

# Reconstructing the dentition of a human skull

**Stephen Vincent** discusses his journey into dental technology, his plans to open a new laboratory and his latest project involving reconstructing the dentition of a human skull

## Stephen Vincent

Dental technician and owner of  
Stephen Vincent Dental Ceramics



I have been a dental technician since finishing my five-year apprenticeship in 1985 at a highly regarded dental laboratory in the west end of London.

As soon as I started training, I felt at home and knew that I had found my niche in life. I developed a love and talent for ceramics, and I have specialised in this field throughout my career.

I went on to become lab manager at both private and corporate laboratories, working for renowned names in the industry.

In 2005, I started my own laboratory – Allport & Vincent Dental Laboratory – with a business partner.

I built a reputation on quality and service and have been working with some of the same clients for 30 years. I firmly believe that every patient deserves my complete attention, and I will always strive to achieve the finest result for them aesthetically and functionally.

## The reconstruction

In spring 2022, I resigned from Allport & Vincent Dental Laboratory and took 12 months off to rest and regroup.

I still have the same passion for ceramics that I had at 16 years old. I have always wanted to reconstruct the dentition of a human skull, but had never previously had the time to devote to such a project. After 43 years, I finally had the time and opportunity to get the project started.

I purchased a replica resin skull from an online supplier in Australia and waited with anticipation for it to make its long journey to the UK. It came complete with a full set of resin teeth, and I had to prepare each one individually. This was difficult and time-consuming as they were fixed to the skull and not removable.

I have a newfound respect for the skill and dexterity of a dentist in preparing a tooth on a live patient. My skull was more forgiving than a patient would be and did not require any anaesthesia!

As I would normally in a live case, I started with the upper anteriors and commenced waxing for alloy-free copings.

These were duly processed in the normal manner and then pressed with a lithium disilicate ingot. The copings were fitted down onto the preps and layered with porcelain. Many firings later, I had the beginnings of my reconstruction. The lower anteriors came next, followed by each quadrant of the posteriors in turn.

Several days later, I was happy with the morphology and occlusion.

## Finishing touches

I then decided to wax and varnish the gingival areas.

I was now at my favourite stage of the whole reconstruction, as I could begin to emphasise the built-in characterisations and depth of colour with stains, ready for a low temperature glazing.

After cooling, I checked everything for fit, finish and



quality before I finished each crown with diamond polishing paste. This is to achieve the correct texture and lustre present in natural teeth.

I could now turn my attention to the presentation of the skull. I decided to take an alginate impression of my right hand and proceeded to make a plaster replica.

Next, I sprayed this gold and mounted the hand, holding the skull, onto a wooden plinth. I ordered a custom-made display case and finally, my skull was finished.

If I did the restoration a dozen times, each one would be different because that is the nature and beauty of bespoke ceramics.

## New beginnings

It was during this period away from the lab that I realised I wanted to resume my career and start a new laboratory.

The new lab opened in May 2023, and allows me to concentrate on high-end ceramics with a one-to-one relationship with all my clients, new and old.

It is my opinion that a close and trusting relationship between a dentist and a dental technician can make a real difference to patient outcome.

I believe that dentists still value that relationship and like knowing who is on the end of the phone when they call.

Modern dental technology can offer a bewildering choice of techniques and

restorations. Many dentists are still happy with the humble but extremely successful porcelain-fused-to-metal (PFM), while others are embracing digital dentistry with all the CAD/CAM options that it brings.

I enjoy discussing the possible choices with my clients and am always happy to chat with them and share my wealth of experience. With the belief that traditional still has a place alongside digital, I am now using both in harmony to produce the best possible results I can.

## Back to the bench

I have never sought the spotlight and prefer my work to speak for itself, but I am excited about my skull project and would like to share it with my colleagues in the dental profession.

I loved every minute of the project and, after completing it, I couldn't wait to get back to the bench with real cases where I can play my part in making a difference to someone's life by helping to restore their smile. I am a technician best suited to producing quality ceramics at the bench and this is where I'm happiest! **D**

**FOR MORE INFORMATION** about Stephen and his laboratory, visit [www.stephenvincentdental.co.uk](http://www.stephenvincentdental.co.uk) or his Instagram page: [@stephenvincent1964dental](https://www.instagram.com/stephenvincent1964dental)

