

March 13, 2019, Volume XIV, Issue II

In this Issue...

THE PRE-DENTAL SOCIETY AT UC BERKELEY PRESENTS...

The Pre-Dental Press

— Established 1959 —

Letter from the Editors



Drinking red wine can affect bacterial growth in our oral cavity. - see page 2



Members form intramural dodgeball team. - see page 4



A family environment is fostered at spring retreat 2019. - see page 8



Take a look at a member's perspective of their experience in PDS. - see page 11

Hello Dental Community! We hope that everybody is having a great start to 2019. The end of the semester is right around the corner and we wish everybody the best of luck on their final weeks of the school year. It has been an awesome semester for our Pre-Dental Society and we believe this issue highlights what we have been up to, as well as some cool scientific finds. We would like to thank our publicity committee for all of their hard work for Dental Health Awareness Week and the articles in this publication. One last thank you to the rest of the officer board for making this club so special for all of the members! Thank you & Enjoy!

Sincerely, Chelsea and Lauren



Insight on Dental School Interviews

By Marrina Ran

Hi there! I finished my dental school interviews in the last couple of months, and I wanted to share some insight into what the experience is like for those of you who will be applying and interviewing in the future. Keep reading to learn some tips that I hope you find useful!

I applied to dental school in early June of 2018, shortly after the AADSAS application opened. Because I applied early in the cycle, all six of my interviews happened before December. That is my first tip – because dental school admissions are on a rolling basis, the earlier you apply, the better chance you will have of getting an interview because the school will have more spots to fill. December 1 (or the Monday after it if it falls on a weekend) is the first day you can hear of your acceptance, and most schools send out almost enough acceptances that day to fill their class. This means that if you apply later such as in August or September, there are fewer spots left for them to give prospective students, and it will be more competitive to even get an interview. (Continued on page 6)

Red wine reduces bacterial growth

By Will Choi

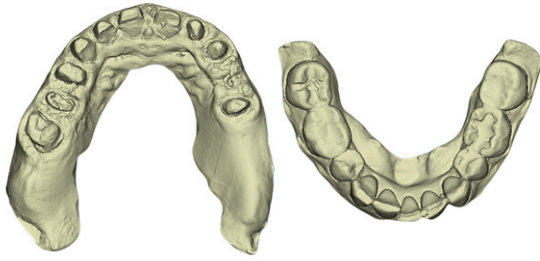
Rejoice, alcoholics! The new study revealed that consumption of red wine may reduce the risks of periodontal diseases/caries! Some of you may be suspicious of what grape liquor has to offer because it mostly gives you visible stains; however, as it turns out, the rich amount of polyphenols in Bacchus' gift can significantly affect the bacterial growth inside our mouths. The researcher brought their focus into two types of polyphenols you can attain from your precious glass of wine: caffeic and p-coumaric acids. Nearly at a rate of about 20 to 40 percent, the polyphenols have been able to inhibit *Streptococcus mutans* (major tooth decay contributor) from attaching to the cells. Additionally the acids were also able to reduce the concentration of *Porphyromonas gingivalis* with the help of grape seed extracts. Live animal experiment has not yet been conducted, but those results do prove that we are close to adding wine debauchery to our oral health checklist very soon. In vino veritas, indeed.

Source: <http://www.dentalproductsreport.com/dental/article/wine-good-mouth-wash>



Illustration by Will Choi

Here's the scoop, no more goop!



<https://www.verywellhealth.com/digital-versions-of-dental-impressions-1059374>



<http://www.caldentalarts.com/benefits-digital-dental-impressions/>

By Eve Zhong

Whether you have gotten braces, retainers, a crown, bridges, or veneers, you have probably taken impressions of your teeth before. You have probably experienced the agony of the dentist thrusting a shovelful of a bubblegum-flavored concoction that looks like something a 7-year-old would make in science class in your mouth and ramming it up against your teeth for 5 minutes while you choke and beg for mercy and try not to vomit on all their expensive dental equipment. Or maybe that's just me. But regardless, dental technology is constantly evolving, and there are now ways to circumvent the torture that is traditional dental impressions. To take a digital impression, a dentist (or dental assistant) moves a small wand around the mouth, which takes a multitude of tiny images, effectively creating a map of the teeth. Though there is more research to be done on them, digital impressions present a promising alternative to the outdated, unpleasant traditional method.

PROS

1. Precision

This method of taking impressions tends to be more precise than molds or just looking at teeth through a mirror. Because digital impressions take an exact replica of your mouth with little margin of error, this allows things like crowns, bridges, and implants to fit better in the mouth.

2. Time Efficiency

According to a 2014 article from BMC Oral Health, the mean time taken to take a digital impression on a patient was significantly lower than that to take a conventional impression. For traditional impressions, it took about 10 minutes per patient -- this included steps of selecting a tray, applying the mold, and waiting for it to dry as impressions of the upper and lower teeth are taken separately. In contrast, the digital scans took around four minutes total. Six minutes may not seem like a substantially greater amount of time in the dental chair, but it is the time saved afterwards in the subsequent steps that makes the difference more consequential. Digital impressions simplify the procedure overall, eliminating the need to make stone casts or plaster models and sending those physically to a dental laboratory. Instead, these images can be emailed, which allows for the quality of the pictures to be assessed instantaneously, and if the images are not satisfactory for any reason, the impression can be taken again in that same appointment, rather than scheduling a second appointment.

3. Comfort

Increased patient comfort due to digital impressions is almost unanimous. This fact is probably very obvious, but to illustrate the sheer extent to which this is true, a 2014 study was conducted where 24 patients answered questionnaires regarding every aspect of impressions and all participants preferred digital impressions.

CONS

1. Learning Curve

As with most new technologies, it may take some time to learn the mechanisms of a certain process. People who are not as technologically-savvy may find taking digital impressions more complicated than taking conventional ones. There are many devices that can be used for digital impressions and their relative effectiveness in scanning is uncertain. It may be difficult to navigate this aspect.

2. Uncertainty

Digital impressions are considered a relatively new technology, so there have not been many studies conducted on the efficacy of digital impressions. One main problem is difficulty in detecting the subgingival margin, the area of gum space between the tooth and gum surrounding the tooth.

3. Cost

As stated by a 2017 literature review, the average cost to purchase a device is between 15,000 and 35,000 euros (17,000 to 40,000 USD), and depending on the model or manufacturing companies, there will be annual management costs. Many dentists do not believe that the additional fees these devices incur is justified, which is why they may continue to perform traditional impressions. However, as these digital impression devices become more prevalent in the market, there should be a reduction in costs.

Sources:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3913616/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5727697/>

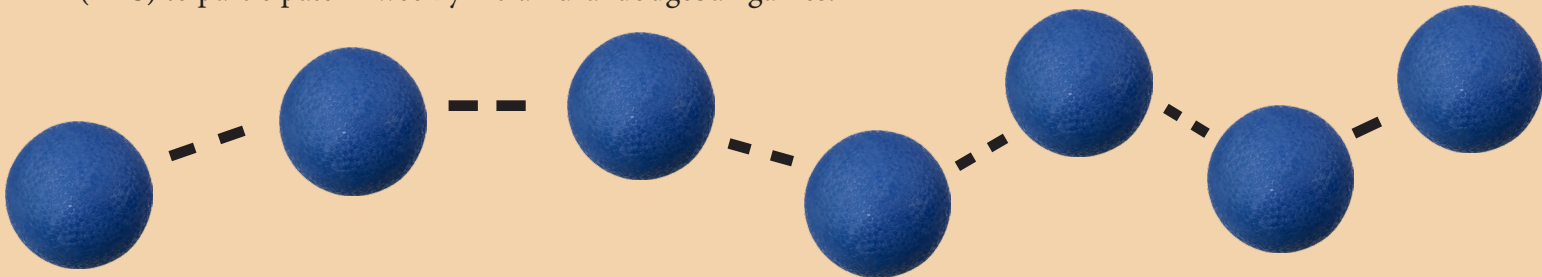
<https://www.verywellhealth.com/digital-versions-of-dental-impressions-1059374>



Intramural Dodgeball

By Chelsea Huynh

This semester, several Pre-Dental Society members formed a team under the name Phi Delta Sigma (PDS) to participate in weekly intramural dodgeball games.



PHI DELTA SIGMA (PDS)

Stay Tuned to ADA's Beyond the Mouth Podcast

By Annie La

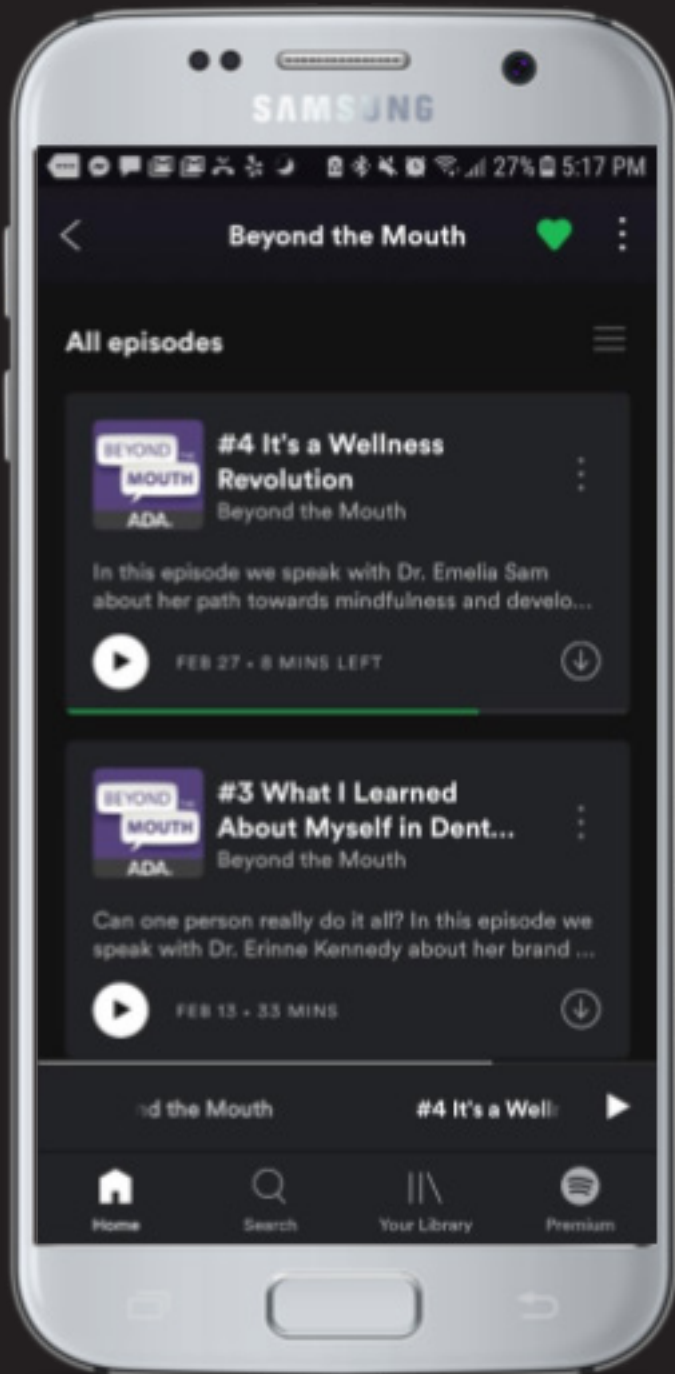


Image Courtesy of <https://pixabay.com/photos/phone-apg-transparent-samsung-1682317/>

American Dental Association (ADA) partnered with the American Dental Political Action Committee to launch the Tooth Talk podcast in 2018 with hosts Sarah Miligan of ADA and Peter Aiello of ADPAC. This podcast, based in Washington DC, is a platform to unite “ADA dentists, dental students, and non-member dentists” across the United States through shared experiences and generally anyone one who has a passion for dentistry, would like to stay posted on dental news, or would like to learn more about ADA’s advocacy for public health and actions that have and will be taken towards these goals. It is available for free on iTunes, Stitcher, Google Podcasts, and Spotify, with new episodes uploaded on the 2nd and 4th Mondays each month. As of today, Tooth Talk has released its tenth episode “Advocating for Access and Prevention: The Role of CAAP” and is continuing to gain popularity and educate numerous across the country. The success of Tooth Talk has led to the establishment of a different type of podcast called Beyond the Mouth. While Tooth Talk takes on a more technical approach in discussing healthcare, treatment, and advances in the field, Beyond the Mouth takes a more personal and holistic approach to dentistry—by focusing on the journey of the dental physical by discussing life prior to dental school, dental school, and life in the profession. Tooth Talk is also available on the popular podcast sites and uploads new episodes on the 2nd and 4th Wednesdays of the month. The podcast is hosted by Dr. Betsy Shapiro of ADA, and it has released a range of episodes from one’s account of starting a new dental office to one titled “What I learned About Myself in Dental School.” Especially since this podcast differs from Tooth Talk by not discussing clinical dentistry and thus leaving technical terms that may be overwhelming to someone who is not yet familiar with the field, this is a good introductory resource for undergraduate students who have not yet decided if they will follow the pre-dental pathway.

As of March 4th, the American Dental Association has released its most recent episode titled “It’s a Wellness Revolution” starring an interview with Dr. Frances Emelia Sam, an oral and maxillofacial surgeon. When asked about why she choose dentistry, Dr. Sam traces her decision back to a career fair in the 7th grade and reflects: “I don’t have a personal familial connection to dentistry, but it [dentistry] was a practical choice.” Dr. Sam goes on to explain the challenges she faced while in dental school and in practice including her decision to switch from general dentistry to a dental surgeon and her struggle to maintain a balance with her personal life and professional life. This is just one of many other informative and exploratory episodes on Beyond the Mouth.

Sources

American Dental Association. Tooth Talk – Brushing up on all the dental news. (2018). Retrieved March 10, 2019, from <http://toothtalkshow.com/>

American Dental Association (Producer). (2019, Feb. 27) It's a Wellness Revolution [Audio podcast]. Retrieved from <https://success.ada.org/en/career/beyond-the-mouth-podcast>.

(Continued from page 1)

I also learned that the style and type of interview varied a lot from school to school. UCSF, UCLA, and UOP required that you write an essay on the spot in about 30 minutes. This is nothing you can really prepare for because you will not know the prompt until the moment of. The most you can do is know how to articulate yourself on paper, familiarize yourself with some current events, and be able to write on some philosophical subjects. From what I heard, the essay is not hugely important compared to the rest of the interview. They just want to make sure you can write and that you didn't have someone else write your personal statement for you.

Additionally, the importance the school places on the interview varies, and this reflects in if the interview has more of a conversation style or interrogation style. For UOP and UCLA, if you get an interview, you have extremely high chances of getting accepted as long as you do not give off any red flags that would make them think you are a psychopath. Getting invited for an interview based off your written application was the "hard" part. My interviews at those two schools were very conversational; they didn't even feel like an interview! It seemed like they honestly just wanted to meet me. They didn't really ask me any questions and just wanted to talk to me about what their school has to offer. The most important tip I can give for this type of interview is to have questions prepared for them. Act like you are very curious and interested in the school, even if you don't really want to go there and it is more of a safety school for you. You can't afford to make a bad impression at your safety school because what if every other school rejects you! It's scary to think about, but important to keep in mind. It would help to read about the school on their website so you can ask them about specific programs they have or even just what it is like to live in that area.

I would say that if you interview at Penn or UCSF, you have a "medium" chance of getting accepted. I felt that they placed more importance on the interview than UOP and UCLA did. They did ask some typical interview questions such as "Why dentistry?" and "Why our school?" but it still felt pretty casual.

Western and San Antonio were the schools that I felt

were more of an interview and less of a conversation. They interview a lot more people than they can accept, so how you do in the interview plays a larger role in whether they take you or not.

For the schools that actually asked me questions, my main tip would be to really know yourself inside and out. They will ask questions that require you to do some introspection, and in order to not take too long in answering, you should already know yourself and your weaknesses, strengths, regrets, things that are important to you, qualities that would make you a great leader and dentist, etc. Western asked me about one of my regrets and what I learned from it. UCSF asked me what a professor of mine would say about my ability to become a great dentist. Granted, you might also get some curveball questions that don't really have to do with yourself but will require you to think quickly about the different facets of dentistry. You might get a question about important issues facing the dental profession or even what the relationship between dentistry and optometry is.

My last piece of advice is to take advantage of the time you're spending there to explore the area and really look at the school and try to imagine yourself living there for four years. You will be able to see how modern the facilities are at each school, experience the weather, see how safe the streets are at night, what there is to do in your free time, how good the public transportation is, etc. For example, I learned that Pennsylvania is absolutely gorgeous but is cold and has a lot more mice and rats than the west coast does. I experienced the heat and humidity of San Antonio and some of the pros and cons of UCLA being in such a nice area as Westwood. Try your best to take some time to notice as much around you as possible when you are visiting these schools. Consider the cost of living and distance from loved ones if those factors are important to you in deciding where to go. If the cost of attendance is the most important deciding factor, you probably don't have to pay as much attention to what it would be like to live there. Knowing what factors are important to you will help you make your decision when you are deciding between schools after you receive your acceptances, which I'm sure you will!

Thanks for reading, and I hope you found this article helpful!

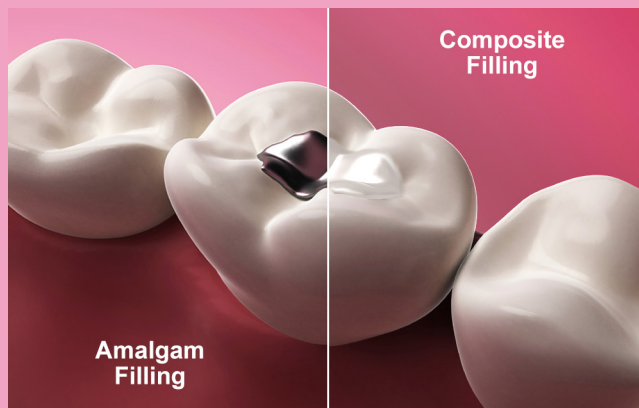


By Will Choi

PROS

CONS

Resin composite fillings are composed of a ceramic and plastic derived materials. Due to resin's excellent resemblance to natural enamel hue, they are great for blending in. The public prefers to call them white fillings or tooth-colored fillings.



PROS

CONS

5

Spring Retreat 2019

By Chelsea Huynh

• The rainy weather did not stop Cal Pre-Dental Society members from attending the semesterly •
• retreat planned by Internal officers Albert Samson and Arjen Aquino. It was a great club bonding •
• event with many group activities to foster a family environment, and the retreat was accompanied by •
• a DEOP (Dental Education Outreach Program) training session facilitated by DEOP officers Betty •
• Birbo and Chris Lee. •

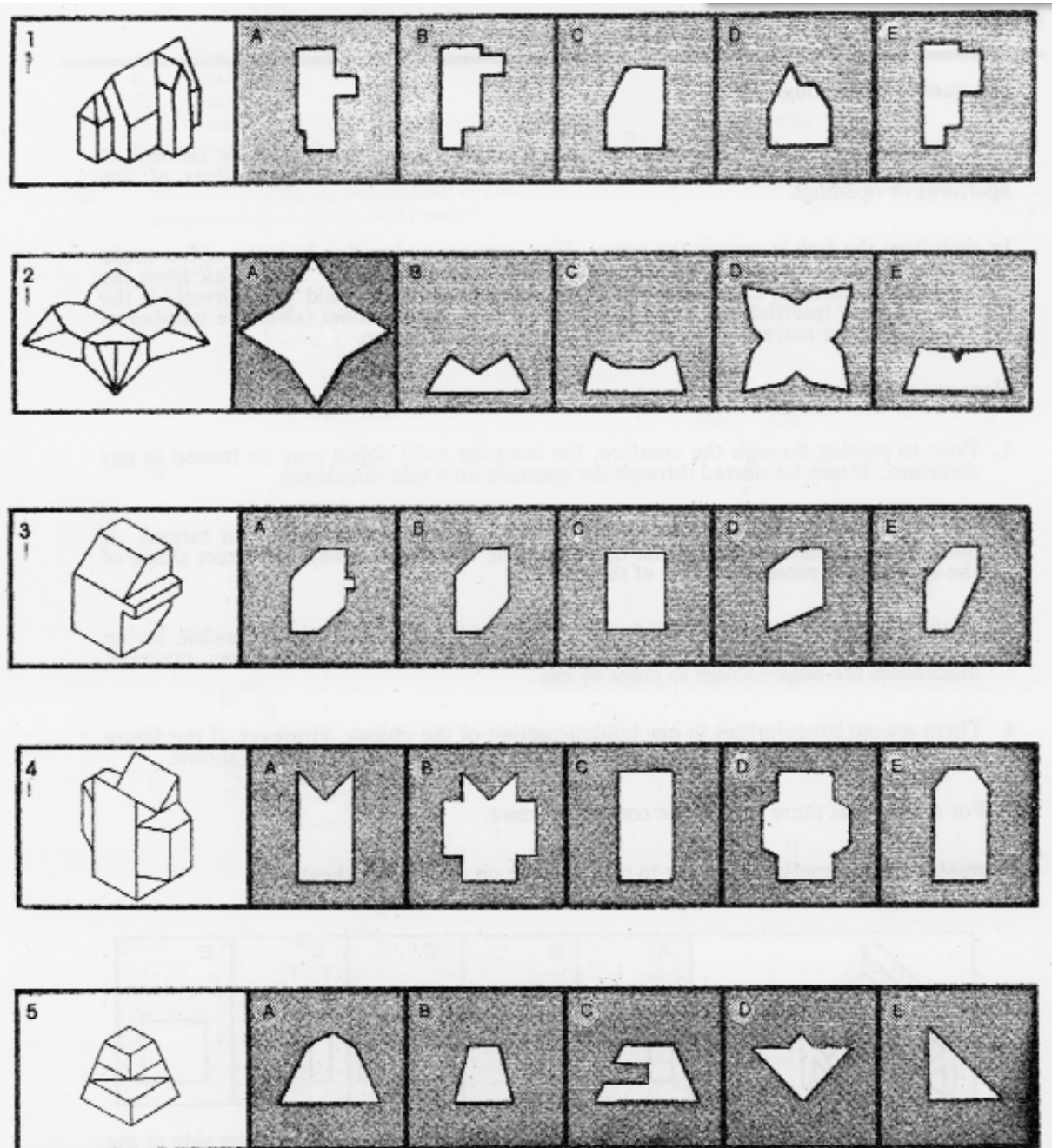


Photos by Brian Lee and Nathane Elazegui

DAT Practice: Keyholes

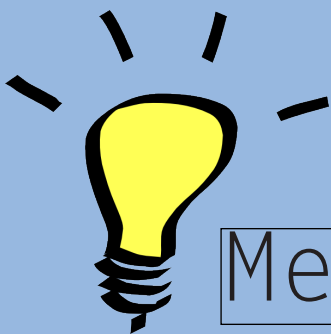
The Perceptual Ability Test (PAT) portion of the Dental Admission Test (DAT) tests your spatial and visualization skills. These skills are important going in the dental field because dentists often need to make three-dimensional mental images of teeth from things like x-rays. The PAT consists of 6 sections: Keyhole, Top-Front-End, Angle Ranking, Hole Punching, Cube Counting, and Pattern Folding. The questions shown below are from the Keyhole test, where a three-dimensional image is shown to the left, and five apertures to the right. You must determine which aperture the object would fit perfectly into.

On the test, you are given 12.5 minutes for 15 questions, which means that you should allot 50 seconds per question. Good luck!



Source: https://www.ada.org/~media/ADA/Education%20and%20Careers/Files/dat_test_sampleitems.shx





Member's Perspective



MARCH 6- University of Pacific(UOP) Dean of Research Dr. Ojcius gives a presentation on current research at UOP.



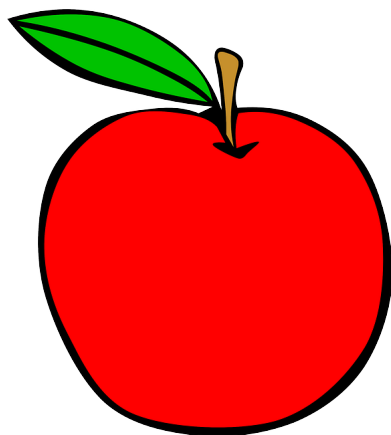
MARCH 2- Cal Pre-Dental Society members attend UCSF's Oral Health Alliance College Day.

By Gabrielle Polyakov

As a Cal Pre-Dental Society member, I have learned so much from all the guest speakers, officers, and interacting with fellow Pre-Dental Students this semester. Already we have had several guest speakers including Dr. Ojcius (UOP, Dean of Research) and Dr. Assael (General and Cosmetic Dentist). The variety of speakers we have gives us exposure to the different paths and opportunities we have as future dentists. In addition to weekly meetings, a general member has so much to do and look forward to. There are weekly community service events, tabling opportunities, Dental Education Outreach Program participation opportunities, socials, and information about Dental School conferences/Pre-Dental Days. Some examples of community service that the club works with are the Prison Literature Project (pick out and package books for incarcerated people), Challah for Hunger (braid Challah at Hillel, and then it is sold/donated to hunger relief organizations in the community), and the Berkeley Project (strengthens relations between residents and students through hands-on community service projects). I personally attend Challah for Hunger quite often because it practices manual dexterity and is a social and fun way to give back to the community. The Dental Education Outreach Program (DEOP) is a volunteer opportunity to educate kids and seniors about dental health. I love volunteering with DEOP because I find so much joy teaching kids about dental health. They are all so cute and eager to learn. It brightens my day spending the morning with preschoolers and watching them absorb the information we present to them. The presentations are hands-on, easy to comprehend, and all the kids love them. Pre-Dental Society exposes its members to many opportunities to learn about different dental schools. There are announcements about upcoming Dental Conferences and Pre-Dental Days in local Dental Schools as well as around the country. I recently went to the UCSF Oral Health Alliance College Day and learned so much about the school and what I should be watching out for/tips on how to fill out the application and on the interview process. All of these amazing opportunities I participate in are because I am a part of this wonderful student-run organization on campus. I know that no matter where my future takes me, I will value the time spent as a Cal Pre-Dental Society member.

Oral Health in Homeless Communities

By Veronica Wong



A few months ago, I was kneeling on the sidewalk tying my shoe when a man approached me. He had a large stuffed-full backpack on his back and a sleeping bag under his arm. He waved a flyer in front of my awkwardly-upturned face and said, “Do you have any money? Feed the homeless!”

I recognized the flyer as an infographic put out by one of the churches close by, describing the lack of resources in the East Bay homeless communities and how to help them. I had no cash with me at the time, but offered him my snack for the morning, an apple. He stared at it for a second, pointed at his mouth, and said, “I can’t chew that. Bad teeth.” As he walked away, the most I could say was a feeble “I’m sorry, sir.”

In 2018, 553,000 people in the United States were reported to be homeless, which means that they do not have access to a conventional permanent dwelling. This definition includes people who are sleeping on the streets and in emergency shelters or transitional housing programs. In addition to lacking housing, they also lack critical resources like food, facilities for personal hygiene, and health care. Homeless individuals are 12 times more likely to have dental problems than people with stable housing. 96% of homeless children (5-9 years old) require dental care, and 44% experience oral pain or infection. They also tend to have more severe problems, with a higher rate of periodontal disease and toothlessness. In spite of this overwhelming problem, homeless people have much less access to health care services.


Some factors that contribute to these staggeringly high statistics include the lifestyles of homeless people. Because they often do not have consistent access to facilities with clean running water, it is hard for them to fill the recommendation of flossing and brushing twice a day. They also have unreliable sources of food and often have to eat junk food high in carbohydrates, contributing to oral decay. Their overall nutrient deficiencies cause a decline in their overall health, including oral health. Existing health conditions complicate this issue; for example, the homeless man who approached me had weak teeth, limiting his intake of nutritious but hard foods like apples. Additionally, usage of alcohol, tobacco, and other orally-ingested drugs are major contributors to tooth decay and gum recession.

As a pre-dental student, I felt awful about not being able to give immediate help to the man who talked to me. I had never even considered that oral health problems are causing pain and preventing some homeless people from eating foods as simple as apples. Researching this topic broadened my understanding of the magnitude of oral health problems among this disadvantaged group. In our Berkeley community, where most students encounter homeless people every day on their walk to campus, I can only imagine the oral health problems they are experiencing. We are pre-health students, and I’m sure that the primary motivator for most

References:
Clark, Michelle. Homelessness and Oral Health. National Maternal and Child Oral Health Resource Center.
“The 2018 Annual Homeless Assessment Report (AHAR) to Congress.” Office of Community Planning and Development. U.S. Department of Housing and Urban Development. December 2018.
Image courtesy of <http://clipart-library.com/>

Special Thanks to the Publicity Committee:

Annie La
Annie Lee
Gabby Polyakov
Veronica Wong
Will Choi

There are 5
easter eggs
that look
like this 
can you find
them all?

(Answers on bottom of page.)



Throwback to Cal Pre-Dental Society's Fall 2018 Banquet. Silly faces, everyone!

The Pre-Dent Press is an ASUC sponsored publication. Cal Pre-Dental Society general meetings are ASUC-sponsored and wheelchair accessible. For more information on publications, please contact Chelsea and Lauren at cal.pds.publicity@gmail.com. For information on advertising with Cal PDS, please contact Austin and Brandon at cal.pds.finance@gmail.com.

Visit us at calpds.com to see past issues of our Pre-dental Press and learn more about our club.