Orthodontic News

SPRING 2012

'Skull-diggery' at Manot Cave continues to yield insights on craniofacial development, human evolution

This year, Case Western Reserve University dental students and researchers will travel to Israel to make a house call on their oldest patients yet— ancestors who lived between 300,000 and 20,000 BP (before present). They were particularly interested in the skull, considered one of the most complete fossils of an early human skull. The cave, in Manot, Israel, in the western Galilee area, was opened in 2008 after being sealed for 20,000 years. The dig has been going on for more than a year.

The ongoing excavations are likely to reveal even more evidence about human evolution. This is important, say the researchers, as the dates identified in the cave bracket the times when modern humans and Neanderthals occupied Israel.

"It has been said that "Israel is the 'bus stop' of human evolution," notes **Bruce Latimer, Ph.D.**, recently appointed as professor of orthodontics at



the school of dental medicine. "This is because in order to leave Africa, early humans had to go through Israel," he adds. "This cave has huge potential."

Dr. Latimer is a lead researcher on the project, as is Mark Hans, D.D.S., M.S.D., '79, '81, chairman of the department of orthopedics. Dr. Latimer has also collaborated with Israel Hershkovitz from the University of Tel Aviv's anatomy department.



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Incoming Residents



Alexander Apple is from Voorhees, New Jersey. He attended the University of Pennsylvania School of Dental Medicine. "Orthodontics appeals to my enthusiasm towards solving puzzles," he says. "I enjoy of evaluating radiographs and implementing creative treatment plans. The CWRU atmosphere felt like a family, and the city of Cleveland was very welcoming. After my training, I hope to practice in a group setting and teach at a dental school. My hobbies include playing soccer and tennis, and I am a passionate Duke basketball fan. I am new to Cleveland, and I am excited to discover everything the city has to offer."



Adriano Farina is currently working at the Montreal Children's hospital, and can't wait to start his program here. He says he "really became interested in orthodontics just prior to starting University, when I spent my free time shadowing different orthodontists in their private practices." He attended dental school at McGill University in Montreal. Adriano chose CWRU because "From the onset, I heard fantastic things from colleagues and professors about the orthodontics program here. When I went for my interview, I was able to see how enthusiastic the whole faculty was. This passion was so contagious that I knew instantly that CWRU was where I wanted to end up." He hopes to have a "well-balanced practice where we do a bit of everything, whether it involves interceptive treatments, adult patients, multidisciplinary cases, and even some treatments with special needs individuals." In his spare time, Adriano enjoys hockey, soccer, movies, and trying new restaurants.

Class Notes



Clay Damon cares deeply about the importance of the total development of young people. He believes strongly in the value of organized sports and supports community organizations. He is involved in all aspects of

coaching young people who participate in community sports and is also a supporter of Spokane's premier basketball event, Hoopfest.

1998 **Nhat Le** maintains a faculty appointment at Nova

Southeastern University College of Dental Medicine and



has been a member of the Adjunct Faculty since 1998. He is an active member of organized dentistry and is a past president of the South Florida Academy of Orthodontists. He is a Diplomate of the American Board of Orthodontics.

2011

Brent Paulus and his pediatric dentist wife, **Ashley** (Ped Dent 2010), moved to Colorado Springs to experience all of the outdoor adventures Colorado has to offer. In their spare time, they enjoy skiing, being



outdoors, traveling, college football, and spending time with their family and friends.



Corey Jones, who is from Fairway, Kansas, became interested in orthodontics because his father is an orthodontist. "While I was growing up, my father explained his cases to me, similar to the way in which a father and son spend time working on cars or building a tree house." Corey attended the University of Iowa dental school. He chose the CWRU School of Dental Medicine for his residency because "I liked the [program's] strong background in surgery/hospital cases. In addition, the faculty who were present at the interview were good-humored and cordial." He hopes that his future practice will "turn out to be a comfortable atmosphere, where the people who work there and who visit will feel welcome." In his spare time, Corey enjoys golf, basketball, Kansas City Royals baseball, reading, and "attempting to cook." His two other main passions, he says, are barbeque and the University of Michigan (he is a 2008 graduate).



Lucas McGuire says that "I was always interested in the esthetic aspect of dentistry. After a rotation in the pediatric clinic in dental school, I realized that I really enjoy working with kids and would love to help improve their self-esteem when they smile through the use of orthodontics." Lucas attended dental school at the University of Pittsburgh. He chose CWRU, he says, when "in June 2011, I decided to visit CWRU for three days during one of my breaks in dental school. I was blown away by the kindness of the faculty and residents, and I quickly realized that I would get an amazing education at CWRU." He hopes that when he has his own practice, it will be a solo practice, but "I would like to be an associate for the first year after residency," he says. "The location is still yet to be determined, but I would love to live in a small town but still be close to a fun city! Also, I would love to have either a theme for each operatory or multiple chairs in one open space. I guess this depends on the capabilities of the practice location." Lucas grew up in Ebensburg, PA, which is an hour and a half southeast of Pittsburgh. He is an avid golfer in the spring/summer/fall and loves to snowboard in the winter, so hopefully there will be a lot of snow in Cleveland! (A wish that did not come true this winter!) He adds that he is an only child, from a relatively small family and he loves dogs, "especially Welsh Corgis."



Sorapan Smuthkochorn was born and raised in Bangkok, Thailand. However, she spent "a few years in middle school" in Normal, Illinois with her mother. She has a younger sister who is a lawyer and is very close with her family. Sorapan studied marine biology for her undergraduate degree at Chulalongkorn University. She went to dental school at Thammasat University in Pathumtani, Thailand. At present, she is staying very busy. She currently is on the faculty for operative dentistry at Srinakarinwirot University in Bangkok. "I supervise operative laboratory classes, operative clinics and lectures," she says. Sorapan loves to ride horses, scuba dive, and play sports such as tennis and wake boarding. She first became interested in orthodontics when she had braces, headgears and functional appliances when she was 7 years old. "People would think I'd hate my orthodontist, but it's always so interesting to see her work, with all her tools and her x-rays," she says. "And she took the time to talk to a child, even though I had no idea what she was saying. It was a good motivation so I would at least wear the appliance. I also love working with my hands. I draw, paint and sculpt a lot. And I like math; yes I really do. Science was my first school track of

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LETTER FROM THE CHAIRMAN



Mark Hans, D.D.S., M.S.D. '79, '81

Greetings from Cleveland. I regret that I was unable to attend the annual session this year but plan to see you all next year in Philadelphia. Our program director, Marty Palomo, and his lovely wife Leena, hosted the alumni reception and reported on the progress we have made in the department over the last year.

The reason I was not at the AAO for the first time since 1987 is that I was invited by one of our alumnae, Thierry DeCoster, to speak at the EuroMed meeting in Monte Carlo and I could not arrange my travel plans to accommodate both meetings. Rest assured in my belief that alumni are the lifeblood of a successful orthodontic department.

I know that you work hard for your dollars and I want to be a responsible steward of your money. Alumni endowment funds generate about 100K per year and all of that goes to support the orthodontic training program. For example, last year we sent the second-year class to Beijing, China, to meet with students at Peking University School of Stomatology. The students presented their research result and met with their Chinese counterparts for seminars on diagnosis and treatment planning. As a side benefit, they were also able to visit the Great Wall, Tiananmen Square, the Forbidden City, and most of the Olympic venues. Be sure to ask them about this once-in-a-lifetime experience when you see them next year in Philadelphia.

In addition to the China trip, alumni funds supported the purchase of new high-end computers for manipulating CBCT images and research, helped finance the new 1,500-square-foot Broadbent Institute for Craniofacial Care and Research, and supported resident travel to the Moyer's Symposium and the AAO meeting. (For more on this, please see the column by Dr. Valiathan, Fellowship Director, in this newsletter.)

Because endowment is the only unrestricted support we get, the money often finances new initiatives that broaden the scope of our department's activities.

Such is the case with the hiring of Dr. Bruce Latimer, a noted paleoanthropologist to lead the exploration of Manot Cave in Israel. A world-renowned physical anthropologist, Dr. Latimer will provide instruction in Evolutionary Biology, as well as in Head and Neck Anatomy. You might recall his work in Ethiopia where he was one of the scientists that discovered Ardi and was a graduate student on the team that discovered Lucy. The department will be featured in an upcoming segment for *National Geographic* that highlights Dr. Latimer's work in human evolution.

You can see that your alumni dollars are working just as hard as you do. We continue to build an orthodontic department you can be proud to be part of. Please feel free to drop me an email if you have questions or comments on this column or any of the newsletter content. Thanks!!!!

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Incoming Residents... continued

choice. The details all came together, and became a recipe whereby I chose to pursue orthodontics. It wasn't clear while I was growing up, but the signs kept pointing to the same direction as my clinical experience grew, and I just love it. Simple as that!" Sorapan chose CWRU because of "its prestigious name. The school's publications and archives are known all the way over in Thailand. But my commitment to this school was because my interview with the staff, and teachers and residents. It's the best environment for me and I feel I can do my best here with their friendly attitude and eagerness to help me succeed. In my practice, I want to be a teacher at an orthodontics department somewhere, preferably in Thailand. I will also want a practice of my own. I live in a country that centers everything in Bangkok and you drive 50 miles south or east and it's a different country. Dental health care alone is a mishap. I would like to work in these areas, maybe once a week to get them familiar with orthodontics. It's a tiny part to play but at least it's something that I can give back."

A MESSAGE FROM THE PROGRAM DIRECTOR



J. Martin Palomo, D.D.S., M.S.D., '97

The state of the residency is as strong as ever. The AAO president, John Buzzatto, D.M.D., M.D.S., recently served as an external examiner for our department. He reported that our residents performed with flying colors. As such, it does not surprise me that residents use cases completed in their residency at CWRU to attain ABO diplomate status. Recent graduates echo that

sentiment, and tell me that they were more than prepared for the transition to private practice.

I believe part of the reason for our success is that we never shift to neutral; we continue to grow. This year we built a new third-floor clinic. Expanding our research capacity, our imaging center has added a new x-ray machine, which takes cephs and panos in addition to seven different CBCT image sizes. We also have two new research areas. Our "beefed up" infrastructure

will host an additional three fellows, and two international scholars this year.

I am proud to report that alumni who are practicing all over the world, tell me that our program continues to be respected for its incomparable clinical experience and didactic rigor.

To keep connected with our stakeholders, alumni, residents, staff, and faculty, we are now on facebook as "CWRU Orthodontics." We will post snapshots of the cephalometric analysis course recently given by former Orthodontics Department Chairman (1971-76) Lysle Johnston, D.D.S., M.S., Ph.D., as well as the Annual Charles H. Tweed International Foundation for Orthodontic Research and Education Course, and notices of guest speakers. Our stakeholders are always warmly invited to attend.

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A MESSAGE FROM THE CRANIOFACIAL FELLOWSHIP DIRECTOR



B.D.S., M.D.S., D.D.S., M.S.D. '97.

The construction of the new Craniofacial clinic, designed to provide advanced care for patients affected by craniofacial anomalies, has been completed.

Located on the third floor of the School of Dental Medicine (SODM) and within the Bolton Brush Growth Study Center this state-of-the-art, 3 chair-facility, has been named the Broadbent Institute for Craniofacial Care and Research (BICCR).

It is nearly 2,000 square feet and is adjacent to the Case Imaging Center (CIC). The SODM recently added the newest small-volume CBCT, capable of capturing panoramic and cephalometric radiographs to the CIC.

The new machine complements our existing large-volume CBCT and rounds off any craniofacial imaging needs of syndromic and non-syndromic patients. The BICCR clinic, along with the CIC, represent an investment of more than \$500K to support craniofacial care and was made possible by the support of the Orthodontic Alumni Endowment funds and the SODM.

In particular, we would like to recognize the generous contributions of Drs. Jack Beattie and Brad Hylan and the distinguished contributors to the Chairman's Fund. The newly established and accredited Craniofacial, Surgical and Special Needs Orthodontic fellowship, anticipates the addition of the first fellow to this program later this year.

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Dr. Sabat's teaching emphasizes performance, accountability, excellence

Michael Sabat, D.D.S., M.S. '66, '68, Clinical Professor, has been a faculty member in the Department of Orthodontics for more than 40 years, possibly longer than any other faculty member. If you ask him about his teaching philosophy, he will tell you that students must learn the what, why and how to do orthodontics, and then have the passion to do it well. This includes instruction on:



Michael Sabat, D.D.S., M.S. '66, '68

- Clinical procedures, such as how to do impressions, wires, or braces, and
- Theory and rationale, such as how and where to move teeth; and the biological basis of orthodontic treatment.

"I try to get residents to understand the big picture,"

says Dr. Sabat. "I often find that students are anxious to 'do orthodontics'; they want to get to the tasks and the skills. However, being an orthodontist is so much more than being a mechanic. It is not just a 9 to 5 job, but also a life-long commitment to pursue. Of course, we want the patient to have straight teeth, but it's important for the students to understand why things are done a certain way.

"I continually emphasize that we need to 'own' our profession," he says. "We are responsible for what you do, or, don't do for your patients. I know that the residents like to work with the latest technology but that doesn't always lead to better treatment outcomes. For example, while cone-beam CTs can provide more detailed information, it is no substitute for clinical judgment and expertise in how that information is applied."

It is also important, Dr. Sabat says, to maintain high standards, even if no one but you will ultimately know what goes into your work. "When you treat a patient, no one may know the quality and the concern for detail in that effort, except you," he says. "I encourage the

students to focus on details. I also challenge the students to be accountable. You have to perform. Orthodontics, and dentistry in general, is a performing art, and we all must perform well. Essentially, always do what is best for the patient. Even if only you know that you've put forth that extra care and effort. In my opinion, that is the definition of a professional. Excellence consists of consistent attention to detail," Dr. Sabat adds. "You must strive to be better and increase your percentage of successfully treated cases in your practice. I want our students to leave this program having experienced being part of exceptional treatment results so they have a vision of what great treatment means."

People skills crucial

"Everything is increasingly complex today, though students don't often realize that right away," says Dr. Sabat. "Initially, as one enters private practice, things might seem simple, but as you practice longer, you begin to notice the nuances. This is partly because you are practicing with real patients out in the real world without the support of the educational environment. To become a successful orthodontist, you must develop your people skills. There is no getting around it; we are in the people business.

"My teaching philosophy also encompasses this very important point: Rather than trying to look for a mentor, try to arrange your life in such a way to become one. I can't tell you how many times I've been at alumni events or meetings and I have had former students come up to me and tell me, 'I didn't appreciate what you were trying to tell me, until later, when I was in my own practice.'

"I keep returning to teaching because of what I see happening in our culture. There seems to be a general lack of acceptance of responsibility. Also, today there is more emphasis on the business side of the practice than ever before. While this is often out of necessity, and not that this is unimportant, but there is a decreasing emphasis placed on what is in the best interest in the individual patient.

"This last point goes back to accountability for one's work," says Dr. Sabat. "I see residents having patients transferred to them from a previous class and never having the same level of interest and ownership for the treatment outcome as they have for the patients where they initiated the treatment process. I hope that my emphasis on details would change this attitude." If you treat a patient, you must own the outcome."

Why orthodontics as a career?

"I didn't choose a career, it chose me. As a child, I needed orthodontic treatment," says Dr. Sabat. "And, I had an uncle who was a dentist. He advised and inspired me to go to college with the hope that I would choose dentistry. In the 9th grade I had to write an autobiography and in the last chapter I wrote that I was going to become a dentist. I entered Western Reserve University. After two undergraduate years, I was accepted into the early-admissions program at the dental school. I loved it, and when we were introduced to the area of orthodontics, I felt my calling.

"While I was in orthodontic training, I met a dental hygiene student, Lynda, who recognized that she needed orthodontic treatment. One day she showed up in the orthodontic department and the department chairman, Dr. Richard Beatty, asked if one of the residents would volunteer to accept another case. I volunteered and that's how I met my wife.

"Lynda has a career in teaching hygienists and served 10 years on the Ohio State Dental Board, and is now an examiner for NERB. I continue to volunteer for her as well as the dental school. The learning curve in orthodontics is long, and I am still learning. As I see children of my patients coming into my practice, I learn about long-term results. We can never stop observing and learning, as we continue our journey of the mastery of the art and science of orthodontics."

The profession's future

Dr. Sabat sees the future of orthodontics as a continuum of the comprehensive care we as orthodontic specialists have always provided for our patients. He sees a particular opportunity now for the emphasis on the long-term benefits of what orthodontic treatment can provide for patients of all ages. And, today we are more conservative with treatment. "We can make space for crowded teeth while that patient is still quite young and growing, provide dental facial orthopedics, to improve facial balance, and position the teeth better with in the face and smile. We can also establish better periodontal health and more ideal function.

"We also now provide service for adults who need reconstructive work," he says. "They may need help with teeth that have drifted, or they might need bridgework. There is a lot of malocclusion in adults, whether untreated or, previously treated. We can correct this, and set the stage for more ideal and longer-term predictable restorative dentistry. Teeth in their ideal and most stable position, supported by healthy bone and soft tissue, provide the best foundation for restorative dentistry and are easiest for the patient to keep clean. And, they have the best esthetics. Comprehensive dentistry is by nature, esthetic dentistry, as we in the specialty of orthodontics have always known. We have to tell our story to the public.

"As always, the message here is to provide the highest level of care for each patient. "Treat the malocclusion first," says Dr. Sabat, "only then, take care of the upper front teeth. Comprehensive orthodontic care as provided by an orthodontic specialist, is at the forefront of the evolution of dentistry." (Healthy Teeth, face, smile, and function = your life)

No matter what area of dentistry Dr. Sabat is teaching, he implores his students to remember: "Always ask yourself, 'What treatment is in the best long-term interest of this patient?' And what treatment procedures will work best for this patient? If you keep these thoughts uppermost in your mind you will refine your diagnostic skills and have improved outcomes."



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Cynthia McConnaughy Brings Smiles to Patients, Colleagues

Cynthia McConnaughy began her career at Case Western Reserve University at the Craniofacial Imaging Center in August, 2005. "I like to say I came in the box with our Cone Beam CT Hitachi Mercuray," she jokes.



Cynthia McConnaughy

Cynthia says what she likes best about her job are the students, the researchers, and the patients. "Every year, a new group of students comes in, and they give the campus a new look and feel," she says. Cynthia also enjoys the international flair that she experiences in the department of orthodontics.

"We have had researchers from Turkey, South Korea, China, Brazil, and India," she explains. "Where else can you find such diversity? I get to make friends with people from all over the world."

But she also loves working with the local Cleveland patient population. "It is great to see the joy and excitement that patients have when their braces are removed," says Cynthia. "They just can't wait to show all their friends, and I get to share that with them."

There are a few other individuals with whom Cynthia really likes to work. "I would be remiss if I didn't mention my wonderful bosses," she says. "Each one is dedicated to their profession and their students. I

would also like to commend our hardworking staff; they always bring a smile to my face."

Why did she come to work at CWRU? "I started working in the dental field when I was in high school," she says. "Both doctors that I worked for had graduated from CWRU. I was always impressed with their knowledge and their professionalism, plus their loyalty to CWRU."

In her personal time, Cynthia says she is devoted to her family members, including her husband, five children, two grandchildren, plus one who is "due shortly."

Learning the ukulele

She also enjoys gardening, riding and feeding her horses, singing in the church choir, and working around the house. Plus, "I am currently teaching myself how to play the ukulele for when my grandchildren visit. We can sing all those wonderful children's songs together."

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