

Exploring a Career in Academic Dentistry

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University of Pittsburgh School of Dental Medicine
DMD Candidate, Class of 2016

Personal Objectives

- Desire to see the other side of the story: view education from a teacher's perspective
- Learn how a course is designed
- Consider teaching as a potential career choice

ACT ARCO/ADCFP Coursework

Three components of Academic Career Track Area of Concentration (ACT ARCO) at Pitt Dental:

1. Education
 - Didactic
 - Clinical
2. Research
3. Leadership



My classmates and I collaborating at our training sessions

Examples of courses:
Didactic Teaching
Methodology
Clinical Teaching
Practicum
Academic Administration



Teaching Experiences

Pre-Clinical sessions with D1s

- Operative Dentistry Lab
 - Beginning cavity preparation and restoration with composite resin
- First Year Clinic (Introduction to clinic)
 - Conducting patient interviews
 - Performing an examination
- Dental Materials Lab
 - Taking diagnostic impressions in a clinical setting
 - Making diagnostic study models

"Mini-Teaching" Lecture Simulation Exercise

- Prepared a lecture on a topic of my choice
- Presented it to my peers in ACT ARCO and received feedback

Small Group Experience

- Standardized Patient session
 - Helped D3s practice Motivational Interviewing
- Ethics small group discussion
 - Reviewed ethical dilemma scenarios with D1s
 - Clarified ethical and professional standards based on **ADA Code of Ethics**



D2 students in the Simulation lab.

Research

Related coursework: Survival Skills for a Career in Dental Research

Research project:

Non-invasive dental procedures as a trigger for recurrent herpes labialis, University of Pittsburgh School of Dental Medicine, 2014-15



Advisor: Dr. Alexandre Vieira, DDS, MS, PhD
Aim of project: investigate the possible correlation between dental prophylactic treatments and the outbreak of recurrent herpes labialis

Me presenting at the IADR Conference, 2015, in Boston, MA

Independent research project resulted in opportunities to present my work, travel to several conferences, meet dental students with similar ambitions and leaders in research and gain an appreciation for science in Dentistry

Participated in ADA Foundation Colgate Dental Students Research Conference, Fall 2015



My colleagues and I with Dr. R. Bowen at the National Institute of Standards and Technology.

Leadership Development

Related coursework: Introduction to Leadership and Career Development

- View a day in the life of various leaders at Pitt Dental, including Deans
- Understand the meaning of being a leader in academics
- Comparing managing and leading
- Appreciate the importance of a team in effective leadership

Faculty Mentoring

Ample opportunities to discuss academics with faculty.

Including:

- Interviews with professors with a didactic focus, pre-clinical/clinical focus and learned their perspectives
- Discussions with faculty with administrative appointments, such as the Dean of our dental school
- ADEAGies Academic Career Day

Reflections and Future Plans

- Greater understanding of the roles of an educator and the challenges of being a teacher
- Better knowledge of teaching styles and course design
- Future: hope to stay involved in education and research



To Teach, To Learn, To Inspire, To Conquering Goals And Dreams

Mandana Shaya DMD, 2015-16 ADCFP Fellow
 Advanced Education in General Dentistry
 University of Pittsburgh School of Dental Medicine



Personal Objectives And Goals:

My philosophy: As an educator I hope to serve as a mentor and encourage life long learning. I would hold students responsible and accountable of their education and hope to teach them to be good problem solvers and creative and bold thinkers. In my classroom, I would want students to be actively involved in their learning.

Research Project #1:

Title: Prevalence of Periodontal Disease by Recording Indices Among Low Income Discount Dental School Patients

OBJECTIVE:

The purpose of this study was to evaluate the prevalence of periodontal disease among the patient population at the University of Pittsburgh who receive the Low Income Discount (LID) financial obligation reduction based on family income in relation to federal poverty guidelines.

STUDY DESIGN:

This was a retrospective study examining the Electronic Health Record at the University of Pittsburgh School of Dental Medicine (axiUm, Exan Group) from August 2008 to April 2013 (N = 7936). Records of the complete periodontal examination, income, age, gender, race, and other variables were collected and analyzed.

RESULTS:

Logistic regressions were performed, controlling for patients' age, ethnicity, smoking status, BMI, and diabetes. The odds of having periodontal disease for patients receiving the low income discount (LID) was higher (1.055), but the difference was not statistically significant (P = 0.35).

SIGNIFICANCE:

Patients receiving the low income discount did not have a higher prevalence of periodontal disease. Factors other than income appear to be more important to predict greater prevalence of periodontal disease, but this insight requires further investigation.

Teaching Practicum:

Introduction to Dental Anatomy Lab

- 7 Sessions (40 students each session)
- 1st year dental students

First year clinic

- 7 Sessions (20 students each session)
- Obtain medical history of patients

Standardized Patient Session Facilitator

- 5 Students for the session
 - Supervised students as they simulate initial appointment with patient and complete medical and dental history
- Didactic Teaching in Cariology
- 80 Students (First Year students)
 - Designed lecture and activities for a course on sealants

Research Project #2:

Using data collected previously by COHRA (Center for Oral Health Research in Appalachia) in a study directed by Dr.

Weyant a research project was created using parts of this data to analyze how locus of control plays a role in caries rate in this population. Mothers locus of control was determined and correlated to corresponding child's (ages 1-6 years old) caries rate.

Definitions:

Internal Locus of Control - individual believes they are responsible for their on success
 External Locus of Control - individual believe that an external force such as luck determines the outcome

"You cannot teach a man anything, you can only help him find it within himself." — Galileo Galilei

Faculty Interview:

- To be successful, one must take time to understand and learn what ignites each individual person; to find their potential.
- Nothing in teaching can be established as a negative aspect, but rather just another learning opportunity

Reflections:

In class we learn that effective teaching depends on a teachers ability to communicate well with students. Asking the right question and being able to explain ideas effectively are crucial in teaching. Can one address the question in a manner that allows the student to think and process the answer without the teacher directly telling the student the correct answer? The goal is to create an experience that will alter a student's attitude, behavior, or skill so that the he or she can retain a new understanding and perspective of the topic being taught. By gradually adding the new skills to this experience eventually the student will master the skills necessary.

Future Plans:

I hope to practice General Dentistry for a couple year and gaining a more thorough understanding of the field prior to considering a career in clinical teaching.

Acknowledgment:

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The Curious Path Toward Teaching

2015-2016 Academic Dental Careers Fellowship Program (ADCFP)

David Cole; DMD Candidate

University of Pittsburgh School of Dental Medicine



Personal Objectives

- Explore career options as a clinical instructor
- Work with pre-doctoral students in the pre-clinic in a formal setting
- Learn transferable skills that could be implemented in a private-practice setting.



Research

- Comparing 3dMface Digital Stereophotogrammetry & 2-D Facial Photography to Real Life Facial Form Analysis for Orthodontic Diagnosing and Treatment Planning



Faculty Interviews

Insights:

- Academics vs private practice
- Full-time vs part-time
- Challenging vs fulfilling aspects of teaching
- Greatest successes and future goals



Dr. Ronald DeAngelis



Dr. Manjari Kulkarni

Teaching Experiences

The Skull: Basic and Applied Anatomy (lab TA), Spring 2014
 My role: to instruct predoctoral dental students in the anatomy of the skull to instill a clear and lasting understanding of the anatomical concepts and relationships essential for the practice of dentistry.

Principles of Operative Dentistry 1 Lab (clinical student teacher), Spring 2014
 My role: to assist and guide the students to develop the psychomotor skills to prepare and restore cavities using amalgam on a mannequin

Fixed Partial Dentures 1 Lab (clinical student teacher), Fall 2015
 My role: to instruct students in the necessary lab and clinical procedures in preparing teeth and fabricating single

Oral and Maxillofacial Pathology (peer tutor), Fall 2015
 My role: to act as a tutor to students identified by the course director as those in need of additional instruction in study skills and the instruction of Oral and Maxillofacial Pathology.

Introduction to Behavioral Dentistry (Standardized Patient session facilitator), Spring 2015
 My role: to facilitate Standardized Patient sessions involving the use of Motivational interviewing skills

Orthodontic Diagnosis and Treatment Planning (guest lecturer), Spring 2015
 My role: to present a lecture to the second year pre-doctoral students on the advances in technology in the field of Orthodontics



Reflections

" The mediocre teacher tells.
 The good teacher explains.
 The superior teacher demonstrates.
 The great teacher inspires."

- William A. Ward

Future Plans

Welcome to VCU Orthodontics Class of 2018!



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