In the winter issue of UB Dentist, I touched on our plans for renewal in the school’s clinical education facilities. Now I’d like to tell you about our progress in this effort in more detail.

We are moving forward where we can despite the uncertain financial climate. We had earlier purchased and deployed new operator chairs for all operatories in the clinics. We have also completed cabling for digital radiography and to support point-of-service digital imaging for all clinic operatories. This will also support the point-of-care delivery of our electronic oral health record this fall.

We do not need to make major architectural changes in our clinics: we have nicely located clinical spaces in a building that has been well cared for. The key piece of our clinic renovation—and the most costly—is replacing all the equipment in the clinics, including patient treatment chairs and the associated equipment and cabinetry.

New operatories will support more contemporary practices in infection control, which will make us somewhat more efficient. The new clinical equipment will also enable us to incorporate simulation directly into clinical education settings, facilitating the transition of second-year students into third-year clinical experience. This is a major potential benefit as it will move our novice clinicians off the flat part of the clinical learning curve much more rapidly, enhancing their clinical productivity, better preparing them for independent clinical practice while enhancing our capacity to serve.

We hope to have completed the renovations by acquiring new operatories within the next two years. To do so, we will commit our own resources, obtain funding from the university, and seek funds from friends and industry partners. It is possible that the federal American Recovery and Reinvestment Act of 2009 will benefit our plans.

Fortunately, we are in a very strong position to compete for federal economic stimulus funds, especially in the Health Information Technology category due to our extensive previous work in this area and the conspicuous strength of our IT group.

We are attempting to confirm all sources of support so that the final clinical renewal plan can be approved this summer.

In the next issue of UB Dentist, I hope to be able to report to you the actual implementation schedule for what is the school’s most important facilities improvement project in more than two decades.

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16 CLASS NOTES
A national search for the dean of the UB School of Dental Medicine has begun. “UB will recruit an individual with stellar academic credentials who will lead the ongoing initiatives of the faculty of the school to move its programs into the top tier,” said David L. Dunn, MD, PhD, vice president for health sciences, who announced the membership of the committee that will conduct the search.

Robert J. Genco, SUNY Distinguished Professor, will chair the committee. “I am sure we will attract a large number of excellent candidates, and I look forward to the committee’s recommendations,” Dunn said.

In addition to Genco, the following individuals will sit on the search committee:

- **Mark C. Barabas**, president and chief operating officer, Erie County Medical Center
- **Frank C. Barnashuk**, past-president, Eighth District Dental Society, postdoctoral program director for general dentistry and assistant professor of restorative dentistry, School of Dental Medicine
- **Joseph E. Bernat**, chair, postdoctoral program director and clinical associate professor in the Department of Pediatric and Community Dentistry, and associate dean for government and hospital affairs, School of Dental Medicine
- **Mary A. Bisson**, professor of biological sciences, College of Arts and Sciences
- **Barry C. Boyd**, clinical associate professor of oral and maxillofacial surgery, School of Dental Medicine
- **Gayle A. Brazeau**, associate dean of curricular affairs and associate professor, School of Pharmacy and Pharmaceutical Sciences
- **Linda Caley**, assistant professor, School of Nursing
- **Heidi Crow**, assistant dean for postdoctoral general dentistry and associate professor of oral diagnostic sciences, School of Dental Medicine
- **Michael Duffey**, professor of physiology and biophysics, School of Medicine and Biomedical Sciences
- **Jude Fabiano**, associate dean for clinical affairs and clinical associate professor of restorative dentistry, School of Dental Medicine
- **Jo L. Freudenheim**, UB Distinguished Professor and chair, Department of Social and Preventive Medicine, School of Public Health and Health Professions
- **Robert G. Hoeing**, associate professor of linguistics, College of Arts and Sciences; chair of the Faculty Senate
- **Chunhao (Chris) Li**, assistant professor of oral biology, School of Dental Medicine
- **Richard J. Lynch**, executive council member, UB Dental Alumni Association
- **Eugene A. Pantera Jr.,** assistant dean for continuing education and clinical assistant professor of periodontics and endodontics, School of Dental Medicine
- **Maureen Sullivan-Nasca,** chief, Department of Dentistry and Maxillofacial Prosthetics, Roswell Park Cancer Institute
- **Lawrence Zielinski**, president, Buffalo General Hospital, Kaleida Health Systems

**The final four**

“We should have bought a lotto ticket,” jokes Amy Stone, one of four students heading to Women and Children’s Hospital of Buffalo this year to specialize in pediatric dentistry. It’s the first time in recent memory that all residency matches at the hospital are to UB students. The chosen four participated in the School of Dental Medicine’s Match Day lunch on January 26, when students and faculty celebrated the Class of 2009’s postdoctoral placements.

Stone and classmates Andrew Beuttenmuller, Adam Shepherd, Carrie Wanamaker and Andrew Beuttenmuller, Amy Stone, Carrie Wanamaker and Adam Shepherd. See story 2, this page.
herd and Carrie Wanamaker spent many hours together in class and in the pediatric clinics and look forward to starting their careers in Buffalo.

“We took the pediatric lit review together, and it was a small class of 12,” Wanamaker says. “So it’s pretty cool that four of the 12 of us are matched at the same place.”

In preparation for their residency, she and Stone spent two and a half weeks at Children’s shadowing dentists, doing dentistry and observing procedures in the operating room. “You definitely bond when you’re working at the hospital together at 6 a.m.,” Wanamaker says.

All four students also look forward to getting out of the classroom and into a real-world dental setting where they have more freedom and independence. “There’s a strong program at Children’s,” says Shepherd. “I want to learn from it, and become an efficient clinician.”

The students will be joined at Women and Children’s Hospital by SDM alumna Jessica Levy, DDS ’08, who is in the middle of a general practice residency program at New York Medical College, Westchester Medical Center in Valhalla, N.Y.

While not all 84 of SDM’s seniors participated in the match, the lunch provided an opportunity for the entire class to share the news of what they will be doing next year. Of those who did, the vast majority will be completing general practice residencies or advanced education in general dentistry programs. About 10 students will be going into specialty programs, including pediatric dentistry, oral surgery and orthodontics, and a similar number have chosen to go directly into private practice.

A WORLD OF TALENT

A contingent of eight dental students interested in various forms of Indian dance performed a fusion of classical dance from North India (Kathak) and South India (Bharatnatyam), Bollywood and folk traditions at the School of Dental Medicine Talent Show on Jan. 23 at the UB Center for the Arts.

In the picture above, Lord Krishna (Tina Chacko, class of 2012), left, and his principal consort, Radha (Shweta Vora, class of 2012), are part of a tableau representing worship in a temple devoted to the two. Vora, who choreographed the dance, is a seasoned performer with 10 years of professional dance and choreography experience, including appearances in seven Bollywood movies. Move over, Slumdog Millionaire.

RESTORATIVE IN PUBLIC EYE

Seungyee (Nina) Kim-Pusateri, DDS ’02, MS ’05, assistant professor of restorative dentistry, published “Reliability and Accuracy of Four Dental Shade-Matching Devices” in March 2009 issue of the Journal of Prosthetic Dentistry.

Namrata Nayyar, BDS, MS, a resident in the postgraduate prosthodontics program, won second place in the Graduate Prosthodontic Table Clinic Competition at the 81st annual meeting of the American Prosthodontic Society in Chicago this February.
school. “The event was well-attended by dental students and faculty, and it was great to see and hear the buzz around the posters during the judging and public viewing portion of the program.”

The projects ranged from very basic science—genes involved in dental infections and the sheer bond strengths of self-adhesive cements—to more clinical concerns, such as whether having a parent in the dental examination room lessens a child’s anxiety.

Approximately 40 faculty members with research interests in the basic and dental clinical sciences also participated in the student research program.

The SDM Student Research Group presented the annual Society for Advancement of Science Award to Anne E. Meyer, associate dean for research. The award is given annually to recognize an individual who supports dental student research at UB.

Gerard Kugel, DMD, MS, PhD, associate dean for research and professor of prostodontics and operative dentistry at Tufts University School of Dental Medicine, gave the keynote presentation. “Who Cares About Research?” Kugel spent the next day in Squire Hall meeting with groups of faculty and students.

The following students received honors:

**Martin Smallridge**, undergraduate program, mentored by Karuna Sharma, and

**Tobias Boehm**, postgraduate program, mentored by Ernesto DeNardin, both won the Maryanne Mather Clinical Research Award for “Tannerella forsythia S-layer: Solving the layer of complexity!” and “Fibrinogen has dual effect on IgG-specific antigen binding and phagocytosis,” respectively.

**Xuewie (Serene) Li**, predoctoral program, mentored by Mira Edgerton, and **Zohair Qureshi**, predoctoral program, mentored by Richard Ohrbach, both won the UB School of Dental Medicine Award for “Candida albicans Sho1 membrane osmosensor initiates protective response against histatin” and “Reliability of chewing performance,” respectively.

**Allen Ho**, graduate program, mentored by Sarah Gaffen, won the Oral Biology Award for “Differential expression and protein interactions of IL-17RCDr.”

**Jayaleka Amarasinghe**, graduate program, mentored by Frank Scannapieco, won the Robert Genco Award (supported by Sunstar Inc.) for “Characterization of novel Fur and iron-regulated sRNA regulatory mechanism involved in biofilm formation of Aggregatibacter actinomycetemcomitans.”

**Timothy Weibley**, predoctoral program, mentored by Sarah Gaffen, won the James English Research Award for Predoctoral Students for “Inhibitory activity of interleukin-17 receptor target gene regulation by the ERK and GSK3 kinase pathways.”

**Satyaprasad Nayak**, graduate program, mentored by Robert Baier, won the James English Research Award for Advanced Education and/or MS Students for “Development of a test model for enhancement of endodontic imaging.”

**Heather Conti**, graduate program, mentored by Sarah Gaffen, won the James English PhD Award for “Th17 cells and IL-17 receptor signaling are essential for mucosal host defense against oral candidiasis.”

**Travel awards for predoctoral students:**

- Thayne Gardner – ADA/Dentsply Student Clinician
- Nishith Patel – ADA Conference on Research
- Sara Caro – Hinman Student Research Symposium
- Eric D’Silva – Proctor & Gamble Crest Travel Fellowship, Greater New York Dental Meeting

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**OKU ELECTS NEW MEMBERS**

Gerard Wieczkowski Jr., DDS, secretary/treasurer of Lambda Lambda Chapter, Omikron Kappa Upsilon, the National Dental Honor Society, announces that the following members of the Class of 2009 have been elected into membership in the society:

- Patrick Battista
- Jason Berk
- Andrew Beuttenmuller
- Lester Domingo
- Geoffrey Duviner
- Stacy Hoffman
- Jill Leiderman
- Xuewie (Serene) Li
- Seung Bum Lim
- Adam Shepard
- Michael Swirskey

Also: Yoly Gonzalez, DDS, of the Department of Oral Diagnostic Sciences has been elected into faculty membership of OKU, and Anne Meyer, PhD, of the Department of Oral Diagnostic Sciences has been elected into honorary membership of OKU.
Students from participating Buffalo public schools and area Head Start programs, as well as a significant number of walk-in patients, received free dental exams during the 7th annual Give Kids A Smile (GKAS) Day. The children also received fluoride treatments, X-rays, sealant, oral hygiene instruction and other treatment or consultations as needed, including limited restorative dental work.

GKAS volunteers included more than 20 local dental health providers, as well as UB dental students, residents and faculty; students from the Dental Assistance Program at UB’s Educational Opportunity Center (EOC); social workers from UB’s CARES Program; students from the Dental Hygiene Program at Erie Community College; and students in the undergraduate Social Work Program at Buffalo State College. The event is sponsored by the American Dental Association (ADA).

“We know that there are thousands of children out there who are not receiving the dental care that they need,” says M. Dian Chin Kit-Wells, clinical assistant professor of pediatric and community dentistry and director of GKAS. “We’re so pleased the ADA would create a day where we can open up the doors of the dental school to provide access to care, and make parents more aware of dental needs early in a child’s life.”

The Squire Hall clinics welcomed 200 Head Start preschoolers, 250 Buffalo public school students, and 175 other children.

At the University at Buffalo, our purpose—our promise—is to reach others. It’s a promise that knows no boundaries. www.buffalo.edu/reachingothers

4 Nothing but smiles

PRACTICAL ORAL MEDICINE APPLICATIONS
Interactions affecting oral cancer risk
Your role in smoking cessation
Common oral mucosal abnormalities, systemic diseases
Impact of modern technology on oral medicine
9 a.m. – 4 p.m., Friday, May 29, 2009
UB School of Dental Medicine
UB Dental Alumni Dentist $195
Nonmember Dentist/Doctor $225 Team Member $95

EDUCATION ON LOCATION
Dental Pharmacology Update: Drug Interactions and Medical Emergencies in Dentistry
High Peaks Resort, Lake Placid, N.Y.
8:30 a.m. – 4:30 p.m., Friday, June 5, 2009
UB Dental Alumni Dentist $195
Nonmember Dentist/Doctor $225 Team Member $95

30TH ANNUAL CHAUTAUQUA
DENTAL CONGRESS July 1-3, 2009

WEDNESDAY, JULY 1
Cankers, Chancres and Cancers! An Update on Oral Ulcers
Stuart L. Fischman, professor emeritus, Department of Oral Diagnostic Sciences

THURSDAY, JULY 2
New Products and Procedures That Make Sense
Donald E. Antonson, clinical professor and associate chair, Department of Restorative Dentistry

FRIDAY, JULY 3
Pearls in Dental Therapeutics
Sebastian G. Ciancio, professor and chair, Department of Periodontics and Endodontics

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TUITION
Dentist $195/3 days or $85/day
Dental Team Member $95/3 days or $45/day

See “Travel Programs” at www.buffaloce.org for full details.

Complete course details & online registration:
www.BuffaloCE.org
(716) 829-2320
There is a quiet realm in the southwest corner of the first floor of Squire Hall where some 20 mostly young dentists practice in a bright clinic of their own. They are orthodontists in the making, residents in the School of Dental Medicine’s oldest postgraduate program—started in 1947—learning dentistry’s original certified specialty.

The program admits six students a year, among them always one international student and usually one into a PhD track. Fellows come and go, rounding out the clinical headcount. The residents are organized in five teams that practice together in pastel color-coded sections of the clinic. The ambient sound in the clinic is an unpunctuated murmur of conversation, between doctor and patient, doctor and doctor, and doctor and faculty.

Paul Ziarnowski, ’77, Ortho ’82, is one of the faculty members in that rolling conversation, moving from chair to chair. A clinical assistant professor with a practice in Springville, N.Y., he teaches two days a week. “I learn as much as I give,” he says, surveying the clinic. “I learn every day here.” He sits down at a patient chair and pulls on gloves and a mask to take a close look at something a resident wants his opinion about.

The Department of Orthodontics has four full-time, three part-time clinical and several volunteer clinical faculty. Full-time faculty members teach two days a week and pursue research two days a week; the part-time faculty teach one or two days a week.

Department chair C. Brian Preston came to UB 13 years ago after serving for 12 years as dean of the University of Witwatersrand dental school in Johannesburg, South Africa, where, as part of a dental-medical complex, his students had close contact with medical students—a model which he believes has some benefits. He is an active researcher and a world figure in orthodontics; his lecture itinerary this spring includes Australia, Europe, Japan, South Africa and several Middle East countries.

Assistant professor Guoqiang Guan, Ortho ’08, who joined the faculty in 2008, has had a career as far-flung as Preston’s lecture travels. He earned a DDS from Peking University, a PhD and a certificate in orthodontics from Okayama University in Japan, spent four years as a senior biomedical sciences research associate at Baylor College of Dentistry where he completed a fellowship in craniofacial biology, and then completed the certificate program in orthodontics at UB.

The other relative newcomer to the faculty, but not to the dental school, is Sawsan Tabbaa, MS ’97, Ortho ’04, who joined the department in 2007 as an assistant professor. She earned a DDS and a certificate in orthodontics at Damascus University in Syria, completed a residency and an MS in TMD and orofacial pain in the Department of Oral Diagnostic Sciences at UB and was a researcher at the school before completing the certificate program in orthodontics at UB. She published the Northeastern Society of Orthodontists’ case of the month in July 2008.

Guan, who is the clinic director for the program, says he returned to clinical work from his research interlude at Baylor because he wanted to be equally well equipped as a teacher, a researcher and a clinician. For most things that come up for the residents, he’s just been there. “I’m familiar with what they need,” he says. When he isn’t in the clinic, he is in a lab in Foster Hall conducting stem-cell research in the area of periodontal tissue regeneration and research on inflammation in TMD.

Most residents come to the program through the match system (see a related news item on Page 3)—like Michelle Stanislowsky, now in her second year, who matched from the University of Connecticut. She is from Saratoga Springs, N.Y., and an upstate New York program was what she wanted. Candidates for orthodontics programs (and for other specialties) tend to self-select before they start making out applications so that the whole pool of applicants is impressive. International applicants are a global best of the best.

Waseem Kassas, also a second year resident, came to UB with a DDS and specialty training in periodontics, both from Damascus University. His father,
who practices in Damascus, came to UB for implantology coursework 10 years ago. There can be no more meaningful endorsement than to encourage the son to follow.

In the summer before they start the program, residents spend four weeks in what Preston calls orthodontics boot camp, an intensive training course run by Great Lakes Orthodontics at their facilities in Tonawanda. “When the residents come in, they’ve been through the wringer,” Preston says. The session gives faculty a good fix on skills levels of the incoming residents. Preston says he doesn’t know of any other department that offers this kind of jump-start.

When they begin the program proper, residents get more intensive “wire bending” bench training from a specialist who comes in from Japan for six weeks. New residents work up prospective patients for about six months before they start treating cases.

New patients are screened for underlying conditions that would interfere with treatment. Most patients are teenagers or pre-teens. If they and their parents agree to treatment, the work-up includes X-rays, impressions (from which digital models are rendered) and extensive photographs of teeth and face. This material is digitally mapped and manipulated and eventually collated in a portfolio that is the documentation for a treatment plan that residents and faculty work on.

The program was lengthened from 30 to 36 months in 2007. The curriculum and clinical training—and a written examination at the end of year two—fulfill the requirements for admission to the American Board of Orthodontics. Residents see patients three and a half days a week and spend the balance of their time on the academic curriculum, their master’s research and teaching in the DDS program.

Because orthodontic treatment often lasts longer than a resident’s training, third-year residents hand off their cases to first- and second-years. This formalized process, which involves faculty, is an opportunity for collaboration, which is the pervasive spirit in the clinic.

Each resident starts about 35 cases and eventually carries a patient load of about 125. Stanisowsky, now halfway through the program, has appointments booked eight weeks out.

When Preston characterizes the department, which he has headed long enough to leave his stamp, he says—he comes from that background,” he says—and that it does an impressive amount of research for its size.

Dental school dean Richard Buchanan credits Preston for the department’s significant scholarly production that he says enhances and enriches its clinical training. “The department is well recognized within the school and around the nation,” he says.

The clinic is small enough to be a real community, one that is both stable and continually renewing itself as residents enter and finish. And, Preston says, the international residents’ different cultural perspectives are a wonderful benefit.

After they have finished, graduates of the program tend to scatter. “They have a good idea where they want to go before they come here,” Preston says. He guesses that half a dozen have stayed in the area over the past 10 years.

But wherever they go, Preston holds the alumni community together with bonds of friendship and professional courtesy: he’s always ready to discuss a case.

“I learn as much as I give. I learn every day here.”

~Paul Ziarnowski
Currently, all these functions, among many others, are supported by a hybrid system that combines paper charts and a computer-based clinic management system, known as “Picasso,” whose functions include coordinating appointments, recording student grades and billing—but little patient medical information.

That’s all about to change as the UB dental school prepares to embark on an ambitious new project aimed at fully integrating electronic oral health records into its existing information technology.

“This project basically touches on all of the constituents of the school; we’ve all got some clinical responsibilities,” says Gunther Kohn, chief information officer for the dental school. “It impacts all our mission elements too—student education, research, patient care, and community outreach.”

In fact, Kohn, who is chair of the school’s electronic oral health record committee, says UB has been a longtime pioneer in electronic oral health records, noting that John Eisner, retired associate dean for information resources, developed a prototype for an electronic health record nearly 20 years ago, long before such a system was on anyone’s must-have list. Now, Eisner’s early vision is closer than ever to becoming a reality.

But creating and integrating a full-fledged electronic oral health record into an existing clinic management system is still an enormous challenge—and one few other dental schools are attempting. To accomplish the job, the dental school is turning to a small group of dedicated programmers in Kohn’s office, working in close collaboration with dental faculty.

“We felt that the future was in the computer-based management of oral health records, and of clinics,” says former dean Louis Goldberg, discussing the decision to integrate electronic oral health records into the school’s current clinic management system, as well as the creation of the original system more than a decade ago.

“Our overall goal is to develop a very high-quality, fully interoperable electronic oral health record,” says Kohn, explaining that electronic health records are not yet sufficiently interoperable—meaning that one system can’t “talk” with another—in part because standard terminologies to describe the intricate medical information they contain are still being developed. “The really big payoff will only come once the dental record and the medical record are connected in such a way that they can easily exchange accurate information.”

Semantic interoperability is extremely challenging. Incompatible terms across multiple records could result in miscommunications concerning treatment plans or drug interactions, for example, either of which may have very serious consequences for a patient.

Because of these challenges, which are the subject of intensive work by experts across the country, Kohn says the dental school’s short-term goal is to “go paperless” in the next two to three years, with improvements and upgrades...
continuing after that initial benchmark is reached.

**In-house development**

Paper charts remain the “official record” in the clinics, he says, a scenario that sometimes creates strange situations in which patient information that has already gone digital—such as digital radiographs—is printed and inserted into paper charts. Rectifying this situation not only involves integrating patient information into the system, but also the installation of individual computer terminals at each of the clinic’s dental operatories, supplying instant point-of-care access to patient information to everyone working on a case. That project is slated for completion in the fall of 2009.

“Of course, we’re not simply aiming to take our paper chart and convert it to an electronic chart,” says Kohn. “You can now do things with the electronic information you could never consider doing with paper. When we say the ‘electronic chart,’ we’re really talking about a whole new concept.”

For example, his group is not only interested in upgrading the clinical management system to include an electronic oral health record but also in making selected patient information accessible to dental students via mobile computing devices, such as iPhones and Blackberries.

“While you’re walking to the reception area to meet your next patient, you could consult their data on your mobile device,” says Kohn, “or you might think of something while you’re walking between classes or going to lunch. Mobile computing really enables these very small, but very opportunistic, moments.”

Studies have shown that electronic health records contain the most accurate patient information when they’re accessible at the point of care—and accurate information is the key to good oral health outcomes. Entering information later, after a dental exam or treatment, tends to degrade its accuracy.

The ability to participate in this level of experimentation and customization was a central factor in developing an in-house electronic oral health record, says Goldberg, noting that commercial systems, which most of UB’s peers are using, are severely limited in many ways.

“We feel that we can create a much higher quality implementation by developing in-house,” says Kohn. “You simply can’t innovate when you’re buying a product because commercial vendors are focused on the soft middle. They want to sell to the most customers—they’re not interested in the edges, in the interesting fringes.”

One reason that the dental school wouldn’t find a good fit with a prepackaged software system, most of which are designed for small private practices, is the school’s enormous patient population. “We’re really like an outpatient hospital,” notes Goldberg, “with important teaching and research missions as well.”

Kohn says an out-of-the-box electronic health record system designed for a non-teaching practice can’t handle student evaluations and grading.

**Better patient outcomes**

In terms of research, Goldberg says an in-house electronic oral health record system offers even greater advantages.

“If you’ve got an electronic record, then you’ve got an enormous amount of information concerning the oral health of a large number of patients,” he says.

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"Our overall goal is to develop a very high-quality, fully interoperable electronic oral health record."

—Gunther Kohn

“Perhaps the most persuasive argument in favor of the school building its own system, according to Kohn, is that studies have shown again and again that stronger, more efficient implementations of electronic health record systems result in better patient outcomes.

John Eisner notes that the addition of diagnostic information to the patient record will also facilitate the collection and analysis of quality assurance data. For example, the presence of various risk factors could allow the software to alert the clinician when contra-indicated treatment is proposed. Similarly, qualitative thresholds could be established which would allow the school (or a clinician) to measure the quality of various aspects of its patient care.

“Merging the original clinic management system with an electronic health record will be a spectacular accomplishment,” says Goldberg. “And because we will have written and control the software, it will permit us to easily modify the system, to make it better, to use it for purposes we haven’t even thought of yet—and that’s an enormous advantage for everyone.”
Erin Topley, Class of 2009, sees the world from a slightly odd angle.

You may remember that tumor protein 53—p53, for short—regulates the cell cycle in multicellular organisms and functions as a tumor suppressor. It’s known as the “master watchman,” or, as Erin Topley’s microbiology instructor called it, “the defender of the genome.”

That’s just a line in most students’ notes, one more fact to remember. For Topley, it was bait. She went to a Halloween party as the superhero p53 Defender of the Genome. (p53 is also known as the “guardian angel of the genome,” but that’s for another Halloween.)

When she isn’t catching the one-liner no one else heard, Topley is a kind of cultural anthropologist. After closely observing dental students for two years, she devised a recipe for making a dentist that calls for, among other ingredients, 10 gallons of book smarts, ½ cup street smarts and 1 tsp of people skills, 1 ounce of social life and 2 tons of ego, seasoned with sexual tension.

Topley is an editorial cartoonist, or, in other words, a subversive. She started poking fun at the world in the pages of her high school newspaper in Fargo, N.D. (she won a national award for her work). She took time off from cartooning when she was an undergraduate at Rochester Institute of Technology. She started again in her second year in dental school when she was about to collapse under the weight of the work. She drew caricatures next to her lectures notes. It improved her concentration. When something amused her, she’d pin it down on paper—the drawn version of stand-up comedy. Staff and students started collecting Topleys; they appeared on the walls in the dispensary and elsewhere. After a while she’d seen enough of dental school for a whole book of cartoons—so she produced a whole book of cartoons. She borrowed seed money, found a printer, wrote the text, laid out the pages and had volumes ready for sale at the 2008 Buf-
You laugh

By Judson Mead

falo Niagara Dental Meeting where she did good business.

She says she’s not entrepreneurial at all—“I’d rather just give things away”—but she is enterprising. She found a small business advisor and set up a Web site to sell the books and individual cartoons.

She branched out, cartooning for the American Student Dentist Association’s national newsletter—for which she was honored with a national journalism award at the ASDA annual meeting this March—and for the UB student newspaper, Spectrum.

She broke the gender barrier in the Buffalo Dental Bowling League, renovated a house, played hockey with the boys and was a class officer. She says she likes to keep busy.

Topley was born in Winnipeg, Manitoba, where she lived until she was 12. She’s a hockey player and she got interested in dentistry only after losing two teeth playing for RIT.

“I was treated over a couple of years by two wonderful young women dentists, Roxanne Lowenguth and Mary Ann Lester, and that was the first time it occurred to me that young women could be dentists,” she says.

She’d thought only middle aged men could be dentists. She traded in her graphic art major for premed study. And she spread the word: Her sister, Carly, followed her into dental school (class of 2011).

Erin Topley is headed for a general practice residency at a VA hospital in Minneapolis. After eight years in the East, she wants to try the upper Midwest again. She has ideas for two projects: a book for children that explains going to the dentist, and what she says would be a kind of illustrated Cliff notes for dental students.

Nasal Spray May End Dental Needle Injections for Upper Teeth Repair

A nasal spray shown to numb the upper jaw is set to be tested in an FDA Phase 3 trial, which will assess the spray’s effectiveness compared to the current “gold standard” treatment—painful anesthesia injections.

“A successful trial of this new dental anesthetic will change dental technology worldwide,” says Sebastian Ciancio, DDS, SUNY Distinguished Service Professor and chair of the Department of Periodontics and Endodontics.

Ciancio directed the Phase 2 trial and will coordinate the Phase 3 trial. Between 6 and 10 million dental needle injections are given daily, according to Ciancio.

Results of the FDA Phase 2 trial, conducted in 48 subjects at the School of Dental Medicine, showed that the spray appears to be safe and effective.

The Phase 3 trial will be carried out later in 2009 at the dental school and other clinical sites. Ciancio says that if the Phase 3 trial is successful, it may mean the end of injections for any dental work performed on the upper teeth.

Ciancio and colleagues conducted the initial preliminary dental studies using the nasal spray, which is being developed by St. Renatus, LLC, based in Fort Collins, Colo.

The nasal spray formula being tested is related to a drug used by ear, nose and throat physicians when they operate on the nose. Patients who received this anesthetic reported that their upper teeth felt numb, sparking interest in using the anesthetic for dental procedures. The spray is effective only on the upper teeth.

Other investigators involved in the Phase 2 and preliminary trials, all faculty from UB School of Dental Medicine, were Eugene A. Pantera, DDS; Carol T. Pantera, DDS; Fadi Ayoub, DDS; Davis Garlapo, DDS; Nina Kim, DDS; and Benita Sobierj, DDS.

Basis of Immunity to Oral Thrush, Common in AIDS, Identified by UB Researchers

Oral thrush, a hallmark symptom in AIDS patients, is caused by a type of yeast that grows unchecked in people with weakened immune systems, and appears in colonies of white patches in the mouth.

AIDS is characterized by the progressive loss of T cells—cells that originate in the thymus and are a critical component of the immune system. A particularly important type of T cell is known as the Th helper, or Th cell.

Research carried out at the University at Buffalo has shown for the first time that a recently identified type of Th cell, known as Th-17, is the principal defense component required for immunity to oral thrush. Mice lacking Th-17 cells, but not other types of T cells, develop severe oral thrush.

Results of the research appeared in February in the online issue of the Journal of Experimental Medicine. Heather R. Conti, PhD, a student in the Department of Oral Biology at the School of Dental Medicine, is first author.

The research was conducted in the laboratory of Sarah Gaffen, formerly associate professor in the Department of Oral Biology, and in the laboratory of Mira Edgerton, DDS, PhD, research professor of oral biology. Gaffen has since left UB to take a position at the University at Pittsburgh. The research is continuing at UB under Edgerton.

Additional UB contributors to the study were Fang Shen, Namrata Nayyar, Eileen Stocum, Jianing N. Sun, Matthew J. Lindemann, Allen Hoe, Justine Hoda Hai, Ji Won Jung and Patricia Masso-Welch. Scott G. Filler, from the David Geffen School of Medicine at UCLA, also was a contributor.

Oral Biology in the $2 Million-plus Club

Research expenditures at the University at Buffalo increased by nearly 7.7 percent to a record $348.2 million in the 2008 fiscal year.

Twenty-six UB departments and centers had research expenditures exceeding $2 million in FY 2008, up from 21 the previous year. One of those is the Department of Oral Biology, with total research expenditures of $2,460,242. The second highest departmental total in the dental school was $900,853 for oral diagnostic sciences.
Describe your development background; what does your job at the dental school entail now?
I came from the School of Public Health and Health Professions (SPHHP), where I led the development efforts since 2005. Before that, I held positions as director of development for the American Red Cross, Greater Buffalo Chapter, and capital campaign coordinator for SUNY-Brockport.

Now, as director of development at the School of Dental Medicine, I’m privileged to help alumni and other donors with their philanthropic investments in the school.

What have your various development roles taught you?
My work has made me realize how important development is to running an organization. Whether you’re talking annual funds, foundation grants, or endowment funds, my philosophy is that good philanthropic relationships are built when the vision and goals of the organization are well matched with the wishes, desires and motivation of the donor. When that happens, everybody benefits. Donors are thrilled to have made the investment, the school and university advances and our community and region are improved.

What else about your job do you find fulfilling?
Well, it starts at home in Western New York. It’s where I work and raise my family. I got into the business of development to help improve the community where I grew up. I started in the not-for-profit, human service sector. That’s important and rewarding work. Philanthropic investment in a research university like UB, though, can not only transform the school, but the entire community. UB plays an incredibly important role in the well-being of Western New York and the region.

The dental school, of course, is part of UB’s Academic Health Center, which plays a huge role in education, research and service in this region. It improves the health of both individuals and populations—a concept I embraced at the School of Public Health and Health Professions, and one that can, in some ways, be applied to the dental school.

Our educational opportunities, public clinics, outreach programs in local schools and in underserved areas across the world, make it about far more than just learning dentistry.

What do major gifts help fund at the dental school?
Since I’ve arrived, I’ve been hugely impressed by the level of excellence here. As I travel around visiting alumni and friends of the school, I’ve also quickly witnessed the respect people have for its reputation. Generations of quality dental professionals have been trained here. It’s something to be very proud of.

Now, more than ever, we need to capitalize on that reputation. The priority in my office is to help donors think big and see how they can be a part of our shared vision for the school, university, and community—to help them realize the level of gift and power of the contribution that is within their reach. Endowed chairs, for example, allow us to recruit the best faculty from around the world for our students and research endeavors. Donations to funds like these are key and the School of Dental Medicine is, perhaps, the best place in which to invest and make a difference in dental education, research and service.

What role do alumni have in supporting the school?
First of all, my hat’s off to the UB Dental School Alumni Association. They do a terrific job; fundraising time, talent and treasure to support the school and the profession. Clearly, development at the dental school would not be where it is today without their commitment. I would add that they also host one of the country’s best dental conventions right here in Buffalo.

All of our alumni play a vital role in helping direct the dental school’s future, and there are numerous opportunities to get involved. In my office, we concentrate on providing philanthropic opportunities for alumni, encouraging them to stretch their giving in ways that will truly transform the school, the profession and our community.

Capital renovations of SDM’s clinic facilities are our top priority and we will rely on philanthropic investment to complement other sources of revenue to renovate the clinic. Endowed chairs, professorships, research funds and scholarships are also important.

These are challenging times, yet the dental school continues to produce top-notch graduates. Our alumni can provide the vision and resources to achieve our shared, long-term goals in research, education and innovation. I, along with our development staff—Marilyn Koren, Tracy Oun, Carol McCourt and Eileen Comer—look forward to working with all of our alumni and friends. Please stop by the third floor of Squire and visit us!
A sane choice in an insane market: Charitable gift annuities

So here we are. As this story is written, the Dow is hovering around 7,500. Two weeks ago it was at 6,500, and when you read this, who knows where the numbers will be?

One positive result of the ongoing market fluctuation is the attention that charitable gift annuities have been garnering. You may have read about them in the news as the benefits of gift annuities have been featured recently in the Wall Street Journal and Forbes.

Timing is everything, and this fiscal environment may be the best time to establish a charitable gift annuity. At the very least, you owe it to yourself to explore this unique opportunity to do well and do good.

A charitable gift annuity is a simple agreement between an individual and a charity (such as the University at Buffalo Foundation) in which the donor gives the charity a set amount of money. In exchange, the charity guarantees to pay the donor a fixed amount for the rest of his or her lifetime. I know of donors who have collected annuity payments for decades—not a bad return!

To sweeten the pot, donors who establish charitable gift annuities also qualify for an immediate tax deduction to offset income taxes. This, coupled with the guaranteed, fixed, lose-no-sleep-at-night returns, often have donors coming back to establish additional gift annuities.

Most charities adhere to rates recommended by the American Council on Gift Annuities. As an example, a 70-year old wishing to establish a gift annuity would earn a solid and steady 5.7 percent. Let’s say that this 70-year old wanted to establish a gift annuity with $10,000. He or she would receive $570 per year for the duration of his or her lifetime, along with a nice tax deduction in the year that the annuity is established.

As an added layer of security, gift annuities are guaranteed and backed by the charity’s assets. However, you should consider the size, strength and reputation of the organization before you set up a gift annuity. A long-standing well-established group, like the University at Buffalo Foundation, then you’ll be in terrific shape.

Gift annuities can come in different shapes and sizes. For example, gift annuities can be established for one or two beneficiaries. The rates will be slightly lower for two-life gift annuities, but they’re still an attractive option for couples seeking income.

Individuals who are nearing but not quite ready for retirement may want to explore a deferred gift annuity. This arrangement allows a donor to set up a gift annuity now, while delaying the income until a later date. The longer a payment is deferred, the higher the rate of return. Many donors who expect to find themselves in a lower tax bracket after they retire find deferred gift annuities to be quite attractive. Another plus is the deduction that is earned immediately that helps to reduce current income taxes.

And not to forget, they’re called charitable gift annuities for a reason. A portion of your contribution will be used in support of a philanthropic purpose in the future.

What’s important to you when you think about supporting your alma mater through that contribution? Whatever you decide, the charitable gift annuity can make a difference in a way that fits your lifestyle. UB’s dental programs, students, faculty and staff will thank you for it!

by Wendy M. Irving Esq., assistant vice president for gift planning

REMEMBER THE SCHOOL OF DENTAL MEDICINE IN YOUR WILL

Did you know that you can make a major impact on the future of the School of Dental Medicine by including us in your estate plans? Call UB’s Office of Gift Planning toll-free at 877-825-3422 to learn more about how you can support dental facilities upgrades, faculty development, curricular improvements, or student scholarships.

If you plan to make a charitable gift by will, please think it through carefully. Then, meet with your attorney to discuss and update your will. Tell him or her exactly what you want to do. Be as clear as possible in describing what you want given to whom. If you prefer to remain anonymous, your gift will be kept completely confidential. But at the same time, recognition of your gift can encourage others to do the same.

THANK YOU FOR YOUR SUPPORT!
Ten minutes after Flight 3407 crashed into a house in Clarence, N.Y., killing all 49 people on board and one on the ground, he received his instructions: “Sit tight. We’ll need you soon”.

Miller, a forensic dentist, went back to bed but rose again early the next morning to start a grueling day inspecting crash victims’ dental remains for the Erie County medical examiner’s office, based at Erie County Medical Center. As dental section chief for Flight 3407’s dental ID team, he also assessed the crash site the day after the disaster.

For decades, Miller has served as a dental forensics consultant for local and federal agencies during emergency management situations like the Clarence crash. His experience includes assisting victim identification efforts after 9/11 and Katrina.

Miller’s training began in dental school at UB. As a dental officer in the Air Force, he was required to take a course in forensic dentistry.

Miller expresses gratitude to the local units who responded to Flight 3407. “Our team went far beyond the call of duty to uncover these victims’ identities,” he says, crediting the following with assistance: SMART team members and community volunteers Donald Tucker, ’81, Peter D’Arrigo, ’71, David Millhouse, ’92 and Marcia Kent; ECMC residents James Mitchener, ’88, Callie Davis, ’08 and Anita Mariani ’07; ECMC attending staff Philip Williams, ’07 and Jennifer Holmer Su, ’00; and UB dental faculty and staff Mary Bush, ’99 and Peter Bush.

While Miller examined victims, compared records and took dental radiograph readings, Tucker was making countless calls to clinics across the country to track down corresponding dental records. His wife, Dian, and her son Brent drove all over the Southern Tier and Canada to retrieve them. A family assistance center also was set up to help victims’ families report information about their loved ones.

The Clarence crash involved a relatively contained group of victims, and for the most part, their dental records have been made readily available by families and their dental offices. “We have had a few cases where parents no longer knew where their grown children currently received dental care and we received outdated records,” Miller says.

Each emergency situation brings its own kind of chaos. The crash in Clarence happened during a particularly harsh Buffalo winter, bringing added hardship to the recovery operations. Miller says it was similar in some ways to the scene at 9/11—both involved planes crashing into structures, with fire and the fallout that resulted—although 9/11 was “more about numbers” because of the enormous volume of remains to process. When Hurricane Katrina hit, dental records were destroyed along with entire clinics. “Every tragedy, no matter how you train, is unique,” Miller says. “You prepare for contingencies, but in the end you take it as it comes and try to be flexible.”

The goal of all SDM members on the scene was to bring closure for the families, serve the crash investigation, and help everyone move on. “It’s a sociological and cultural issue—not just a medical or forensic one—for everyone involved,” Miller says.
Michael A. Fabio, ’73, has received the Northern Virginia Dental Society Lifetime Achievement. The award was presented in recognition of his continuous leadership and service to the society, a section of the Virginia Dental Association, since he joined in 1980. In his acceptance speech, Fabio recognized William Falcone, ’54, with whom he started practice in 1978, and Bruce Seidberg, ’63, a clinical professor in endodontics at UB, as mentors. Fabio maintains a clinical practice in endodontics in Reston and Springfield, Va. Pictured at the award ceremony are Fabio, his wife, Patricia, and their son Christopher.

Greg Maurer, ’73, has been elected as president of the Vermont State Dental Society. He writes: “This is a busy year for organized dentistry as we consider changes in scope of practice for dental auxiliaries, evolving concerns about dental materials, various methods of health care delivery and the challenges for dental education.” Greg continues to maintain a general practice in Vergennes, Vt. He can be contacted through VSDS.org.

Kevin J. Hanley, ’78, of Buffalo has been named editor of the New York State Dental Journal, the clinical journal of the New York State Dental Association (NYSDA). Hanley, an orthodontist, has been an active participant in organized dentistry. He is a member of the NYSDA Board of Governors and its Executive Committee; was chair of the NYSDA Council on Dental Practice; and served on the NYSDA Finance, Budget and Audit Committee. At the national level, he has served since 2001 as a delegate to the American Dental Association (ADA). Andolina is a fellow in the Academy of General Dentistry, American College of Dentists, the International College of Dentists, the Academy of Dentistry International, and the Pierre Fauchard Academy. He is a consulting dentist for several regional hospitals and has been active in his community, serving as a director on the boards of St. James Mercy Hospital, his local Chamber of Commerce, a local bank, the Humane Society and the YMCA.

Bruce Lieberthal, ’83, is vice president of product management and development at Henry Schein Practice Solutions, where he previously served as director of product management. He has also developed, built, supported and sold multiple software platforms relevant to dentistry and endodontist. He has 14 years of experience as a practicing dentist and lives in Wrentham, Mass.

Guy DiTursi, ’86, MBA 1995, has been appointed the Chief of the Dental Service of the VA Western New York Healthcare System. The VA Western New York Healthcare System
includes the Buffalo and Batavia Medical Centers, and provides comprehensive dental and medical care to America’s veterans. DiTursi completed a general practice residency at the Buffalo Medical Center, and was the GPR program director prior to his appointment as the service chief.

Michael E. Katz, ’88, has joined the professional staff of Western New York Dental Group. Katz completed his GPR at Roswell Park Cancer Institute and served as the director of dental medicine at Sisters of Charity Hospital of Buffalo for the past 15 years.

Heidi C. Crow, MS ’91 and TMD ’91, was presented with the 2009 ADEA/Colgate Palmolive/National Dental Association Jeanne C. Sinkford Scholarship at the 86th ADEA Annual Session in Phoenix, Ariz. The Sinkford Scholarship provides the opportunity for a dental educator who is closely aligned with the promotion of equity and diversity to participate in the ADEA Leadership Institute. Crow is currently associate professor in the Department of Oral Diagnostic Sciences, assistant dean for postdoctoral dentistry programs, and program director for TMD and Orofacial Pain.

Jeffrey Berkowitz, ’94, has been elected as treasurer of the Vermont State Dental Society. He has practiced dentistry with the Timberlane Dental Group in South Berlingon, Vt., since 1995. Berkowitz lives in Charlotte, Vt., with his wife and three young children.

In memoriam

Mario J. Violante, ’44, died on April 6, 2009 in Niagara Falls, N.Y. He was 91. His son Mario J. Violante Jr., ’76, and grandson Mario J. Violante III, ’99, both practice in Niagara Falls.

Walter C. Ervin Jr., ’52, died unexpectedly on Jan. 13, 2009, at his home in Elmira, N.Y. He was 82.

Ernest C. “Doc” Passaretti, ’53, died on Dec. 2, 2008 at Albany Memorial Hospital. He was 81.


Frederick W. Downie, ’70, died on Jan. 9, 2009. He was 64. He practiced dentistry in both the Syracuse and Albany VA hospitals.

The Buffalo Chapters of American Student Dental Association and Delta Sigma Delta are selling T-shirts to raise funds for student activities.

**Item #1:** “I Love UB Dental”
Short-sleeve, 100% pre-shrunk cotton
Color: White, royal, black
Size: S, M, L, XL, and XXL
Price: $12 each

**Item #2:** “I Love UB Dental”
Long-sleeve, 100% pre-shrunk cotton
Color: White, royal, black
Size: S, M, L, XL, and XXL
Price: $15 each

**Item #3:** Short-sleeve, 100% preshrunk cotton
Color: White, royal, black, grey, navy, red, and hunter green
Size: S, M, L, XL, 2X, and 3X
Price: $12 each, 2 for $20; add $3 for 2X and 3X

**Item #4 (not shown):** Nike Dri-Fit embroidered golf polo
Color: Navy with white embroidery, white with navy embroidery
Size: S, M, L, XL, 2X, and 3X
Price: $55 each, 2 for $100; add $5 for 2X and 3XL

Order form. Orders accepted until **May 30, 2009**.

Name: ____________________________

Address for delivery: ____________________________

For items #1 and #2 (“I Love UB Dental”), please make checks payable to “ASDA.”

For items #3 and #4 (UB SDM tee, golf tee), please make checks payable to “DSD.”

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The University at Buffalo is a premier public research university, the largest and most comprehensive campus in the State University of New York system. The School of Dental Medicine is one of 12 schools that make UB New York’s leading public center for graduate and professional education and one of five schools that constitute UB’s Academic Health Center.

**UPCOMING COURSES**

**FRIDAY, MAY 29**  
9 A.M. – 1 P.M.  
UB SCHOOL OF DENTAL MEDICINE

**Endodontic dx for the dental hygienist: a hands-on workshop**

Dental hygienists are in a unique position to collect clinical signs and symptoms of endodontic disease. State practice acts may not allow you to make a diagnosis; you can gather information that will help the dentist to facilitate care or treatment planning.

Faculty presentation of the basic concepts of endodontic diagnosis is followed by clinical hands-on experience. You will perform procedures on fellow students in School of Dental Medicine facilities.

**4 CE HOURS ADA/CERP**

**TUITION**  
RDH $245  
Limited Enrollment.  
Register by May 1 and save $20.

**FRIDAY, MAY 29**  
9 A.M. – 4 P.M.  
UB SCHOOL OF DENTAL MEDICINE

**Practical oral medicine applications**

- Interactions affecting oral cancer risk
- Your role in smoking cessation
- Oral mucosal abnormalities and systemic diseases we commonly see—a collection of pathology and systemic disease patterns
- Impact of modern technology on oral medicine

**6 CE HOURS ADA/CERP**

**TUITION**  
UB Dental Alumni Dentist $195  
Nonmember Dentist/Doctor $225  
Team Member $95

**FRIDAY, JUNE 5**  
9 A.M. – 4 P.M.  
UB SCHOOL OF DENTAL MEDICINE

**Restorative procedures for the dental team member**

Instrumentation and basic principles, dental materials used in restorative dentistry, proper occlusion and tooth relationships, and placing and finishing composite restorations.

Clinical faculty will demonstrate procedures and you will practice with instruments on typodonts.

**6 CE HOURS ADA/CERP**

**TUITION**  
$425 per team member (Group discount for 4+ from the same office. Call UB-CDE for details.)  
Register by May 1, 2009 and save $50.

**FRIDAY JUNE 12**  
9 A.M. – 4:00 P.M.  
HILTON GARDEN INN  
GENESEE ST., across from Buffalo Niagara International Airport

**High tech on a low-tech budget**

Changing patients’ views of your office into a high-tech perception

**Dr. Marty Jablow**

Learn how high tech can pay for itself through improved patient treatment and better office efficiency and communications. Get a roadmap for acquiring and implementing technology into your practice without large capital outlays. All products discussed are less than $10,000 and many are under $1,000.

**6 CE HOURS ADA/CERP**

**TUITION**  
AO Member $195  
Nonmember DDS $225  
Team Member $95

For more information on these and other UB School of Dental Medicine Continuing Dental Education programs, call (716) 829-2320 or 800-756-0328 or visit the CDE Website at www.buffaloce.org.