

A COLLEGE UPDATE from Dean A. Isabel Garcia, D.D.S., M.P.H.

UF College of Dentistry,

I hope that everyone is enjoying some downtime this summer, and that you have the opportunity to safely catch up with family, friends, travels and experiences you may have missed during the last year. As challenging as the past year-and-a-half was for all of us, it's really put things into perspective and allowed time for reflection about what is most important.

I remain so appreciative of our entire college community. You adapted swiftly to all changing expectations, and pressed forward for the benefit of the college and those we serve.

As much as I'd love to say we're past the worst with the COVID-19 pandemic, simply put, we are not. We're experiencing another increase in persons testing positive for coronavirus and hospitalizations as the highly-infectious delta variant makes its way to Florida. This is another reminder that people who are unvaccinated are at highest risk of becoming ill and infecting others.

If you have not yet received the COVID-19 vaccine, I strongly urge you to visit <u>UF</u>

Health's Screen Test & Protect vaccination

website that has wonderful resources about vaccine safety, how vaccines work, vaccine availability in our area and information about walk-up vaccine appointments.

We now know that the delta variant is 40 to 60 times more transmissible, and is affecting younger populations of people between the ages of 20 and 40. There is also factual evidence that a majority of current COVID-19 related hospitalizations are persons who are unvaccinated.

We absolutely must continue to be diligent with simple methods of preventing virus transmission, including washing hands, using face coverings in all clinical facilities and most importantly, staying home if you feel ill. It can't be said enough that scientific data reflects that people who are fully vaccinated and become infected with the coronavirus are less likely to have severe symptoms, and less likely to be hospitalized or die. Please take care of yourselves and others.



While we continue to juggle the impact and ever-changing scope of the pandemic, we have so much to celebrate as we've persevered forward.

#### **SPRING 2021**

We celebrated the graduation of the DMD Class of 2021 and 61 residents as well as some students from the Class of 2020 <u>during commencement</u> at the Stephen C. O'Connell Center. While different than years past, it was a beautiful event that had the added bonus of seeing everyone – and their families, friends and supporters – in person.

The Florida Dental Convention was also in person this year, and we took a hybrid approach at UFCD by hosting our Academy of Alumni & Friends and Class Leaders meeting on Zoom prior to the start of FDC. We shared many college highlights spanning our education, research, patient care and service missions, and I am proud to share with you on behalf of our Development and Alumni Affairs team that our college received a total of \$3.8 million in gifts and grants this past fiscal year.

Their work is so important and we appreciate the support of our alumni and friends now more than ever.

#### **EXPANDING OUR FAMILY**

We are so proud to welcome nearly 20 new faculty to the UF College of Dentistry family since last summer and leading into this fall. With the talent, expertise and innovation among our diverse group of faculty, the future is very bright for our college. Many exciting things are on the horizon, including our involvement with UF's artificial intelligence initiative. You can read more on

both our new faculty and AI at UFCD in this issue.

#### **ACCREDITATION**

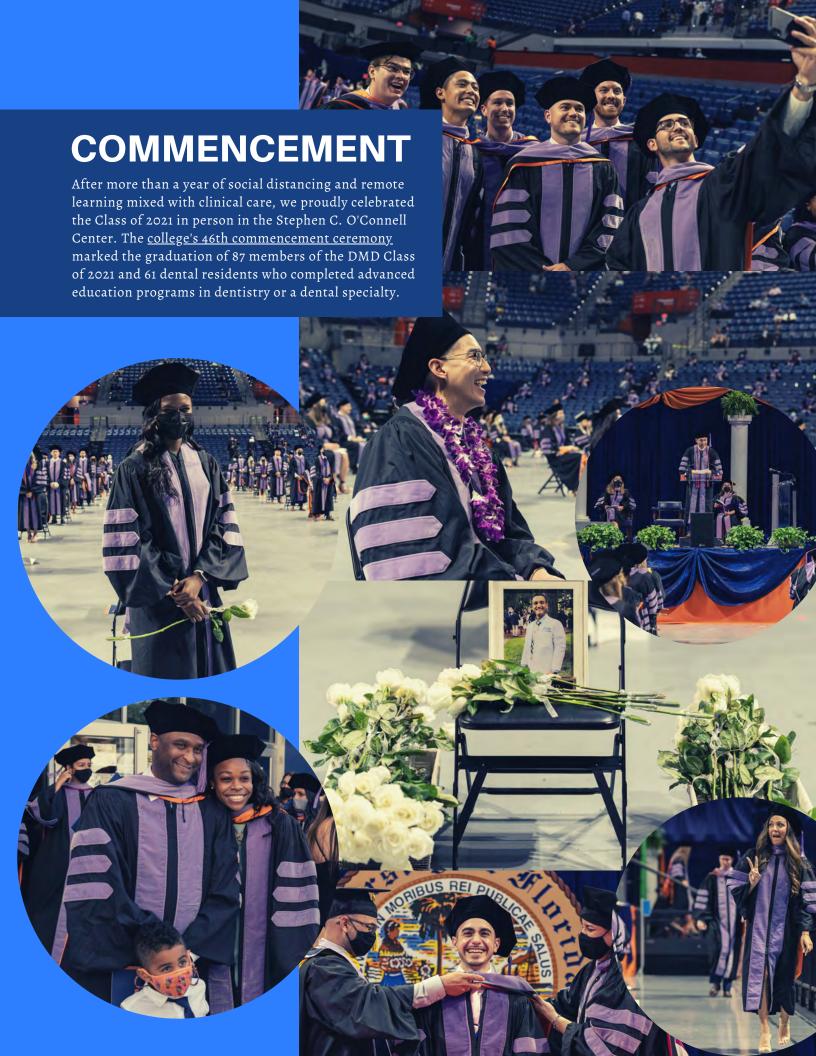
One word that means so much for our college. A great deal of discussion, evaluation and preparation go into <u>accreditation</u>, and we are gearing up for our next accreditation cycle, slated for September 2023.

While it may seem far off, our DMD and specialty programs undergo a thorough process of reflection to prepare a self-study outlining how our educational programs meet, or exceed, <u>standards</u> set by the Council on Dental Accreditation. You will hear much more on accreditation as we prepare to launch the evaluation process soon, beginning with a workgroup that will focus on identifying, collecting and evaluating key metrics and data.

While we continue to enjoy what remains of summer, I am very much looking forward to the start of a new academic year. We are thrilled to welcome over 150 future Gator Dentists to our advanced education and residency programs, and look forward to seeing all 93 members of the DMD Class of 2025 on campus for orientation beginning August 23.

I wish you all the best, and plenty of rest and rejuvenation.

Issere



### **PROMOTIONS & TENURE**



**Associate Professor with** tenure Department of Oral Biology



Dr. Jacqueline Abranchez Dr. Yenişel Cruz-Almeida

**Program Director and Associate Professor with** tenure

Department of Community Dentistry and Behavioral Science



Dr. Luiz Gonzaga

**Clinical Associate Professor** Department of Oral & Maxillofacial Surgery



Dr. Ana Dias Ribeiro

**Director and Clinical Associate** Professor

Department of Restorative Dental Sciences

Congratulations to four University of Florida College of Dentistry faculty who received promotions from the University of Florida provost, or were approved for tenure by the UF Board of Trustees in 2021.

Dr. Jaqueline Abranches, Dr. Yenisel Cruz-Almeida, Dr. Luiz Gonzaga and Dr. Ana Dias Ribeiro were all honored by the University of Florida for their dedication to excellence in their career as educators and scientists, and officially began their new roles on July 1.



### ARTIFICIAL INTELLIGENCE

The University of Florida is making artificial intelligence the centerpiece of a long-term initiative that is combining world-class research infrastructure, cutting-edge research, and a transformational approach to curriculum.

**SO...what exactly is Artificial Intelligence?** Simply put, artificial intelligence leverages computers and machines to mimic the problem-solving and decision-making capabilities of the human mind.

### A few ways we're planning to use Artificial Intelligence at UFCD:

- Utilize AI to decode biological and psychosocial pain interactions, resulting in methods for optimal pain treatment and personalized pain care
- Utilize AI and machine learning approaches to improve patient outcomes and prognoses in patients with pre-malignant and malignant lesions in the oral cavity and jaws
- Use AI neural networks to identify patterns of gene expression associated with the development of oral diseases like periodontal disease, head and neck cancers

"Our eyes have limitations. AI will help overcome those limitations of our vision." ~Dr. Anita Gohel on utilizing AI in Oral & Maxillofacial Radiology to help with diagnoses.



ror\_mod.use\_x = Fals rror\_mod.use\_y = True

od.use\_z = True

AI in Dental Materials

Dr. Rocha recently presented "The use of artificial intelligence and smart dental materials towards the future of dentistry." His lecture shared broad insights on the concept of AI in restorative dentistry and discussed nanotechnology applied to "smart" materials.

More on Rocha's presentation can be found online.



Check out the <u>College of Dentistry's</u>
<u>Artificial Intelligence page</u> online to learn more about the initiative at UF, at the Academic Health Center and in our college.

### SUMMER RESEARCH PROGRAM

The UFCD Summer Research Program (SRP) is in full swing, providing a group of incoming dental students with research experience and the opportunity to form relationships with one another and faculty mentors prior to beginning dental school. Many students continue their research activities during school. The 10-week program includes guest speakers, research projects, abstract preparation and more resources for conducting research.

This year's program wraps up July 23, but the group will present their summer research presentations to the college in the fall, and will represent our college at the 2022 American Association of Dental Research meeting in Atlanta next March.

The group recently participated in an Artificial Intelligence presentation with University of Florida AI trainer Dr. Daniel Maxwell and representatives from NVIDIA, a <u>new UF partner</u> and leader in artificial intelligence and graphics processing units.











Summer Research Program students pictured below, listed l to r:







Logan Marks Mentor: Dr. Seunghee Cha

Richard Ong Mentor: Dr. Bernadett Papp

Kiana Saadatmand Mentor: Dr. Maggie Dasilva

Alec Simonson

Mentor: Dr. Robert Caudle

Mary Nguyen Mentor: Dr. Jacqueline Abranches

Mark Fischer

Mentor: Dr. Luis Martinez

Jenna Stefany

Mentor: Dr. Josephine Esquivel-Upshaw

Romina Homayoun

Mentor: Dr. Mary Ellen Davey

Kyra Martin Mentor: Dr. Jose Lemos

Michelle Patel

Mentor: Dr. John Neubert





### **FLORIDA DENTAL CONVENTION**

We saw many PROUD Gator Dentists and their families in Orlando in June for the Florida Dental Convention. A special thank you to our Dental Ambassadors and the Office of Development and Alumni Affairs for welcoming alumni, friends and visitors at our college's booth each day.

It's Great to be a Gator Dentist!



















# Radiology

Q&A WITH DR. ANITA GOHEL

DIVISION DIRECTOR, ORAL & MAXILLOFACIAL RADIOLOGY



ANITA GOHEL, BDS, PHD

### BREAKING DOWN ORAL & MAXILLOFACIAL RADIOLOGY

**Dr. Gohel**: As Oral & Maxillofacial Radiologists, we have advanced training in interpretation and diagnosis of radiographs and the knowledge of the latest advanced innovative radiographic technology, including 3D imaging, radiation effects on humans, and radiation safety and protection.

### **RADIOLOGY IN ACADEMICS & AT UFCD**

**Dr. Gohel**: We are committed to academic excellence in image-based clinical care.

Our duties include teaching radiographic techniques, radiation safety, appropriate use of radiation and image interpretation to both the pre-doctoral students and the residents. We interpret and provide consultations on a variety of radiographs, which are taken both here and sent to us from private practices via referrals. On a daily basis, diagnosis and interpreting radiographs takes a major portion of our time.

We are on call for UF Health dental radiographic interpretations. For example, if someone comes into the ER with a jaw fracture, the techs will take necessary images and we interpret the images and provide a radiographic report.

Maintaining radiographic quality assurance and radiation protection is also an important part of our profession.

For example, our job is to implement proper radiation safety guidelines to ensure patient radiation exposure is kept to the minimum, establish optimized protocols for diagnostic imaging and evaluate any radiation incident or concerns.

We additionally handle radiology certification for dental assistants, so we offer CE courses to certify them and teach them the digital technology. I always think of these courses as our service to the greater UFCD community.

### **Radiology Faculty**



Dr. Rutvi Vyas | joined UFCD last August



Dr. Mayank Pahadia | will join UFCD this month

### **Radiology Residents**

Learn more about our <u>radiology</u> <u>residents</u> on the college's website.

# Radiology

### **O&A WITH DR. ANITA GOHEL**

DIVISION DIRECTOR, ORAL & MAXILLOFACIAL RADIOLOGY

### WHAT NEEDS MIGHT A RADIOLOGY PATIENT HAVE?

**Dr. Gohel**: We provide patient-centered imaging care with both acquisition and interpretation of the images. Our patients range from common dental diseases such as caries and periodontal disease, to trauma, infection, TMJ disease and jaw lesions, including malignancy.

### A TYPICAL DAY IN RADIOLOGY

**Dr. Gohel**: We generally spend a majority of our day acquiring and interpreting volumetric radiological images and generating radiographic reports for both internal patients and those referred from private practices.

Our residents initially interpret the images and then the faculty review these reports.

We lecture to both dental students and residents. We have dental students rotating in our clinic. We teach imaging techniques and interpretation of both plain as well as cone-beam computed tomography (CBCT) images.

We have weekly radiographic-clinical seminars and literature review as small group sessions.

Our radiology technicians at UFCD are absolutely exceptional and are very skilled in taking both 2D and 3D images.

Once we have interpreted the radiographs, depending on the urgency, we will either call the referring dentist or doctor, or place a note in axiUm for the provider.



**UFCD Dental Radiographers** (l to r): James Anderson, Crystal Prince, Theresa Pendray & Angela McNeal



# Radiology

### **O&A WITH DR. ANITA GOHEL**

DIVISION DIRECTOR, ORAL & MAXILLOFACIAL RADIOLOGY

### YOU'VE BEEN HERE A LITTLE OVER A YEAR, WHAT IS YOUR MISSION FOR THE OMFR DEPARTMENT AT UFCD?

**Dr. Gohel**: My goal is to make our radiology program the best in the country, and I will work hard to achieve it.

When I joined UFCD, I had two immediate short-term goals. One was to improve the quality of our 2D images. There had been concerns over the diagnostic quality of some of our digital radiographs. I had previous experience with these digital sensors and contacted the manufacturer to have a software upgrade installed and we adjusted the exposures for optimal image quality. I also made changes to the radiograph templates in MiPACS to ensure smoother image acquisition.

My other goal was to guide residents to pass Part 1 of the oral and maxillofacial radiology boards. It had been a hurdle for our residents to successfully challenge the boards in the past. I implemented small group sessions and taught radiation physics, protection and biology. This year three of our residents took Part 1 of the exam and they passed, qualifying them for Part 2. For me, that was a major accomplishment.

We now have a structured curriculum for our dental residents, and they additionally excel at radiographic diagnosis as we see a wide variety of cases here at UFCD.

There have been changes to the dental student radiology courses, too. Our students need to be able to use the newer technologies to provide a high standard of care and additional treatment options for the patients. We have increased the time in our didactic curriculum for CBCT imaging protocols and diagnosis. We also provide hands-on experience with these units and imaging softwares to ensure students are comfortable using 3D imaging in their practices.



### RADIOLOGY AND ARTIFICIAL INTELLIGENCE

**Dr. Gohel**: I am very interested in working with AI. We want to be the leaders in using artificial intelligence to enhance diagnosis and patient care.

Our eyes have limitations and AI will help overcome those limitations of our vision. We will be able to see subtle changes that our eyes can't perceive.

That's where we want to use AI to help us, not only in the technique, but in diagnosis and treatment planning for patients. I am very excited about the AI aspect of radiology.

### ON THE RADIOLOGY STAFF AT UFCD

**Dr. Gohel**: Our staff are very skilled and provide patient care for all departments. They are also very involved with teaching our students how to take good diagnostic radiographs.

They are amazing, they are flexible. During COVID-19 and the shutdown, our radiology techs were here full time without any complaints. In addition to adjusting to new infection control guidelines and how we see patients; they ensured patient care, as well as the education of our students, continued.

They make it really, really fun for our students to learn, and I love that.

### WELCOME TO UFCD

Extending a very warm UF College of Dentistry welcome to our new faculty who have joined us since last summer. While the past year has been unconventional in many ways, we have continued to enhance the talent at UFCD and we couldn't be more thrilled for the creative, dedicated and innovative faculty that are part of our family now.



Or. Eric Bauman

Clinical Assistant Professor

Department of Restorative Dental Sciences

Division of Operative Dentistry



Or. Niall Murphy

Research Associate Professor

Department of Orthodontics



Or. Alexandre Cabrera

Clinical Assistant Professor

Department of Restorative Dental Sciences

Division of Prosthodontics



Or. Mayank Pahadia

Clinical Assistant Professor

Department of Oral & Maxillofacial Diagnostic
Sciences Division of Radiology



Or. Téemar Carey.

Clinical Assistant Professor

Department of Pediatric Dentistry



Dr. Allison Sley

Clinical Assistant Professor

Department of Oral & Maxillofacial Surgery



Or. Clinic Cerrud

Clinical Assistant Professor

Department of Endodontics



Or. Stephanni Terza

Clinical Assistant Professor

Department of Restorative Dental Sciences

Division of Operative Dentistry



Or. Varsha Desai

Clinical Assistant Professor

Department of Restorative Dental Sciences

Clinic Director, UF Health Dentistry - Wildlight



Dr. Pedro Antonio Valdés Hernández

Research Assistant Professor

Department of Community Dentistry and

Behavioral Science



Or. Sherif Hosney

Clinical Assistant Professor

Department of Restorative Dental Sciences

Division of Prosthodontics



Or. Rutvi Vyas Clinical Assistant Professor Department of Oral & Maxillofacial Diagnostic Sciences Division of Radiology



Dr. Aliga Johnson

Research Assistant Professor

Department of Community Dentistry and
Behavioral Science



Dr. Alejandro Riveros Walker Research Assistant Scientist Department of Oral Biology



Or. Divakar Karanth

Clinical Associate Professor

Department of Orthodontics



# It's going to take a village.

Whether you are vaccinated or awaiting your turn, *you can help now.* Become a COVID-19 vaccine champion.

Let science — and your heart — be your guide.





Walk-up vaccinations are now available, and we encourage you to do your part to stop the spread of COVID-19, and the contagious delta variant.

We are in the midst of another wave of positive cases, including an influx of hospitalizations in Gainesville and throughout the UF Health system in our state.

UF Health patients and members of the general public who are interested in receiving the vaccine can walk up at either UF Health Pharmacy – Medical Plaza or UF Health Pharmacy – Springhill.

They can also schedule a vaccination through the Florida Department of Health in Alachua County.

More information on vaccine availability, vaccine safety and how vaccines work can be found on <u>UF Health's Screen Test & Protect vaccine website</u>.