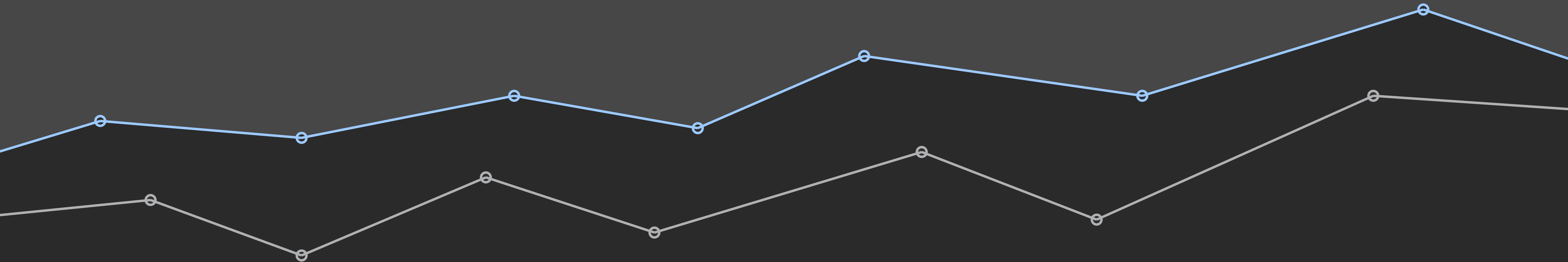
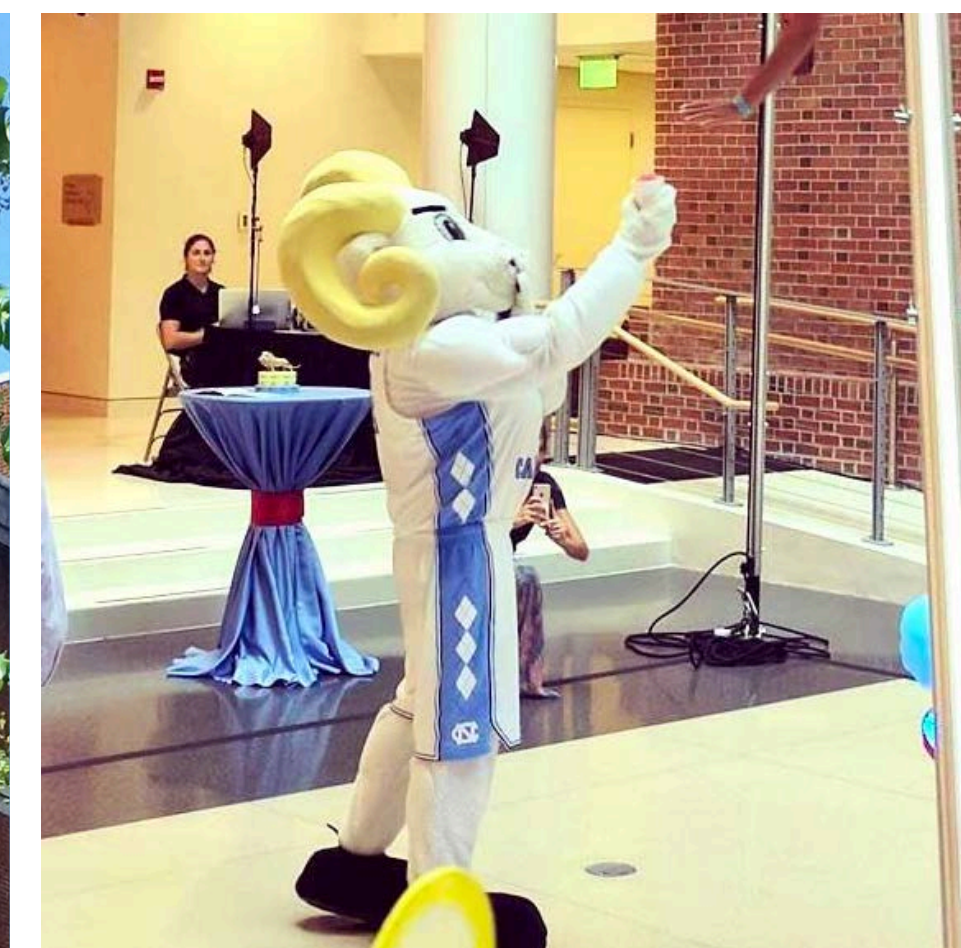
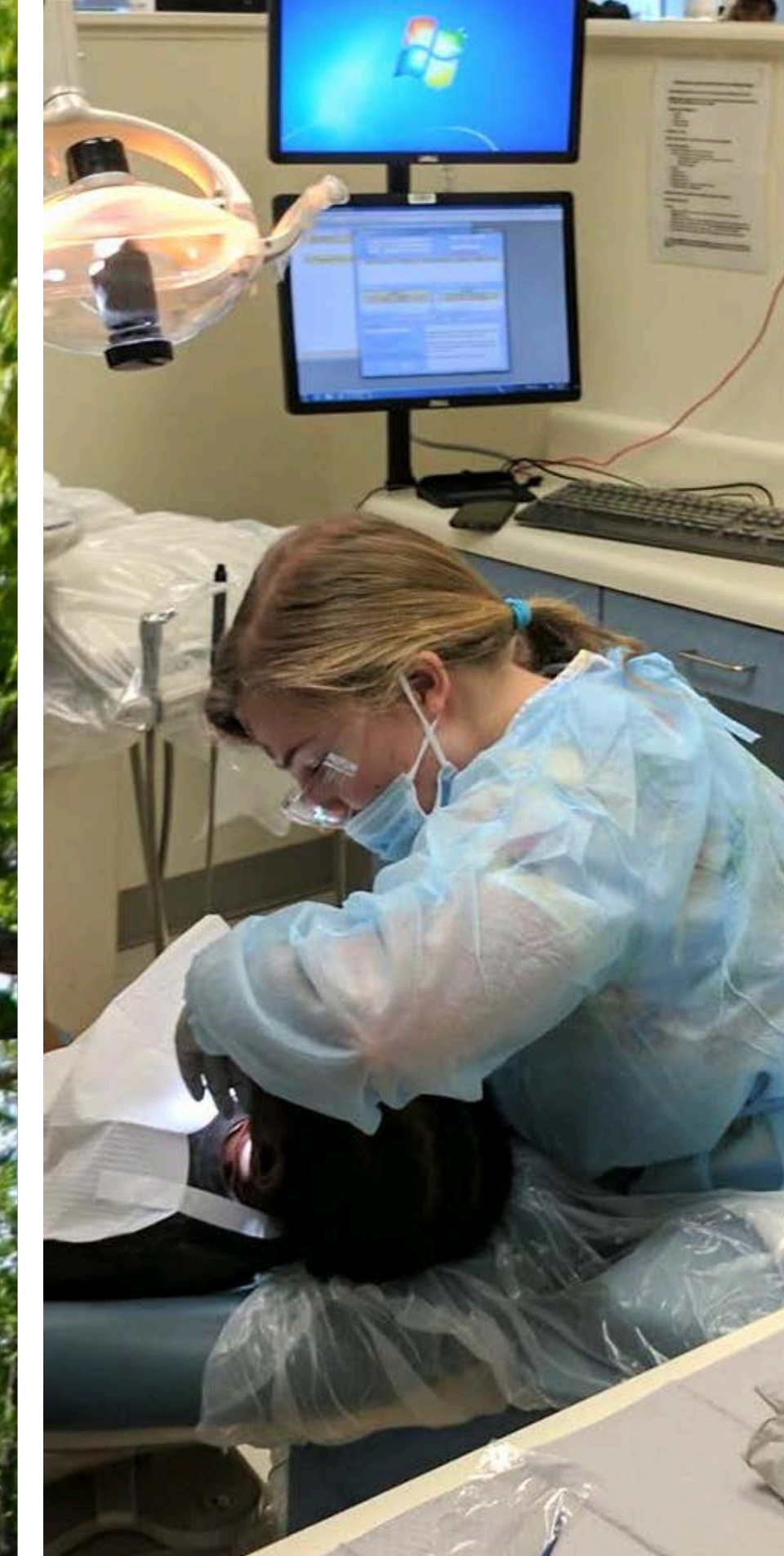
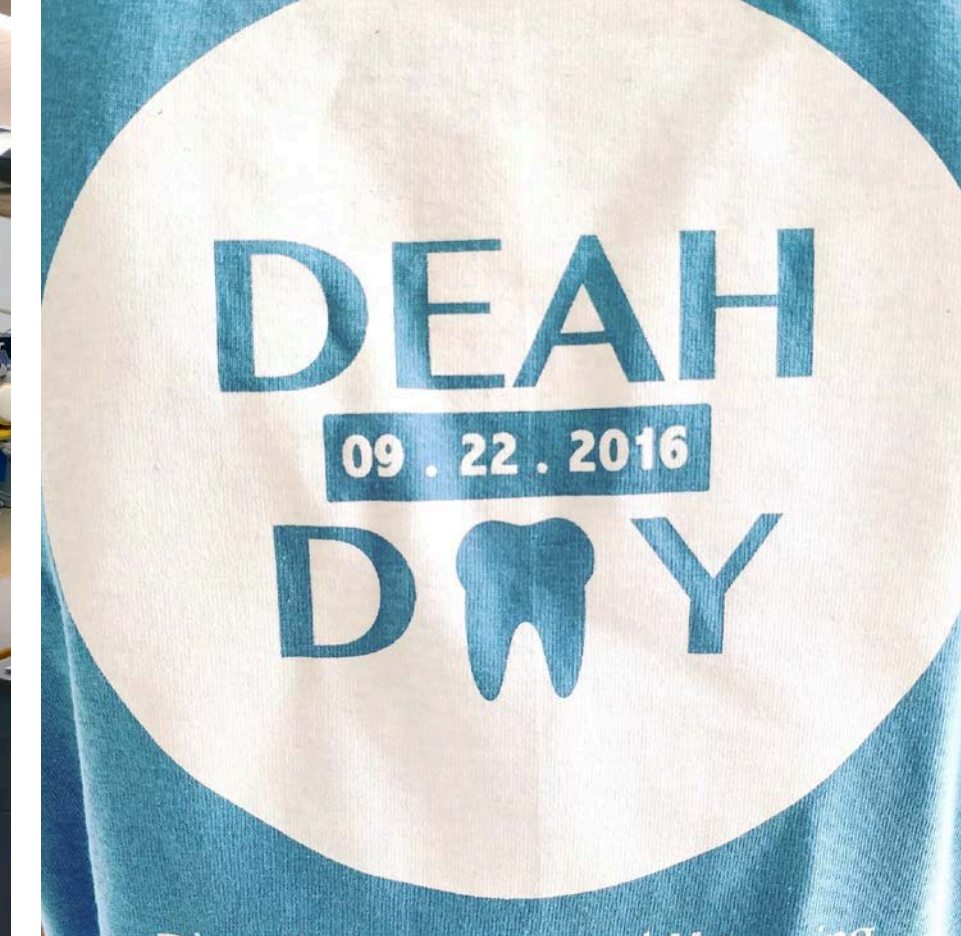


PERIODONTOLOGY LEADING IMPLANT EDUCATION

NOW AND IN THE FUTURE

JONATHAN RESIDE
UNC SCHOOL OF DENTISTRY





THE PAST

THE IMPLANT TEAM

Formed in 1985 by Dean John Stamm to evaluate long-term viability of implants in dentistry and explore introduction of dental implants to UNC

Team met to discuss every implant case, develop surgical and restorative plans, divide patients

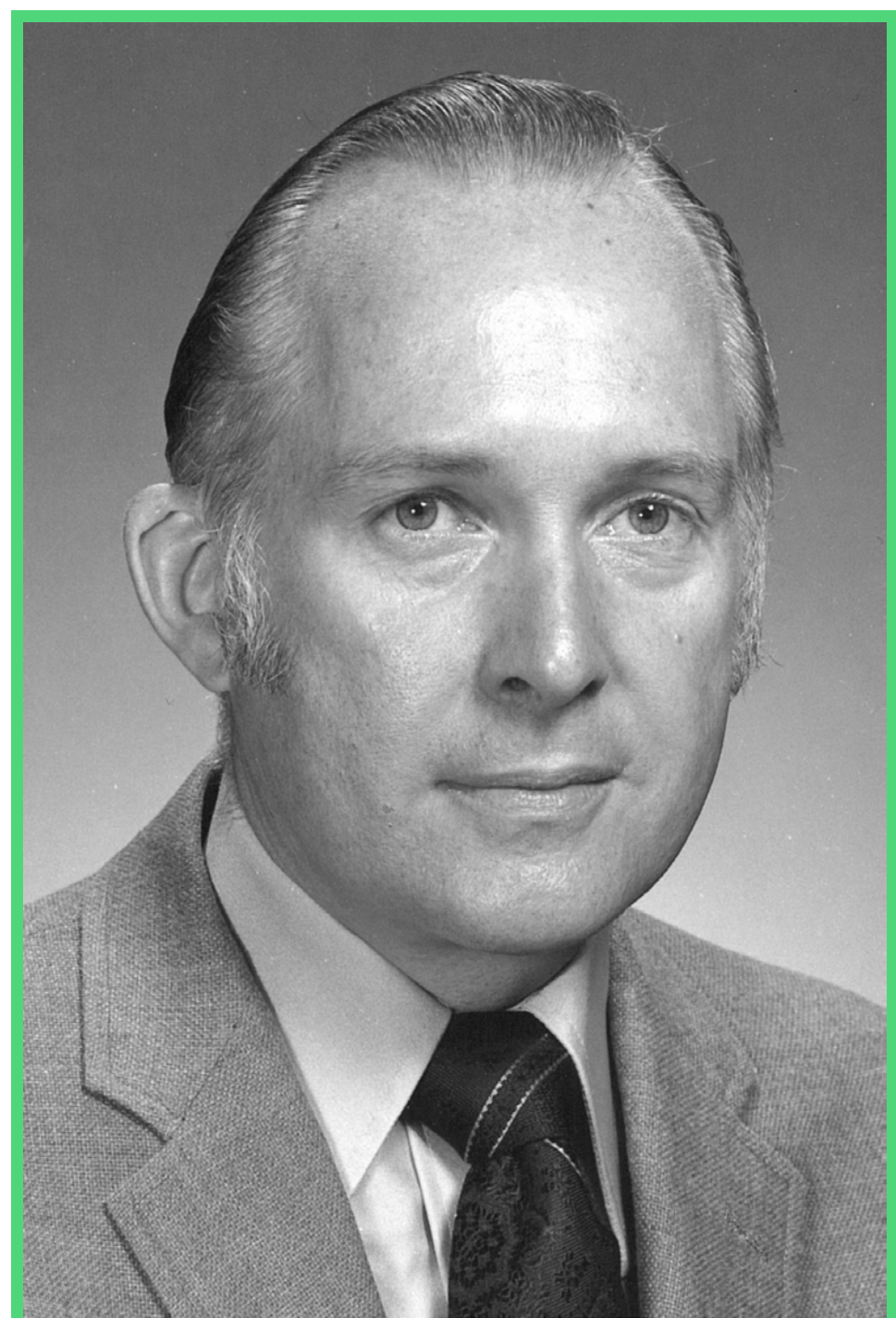
THE PAST

THE IMPLANT TEAM

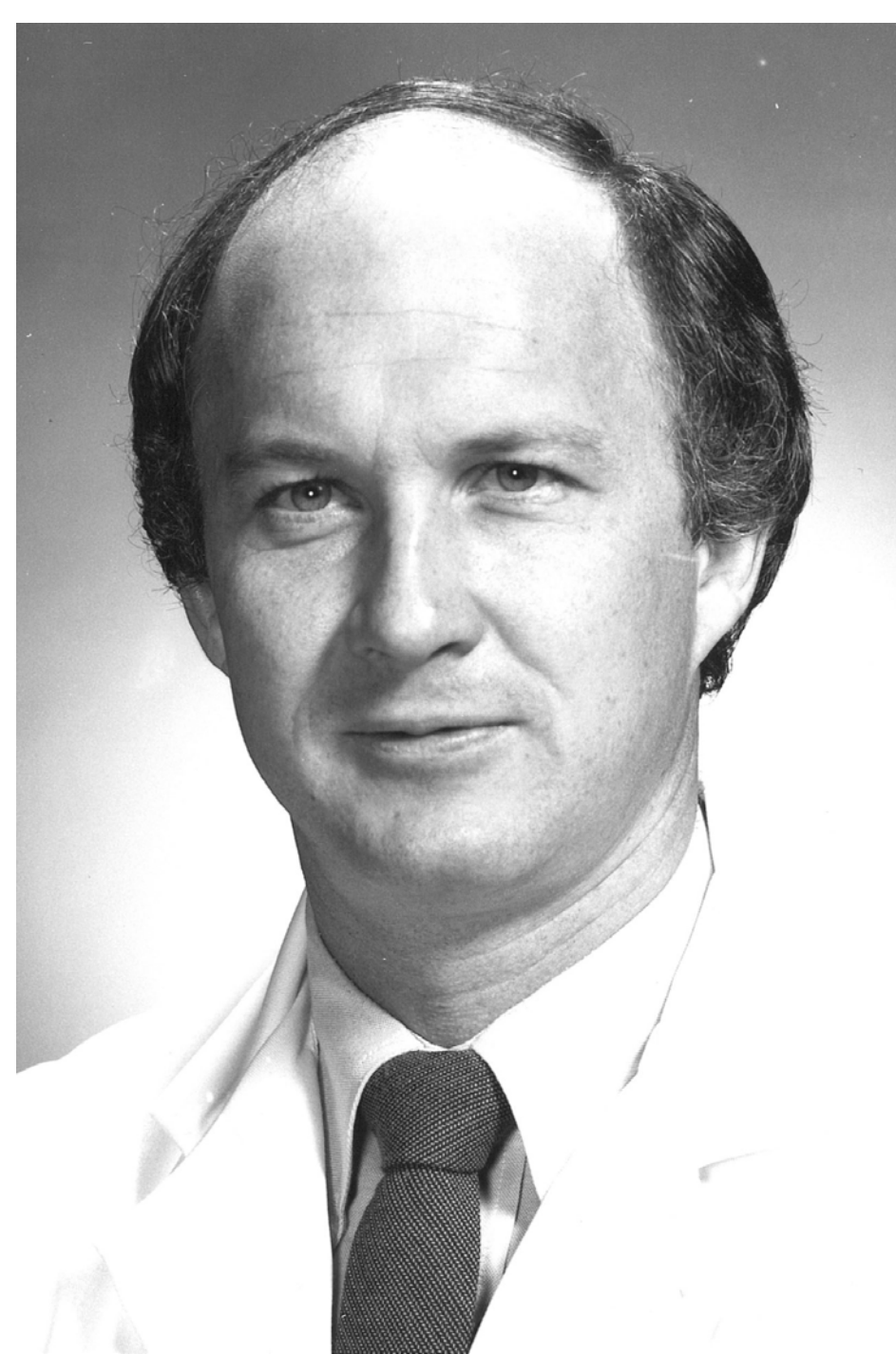
ORAL SURGERY

PERIO

PROSTHODONTICS



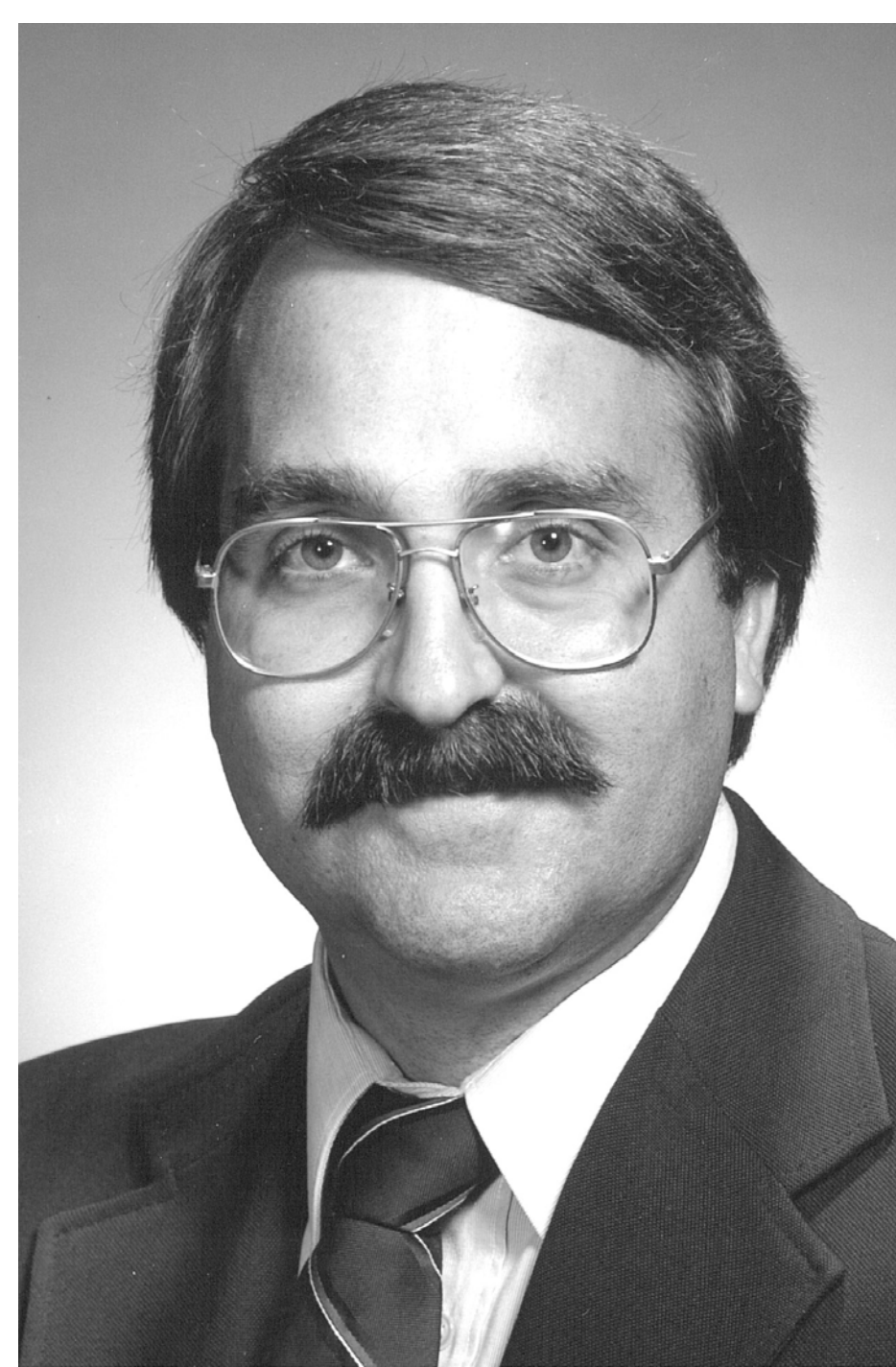
RON BAKER



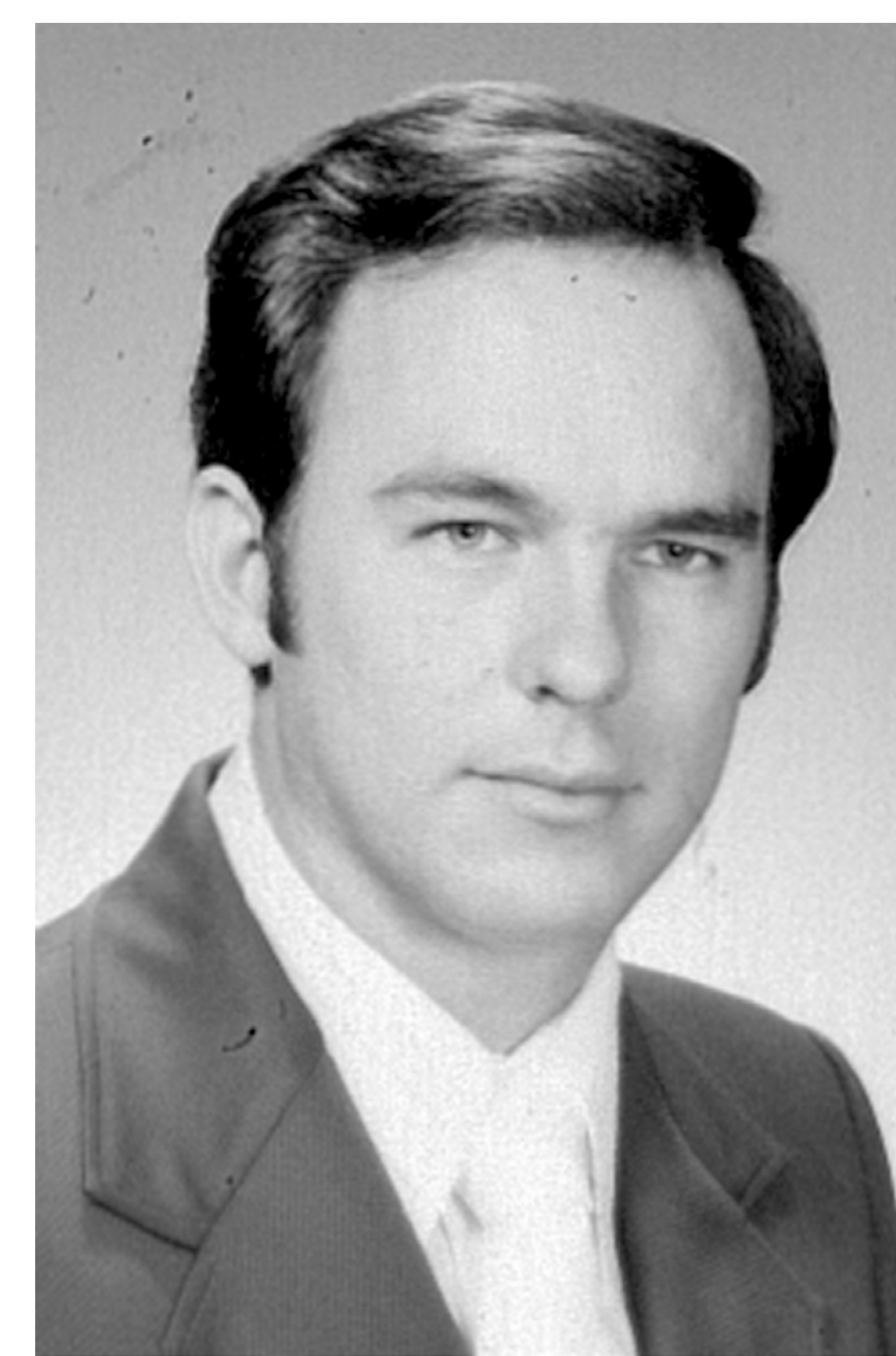
MYRON TUCKER



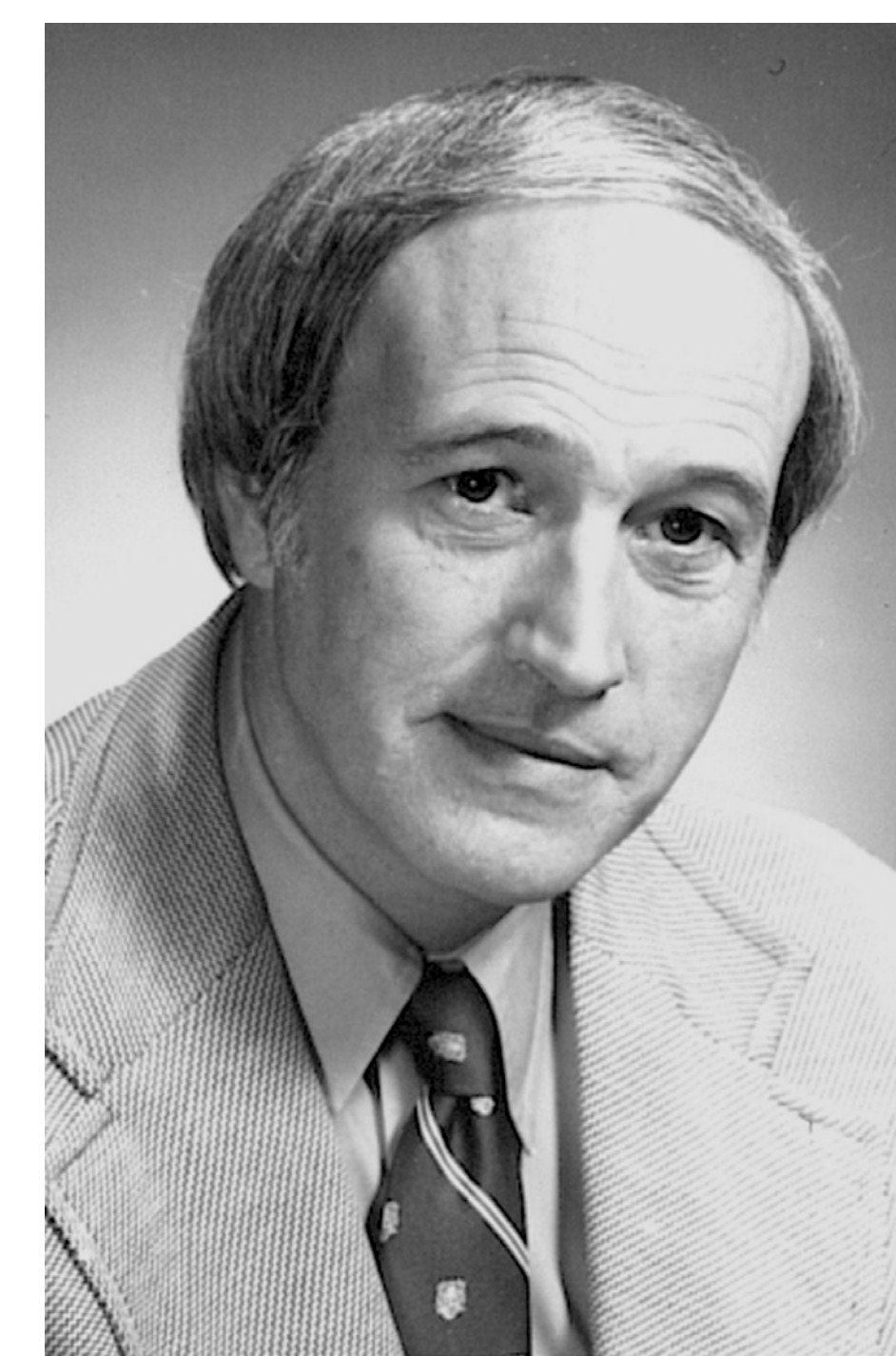
JOHN MORIARTY



DAVE FELTON



RICK JORDAN



DAVID KOTH

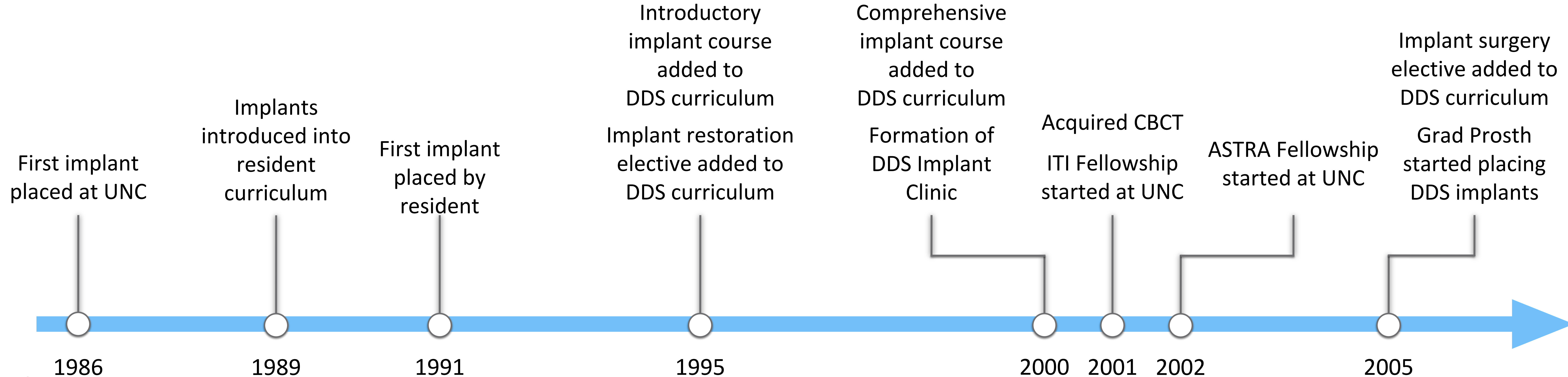


GLENN MINSLEY

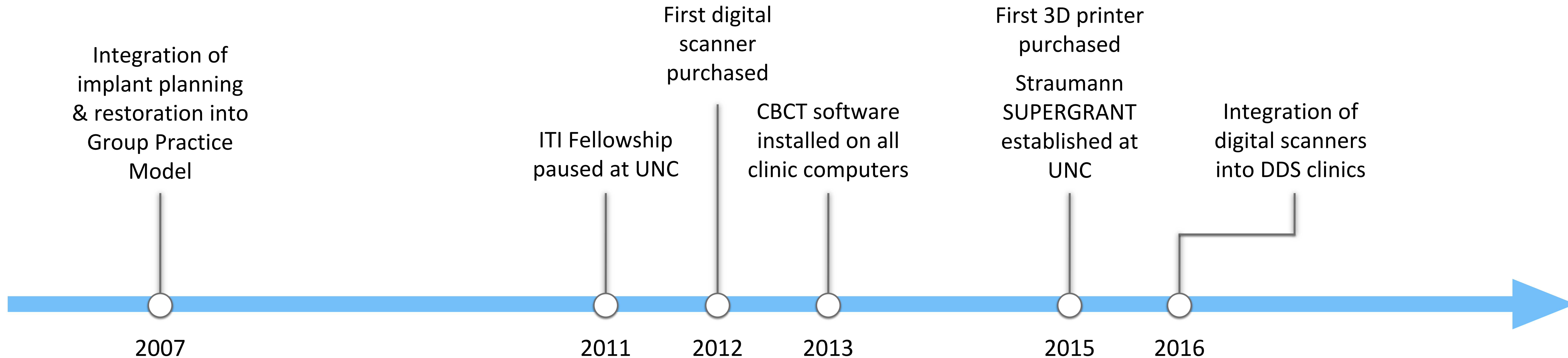


MATT WOOD

OUR JOURNEY



OUR JOURNEY



THE PRESENT

OUR CURRENT IMPLANT TEAM

OMFS



GLENN RESIDE

PERIODONTOLOGY



THIAGO MORELLI



ANTONIO MORETTI



JONATHAN RESIDE

PROSTHODONTICS



RYAN COOK



MATT HOPFENSPERGER

THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION OVERVIEW

Dental Implants (DENT 320)

Department of Periodontology Surgical Implant Assists

Surgical Implant Placement Elective (DENT 454E)

Periodontology Elective (DENT 463E)



THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION DENTAL IMPLANT COURSE

Comprehensive DDS3 course initiated in 2000

Comprehensive overview of dental implant treatment with heavy emphasis on patient evaluation, treatment planning and implant restoration

Combination of didactic lectures and hands-on laboratory exercises

THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION DENTAL IMPLANT COURSE

IMPLANT
BASICS

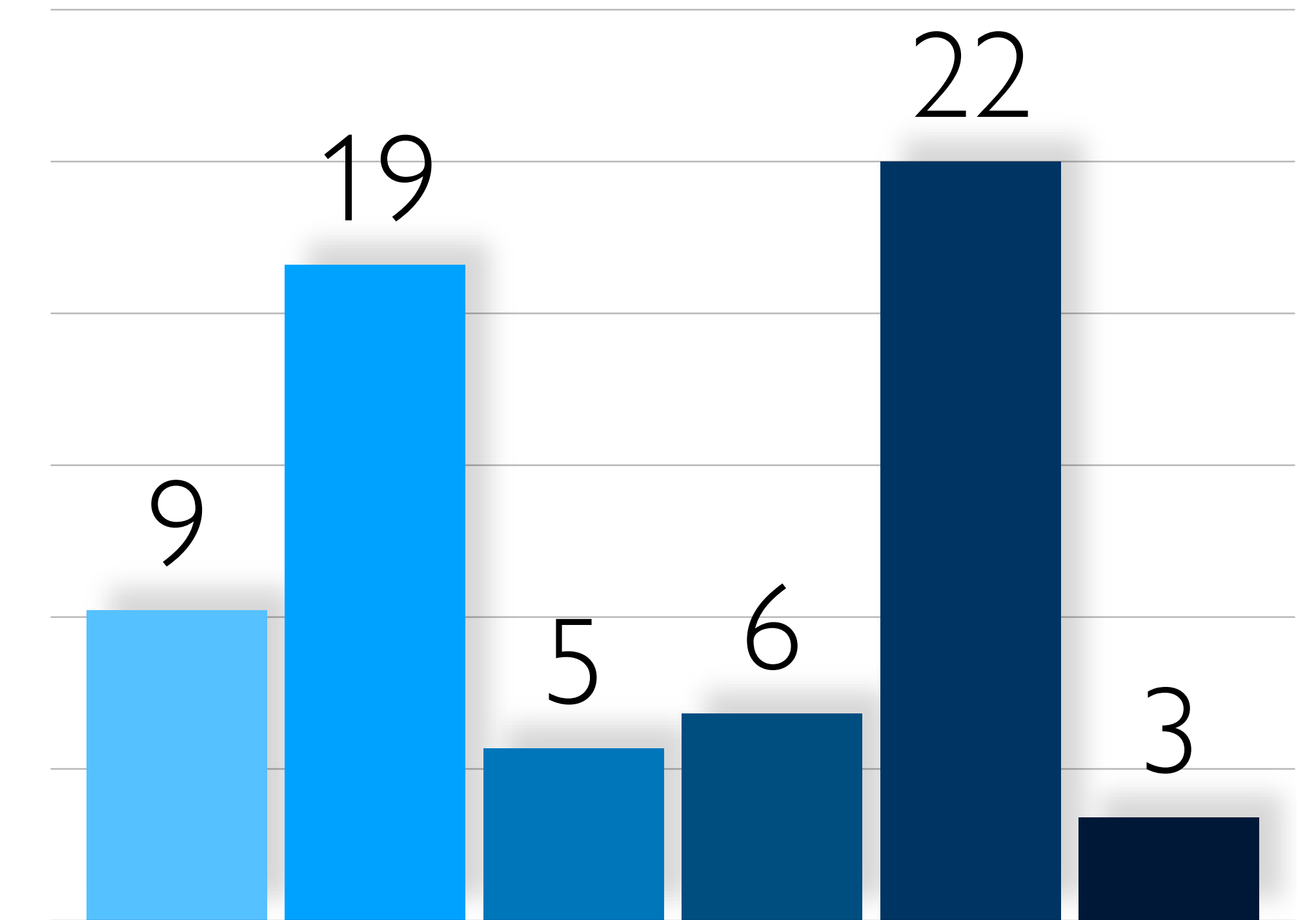
PATIENT EVALUATION
TREATMENT PLANNING

SITE PREPARATION

IMPLANT
SURGERY

IMPLANT
RESTORATION

PERIIMPLANT DISEASES



THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION SURGICAL IMPLANT ASSISTS

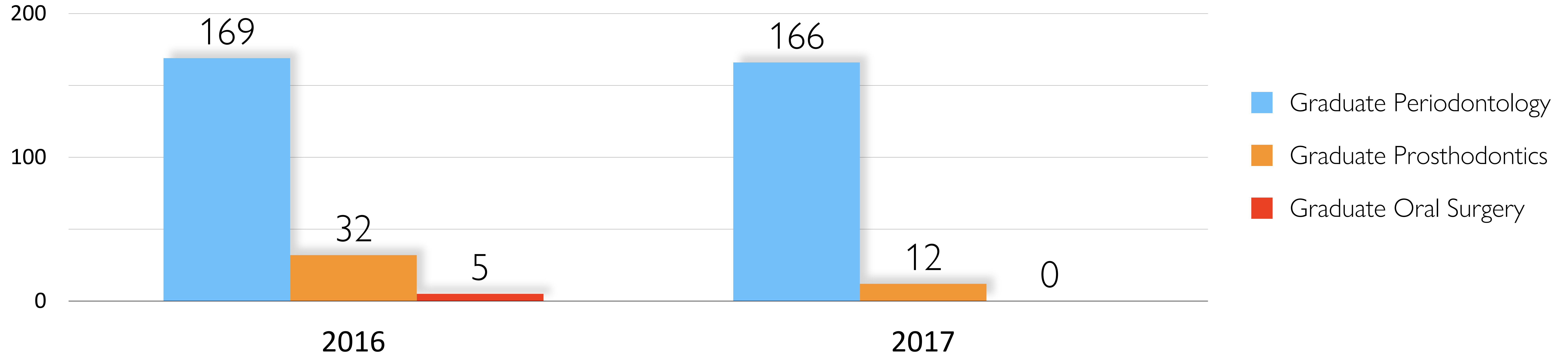
Department of Periodontology Graduation Requirement

Must assist with 2 separate surgical implant placement procedures

May be completed in Periodontology, Prosthodontics, or Oral & Maxillofacial Surgery Graduate Clinics

THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION SURGICAL IMPLANT ASSISTS



THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION IMPLANT SURGERY ELECTIVE

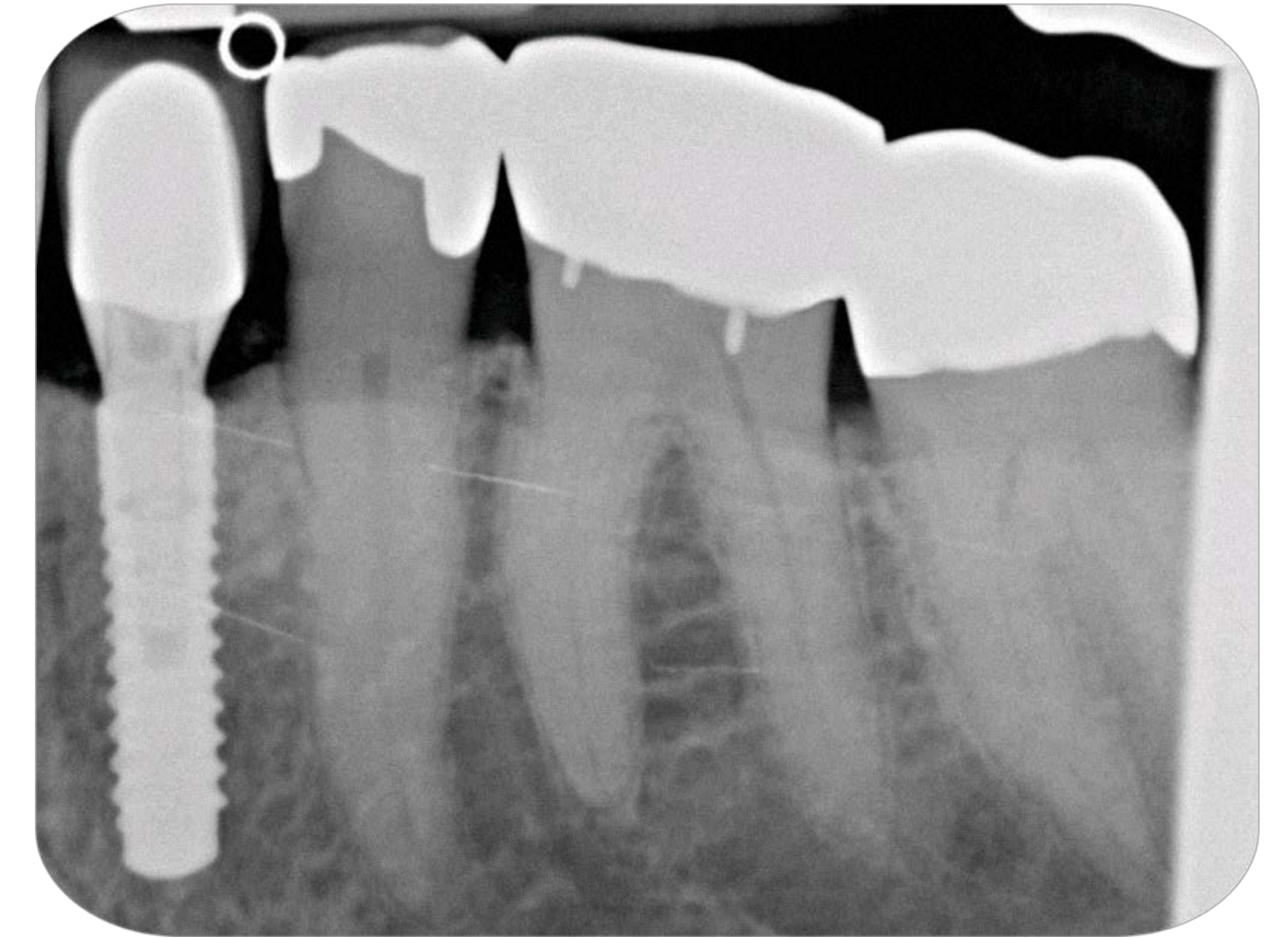
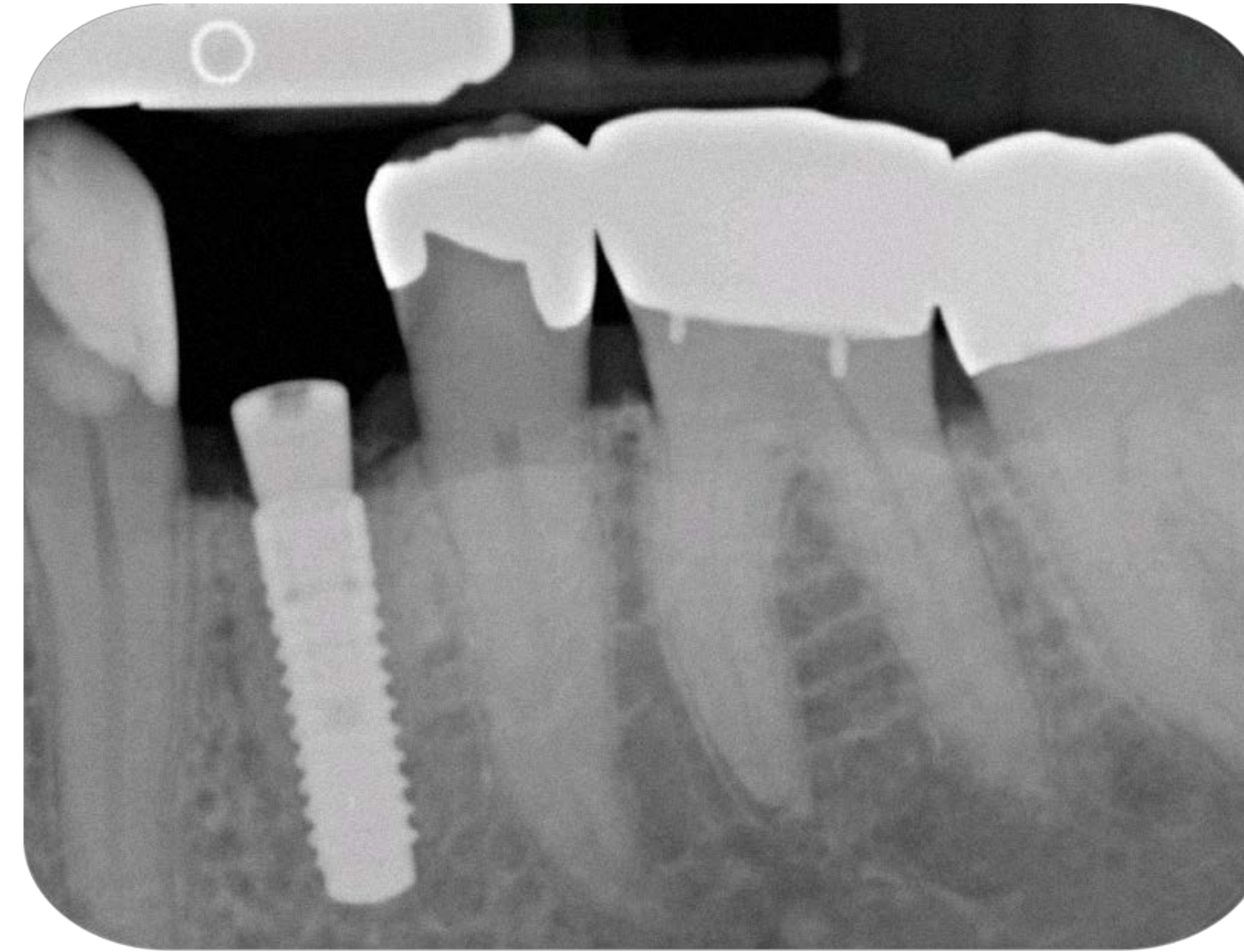
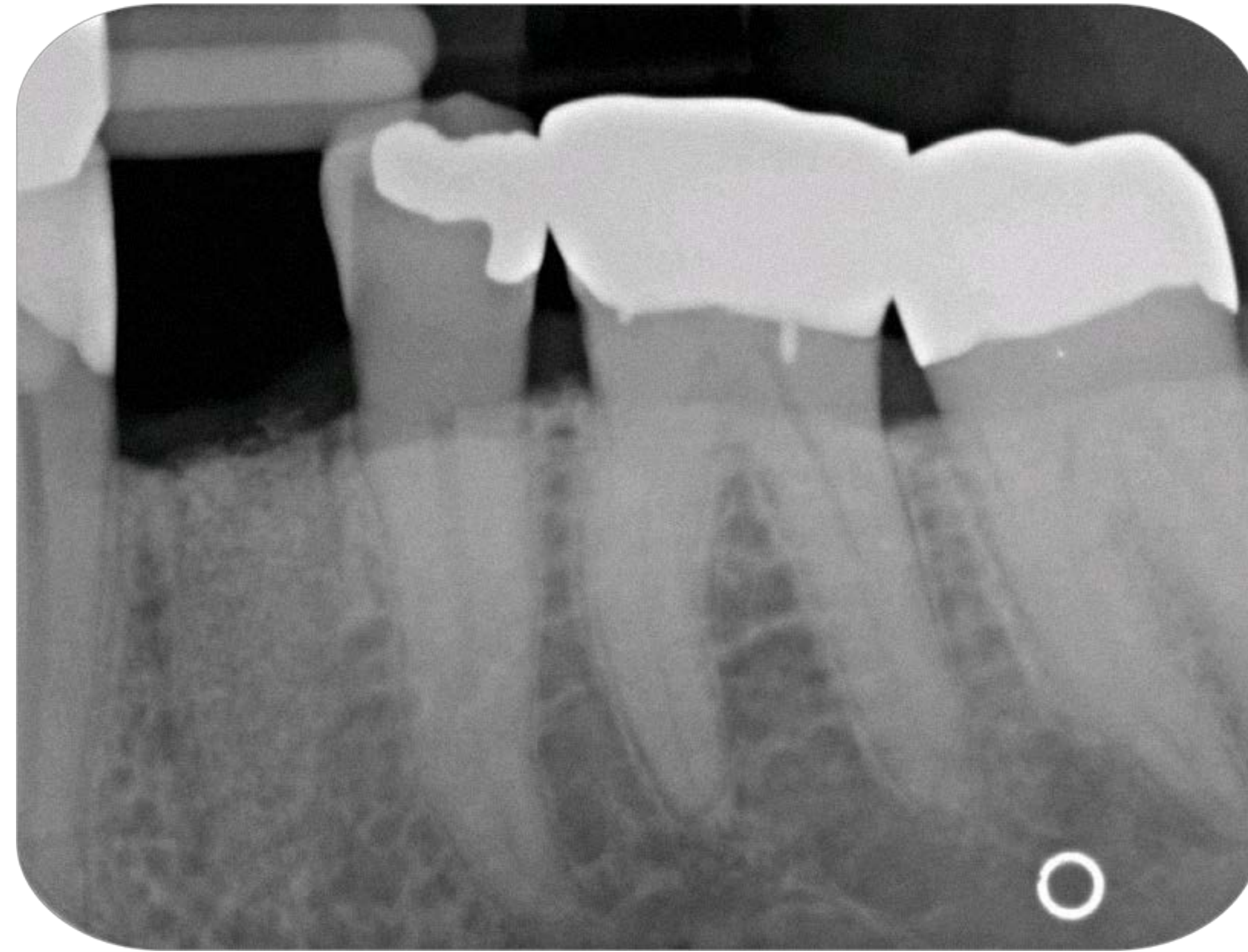
DDS4 course initiated in 2005

Additional didactic instruction in patient evaluation, treatment planning, implant surgeries

One-on-one surgeries completed with faculty on Implant Team

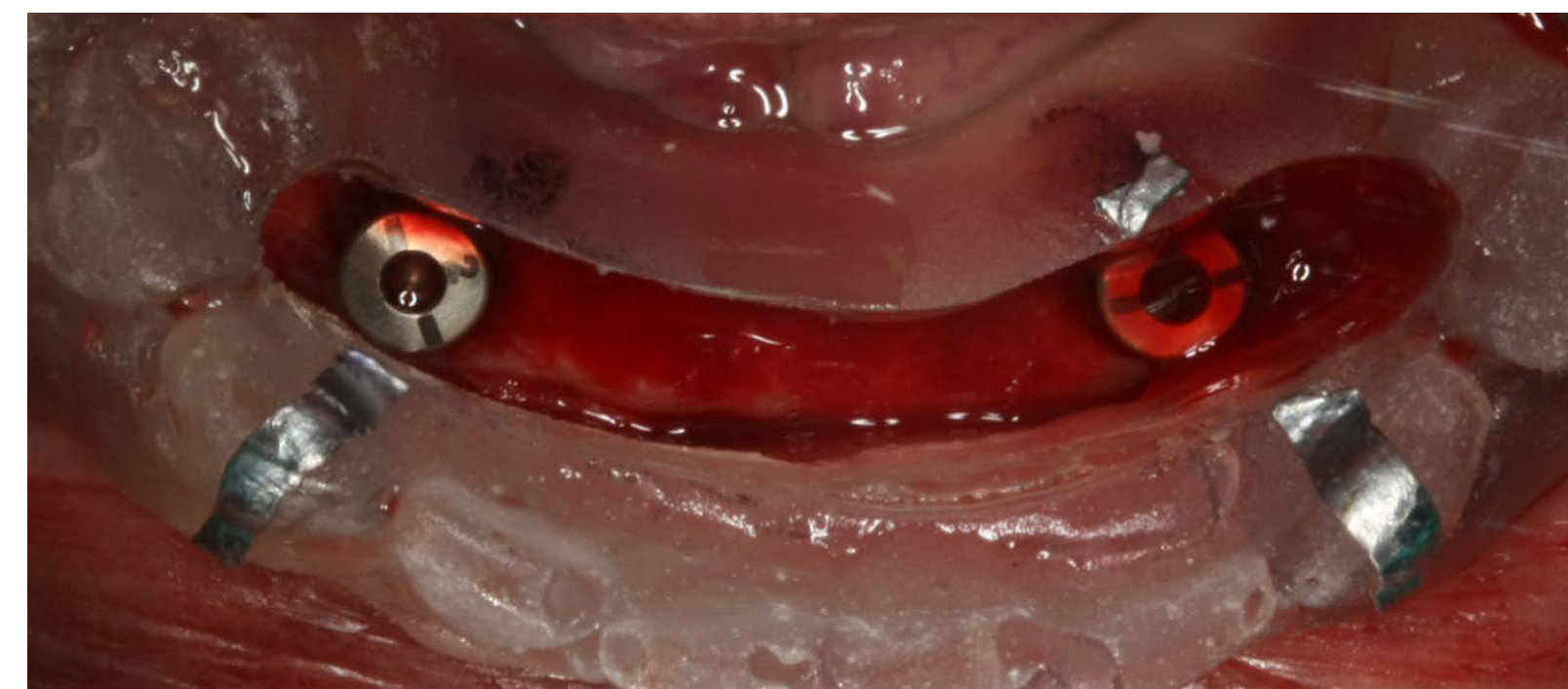
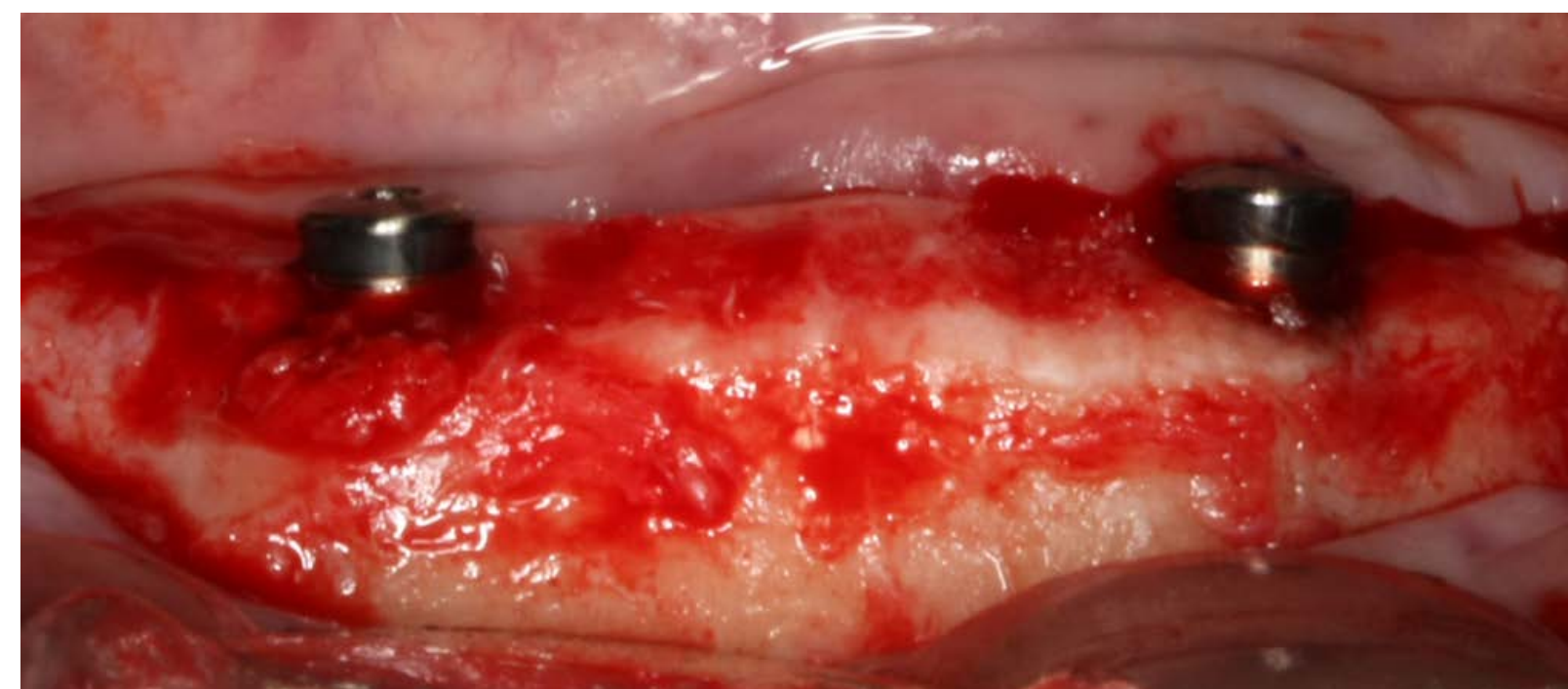
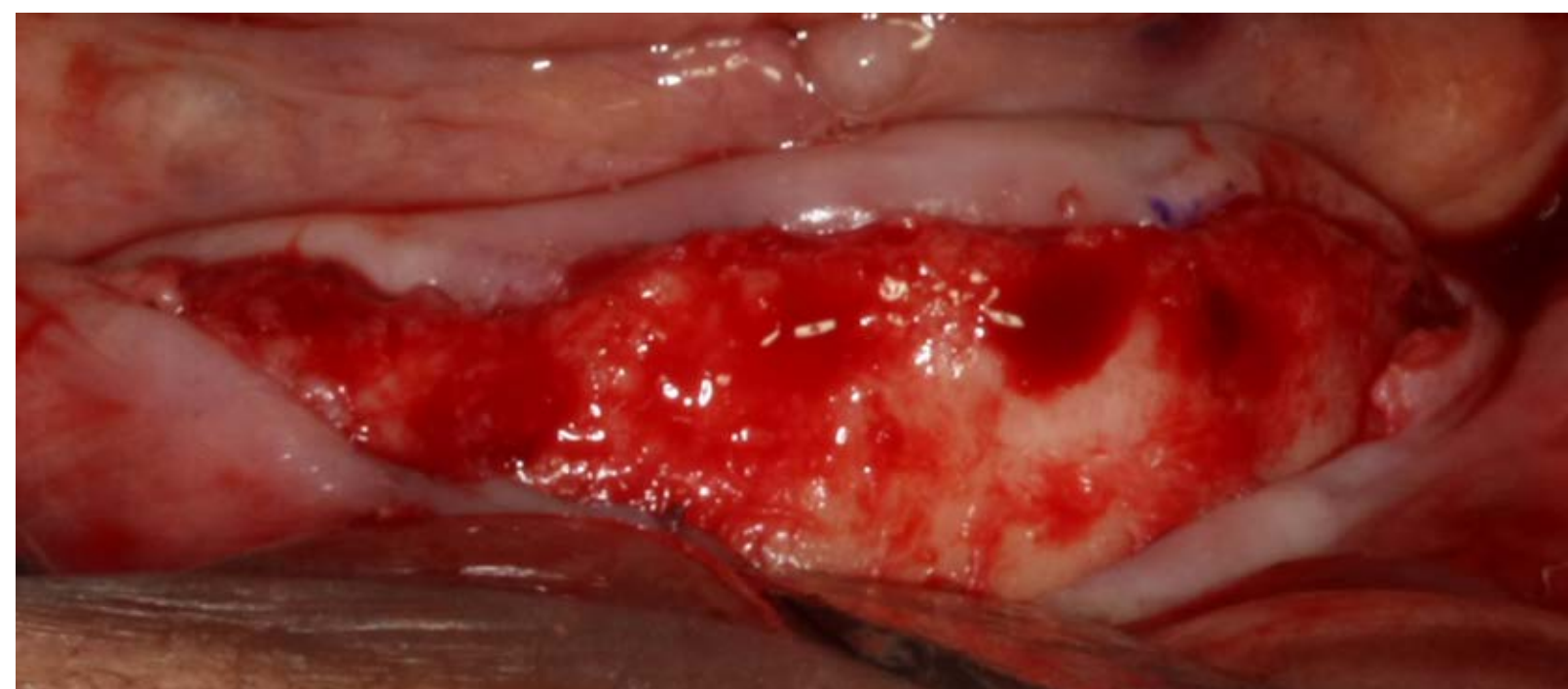
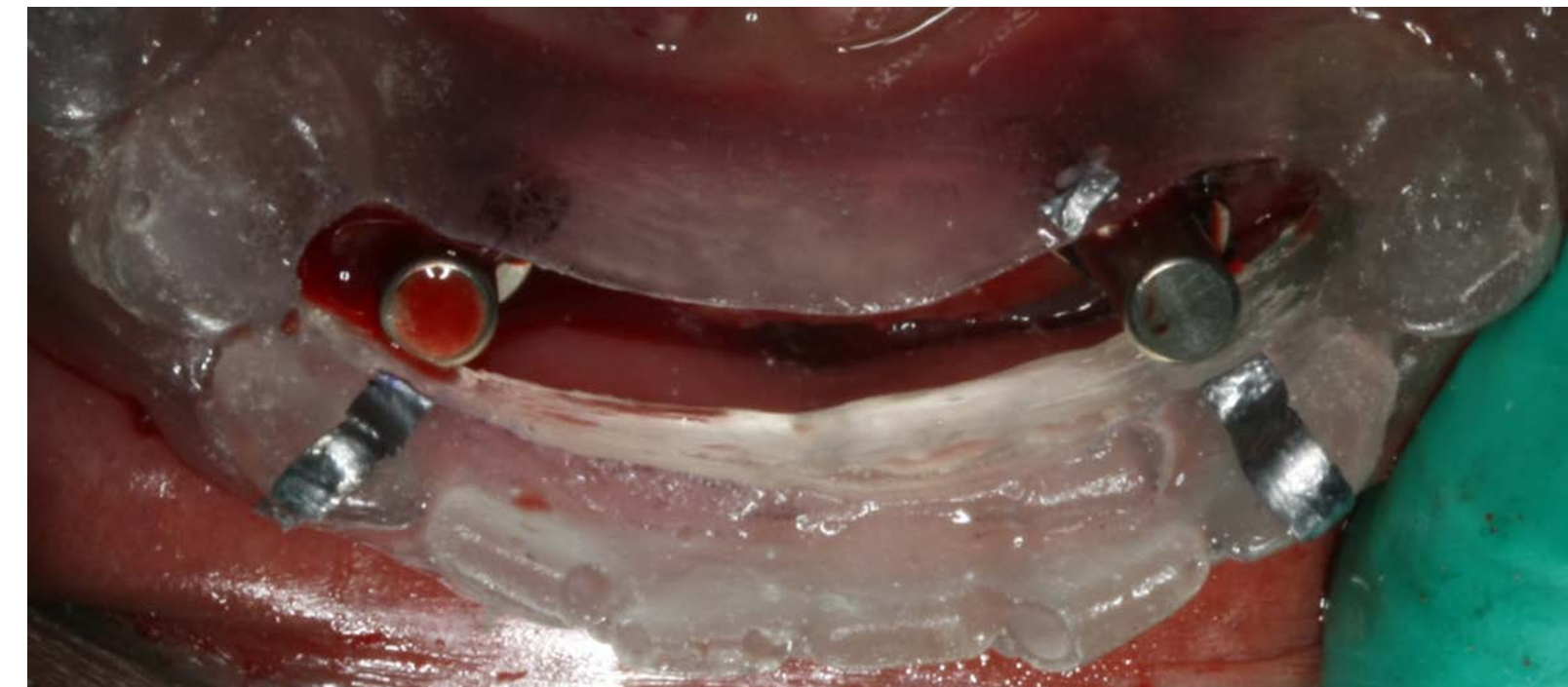
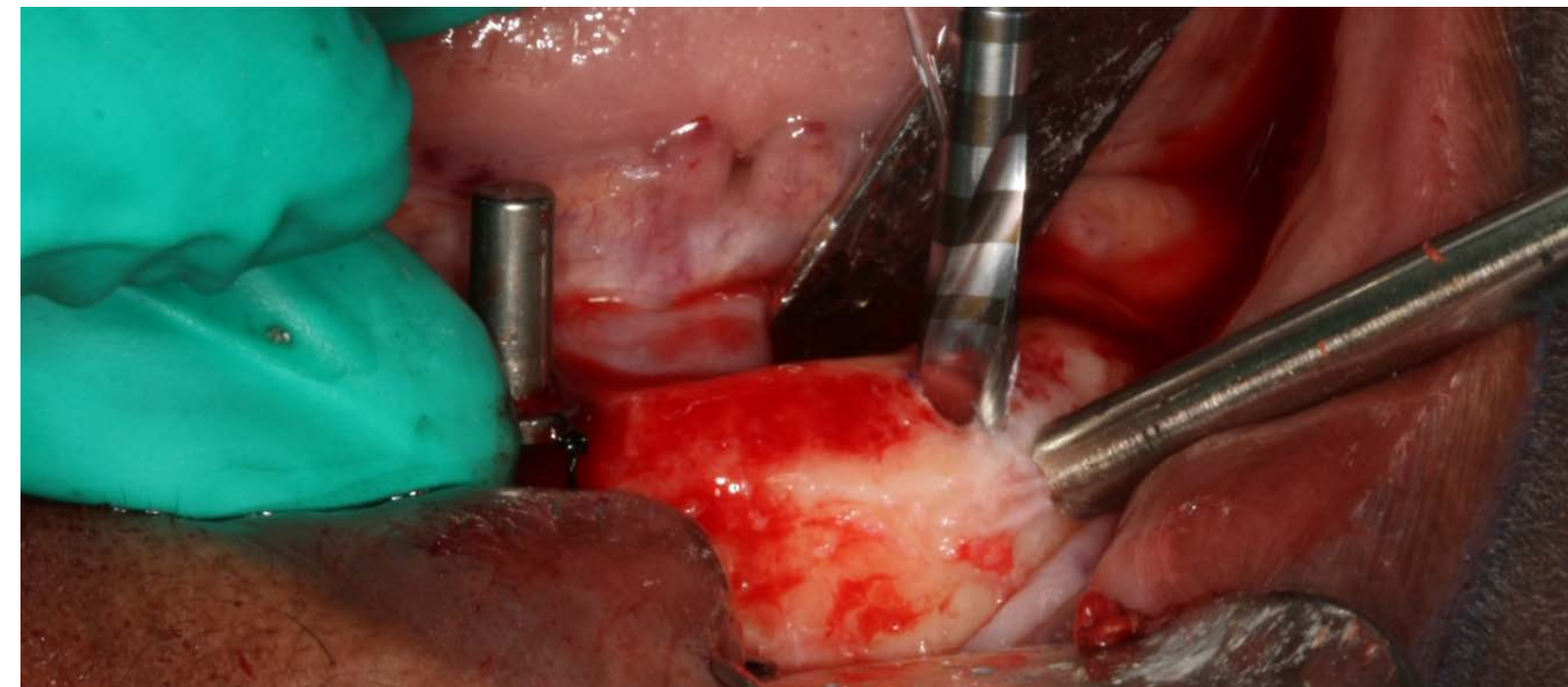
THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION IMPLANT SURGERY ELECTIVE



THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION IMPLANT SURGERY ELECTIVE



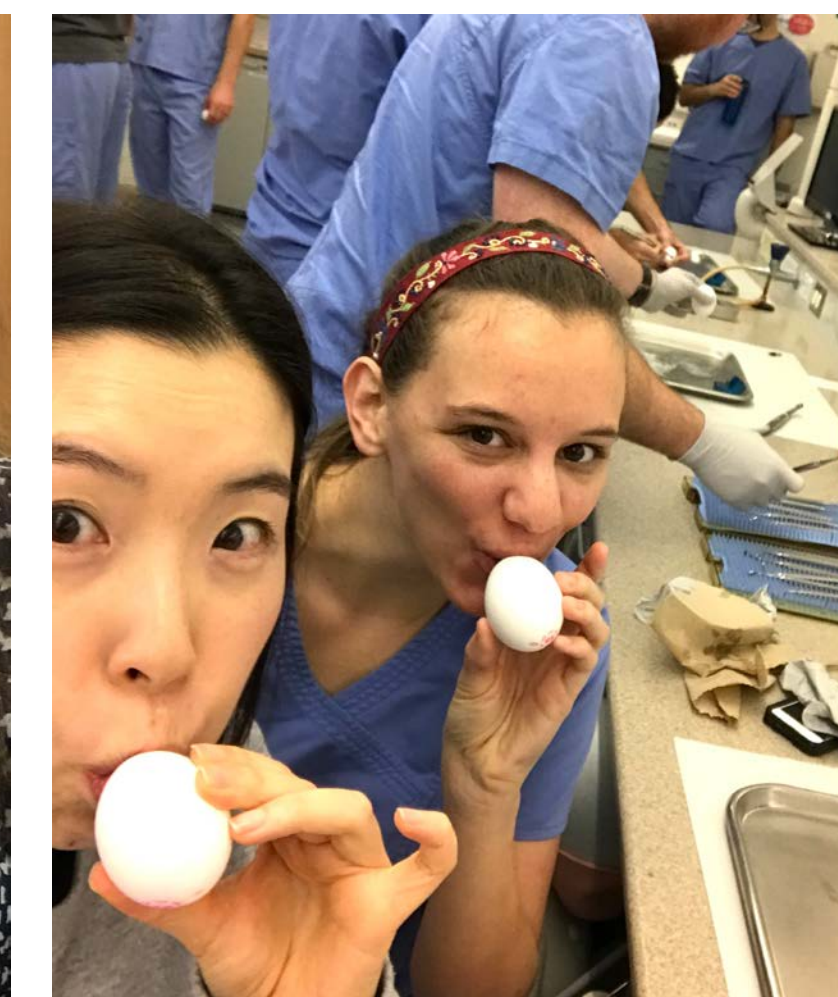
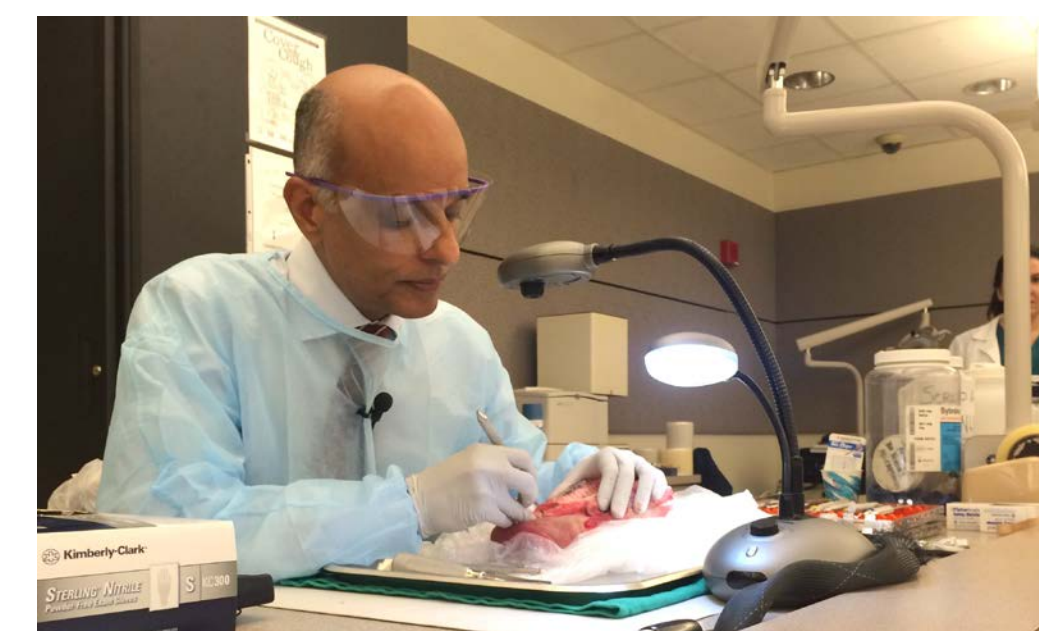
THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION IMPLANT SURGERY ELECTIVE



THE PRESENT

OUR DDS STUDENT IMPLANT EDUCATION PERIODONTOLOGY ELECTIVE



THE PRESENT

OUR **RESIDENT** IMPLANT EDUCATION OVERVIEW

Introduction to Dental Implants (PERI 890)

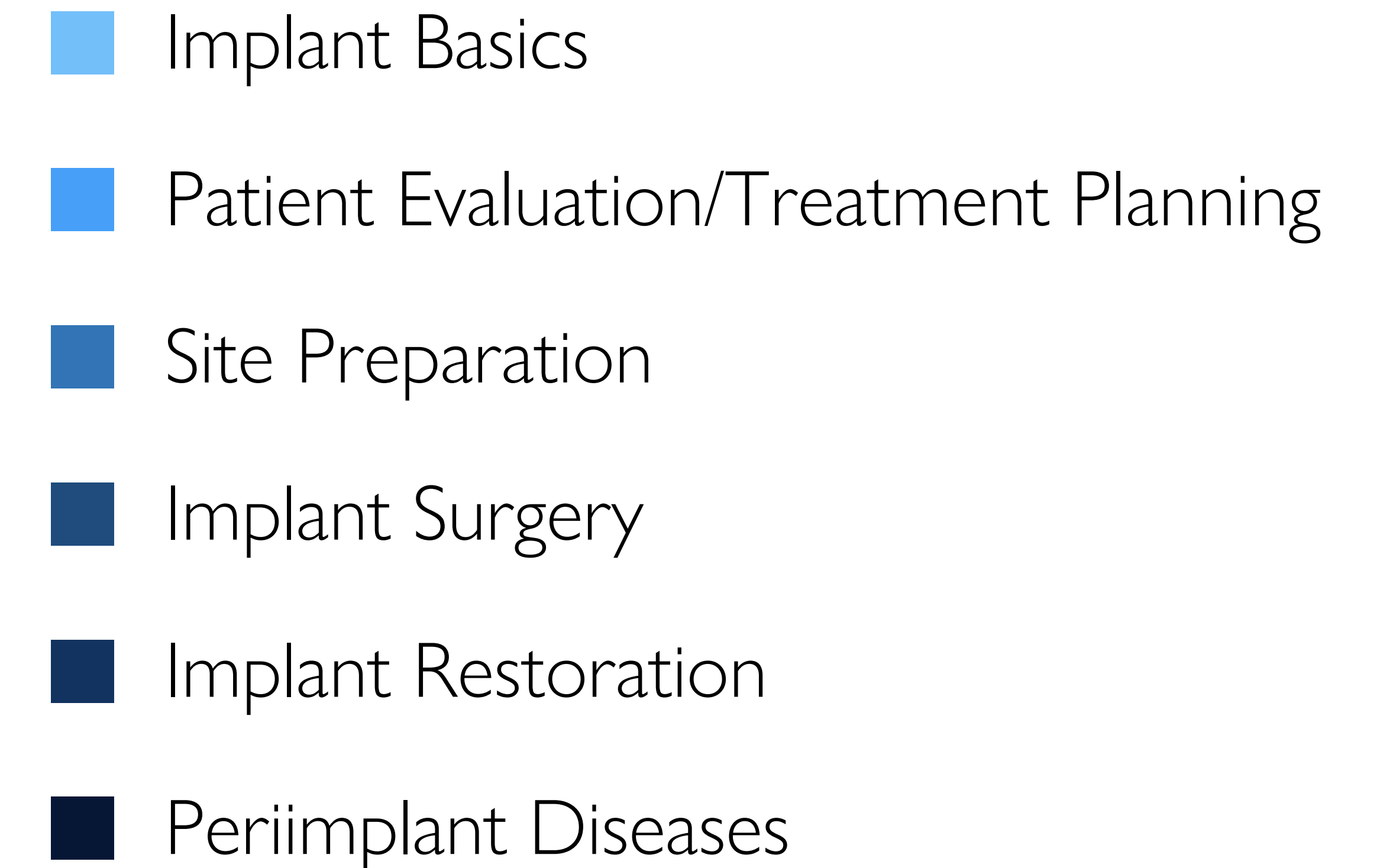
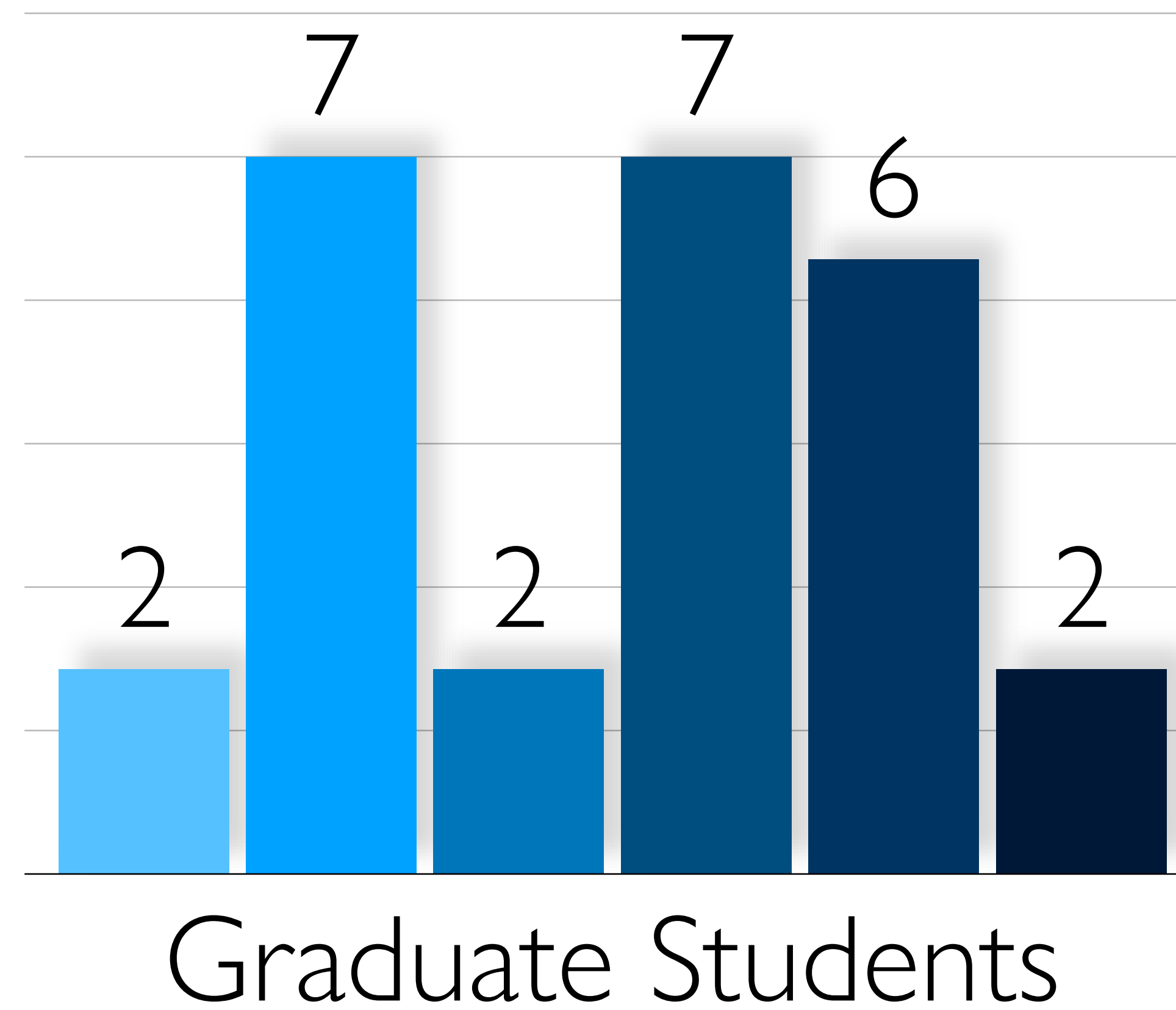
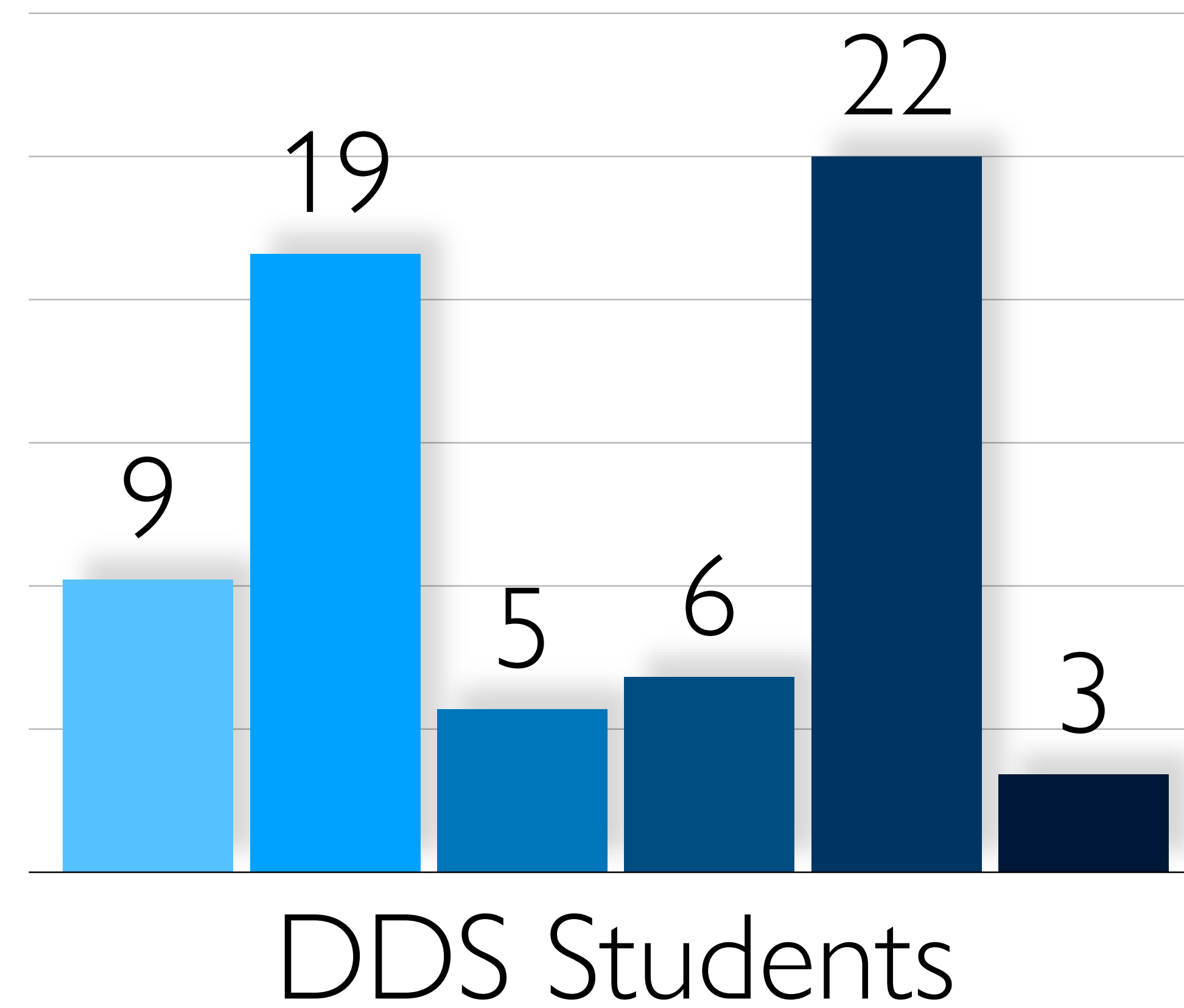
Clinical Implant Complications (PERI 891)

Seminar in Dental Implantology (PERI 762)



THE PRESENT

OUR **RESIDENT** IMPLANT EDUCATION DENTAL IMPLANT COURSE



THE PRESENT

OUR **RESIDENT** IMPLANT EDUCATION IMPLANT COMPLICATIONS COURSE

Case presentation-based discussion regarding surgical and prosthetic implant complications

Alternating presentations between Graduate Periodontology & Graduate Prosthodontics



THE PRESENT

OUR **RESIDENT** IMPLANT EDUCATION IMPLANT LITERATURE REVIEW (PERIO)

Graduate Periodontology Resident course

Literature review dedicated to classic and contemporary literature for surgical dental implant therapy

Other Graduate Programs have dental implants incorporated into existing literature reviews

THE PRESENT

OUR DDS STUDENT CLINICS SURGERY REFERRAL PROCESS

Prior to surgical assignment, students must ...

- complete diagnostic wax-up
- fabricate radiographic & surgical guides
- obtain CBCT
- plan case in SimPlant
- complete planning worksheet

UNC PreDoc Dental Implant Surgical Assignment Form 1

Implant Surgical Assignment Form:

This form is required to obtain assignment of a surgical resident for procedures related to and including surgical placement of dental implants. Students should complete this form prior to requesting a surgical assignment.

Proper case selection, treatment planning, communication, organization, and attention to detail will provide a more successful result. Keep an open mind during the learning process!

Information:

Patient Name: _____ Date of Birth: _____ Record No.: _____

Student Name: _____ Student Number: _____

Implant Site(s): _____ Planned Restoration: _____

Significant factors to be addressed:

- Control phase required: ☐ yes ☐ no _____
- Site development required: ☐ yes ☐ no _____
 - Extraction required for staged placement: ☐ yes ☐ no _____
 - Site preservation required: ☐ yes ☐ no _____
 - Staged GBR grafting required: ☐ yes ☐ no _____
 - Staged sinus grafting required: ☐ yes ☐ no _____
 - Staged soft tissue grafting required: ☐ yes ☐ no _____
 - Pre-surgical orthodontics required: ☐ yes ☐ no _____
 - Endodontics required on adjacent tooth: ☐ yes ☐ no _____
 - Periodontal therapy required: ☐ yes ☐ no _____
- Procedures required at time of implant placement: ☐ yes ☐ no _____
 - Extraction required for immediate placement: ☐ yes ☐ no _____
 - Simultaneous bone augmentation required: ☐ yes ☐ no _____
 - Osteotome sinus lift required: ☐ yes ☐ no _____
 - Simultaneous soft tissue grafting required: ☐ yes ☐ no _____
- Significant history:
 - Significant medical history:
Explain: _____

 - Significant dental history/plan:
Explain: _____

University of North Carolina School of Dentistry Pre-doctoral Implant Program © - updated Nov 2015

UNC PreDoc Dental Implant Surgical Assignment Form 2

Requirements for Implant Surgical Assignment:

- ☐ » Completed implant surgical assignment form (this document)
- ☐ » Mounted diagnostic casts
- ☐ Diagnostic wax-up or set-up (denture completed for overdenture cases)
- ☐ Treatment plan approved and signed
- ☐ » Appropriate radiographic/surgical template or denture duplication
- ☐ CBCT scan completed
- ☐ Signed implant surgery assignment note in EPR
- ☐ » SAC Classification: Surgical _____ Restorative _____
- ☐ Signed implant restorative consent form (surgical consent to be completed by surgeon)
- ☐ » Case plan utilizing SimPlant software (find D:COM files @ Start → Run → [\dentistry1](#) → then copy patient folder and paste it into C:DentalData → Open the files through SimPlant)
- ☐ » Print-outs of significant EPR CBCT and/or SimPlant views (2 copies)

Group leader or deputy signature: _____

Existing Graduate Resident:

Patient is currently under active treatment with graduate resident: ☐ yes ☐ no

- Graduate Department: _____
- Specific Resident: _____
- Procedure(s): _____

Surgical Assignment (be prepared with » items above):

- ☐ Graduate Oral Surgery
- ☐ Graduate Periodontics
- ☐ Graduate Prosthodontics
- ☐ Astra Implant Fellow
- ☐ Straumann Implant Fellow
- ☐ Specific Resident: _____
- ☐ Other Comments: _____

Dr. Hopfensperger signature: _____

University of North Carolina School of Dentistry Pre-doctoral Implant Program © - updated Nov 2015

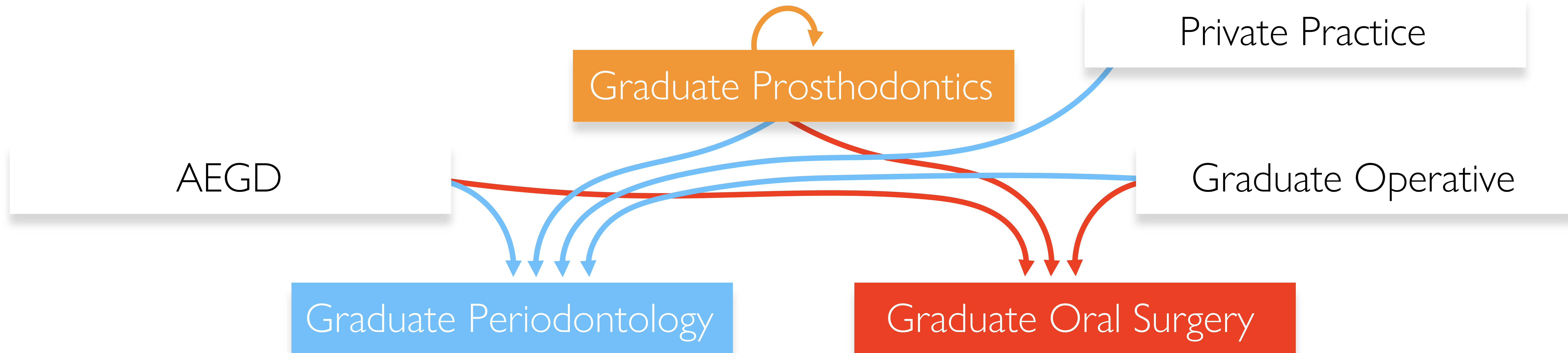
THE PRESENT

OUR DDS STUDENT CLINICS SURGERY REFERRAL PROCESS



THE PRESENT

OUR **RESIDENT CLINICS** SURGERY REFERRAL PROCESS



THE PRESENT

OUR CENTRALIZED IMPLANT CENTER

ITI STRAUMANN Surgical Dental Implant Form

Current Date: _____ Procedure Date: _____ Procedure Time: _____
Patient: _____ Patient Chart #: _____ Clinical Area: _____
Doctor: _____ Doctor Number: _____ Faculty Print: _____
Pre-doc: _____ Pre-doc number: _____ Faculty Sign: _____

☐ **Surgical Pack** ☐ **Green Tubing**
Single patient drill kit (short) 3.3mm: ☐ 4.1mm: ☐ 4.8mm: ☐ Single patient drill kit (long) 3.3mm: ☐ 4.1mm: ☐ 4.8mm: ☐

Standard and Standard Plus Implants																	
Tooth #		Planned					Backups										
Type	Type	Length					Type	Length									
1.	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE					
2.	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE					
3.	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE					
4.	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE					
5.	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE					
6.	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE					
7.	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE	3.3NN	3.3RN	4.1RN	4.8RN	4.8WN	TE					

Planned				Bone Level Implants				Backups			
Tooth #	Type	Length		Type	Length		Type	Length			
1.	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT		
2.	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT		
3.	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT		
4.	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT		
5.	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT		
6.	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT		
7.	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT	3.3NC	4.1RC	4.8RC BLT		

Bone Level Implants

Cover screws/ NC Healing abutments / RC Healing abutments / bottle shape abutment					
NC D 3.6, 2mm	NC D 4.8, 2mm	RC D 5.0, 2mm	RC D 6.5, 2mm	RC D 6.5, 2mm	RC D 6.5, 2mm
NC D 3.6, 3.5mm	NC D 4.8, 3.5mm	RC D 5.0, 4mm	RC D 6.5, 4mm	RC D 6.5, 4mm	RC D 6.5, 4mm
NC D 3.6, 5mm	NC D 4.8, 5mm	RC D 5.0, 6mm	RC D 6.5, 6mm	RC D 6.5, 6mm	RC D 6.5, 6mm
NC 0.0mm	NC 0.0mm	RC 0.0mm	RC 0.0mm	RC 0.0mm	RC 0.0mm

Cover Screws											
_____ NC 0.0mm						_____ RC 0.0mm					
IMPLANTS PLACED											
Tooth #		Diameter	Length				Tooth #		Type	Length	
1.	4.1RN	4.8RN	4.8WN	3.3RN	3.3NN	TE	1.	3.3NC	4.1RC	4.8RC	BLT
2.	4.1RN	4.8RN	4.8WN	3.3RN	3.3NN	TE	2.	3.3NC	4.1RC	4.8RC	BLT
3.	4.1RN	4.8RN	4.8WN	3.3RN	3.3NN	TE	3.	3.3NC	4.1RC	4.8RC	BLT
4.	4.1RN	4.8RN	4.8WN	3.3RN	3.3NN	TE	4.	3.3NC	4.1RC	4.8RC	BLT
5.	4.1RN	4.8RN	4.8WN	3.3RN	3.3NN	TE	5.	3.3NC	4.1RC	4.8RC	BLT
6.	4.1RN	4.8RN	4.8WN	3.3RN	3.3NN	TE	6.	3.3NC	4.1RC	4.8RC	BLT
7.	4.1RN	4.8RN	4.8WN	3.3RN	3.3NN	TE	7.	3.3NC	4.1RC	4.8RC	BLT

☐ # of Parts Issued ☐ # of Parts Returned ☐ # of Parts Placed

U48.192					A-3					Insert blue 0"-10" lbs									
										Retentive									
Qty	Ref #		Loca		Description										Q				
	048.439		C-3		Retentive anchor abutment														
	048.109		C-3		Transfer pin for retentive anchor														

Component Order Form
Appt. Time: _____
Clinical Area: _____
Faculty Print: _____
Faculty Sign: _____

Wide Neck			
Qty	Ref #	Loca	Description
	048.603	C-5	1.5 abutment screw-retained
	048.606	C-5	5.5 abutment cementable
	048.608	C-5	15° angled type A 5.5 abutment
	048.609	C-5	15° angled type B 5.5 abutment
	048.013	C-6	Impression cap
	048.096	C-6	positioning cylinder white
	048.091	C-6	Impression cap with guide screw
	048.171	C-6	analog gray
	048.243	B-6	burn-out coping for 048.606 crown
	048.244	B-6	burn-out coping for 048.608 bridge
	048.644	4	Gold abutment

Bone Level			
Qty	Ref #	Loca	Description
	022.2502	A-7	Locator abutment H2
	022.2503	A-7	Locator abutment H3
	022.2504	A-8	Locator abutment H4
	022.2505	A-8	Locator abutment H5
	022.2506	A-9	Locator abutment H6
	025.2101	B-8	Implant analog

Bone Level			
Qty	Ref #	Location	Description
	022.4102		Anatomic abutment 0° GH2
	022.4104		Anatomic abutment 0° GH3.6
	022.4152		Anatomic abutment 15° GH2
	022.4154		Anatomic abutment 15° GH3.6
	022.4410		Gold abutment crown
	024.4370		Temporary abutment
	022.4501		Locator abutment H1
	022.4502		Locator abutment H2
	022.4503		Locator abutment H3
	022.4504		Locator abutment H4
	022.2505		Locator abutment H5
	022.2506		Locator abutment H6
	023.4326		Coping for crown D 5
	023.4336		Coping for crown D 6.5
	025.4101		Implant analog

Bolt			
Ref #	Loca	Description	
048.183	B-1	WN Locator 1.0mm	
048.184	B-1	WN Locator 2.0mm	
048.185	B-2	WN Locator 3.0mm	
048.186	B-2	WN Locator 4.0mm	
048.197	C-1	Locator impression coping	
048.198	C-1	Locator analog (Female)	
048.193	B-3	Insert, green 10°-20° 3-4lbs	
048.194	B-3	Insert, red 10°-20° 1.5lbs extended	

Retentive Anchor			
Qty	Ref #	Loca	Description
048.439	C-3		Retentive anchor abutment
048.109	C-3		Transfer pin for retentive anchor

Astra EV/Dentsply Surgical Dental Implant Form

Current Date: _____ Procedure Date: _____ Procedure Time: _____
Patient: _____ Patient Chart #: _____ Clinical Area: _____
Doctor: _____ Doctor Number: _____ Faculty Print: _____
Pre-doc: _____ Pre-doc number: _____ Faculty Sign: _____

☐ **Surgical Pack** ☐ **Green Tubing** ☐ **Single patient guide drill** ☐ **Single patient precision drill** ☐

Planned							Backups					
Tooth #	Diameter			Length			Diameter			Length		
1.	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S
2.	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S
3.	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S
4.	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S
5.	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S
6.	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S
7.	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S	3.0S	3.6S	4.2S	4.2C	4.8S	5.4S

Please indicate healing uni abutments and number of each					
3.0	3.6	4.2	4.8	5.4	
2mm	2mm	2mm	2mm	2mm	
3mm	3mm	3mm	3mm	3mm	
4mm	4mm	4mm	4mm	4mm	
6mm	6mm	6mm	6mm	6mm	

Please indicate heal design abutments and number of each					
3.0	3.6	4.2	4.8	5.4	
3.5x3.5mm	4x3.5mm	5x3.5mm	5x3.5mm	6.5x3.5mm	
3.5x4.5mm	4x4.5mm	5x4.5mm	6.5x4.5mm	6.5x4.5mm	
3.5x6.5mm	4x6.5mm	5x6.5mm	6.5x6.5mm	6.5x6.5mm	
	5x3.5mm(Tr)	5x3.5mm(Tr)	5x3.5mm(Tr)	6.5x3.5mm(Tr)	

Cover Screws					
3.0	3.6	4.2	4.8	5.4	

IMPLANTS PLACED

Single patient guide drill					Single patient precision drill				
Tooth #	Diameter				Length				
1. _____	3.0S	3.6S	4.2S	4.2C	4.8S	4.8C	5.4S	_____	
2. _____	3.0S	3.6S	4.2S	4.2C	4.8S	4.8C	5.4S	_____	
3. _____	3.0S	3.6S	4.2S	4.2C	4.8S	4.8C	5.4S	_____	
4. _____	3.0S	3.6S	4.2S	4.2C	4.8S	4.8C	5.4S	_____	
5. _____	3.0S	3.6S	4.2S	4.2C	4.8S	4.8C	5.4S	_____	
6. _____	3.0S	3.6S	4.2S	4.2C	4.8S	4.8C	5.4S	_____	
7. _____	3.0S	3.6S	4.2S	4.2C	4.8S	4.8C	5.4S	_____	

Please indicate healing uni abutments, number and size of each

3.0	3.6	4.2	4.8	5.4	
Cover screws used					
3.0	3.6	4.2	4.8	5.4	

☐ # of Parts Issued ☐ # of Parts Returned ☐ # of Parts Placed

Astra EV			
Qty	Ref #	Loca	Description
	25539	Short	
	25540	Long	
	25545	#7 - 1.0/2.5 mm	
	25546	#7 - 2.0/3.5 mm	

plant System™ EV

ery date: _____
nt # _____
der number: _____
ly number: _____
loc: ☐

Height™ EV			
Qty	Ref #	Loca	Description
	25535	Ø 3.3 - 1.5 mm	Temporary

Design™ EV			
Qty	Ref #	Loca	Description
	25528	1.6	
	25527	4.0	
	25528	4.0	
	25527	3.0	
	25529	1.4	

Mount Screw EV			
Qty	Ref #	Loca	Description
	25503	1.0	
	25504	1.6	
	25505	4.0	
	25506	4.0	
	25507	1.4	

Unit Replica EV			
Qty	Ref #	Loca	Description
	25543	1.6	
	25544	1.6	
	25545	4.0	
	25546	4.0	
	25547	1.4	

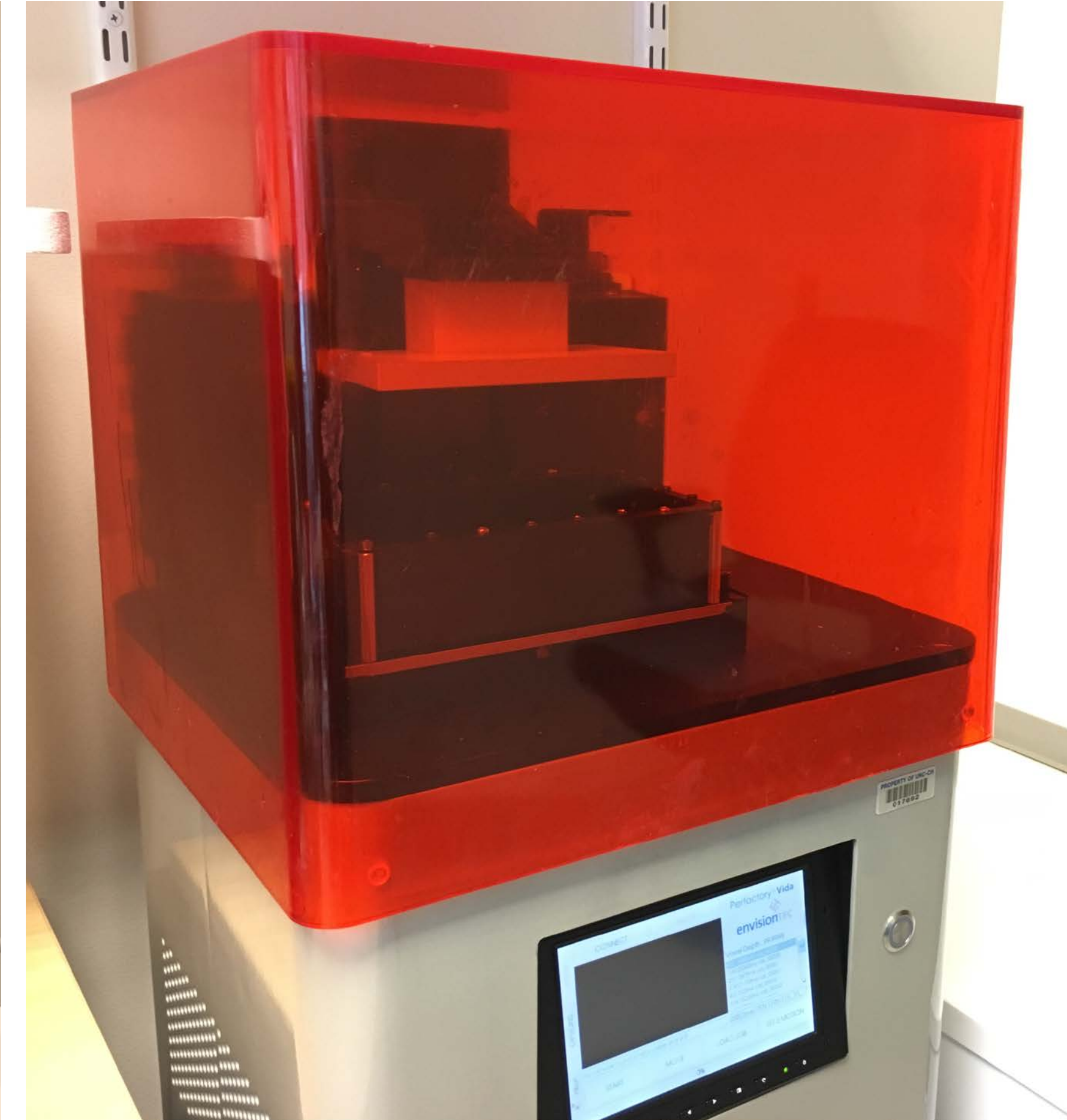
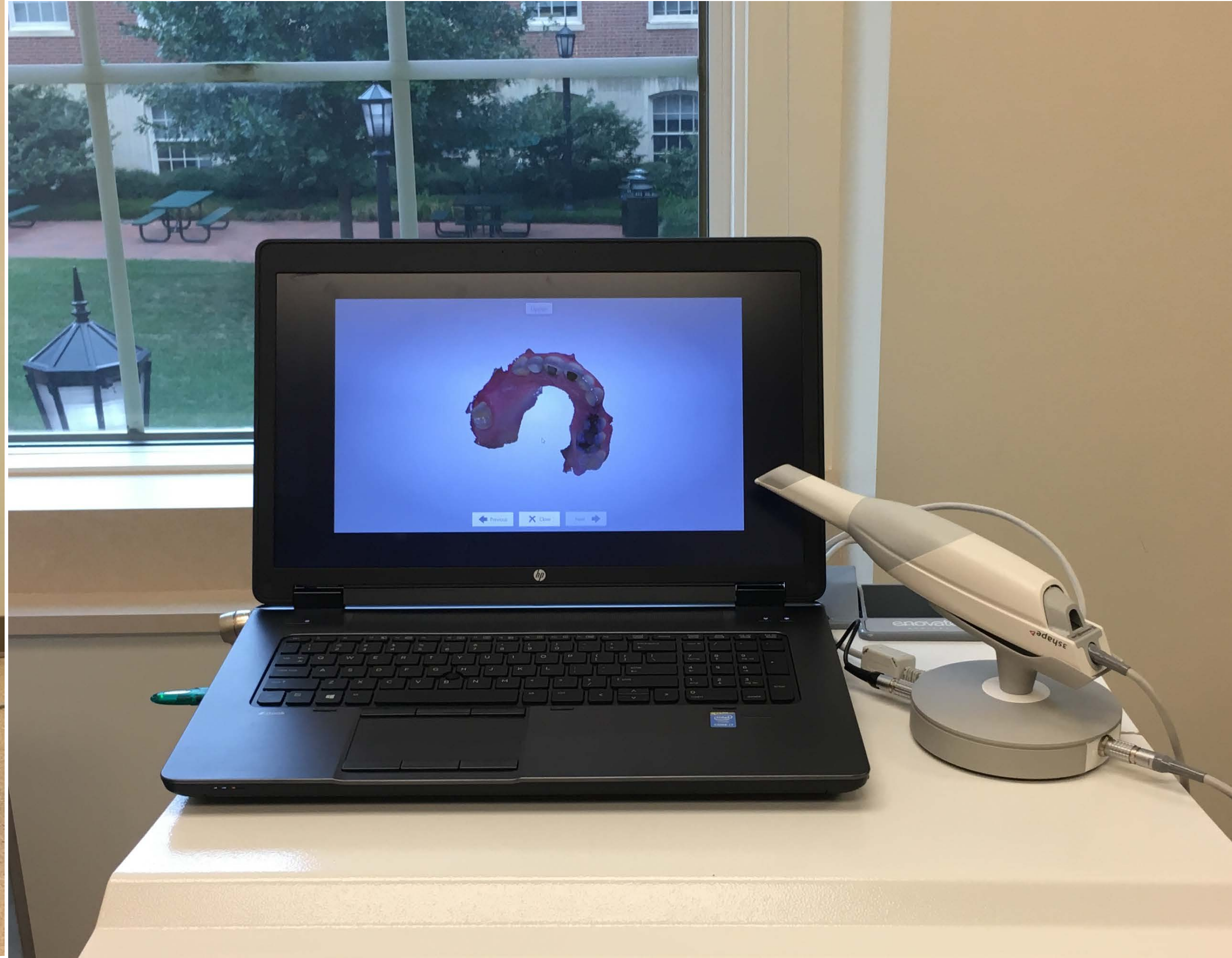
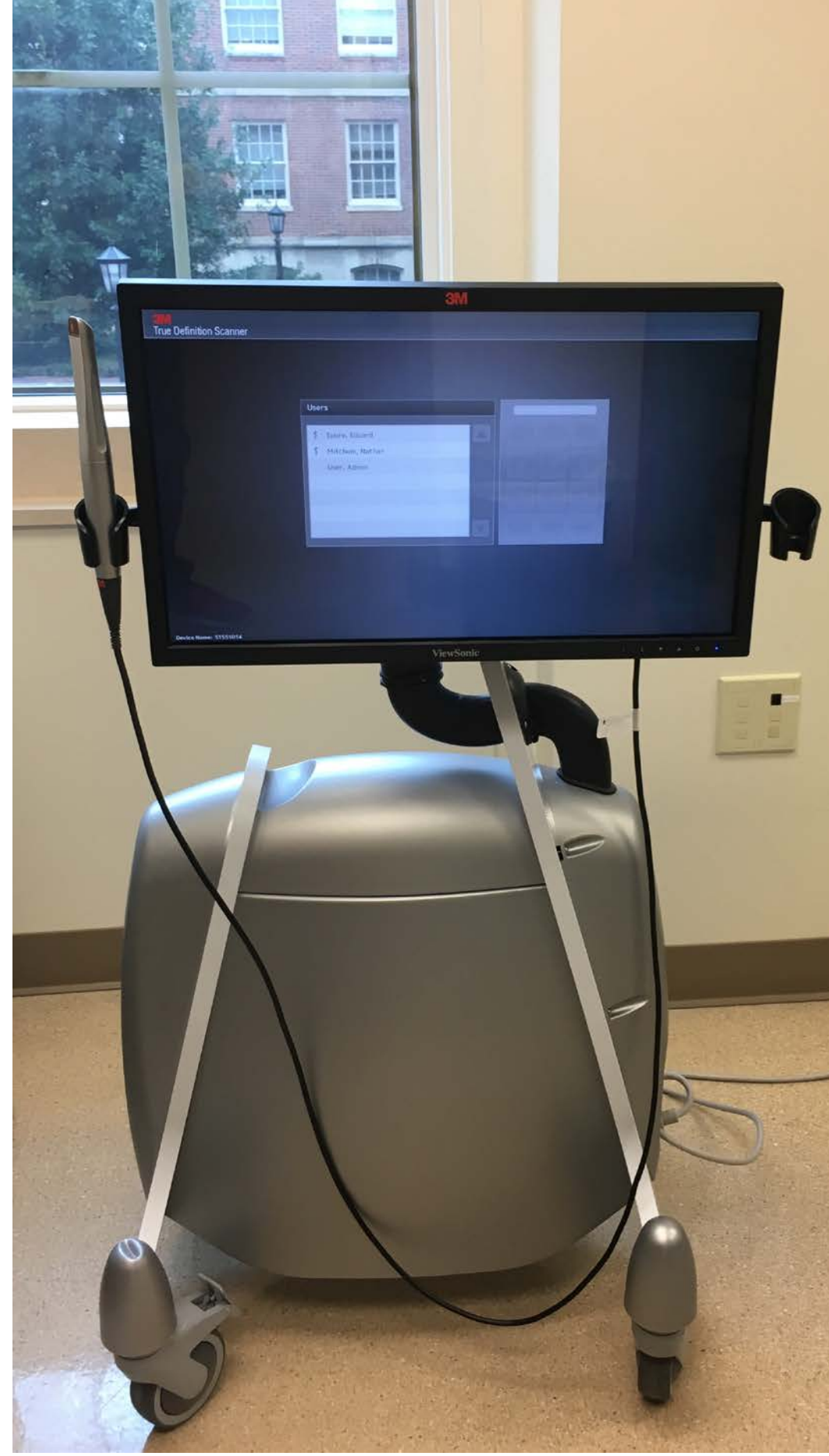
Abutment™ EV Replica			
Qty	Ref #	Loca	Description
	25401	3.3	
	25402	4	
	25403	3	
	25404	6	

REW-RETAINED			
Qty	Ref #	Loca	Description
	25548		
	25558	1 mm	
	25559	2 mm	
	25560	3 mm	
	25561	4 mm	

	25559	1 INCH		Unit Abutment EV	
	25560	2 INCH		Burnout Cylinder	
	25561	5 INCH			
				25649	
Abutment EV	4.5				
	25562	1 INCH		Bridge Screw EV	
	25563	2 INCH		25481	AST II

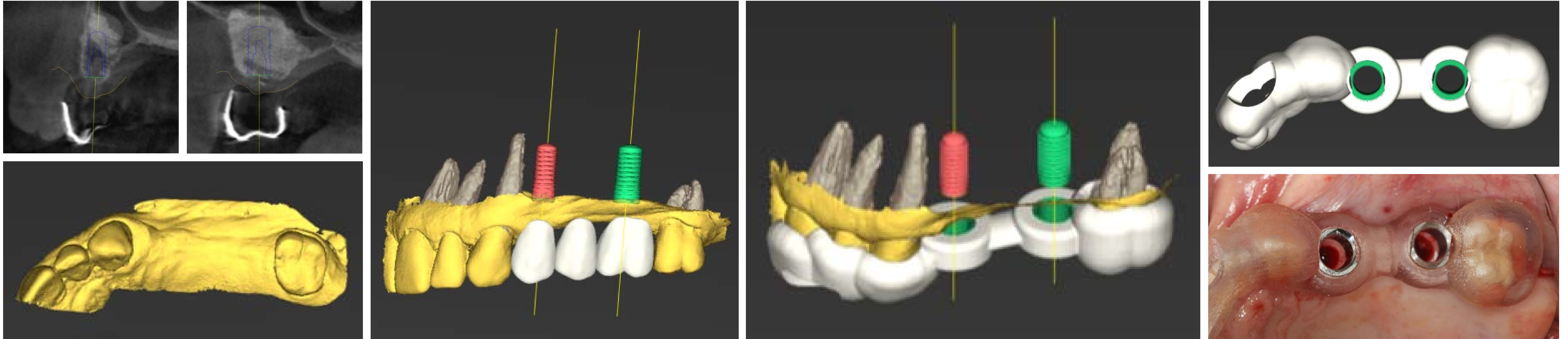
THE PRESENT

OUR TOYS



THE PRESENT

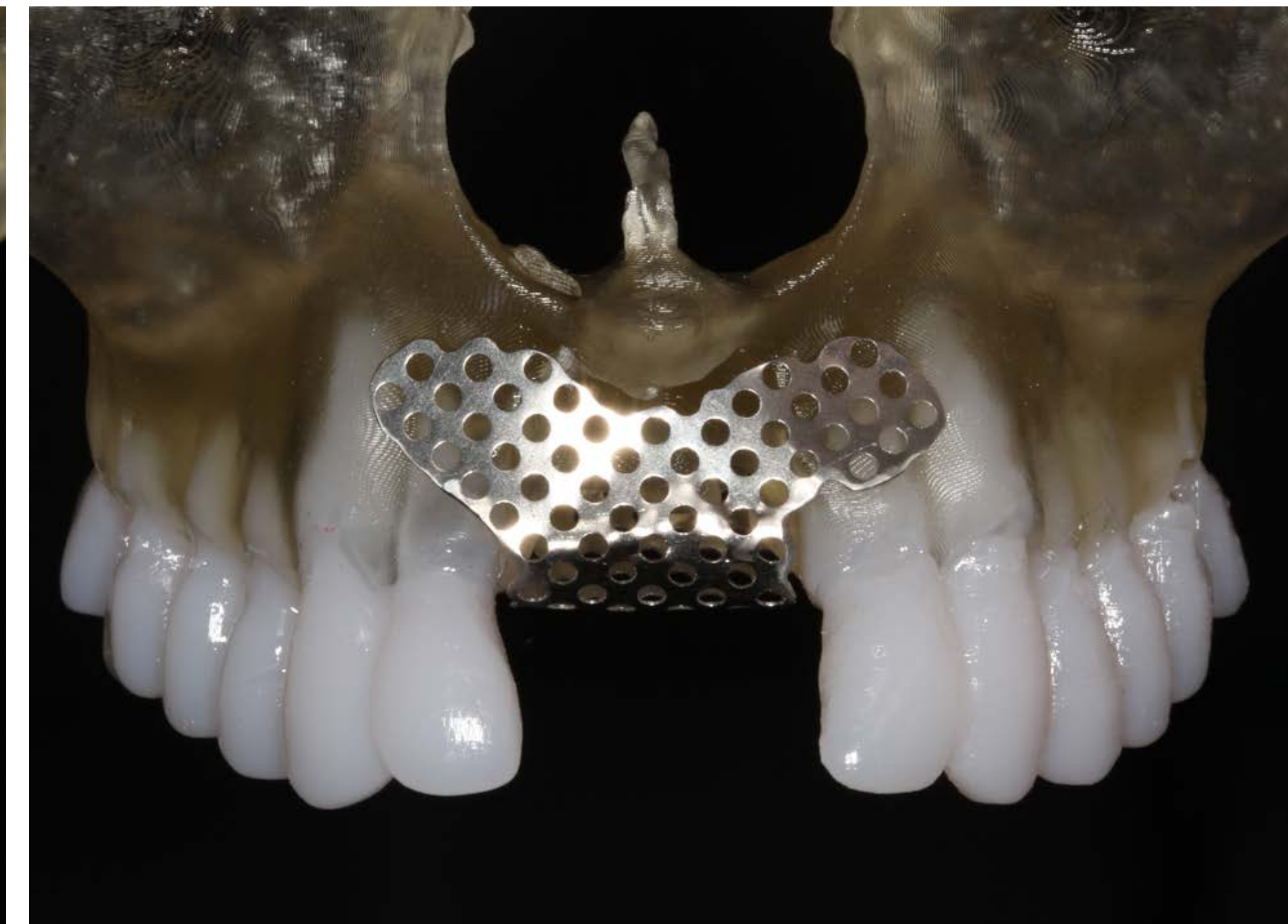
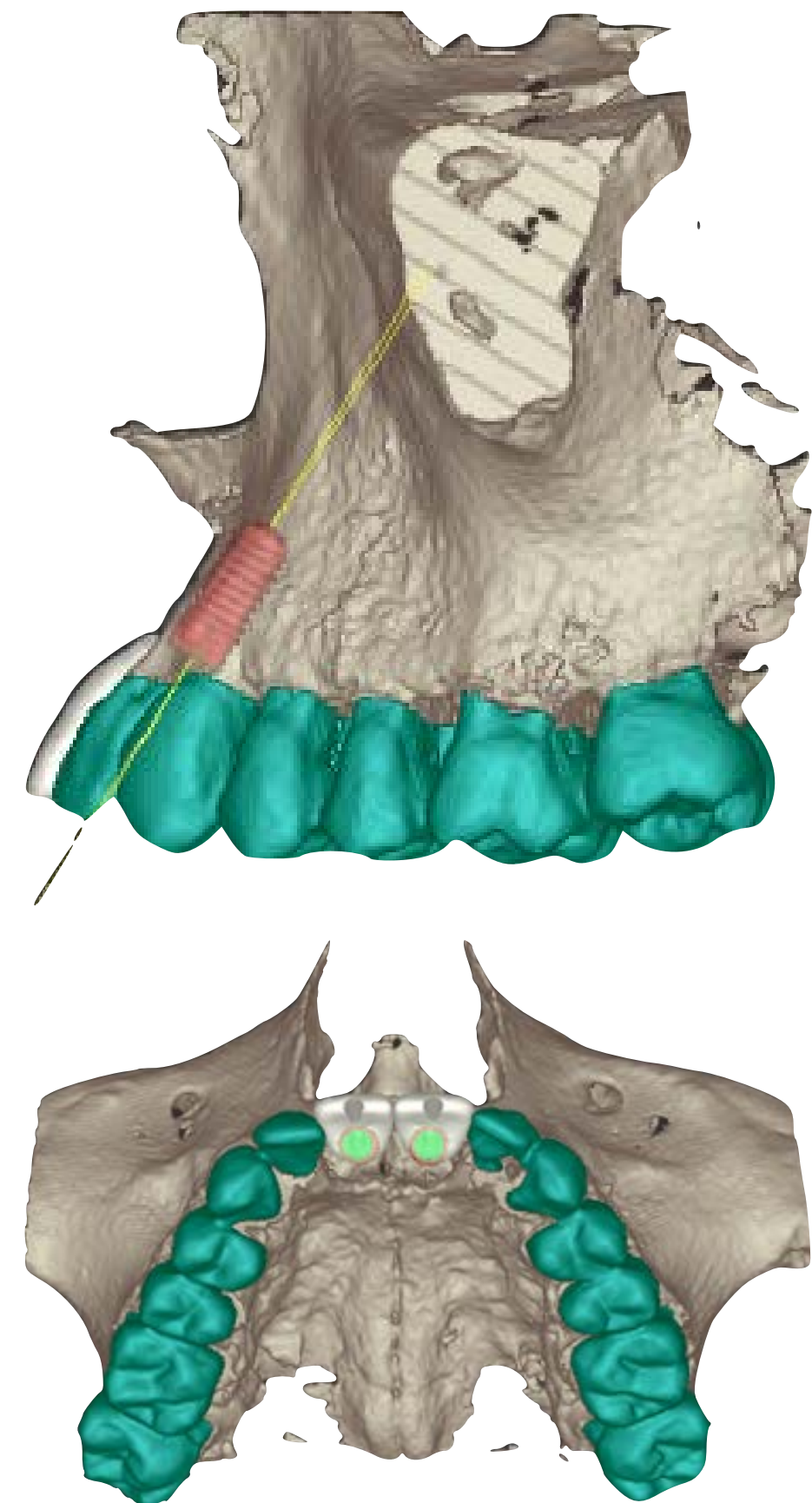
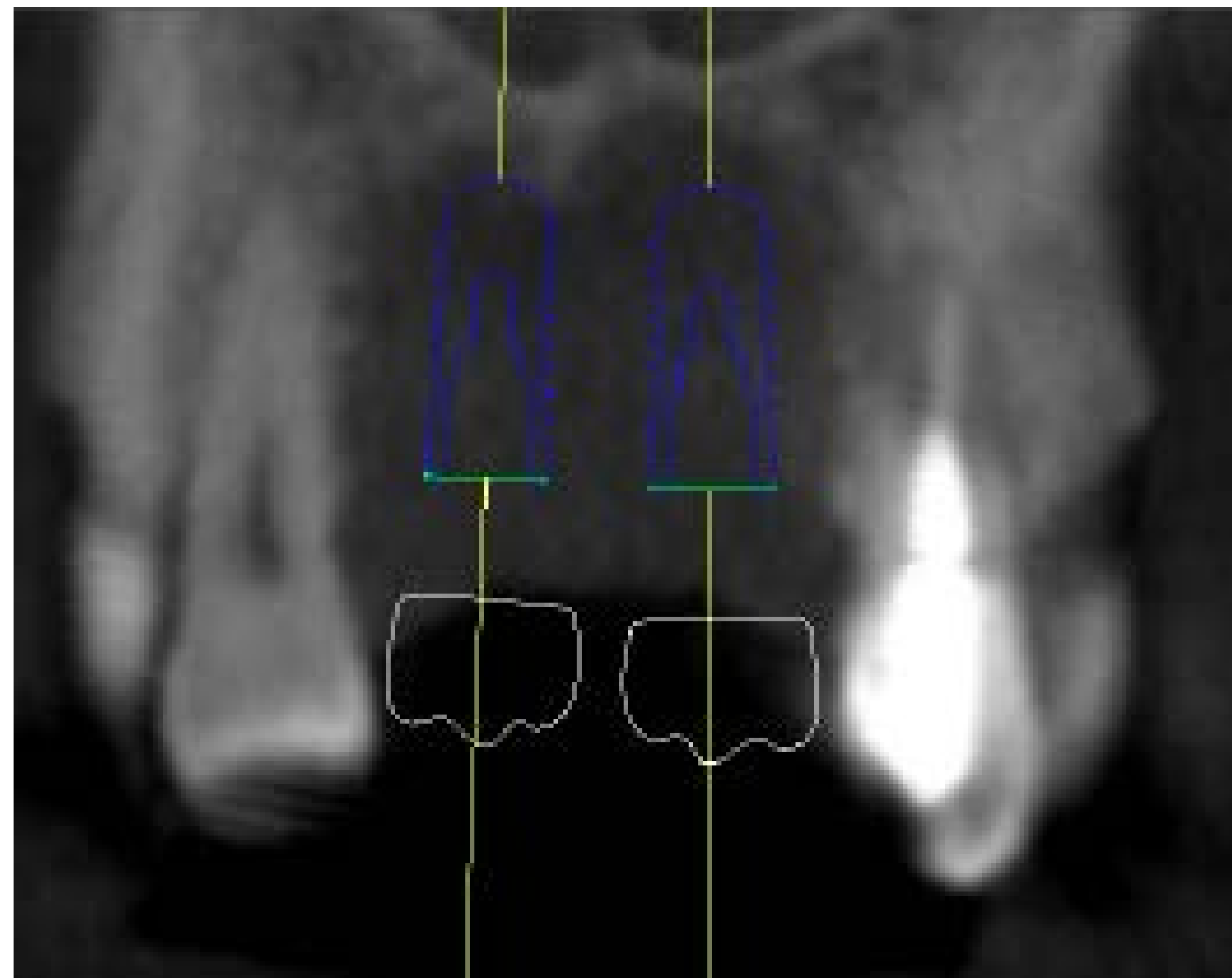
SOME OF OUR CASES



Case Courtesy of Dr. Acela Martinez (Class of 2015)

THE PRESENT

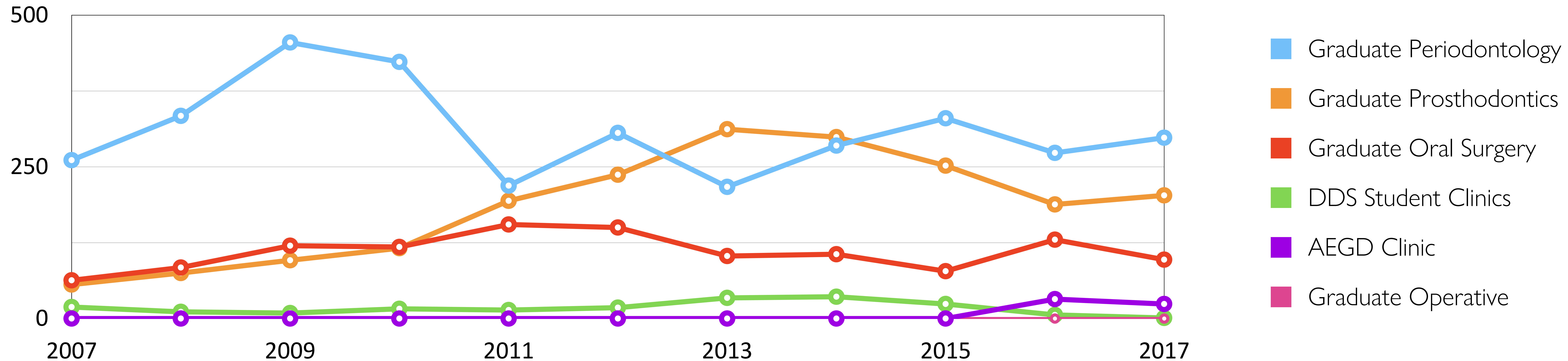
SOME OF OUR CASES



Case Courtesy of Dr. David Semeniuk (Class of 2017)

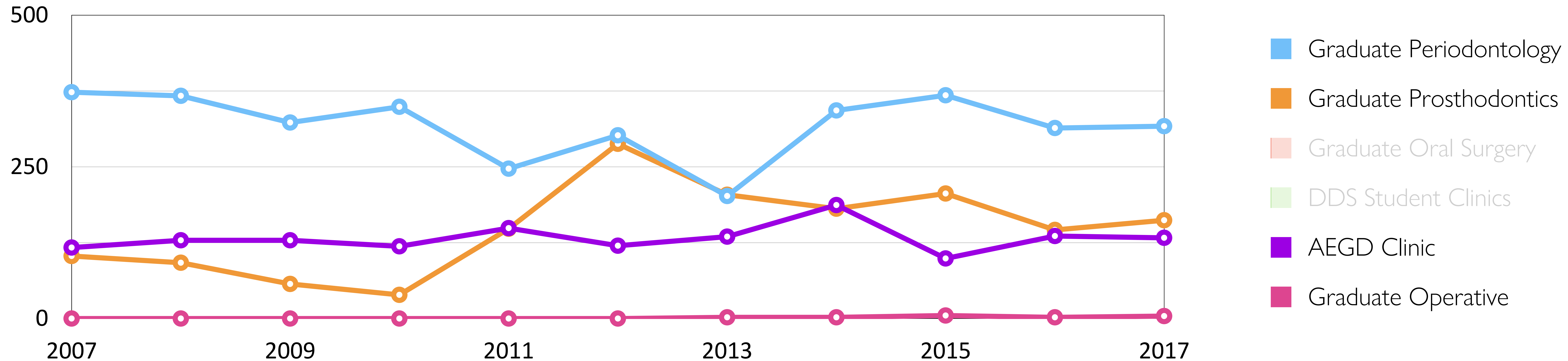
THE PRESENT

OUR NUMBERS SURGERY: IMPLANT PLACEMENT



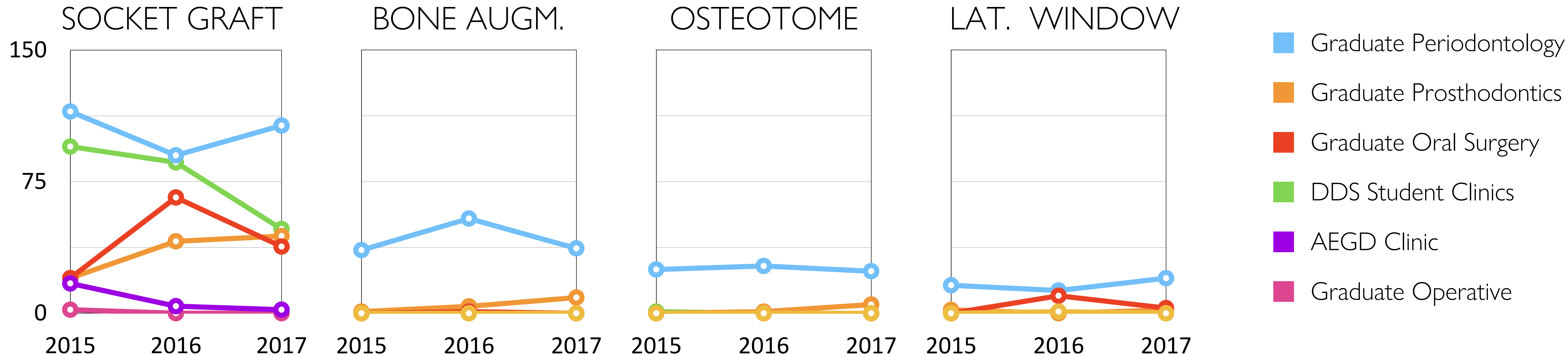
THE PRESENT

OUR NUMBERS SURGERY: TOOTH EXTRACTIONS



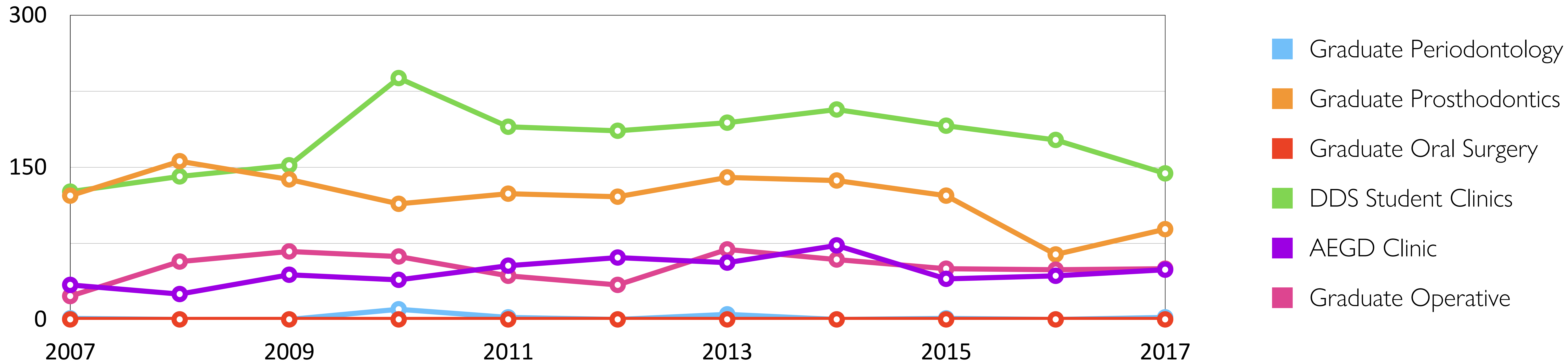
THE PRESENT

OUR NUMBERS SURGERY: BONE & SINUS AUGMENTATION



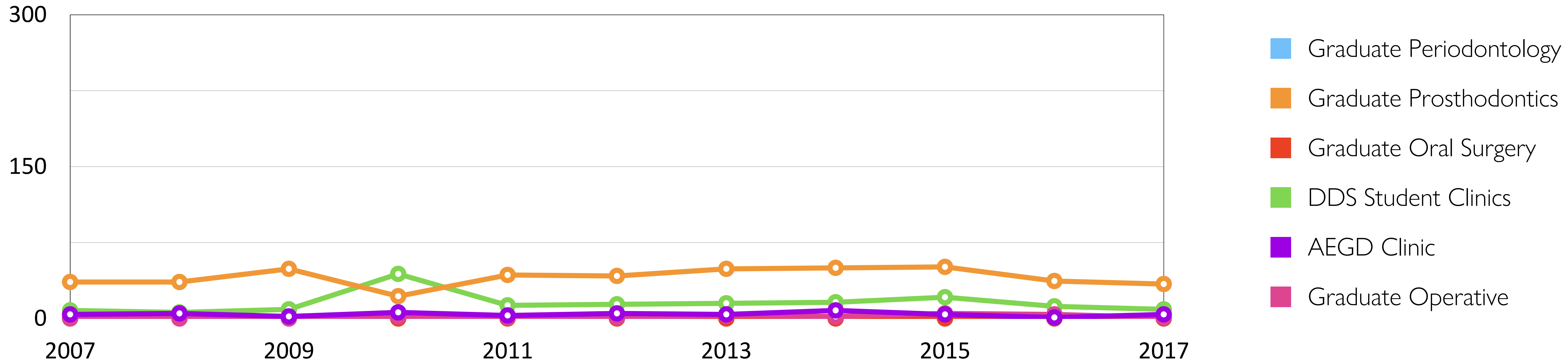
THE PRESENT

OUR NUMBERS IMPLANT RESTORATIONS: SINGLE-UNIT CROWNS



THE PRESENT

OUR NUMBERS IMPLANT RESTORATIONS: FIXED PARTIAL DENTURES



THE VERY NEAR FUTURE

WHAT WE ARE WORKING ON NOW

Developing digital implant competency

Incorporating periimplant disease diagnosis into current competencies

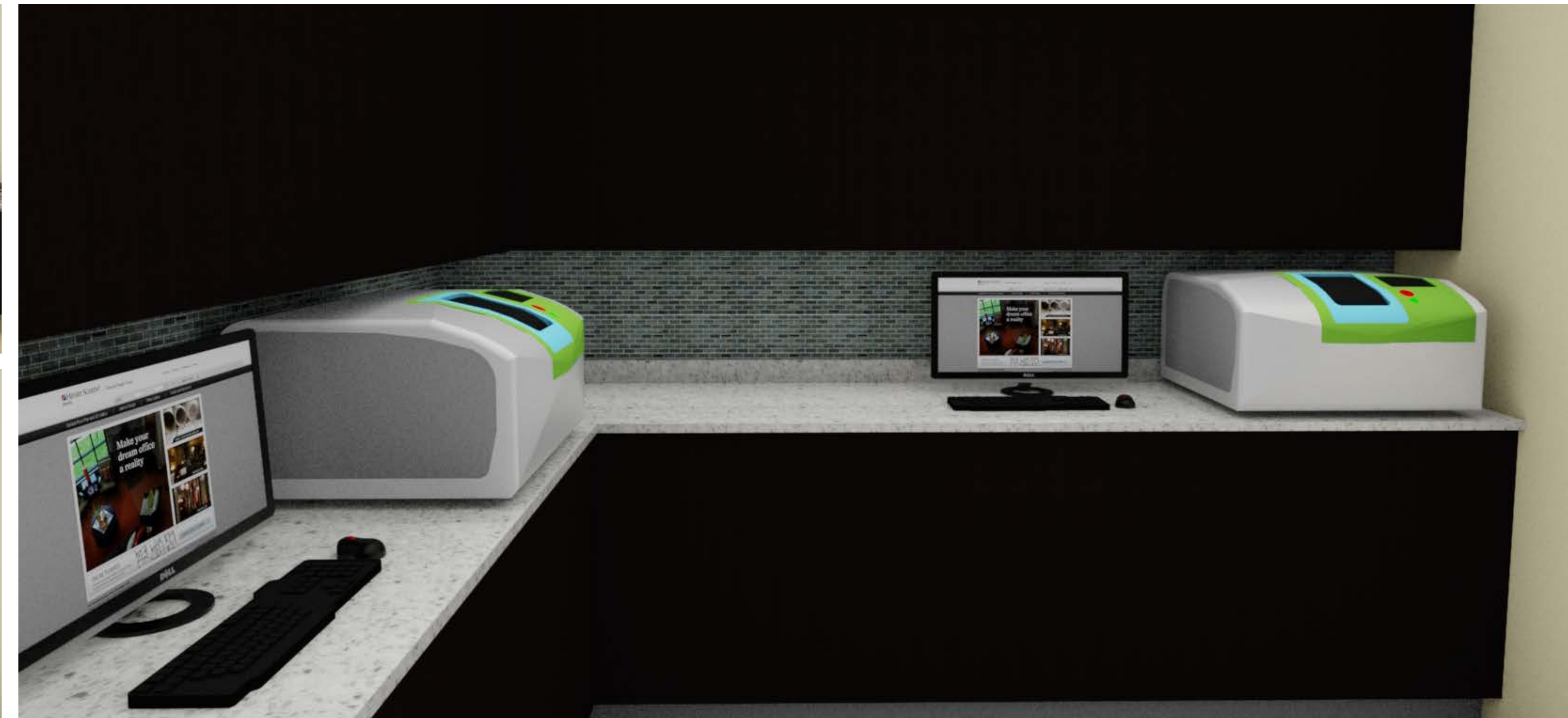
Strengthening DDS Student educational programs on implant maintenance, periimplant diseases

Standardizing use of CDT codes for reporting and tracking purposes

Standardizing post-crown/restorative delivery protocols

THE VERY NEAR FUTURE

WHAT WE ARE WORKING ON NOW



THE FUTURE

WHERE DO WE GO FROM HERE

Where should the graduating DDS students' prosthetic and surgical skill sets be when they graduate?

How do we best incorporate rapid evolutions in digital implant planning and treatment into our curriculum?

How do we teach our restorative colleagues to focus on early periimplant disease diagnosis and management, long-term implant maintenance, and referral?

