

# THE ORTHODONTIC ARCHITECT

With a passion for effectiveness through pioneering appliance design, Dr Luis Carrière tells us the fascinating story about how he came up with the idea of the innovative Carriere Motion Appliances and the self-ligating bracket.

## Please tell us a bit about your background.

**Luis Carrière:** Certainly. I earned my dental degree at Universidad Complutense de Madrid and my MSD in orthodontics and PhD from the University of Barcelona. In private practice in Barcelona, Spain, with my father since 1991, I also keep quite busy lecturing internationally and publishing journal articles. I serve as a contributing editor to the JCO and am on the editorial board of the AJO-DO. Things that drive me are innovation, elegant design and brainstorming that takes me out of my comfort zone. I'm always looking for simple solutions to complex issues.

## What or who made you choose a career in orthodontics?

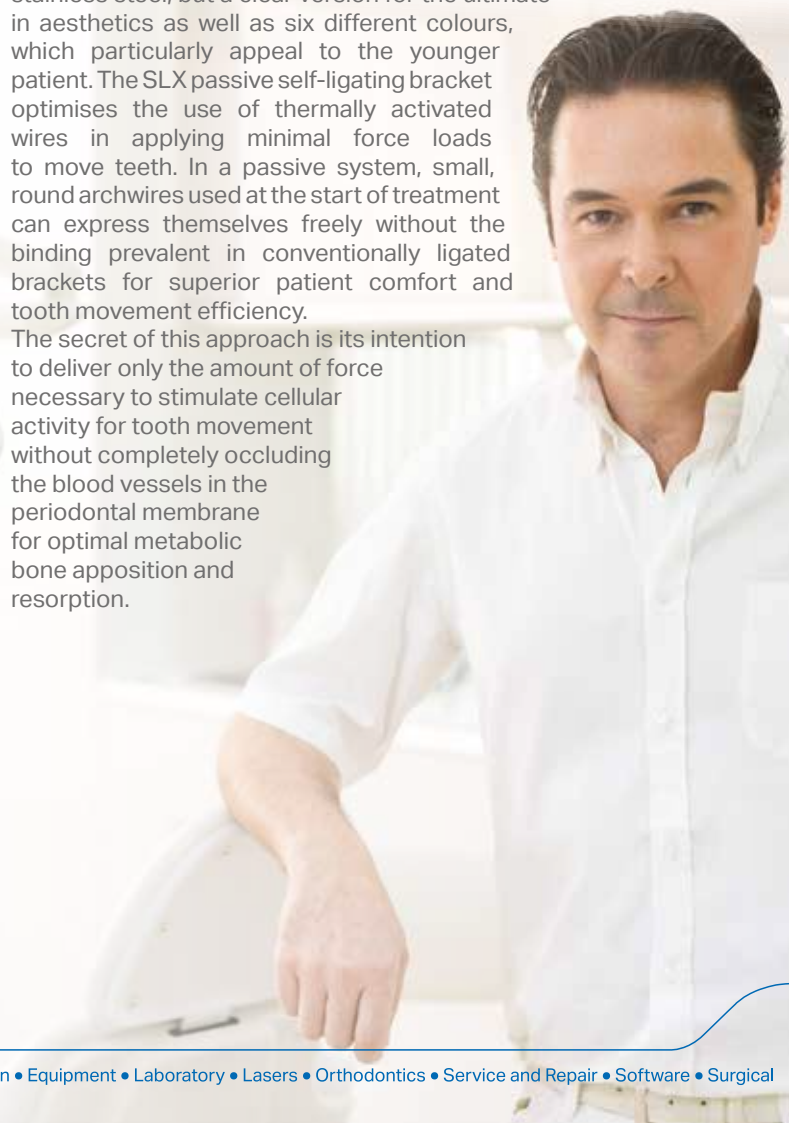
**LC:** Both the 'what' and the 'who' of my most notable career influences are related to my father, Jose Carrière, DDS, MD, PhD. His passion for the profession and the joy his special brand of patient care gives him has always been my source of inspiration. He views the practice of medicine as much an art as a science. And he's taught me how creating a beautiful smile, good occlusion and facial harmony positively affects an individual's self-esteem and that there's a responsibility in the social importance orthodontists play in someone's life. I strive every day to emulate him.

## Tell us more about your invention of the Carriere Motion Appliances and the Carriere SLX self-ligating bracket.

**LC:** Non-invasive treatment to resolve the sagittal aspect of malocclusions is essential to preserving or enhancing facial harmony so offering appropriate non-extraction and non-surgical therapy is a cornerstone of our practice. But traditional non-extraction CL II correctors are cumbersome and uncomfortable for patients and most class III patients are strongly against the idea of surgery if they can avoid it. The notion for the Carriere Motion CL II appliance dawned on me first. It was sparked by my desire to give orthodontists an appliance that would resolve sagittal issues simply, with predictable results, reproducible in every patient. When the idea for the CL II Motion hit me, I quickly carved it into a single piece of soap before it slipped away. I then worked with a friend to create a computer model of it and, later, engaged a university lab to generate a to-scale 3D silicone mould. I then got a local jeweller to fabricate a number of prototypes. Happy with its application in my practice, I contacted Class One, now Henry Schein Orthodontics, to make it available to the profession. The success of Motion CL II prompted development of the CL III version. For the Carriere SLX bracket, I went directly to HSO. HSO's R&D team is top notch and the engineers are stimulating and fun to work with. Their state-of-the-art capabilities are remarkable. They use 3D appliance design, virtual simulation testing, additive printing, slow-motion videography and advanced manufacturing techniques. Each progressive step of their process brings another layer of precision to their work. Because of their detail orientation and conscientiousness, our appliances are beautifully designed and manufactured with great precision. They offer countless innovative features that ensure consistent and predictable clinical performance.

## What are the advantages of using this system?

**LC:** The Carriere system is biomimetic, minimalistic and non-invasive in its approach. One of its underlying philosophies is 'sagittal first'. Establishing a class I platform prior to comprehensive orthodontic treatment, with either fixed brackets or aligners, simplifies treatment. It eliminates competing force vectors when A/P traction is employed concurrent with finishing treatment. After the class I platform is achieved, usually in three to four months, finishing to a high-quality result is easier and more efficient. Each motion appliance addresses its intended sagittal dimension to reduce either extractions or surgery while helping reposition the jaws in better relation to one other, balancing the relationship between the nose, upper and lower lips and chin for facial harmony. Both are biomimetic in function and consist of a small single-part design. This offers patients considerable freedom of movement for significantly greater comfort than traditional A/P correctors. While Motion works together with the SLX bracket as a system, any fixed appliance or aligner system can be used to finish treatment. Motion now comes not only in stainless steel, but a clear version for the ultimate in aesthetics as well as six different colours, which particularly appeal to the younger patient. The SLX passive self-ligating bracket optimises the use of thermally activated wires in applying minimal force loads to move teeth. In a passive system, small, round archwires used at the start of treatment can express themselves freely without the binding prevalent in conventionally ligated brackets for superior patient comfort and tooth movement efficiency. The secret of this approach is its intention to deliver only the amount of force necessary to stimulate cellular activity for tooth movement without completely occluding the blood vessels in the periodontal membrane for optimal metabolic bone apposition and resorption.



# THE CARRIERE MOTION 3D CLASS II APPLIANCE

Advanced medical grade polymer provides excellent strength and durability

Smooth, low-profile, rounded arm for patient comfort

Fixed cuspid pad allows the distal movement of the cuspid along the alveolar ridge without tipping

Contoured stainless steel base to fit patient tooth anatomy

**Fast**

**Gentle**

**Natural**

## SAGITTAL FIRST PHILOSOPHY COURSE

A course which presents an innovative concept in the correction of Class II and III malocclusions that achieves beautiful smiles by turning them simply into Class I in the **shortest possible time.**

Patients nowadays are very different to patients of 20 years ago. And with the surge in use of social media, 'looking good' is more important than ever. People are more self-conscious about their general appearance and the patient is now highly skilled with high expectations and as Dr Luis Carrière says, 'we have to manage the technology to accomplish these results'.

Dr Luis Carrière obtained his dental degree from the University of Complutense in Madrid (UCM), in 1991. He then attended the University of Barcelona where he completed his orthodontic training and received his master of science in orthodontics in 1994. In 2006, he received his doctorate in orthodontics, cum laude, from the University of Barcelona.

### WHY ATTEND?

During this one-day course in London, organised by Henry Schein Dental, Dr Luis Carrière demonstrates how to correct class II or class III malocclusions at the beginning of treatment, before bracketing and when patient compliance levels are at their highest, providing unique efficiencies and results with minimal extractions. In addition, he shows delegates how to correct class II and class III malocclusions and then consequently transition to a passive self-ligating system which provides treatment efficiencies over traditional mechanics.

This new unique and innovative treatment approach ensures that the orthodontist addresses the total facial harmony of the patient. Dr Carrière's informal and interactive lecturing method makes for a wonderfully relaxed way of teaching for all participants. He covers case studies using before and after photos, clinical tips and offers delegates a Q&A session.

He says, 'Orthodontics today is much more than just moving teeth – it's the joints, airways, profile, occlusion, nose and jawline. We are considering the evolution of the face. The Carriere system is biomimetic, minimalistic and noninvasive in its approach. We aim to minimise invasive treatment while creating facial harmony by positively affecting the patient's skeletal, postural, functional and dental dimensions.'

## Travel

### By Rail and Tube

30 Euston Square is just 1 minute walk from London Euston and Euston Square tube stations and 7-10 minutes from Kings Cross and St Pancras International train stations.

### Times to London Euston by tube:

- Kings Cross St Pancras - 2mins
- Oxford Circus - 4mins
- Victoria - 6mins
- Charing Cross - 7mins
- Moorgate - 8mins
- Paddington - 9mins
- Waterloo - 9mins
- Bank - 10mins
- Liverpool St - 10mins

### By Car

The nearest car park is **George Mews Car Park**, North Gower Street, Camden Town, London, NW1 2E

## Location

**30 Euston Square, London, NW1 2FB**



## Prices

**Standard £250<sup>+VAT</sup>**  
pricing valid from 1 January 2020

**DCP £140<sup>+VAT</sup>**  
pricing valid from 1 January 2020

For more information on this and our full orthodontics range:  
**alison.davies@henryschein.co.uk**

Book today: **carriere2020.eventbrite.co.uk**

### Terms and Conditions:

Fees include attendance at the session and refreshments. Cancellations must be received in writing to Henry Schein Dental Education 14 days prior to the session for a refund to be made. After this date we regret that no refunds can be given. Substitutions are always welcome. Henry Schein Dental reserves the right to change the session/trainer in cases of illness or other conditions beyond its control. Dates and venues could also be subject to change and you may be contacted by a third party to confirm your booking details.

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