

# Medicinal purpose

RIT grads are using technology to help build careers in the medical field

## Physician takes the paperwork out of his practice

With the vast volume of patient records, insurance forms and regulatory documentation, the medical establishment is seemingly awash in paperwork.

Dr. Robert L. Smith '96 (M.S., clinical chemistry) has found a way of staying afloat. He's pioneering the concept of the "paperless" medical office at the family medicine practice he launched in 2006 in Canandaigua, N.Y.

"It's a very logical, very practical system," Smith says. "Staff and patients love this because it's so much more efficient than paper charts."

Smith grew up in Rochester and received a bachelor's degree in health and sports science/biology from Wake Forest University in 1991. He worked as a PGA golf professional from 1991-1993 before attending RIT. Smith received his M.D. degree at SUNY Upstate Medical University in 2000, completed a residency in family medicine at St. Joseph's Hospital in Syracuse in 2003, then joined the medical staff at F.F.

(www.apractissolutions.com).

In his "paperless" system, incoming voice mails, e-mails, and faxes are received in a software program called UpDox, (www.updox.com). This desktop application routes incoming and outgoing communications to other medical offices or directly into the patient's electronic record after it is given an electronic signature. Messages are routed from the doctor's online, automated answering service directly to Smith and his clinical staff. Smith can check for messages online while at home, in the office, or at the hospital during rounds, instead of relying on a traditional answering



Robert Smith '96

and communications coming from patients' online instead of via the telephone has enabled my staff to actually focus more of their time on our patients who are in the office requiring care, rather than answering the phones all day," states Smith.

Recently, F.F. Thompson Hospital has begun securely e-mailing lab reports instead of faxing them to Smith's office. "It is completely backwards to continue relying on

faxing confidential medical information in this day and age," says Smith. "Faxes are not a secure form of communication, yet it sadly remains the method of choice between offices and hospitals. My mission is to stop faxing altogether.

"The field of medicine has been slow to incorporate technology into the patient-physician relationship," he says. "As a new physician, it just made so much sense to start out with a system that takes advantage of the latest e-health innovations. My goal is to change the perception of patients by encouraging them to e-mail our office for all of their medical concerns, including urgent medical requests requiring a same-day visit."

In his work with Apractis Solutions, Smith assists with the development and implementation of applications such as UpDox to assist physician-physician and patient-physician communications.

"My office is the laboratory for the communication systems we're building," he says. "It's exciting to be a part of this new era in medical practice redesign, for the benefit of physicians as well as patients."

For more information, go to [www.fingerlakesfamilycare.com](http://www.fingerlakesfamilycare.com).

**"Having more and more transactions and communications coming from patients online instead of via the telephone has enabled my staff to actually focus more of their time on our patients who are in the office requiring care, rather than answering the phones all day."**

Robert Smith '96

Thompson Hospital in Canandaigua before opening Finger Lakes Family Care.

He began consulting in the field of healthcare informatics during his residency, founding Medsmith Solutions. He now serves as chief medical officer for Apractis Solutions LLC, a company founded by physicians dedicated to online collaboration and secure communication using a variety of digital media

service. Paper charts are replaced by electronic files that are easily accessible by multiple office staff simultaneously as well as when Smith is out of the office. Patients can make appointments, fill out required forms, request refills of medications, check for the results of tests or make inquiries through a secure Web site.

"Having more and more transactions

# Orthodontist builds on engineering background

After graduating from high school, Brandon Comella '97 (B.S., M.S. mechanical engineering) joined the Air Force, "because I wanted to fly airplanes."

He ultimately did receive a pilot's license, but he discovered another passion while working as a dental technician for the USAF. By 1993, he knew he wanted to become an orthodontist. Perhaps surprisingly, his next step was engineering school.

"Mechanical engineering is a great segue to orthodontics," he explains. While at RIT, Comella worked as a technician for Roy Epstein Dental Lab in Webster.

He went on to study dentistry and work on his Ph.D. in engineering at the State University of New York in Buffalo. In 2001, he graduated from the dental program and started his career in orthodontics. After several years working at a dental practice in Buffalo, Comella opened his own office in Penfield, N.Y., in 2005.

He's putting his RIT education to good use.

"One of the things that separates this practice is the high-tech engineering process I use to diagnose and determine treatment," he says.

The first step, making an impression of the patient's teeth, is nothing new. Comella then sends the cast to a company in New Jersey that makes a digital, 3-D computer model of the teeth. Using the computer model, Comella can virtually place the brackets, wires and rubber bands and project how the teeth will respond over the course of treatment.

"The computer program gives a demonstration of how the process starts and finishes," he says. "If I'm not satisfied with the projected result, I can make adjustments before putting any hardware in the patient's mouth."

In cases requiring surgery to correct severe problems affecting the jaw or bones of the face, he can determine precisely what needs to be done to achieve the desired result.

The computer technology improves the overall outcome and it also reduces the total amount of time the patient spends in the dentist's chair, he says, adding that most people appreciate that.

Comella says this system has been in existence for several years, and is becoming more widely used. Besides the computer technology, advances in adhesives and in materials used in constructing the brackets and wires have revolutionized orthodontics. In addition, in setting up his office from scratch,



Brandon Comella '97 uses 3-D computer modeling to help determine a course of treatment for patients.

he opted for digital radiography and an expanded Web site where patients can track their treatment.

At least part of his enthusiasm for the system comes from personal experience. While in dental school, he diagnosed his own treatment. Besides improving the appearance of his teeth, he was able to correct a problem with his nasal passages to

improve breathing.

"I did the setup on the computer and had friends assist in the work," he says. "It took about 1½ years, but I'm very pleased with how it turned out."

Kathy Lindsley

For more information about Comella's practice, visit [www.comellaortho.com](http://www.comellaortho.com).

## Entrepreneurs find niche in healthcare

### RIT incubator helps grads develop business plan

Managing the elements of home healthcare can be overwhelming, particularly for smaller companies with limited resources. Tom Hogan '03 (MBA) saw that firsthand while working for his family's company, Venture Forth Inc., a service provider in his hometown of Niagara Falls, N.Y.

"When you're trying to manage 100 employees' schedules on a sheet of paper, it's very difficult," he says. Tracking payroll and billing complicates matters even further.

In hopes of finding solutions, Hogan agreed to serve as a consultant for the company. He and Doug Golub '03 (M.S., information technology) teamed up.

"Every person we had the opportunity

to talk to would tell us, 'Right now, we use nothing. When you find something, I'd really appreciate it if you'd let me know,'" recalls Golub. "After hearing that about five times, we realized there might be market potential here."

That led the pair to create MediSked, a software company providing integrated solutions to help service-based businesses manage issues like scheduling, billing and payroll. The company is based in RIT's high-tech incubator, Venture Creations.

Tapping into Hogan's business savvy and Golub's programming expertise, the pair created a Web-based software prototype. Implementation of the system in Niagara

Falls proved so successful that Hogan and Golub chose to pitch it at a home health-care conference. Their target customers were administrators of smaller service providers looking for efficient and affordable management tools.

"The very large agencies can probably afford a multi-million dollar solution," says Golub, a Long Island native, "but the smaller ones don't know where to look because there really is nowhere to look, and they don't really have a lot of resources."

As a result of that conference, MediSked attracted two additional clients. One of them, Belvedere of Albany, found itself struggling to manage a significant volume of paperwork. Signing up with MediSked helped to change that.

"We have almost 80 clients that we're keeping different books for, and now everything is in one spot," says Sue Nestler, Belvedere office manager. "You pull up a client's name, and everything is there—from their service plan to who worked with them last night."

Similar sales opportunities and word-of-mouth referrals helped the company expand to 14 agencies by the end of 2005. Today, the company serves about 40 customers in New York state and one in Maine.

MediSked owes a portion of its early success to its affiliation with Venture Creations. RIT's business incubator creates an environment for students, faculty, staff and alumni to develop ideas of economic and commercial importance.

"We had to go through the process of

**"I was very interested in their business. It seemed like one of these incredibly simple, right-in-front-of-you opportunities that nobody had bothered to figure out except them."**

**Kevin Gavagan '79**

validating our business plan and really solidifying it to get in," explains Hogan. "That, and its association to RIT, has been very helpful. When we tell people we're at the RIT incubator, it just adds a little bit more credibility."

One of the resources available to companies based within the incubator is the opportunity to interface with veteran business leaders who are willing to assist in an advisory capacity. As members of the Venture Creations board, Kevin Gavagan '79 (MBA), principal at QCI Asset Management Inc., and Joseph Loboizzo '95 (Executive MBA),



Doug Golub '03, left, and Tom Hogan '03 are building a successful business with the support of RIT's high-tech incubator.

founder and CEO of JML Optical Industries Inc. and an RIT trustee, agreed to serve as advisers to the MediSked team.

"I was very interested in their business,"

Gavagan remembers. "It seemed like one of these incredibly simple, right-in-front-of-you opportunities that nobody had bothered to figure out except them."

Over the past few years, Gavagan and Loboizzo have worked with MediSked to address issues related to the company's evolution such as pitching venture capital firms and determining service pricing. Considering the company's early success, Loboizzo says having the opportunity to serve a mentorship role has proven quite rewarding.

"Frankly, it's more fun watching the en-

thusiasm of these young guys – and I think they're going to be immensely successful – than reliving when I started my company 34 years ago. Seeing that enthusiasm in two young men is absolutely incredible fun."

"It is very rare to hear a business plan projection and then go back a year and a half later and see that you've exceeded it by a wide margin," adds Gavagan. "It was gratifying and also kind of reinforcing to the notion that I'm glad to be involved with what appears to be a developing, winning story."

According to Golub, "We have the vision, and these folks are the ones who can help us with the steps to get there."

Don Boyd, RIT vice president for research, says that MediSked is a model example of the type of enterprise that the incubator is looking to foster. He says operating in the information technology field requires the company to focus on staying one step ahead of the competition.

"These young entrepreneurs know their business and their customers, they know what needs to be done," states Boyd. "We have high hopes for their success."

Hogan and Golub continue to focus on expanding the company's client base, but that will require even more time apart from family and friends who sometimes question the merits of their commitment.

"They definitely think we're nuts for spending this much time on it, but we keep telling them it will pay off," says Golub. "And it will!"

Adds Hogan, "From where we're standing right now, it seems almost limitless as to where it could go."

Paul Stella '03

For more information about MediSked, go to [www.medisked.com](http://www.medisked.com).

For more information about RIT's Venture Creations business incubator, go to [www.venturecreations.org](http://www.venturecreations.org).