

# *Smile Design: 3D*

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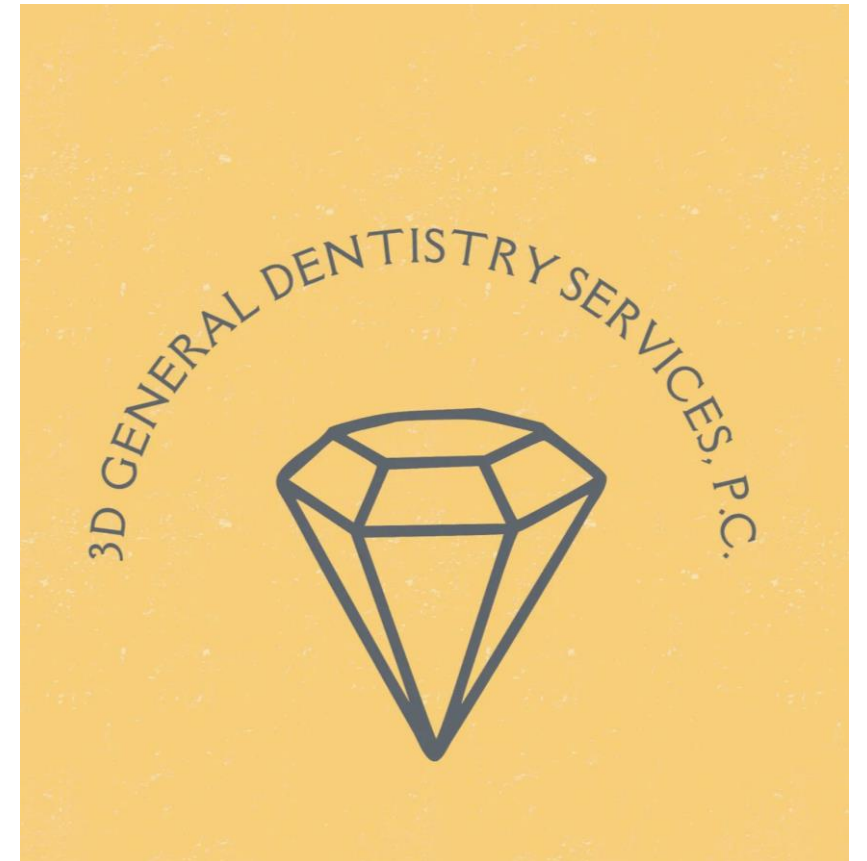
**UAB Alumni Meeting**

February 6, 2025

Hyatt Regency Birmingham-The Winfrey

*Barry E. Goodspeed, DDS*

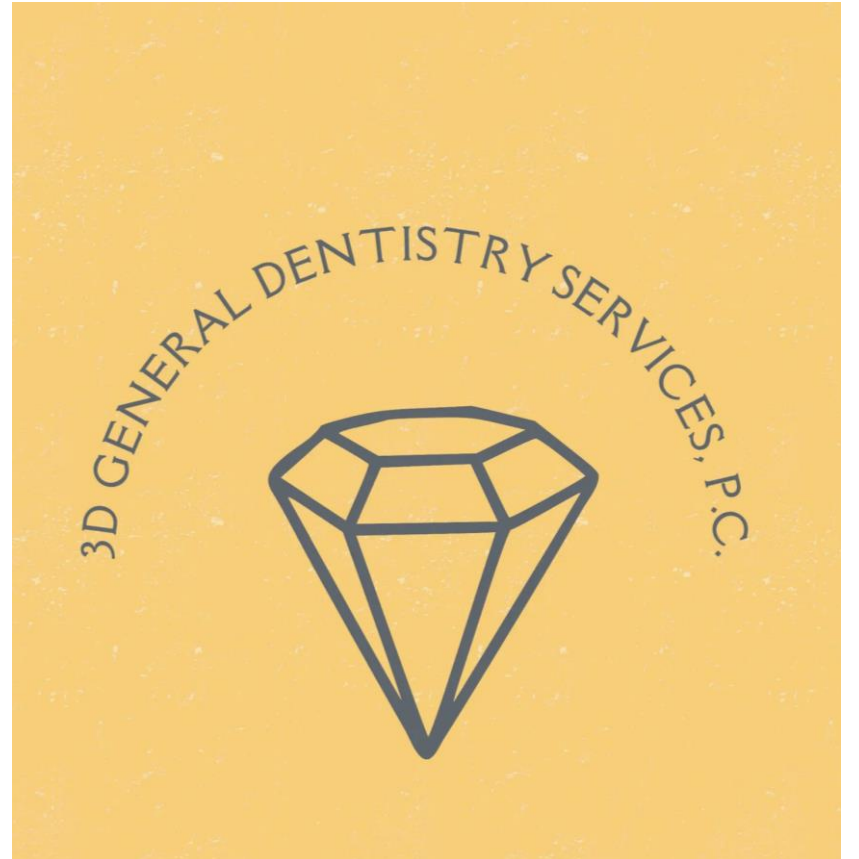
*3D General Dentistry Services, P.C.*



# Smile Design: 3D

## Course Objectives:

1. Review Smile Design 2D and Requested Records.
2. Become familiar with general Digital Wax Up Techniques.
3. Observe a Wax Up Transfer with Copyplast stents.
4. Compare Pre-Op to Digital Wax Ups:  
Min Reduction & Moderate Reduction.
5. Observe Orthodontic and Vertical Dimension considerations for cosmetic and functional cases.



# *Special Credits and Acknowledgements*

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## Collaborators:

Jahnvi

Dr. Allen Kessler

Dr. Mallory Hunt

Dr. William Allee

Dr. Kaytlyn McCallister

Dr. Chelsea Maniscalco

Jael Wall-Ellis, RDH

CDOCS

Dentsply Sirona  
inLab 22

Medit Smile Design

Polycam

# 3DGDServices.com Resources

## Downloads

Oath of Hippocrates (pdf)

DOWNLOAD

AI Glossary (pdf)

DOWNLOAD

CE Ethics. References page. Alumni Meeting (pdf)

DOWNLOAD

Orthodontic and Esthetic Evaluation Template (pdf)

DOWNLOAD

Photo Set 8 (xlsx)

DOWNLOAD

Photo Set 3 in 1 (xlsx)

DOWNLOAD

References. Smile Design 2D and 3D (pdf)

DOWNLOAD

Smile Design Collaborator Checklist (pdf)

DOWNLOAD


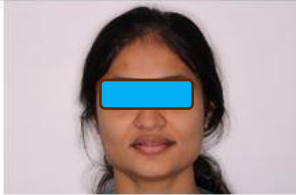

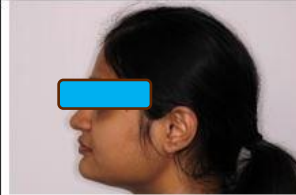





References. Smile Design 2D and 3D (pdf)

DOWNLOAD




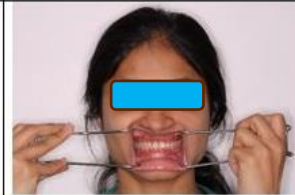







# Records Summary for a “Facially Generated Treatment Plan”

## Photo Set 8

	PHOTO SET 8 Orthodontic/Esthetic Evaluation	UAB SOD Esthetics Club
EO Frontal Repose	EO Frontal Full Smile	EO Profile
		
IO Retracted Occlusal Maxillary	Doctor: UAB SOD Esthetics Club Patient: Jahnvi DOB/Age: Date: November 3, 2023	IO Retracted Occlusal Mandibular
		
IO Retracted Closeup Buccal Right	IO Retracted Closeup Anterior	IO Retracted Closeup Buccal Left
		

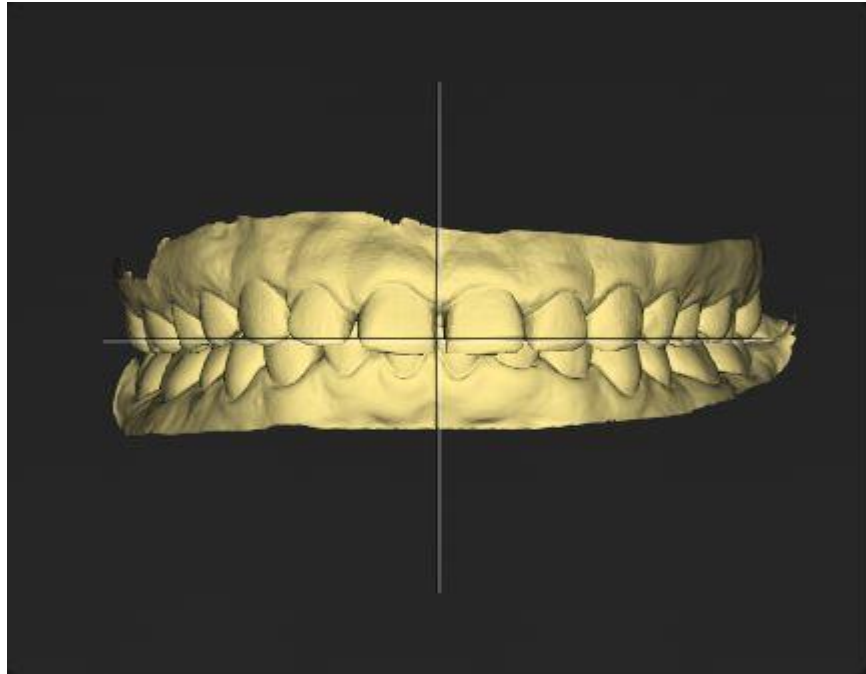
## 3:1 Photoset

	3:1 SMILE DESIGN PHOTOS	UAB SOD Esthetics Club
EO Frontal Relaxed Incisal Display	EO Frontal Full Smile	EO Frontal Full Smile Retracted
		
IO Retracted Occlusal Maxillary	Doctor: UAB SOD Esthetics Club Patient: Jahnvi DOB/Age: Date: 11/03/2023	IO Retracted Occlusal Mandibular
		
IO Retracted Closeup Relaxed Inc Dis	IO Retracted Closeup Other	IO Retracted Closeup Anterior
		

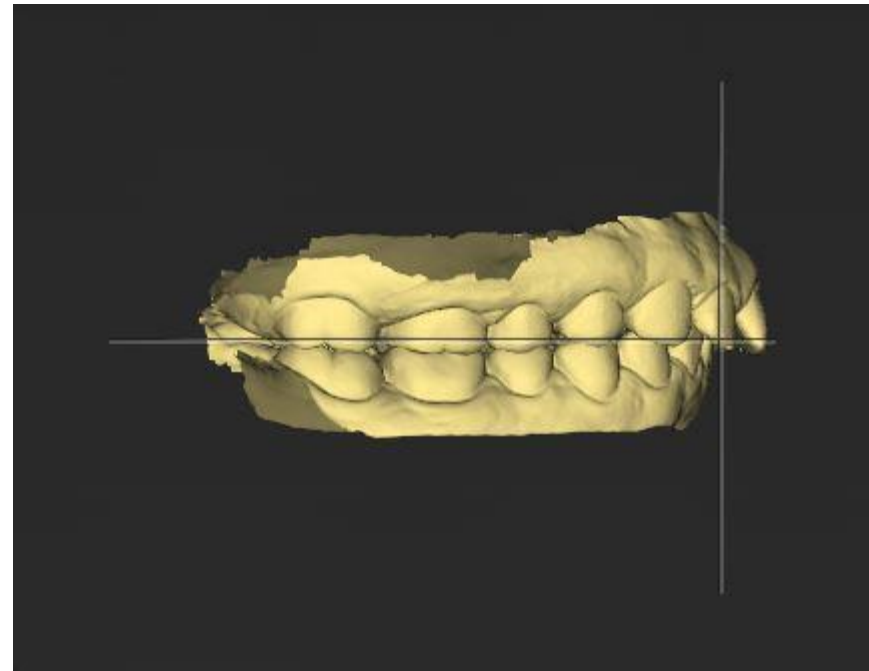
# *Records Summary for a “Facially Generated Treatment Plan”*




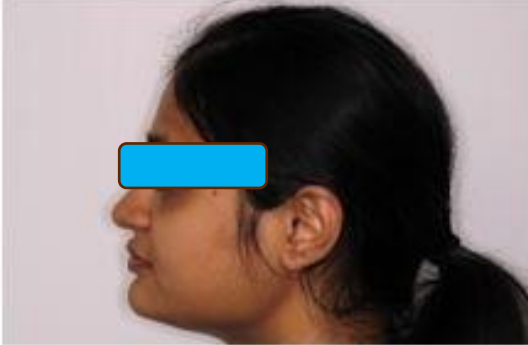





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Curve of Wilson












Curve of Spee



	<b>PHOTO SET 8</b> <b>Orthodontic/Esthetic Evaluation</b>	<b>UAB SOD Esthetics Club</b>
<b>EO Frontal Repose</b>	<b>EO Frontal Full Smile</b>	<b>EO Profile</b>
		
<b>IO Retracted Occlusal Maxillary</b>	<b>Doctor: UAB SOD Esthetics Club</b>  <b>Patient: Jahnvi</b>  <b>DOB/Age:</b>  <b>Date: November 3, 2023</b>	<b>IO Retracted Occlusal Mandibular</b>
		
<b>IO Retracted Closeup Buccal Right</b>	<b>IO Retracted Closeup Anterior</b>	<b>IO Retracted Closeup Buccal Left</b>
		





	<b>3:1 SMILE DESIGN PHOTOS</b>	<b>UAB SOD Esthetics Club</b>
<b>EO Frontal Relaxed Incisal Display</b>	<b>EO Frontal Full Smile</b>	<b>EO Frontal Full Smile Retracted</b>
		
<b>IO Retracted Occlusal Maxillary</b>		<b>IO Retracted Occlusal Mandibular</b>
	<b>Doctor: UAB SOD Esthetics Club</b> <b>Patient: Jahnvi</b> <b>DOB/Age:</b> <b>Date: 11/03/2023</b>	
<b>IO Retracted Closeup Relaxed Inc Dis</b>	<b>IO Retracted Closeup Other</b>	<b>IO Retracted Closeup Anterior</b>
		

**Orthodontic/Esthetic Consultation Sheet**  
**3D General Dentistry Services, PC**

<b>Patient Name</b>		<b>Date:</b> November 3, 2023	<b>Phone #:</b>
<b>Email</b>		<b>Age/DOB</b>	26
<b>Chief Concern(s):</b>	Gaps, Diastemata	Teeth are too small	Muscles tired
<b>Doctor Concerns:</b>	Max Incisor lingual attrition	Altered Passive Eruption	Rotations
<b>Other</b>	Deep Bite		

			MAXILLARY	MANDIBULAR
<b>Occlusion</b>		<b>Midline</b>	#8 M is on	1 mm Right
<b>Class</b>	I L, I-II R?	<b>Crowding</b>	none	none
<b>CR CO</b>	~	<b>Spacing</b>	#5-11	Lower Anteriors
<b>Over Bite</b>	3 mm	<b>Crossbite</b>	none	none
<b>Over Jet</b>	4 mm	<b>Cant</b>	?	?
<b>Perio Stage, Grade</b>	2, B	<b>Rotations</b>	#7, 8, 9	
<b>TMJ</b>	Movement, DOO	<b>Whitening</b>	Present Shade D2-3	D2-3
<b>Lateral Canthi Distance</b>	90 mm	<b>Incisal Display</b>	Tooth # (mm): 7(0.5), 8(1), 9(1.5), 10(1)	Negative 2-3 mm
<b>Other</b>		<b>H x W Central</b>	#8 Hx7.5? mm	
		<b>Restorative</b>		

+

TREATMENT			
<b>Pre Ortho:</b>			
<u>SureSmile</u>	Invisalign	<u>ClearCorrect</u>	Refer
Full Case	Anterior	Express	
<b>Time Estimate</b>		<b>Fee Estimate</b>	
<b>NEXT VISIT</b>	Comp Exam	Perio Exam	<u>Px</u>
<b>Ortho Records:</b>	IO Scan	CBCT <u>Panx</u> FMX	
<b>Photographic Records:</b>	Photo Set 8 up	3:1 (Smile, Retracted, Lips at Rest)	

<b>Reviewed: Initial, Date</b>	<b>IPR</b>	To create space, teeth may need to be slenderized.
	<b>Attachments</b>	Tooth colored bonding may be placed on teeth to move selected teeth more readily.
	<b>OA</b>	Teeth may need to be adjusted before, during, &/or after treatment to make bite line up just right.
	<b>Retainers</b>	Will need to be worn indefinitely when treatment is completed to prevent relapse and to protect your investment.
	<b>Refinement</b>	At end of initial treatment Dr. or patient may request an additional set of trays to obtain a more optimum result; We often see <u>about 90%</u> of anticipated/programmed result.
	<b>22 hrs/Day</b>	Trays must be worn 22 hours (all the time except eating then brushing and flossing <u>teeth</u> ) every day for treatment to be successful. Only water can be consumed with trays in place.

**SMILE DESIGN COLLABORATOR CHECKLIST for 3DGDS**

Items in Yellow are Minimum Records Required

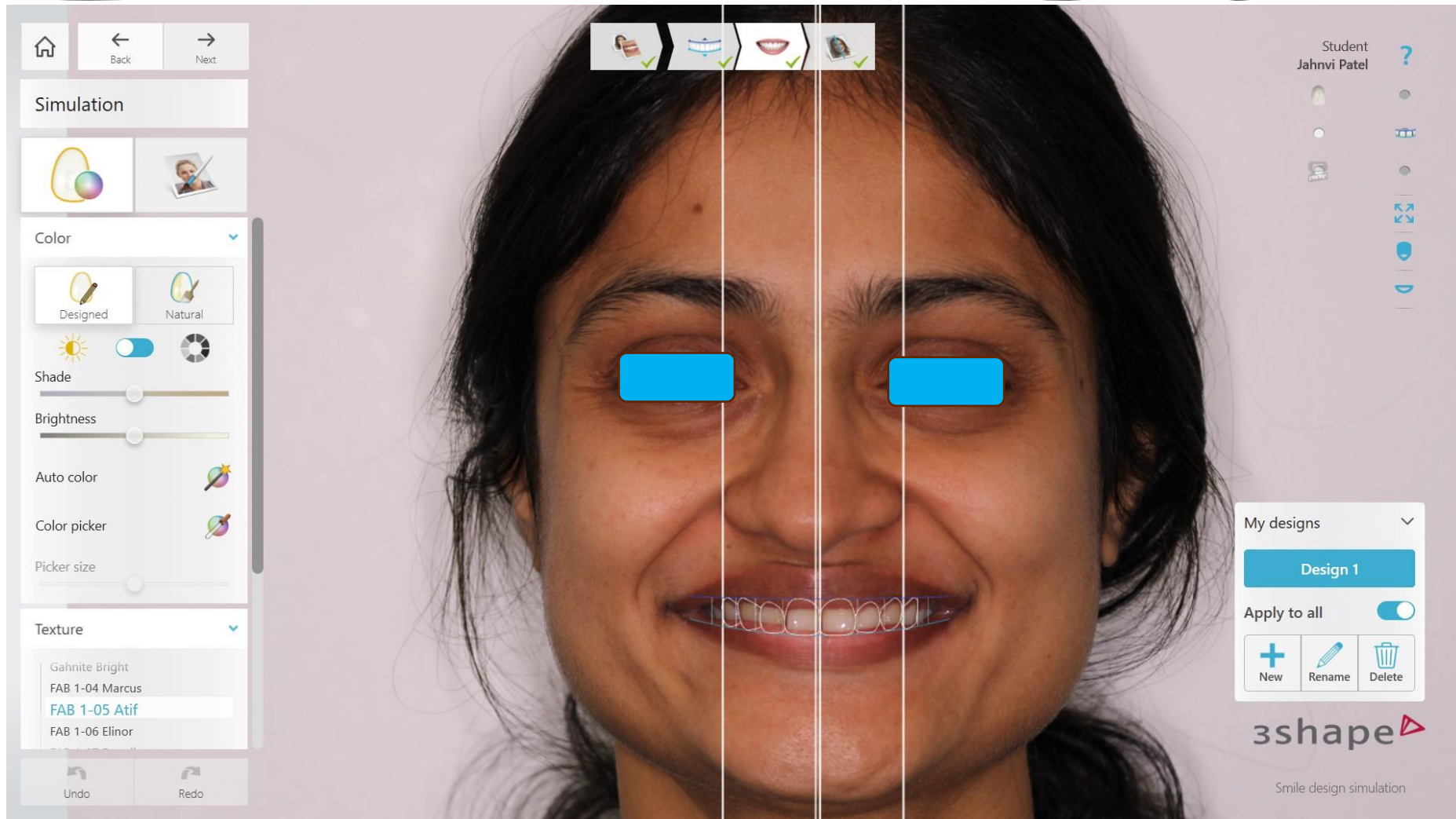
Checklist	A. Pre-Op Records	Patient Name	
<input type="checkbox"/>	1 Informed Consent		
<input type="checkbox"/>	2 Ortho/Esthetic Cons.	Midline, HxW of #8, Cant	
<input type="checkbox"/>	3 Periodontal Charting		
	4 Radiographs		
<input type="checkbox"/>	Panorex		
<input type="checkbox"/>	PeriApicals		
<input type="checkbox"/>	FMX		
	5 Photographs		
	<b>Photo Set 8</b>		
<input type="checkbox"/>	1 Extra Oral	Frontal	Repose
<input type="checkbox"/>	2		Smile
<input type="checkbox"/>	3	Profile	
<input type="checkbox"/>	4 Intra Oral	Occlusal	Maxillary
<input type="checkbox"/>	5		Mandibular
<input type="checkbox"/>	6	Retracted	Anterior
<input type="checkbox"/>	7	Close Up	Buccal Right
<input type="checkbox"/>	8		Buccal Left
	<b>Photo Set 3:1</b>		
<input type="checkbox"/>	1 Extra Oral	Frontal	Retracted
<input type="checkbox"/>	2		Smile
<input type="checkbox"/>	3		Relaxed Incisal Display
<input type="checkbox"/>	4 Intra Oral	Occlusal	Maxillary
<input type="checkbox"/>	5		Mandibular
<input type="checkbox"/>	6	Retracted	Anterior
<input type="checkbox"/>	7	Closeup	Relaxed Incisal Display
<input type="checkbox"/>	8 Extra as needed		
	6 Scans or Impressions		
<input type="checkbox"/>	Maxillary		
<input type="checkbox"/>	Mandibular		
<input type="checkbox"/>	Bite		
<input type="checkbox"/>	Model Axis		

Checklist	B. Prep Day		
<input type="checkbox"/>	1a	Transfer Wax Up	
<input type="checkbox"/>	1b	Adjust Transfer	
<input type="checkbox"/>	1c	Scan Transfer	Biocopy Folder
<input type="checkbox"/>	3	Prep	
<input type="checkbox"/>	4a	Scan Prep Arch	
<input type="checkbox"/>	4b	Scan Opposing	
<input type="checkbox"/>	4c	Scan Bite	
<input type="checkbox"/>	5a	Model Axis	
<input type="checkbox"/>	5b	Draw Margins	
<input type="checkbox"/>	6a	Temps with Stent	
<input type="checkbox"/>	6b	Scan Temps	Gingival Mask or Xtra
<input type="checkbox"/>	6c	Photos of Temps	Closeup
<input type="checkbox"/>			Portrait
	<b>C. Delivery Day</b>		
	<b>Photo Set 8</b>		
<input type="checkbox"/>	1	Extra Oral	Frontal
<input type="checkbox"/>	2		Repose
<input type="checkbox"/>	3		Smile
<input type="checkbox"/>	3		Profile
<input type="checkbox"/>	4	Intra Oral	Occlusal
<input type="checkbox"/>	5		Maxillary
<input type="checkbox"/>	5		Mandibular
<input type="checkbox"/>	6		Retracted Close Up
<input type="checkbox"/>	6		Anterior
<input type="checkbox"/>	7		Buccal Right
<input type="checkbox"/>	8		Buccal Left
<input type="checkbox"/>		Scans or Impressions	

Dr. Barry Goodspeed  
 3D General Dentistry Services, PC  
 3DGDServices.com  
[drbarrygoodspeed@protonmail.com](mailto:drbarrygoodspeed@protonmail.com)  
 205-907-1400



# 3Shape: Simulation. Grid Mode



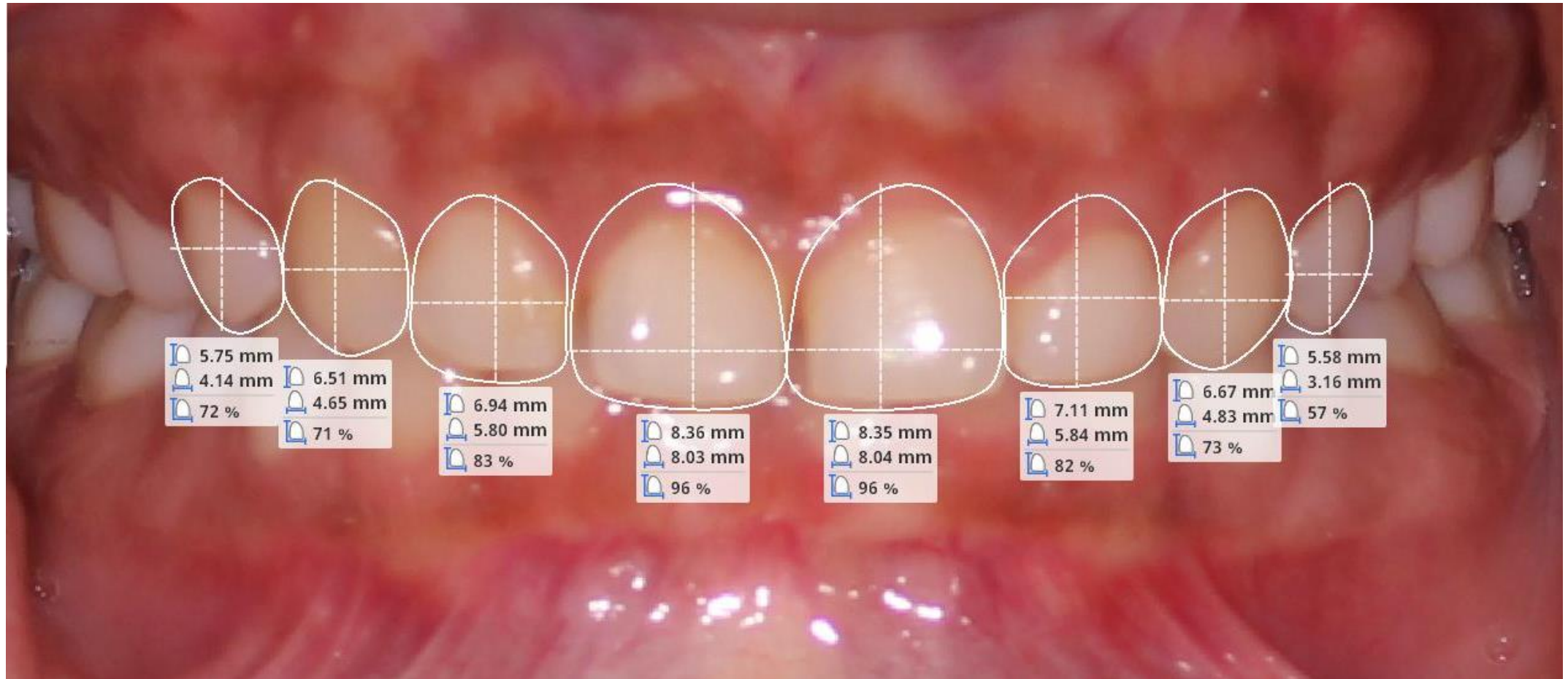
# 3Shape: Proportions for Lab





# *Medit:* Calibrated *Money \$hot* for Lab

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# 3Shape: Simulation Comparison.1



# *The BIG Question is...*

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Can we promise this **2D** Design to our patient?!!

# Case #1: Digital Wax Up Limitations and Modifications (Jahnvi)

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- 
- 
- 

Dentsply Sirona Primeprint Model,...

ID	Cou...	Status		
3	1	✓	+	-
2	1	✓	+	-
1	1	✓	+	-



- 
- 
- 
-

# Case #1: Digital Wax Up Limitations and Modifications (Jahnvi)

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More About this Case Later!



# Preliminary Cases: 6-8 Bridge, 8 Cr, V 10 + 11 (Maria)

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# Preliminary Cases: e.max 7-10 (Faye)

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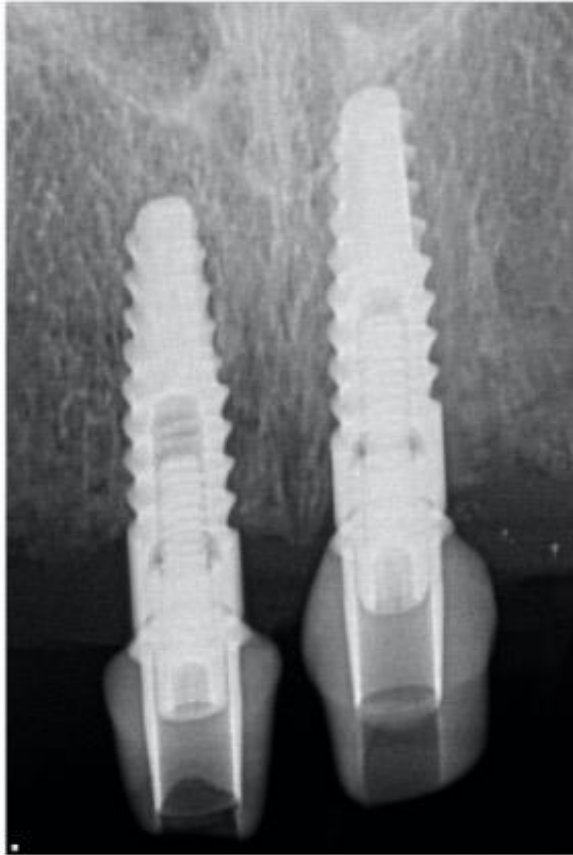
*Preliminary Cases:  
e.max 6-11; same day (Laura)*

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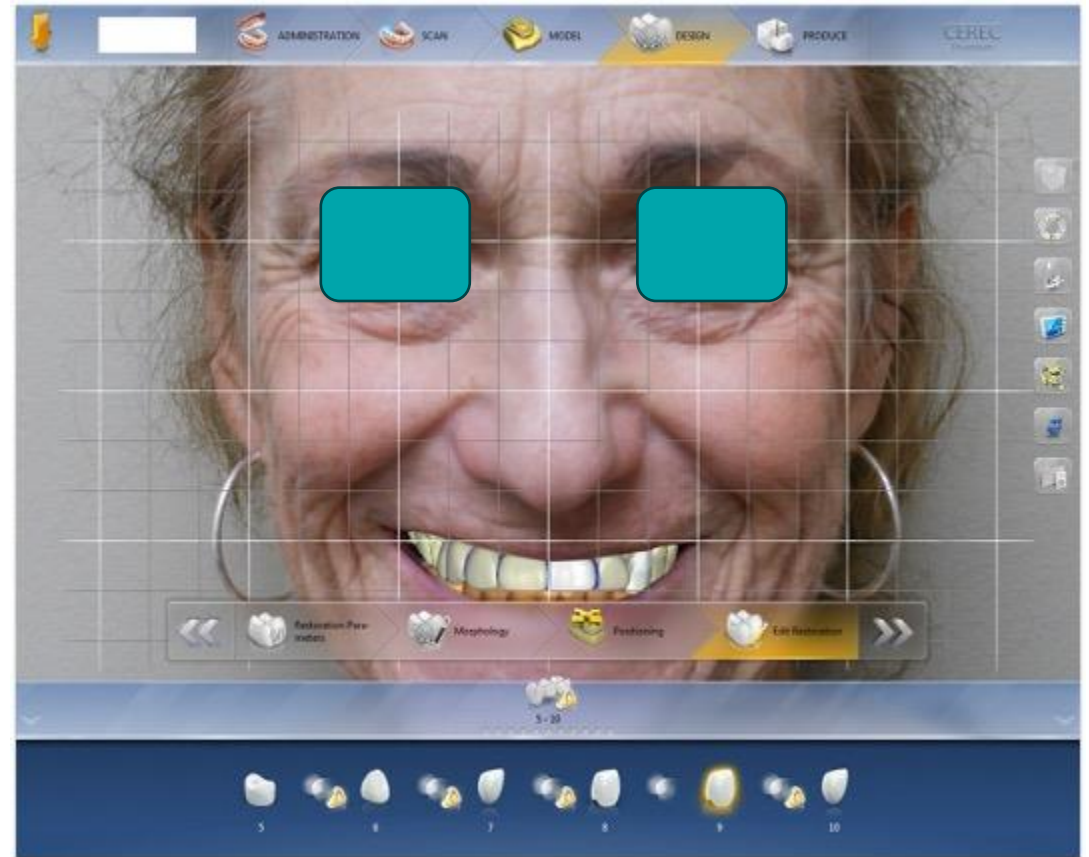
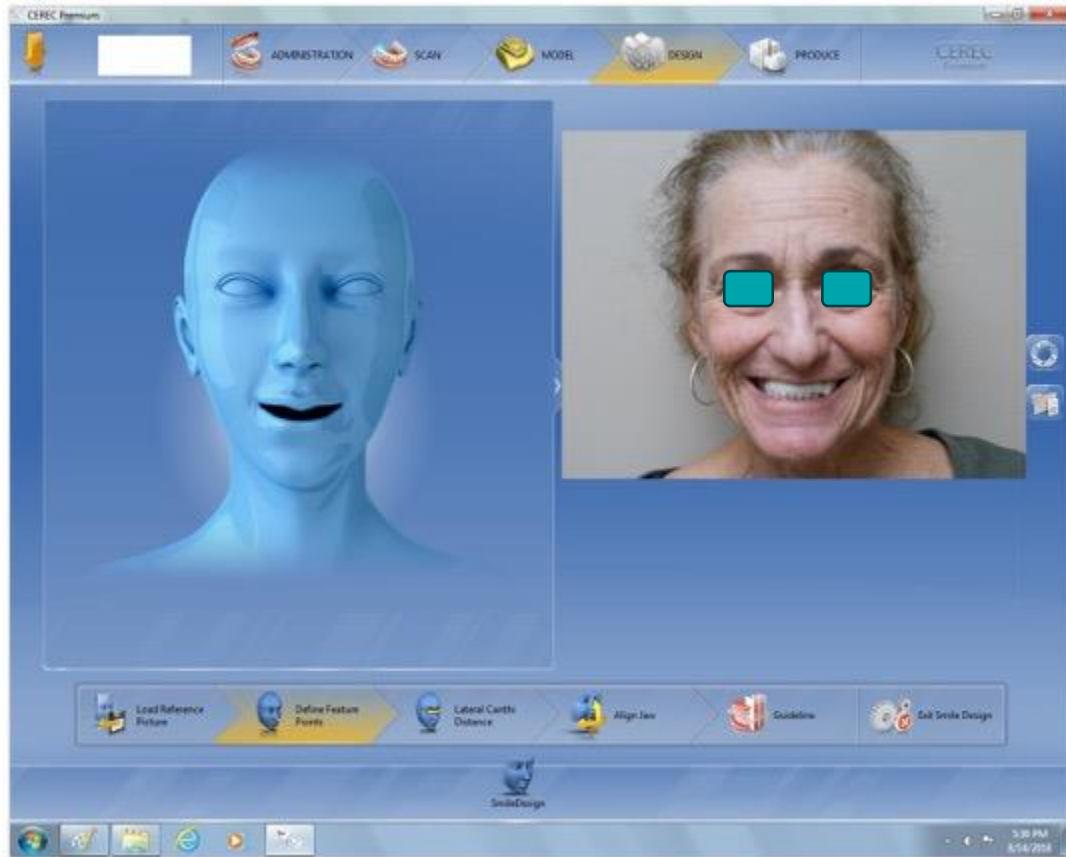


# Preliminary Cases: Implant Bail Out (Marie)

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# Preliminary Cases: Implant Bail Out (Marie)



# Preliminary Cases: Implant Bail Out (Marie)

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Doctor Name:  
Barry Goodspeed

Patient Name:  
Marie

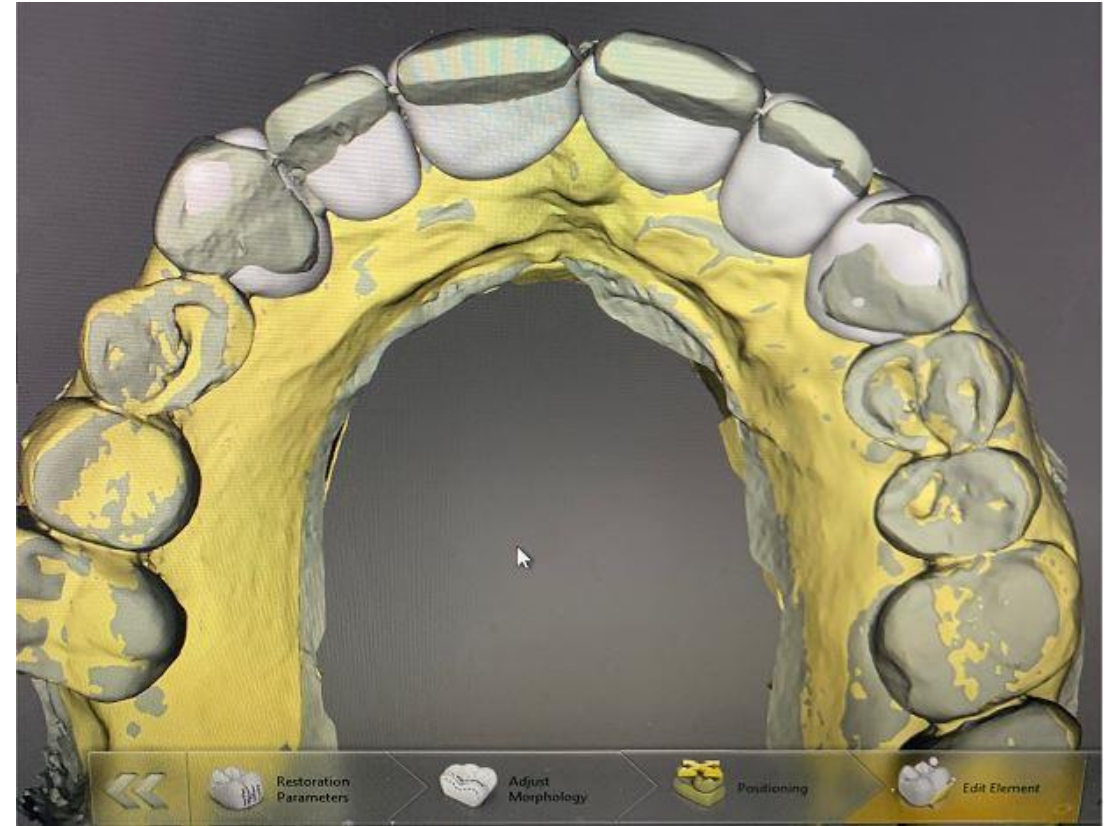
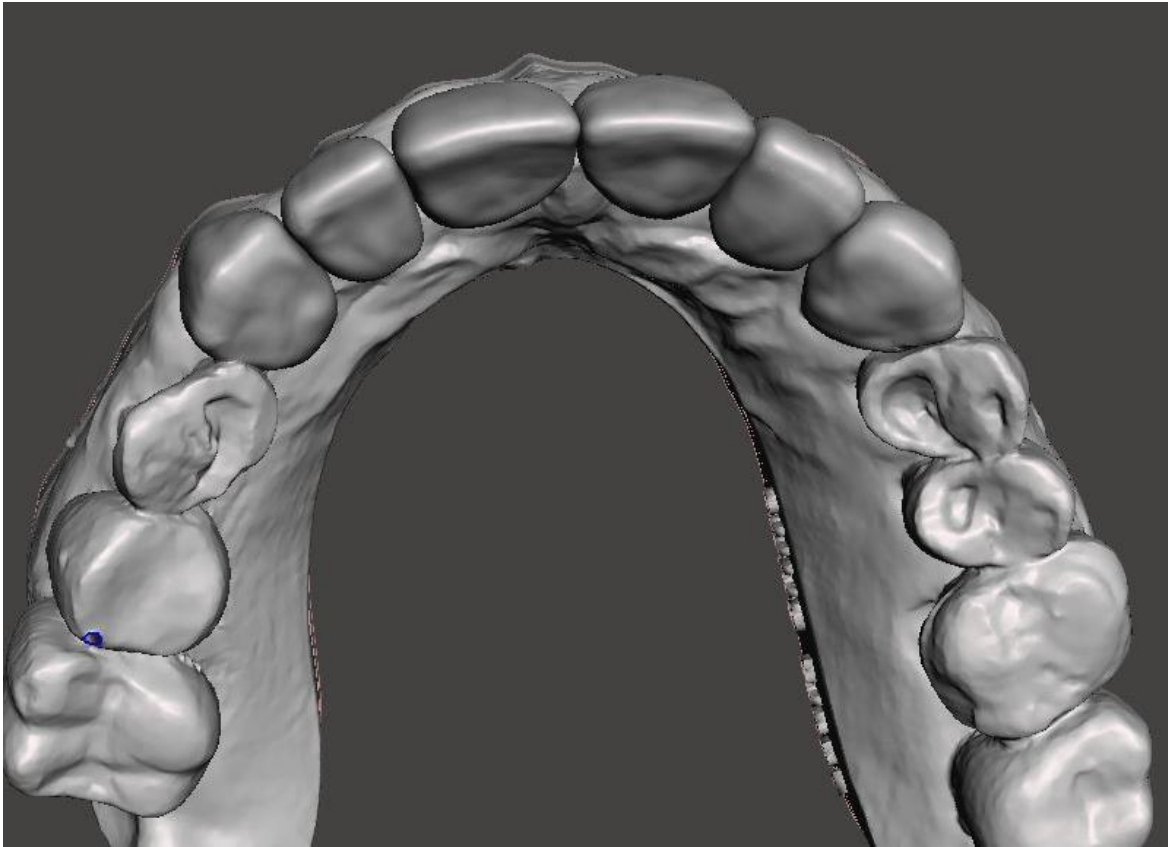
Birthday: \_\_\_\_\_





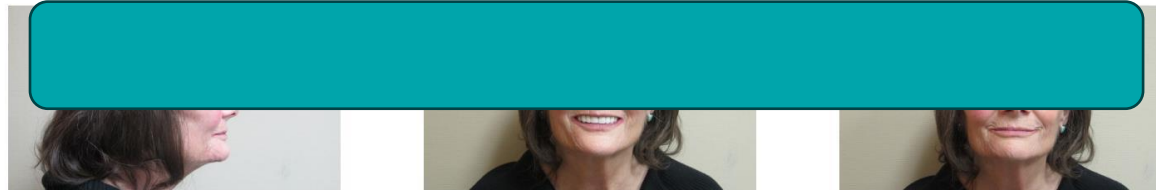
# Preliminary Cases: Digital Wax Up + Full Mouth Rehab (Laura)

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# Preliminary Cases: Digital Wax Up + Full Mouth Rehab (Laura)

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Doctor Name:  
Barry Goodspeed

Patient Name:  
Laura 01/18/2022 FINAL

Birthday:



# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

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Collaboration with



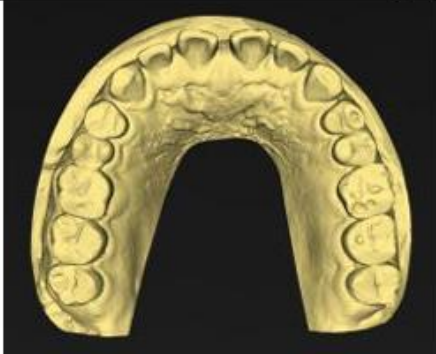


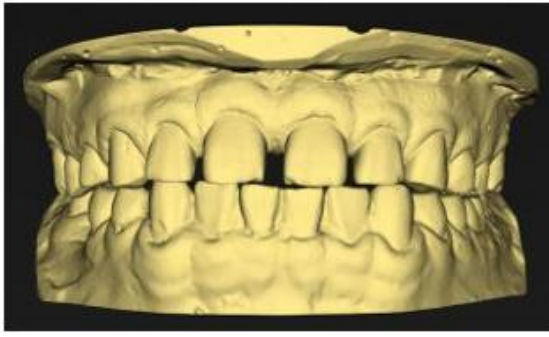

Dr. Allen Kessler and

Dr. Mallory Hunt

Patient considering resin or  
porcelain veneers for spaces in  
between teeth





	PHOTO SET 8 SMILE DESIGN PHOTOS	3D General Dentistry Services, PC 3DGDservices.com
EO Frontal Relaxed Incisal Display	EO Frontal Full Smile	EO Profile
		
IO Retracted Occlusal Maxillary		IO Retracted Occlusal Mandibular
	<p>Doctor: Mallory Hunt</p> <p>Patient: Roberto</p> <p>DOB/Age: date/Age</p> <p>Date: January 14, 2023</p>	
IO Retracted Close Up Buccal Right	IO Retracted Close Up Anterior	IO Retracted Close Up Buccal Left
		

To insert your own pictures: Right Click, Change Picture, From File



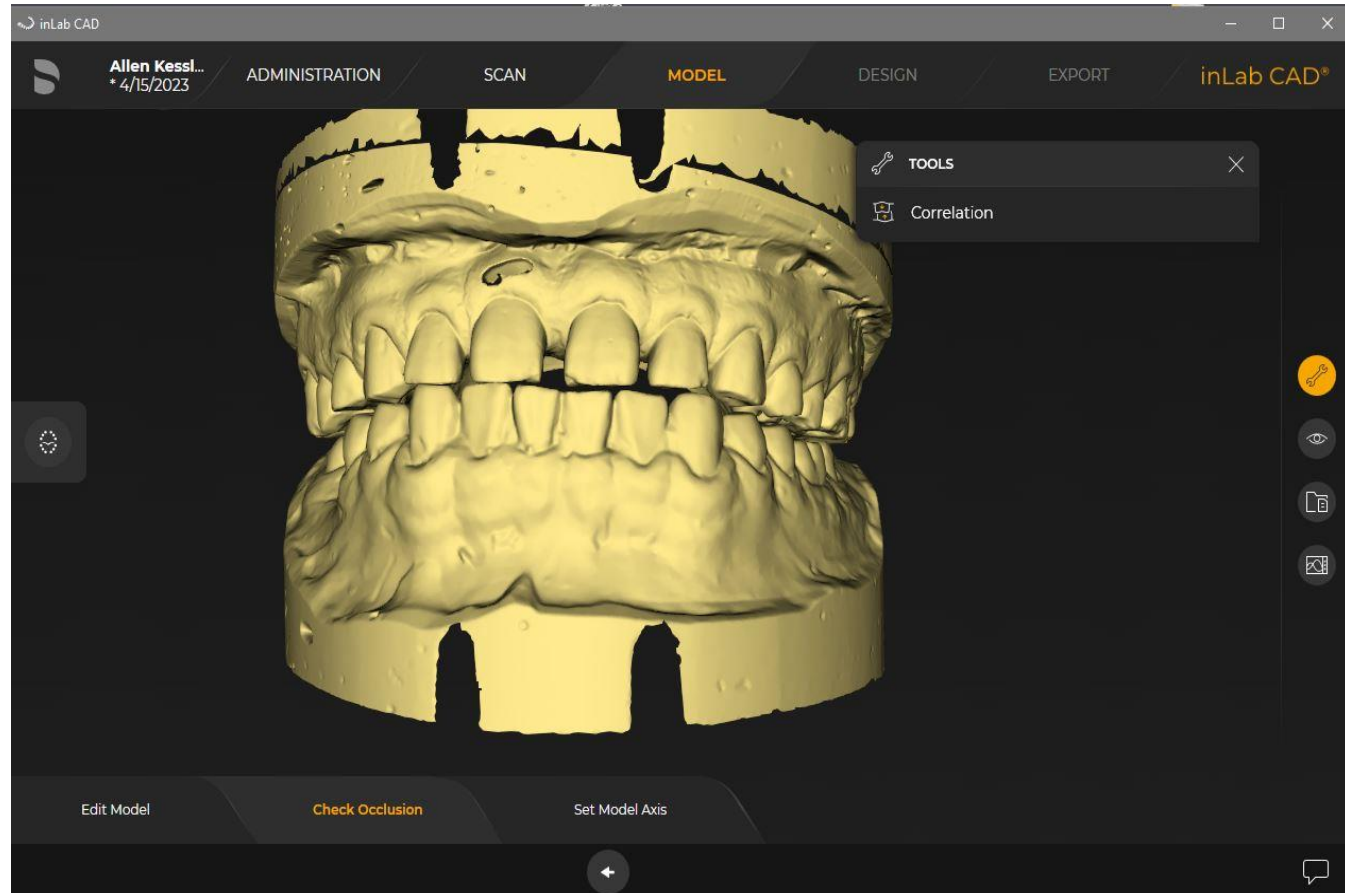
# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

Collaboration with

Dr. Allen Kessler and

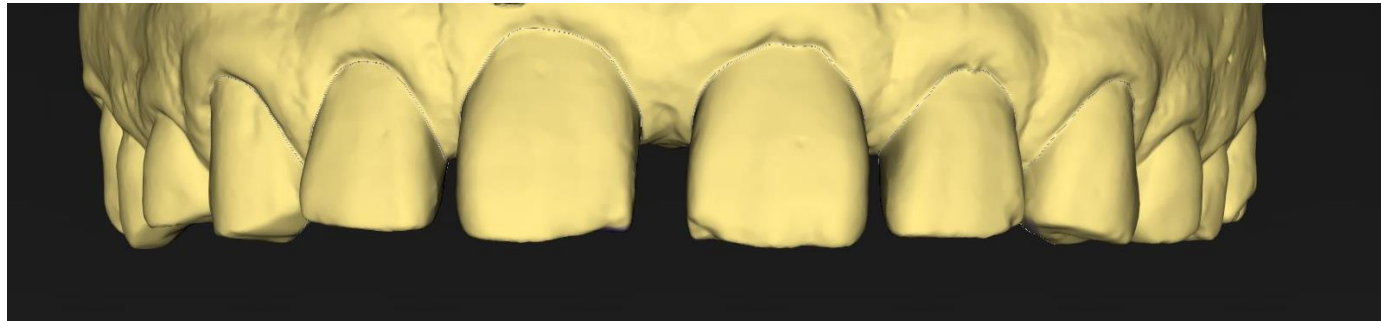
Dr. Mallory Hunt

Patient considering resin or  
porcelain veneers for spaces in  
between teeth

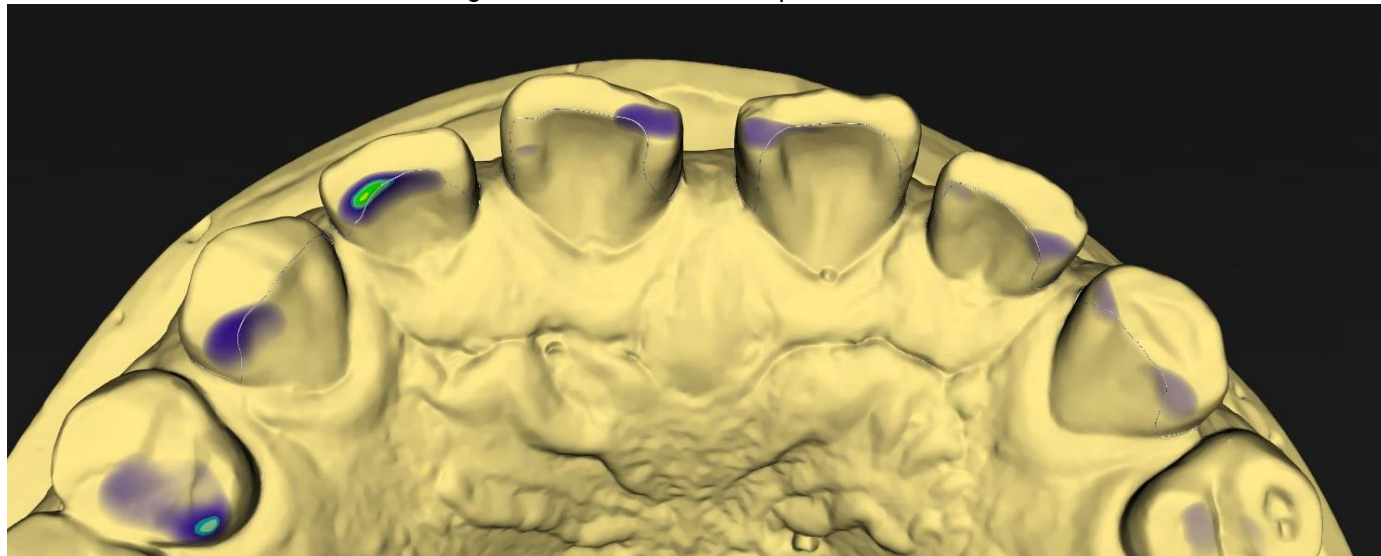


# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

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Margins drawn directly on Teeth



# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

## Parameters

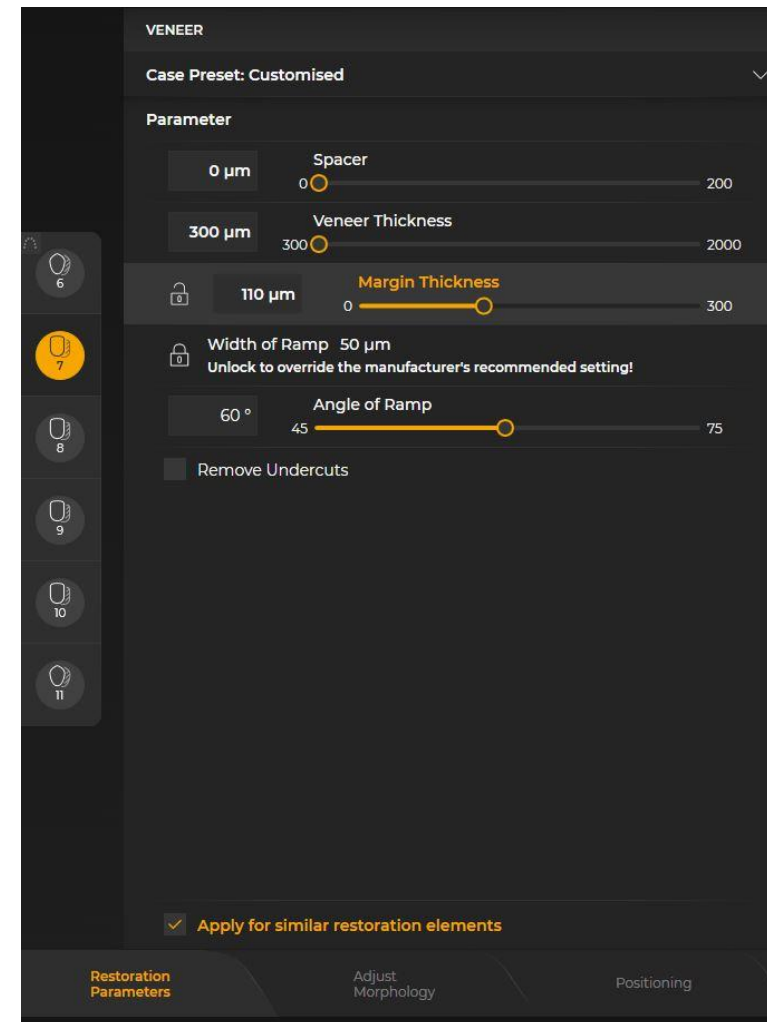
Spacer = 0

Veneer Thickness = 300 or Lowest

Margin Thickness = 110 microns

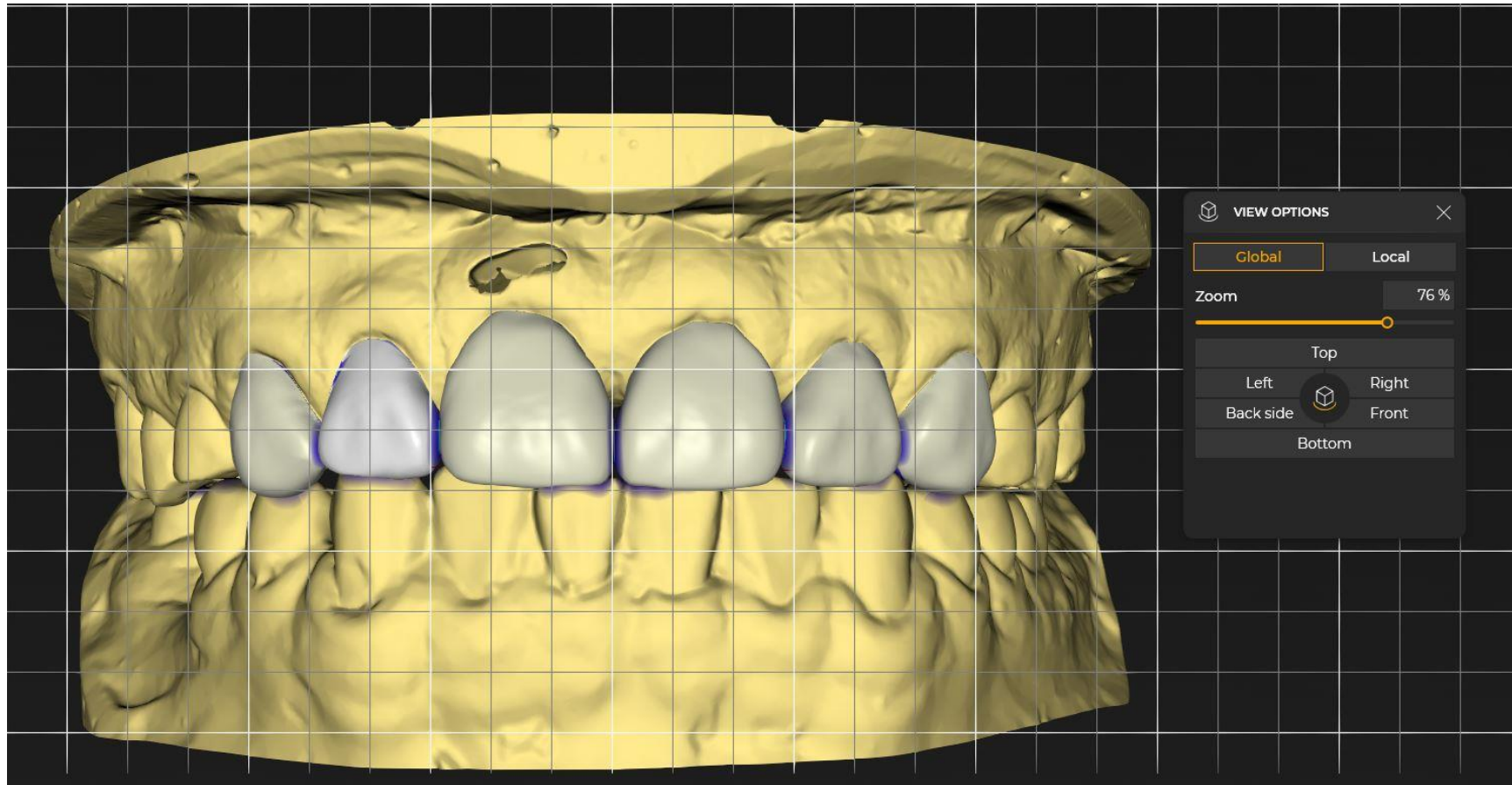
Leave Undercuts

Apply for Similar



# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

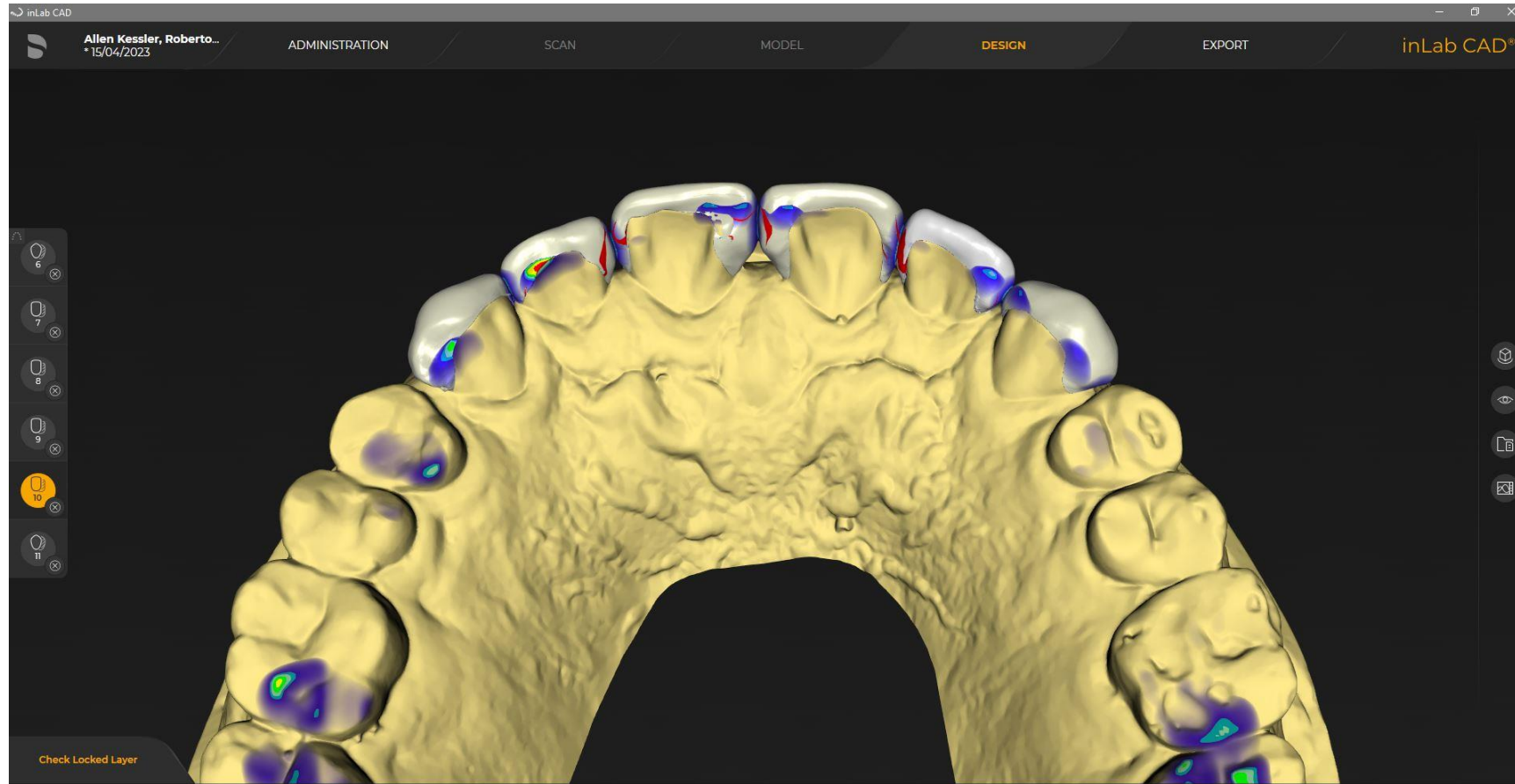
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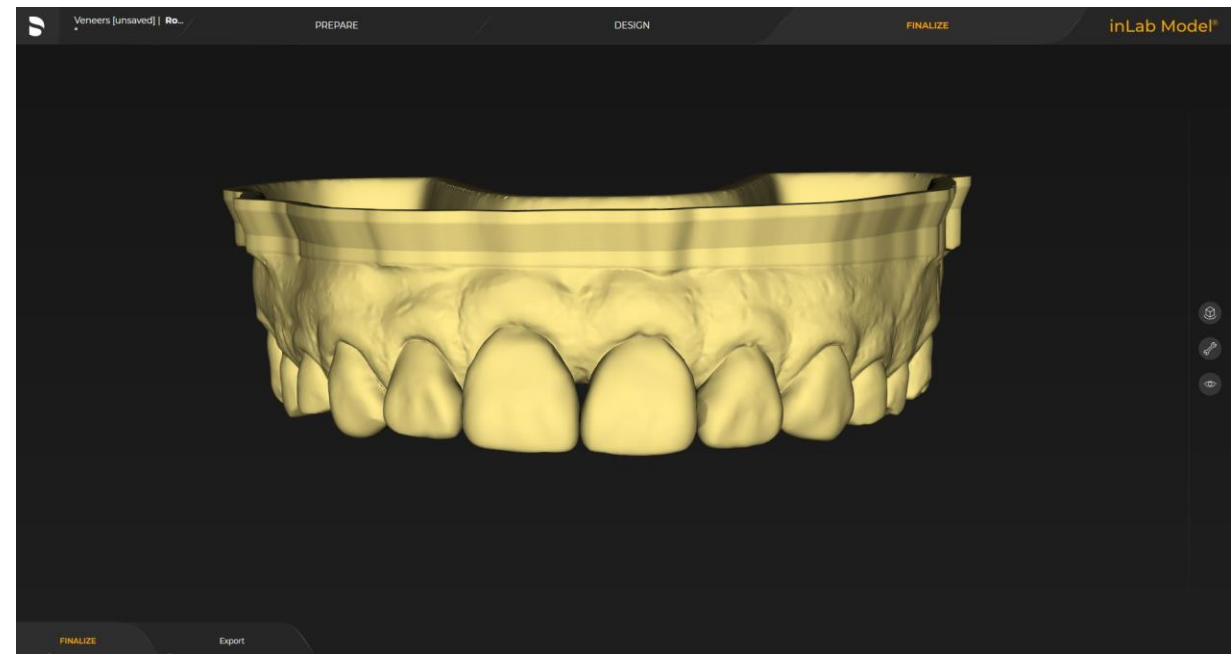
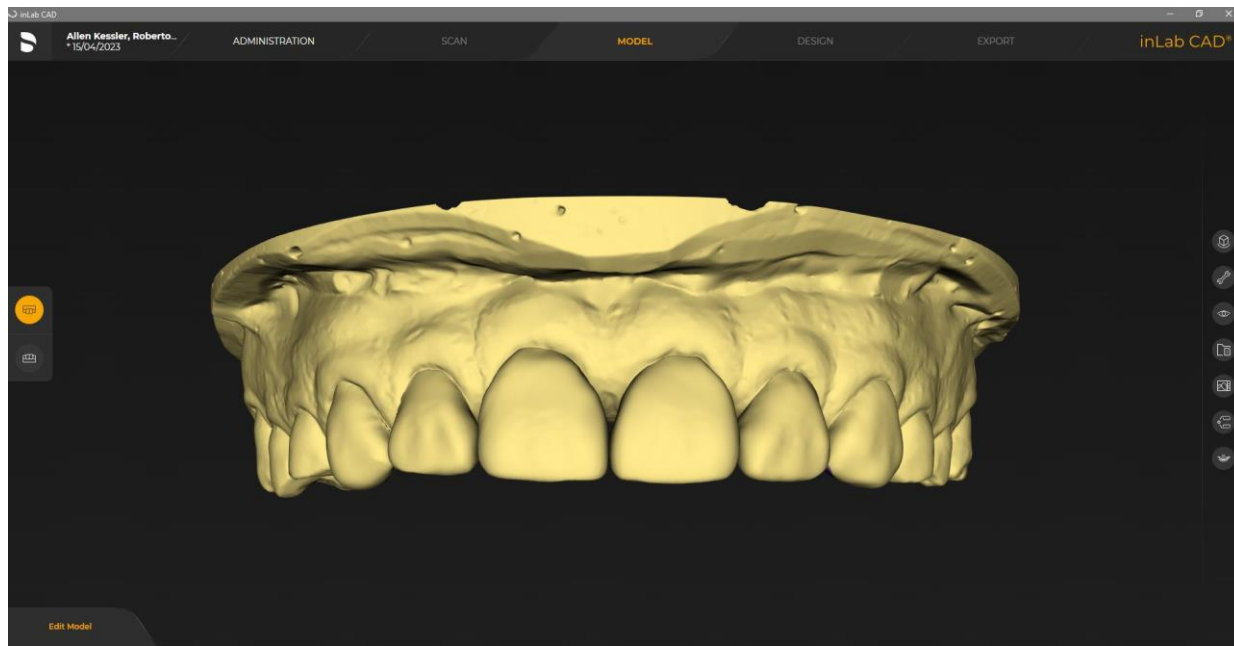
# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

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# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

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Restorations Virtually Seated. Exported to Model Software. Printed Model

# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

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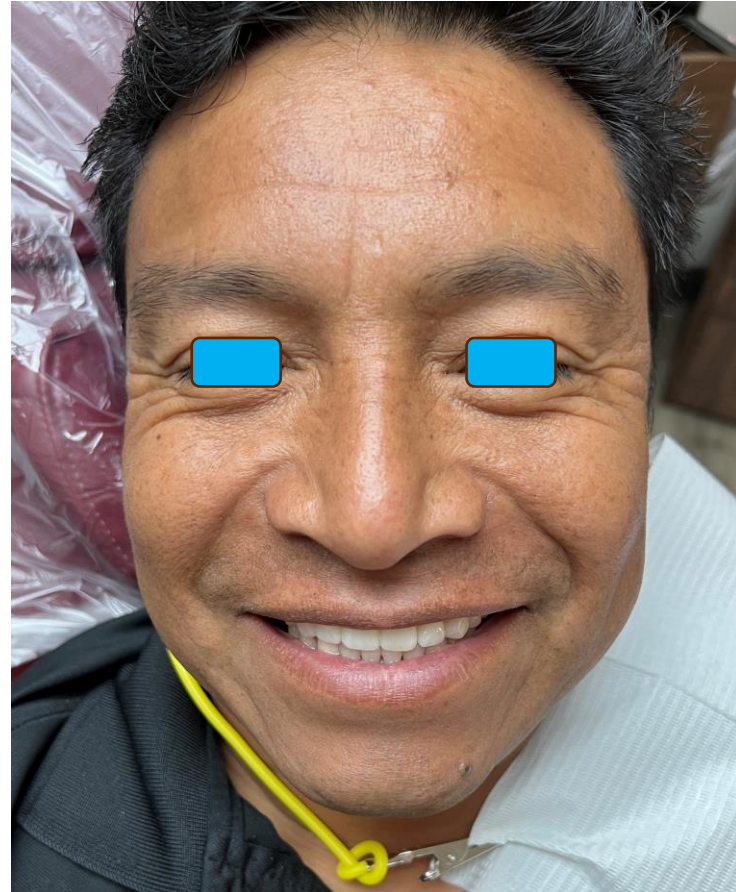
Dr. Hunt used an  
alginate impression  
of printed wax up to  
transfer a resin mock-up  
to the mouth for a preview





# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

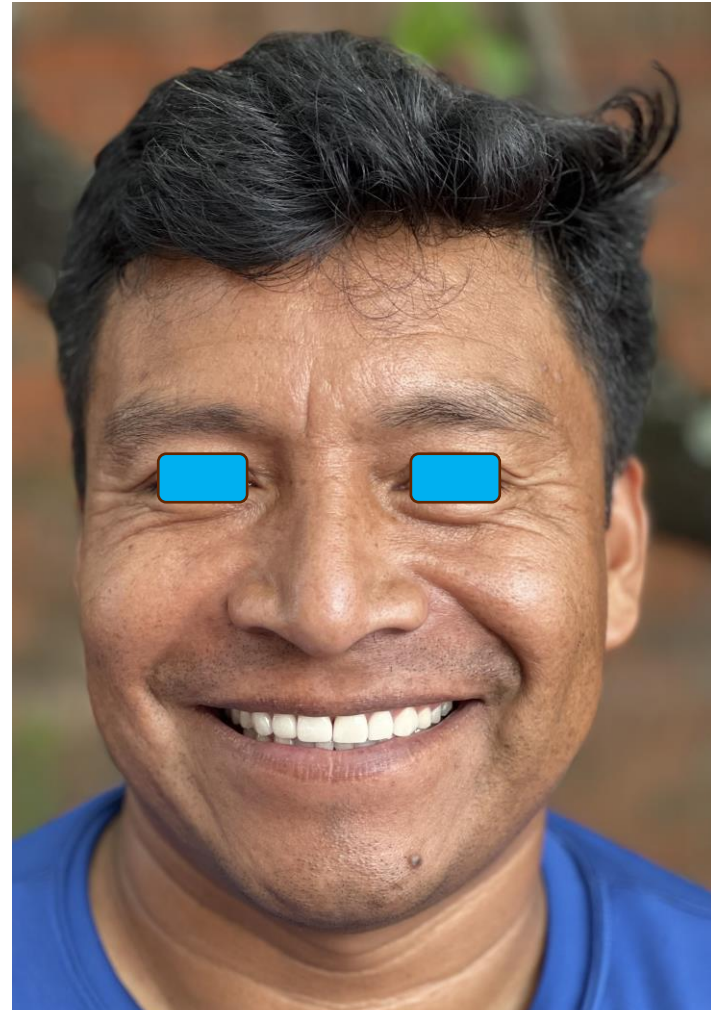
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# Case #2: Digital Wax Up + Final Result (Roberto)

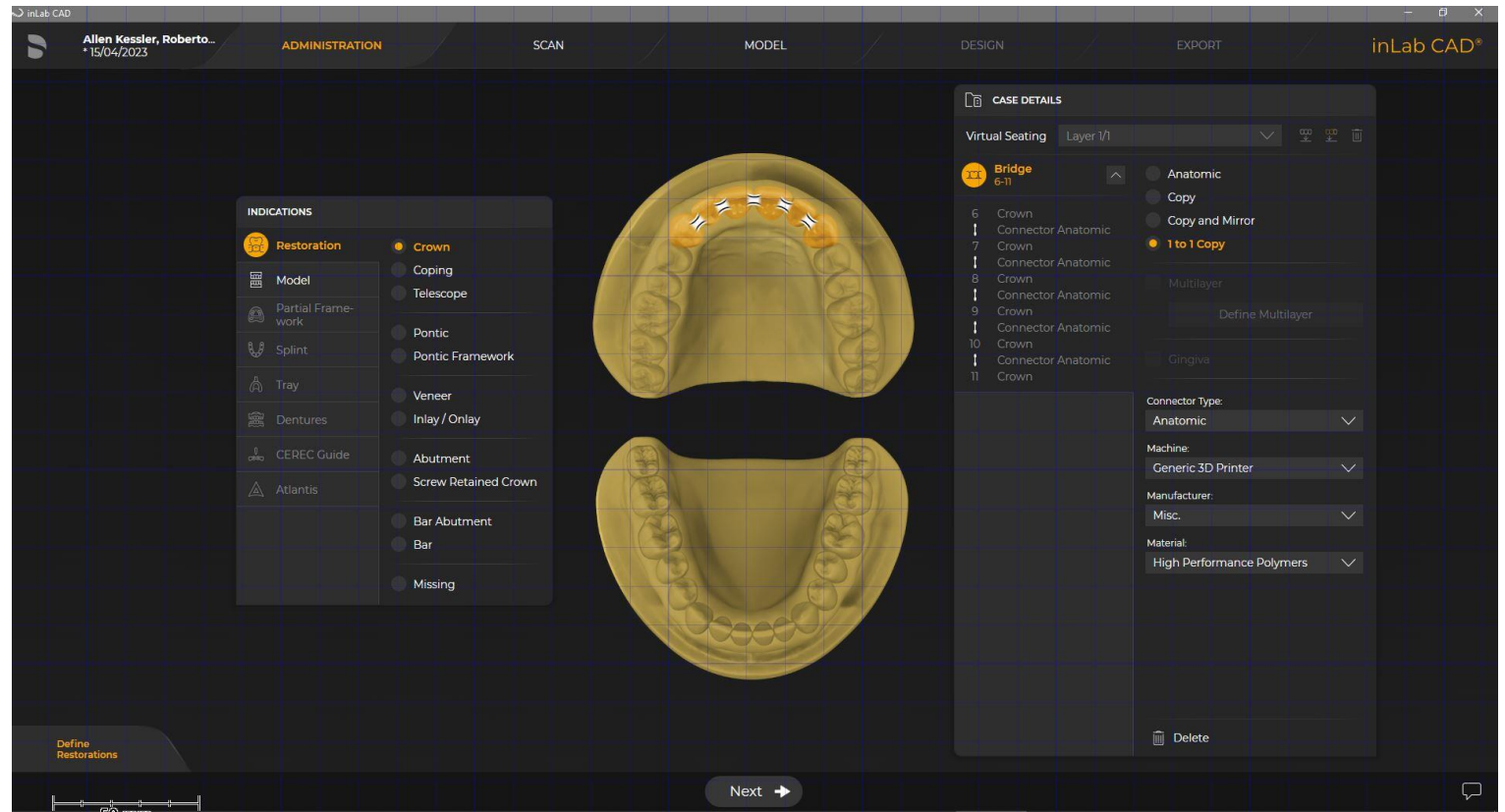
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# Case #2: What If... Send Out for Splinted Temp Design?! (Roberto)

Scenario:

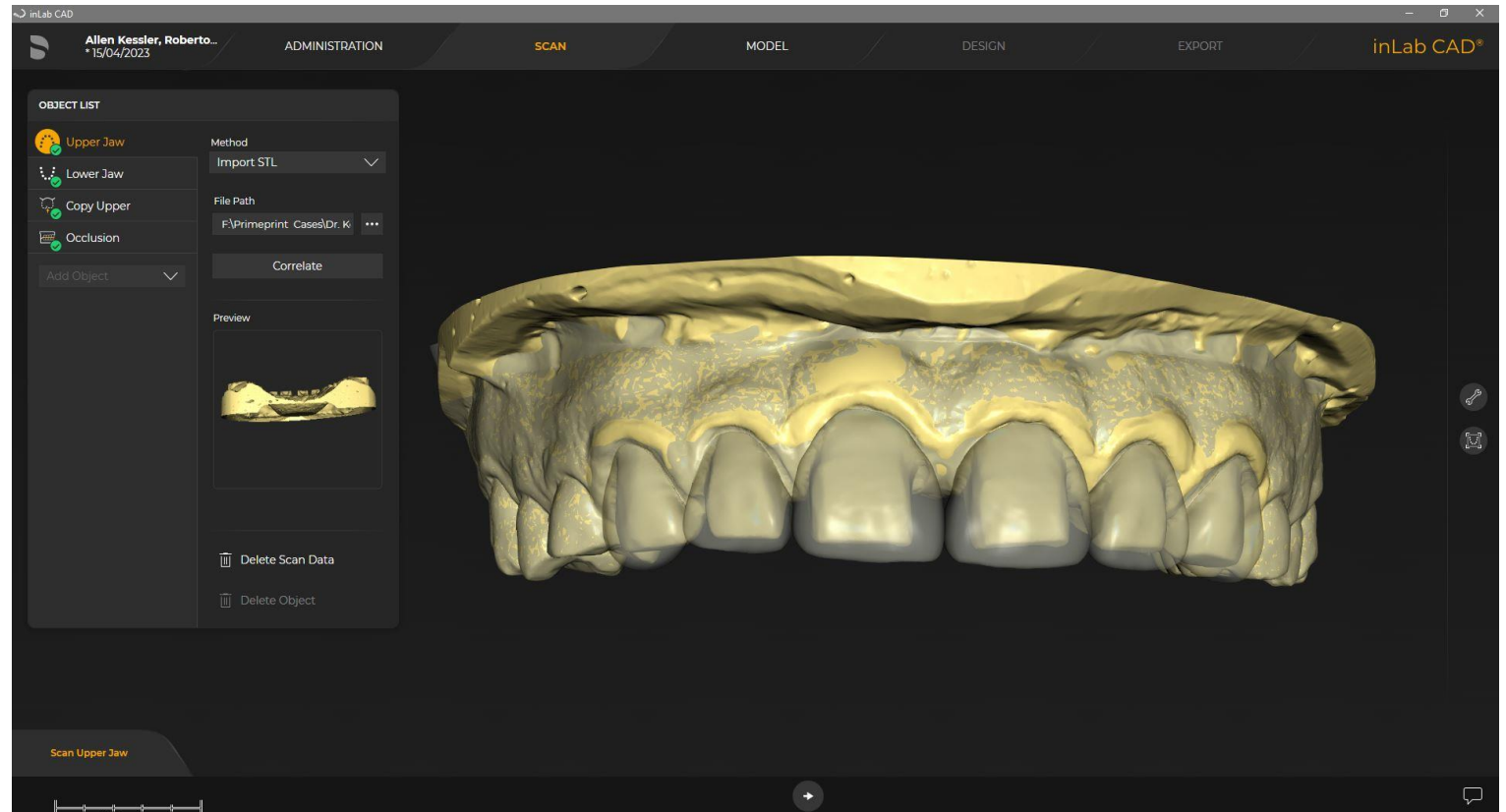
Send (digital) prep scan to lab for splinted temps for printing in House



# Case #2: What If?! (Roberto)

Scenario:

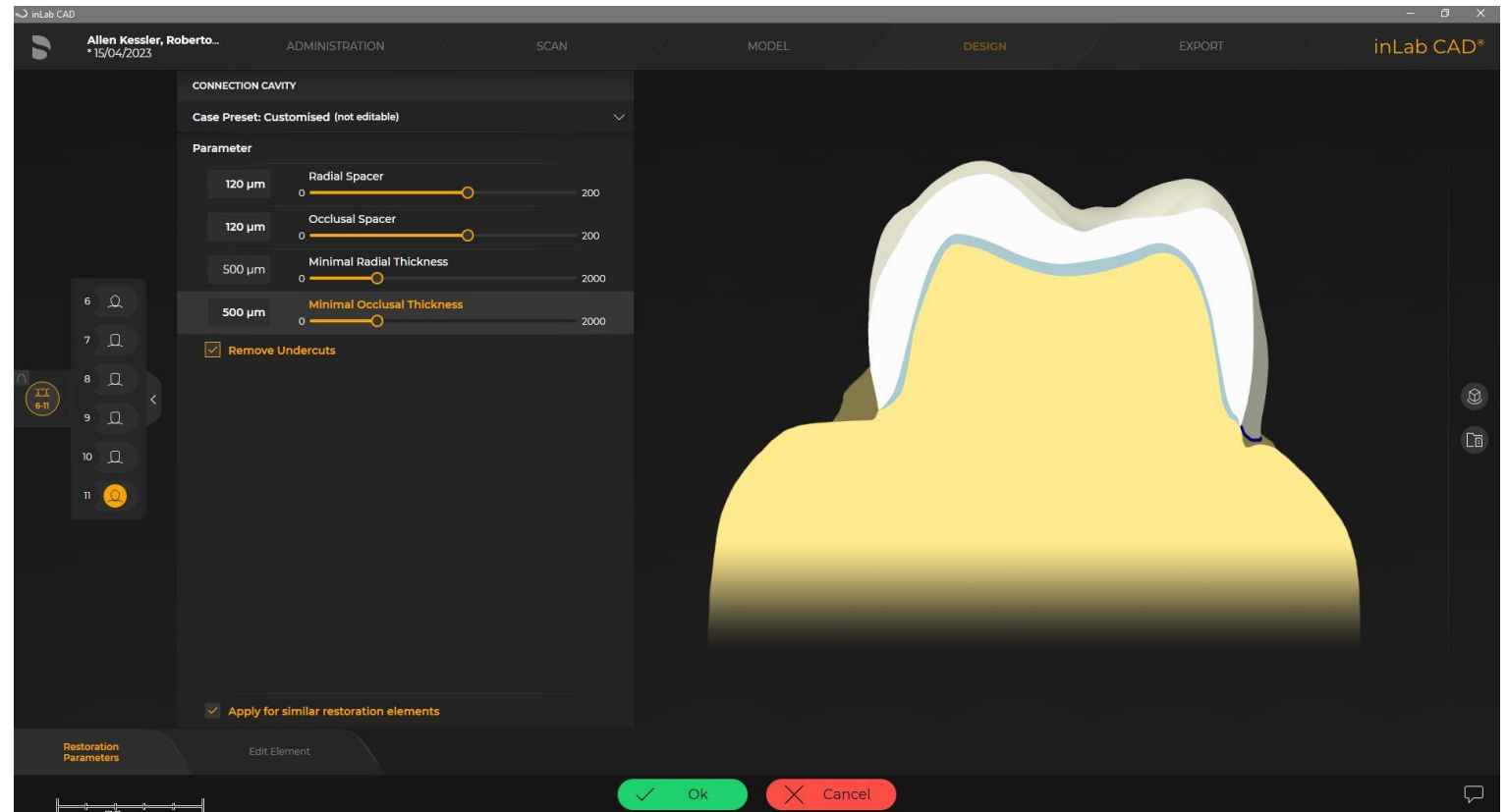
Send (digital) prep scan to lab for  
splinted temps for printing in  
House



# Case #2: What If?! (Roberto)

Scenario:

Send (digital) prep scan to lab for  
splinted temps for printing in  
House





# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

Scenario:

Send (digital) prep scan to lab for splinted temps for printing in House.

Note: Prep model includes #5-12;

Better to include full arch for better stitching

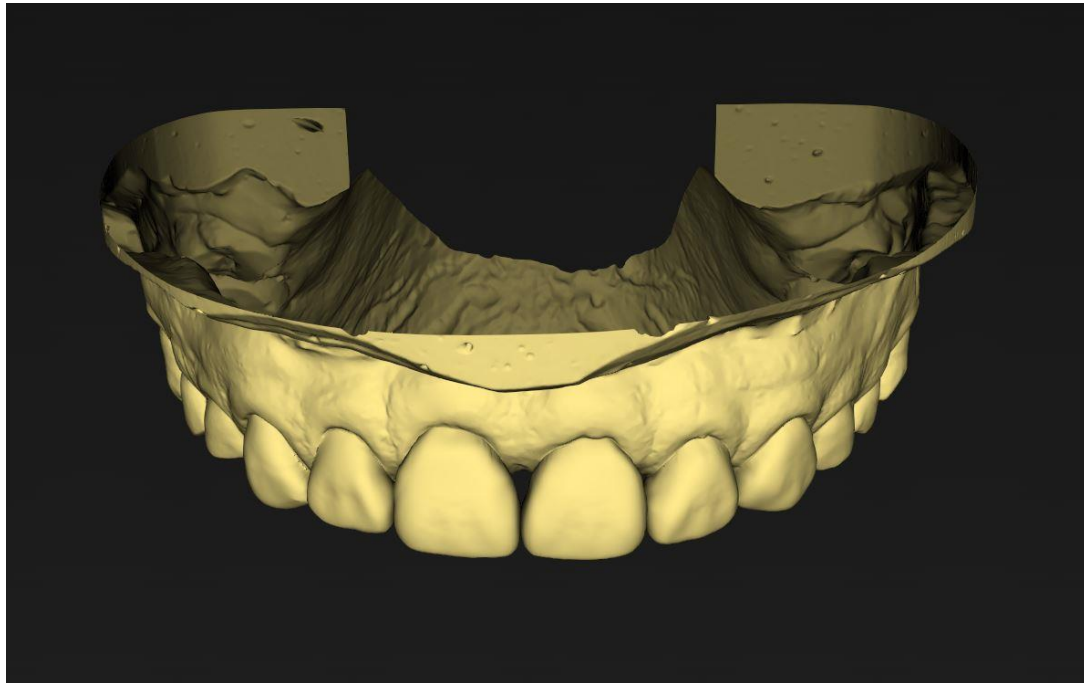




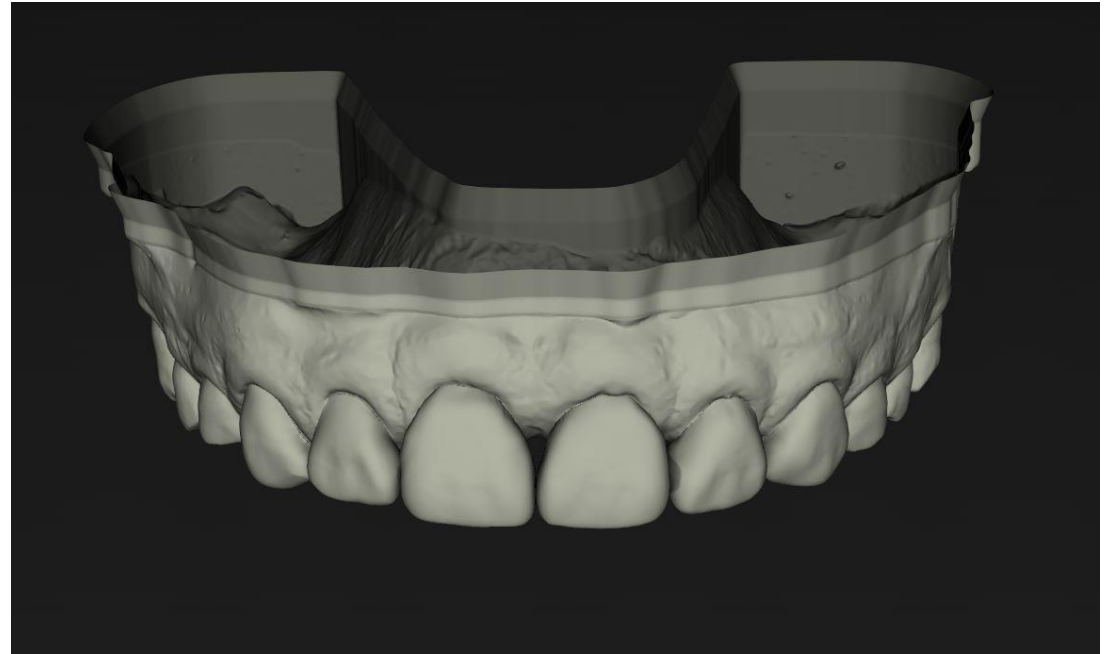
# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

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STL of Virtually Seated Restorations (\*possibly more accurate)



Scanned Printed Model of Virtually Seated Restorations

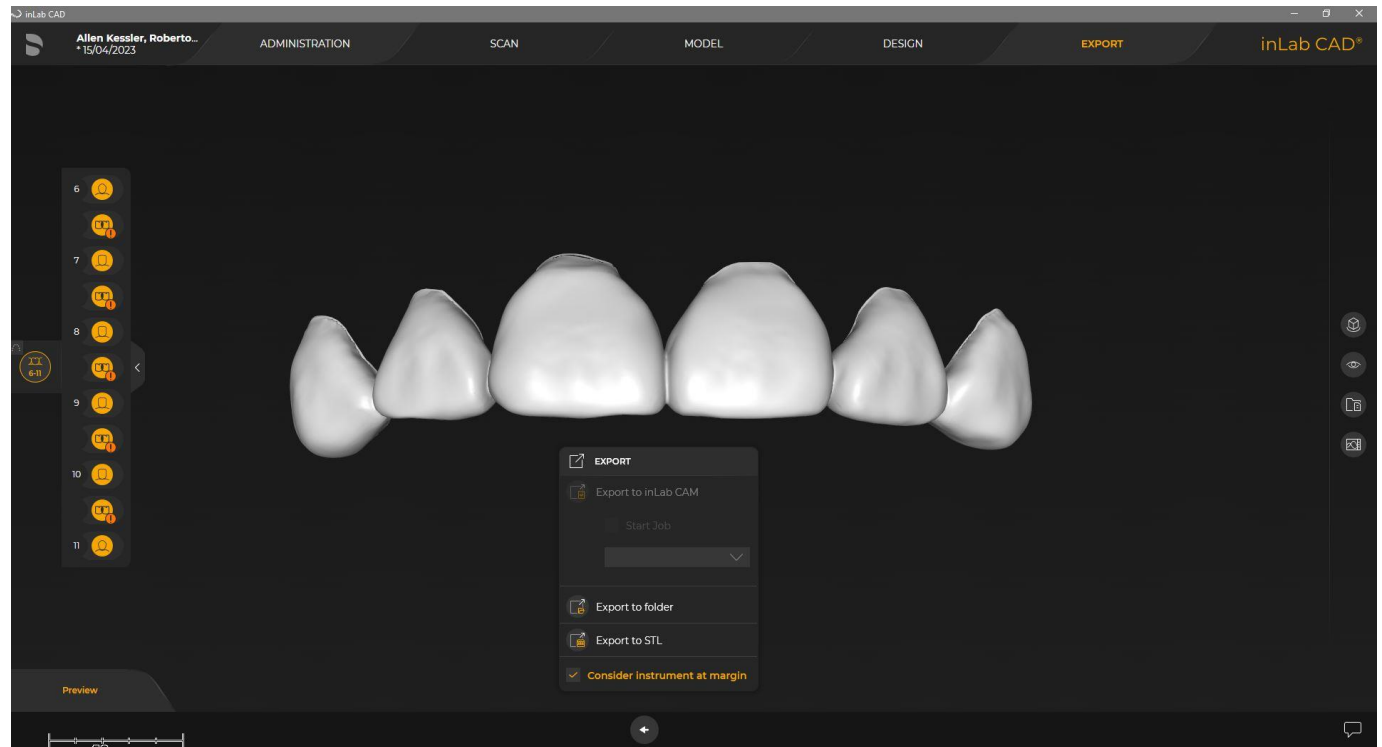


# Case #2: Digital Wax Up + Analog Transfer Mock Up (Roberto)

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Splinted Temps

Ready to Print!



# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

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Dr. Kaytlyn McCallister

UAB SOD Graduate 2024

The Foundry Resident

Patient concerned about spaces and length of teeth

Dr. McCallister requested digital wax up for

Crown #8, Veneer #9





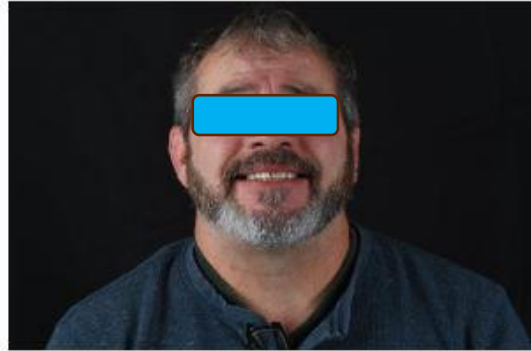
**PHOTO SET 8 SMILE DESIGN PHOTOS**

3D General Dentistry Services, PC  
3DGDservices.com

**EO Frontal Relaxed Incisal Display**



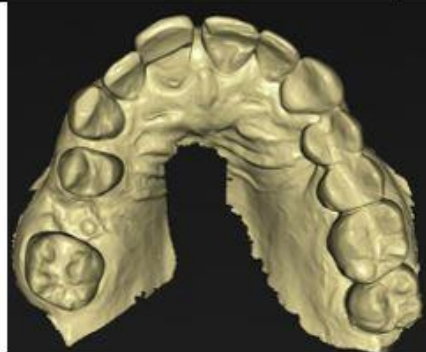
**EO Frontal Full Smile**



**EO Profile**



**IO Retracted Occlusal Maxillary**



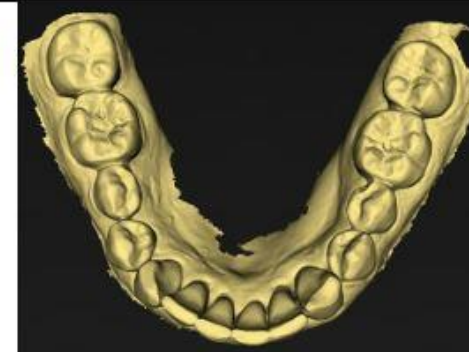
**Doctor:** Kaytlyn McCallister

**Patient:** D

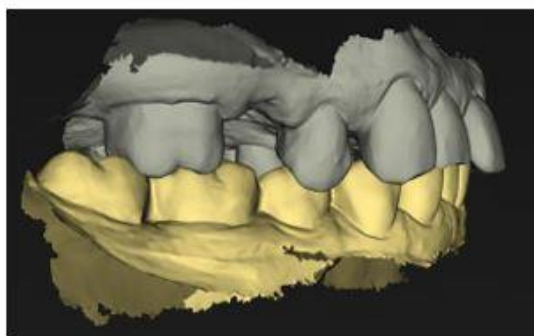
**DOB/Age:** date/age

**Date:** December, 2024

**IO Retracted Occlusal Mandibular**



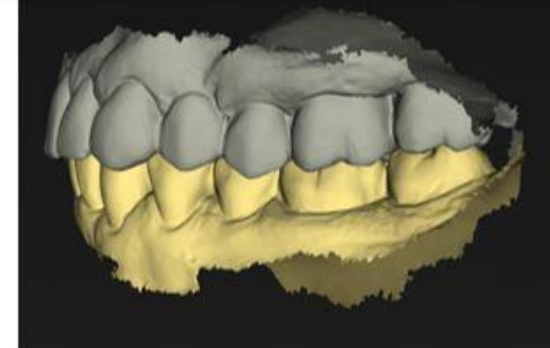
**IO Retracted Close Up Buccal Right**



**IO Retracted Close Up Anterior**




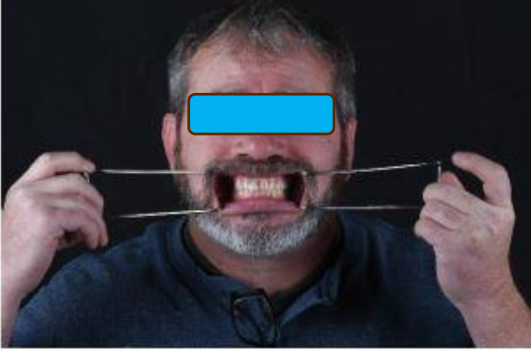






**IO Retracted Close Up Buccal Left**



To insert your own pictures: Right Click, Change Picture, From File

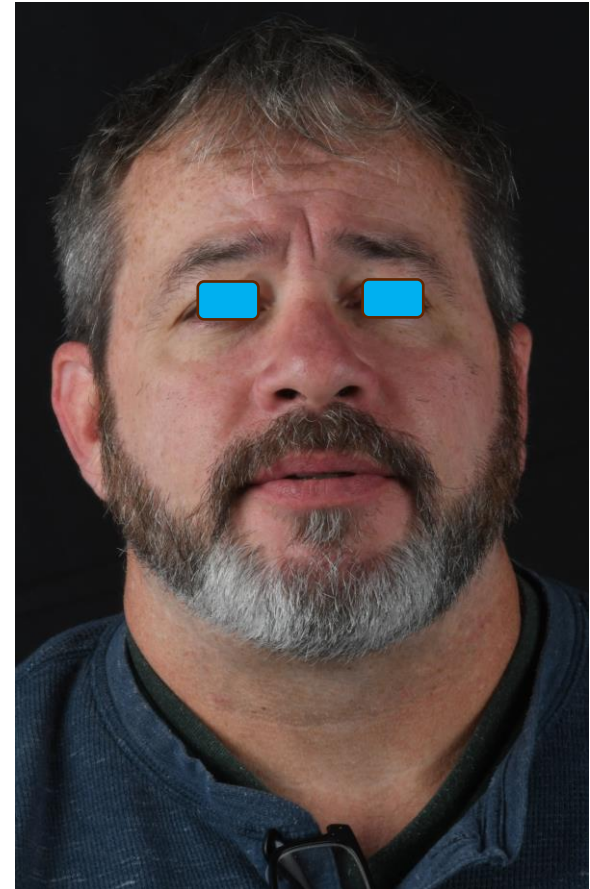
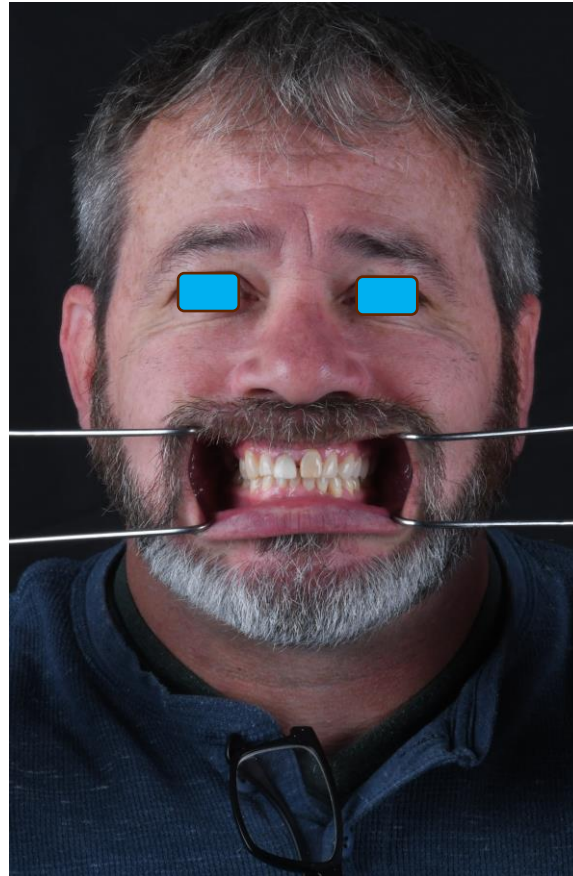
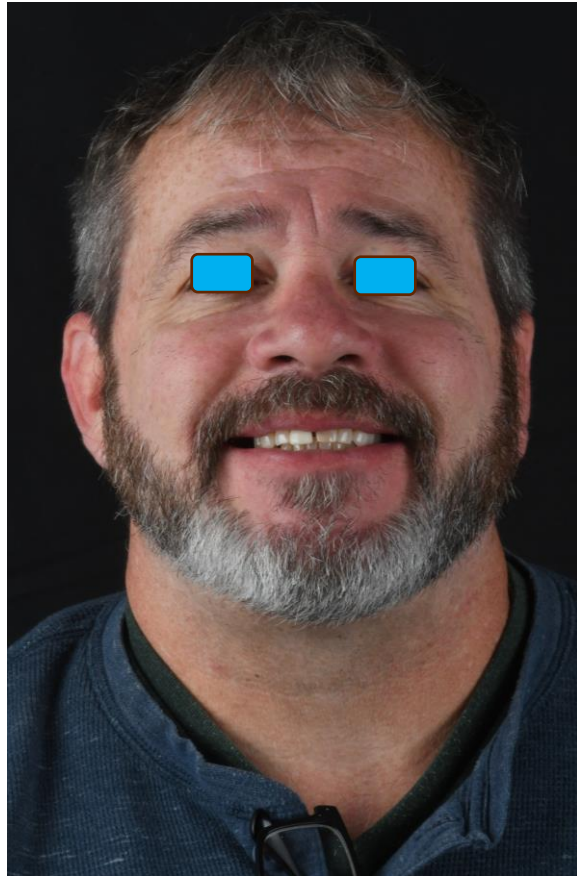


	<b>3:1 SMILE DESIGN PHOTOS</b>	<b>3D General Dentistry Services, PC</b> <b>3DGDservices.com</b>
<b>EO Frontal Relaxed Incisal Display</b>	<b>EO Frontal Full Smile</b>	<b>EO Frontal Retracted</b>
		
<b>IO Retracted Occlusal Maxillary</b>		<b>IO Retracted Occlusal Mandibular</b>
	<p><b>Doctor:</b> Kaytlyn McCallister</p> <p><b>Patient:</b> D</p> <p><b>DOB/Age:</b> date/Age</p> <p><b>Date:</b> December, 2024</p>	
<b>IO Close Up Incisal Display/Lip At Rest</b>	<b>Other</b>	<b>IO Retracted Close Up</b>
		

To insert your own pictures: Right Click, Change Picture, From File

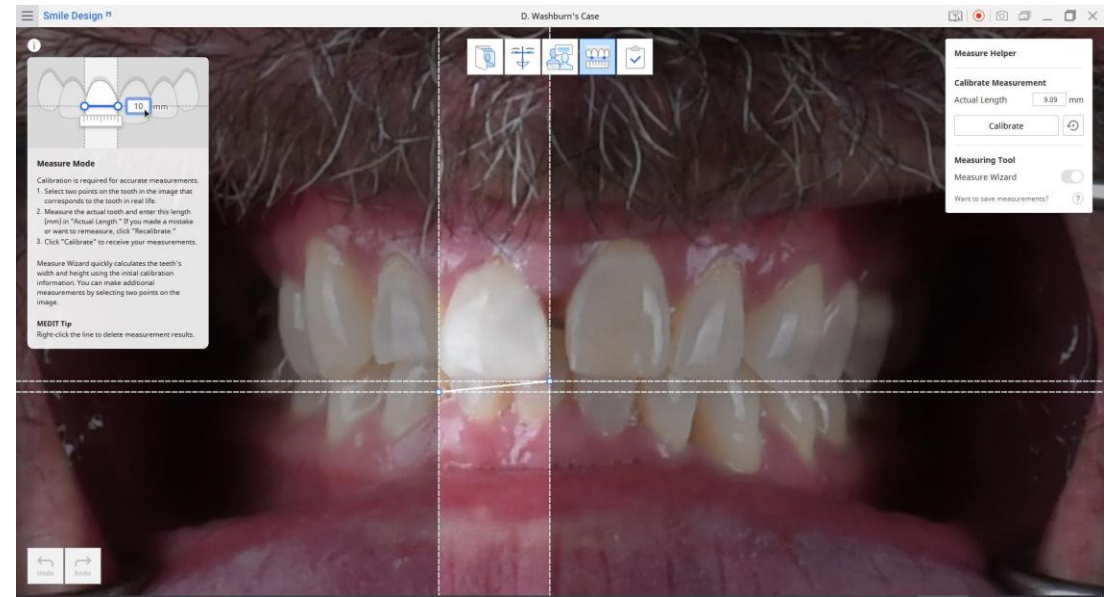
# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

---



# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

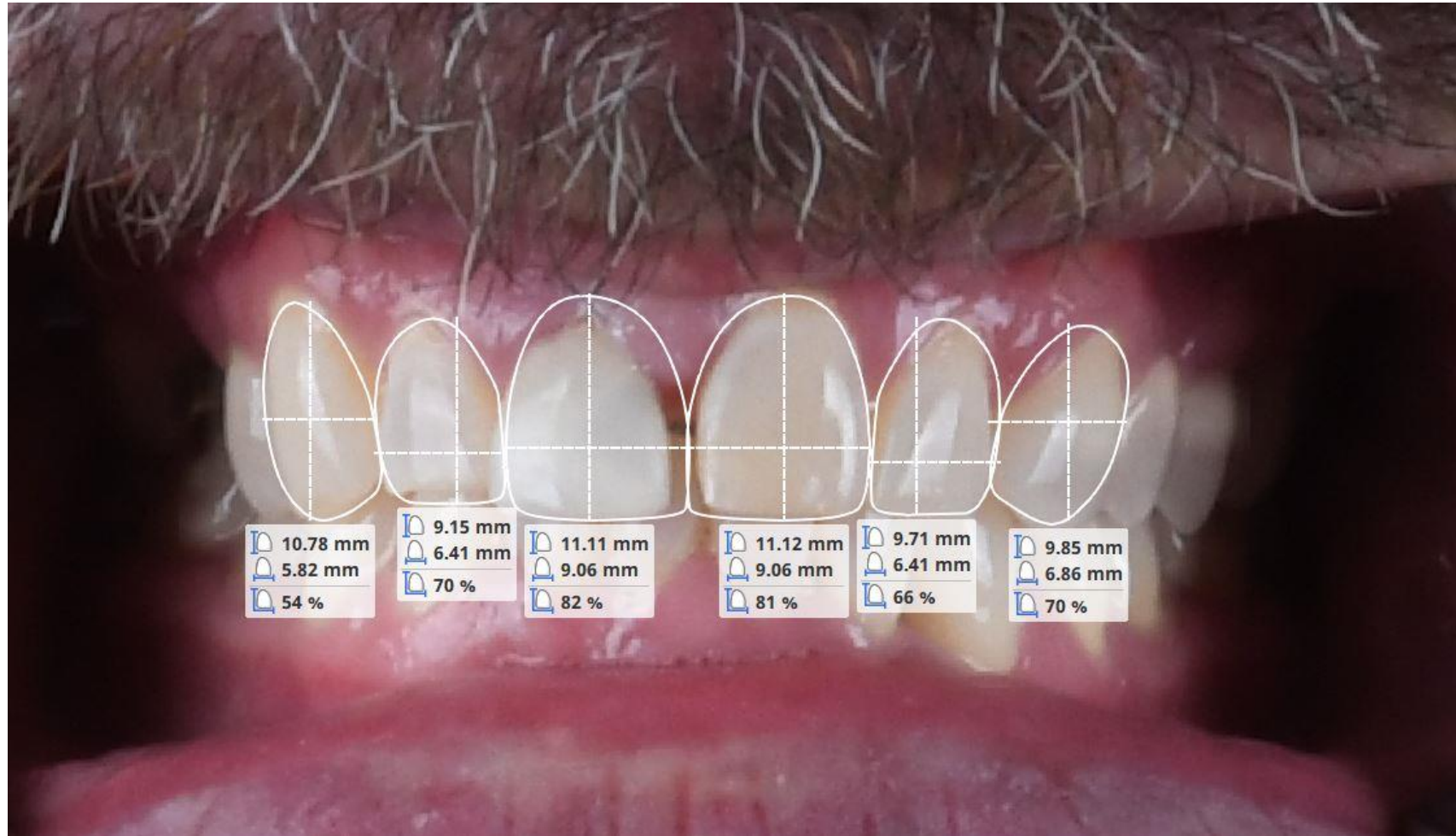
Medit Smile Design for start





# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

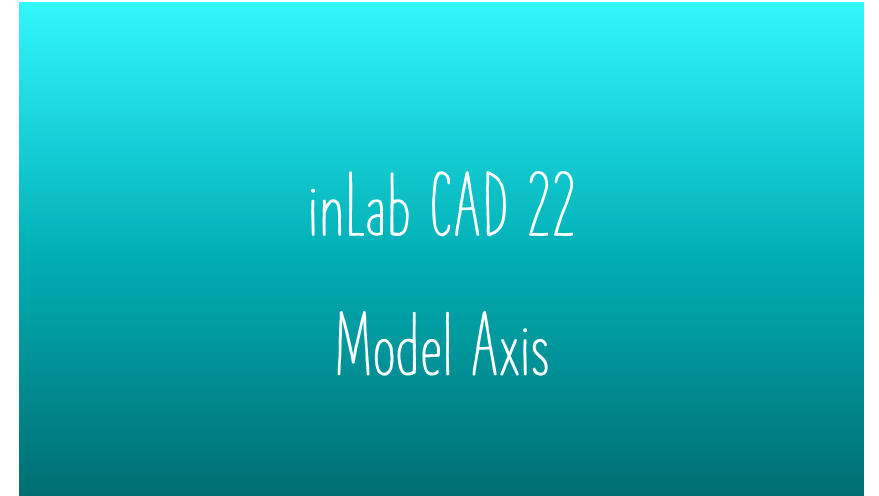
---







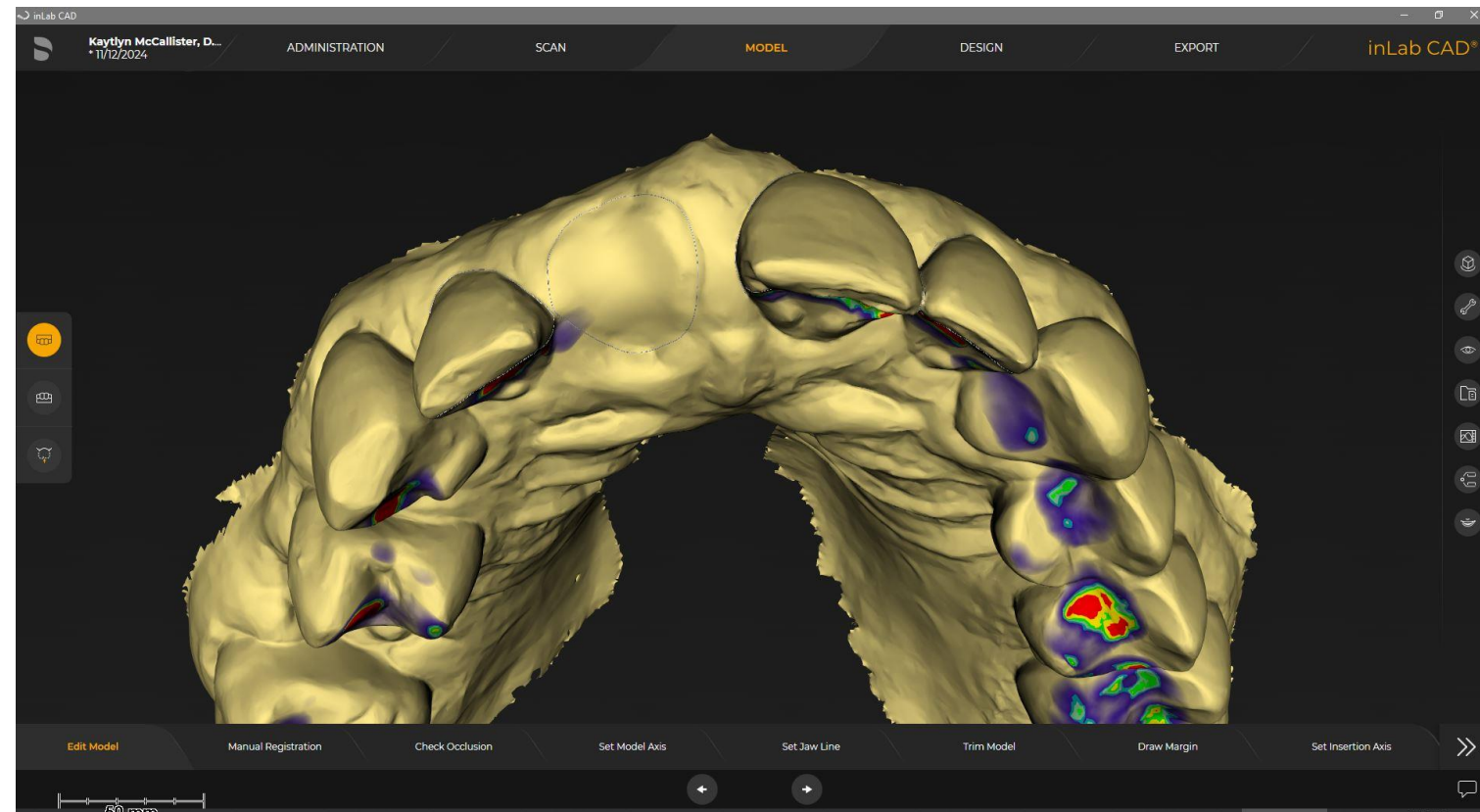
# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)





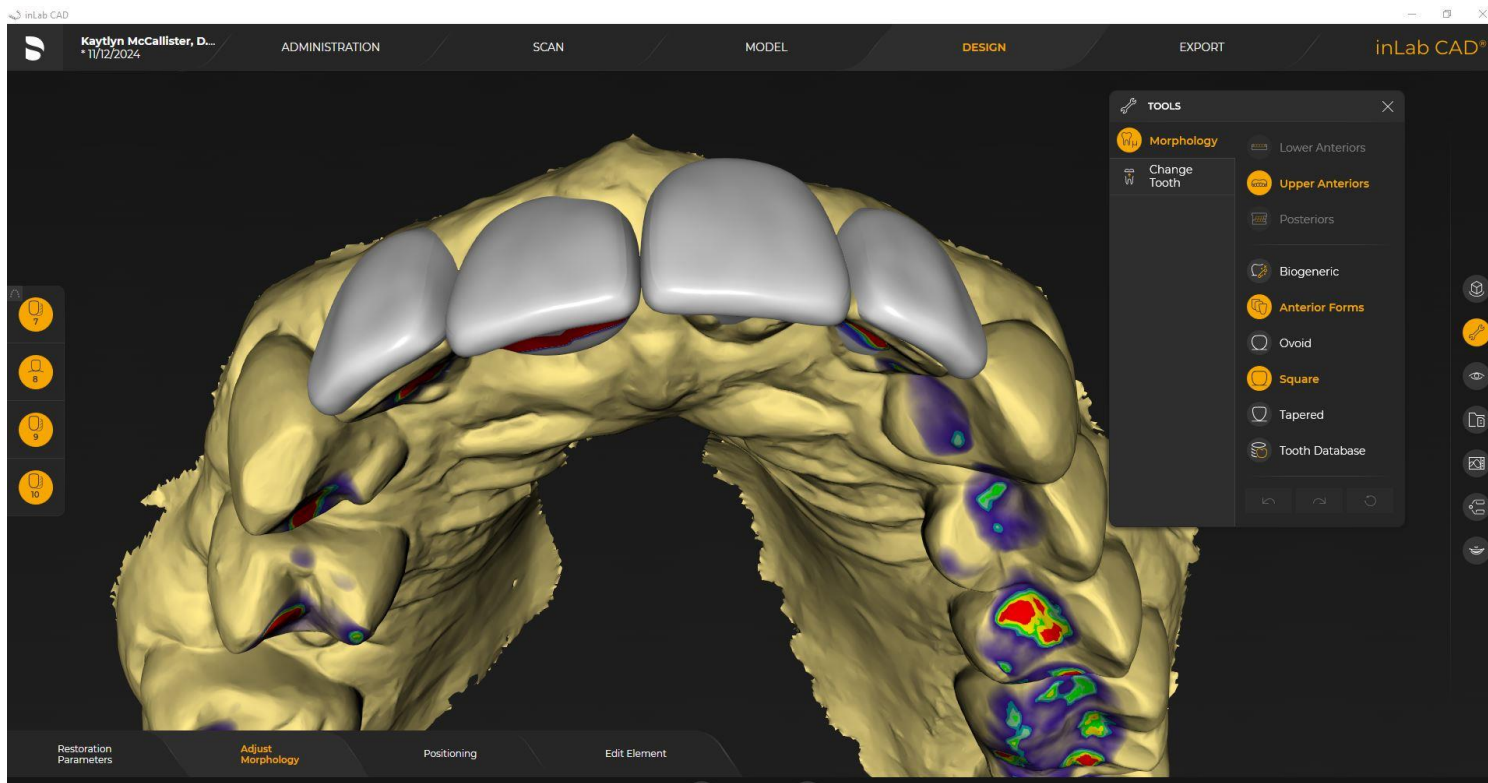
# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

---



inLab CAD 22  
Virtually Extract, Margins #8 Cr.  
Margins #7, 9, 10

# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)



inLab CAD 22  
Anterior Form. Square  
Positioning of Shells

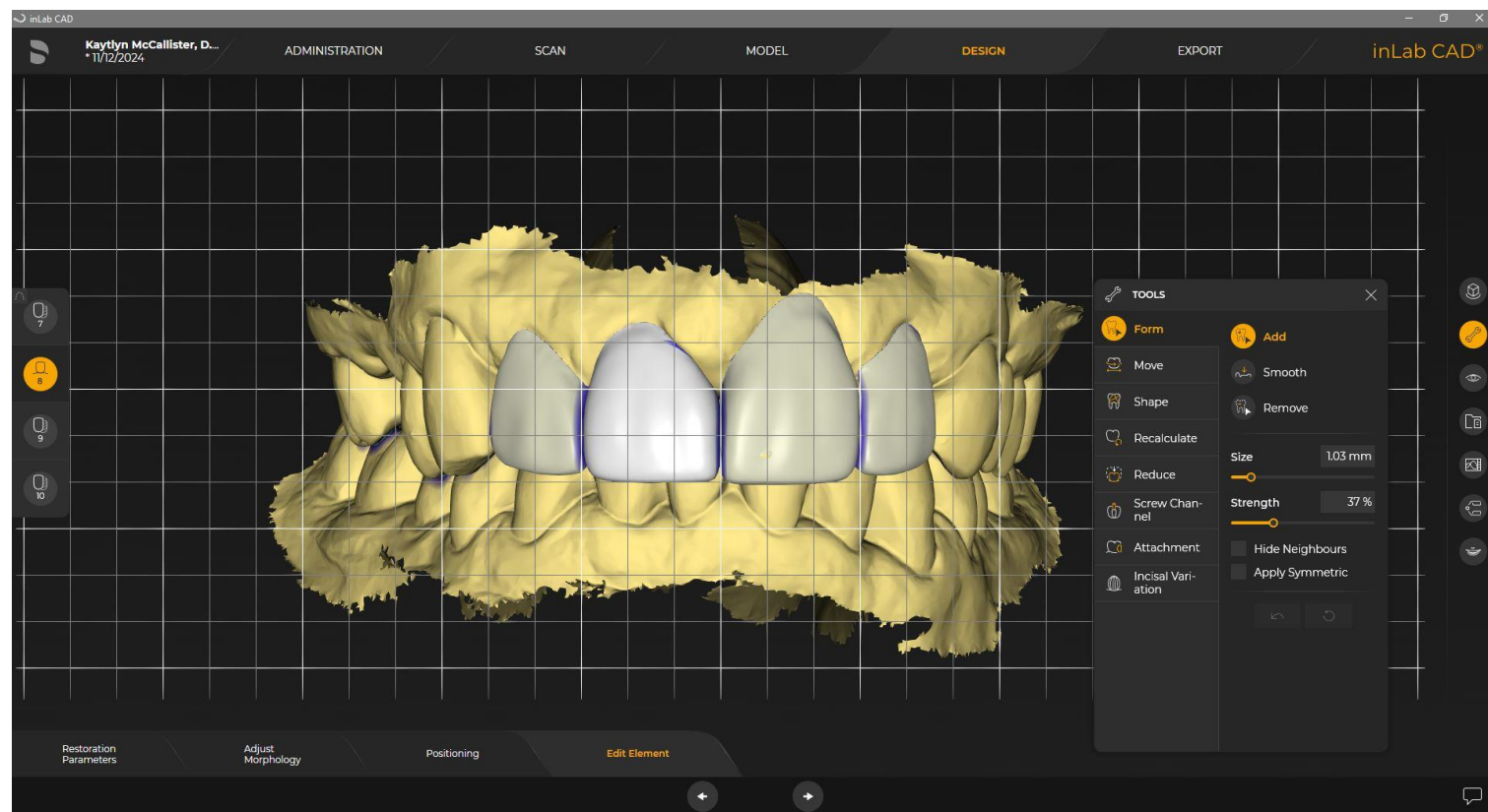


# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

---



# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

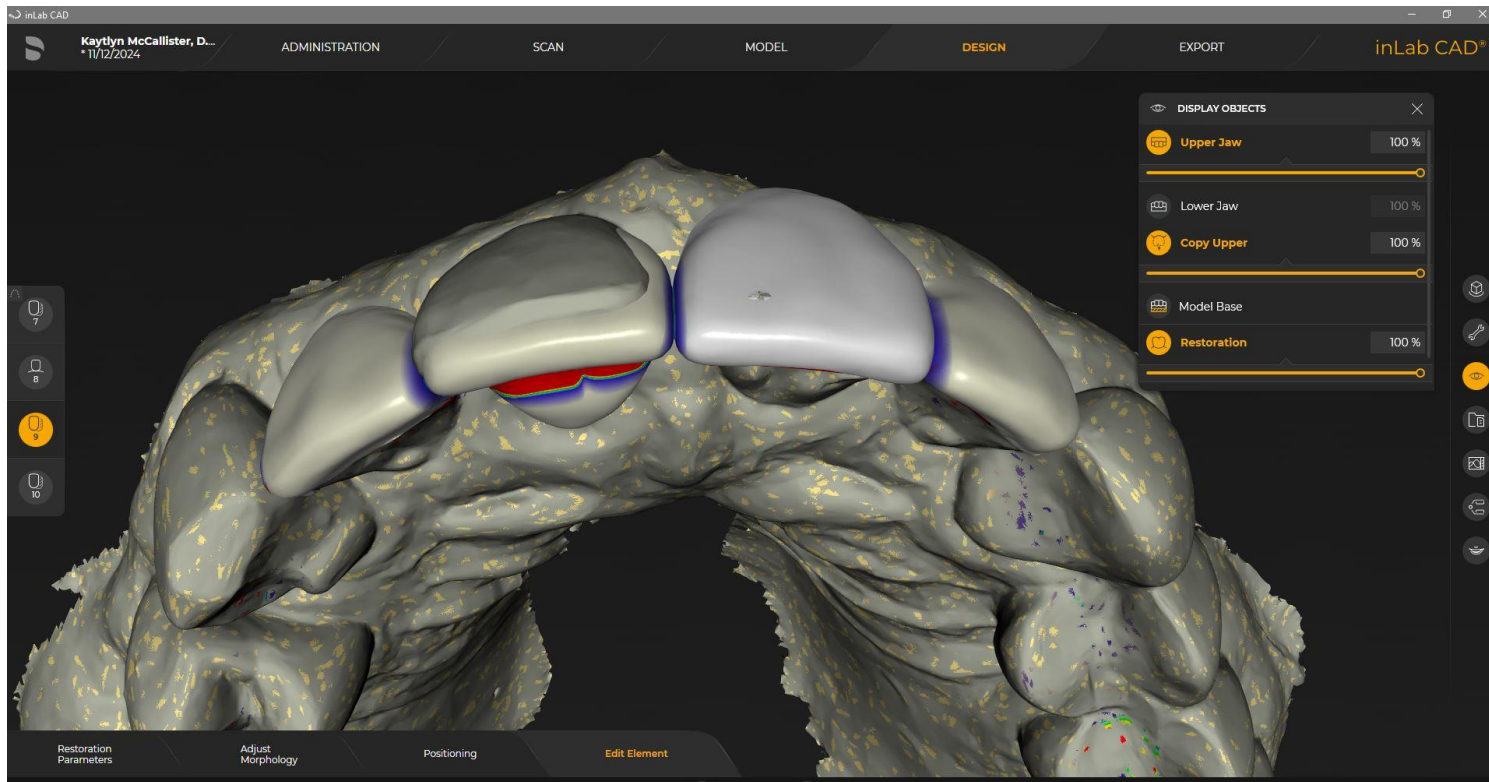


inLab CAD 22  
Grid Preview

# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)



# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

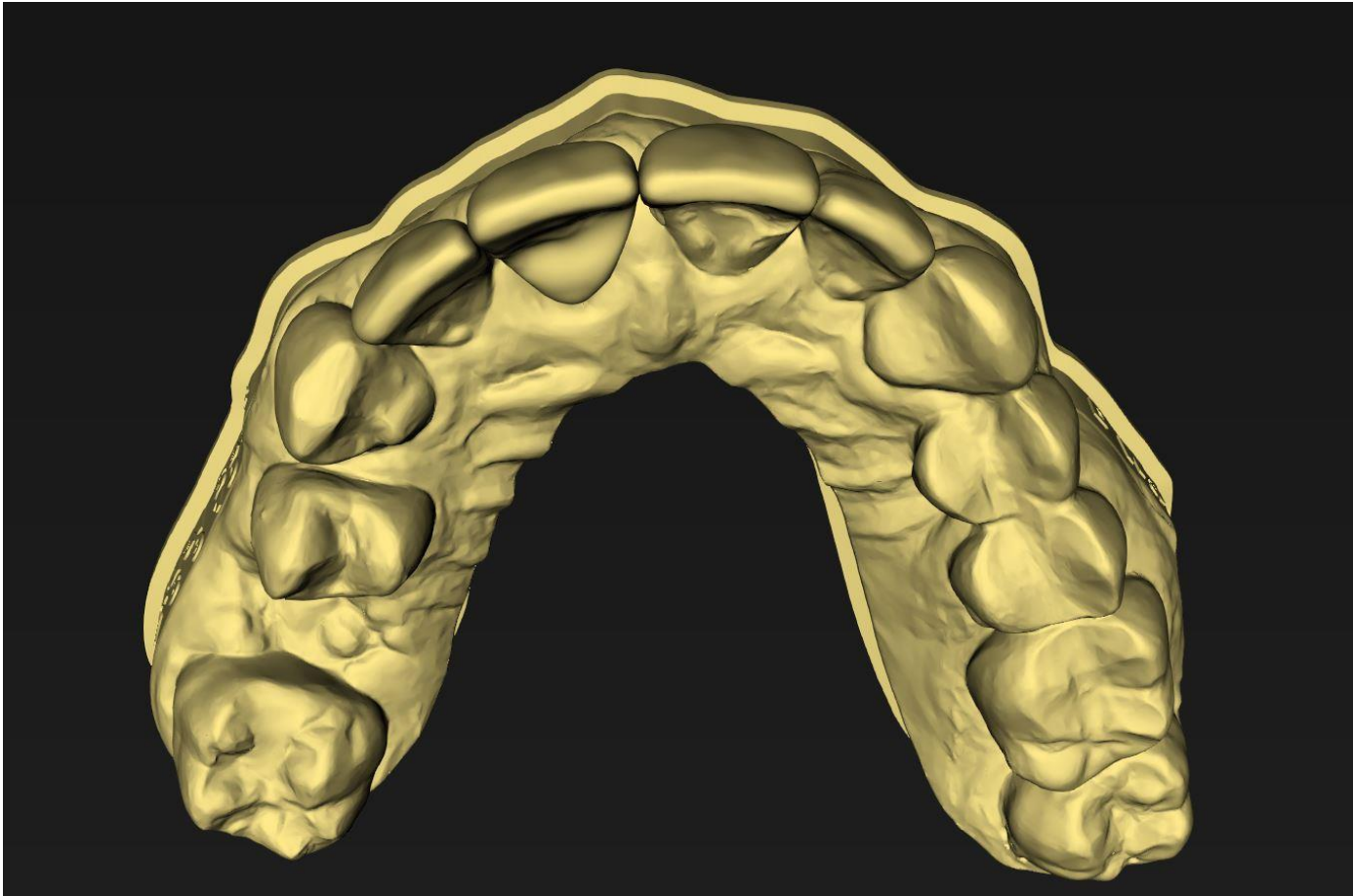


inLab CAD 22  
Pre-Op and Restorations



# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

---

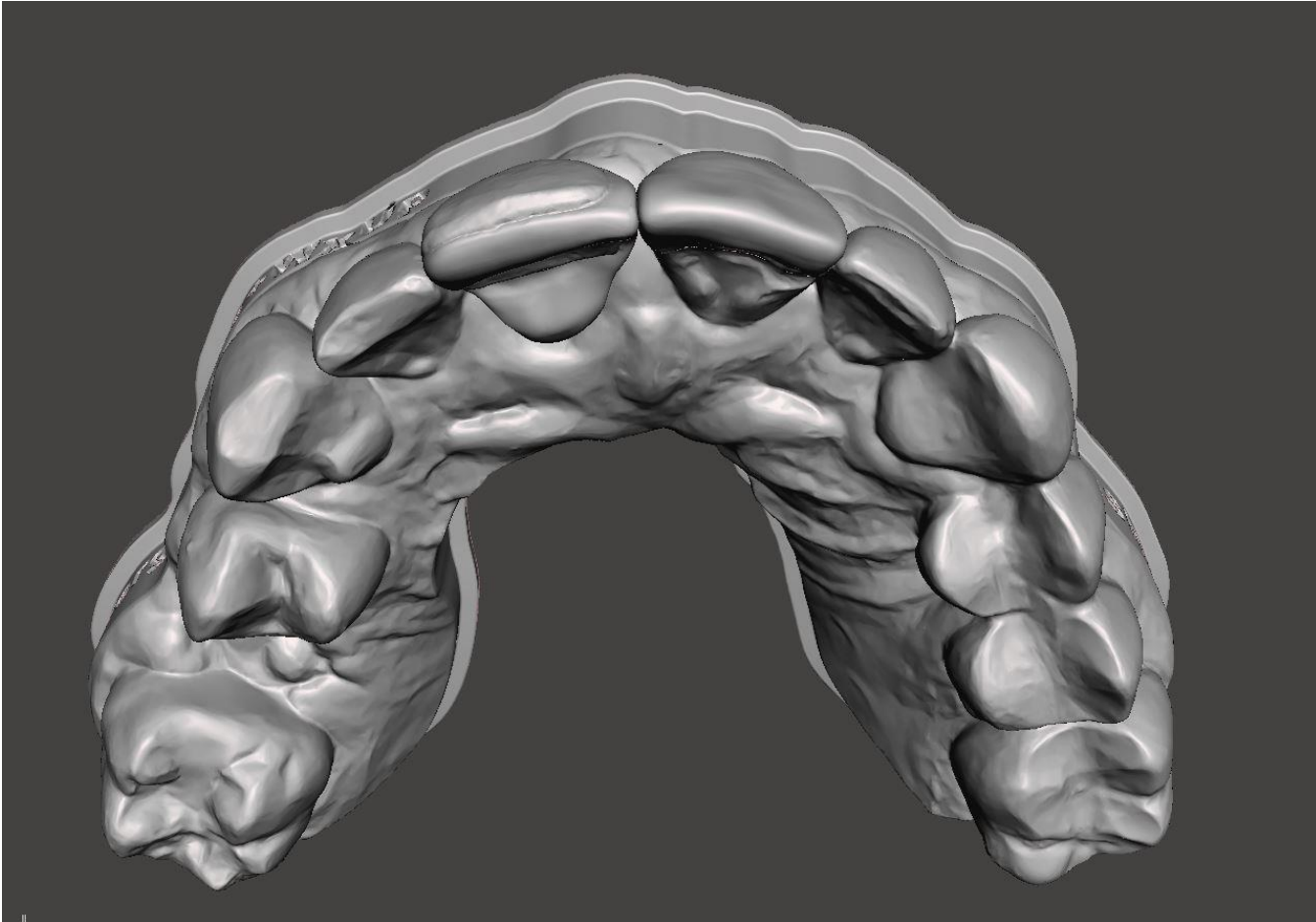


inLab CAD 22

Virtually Seated Restorations Model

# Case #3: 2D Design, 3D Digital Wax Up Digital Workflow (Patient: D)

---



inLab CAD 22

Virtually Seated Restorations +

Pre-Op Merged Model

# Copyplast Transfer Stent



- <https://www.greatlakesdentaltech.com/>
- Item # 035-018, 1.5 mm/125 mm Square
- "Does not bond to acrylic"
- 'Use for duplication molds...temporary crowns and bridges.'

# Copyplast Transfer Stent, Accessory

---



- Amazon.com
- Zibra Open-It! All-In-One Multi Tool



# Case #4: Denture 2D and 3D Adaptations (Patient: Lawanna)

---

Dr. Barry Goodspeed

Lovelady Center

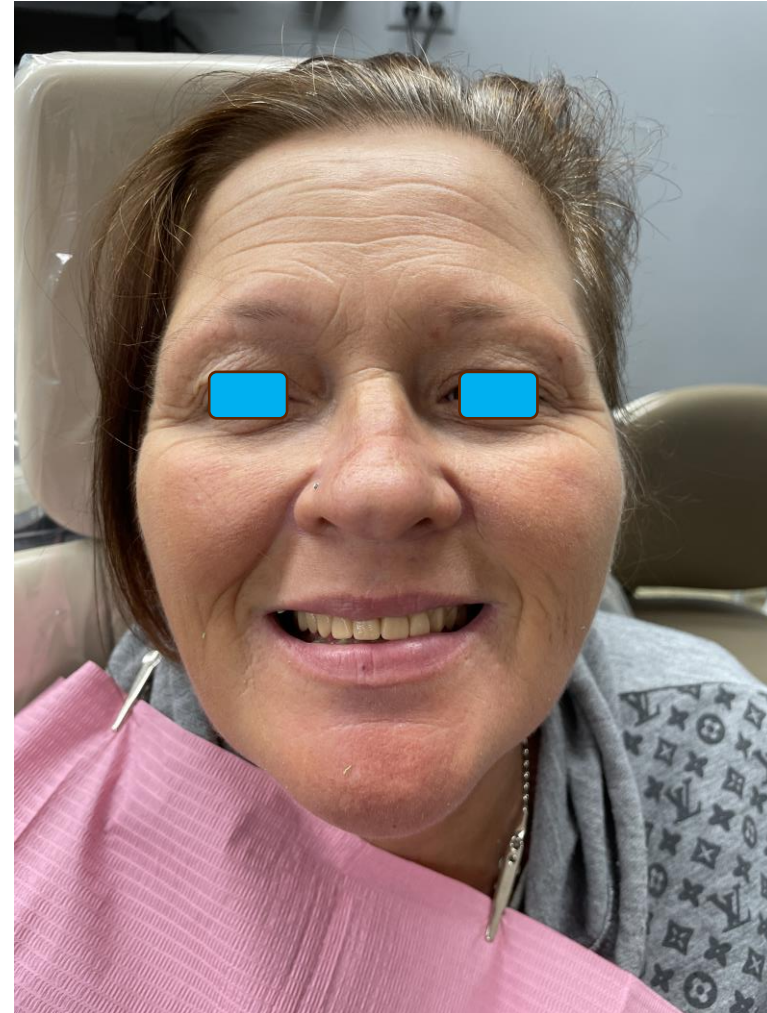
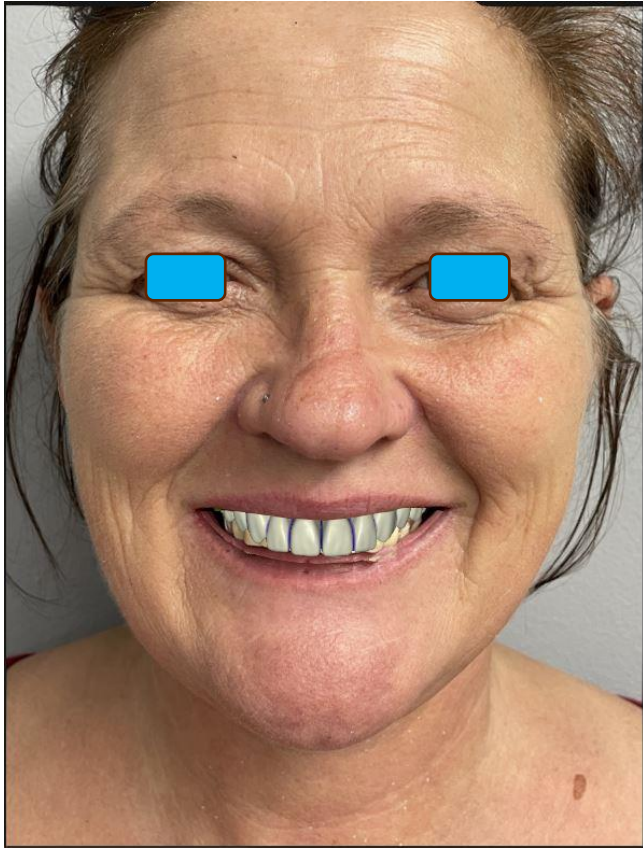
Patient's dog broke her upper denture and  
ate the lower denture!



# Case #4: Denture 2D and 3D Adaptations (Patient: Lawanna)

---

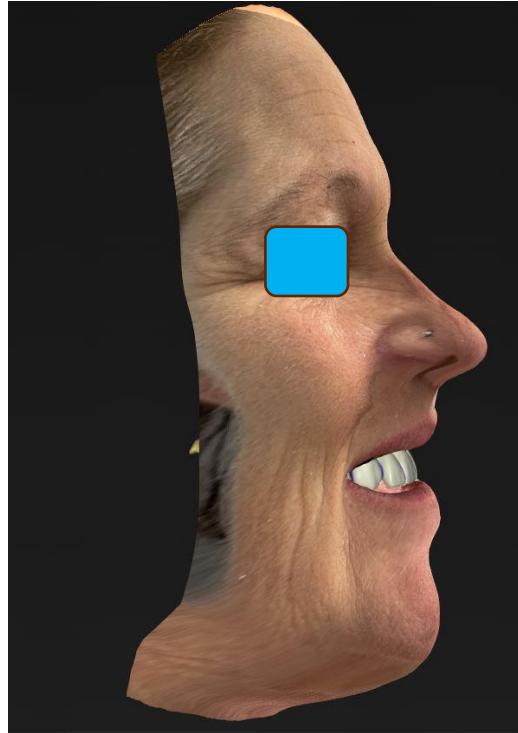
First Set Up and Printed Try In (Model C)



# Case #4: Denture 2D and 3D Adaptations (Patient: Lawanna)

---

First Set Up and Printed Try In (Model C)

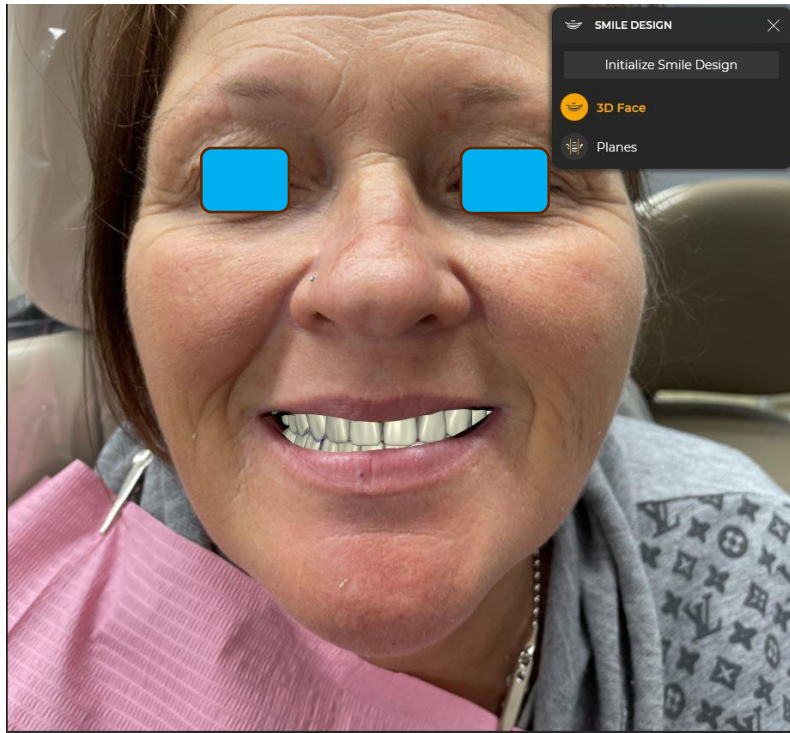




# Case #4: Denture 2D and 3D Adaptations (Patient: Lawanna)

---

Revised Set Up and Printed Try In (Value Try In Resin)





# Case #4: Denture 2D and 3D Adaptations (Patient: Lawanna)

---



# Case #4: Denture 2D and 3D Adaptations (Patient: Lawanna)

---



# Case #5: Digital Wax Up (Patient: Danny)

---

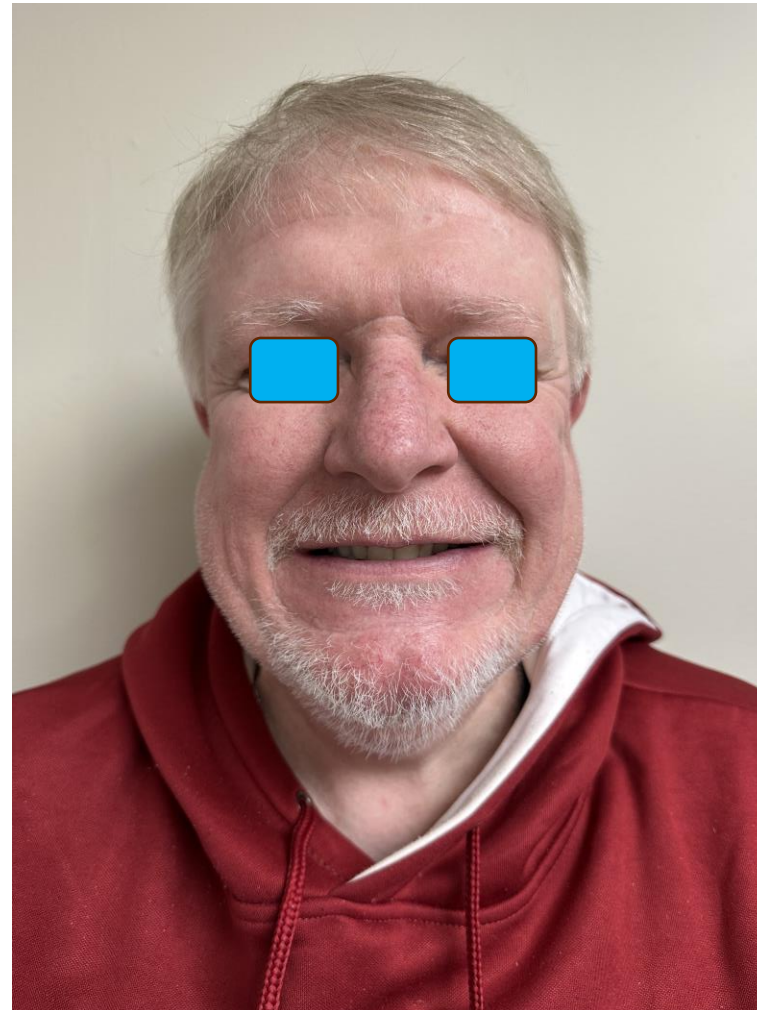
Collaboration with

Dr. Allen Kessler and

Dr. William Allee










UAB SOD Graduate 2024

Patient considering porcelain  
veneers for worn dentition







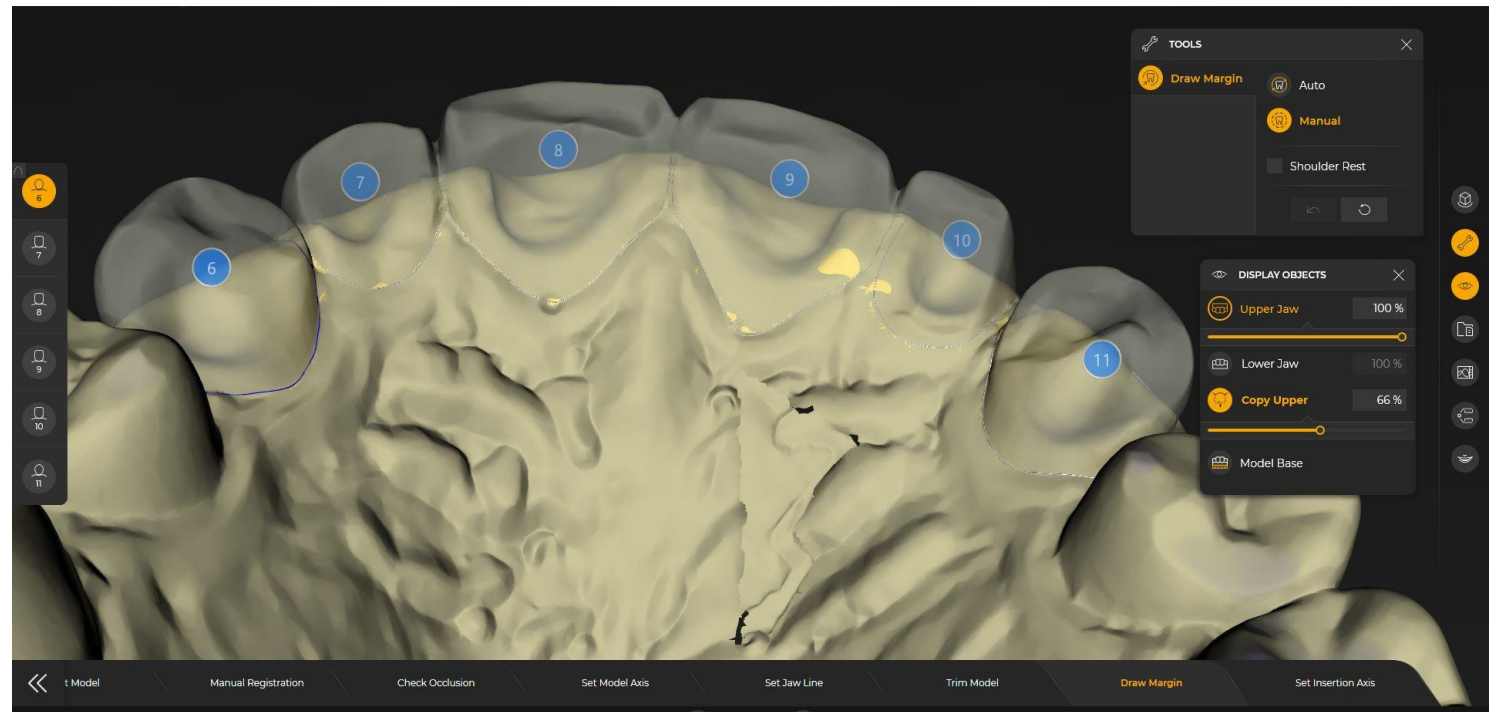
	<b>PHOTO SET 8</b> <b>Orthodontic/Esthetic Evaluation</b>	<b>3D General Dentistry Services, PC</b> <b>3DGDServices.com</b>
<b>EO Frontal Repose</b>	<b>EO Frontal Full Smile</b>	<b>EO Profile</b>
		
<b>IO Retracted Occlusal Maxillary</b>	<b>Doctor: Will Allee</b> <b>Patient: Danny</b> <b>DOB/Age: 54  </b> <b>Date: 1/20/2025</b>	<b>IO Retracted Occlusal Mandibular</b>
		
<b>IO Retracted Closeup Buccal Right</b>	<b>IO Retracted Closeup Anterior</b>	<b>IO Retracted Closeup Buccal Left</b>
		





# Case #5: Digital Wax Up (Patient: Danny)

1. Virtually Extract Teeth on Digital Model with Replace Tool
2. Draw Margins at original emergence of the teeth



# Case #5: Digital Wax Up (Patient: Danny)

## 3. Parameters

Zero space for virtual wax

The screenshot displays the 'CROWN ANATOMIC' software interface. At the top, it shows 'Case Preset: Customised (not editable)'. Below this is a 'Parameter' list with various settings:

- Radial Spacer:** 0  $\mu\text{m}$  (range 0 to 200)
- Occlusal Spacer:** 0  $\mu\text{m}$  (range 0 to 200)
- Proximal Contacts Strength:** 50  $\mu\text{m}$  (range -200 to 200)
- Occlusal Contacts Strength:** 25  $\mu\text{m}$  (range -200 to 200)
- Dynamic Contacts Strength:** -100  $\mu\text{m}$  (range -200 to 200)
- Minimal Radial Thickness:** 0  $\mu\text{m}$  (range 0 to 2000)
- Minimal Occlusal Thickness:** 0  $\mu\text{m}$  (range 0 to 2000)
- Margin Thickness:** 110  $\mu\text{m}$  (range 0 to 300)
- Width of Ramp:** 50  $\mu\text{m}$  (range 45 to 75). Note: 'Unlock to override the manufacturer's recommended setting!'
- Angle of Ramp:** 60  $^{\circ}$  (range 45 to 75)

At the bottom, there is a checkbox for 'Remove Undercuts' which is currently unchecked. A checkmark at the bottom right indicates 'Apply for similar restoration elements'.

# Case #5: Digital Wax Up (Patient: Danny)

4a. Smile Design

Photo

Import and Select

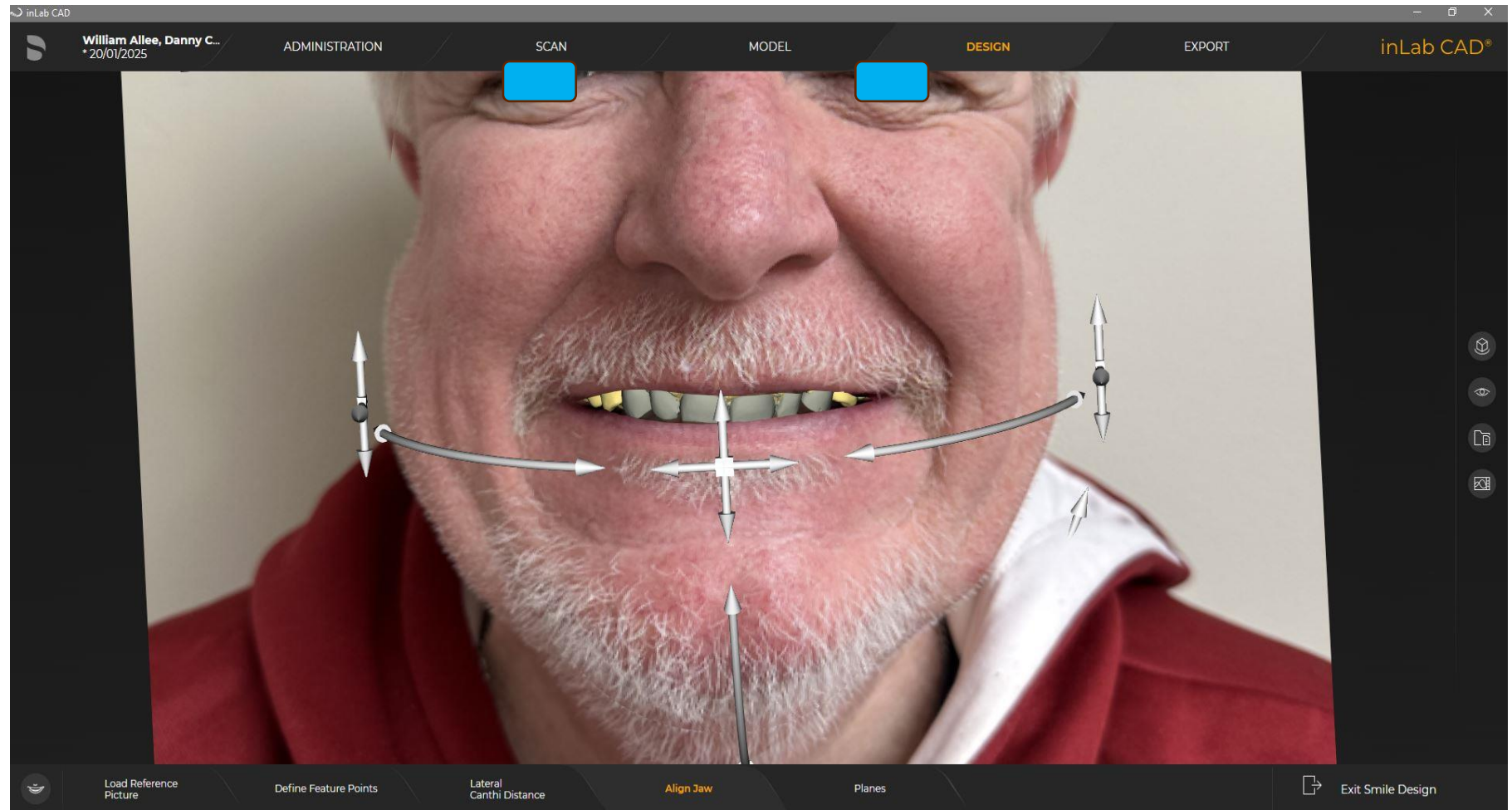
Reference Points



# Case #5: Digital Wax Up (Patient: Danny)

## 4b. Smile Design

Align the Jaw

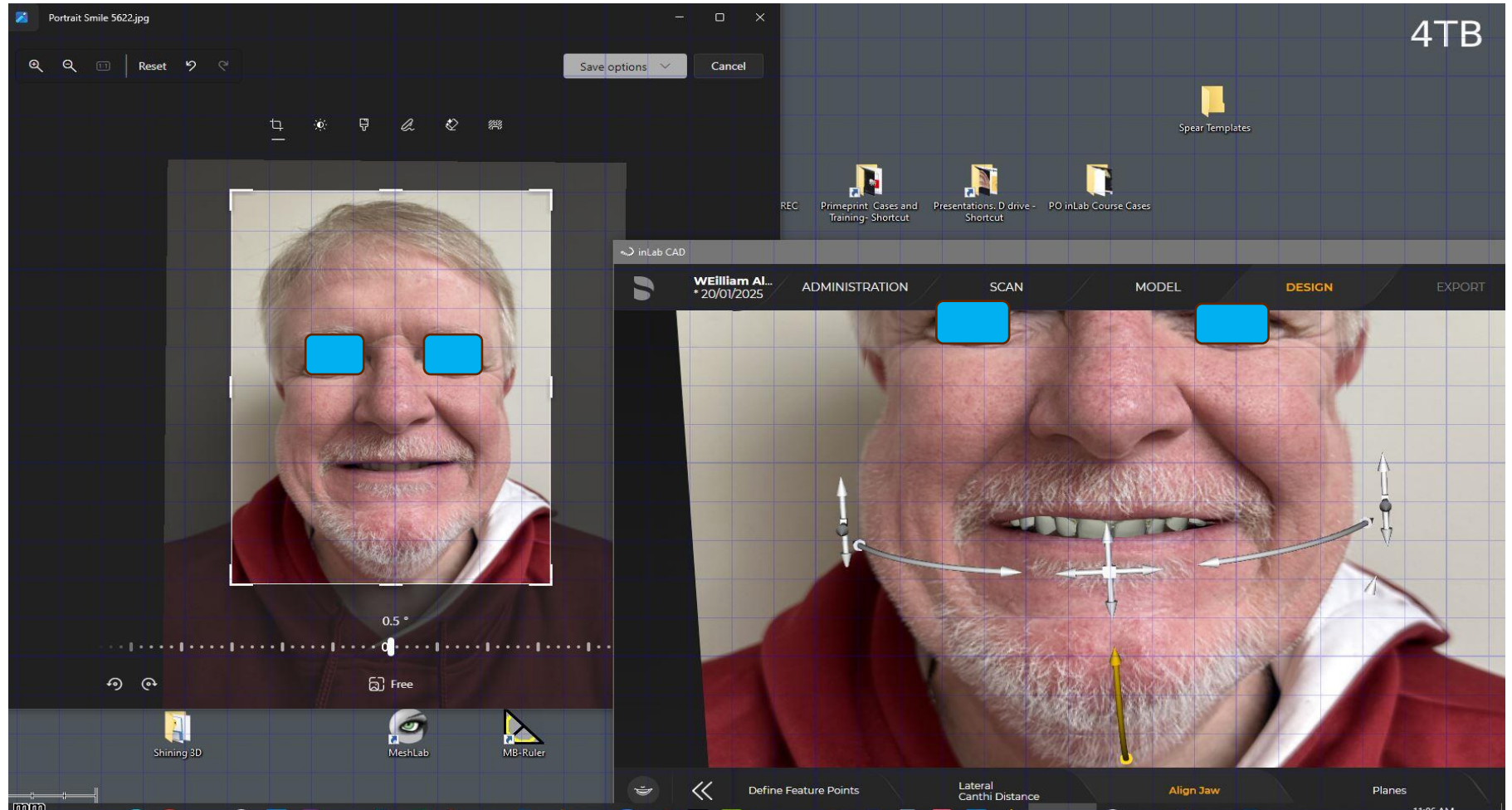




# Case #5: Digital Wax Up (Patient: Danny)

4b. Smile Design

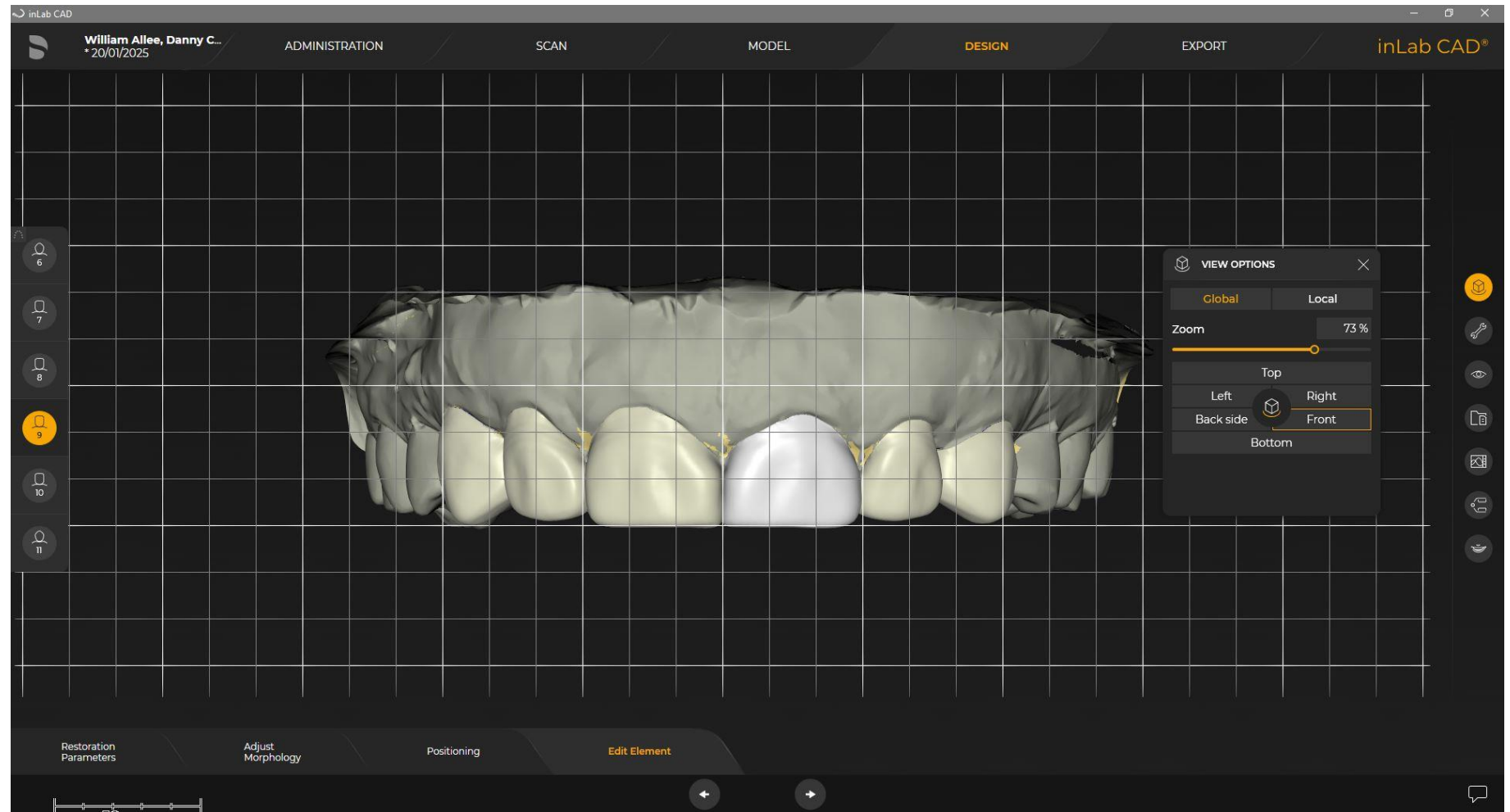
Align the Jaw



# Case #5: Digital Wax Up (Patient: Danny)

5. Final Design

Get On the Grid!!!



# Case #5: Digital Wax Up (Patient: Danny)

## 5. Final Design

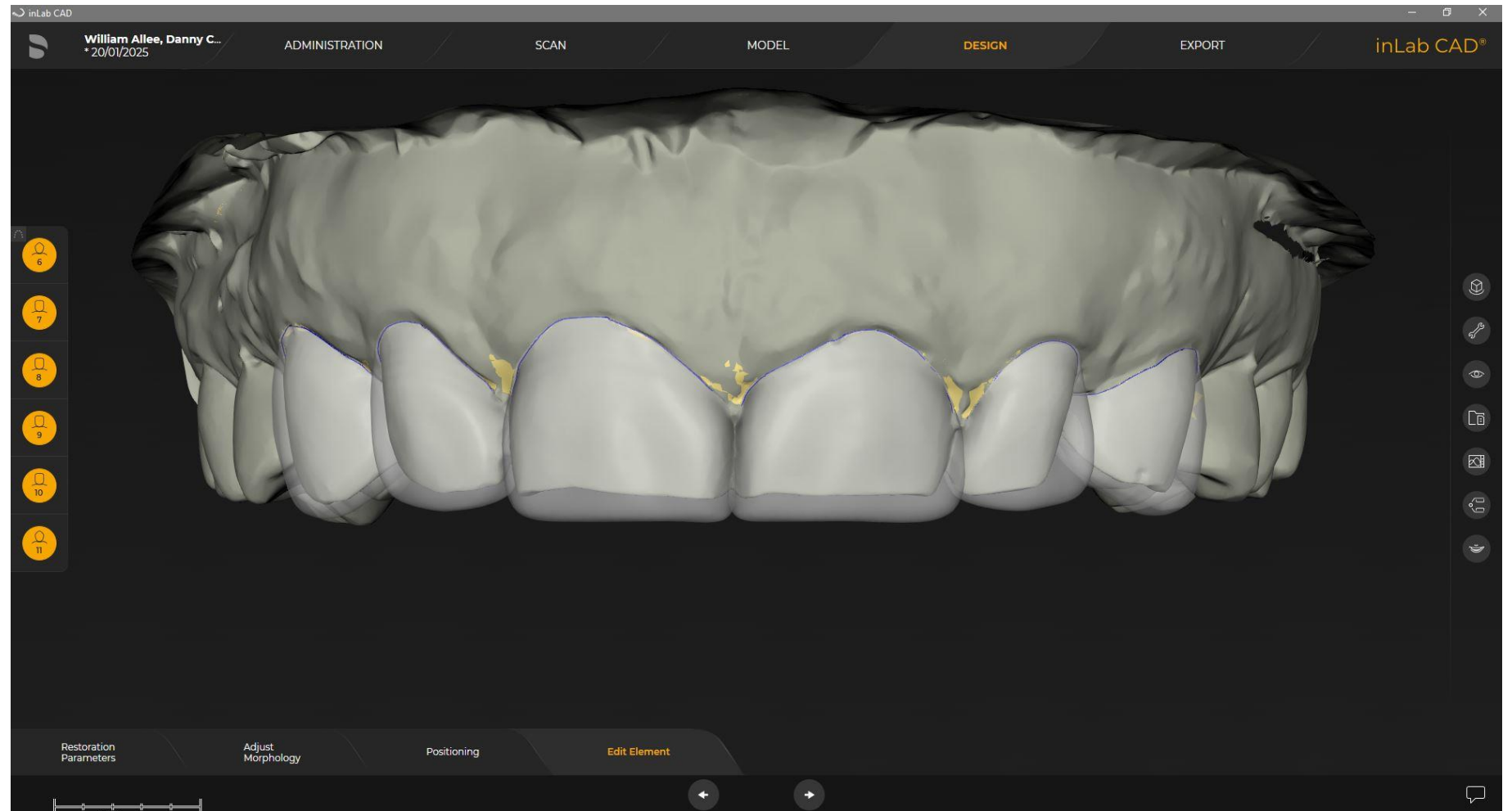


# Case #5: Digital Wax Up (Patient: Danny)

## 5. Final Design

Notice Additive

Areas

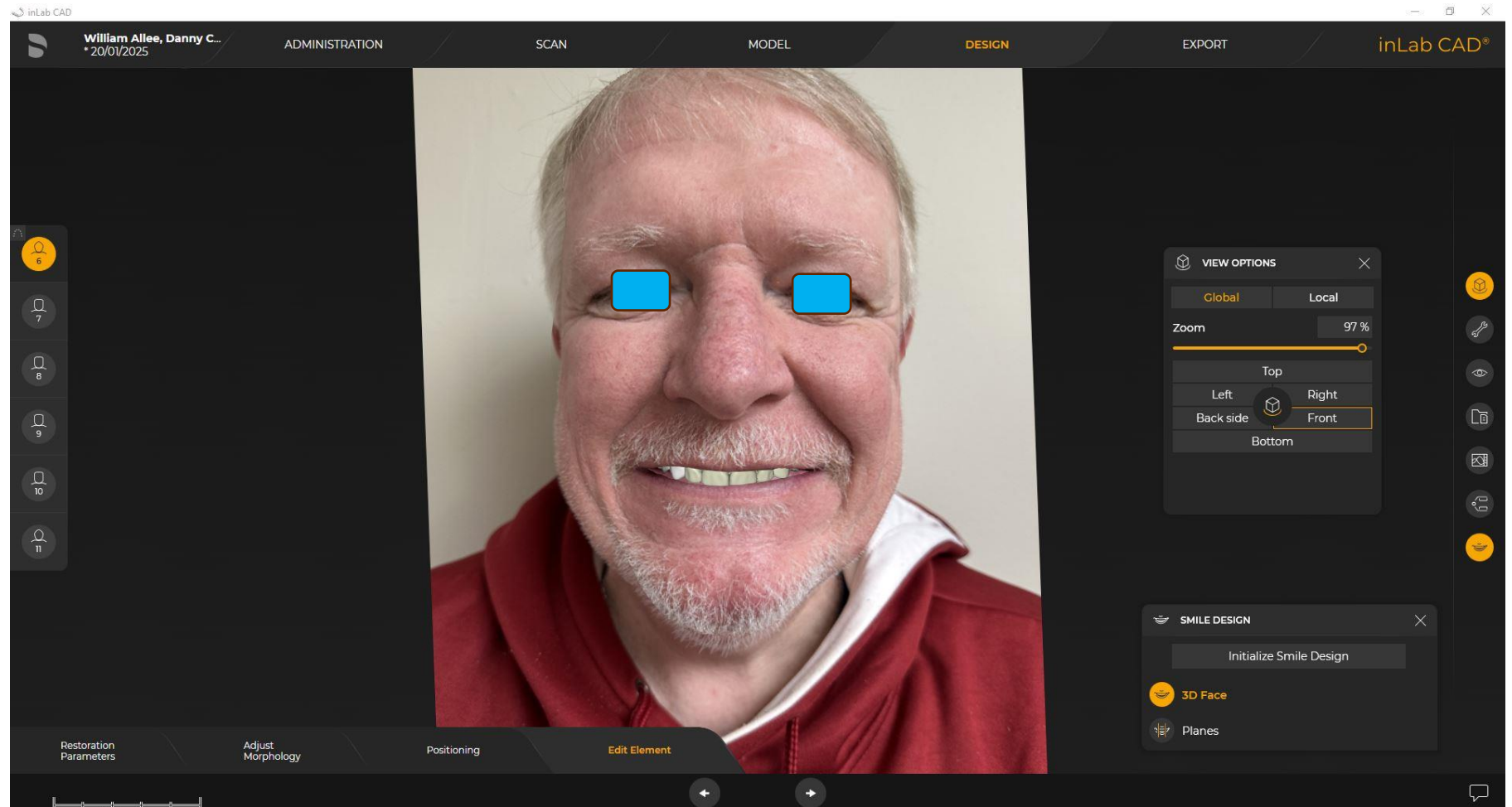




# Case #5: Digital Wax Up (Patient: Danny)

5. Final Design

3D Face Preview



# Case #5: Digital Wax Up (Patient: Danny)

## 6. Virtual Seat

Print then

Create Vacuform

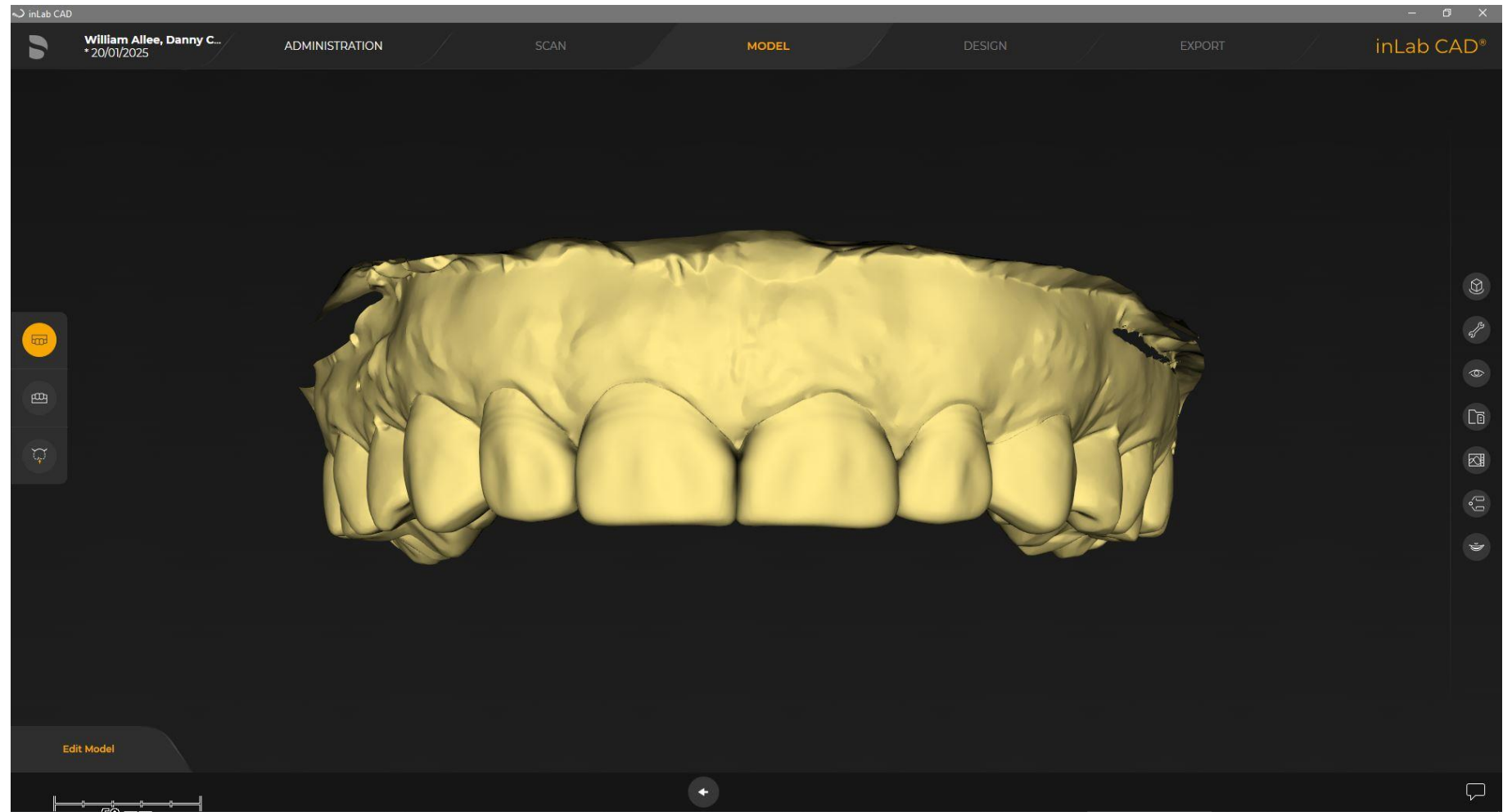
Copyplast Stent

Or

Duplicate with PVS

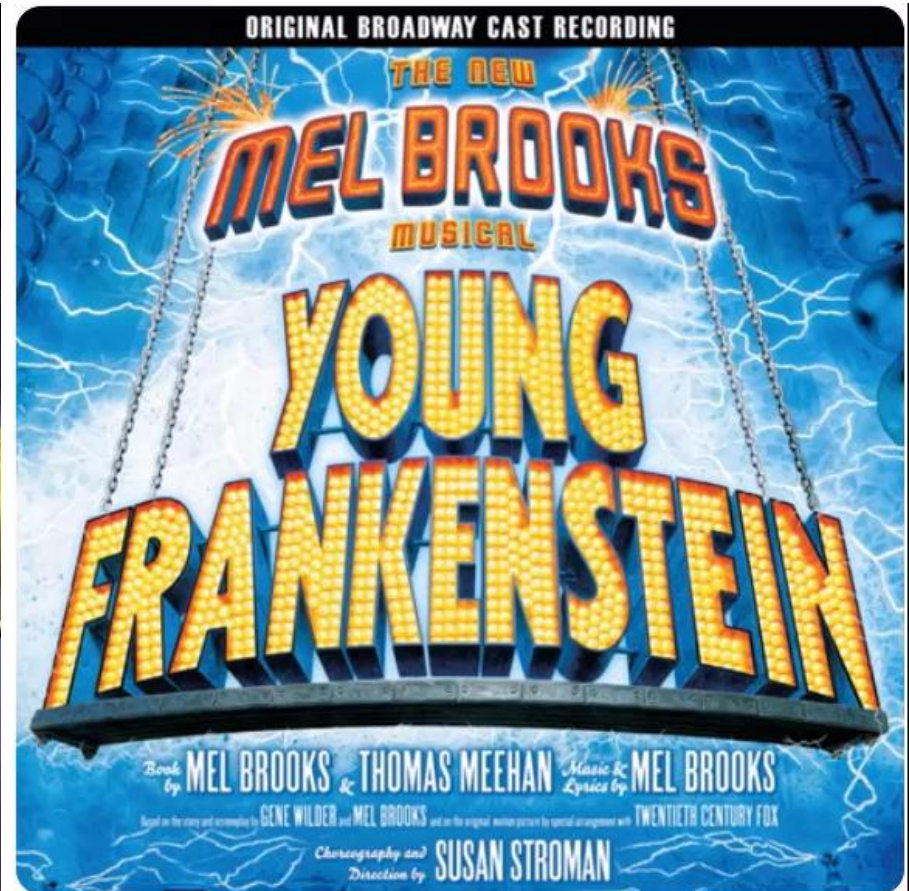
Or Alginate

for Transfer

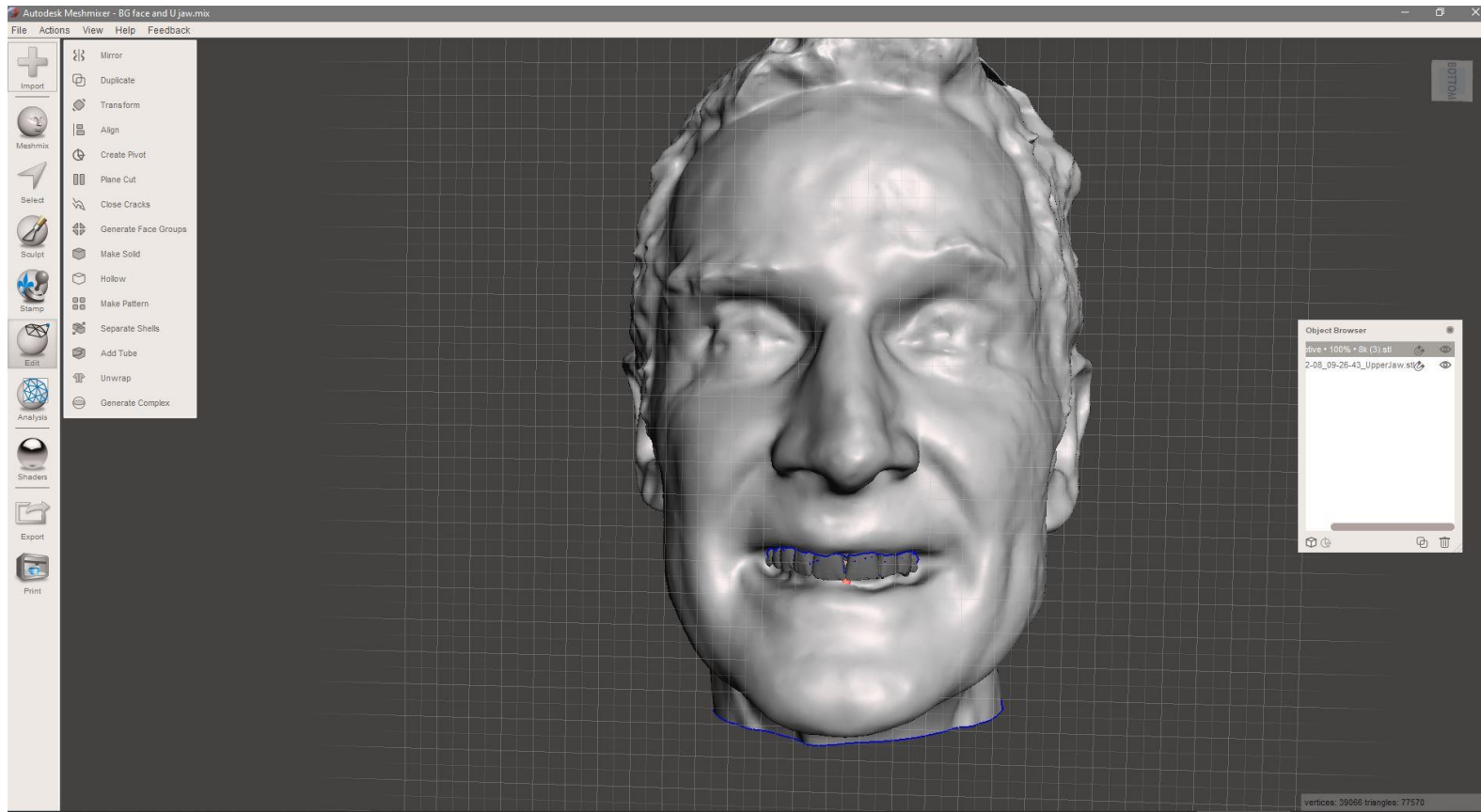




# A Surprise!



# Hybrid Resolution Facial Registration Scan



**"Facial Registration Scan"**  
("Hybrid-Resolution Composite Scan")

New Term Defined by:

**Adam P. Tow, MBA, DMD, FAGD**

*General Dentistry*

September/October 2024

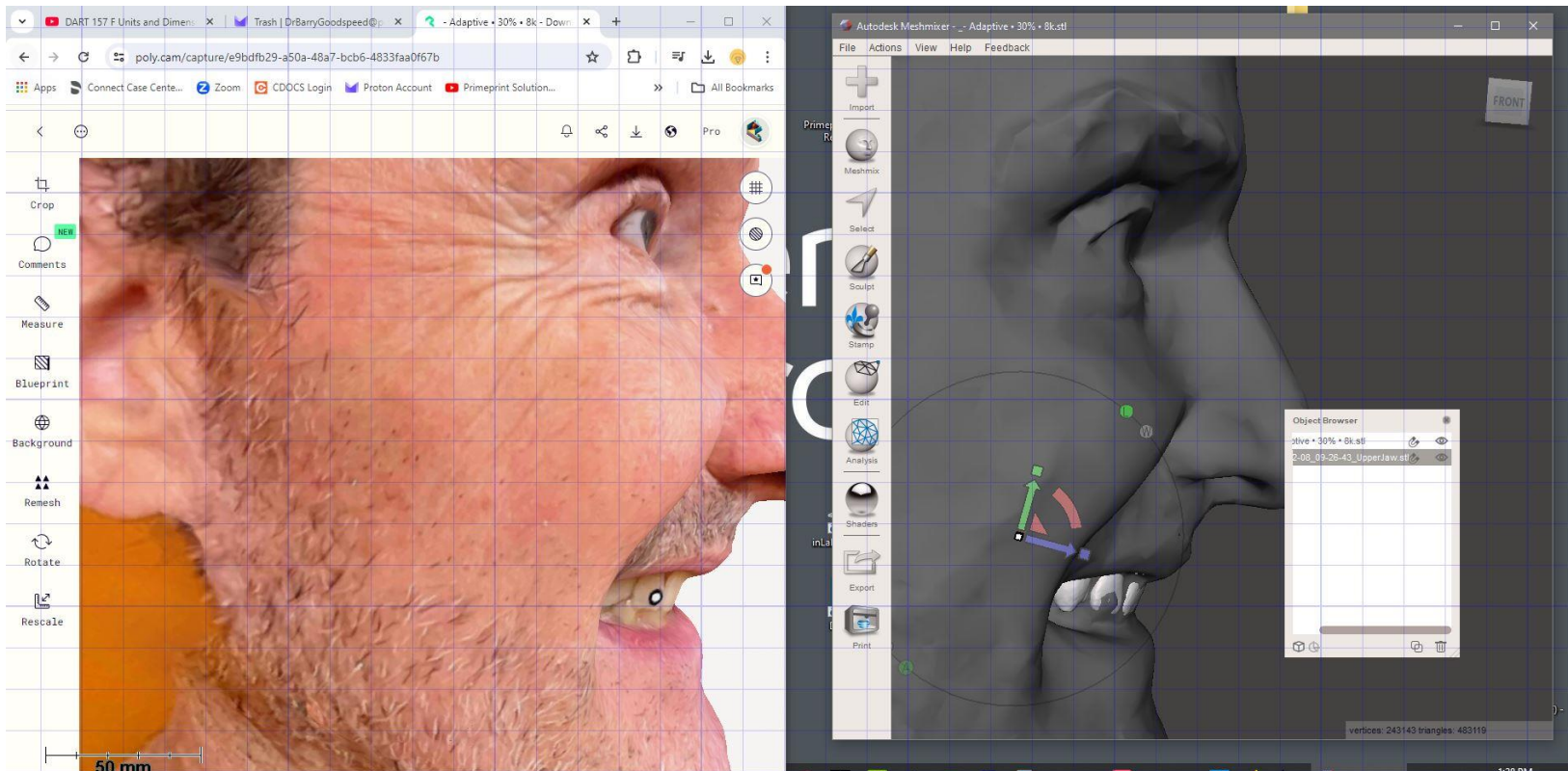
Vol. 72, Number 5, pp. 31-37



# Hybrid Resolution Facial Registration Scan

MB Ruler App!

[https://download.cnet.com/mb-ruler/3000-2056\\_4-10109725.html](https://download.cnet.com/mb-ruler/3000-2056_4-10109725.html)



"Facial Registration Scan"

("Hybrid-Resolution Composite Scan")

New Term Defined by:

**Adam P. Tow, MBA, DMD, FAGD**

*General Dentistry*

September/October 2024

Vol. 72, Number 5, pp. 31-37

# Hybrid Resolution Facial Registration Scan

---

**"Facial Registration Scan"**

("Hybrid-Resolution Composite Scan")

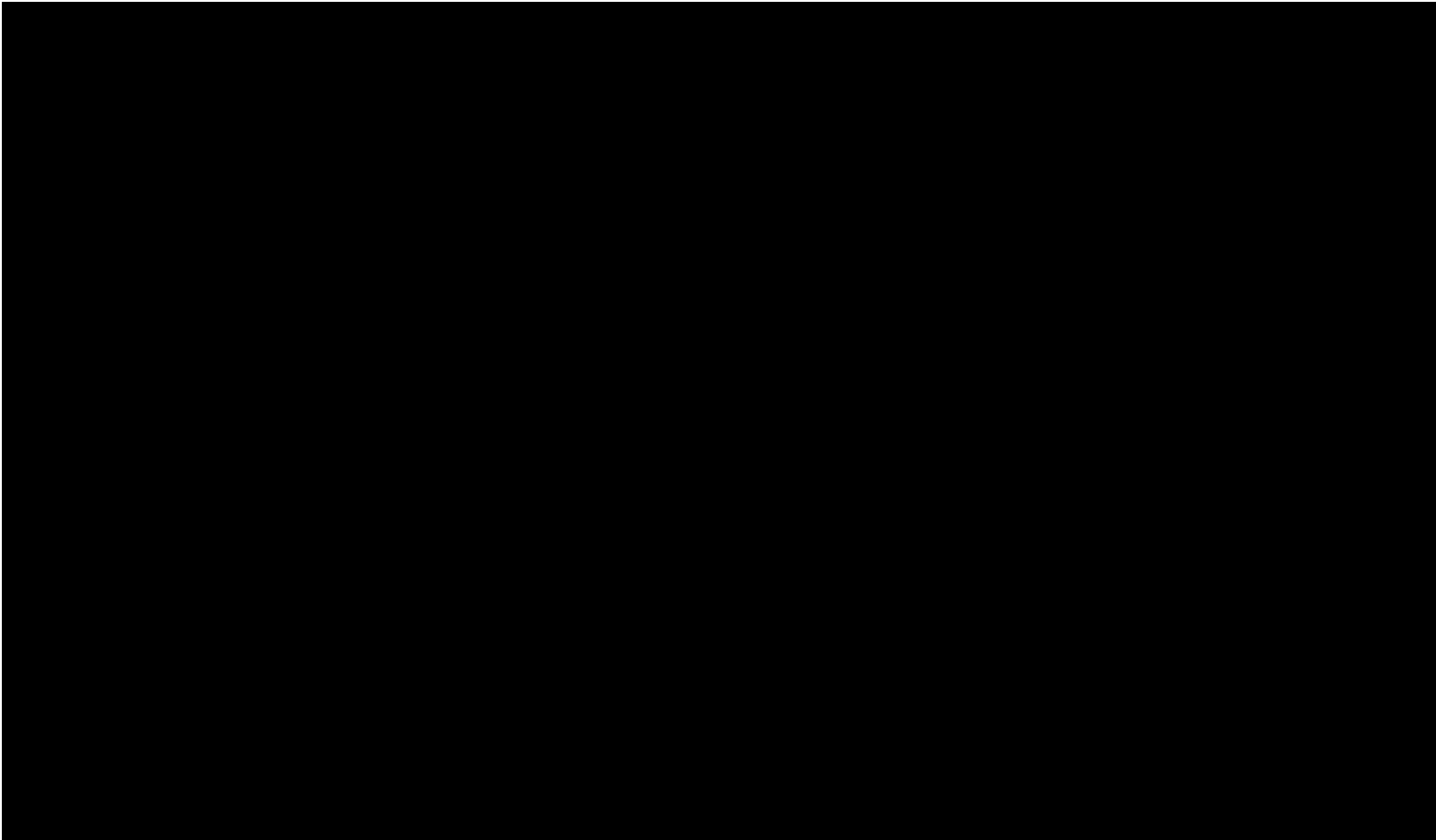
New Term Defined by:

**Adam P. Tow, MBA, DMD, FAGD**

*General Dentistry*

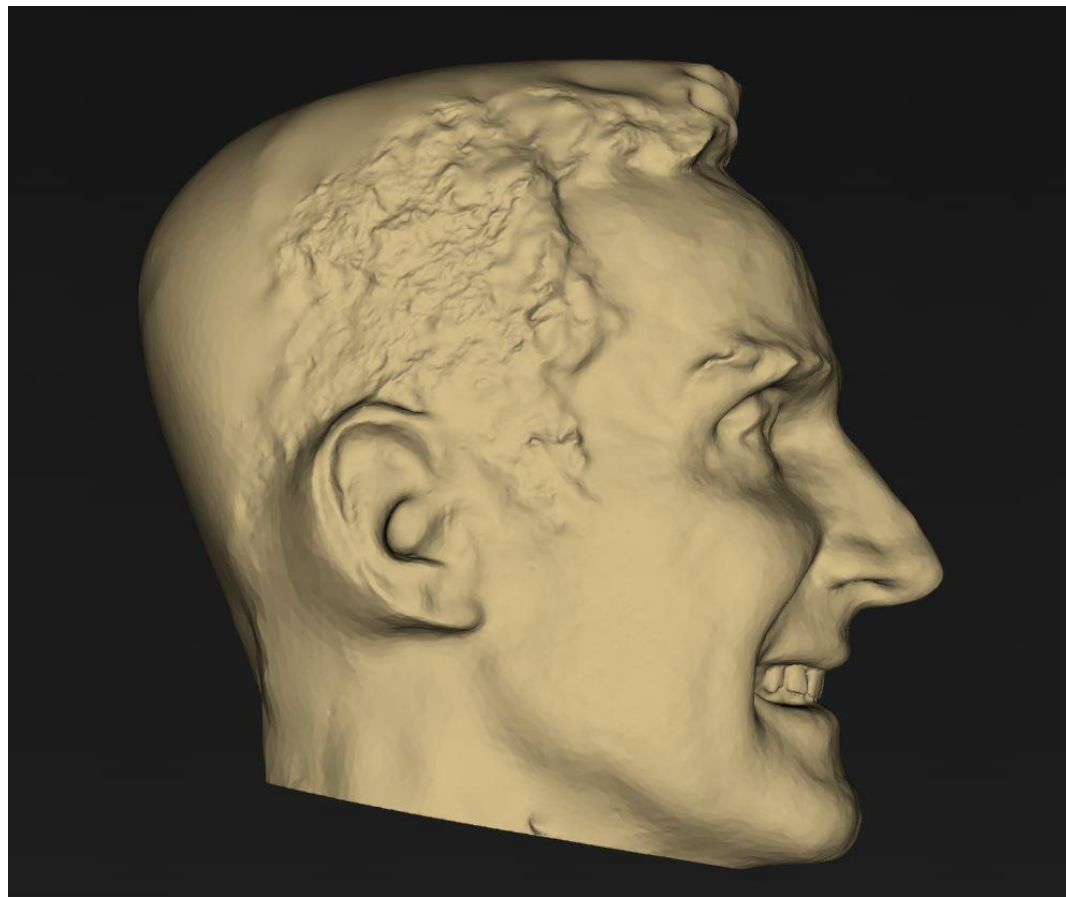
September/October 2024

Vol. 72, Number 5, pp. 31-37



# Hybrid Resolution Facial Registration Scan

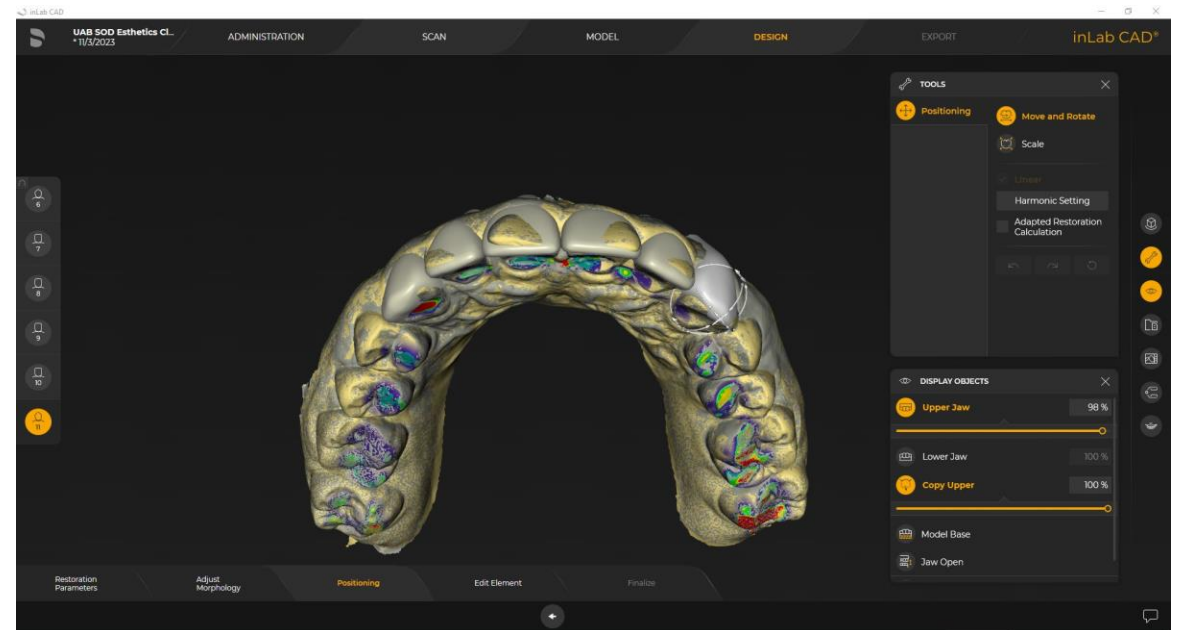
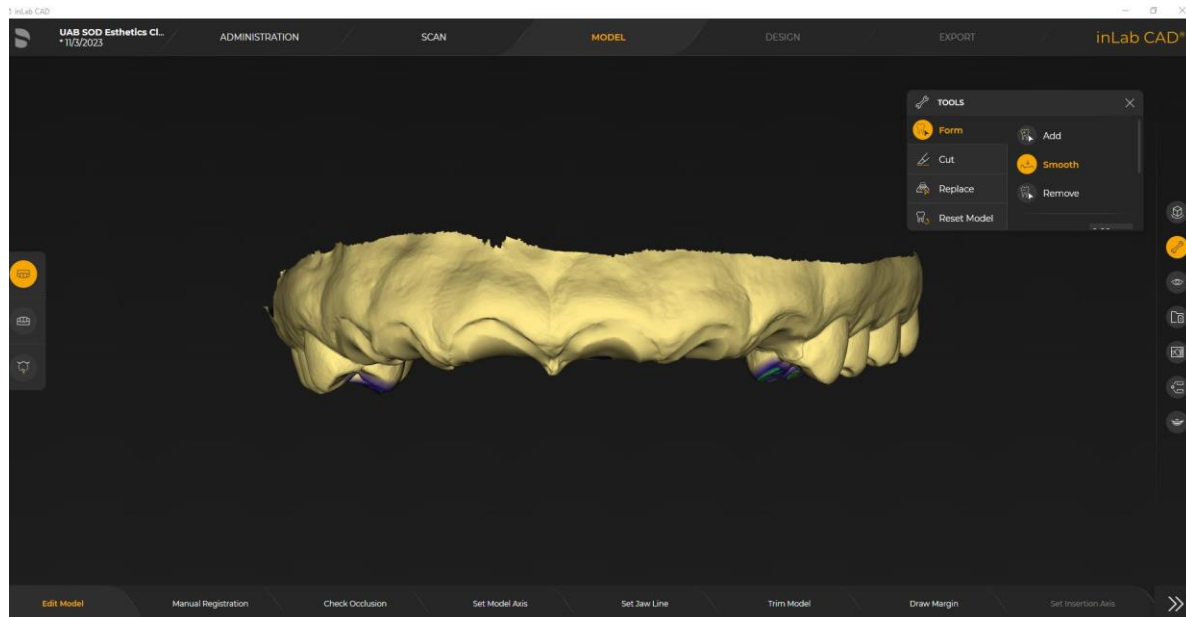
---





# Case #1: Digital Wax Up Limitations and Modifications (Jahnvi)

---



# A Basic Digital Wax Up Sequence: # 6-11

---

- 12 minutes



OBJECT LIST

Upper Jaw ^

Die Rotation

Lower Jaw ^

Die Rotation

Copy Upper

Occlusion

Add Object v

Method  
Import STL v

File Path  
[Input Field] ...

Correlate

Preview

Delete Scan Data

Delete Object



Scan Die Rotation

Scan Upper Jaw



# *A Min Reduction Wax Up Converted for Mod Reduction*

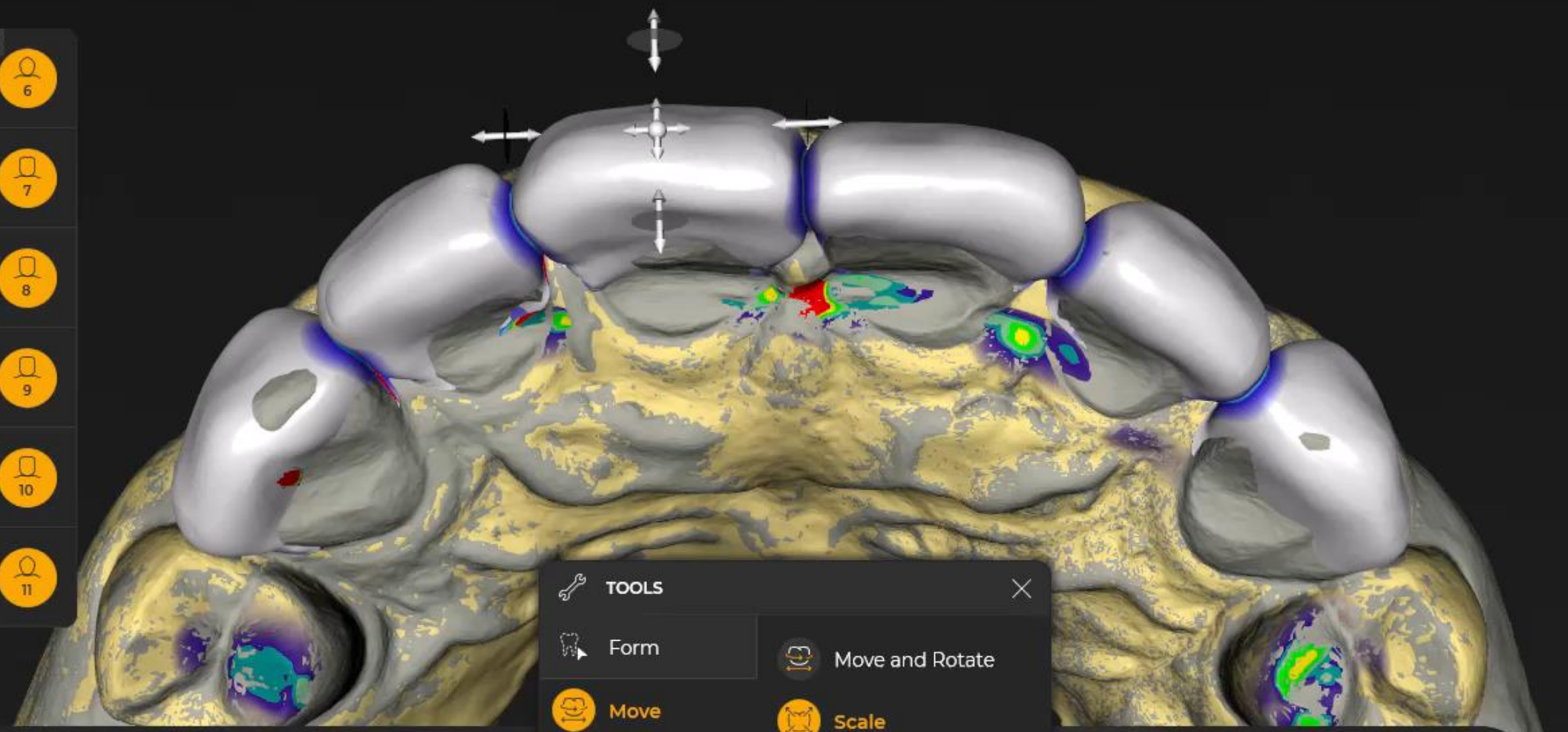
---





- 6
- 7
- 8
- 9
- 10
- 11

- Home
- Wrench
- Eye
- Layers
- Image
- Info
- Help



**TOOLS** [X]

- Form
- Move**
- Shape
- Recalculate
- Move and Rotate
- Scale**
- Keep Contacts**

Restoration Parameters

Adjust Morphology

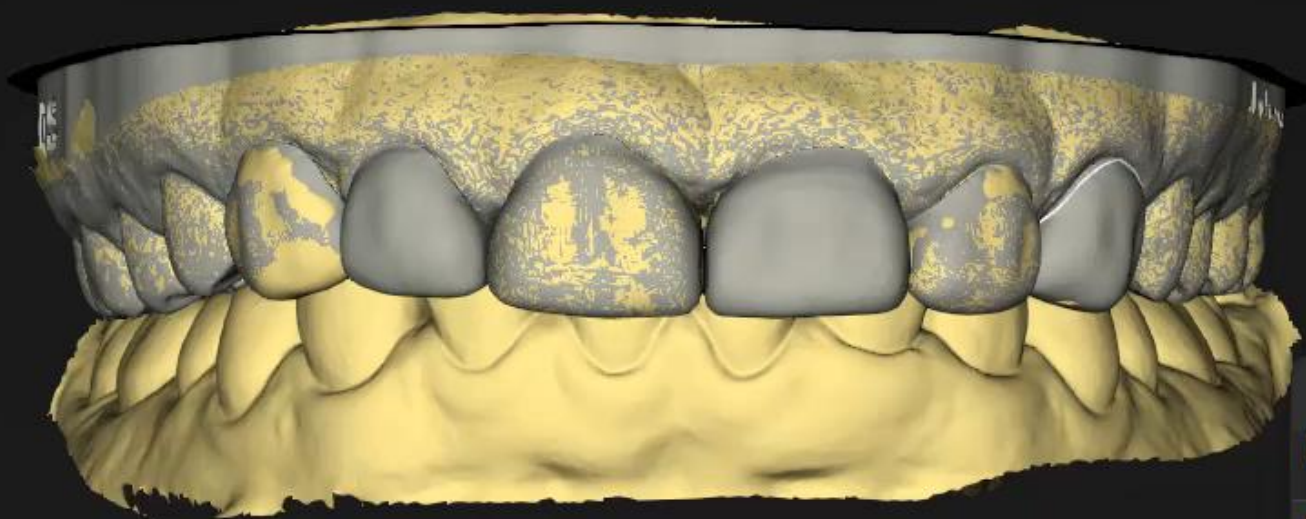
Element

Finalize



*Min Reduction Wax Up Virtual Seat Every Other # 6, 8, & 10*

---



- 7
- 9
- 11

- 3D View
- Tools
- Eye
- Folder

DISPLAY OBJECTS

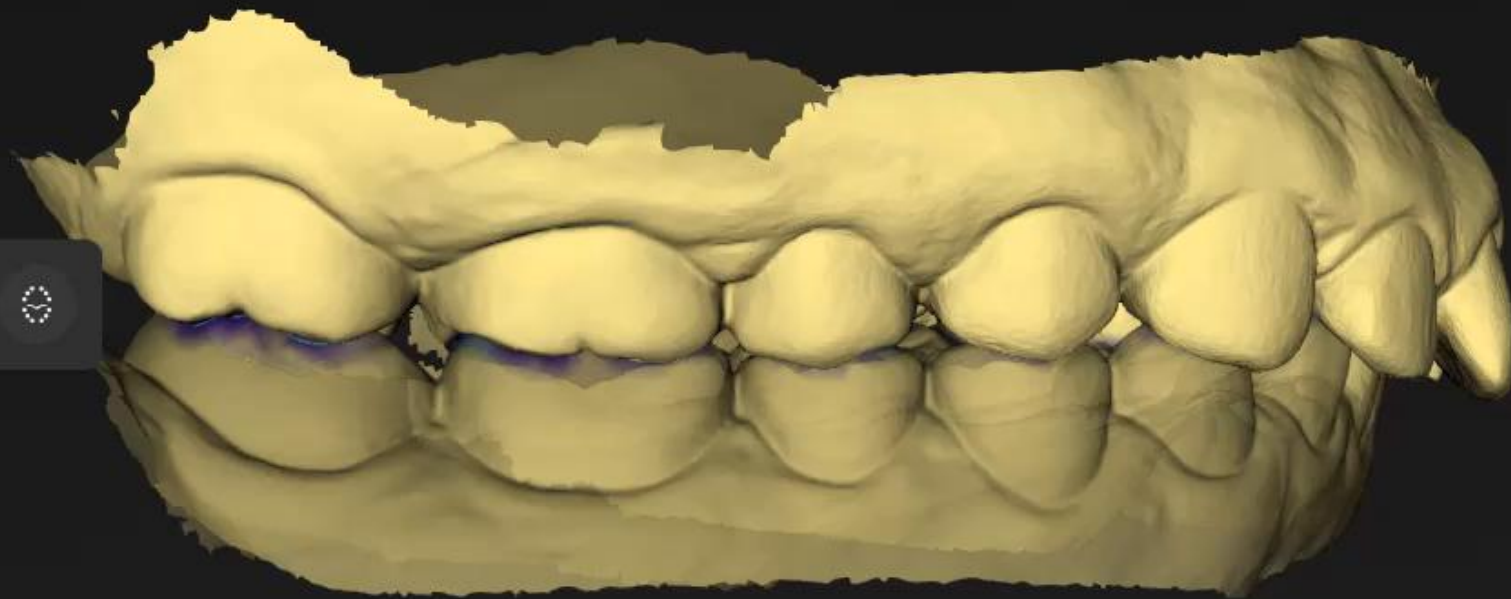
Upper Jaw	100 %
Lower Jaw	100 %
Copy Upper	100 %



# *VDO and Orthodontic Considerations*

---





Edit Model

Manual Registration

Check Occlusion

Set Model Axis

Set Jaw Line



# *Smile Design: 3D*

## Objectives for You

---

Establish a systematic approach to your esthetic cases with a

*“Facially Generated Treatment Plan.”* (Frank Spear).

Understand the underlying concepts of a *Digital Wax Up*

whether you DIY or Send Out to your Lab Technician.

Get	On	The	Grid!
-----	----	-----	-------

# *Special Credits and Acknowledgements*

---

## Collaborators:

Jahnvi

Dr. Allen Kessler

Dr. Mallory Hunt

Dr. William Allee

Dr. Kaytlyn McCallister

Dr. Chelsea Maniscalco

Jael Wall-Ellis, RDH

CDOCS

Dentsply Sirona  
inLab 22

Medit Smile Design

Polycam

# References

---

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  - a. Level 4 Anterior Esthetics,
  - b. Level 5 Comprehensive Restorative Care with a Digital Workflow. CDOCS and Spear Education
  - c. Level 6 Advanced Cerec Software Mastery
2. Orthodontic/Esthetic Consultation Sheet based off of Align Technologies certification Orthodontic Quick Check form distributed by CE presenting doctor, 10/3/2008.
- 3.. Photo Set 8 based on Invisalign composite creator, c. 2008.
4. Quickmount FaceBow With Screw: Model 8645 Whip-Mix Corporation, Patterson Item #: 727-6959, Mfg. Item #: 15911
5. Trios **3 Shape** Smile Design You Tube Tutorial link:  
<https://www.youtube.com/watch?v=omuAeyFOmt0>
6. [MeditLink.com](http://MeditLink.com). Smile Design Application
7. **Medit Link** Smile Design You Tube Tutorial link:  
[Medit App\\_Medit Smile Design v1.2 \(ENG\) - YouTube](#)  
[Workflow guide on how to design smile with Medit 'Smile Design' App - YouTube](#)
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9. Frank Spear, Spear Education. “Facially Generated Treatment Plan” concept and Spear Templates.
10. Dentsply Sirona inLab 22 Software. <https://www.dentsplysirona.com/en-us>

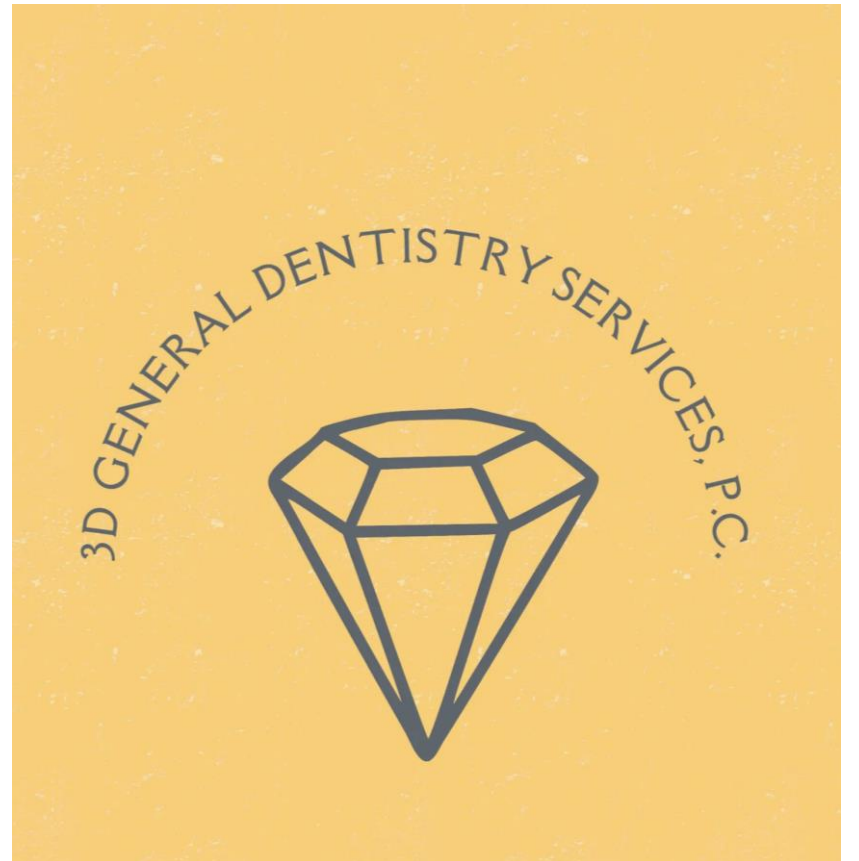


# Smile Design: 3D

---

## Door Prizes!!!!

1. *Remote Training (1 Hour)*
2. *On Site Training (2 Hours)*
3. *Social 6 Digital Wax Up +  
1 Printed model + 1 Copyplast Stent*





# **2025 ALUMNI WEEKEND**

## **FEBRUARY 6-9**

**The University of Alabama School of Dentistry Alumni Association**

Thank You UAB Alumni Meeting!!!

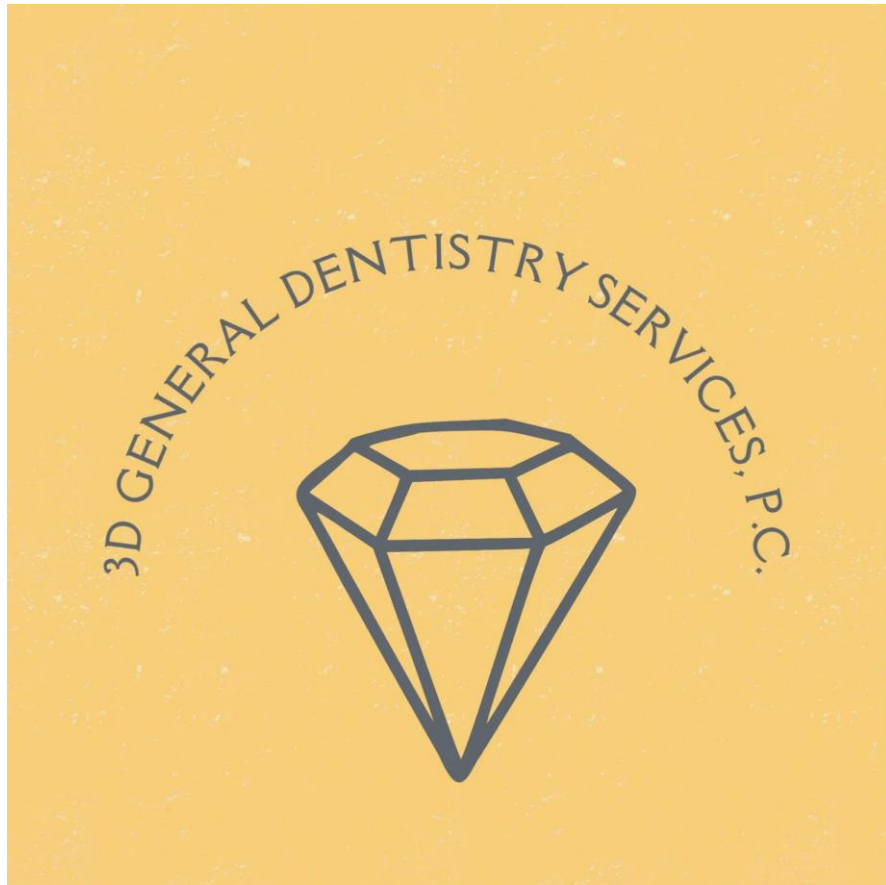
Scott Huffman, UAB SOD Alumni Association Executive Director

Charlene Phillips, Development & Alumni Relations Coordinator

Kerry Chestnut, Ben Moffatt, Abby Vinson, Cherri West

# Thank you for your attention!!!

---



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**3D General Dentistry Services, P.C.**  
**Vestavia Hills, AL**  
**205-907-1400**

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