At the 2016 Predoctoral Educators Workshop, attendees gathered in small groups to discuss individual tactics as part of a greater “tool kit” to supercharge periodontics in dental education. Group leaders summarized their findings, which are presented below.

**Small Group Discussion Leaders and Topics**

Ramzi Abou-Arraj, University of Alabama at Birmingham  
*Recruiting volunteer faculty, area periodontists*

Grishondra Branch-Mays, University of Minnesota  
*Partnering with curriculum development faculty*

Andrew Browar, Midwestern University  
*Making the decision to specialize*

Nico C. Geurs, University of Alabama at Birmingham  
*Implant teams, referral, and treatment of complications*

Omid Kiarash, McGill University  
*Mobilizing residents, post-docs, and fellows to facilitate treatment teams*

Anthony Neely, University of Detroit Mercy  
*Inclusion and diversity initiatives*

Leena Palomo, Case Western Reserve University  
*Research as an entry point into periodontics*
Interactive Session 1
Part A: Challenges/Obstacles

- Lack of calibration for part-time faculty
- Consistency and reliability in clinic coverage
- Clinic scheduling difficulties (empty clinic or too busy)
- Different philosophies of treatment
- Interpersonal conflicts with Chair or Program Director
- Gauging reasons for their interest (beware of only postdoctoral interest)
- Institutional restrictions and requirements: 1) only predoctoral teaching, 2) minimum (5) years of experience, 3) MS or Board certification
- Quality of periodontists
- Geographical restrictions (smaller cities with dental schools would have less available area periodontists than larger or metropolitan cities)
- Compensation for faculty
- Loss of income due to time taken away from (marketing) practice
- Time taken from their family, hobbies, or leisure
- Student loan burden on young graduates

Part B: Strategies to Overcome Challenges

- Require regular calibration sessions
- Have a clinic manual for classifications and clinic flow
- Recruit adjunct faculty with expertise in select areas of patient management and care
- Task adjunct faculty with lectures and courses to increase responsibility
- Offer online learning for didactic teaching to help overcome time and travel restrictions
- Create unique faculty tracks (minimum 3 days/week)
- Require a presentation to evaluate quality
- Demonstrate appreciation through direct student/resident feedback, department leadership and staff feedback, or offer a Part-time Faculty Appreciation Day
- Offer benefits, CE, memberships, Dean’s award for faculty to use for educational purposes, Foundation awards, or sponsorship to attend ADEA meetings
- Offer flexible schedules to faculty
- Recruit young graduates prior to their full-time commitment to private practice
Interactive Session 2
Part A: Value of Adjunct Faculty to the Institution and its Education Mission

- Supporting education programs
- Ensuring expertise in periodontal and implant areas that may be lacking in the existing full-time faculty body
- Practicing management skills and experience
- Establishing local study clubs to educate local dental professionals and grow practice
- Transitioning strategies from residency or from dental school to private practice
- Fostering successful experiences in organized dentistry and community projects
- Bringing different perspectives by showing clinical cases and treatment planning
- Gaining insights from private practice by establishing interactions between the periodontist and the restorative dentist/prosthodontist, and other dental specialists
- Cultivating leadership skills in managing interdisciplinary teams for periodontal care and implant therapy

Part B: Value of Part-time Education to Adjunct Faculty

- Staying current and evolving as periodontists, especially with older periodontists
- Returning the investment (giving back)
- Obtaining a perceived status, or marketing opportunity
- Gaining satisfaction in having contributed to the education of future dentists and periodontists
- Having the opportunity to educate more patients either directly or indirectly by educating more dentists and periodontists
- Networking with colleagues
- Collaborating on research projects (using NDPBRN for example)
Partnering with curriculum development faculty
Grishondra Branch-Mays, University of Minnesota

Barriers/ Challenges
The group identified several barriers and challenges facing periodontal educators:

- Calibration of periodontal faculty and non-periodontal faculty, who supervise periodontal procedures and residents
- Lack of faculty resources
- The General Practice/Comprehensive care model
- Timing of periodontics courses or content in the curriculum
- Coverage of periodontics procedures by non-periodontics faculty

Strengths
The group also identified several strengths:

- Partnering with periodontics faculty who are passionate about what they do
- For schools with a periodontics residency program, having predoctoral students work with residents in the clinic and in preclinical didactic settings
- Utilizing vertical integration to provide early clinical experiences
- Introducing the periodontics specialty earlier in a student’s training; in some programs, periodontics is taught in the first year, which can serve to create excitement around the specialty
- Continuing (elective) periodontics courses or content throughout the 4 years of dental school
- Offering AAP Lunch ‘n Learn sessions to create a positive image of periodontics
- Allowing students to participate in surgeries
- Teaching students how to become excellent general DDS
- Mandatory calibration sessions for all clinical faculty members

Opportunities
The group identified opportunities that could be utilized to encourage partnerships in the curriculum:

- Equipping graduates, most of whom will be general practitioners, with a comprehensive foundation in periodontics, so that they provide excellent care for periodontics patients and understand when referrals are appropriate
- Offering multidisciplinary courses to make sure periodontics is an integral part of the overall curriculum
- Participating in case conferences and case presentations with other faculty to discuss treatment planning
- Providing calibration for periodontics faculty and non-periodontics faculty to create consistency. Several suggestions for providing calibration using a variety of venues include: online access, alternating dates for calibration so part-time and volunteer
faculty can participate, regularly scheduling times to provide calibration at least twice a year, and creating a calibration retreat for the periodontist as well as for restorative faculty

- Developing common grading rubrics that can be used by periodontics and restorative faculty who cover periodontics procedures and incorporate them into axiUm, or whatever clinic software the school utilizes
- Using IPE to partner with other health professionals to discuss the importance of the oral systemic connection and overall health; this creates an opportunity for periodontics to widen the scope of collaborators and understand the importance and impact of periodontal disease on overall health
- Creating collaboration and support from the chairs in periodontics and other departments and administration
- Utilizing curricular innovation, such as flipped classrooms, CBL, and PBL to create collaborative opportunities with other faculty; this creates more opportunities in the curricular structure to interact with faculty
Making the decision to specialize
Andrew Browar, Midwestern University

Reviewing the clinical teaching environment:

- General trend for general practice dentists to manage the periodontal aspect of clinic patient care
- Case selection and diagnosis is often driven solely by general practice dentists, which leads to under diagnosis and misdiagnosis of periodontal diseases
- Too frequently, teeth are planned for early extraction, even though they could be treated periodontally with satisfactory prognosis
- Inconsistent or poor initial diagnostic skills of faculty
- Some faculty are still teaching pre-1999 diagnosis classifications
- First periodontal experiences are with dental hygienists
- A basic treatment, like a patient’s oral physiotherapy, is usually not well-controlled
- Poor initial diagnosis and initial therapy causes periodontal treatment to be considered a ‘roadblock’
- Student-periodontist ratio ranges from 8 to 1, or 100+ to 1, at any one time
- There is a general trend for consolidation of departments, which has led to some periodontal programs not being managed by periodontists
- Most postdoctoral periodontal residents in teach in predoctoral clinics, while most predoctoral students rotate through postdoctoral periodontal clinics
- Some programs offer opportunities for predoctoral students to participate in simulated periodontal surgery procedures or lab pig jaw surgery exercises
- Some faculty express pessimism in the future of periodontics as a specialty

Aspects of education which could encourage interest in periodontics:

- Have a periodontist consistently available on the clinic floor
- Complete periodontal examinations for all patients
- Ensure that calibrated faculty make consistent and accurate diagnoses
- Improve general dental faculty assessment skills to appropriately model for a general dental student
- Conduct periodontal rotations for predoctoral students
- Offer a simulated periodontal surgery or pig jaw exercises/periodontal surgery requirement/honor periodontal group
- Integrate clinical cases into the predoctoral didactic lecture materials

Other factors that influence the candidate pool:

- In the current financial environment, it is increasingly difficult to consider a residency program that requires tuition
- There seems to be a preference for an individual who completed a one-year GPR or AEGD program
• It is significantly easier to recruit predoctoral students to immediately begin a residency after graduation than it is to recruit dentists who are already in practice
• The current timing of the ADAT examination is not helpful for selection of residents
• Requiring an English language proficiency examination is highly desirable
• Most programs depend on candidate interviews because class ranking or grade point averages are unavailable

**Activities to improve the decision to specialize in periodontics:**

• Schedule Lunch ‘n Learns about choosing periodontics as a specialty
• Create a periodontal student interest group
• Offer honors or elective programs in periodontics
• Sponsor interested dental students to attend regional periodontal meetings
• Survey first-year postdoctoral residents as to why they chose periodontics as a specialty
• Mentor students in the clinics
• Consider ways to improve recruitment among dentists 1-2 years out of school
Implant teams, referral, and treatment of complications
Nico C. Geurs, University of Alabama at Birmingham

The group discussed the role of the periodontist in implant therapies throughout different schools and was charged to identify best practices to optimize implant therapy in periodontal educational programs.

A variety of educational models were represented within the group, including schools without graduate programs, schools with graduate programs, schools with implant clinics, and a variety of graduate programs placing implants.

The group agreed that the implant treatment planning and therapy phase have standard elements that must be completed. This includes a patient-specific risk assessment, appropriate diagnostics, and sequencing of therapy. The leadership at schools that direct the implant care need to be made aware of these best practices, and that implant therapy does not start with implant placement.

Periodontists should seek input into the treatment planning process for all patients, including implant therapy. Opportunities to increase this in schools where this is not the case include implementing risk assessment protocols for implant success. These protocols would require an assessment of the periodontal status and periodontal disease risk in implant patients, as well as an assessment of the overall health of the patients and the impact on implant therapy. The AAP should consider developing a tool for proper risk assessment for implant complications and an optimal sequence for implant therapy.

Patient assignment should be based on the patient’s diagnosis and treatment needs. It should be emphasized that implant patients do not exist. Patients can be diagnosed with ridge deformities, partial or complete edentulous, and other oral diseases. Dental implant therapy is a treatment modality that can be utilized to address these issues. Treatment planning should emphasize health, function and esthetics, and addressing the patient’s chief complaint versus the educational needs for the various programs. Random patient assignment based on coin flips does not take this into consideration.

Periodontal faculty should emphasize therapy within the team approach. The periodontal faculty or resident should work together with the restoring dental student or residents to facilitate the prosthetic work-up, including fabrication of the surgical guide. This should be a positive experience for the dental students. The guidance of the periodontal faculty should emphasize the supporting role of the periodontist in this process. The role of residents should be focused on this as well, and residents should act as ambassadors for periodontists. Overall, learning for students should occur within a positive supporting environment provided by periodontal faculty and residents.

Periodontal faculty must emphasize the importance of maintenance for all implant patients. This is an opportunity for periodontal departments. Maintenance is generally not a popular activity and periodontal faculty should develop and promote maintenance programs. The
leadership for maintenance within schools should come from periodontal faculty. This includes the diagnosis and management of biologic complications of dental implants. Periodontal programs should be the go-to center for management of peri-implant disease.

Periodontists should foster relationships within schools among other specialties to promote periodontists for implant treatments. These positive relationships will emphasize the prominence of periodontics in implant therapy.

The consequence of implant failure to patients, and the financial impact on clinic revenue, should be further described and could be used to convince administration of proper planning and executions of implant cases under the guidance of periodontal faculty.
Mobilizing residents, post-docs, and fellows to facilitate treatment teams
Omid Kiarash, McGill University

1. Consider experience as a key factor – not age, not language, etc.
2. Encourage recent perio grads to come back and contribute, especially in institutions or regions where they lack manpower periodontists
3. Share knowledge electronically, beyond the boundaries of our own institutions (e.g., AAP Connect for Students), to foster a sense of belonging early on in their dental education
4. Support a resident-organized study club to share their experiences with dental students
5. Offer resident-led webinars to schools that do not have a residency program
6. Ensure resident involvement with the transfer of patient information from D4, D3, D2
7. Empower residents to share their experiences through annual symposiums with dental students
8. Empower residents by training them for a leadership role to become leaders of the dental team
9. Increase student involvement in photographic and video graphic documentation of surgical cases
10. Pair students with resident for summer research and perio interest group research
11. Consider a “grassroots movement” – bottom-up as opposed to top-down movement
Inclusion and diversity initiatives
Anthony Neely, University of Detroit Mercy

Target Groups: Underrepresented groups include 1) African Americans, 2) Latinos, 3) Native Americans, 4) Women, and 5) LGBTQ

The working groups identified the following challenges to diversity and inclusion:

• Issues of mentoring students and faculty
• Lack of undergraduate diversity
• Limited pool of applicants in undergraduate and dental school
• Teaching and clinical challenges
• Top-down approach
• Faculty and student body may be diverse, but this diversity does not necessarily include the traditional underrepresented groups.

Diversity of students and faculty in dental schools is positive and should be celebrated. However, having diversity does not necessarily mean that dental schools have representation from traditionally underrepresented groups (African Americans, Latinos, and Native Americans) as defined by the federal government. Unfortunately, some schools have substituted the term diversity for underrepresentation. Whereas diversity among faculty and students is important, it should not supplant the goal of inclusion of underrepresented groups.

The working group identified the following potential solutions to improve diversity and inclusion:

PATH Program –
There was much discussion about getting predoctoral students involved in a 4 or 5-year program so that they can get a firsthand view of periodontics as a specialty. This type of program would offer mentoring to students from diverse backgrounds. One suggestion was to start the mentoring process as early as high school to get students interested in dentistry which is the first step towards specializing in periodontics. In such mentoring programs, students could be invited to spend time visiting private offices and/or dental schools.

Mentoring Dental Students –
The mentoring process in dental school should begin in the first year when students may be beginning to explore career options. Bringing them into periodontics clinics and offices exposes them to the full scope of the field and could get them excited about the profession. Early exposure to career options allows students to start preparing a path that could lead into the specialty. For example, students might choose to do an externship, service or mission trips, or research to make their applications more competitive. If the process is started early, they will be able to have more relevant experiences that make their application to specialty school more competitive.
Mentoring Junior Faculty –
Creating a welcoming environment for students of diverse backgrounds is challenging but could be improved by recruiting and retaining faculty from diverse backgrounds. Hence, it is important to mentor junior faculty to increase the likelihood that they will remain in academics, and understand and embrace their role in encouraging diverse students to enter Periodontics. Students are much more likely to gravitate toward the field if it is relevant to them and if faculty members are excited to serve as ambassadors for the profession.

AAP Foundation as a Funding Source –
The cost of periodontal training is expensive for anyone and would likely be a great hardship for many students of color or other underrepresented groups. It was suggested that the AAP Foundation take a leading role in providing funding to offset the cost of specialty training and mentorship of diverse students and faculty members. If the AAP Foundation cannot provide direct assistance to candidates in the form grants or scholarships, it could provide resources for programs that introduce dental students to the specialty. Such programs could also include free access to annual AAP meetings or pay for memberships in local periodontal societies.

Convincing Deans to Make Efforts to Increase Diversity –
Despite the fact that the percentage of students of color applying to and entering dental schools has not increased significantly over the past few decades, it is still necessary for schools to make every effort to recruit and retain both faculty and students from diverse backgrounds. The tone of any dental school is set by the dean and is transmitted to the faculty and staff. Deans can make recruiting diverse faculty a high priority and provide resources to make those who are recruited feel welcome and included once they join the school. This also applies to students recruited into dental schools. The underlying premise of this latter argument is that increasing the pool of diverse students in dental schools also increases the pool from which a diverse group can be recruited and selected to enter periodontics specialty training.
Research as an entry point into periodontics
Leena Palomo, Case Western Reserve University

1. Work with DMDs at their level, often this means "a small bite" of a larger project
2. Spend a lot of extra time to explain and guide students
3. Keep expectations realistic