

Physician Assistant/MMS

Cardiovascular Perfusion/MS

Biomedical Sciences Masters

Doctor of Health Sciences

**Veterinary Medicine/DVM: 2014**

# MIDWESTERN UNIVERSITY

## Downers Grove, Illinois Campus

- |                               |                          |                       |                                      |
|-------------------------------|--------------------------|-----------------------|--------------------------------------|
| <b>1</b> Littlejohn Hall      | <b>4</b> Hyde Atrium     | <b>8</b> Redwood Hall | <b>12</b> Birch Hall                 |
| <b>2</b> Haspel/Hambrick Hall | <b>5</b> Science Hall    | <b>9</b> Dogwood Hall | <b>13</b> Chestnut Hall              |
| <b>3</b> Alumni Hall          | <b>6</b> Centennial Hall | <b>10</b> Elm Hall    | <b>14</b> Forest Lodge               |
|                               | <b>7</b> The Commons     | <b>11</b> Aspen Hall  | <b>15</b> The Pines Apartments       |
|                               |                          |                       | <b>16</b> Parking                    |
|                               |                          |                       | <b>17</b> Recreation & Wellness Hall |
|                               |                          |                       | <b>18</b> Administration Building    |







# Midwestern University College of Dental Medicine-Arizona

Russell Gilpatrick DDS  
*Dean*

Founded in 2006  
Inaugural Class Matriculated in 2008  
Inaugural Class Graduated in 2012  
Class Size: 110

2012: CODA Granted Accreditation  
Through 2019

Integrated Systems-Based  
Basic Sciences Curriculum

Integrated Oral Health Sciences Curriculum

Emphasis on Professionalism, Ethics,  
Teamwork, High Performance, Humanism  
Evidence-Based Scholarship & Patient Care

General Practitioner Focus

Department-less Faculty Team



# Simulation Clinic

Midwestern University  
College of Dental Medicine-Arizona

2006





# Teams



# Suites: Small Group Practices





# Midwestern University: Working Together

MWU -CDMA upperclassmen  
share their views on the team  
approach at the dental institute

By Liz Davis '13 & Rachel Ecker '14





**Midwestern University  
College of Dental Medicine-Illinois**

Founded in 2009

Inaugural Class  
Graduates: 2015

Class Size : 130



**Midwestern University  
Multispecialty Clinics**



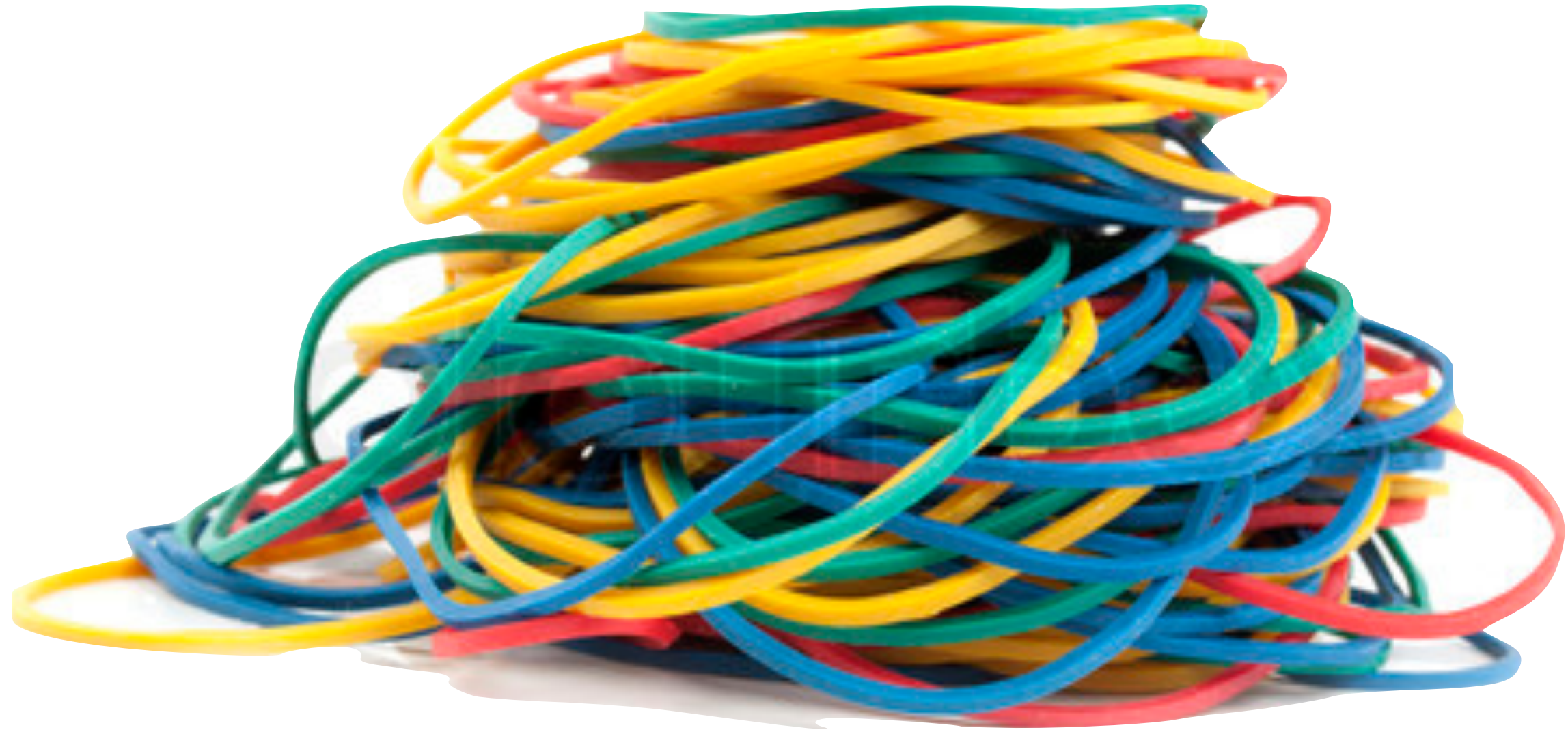




# Integrating

Periodontal Education  
in the Predoctoral Dental Curriculum





**Curriculum = Parts**



**Integrated = Whole**





# Integrating

Periodontal Education  
in the Predoctoral Dental Curriculum





= Integrating  
Embedding





# Integrating

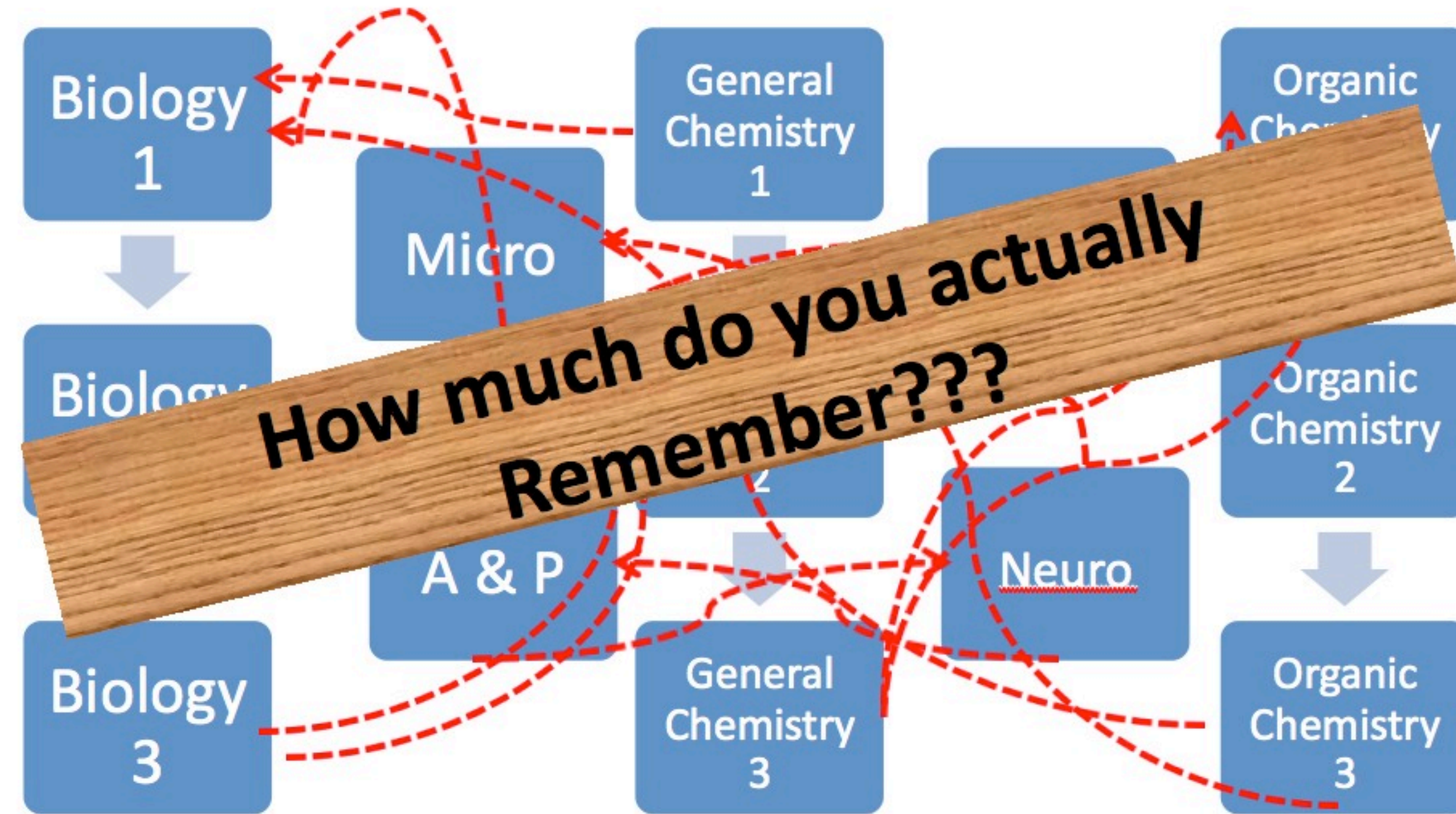
Periodontal Education  
in the Predoctoral Dental Curriculum





Integrating  
= Synergies





**pre-dental requirements**



**integrated systems-based  
basic sciences curriculum**





**dental patients = integrated**

“dental patients won’t come in to see me with just a dental anatomy problem, a microbiology problem, a physiology problem, and so on... they will have a problem with their tooth, mouth, body...and I will have to diagnose and treat them/their condition as a whole”

Jay Slater, Class of 2013



# learning objectives

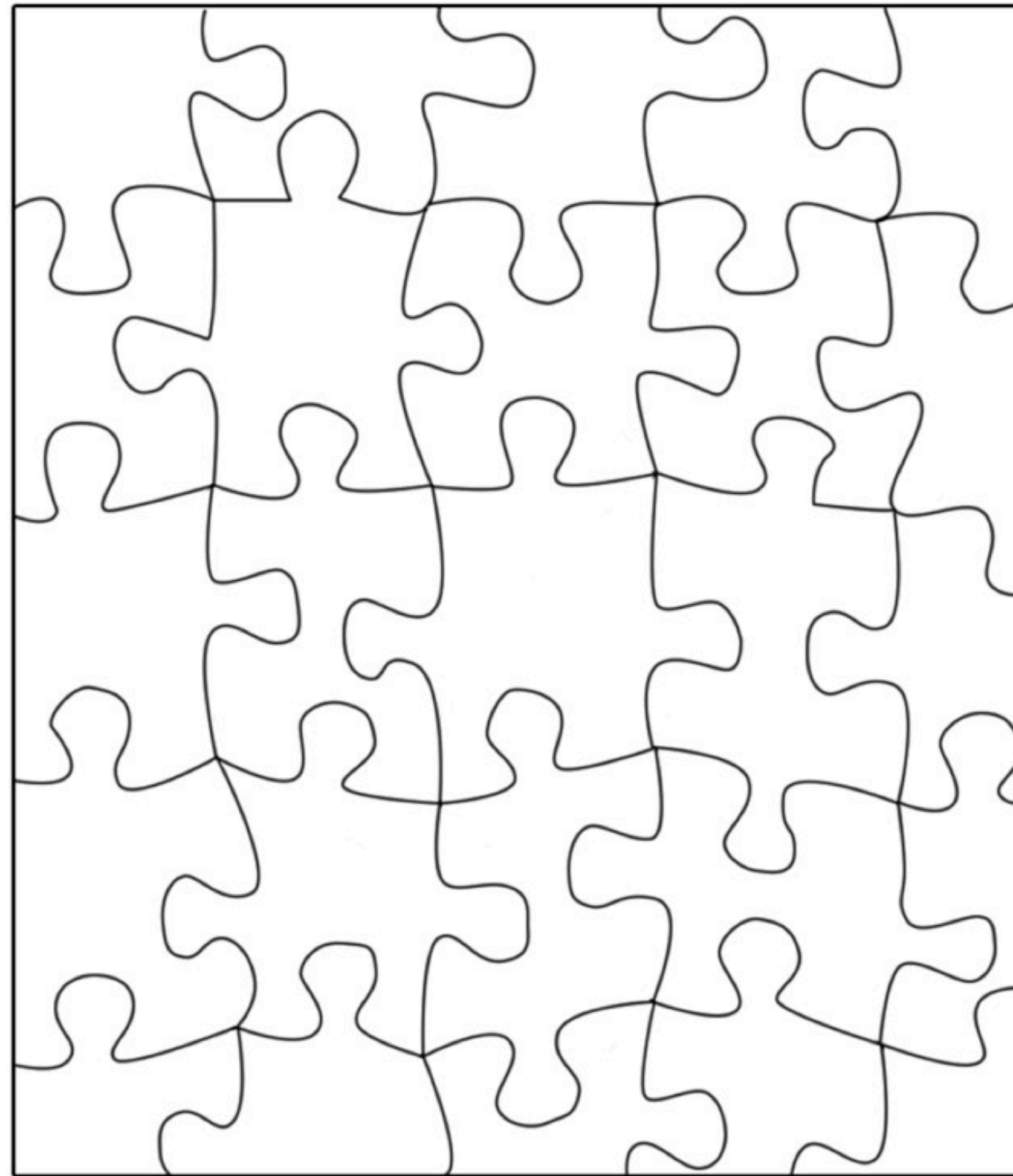
Explore an integrated systems-based basic science and oral health sciences curriculum where periodontology is embedded into and interfaces with the overall predoctoral dental program.

Discuss advantages and disadvantages of a traditional versus an integrated predoctoral periodontology curriculum.

Consider opportunities for integration of the periodontology curriculum at your own institution.



**new  
school  
blank slate**

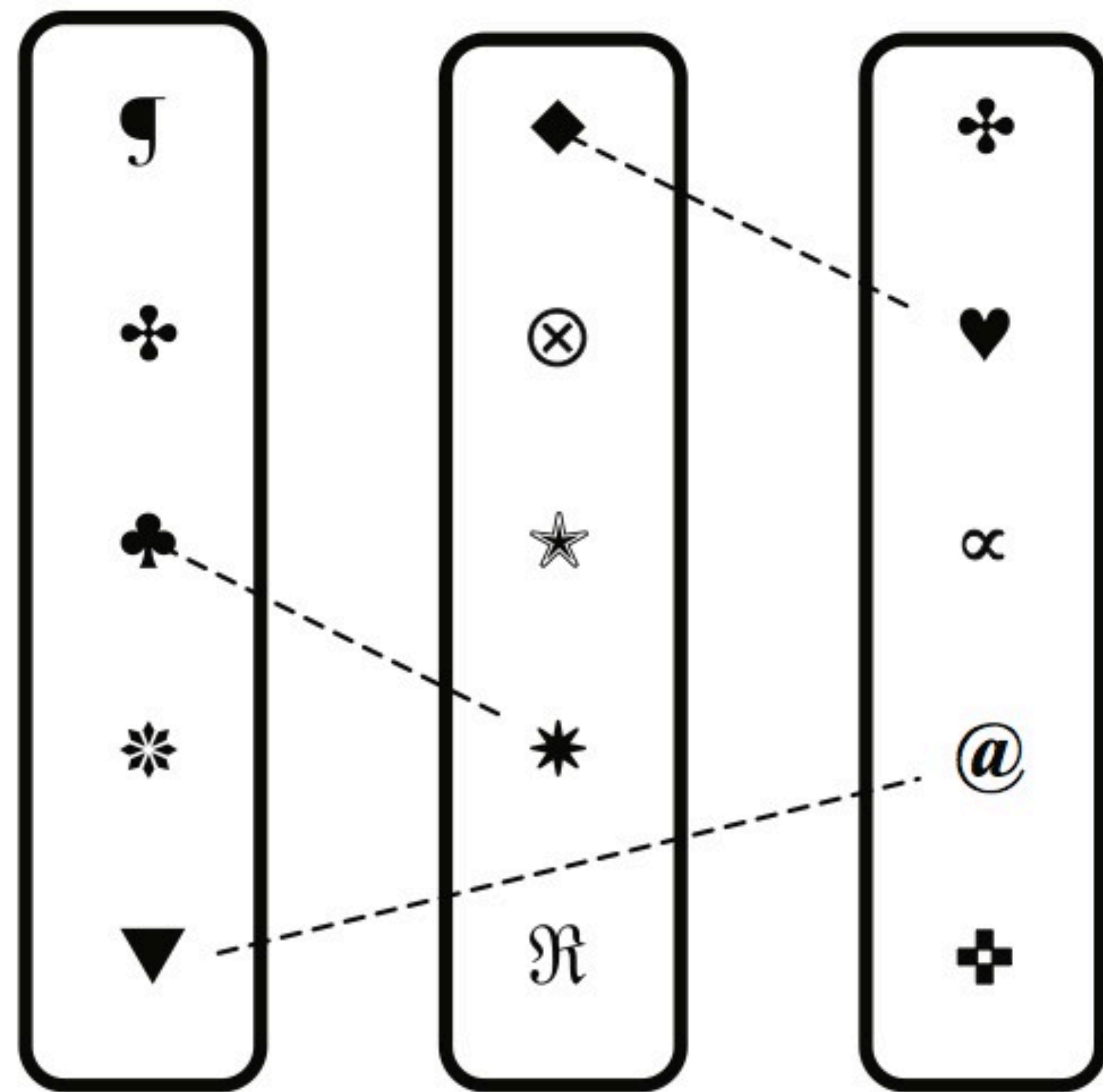




# **new school: vision**

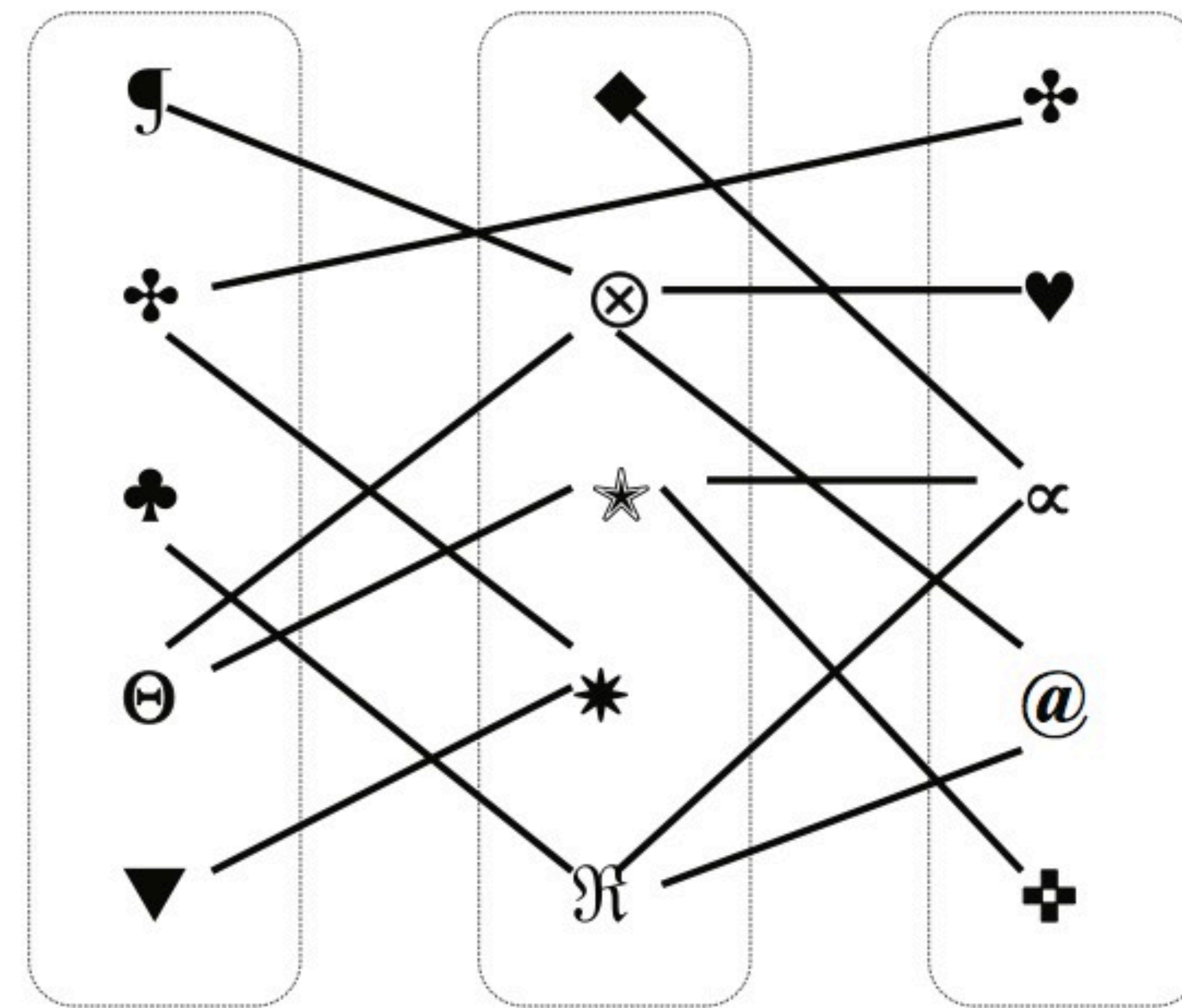






**Vertical—compartmentalized**

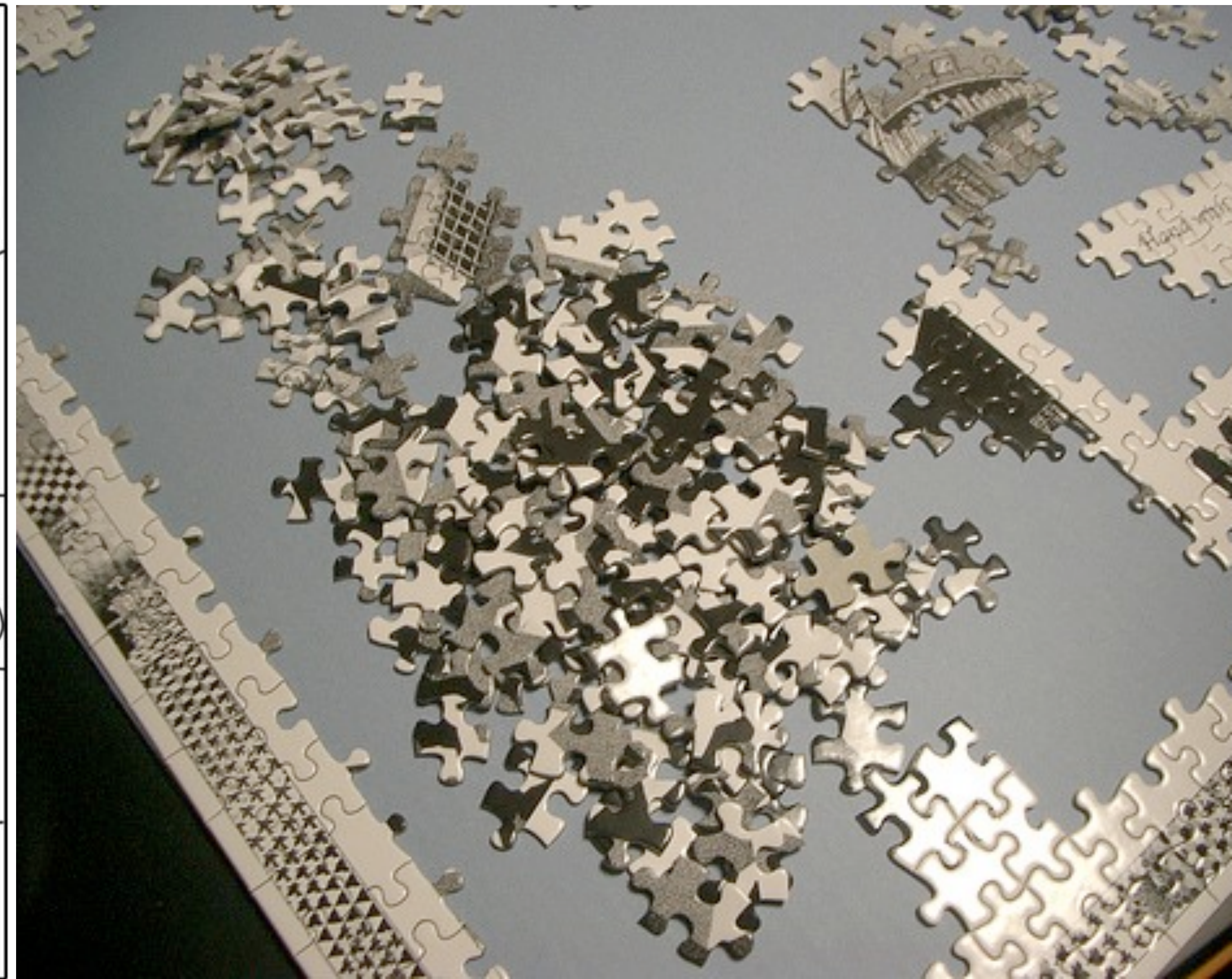
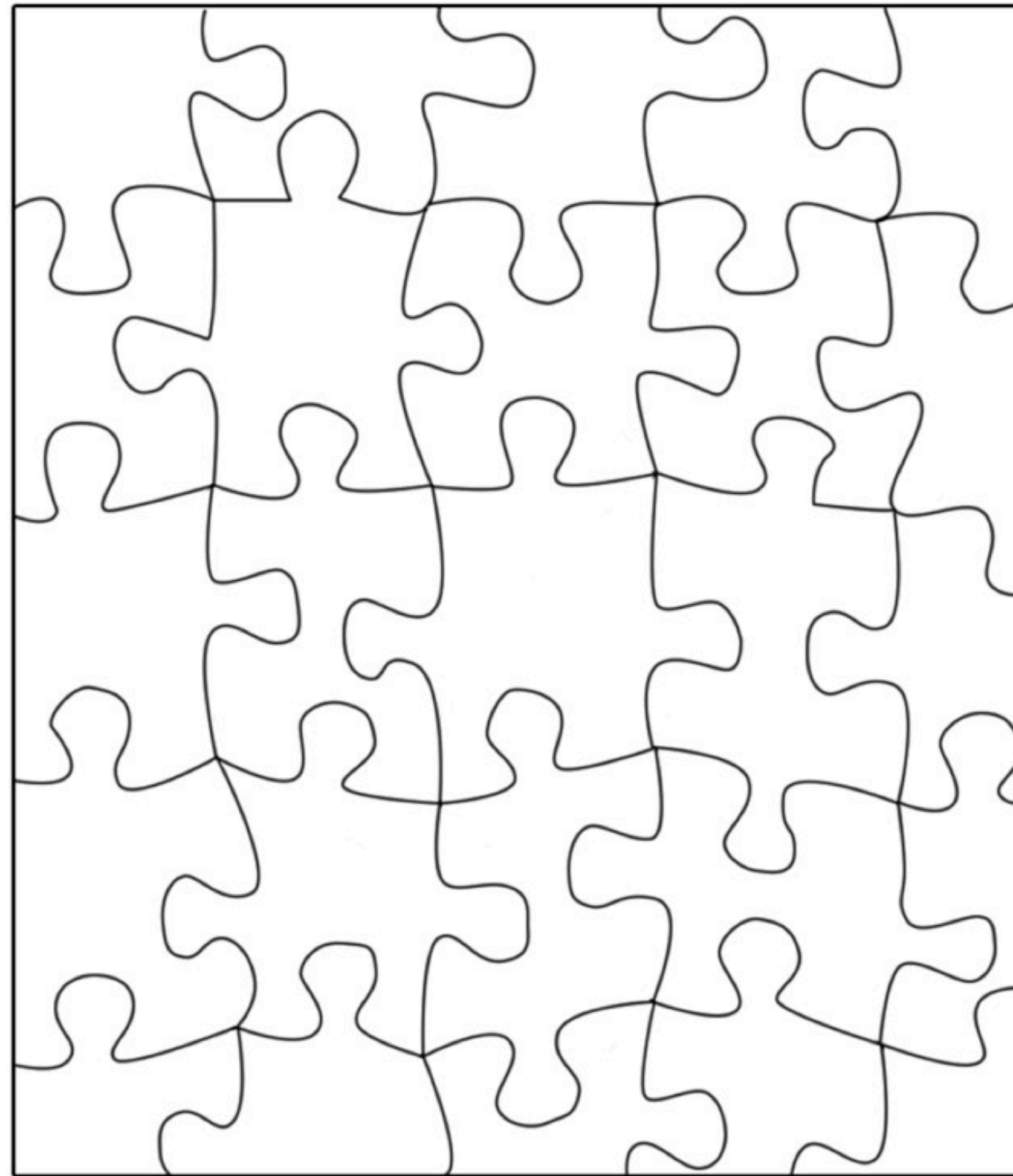
# Curriculum Departments Faculty



**Horizontal—networked**



# **new school building process**



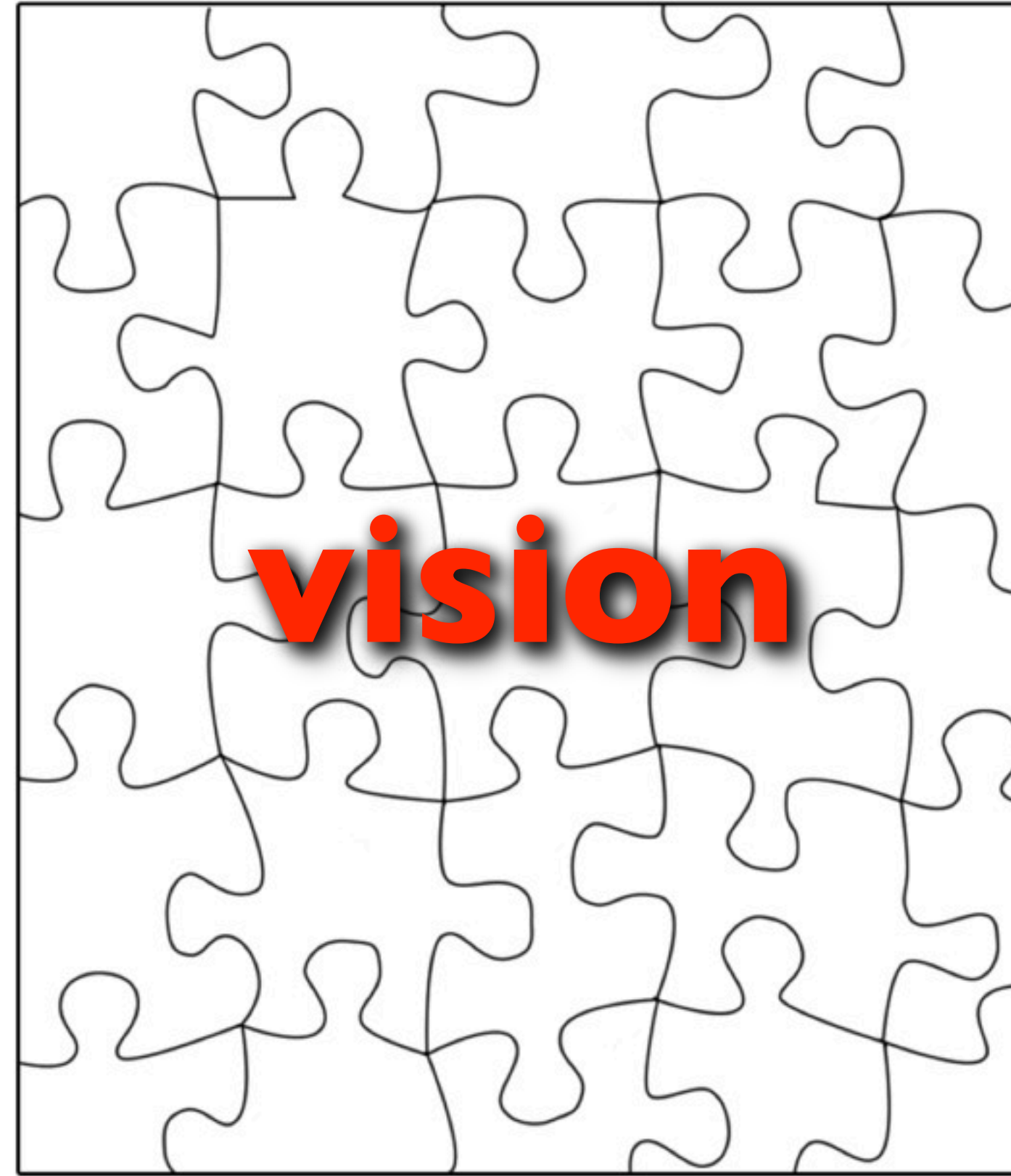


# **new school building process**

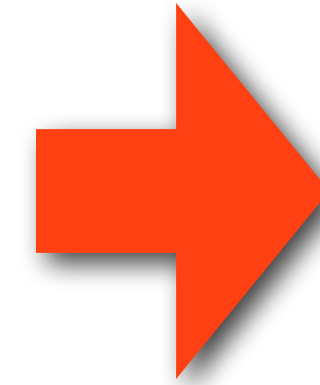




**new  
school  
completed  
integrated  
curriculum**



**vision**



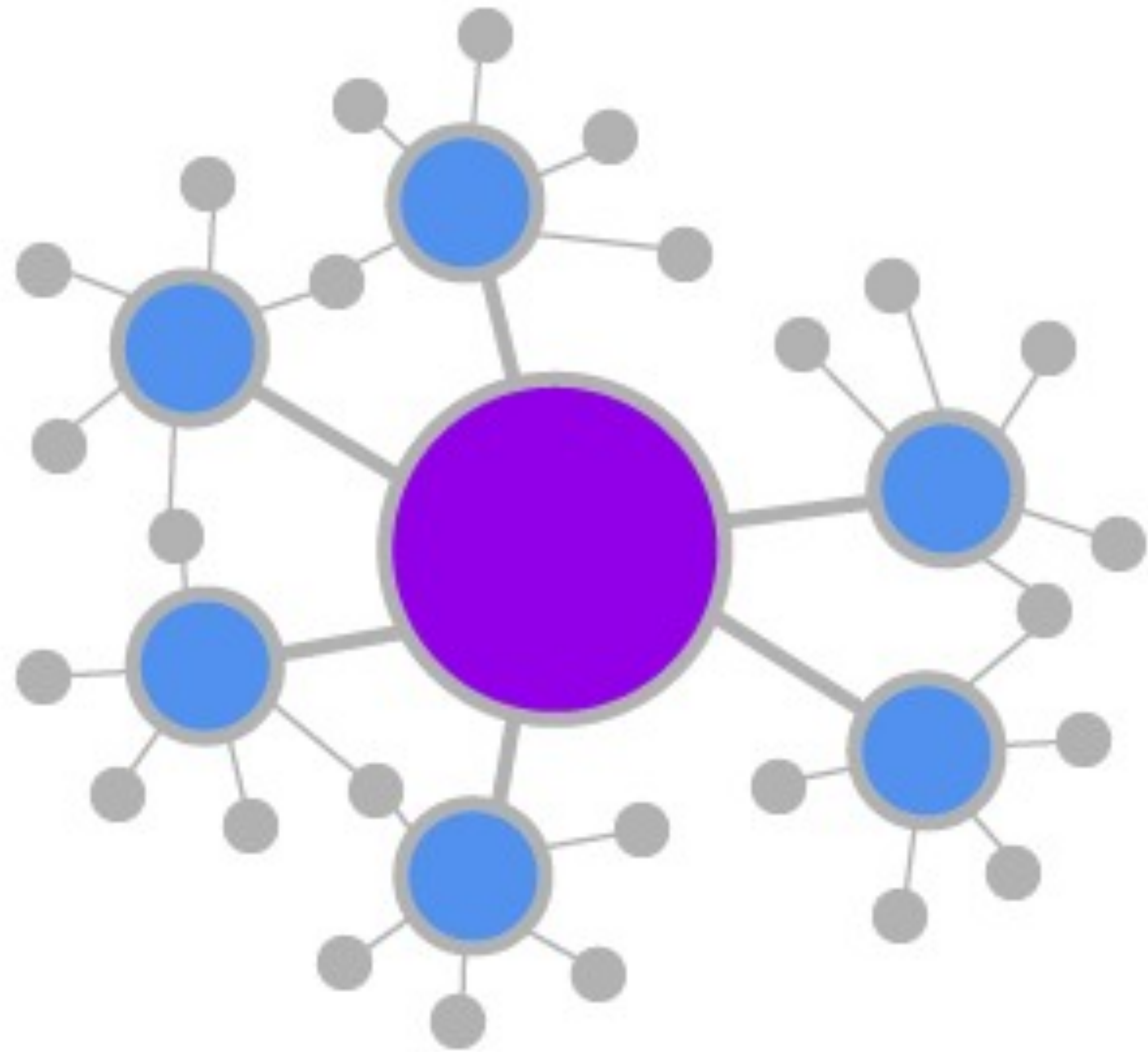
**reality**



# change is difficult

Dr. Kenneth (Ken) L. Kalkwarf, an ADEA Past President and Dean of the University of Texas Health Science Center at San Antonio Dental School who is currently serving as the university's President ad interim, was asked to be the first Chair of the new commission. In a "Perspectives" piece published later that year in the *Journal of Dental Education* he observed, "It's easier to move a cemetery than to change a curriculum," and he stressed the importance of finding "a single Archimedean leverage point" if systemic change were to occur.

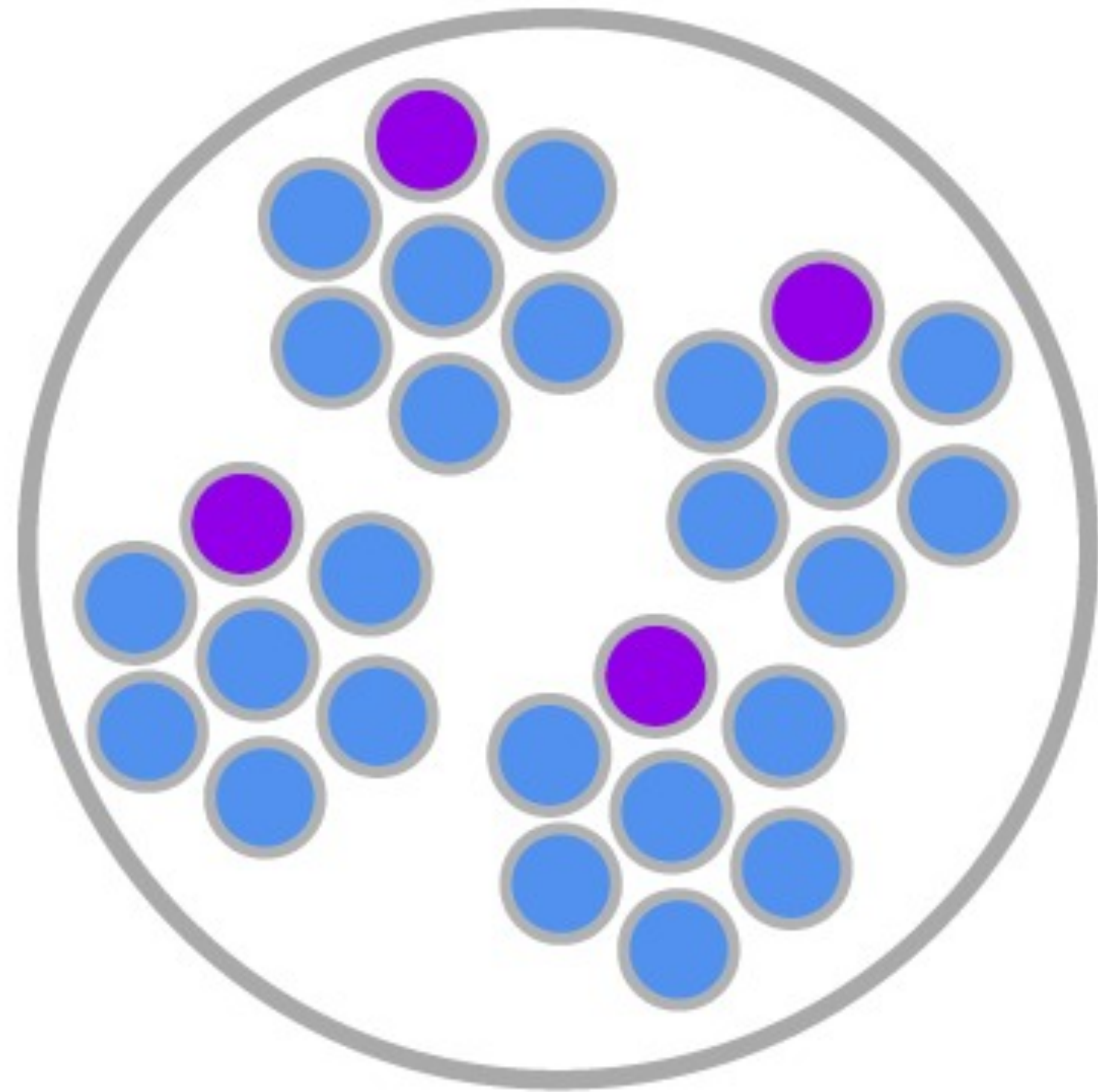




# **Traditional Curriculum**

## Some Integration





= Periodontics Curriculum

**integrated**

**imbedded into & interfaces**



= Oral Health Sciences  
(Dentistry) Curriculum



# learning objectives

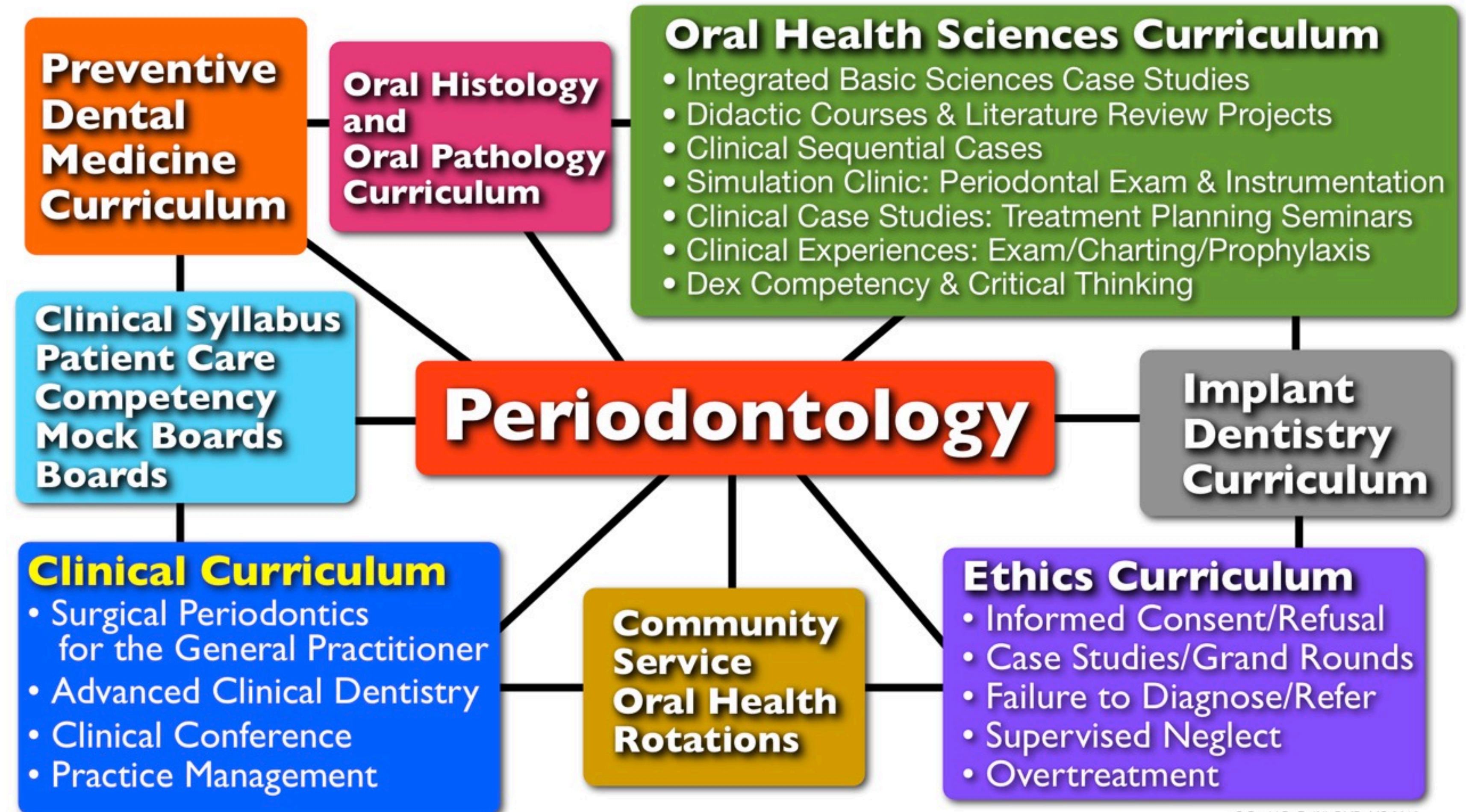
Explore an integrated systems-based basic science and oral health sciences curriculum where periodontology is embedded into and interfaces with the overall predoctoral dental program



# Integrated Periodontology Curriculum



Midwestern University  
College of Dental Medicine-Arizona





# **Ethics & Professionalism Curriculum**

David Rolf II, DMD, MS

DI-D4 Years

Every 2 weeks

45 Hours

Imbedded throughout program

Professional culture



# **Ethics & Professionalism Curriculum**

## **Healthcare Ethics Dental Ethics & Professionalism Ethics Grand Rounds**

- Informed Consent/Refusal
- Failure to Diagnose or Refer
- Scope of Practice & Standard of Care
- Supervised Neglect
- Overdiagnosis & Overtreatment
- Case Studies: Include Periodontics



# **Preventive Dental Medicine Curriculum**

David Rolf II, DMD, MS  
Teresa Pulido DDS, MS  
Christine Halket DDS, MS  
James Pashayan DDS MAEd

**D I Year: Fall & Winter Quarters**

**20 Hour Curriculum**

**Etiology, Pathogenesis**

**Risk Factors & Risk-Based Prevention**

**Caries, Periodontal Disease, Oral Cancer**



# **Preventive Dental Medicine Curriculum**

## **Periodontology & Oral Health**

- Evidence-Based Dentistry
- Clinical Epidemiology
- Dental Public Health
- Oral Plaque Biofilm and Saliva
- Oral Hygiene Indices, OHI, Plaque Control
- Oral-Systemic Interrelationships



# **Preventive Dental Medicine Curriculum**

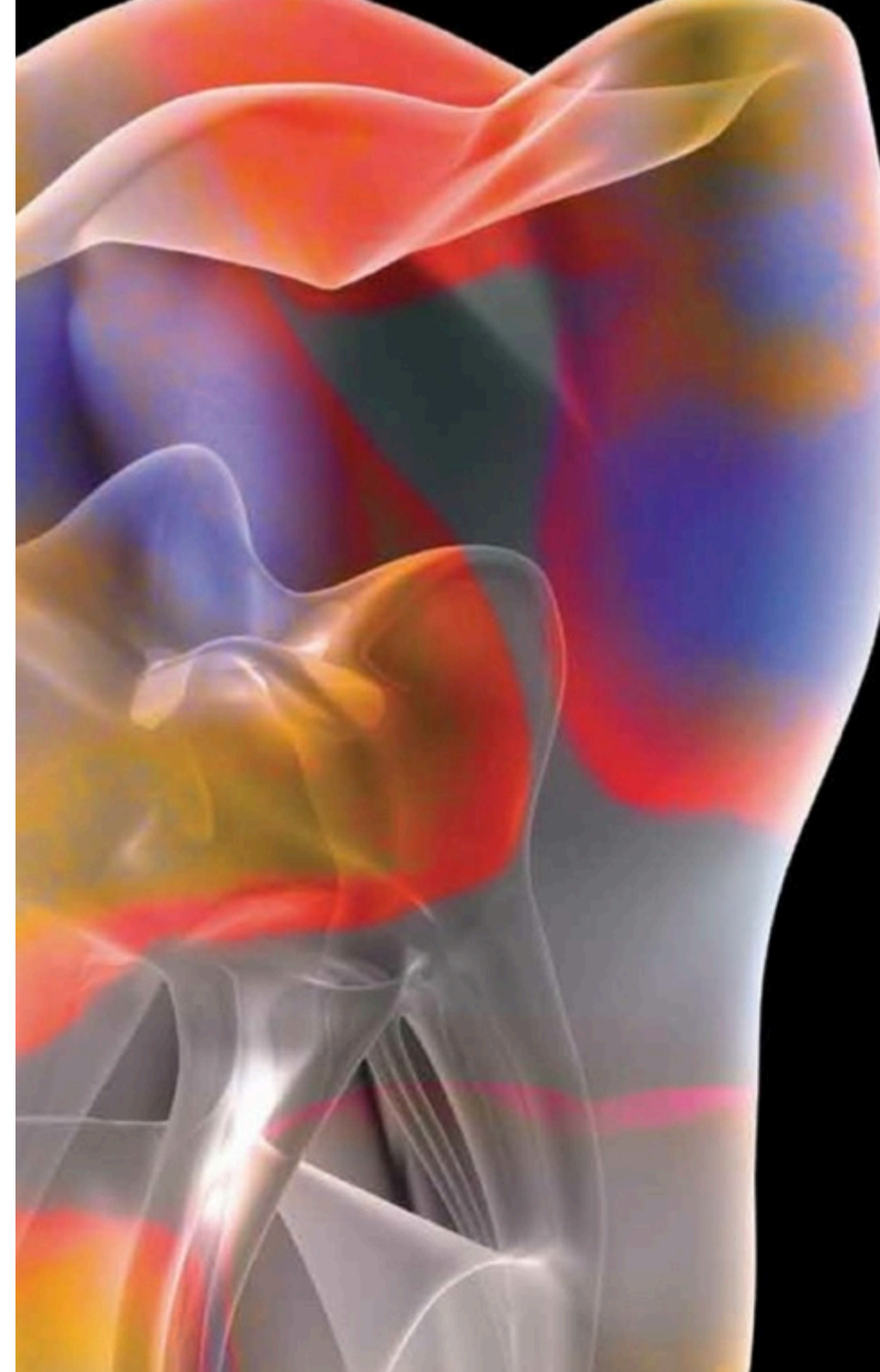
## **Periodontology & Oral Health Patient Education**

- Communication Strategies with Patients
- Enhancing Adherence with Preventive Programs
- Oral Health Literacy & Culturally Effective Care
- Nutrition & Obesity: Pro-Inflammatory Diet
- Diagnostic Tests & Lab Values



# **DI Year: Oral Histology**

## **Oral Histology and Oral Pathology Curriculum**



# **Oral Histology**

## **Periodontal Histoanatomy & Clinical Correlations**

**DAVID D. ROLF II, D.M.D., M.S.  
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**D1 & D2 Years:**

**Integrated  
Oral Health  
Sciences**

## **Oral Health Sciences Curriculum**

- Integrated Basic Sciences Case Studies
- Fundamentals of Periodontology I-III
- Didactic Courses
- Literature Review Projects
- Clinical Sequential Cases
- Simulation Clinic: Periodontal Exam & Instrumentation
- Clinical Case Studies: Treatment Planning Seminars
- Clinical Experiences: Exam/Charting/Prophylaxis
- Dex Competency & Critical Thinking



**D1**

# **Fundamentals of Periodontology**

David Rolf II, DMD, MS  
Thomas McDaniel, DMD

D I Year: Spring Quarter  
10 Hour Curriculum

Evidence Based Dentistry  
EBD Hands-on Workshop

Normal Periodontium

OHI & Plaque Control Methods



# **Clinical Rotations**

## **Plaque Index, OHI, Plaque Control**





**D1 & D2 Years:**

**Integrated  
Oral Health  
Sciences**

## **Oral Health Sciences Curriculum**

- Integrated Basic Sciences Case Studies
  - Fundamentals of Periodontology I-III
  - Didactic Courses
  - Literature Review Projects
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  - Dex Competency & Critical Thinking



**DI Year**  
**Integrated**  
**Basic Sciences**  
**Case Studies**

**Dental Case-Based Component**  
of the Integrated Systems-Based  
Basic Science Curriculum

Integrate & translate basic science knowledge  
into more clinically relevant skills

Evidence-based approach to Medicine & Dentistry

Develop public speaking & presentation skills,  
interprofessional and ethical values, teamwork



# Basic Science Integrated Sequence

Fall Quarter: BASI 1501, 1502 & 1503

Course Number	BASI 1501	BASI 1502	BASI 1503
Modules	<ul style="list-style-type: none"> <li>• Cell Biology</li> <li>• MCB &amp; Metabolism</li> <li>• Cell Structure &amp; Blood</li> </ul>	<ul style="list-style-type: none"> <li>• Cancer and Genetics</li> <li>• Lymphatic System &amp; Immunology</li> </ul>	<ul style="list-style-type: none"> <li>• Infectious Diseases</li> <li>• Integument &amp; Blood Disorders</li> </ul>
Credit Hours	4.7 (4.2 + 0.5) (42 L hrs + 1 Case)	5.5 (4.5 + 1.0) (45 L hrs + 2 Cases)	5.2 (4.2 + 1.0) (42 L hrs + 2 Cases)
# of Exams	3	4	3

**BASI** Case 1: Metabolic Syndrome

**I501** Case 2: Bleeding Disorders

**I502** Case 3: Diabetes & Wound Healing

**I503** Case 4: HIV

Case 5: Skin Cancer

**BASI** Case 8: Meth Mouth

**I504** Case 9: Rheumatoid Arthritis

**I505** Case 10: Hypertension

**I506** Case 11: Asthma

**I507** Case 13: Diabetes/Endocrine

**I508** Case 14: Squamous Cell CA

**I509** Case 15: Temporomandibular Disorders

Case 16: Pregnancy

Case 17: Celiac Disease



# PROCESS

## Week 1

- Case Outline Meeting
- 22 Groups of 5 Students
- Readings: Assigned Articles
- Searching Relevant Literature

## Week 2

- Group Presentation: 20 min.

## Assessments

- Group Presentation
- 20 Question Exam

# Case

A 40 year old white female presents to your office for treatment of a loose tooth. She has advanced periodontal disease and needs some dental extractions to help control an acute periodontal infection. You note in her medical history she has diabetes.

- What questions should you ask her about her diabetes?
- What are the implications of her diabetes in the treatment of this case?

# Learning Objectives

1. List the affect of diabetes on wound healing
2. Describe various types of wound healing
3. List both local and systemic factors that affect wound healing
4. Compare and contrast wound healing by primary and secondary intention
5. List common complications associated with wound healing
6. Describe the relationship between diabetes and periodontal disease.

# Team Presentation

## 5 student doctors





## **D2 Year:**

# **Integrated Oral Health Sciences**

## **Oral Health Sciences Curriculum**

- Integrated Basic Sciences Case Studies
- Fundamentals of Periodontology I-III
- Didactic Courses
- Literature Review Projects
- Clinical Sequential Cases
- Simulation Clinic: Periodontal Exam & Instrumentation
- Clinical Case Studies: Treatment Planning Seminars
- Clinical Experiences: Exam/Charting/Prophylaxis
- Dex Competency & Critical Thinking



# D2

## **Fundamentals of Periodontology**

Christine Halket DDS, MS  
Thomas McDaniel, DMD  
Aseel Murad, BDS, DMD  
David Rolf II, DMD, MS

D2 Year: Fall, Winter, Spring Qtrs  
30 Hour Curriculum

Etiology, Pathogenesis, Risk Factors  
Dx/Px Tx Planning, Therapy, Referral

**Integrated Exams & Case Component**

**Team Taught: Periodontist & GP faculty**



# **D2**

# **Oral Health**

# **Sciences**

## **Examinations**

Weekly: all disciplines

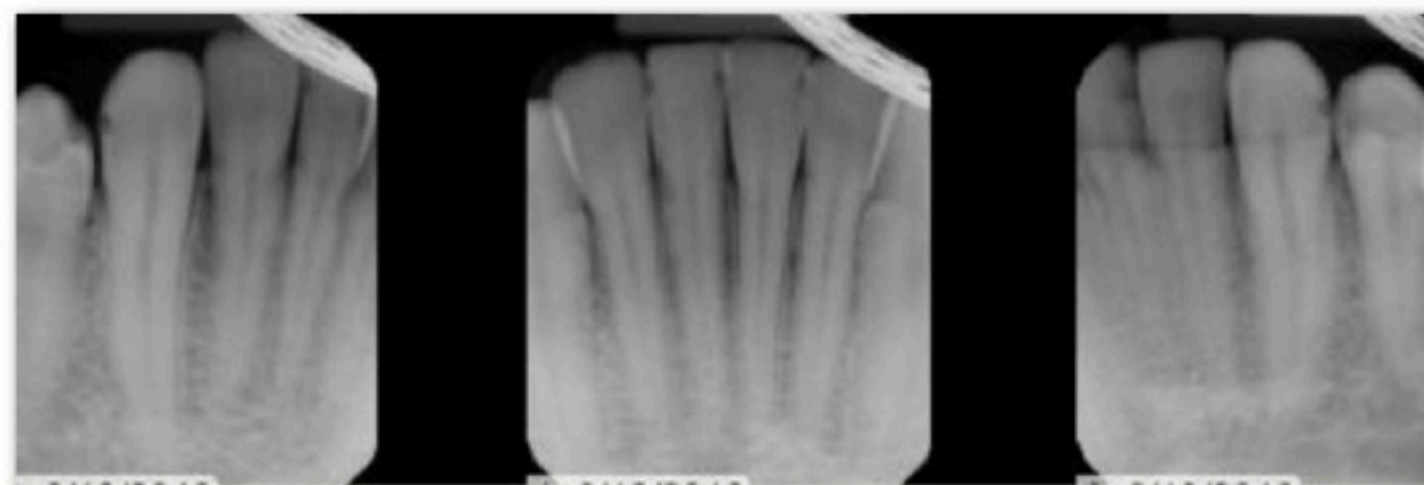
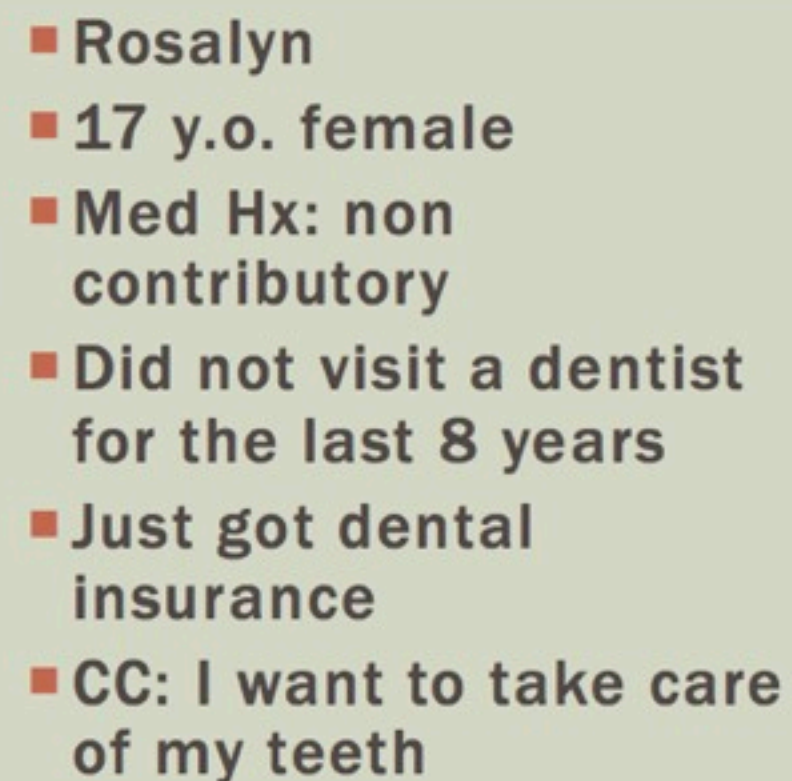
Periodontics Q's  
integrated into examinations







# Sequential Clinical Case 1

[illegible]

- **Ethics question: Can you treat the patient or do you need an adult's consent?**
- **Why did we decide to obtain radiographs?**
- **Why did we decide to perform FMS (full mouth series) radiographs?** *Note: FMX is the former terminology*
- **Which one would you treat first? The gingivitis or the decay?**
- **Why do you think your patient has cold sensitivity?**
- **Why do you think your patient has bleeding with brushing, and how do you control that?**
- **Which type of composites would you use for this patient?**
- **How can you help Rosalyn to manage the decay?**





Mobil																	
Plaque						P P P	P P P	P P P	P P P								
Calc						C C	C C C	C C C	C C C								
Furcation																	
Attach		4 3 3	3 3 3	2 3 3	3 2 3	2 1 2	3 2 3	3 2 3	4 2 3	4 2 2	2 1 2	3 1 3	3 3 3	3 2 3	3 2 3		
Rec																	
Bleed						8	8	8	8	8	8	8	8	8	8		
PROBE		4 3 3	3 3 3	2 3 3	3 2 3	2 1 2	3 2 3	3 2 3	4 2 3	4 2 2	2 1 2	3 1 3	3 3 3	3 2 3	3 2 3		
Lingual																	
	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	
Facial																	
PROBE		3 3 3	3 2 3	3 3 3	3 2 3	3 1 3	2 1 2	2 2 2	2 3 2	2 3 2	2 1 2	3 3 3	3 2 3	4 3 3	3 2 4		
Bleed						8	8	8	8	8	8	8	8	8	8		
Rec																	
Attach		3 3 3	3 2 3	3 3 3	3 2 3	3 1 3	2 1 2	2 2 2	2 3 2	2 3 2	2 1 2	3 3 3	3 2 3	4 3 3	3 2 4		
Furcation																	
Supp																	
Calc																	
Plaque						P P P	P P P	P P P	P P P	P P P	P P P	P P					

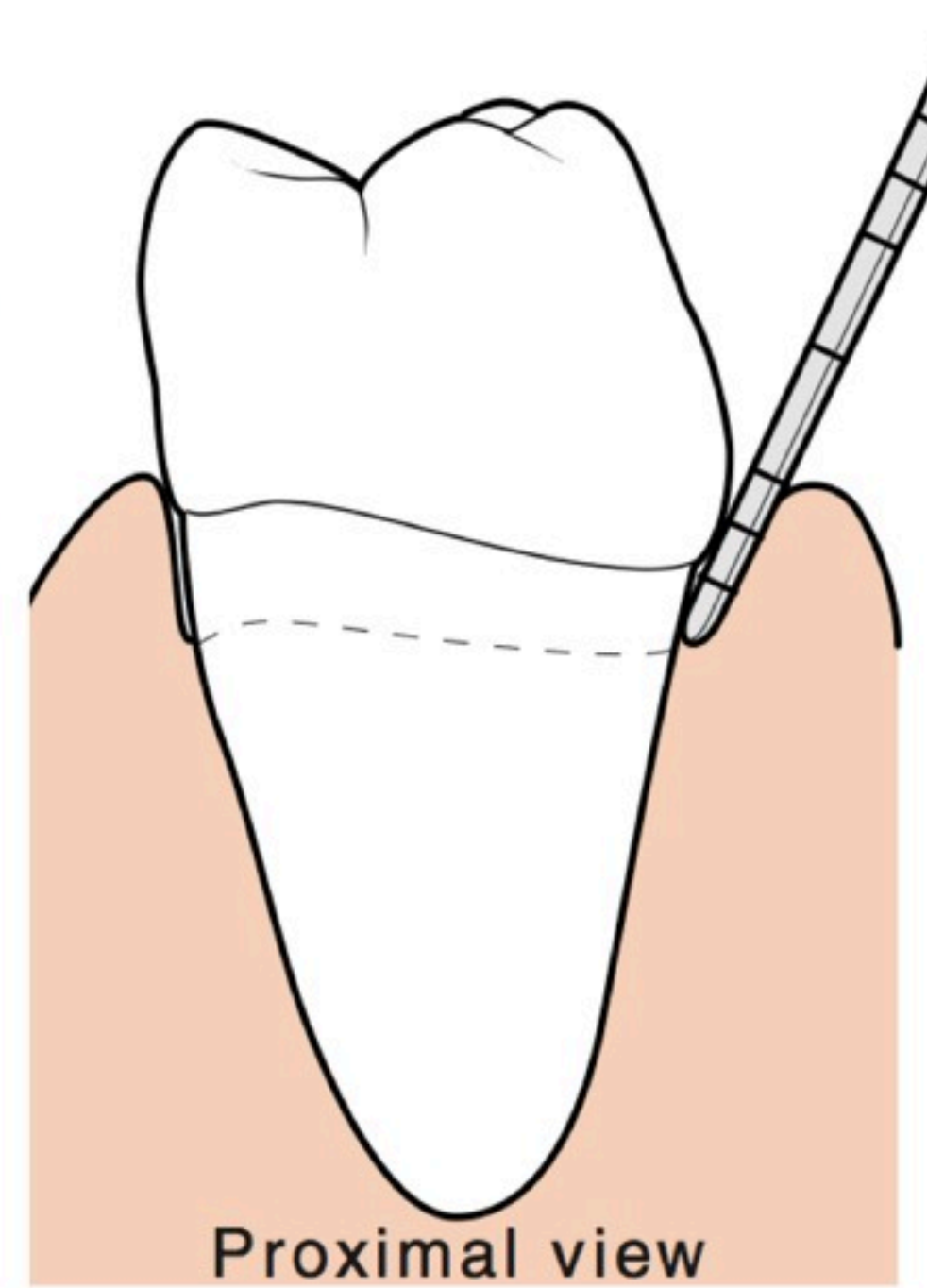
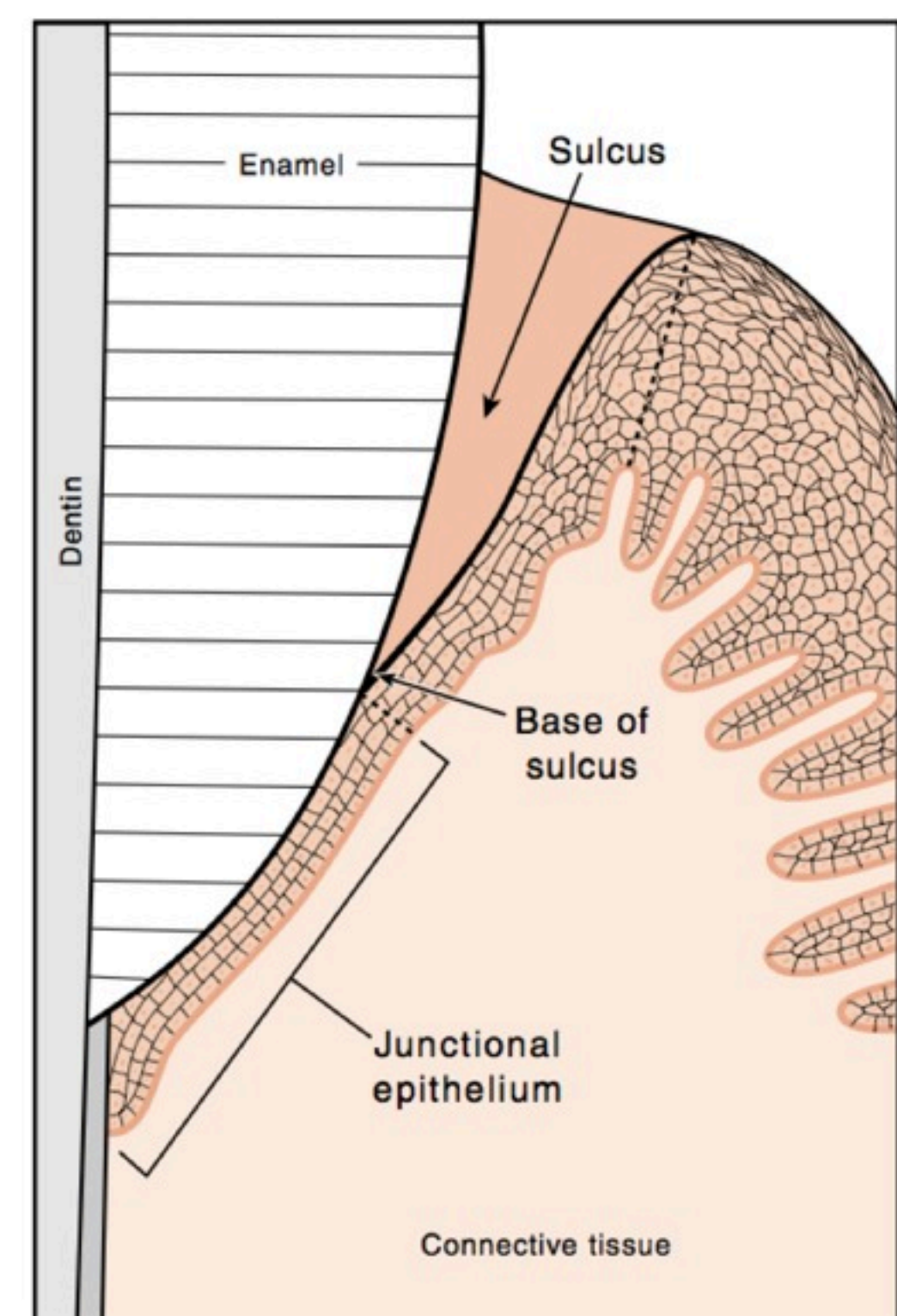
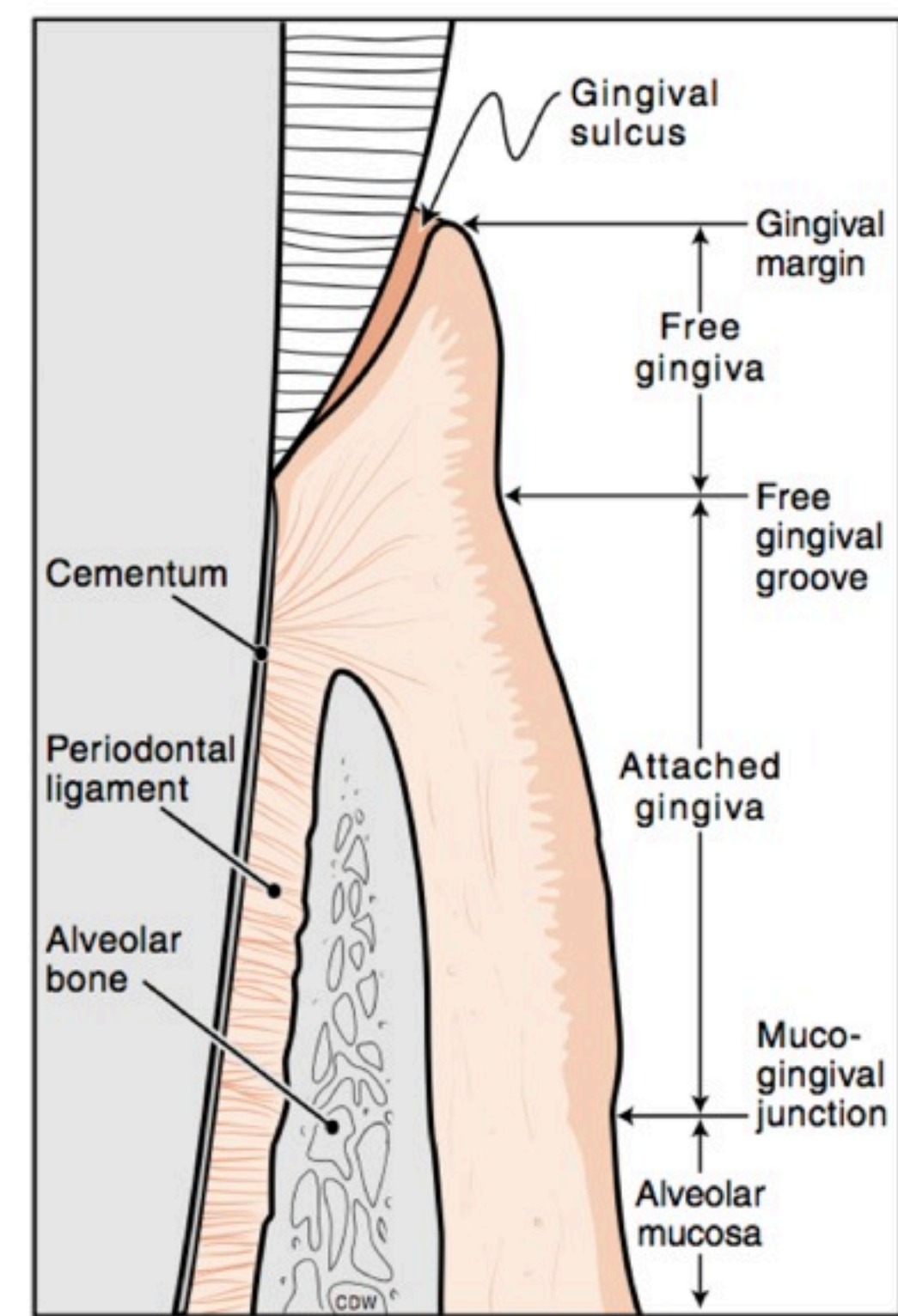
No  
Radiographic  
Bone Loss

## Plaque Biofilm Accumulation

## Gingival Inflammation

## Bleeding on Probing (BOP)

## Probing Depths & CAL



## What are we probing?



# D2

## Sequential Clinical Cases

- Rosalyn
- 17 y.o. female
- Med Hx: non contributory
- Did not visit a dentist for the last 8 years
- Just got dental insurance
- CC: I want to take care of my teeth

## Periodontal Diagnosis:

## Classification

Development of a Classification System for Periodontal Diseases and Conditions.

Armitage, Annals of Periodontology 1999

- I. Gingival Diseases
  - A. Dental plaque-induced gingival diseases\*
    1. Gingivitis associated with dental plaque only
      - a. without other local contributing factors
      - b. with local contributing factors (See VIII A)
    2. Gingival diseases modified by systemic factors
      - a. associated with the endocrine system
        - 1) puberty-associated gingivitis
        - 2) menstrual cycle-associated gingivitis
        - 3) pregnancy-associated
          - a) gingivitis
          - b) pyogenic granuloma
        - 4) diabetes mellitus-associated gingivitis
      - b. associated with blood dyscrasias
        - 1) leukemia-associated gingivitis
        - 2) other
    3. Gingival diseases modified by medications
      - a. drug-influenced gingival diseases
        - 1) drug-influenced gingival enlargements
        - 2) drug-influenced gingivitis
          - a) oral contraceptive-associated gingivitis
          - b) other
    4. Gingival diseases modified by malnutrition
      - a. ascorbic acid-deficiency gingivitis
      - b. other
  - B. Non-plaque-induced gingival lesions
    1. Gingival diseases of specific bacterial origin
      - a. *Neisseria gonorrhea*-associated lesions
      - b. *Treponema pallidum*-associated lesions
      - c. streptococcal species-associated lesions
      - d. other
    2. Gingival diseases of viral origin
      - a. herpesvirus infections
        - 1) primary herpetic gingivostomatitis
        - 2) recurrent oral herpes
        - 3) varicella-zoster infections
      - b. other
3. Gingival diseases of fungal origin
  - a. *Candida*-species infections
    - 1) generalized gingival candidosis
  - b. linear gingival erythema
  - c. histoplasmosis
  - d. other
4. Gingival lesions of genetic origin
  - a. hereditary gingival fibromatosis
  - b. other
5. Gingival manifestations of systemic conditions
  - a. mucocutaneous disorders
    - 1) lichen planus
    - 2) pemphigoid
    - 3) pemphigus vulgaris
    - 4) erythema multiforme
    - 5) lupus erythematosus
    - 6) drug-induced
    - 7) other
  - b. allergic reactions
    - 1) dental restorative materials
      - a) mercury
      - b) nickel
      - c) acrylic
      - d) other
    - 2) reactions attributable to
      - a) toothpastes/dentifrices
      - b) mouthrinses/mouthwashes
      - c) chewing gum additives
      - d) foods and additives
    - 3) other
6. Traumatic lesions (factitious, iatrogenic, accidental)
  - a. chemical injury
  - b. physical injury
  - c. thermal injury
7. Foreign body reactions
8. Not otherwise specified (NOS)



# D2

## Sequential Clinical Cases

### Fall 2012 Cases

**CASE 1**  
FALL 2012  
WEEKS 1-3  
**Rosalyn**

This case is a composite for teaching purposes

Class III  
Class V  
Gingivitis  
Ethics  
Fluoride treatment Rx  
AxiUm

**Case 2**  
Fall 2012 weeks 3-4  
**Kate**



This case is a composite for teaching purposes

- CLASS IV
- Diastema closure
- Whitening
- Prescription writing
- Introduction to pain medication in dentistry
- AxiUm

**Fall 2012**

Case 3  
Composite veneers  
Ceramic veneers  
Whitening  
Xerostomia  
Cholinergic agents  
β2-adrenergic agonist  
AxiUm  
Consent forms  
Week 5- week 6

This case is a composite for teaching purposes

**Case 4**

Weeks 6-8  
2012  
Anterior crowns and material choice  
Occlusion and crown design  
Hypertensive medications  
Cardiac medications  
Drug interactions with dental treatment  
Introduction to Implants  
Introduction to Scaling and Root planing  
AxiUm

This case is a composite for teaching purposes

**Case 5**  
**Revisiting case 2**

Fall  
Week 9  
Anterior Endodontics  
Antibiotics in Endodontics

This case is a composite for teaching purposes



# **Periodontal Examination & Instrumentation**

Simulation Clinic  
Rotation







# **Clinical Rotations**

## **Periodontal Exam, Instrumentation**

## **Prophylaxis, Recare Patients**



# D2

## Oral Health Sciences

### DENT 1614 Literature Review Paper

Topic: Periodontal Diseases

Research the literature to accomplish the following objectives:

1. Describe the microbial/infectious model and the inflammatory (host immune response) model of the pathogenesis of periodontal diseases. According to the current understanding of periodontal pathogenesis, which model predominates? Cite the literature that supports this current paradigm.
2. Discuss the effect of smoking on: 1. risk for developing periodontal disease; 2. host susceptibility to periodontal disease; 3. severity of periodontal disease; 4. healing response to periodontal treatment.
3. Discuss the effect of diabetes on: 1. risk for developing periodontal disease; 2. host susceptibility to periodontal disease; 3. severity of periodontal disease; 4. healing response to periodontal treatment.
4. Discuss the evidence based rationale for the local (direct) delivery of antibiotics into periodontal pockets in patients with periodontitis.
5. Describe the evidence based rationale for adjunctive use of a therapeutic antimicrobial mouthrinse in the daily oral hygiene regimen (which includes mechanical plaque control methods) for your periodontal patient with ineffective home care/plaque control.

# Literature Review Paper

Periodontal Diseases:  
*Etiology, Pathogenesis,  
Risk Factors, Antimicrobials*

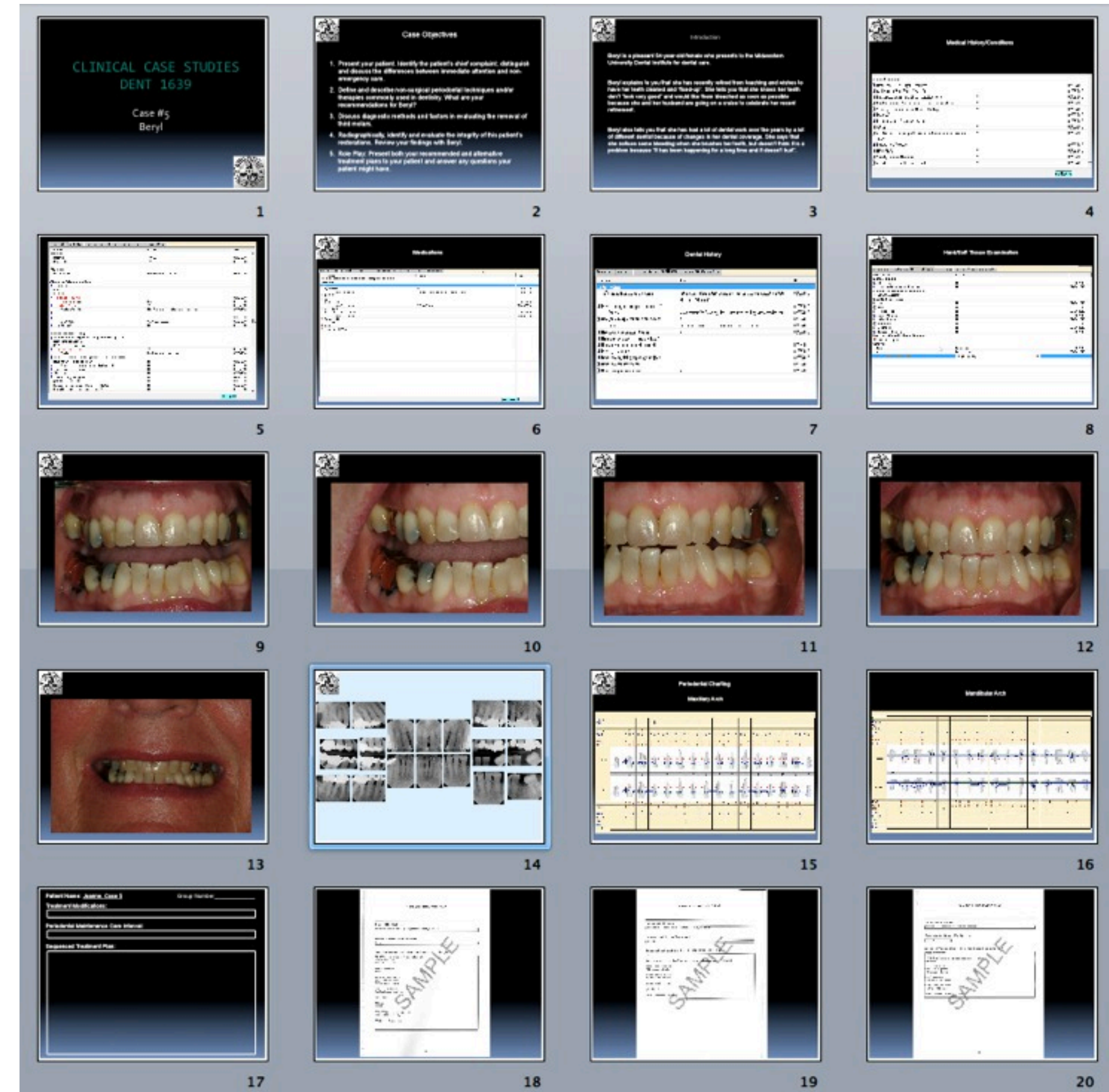


# D2

## Oral Health Sciences

### Clinical Treatment Planning Case Studies

Christine Halket DDS, MS






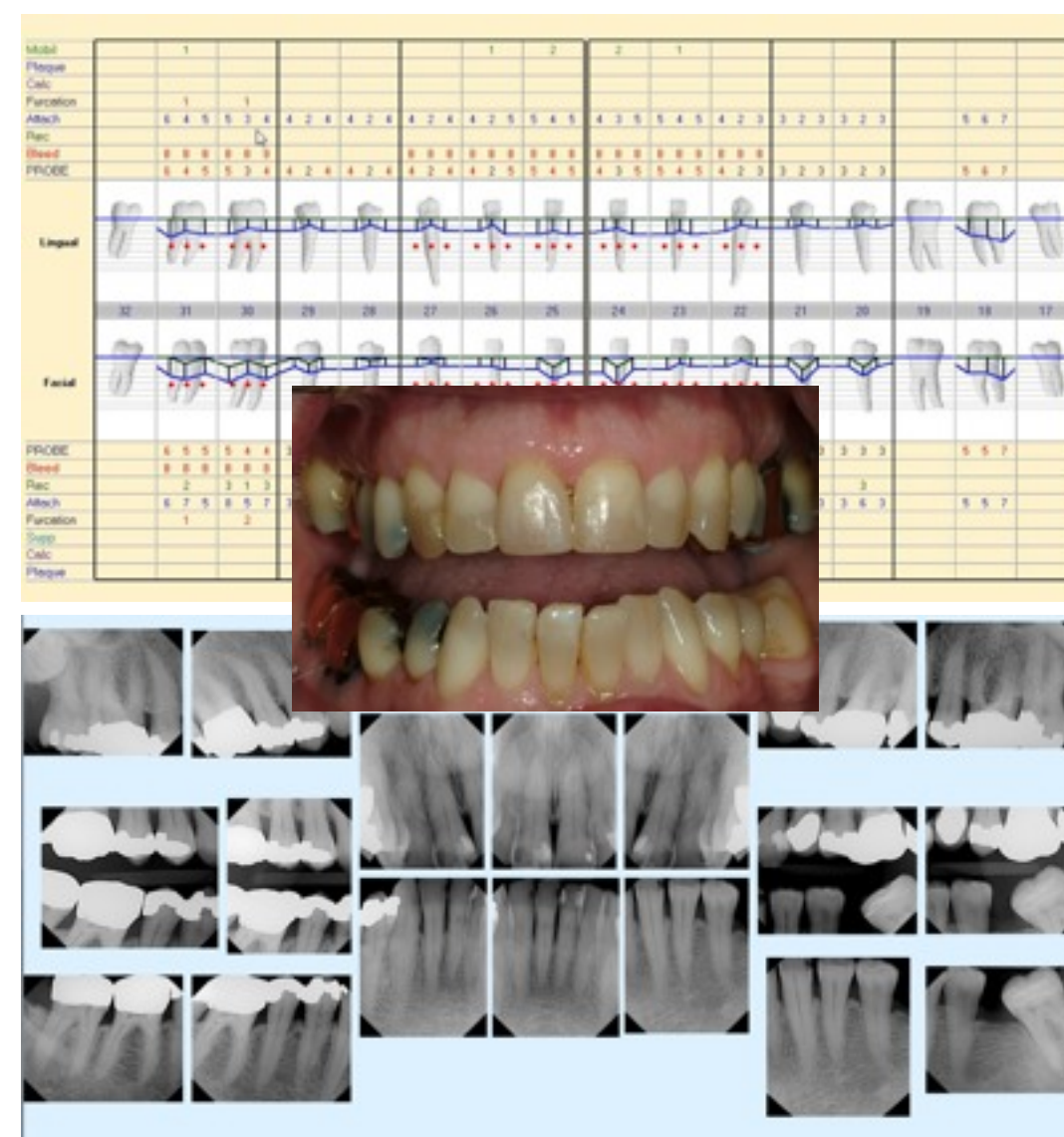
# D2 Oral Health Sciences

## Clinical Treatment Planning Case Studies

Christine Halket DDS, MS

 Case Objectives

1. Present your patient. Identify the patient's chief complaint; distinguish and discuss the differences between immediate attention and non-emergency care.
2. Define and describe non-surgical periodontal techniques and/or therapies commonly used in dentistry. What are your recommendations for Beryl?
3. Discuss diagnostic methods and factors in evaluating the removal of third molars.
4. Radiographically, identify and evaluate the integrity of this patient's restorations. Review your findings with Beryl.
5. Role Play: Present both your recommended and alternative treatment plans to your patient and answer any questions your patient might have.



## Patient History Case Objectives

## Clinical & Radiographic Findings



# D2 Oral Health Sciences

## Clinical Treatment Planning Case Studies

Christine Halket DDS, MS

### SAMPLE 1 - TREATMENT PLAN

#### Treatment Modifications:

Antibiotic Prophylaxis (Amox. 2g. 1hr. prior to procedure), avoid latex

#### Periodontal Maintenance Care Interval:

3 months

#### Sequenced Treatment Plan: (Note: Use the scroll bar on the right)

#1 EXT (addressing the patient's immediate complaint)

#4, #18 caries control

S/RP UR, UL, LL, LR

#14 RCT (retreatment)

#19 RCT

#20 DO Direct Restoration

#3 MO Direct Restoration

#4 MOD Indirect Restoration

#27 F Direct Restoration

#30 MODF Direct Restoration

#12-14 bridge

#18 crown

#19 crown

#29 EXT Refer for implant placement

#32 EXT Refer to oral surgeon

#29 abutment & crown (implant)

**Dx, Px  
Tx Plan  
Tx Options**

**Team  
Presentation  
& Discussion**



# D2

## Oral Health Sciences

## Dex Competency

**Dex Competency**

Projects	Preps	Restore	Critical Thinking	Perio	Endo	Radiology
#2 CCC preparation part of FPD	1					
#4 PFM preparation part of FPD	2					
#2-4 Impression for FPD		1				
#6 ACC preparation	3					
#6 Provisional		2				
#8 Composite Veneer preparation	4					
#8 Composite Veneer restoration		3				
#9 Composite Veneer preparation	5					
#9 Composite veneer restoration		4				
#10 ML composite prep and restoration		5				
#11 ML composite preparation	6					
#14 MODB prep and composite build up**	7	6				
#18 MOD amalgam reparation	8					
#19 MO amalgam preparation and restoration		7				
#20 ACC Preparation	9					
#20 Provisional		8				
#30 DO gold inlay preparation (to mesial pit)**	10					
#31 Occ composite preparation and restoration		9				
LRQ 4 teeth SRP Periodontal section				1		
#30 Access + one canal(of choice) shaped and filled					1	
FMX						1
Critical Thinking (oral exit interview)			1			
**new prep	70% pass	70% pass	75% pass	75% pass	75% pass	75% pass

4 Day  
Mock Board

Critical Thinking  
Components

Oral Exam  
on Rationale/EBD

Periodontics  
Section



# **Community Service Oral Health Rotations**

Robert Kramer, DMD

**D2 Year**

**Elementary School Programs**

**Apply didactic & clinical learning  
in Preventive Dental Medicine,  
Public Health and Periodontology**

**Apply public speaking & teaching  
skills from Basic Science Case Studies**



# Implant Dentistry Curriculum

David Rolf II, DMD, MS  
Christine Halket DDS, MS  
Jay Morrow, DDS  
Azfar Siddiqui DMD, MDS  
Kanokraj Srisuko, DDS, MS

## D2 & D3 Years: 35 Hour Curriculum

## D2 Year: 15 Hour Curriculum

### Team Approach

- Patient Evaluation and Diagnosis
- Treatment Planning, Surgical, Restorative
- Laboratory Procedures & Communication

## Simulation Clinic Rotations





# Implant Dentistry Curriculum

Azfar Siddiqui DMD, MDS  
 David Rolf II, DMD, MS  
 Robert Carpenter DMD  
 Vijay Parashar DDS, MS  
 Christine Halket DDS, MS  
 Joe Mehranfar DMD

Date	Time	Lecture Topic	Speaker
<b>Aug.31</b>	10:00	Course overview. Dental Implantology: Paradigm shift in dentistry	Dr. Siddiqui
<b>Sep.7</b>	10:00	Implant dimensions and diameters	Dr. Siddiqui
<b>Sep.14</b>	10:00	Choice of saving teeth or placing implants. Atraumatic tooth extractions and extraction socket grafting for dental implant placement.	Dr. Rolf
<b>Sep.21</b>	10:00	All on 4 concept for edentulous ridge rehabilitation	Dr. Mehranfar
<b>Sep28</b>	10:00	Bone grafting nomenclature, indications and type of bone grafts	Dr. Carpenter
<b>Oct.5</b>	9:00	<b>Midterm Exam</b>	
<b>Oct.5</b>	10:00	Maintenance of dental implants. Ailing & failing implants: Risk factors, diagnosis and treatment.	Dr. Rolf
<b>Oct.12</b>	10:00	Implant retained and implant supported overdentures	Dr. Siddiqui
<b>Oct.19</b>	10:00	Sinus augmentation for dental implant placement	Dr. Carpenter
<b>Oct.26</b>	10:00	New dental implant systems: Orthodontic, mini and super –wide implants	Dr. Rolf
<b>Nov.2</b>	10:00	Ridge expansion and splitting for dental implant placement	Dr. Siddiqui
<b>Nov.7</b>	7:30	<b>Final Exam</b>	

## D3 Year Advanced Topics in Implant Dentistry



# **Clinical Curriculum**

- Surgical Periodontics  
for the General Practitioner
- Advanced Clinical Dentistry
- Clinical Conference
- Practice Management



# **Surgical Periodontics for the General Practitioner**

David Rolf II, DMD, MS  
Christine Halket DDS, MS  
Jason Augustine DDS, MS  
Trevor Siu DMD, MS

D3 Year: 10 Hour Curriculum

Resective, Regenerative, Plastic & Implant  
Surgical Procedures and Cases

Rationale & Classic/Current Literature

Restorative-Periodontal Interrelationships

GP-Periodontist Relationship  
& Guidelines for Referral to a Periodontist



# Clinical Syllabus Patient Care Competency Mock Boards Boards

## PREDOCTORAL PERIODONTICS CLINICAL SYLLABUS

Prepared by: David Rolf II, D.M.D., M.S.  
Thomas F. McDaniel, D.M.D., F.A.G.D.  
Denise A. Mills, B.S.D.H., D.D.S.  
Russell W. Cyphers, D.D.S., F.A.G.D.  
Trevor L. Siu, D.M.D., M.S.



**MIDWESTERN UNIVERSITY**  
COLLEGE OF DENTAL MEDICINE



**Clinical Syllabus  
Patient Care  
Competency  
Mock Boards  
Boards**

**PREDOCTORAL  
PERIODONTICS  
CLINICAL  
SYLLABUS**

**Thank You**  
Dr. Antonio Moretti  
UNC



**MIDWESTERN UNIVERSITY**  
COLLEGE OF DENTAL MEDICINE



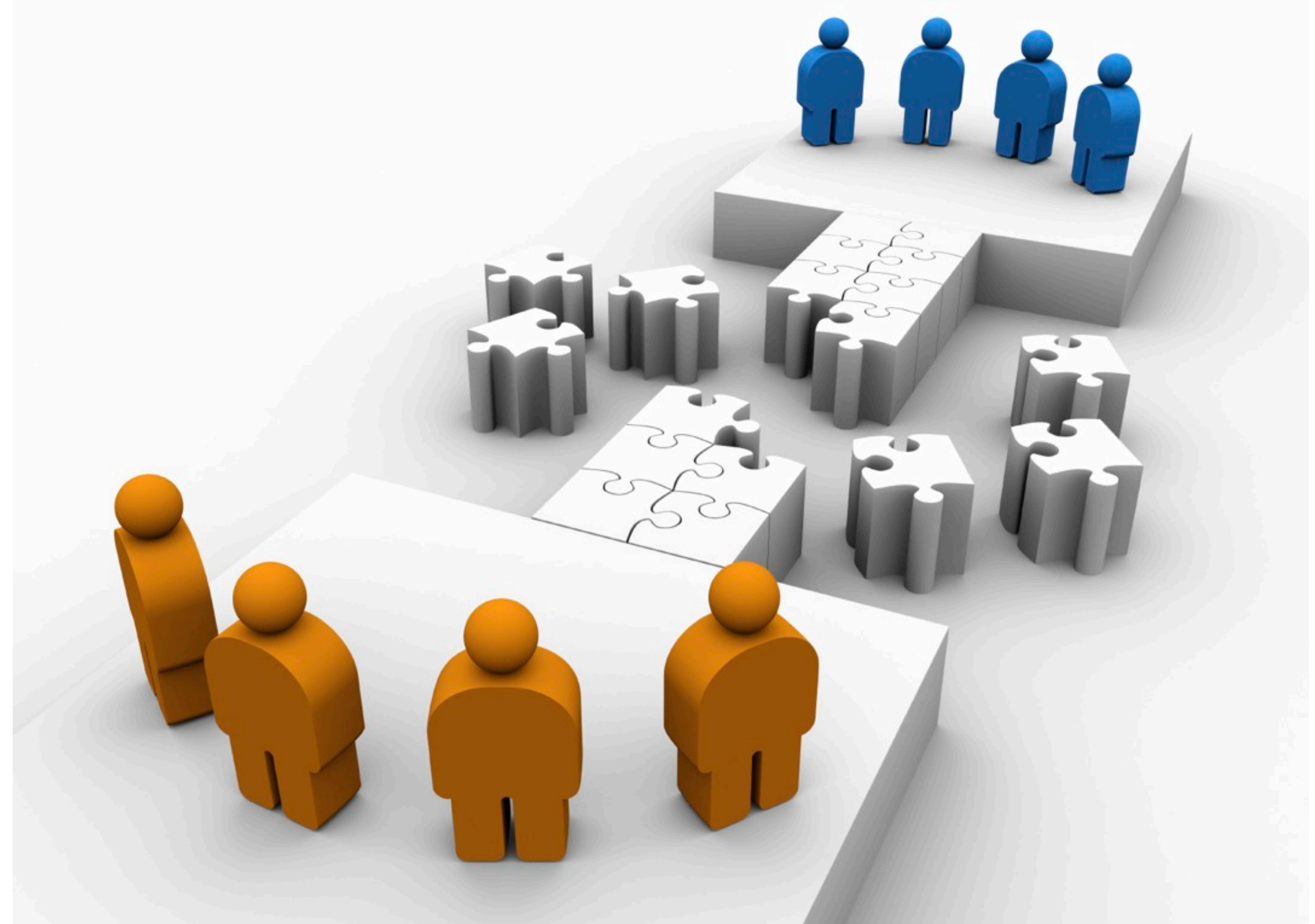
# learning objectives

Discuss advantages and disadvantages of a traditional versus an integrated predoctoral periodontology curriculum.



# **Integrated** **Advantages**

**Enhance learning  
bridge gaps  
& eliminate overlap  
in the curriculum**





**Integrated  
Advantages**



**Periodontics**

**Implant  
Dentistry**





# Cross Training

Fully Equipped and Qualified

## **ADVANTAGES FOR FACULTY & STUDENTS**

**Faculty Development: our faculty learn more across disciplines  
cross training = become better clinicians & teachers**



# Midwestern University: Working Together

MWU -CDMA upperclassmen  
share their views on the team  
approach at the dental institute

By Liz Davis '13 & Rachel Ecker '14





# Challenges

with the  
Integrated Curriculum

“heavy lifting”





The background of the slide is a 3D rendering of puzzle pieces. A single red puzzle piece is in the foreground, partially inserted into a larger structure of grey puzzle pieces. The red piece is on the left, and its interlocking tabs are fitting into the recesses of the grey pieces. The grey pieces form a larger, more complex shape, with some pieces already interlocked and others still separate. The lighting creates soft shadows, giving the pieces a three-dimensional appearance.

# Challenges

**Once curriculum is integrated...  
what if we need to add something?  
How to cram another piece into an  
already finished/integrated puzzle!**



# Challenges with the Integrated Curriculum



EVEN IF ONE PIECE IS MISSING,  
IT MATTERS A LOT



# **Traditional Curriculum Advantages**



# **Departmental System Strengths**



# learning objectives

Consider opportunities for integration of the periodontology curriculum at your own institution.





thank you