

Straight Talk



April 2009

Volume 7, Issue 1

UK Orthodontic Graduate Program

Inside this issue:

Update on Decision Making	2
Focus on Faculty: Dr. Sonny Long	2
Greetings from Tucson	3
Research Updates	4
Class of 2012	5
Focus on Staff	5
Thank You Donors!	5

The University of
Kentucky Orthodontic
Graduate Program &
Orthodontic Alumni Association Proudly Present:

Temporary Anchorage Devices in Orthodontics — Basic Biology and Clinical Practice

By Dr. Sarandeep Huja

Friday, May 29th

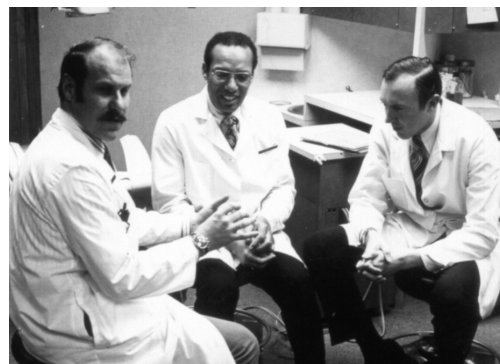
Deadline to register is April 24

Contact Kandace Bright
at 859-323-5371 or
knmoor3@email.uky.edu

From the Program Director's Desk by Dr. Cynthia Beeman

Greetings from all of us in the UKCD Orthodontics Graduate Program! As I write this, I'm marveling at how fast this last year has flown by, how it seems like yesterday since we graduated our last class, how in a few short weeks we'll send three more outstanding orthodontists into the world! So much has happened over the past year, and it's hard to decide what news to share, especially since I've been told to keep my comments concise for this hard copy newsletter. Also, what do our alum's really want to know? What's the best way to communicate the information?

Last week, I attended the annual meeting of the North Atlantic Component of the Edward H. Angle Society of Orthodontists. As always, it was wonderful interacting with this group, and seeing the senior membership, including Charlie Burstone, Bill Proffit, Bob Isaacson, Dan Subtely and Ram Nanda to name a few. I had the opportunity to show the group a picture from the infancy of the UK Orthodontics Program:



That's Dr. Norton, another of my professors from UConn and former UK Orthodontic Graduate Program faculty on the left, Dr. Bob Biggerstaff center, and Dr. Proffit. The senior members were all delighted by this picture, and the reminiscing was fascinating. There were several requests for

the photo, which I will be sending by email...and posting on Facebook!

So, back to the dilemma about sharing all our news with you...try to summarize it here, or encourage you to check out the UKCD Orthodontics Program Facebook group at <http://www.facebook.com/home>.

Facebook is the leading free-access social networking website. Users can connect with other people (friends, local or regional networks, workplaces, schools, etc) and send them messages, post photographs, invite others to events and simply stay in touch. Many of us joined Facebook before we created the UKCD Orthodontics Program group...how fun to see Professor Hartsfield sailing or playing with his band (we let him out of the genetics lab every now and then), see Drew Chalathorn growing up in photos, see the fun times our alum's are having from Colorado (Cassy Wiggins and Wade Housewright) to Michigan (Ulla Crouse). Joe Petrey on water skis? There *IS* life after graduation!!! We started the UKCD Orthodontics group to link us together, but also to provide up to date information about the program, upcoming events and engage in dialogue. On our Facebook page, you'll find old friends, see who's new and hear about when we're getting together in 'real time'.

You'll also find links to the UKCD Alumni Association Facebook group, and other organizations. Follow the lead of some of your fellow alum's and start a Facebook group for your practice (check out Garfinkle Orthodontics on Facebook!).

I hope you are intrigued enough to investigate this new way of staying in touch...it's the way our patients, students, friends and family (my 85 year old Mom is on Face-

(Cont. on page 4)

Update on Decision Making By E. Preston Hicks And G. Thomas Kluemper

Cognitive Biases: Are They Hindrances to Clinical Judgments and Decision Making in Orthodontics?

In the last issue of *Straight Talk*, I introduced my research interest in teaching decision making and avoiding cognitive errors that may arise from intuitive reasoning under uncertainty. Afterwards, in October 2008, I had the privilege of presenting an overview of my findings from the literature at a conference here in Lexington. After hearing my presentation, a bemused Dr. Charles Burstone commented, "Do you mean that I could make an error in judgment even after I have done everything else correctly?" He encouraged publishing this work in the *AJO/DO* to introduce this topic to the practicing orthodontic community. Dr.

Kluemper has since joined me on this project and here's a brief report toward that end.

Studies show that our brains employ two modes of reasoning: 1) heuristic (unconscious, intuitive, automatic, implicit processing); and, 2) analytic (conscious, deliberate, rule-based, explicit processing). The use of heuristics often dominates problem solving when innovative, creative thinking is required. Under conditions of uncertainty, we default to greater reliance on the heuristic processing. In high stakes environments, such as health care settings, this mode becomes problematic. Since choice heuristics are quickly constructed from fragments of memory, they are often biased by prior evaluations of and preferences

(Cont. on page 3)

Focus on Faculty Member Dr. Sonny Long by Dr. Sally Holiday

Where were you born and raised? I was born in Newport News, VA where my dad was working for the Newport News Shipyard during WWII. I was then raised in the rural farming community of Roxboro, NC, where my dad owned a small grocery store and meat market. It was a wonderful place to grow up and to experience Southern values supported by church, school, home, and community.

What schools did you attend? Undergrad: Elon College 1963 – 1967, Dental School: UNC School of Dentistry 1972 – 1976, Pediatric Residency: UNC School of Dentistry 1976 – 1978, Orthodontic Residency: University of Toronto Faculty of Dentistry 1984 – 1986

How did you meet your wife? What does she do? My wife, Cathy, and I met during the summer of 1977 when she was working in the Department of Pediatric Dentistry during the summer after her graduation from UNC. She went on to teach school in Pittsboro in the Fall, and we began dating in the Spring of 1978. She has worked in various capacities in education and in my practice. Currently, she is the office manager in our multi-doctor practice to whom all of us there owe a great debt of gratitude for its efficiency.

What inspired you to be a part time instructor? I was given the privilege to present the graduation lecture in 2003. During that visit, Preston, Cyndi, Tom, and I discussed many issues facing dental and orthodontic education and decided that we would like to continue working together toward a positive resolution to some

of the issues we discussed. During a subsequent visit, we continued the conversation and decided to pursue the vision of a distance learning program to help enhance the educational experience for UK orthodontic residents. We started by connecting computers and using the speaker phone to communicate. Early in 2006, we installed the videoconference system that we are currently using. The orthodontic program at UK is a leading edge program offering an exceptional educational opportunity in an environment of mutual respect and is supported by outstanding faculty, staff, and residents. I enjoy immensely the opportunity to participate in the student's educational experience at UK and have learned so much in the process. It has truly been a blessing.

How long have you been in private practice? I have practiced pediatric dentistry for 29 years and orthodontics for 21 years.

Any plans for the future? As far as the future is concerned, I want to continue doing what I love and have been given an opportunity to do for as long as I am able. It would be nice to have more time to spend with my family and friends as well as some time at the beach enjoying the sand, surf, beach music, and shagging (that's the official dance of North and South Carolina for all of you with ties to England). Who knows, I may even decide to play golf again.

Are you involved in any community activities? Over the years, I have been involved in and supported many civic, service, and professional activities within the

(Cont. on page 5)



Drs. Pascual & McHugh pose in Tucson, AZ

Greetings from Tucson! By Drs. Megan McHugh and Albert Pascual

Sunny and dry days, 90-100degree Fahrenheit temperatures, Spanish colonial adobe homes, and a sprawling desert landscape spotted with tall saguaro cacti and highlighted by the backdrop of the Santa Catalina Mountains. No, we're not in Lexington, but rather the city where those "other" Wildcats (University of Arizona) can be found: Tucson, Arizona. Two of UK's third year residents, Albert Pascual and Megan McHugh, had the unique opportunity to spend nearly two weeks in Tucson for the Charles H Tweed Foundation Study Course, thanks in large part to the generous contributions of Drs. Thomas G. Handy and T. Gordon Handy Jr.

(Continued on page 6)

Update on Decision Making (continued from page 2)

for the alternatives being considered. A rigorous and systematic decision process notwithstanding, judgments under uncertainty may yet be flawed by a number of unconscious biases. Among the large number of cognitive biases that have been identified in cognitive psychology, two examples are presented here to illustrate their possible relevance to orthodontics: 1) the representativeness heuristic (the tendency to over generalize from a few characteristics or observations); and, 2) the overconfidence bias (overestimating the probability of being right).

The Representativeness Heuristic. People assess the likelihood of an event's occurrence by the similarity of that occurrence to their stereotypes of similar occurrences. This may, in some cases, be useful as a good "first-cut" approximation, but becomes problematic when this heuristic is taken as accurate, complete and sufficient when better information exists with which to make an accurate judgment.

Clinical application: Extraction – non-extraction issue. Due to facial pattern and how it fits or doesn't fit one's idea of how a face should look, a decision is made to not extract which persists even when better data presents itself (e.g., amount of crowding, position and inclination of incisors, periodontal architecture, etc.). Using the representative heuristic, a provider decides that "this is a non-extraction face," and everything else becomes secondary.

The Overconfidence Bias. People tend to be overly confident about the infallibility of their judgments and the accuracy of their estimations. Overconfidence has been identified as a common judgmental pattern and demonstrated in a wide variety of workplace settings. While confidence in our abilities and judgment is necessary for achievement in life, overconfidence about the accuracy of predictions results in setting too narrow a range of possibilities and overlooking probable outcomes. So, there really is such a thing as a "no brainer"! Our brains are always at work,

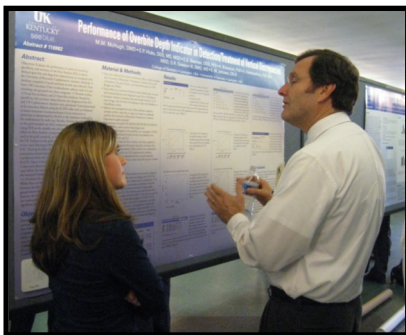
sometimes, in ways that hinder rather than help.

Clinical application: Good examples of this judgment trap can be found at the podiums of many of our national meetings. A clinician with a good original idea is sharing his experience with his new appliance/treatment on a large screen in front of many practitioners. Though not random, his before and after case reports are favorable and indeed demonstrate a biologic plausibility for the success of his new treatment. But the second and equally important criterion that must be met for a theory to become reality is for the new idea to withstand the rigors of the scientific method. Without such testing, even the best idea remains opinion and conjecture, even when held and delivered by the most charismatic and earnest of individuals. The fact that almost everything in orthodontics works some of the time does not even occur to our speaker. Instead, an air of infallibility and overconfidence sets in and the need for testing is replaced by the need to get the word out about the 'magic' appliance, and a promise that "the data is on the way" is quickly composed. A corporate sponsorship increases credibility and the goal shifts from seeking truth about a potentially better treatment to satisfying the shareholders of the sponsoring corporation.

We are all human and all susceptible to these and other biases. To improve the quality of our judgments we must prioritize our commitment and desire to contribute to the quality of care by adopting a healthy dose of *epistemic humility* toward our thinking processes. That is, we must develop not only an awareness of our fallibility in judgments but also we must intentionally cross examine ourselves by using systematic "forcing strategies" to help us identify our errors in judgment. The article will explore several other heuristics and cognitive biases identified in the literature and suggest effective de-biasing methods to improve the quality of our decision making in orthodontics.

Research Update by Dr. James K. Hartsfield

This spring, our three senior residents have presented their research findings at both the UKCD Research Day and the American/International Association for Dental Research (AADR\IADR) meeting. They are now preparing manuscripts for journal submission. Dr. Megan McHugh's research evaluated the performance of the Kim analysis in detection/treatment of vertical discrepancies and received 3rd place honors at the UKCD Research Day. Dr. Sally Holiday's research examined the influence of vertical and transverse relationships on perceived facial attractiveness. Dr. Albert Pascual's study evaluated the essential work of fracture of clear orthodontic retainer materials. In addition to the strong senior resident showing at the UKCD Research Day, first year resident Dr. Michael Pratt presented his research on patient compliance with orthodontic retainers in the post-retention phase and received 1st place honors for his presentation. In addition, first year residents, Dr. John Turner and Dr. David Kujak, presented an interesting table clinic on clinical applications of lasers in dentistry.



Drs. Megan McHugh and Jeff Okeson

This summer, the UKCD is introducing a new Postdoctoral Fellowship Program in Craniofacial Biology Research, which will add to and complement the current research efforts of the residents and faculty. This one year program, modeled after similar programs in Oral Facial Pain and Periodontics, will give fellows exposure to advanced craniofacial biology through the first year orthodontic residency classes, and clinical experience assisting the orthodontic residents; and will allow them to function as a "research team member" with current residents and/or faculty members. In addition, the fellows will gain experience developing their own meta-analysis and/or evidence based review of a particular subject. This year we have accepted three fellows into the new program: Dr. Amin Mason from the Ohio State University, Dr. Tyler Coles from Creighton University, and Dr. Paul DiFranco from the University of Illinois-Chicago. The fellows will be arriving in Lexington in July of 2009.

In addition to myself, Dr. Lorri Morford has recently joined our research team in the UKCD Center for Oral Health Research. Dr. Morford is originally from Michigan and received BS degrees in Biochemistry and Physiology from Michigan State University. In 1995, she received her PhD from the University of Kentucky in the Department of Microbiology and Immunology where she studied immune cell signaling in patients with malignant brain tumors. She has many years of research experience and enjoys working with students and residents in a laboratory setting. She is already busy working with the new residents on their research projects, as well as working with me on developing the hereditary genomics laboratory. We are establishing research teams to study the genetic factors that influence the development of such things as neuropathic facial pain, external apical root resorption, Class III malocclusion, and linkages between hypodontia and cancer. In addition, we are in the process of establishing a clinical database of our patients for future clinical studies.

From the Director's Desk (continued from page 1)

book!) connect. When I write that Preston and Jody made their annual orthodontic study group pilgrimage to northern Italy this spring, announce that Michael Pratt and Megan McHugh took home awards from College Research Day 2009, or share updates about students or faculty, isn't it more fun to see the photos, share congratulations or learn more details quickly? I and many of my orthodontics Facebook friends think so, and think you will, too!

Obviously, there's nothing that can replace getting together *face to face*, and I look forward to seeing you at the AAO and at the Alumni Reception on May 2 in Boston and/or at our Graduation Symposium on May 29!



Drs. Michael Pratt and Jeff Ebersole



From left to right: Drs. Turner, Pascual, Hartsfield, Kluemper, Kujak, Pratt, and Hicks celebrate Dr. Hartsfield's birthday with a tribute of bowties worn in his honor.

Welcome Class of 2012

Jerrod Dempsey grew up in Fort Thomas, Kentucky where he graduated from Highlands High School. He did his undergraduate and dental school training at the University of Kentucky where he is set to graduate in May. His father and sister are both physicians in Northern Kentucky and his mother is a biology professor at Northern Kentucky University. Jerrod recently married his high school sweetheart on July, 19 2008. A few of his many hobbies are golf, fishing, and skiing. After graduating from the Orthodontic Program he plans to go back to Northern Kentucky to practice with a close family friend.



Anna Vu hails from Atlanta, Georgia. She did her undergraduate training at the Georgia State University in Atlanta, GA. She then went on to pursue her dental training at the Medical College of Georgia where she is schedule to graduate this spring. She is part of a family of 7 (1 sister, 2 brothers, and 3 pet dogs-Lucky, Puppi, Dolce). Some of Anna's hobbies include: painting, arts and crafts, sewing, billiards, running, and strength training (so watch out!). When Anna graduates from the Orthodontic Program she plans on entering private practice and potentially pursuing a part time faculty position.

Kristen Daugherty A native Kentuckian, Kristen grew up an hour and a half outside of Lexington in Lebanon, KY. She earned her Bachelor's degree in Biology at Bellarmine University in 2004. Kristen is currently a fourth year dental student at the University of Louisville School of Dentistry where she is the Student Body President. She is married to Charles George, II, and they are expecting their first child in August, 2009! In her free time, Kristen enjoys running, reading, and singing in her church choir. After finishing orthodontics, she plans on working in private practice in Louisville and Lebanon, KY.



A very special THANK YOU to the following alumni and friends of the Orthodontic Graduate Program for their generous support since our last newsletter

\$5000

Dr. Steven Zeh

\$1000-\$4999

Dr. Kyle Childers, Dr. Charles Pritchett, Dr. Joseph Petrey, Dr. Cheryl Aldridge, KAO, Dr. John Phillips

\$1-\$999

Dr. Sid Brantley, Dr. Charles Rekow, Dr. J. Burton Douglass, Dr. Norman Gorback

Focus on Faculty Dr. Sonny Long (continued from page 2)

community. I am currently working on a dream project to build a patient-centered, community conscious practice model that will partner with medicine, particularly a well established pediatric medical practice, to serve a nearby community. Other specialties involved are ENT, internal medicine, OBGYN, urgent care, oral surgery, and outpatient surgery. We also plan to include nutrition and child psychiatry. UNC Pediatric Dentistry residents

and faculty will participate in a very unique way. We plan to offer a full range of pediatric dental and orthodontic services. Through our combined efforts, we would like to partner with and help enable the community to provide care to all who are in need of care. This project is well under way, and we are planning to occupy our space by the end of this year.



Welcome New Team Members! By Erica Odusanva

I am pleased and excited at the addition of five new members of the Division of Orthodontics: Johanna Startzman, Staff Support; Chelsey Elam, Dental Assistant; Rachel Hay, Dental Assistant; Dr. Lorri Morford, Research Scientist, and Sharon Cummins, Dental Assistant.

They have already taken an active role in enhancing our Orthodontic family and I am sure they will prove to be great assets.

left to right: Johanna Startzman, Lorri Morford, Sharon Cummins, Chelsey Elam, and Rachel Hay.

**University of
Kentucky Orthodontic Graduate
Program Alumni Newsletter**

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ATTENTION! PLEASE READ! We want to know what is going on in your lives ! Please send personal and professional news that may be of interest (pictures are appreciated too) to the address listed above or to jst227@uky.edu. We want to include updates about our alumni in this newsletter. ~ THANKS~

Mailing Address Line 1
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[http://www.mc.uky.edu/
Dentistry/students/ortho/](http://www.mc.uky.edu/Dentistry/students/ortho/)

Greetings from Tucson! (continued from page 3)



From September 9-18, 2008, the residents spent their time in Tucson receiving extensive training in the Tweed-Merrifield philosophy, diagnosis, and treatment. Concepts such as the Z-angle in evaluating facial disharmony ("faces first!" in the words of Drs. Vaden and Klontz), utilizing the Tweed triangle in skeletal analyses, and attention to anterior-mid arch-posterior segments of the total dentition for evaluating dental disharmony, were emphasized. In addition, the residents received intensive hands-on training in the four steps of Tweed-Merrifield edgewise directional force treatment: denture preparation, denture correction, denture completion, and denture recovery. This component involved heavy exposure to J-hook headgears, as well as wire-bending concepts necessary in achieving a directional force system, made evident by the numerous cuts, calluses, and blisters the residents had for display upon their return to Lexington.

However, the Tweed Study Course proved to be more than just bending wires and learning the important basic fundamentals of orthodontics. During these two weeks, Albert and Megan were surrounded by fellow residents from all over the country ranging from California to Texas to Massachusetts. Each day they worked closely at a large bench-top table with residents from Oklahoma University and Marquette. Since no music was allowed during the ten hour a day sessions, this left ample opportunity to interact with their colleagues. Thus, amidst the formation of calluses, laughter soon filled the air and friendships quickly developed. The evenings promoted further interaction with an array of activities, some of which included trips to downtown Tucson, hanging out by the pool, and a banquet dinner during the last night of the course for all the residents and instructors followed by a late night outing full of dancing and high-fiving at the Cactus Moon.

The Tweed Study Course proved to be an invaluable experience for improving both clinical skills and creating life-long friendships. Albert and Megan believe they have become better clinicians since returning from Tucson and have kept in touch with numerous residents, many of which they plan to reconnect at the AAO meeting in Boston this spring. Thus, even though the two weeks left Albert and Megan sleep-deprived and with sore fingers, when asked if they would go again, both responded, "without a doubt!"

