

The Faculty of Dental Surgery
The Royal College of Surgeons of England

Careers in dental surgery



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Introduction

Dental surgery is a multi-faceted and rewarding career choice for any individual. It is so much more than providing a check-up or a filling for a patient. Dental surgeons work in many different environments over a range of specialist areas at a variety of levels, allowing you to focus your clinical practice as you wish.

Dental surgery provides you with a secure career that can be pursued both in the UK and overseas. The healthcare workforce, including dentists, is required by all nations to improve the oral health of their populations. Even if you stay in one place, every day in dentistry is different, providing a range of emotional and intellectual challenges – a great asset if you want more than just a salary from your work.

So, if you are the kind of person who enjoys helping people, relishes an ever-changing and rapidly developing clinical environment, thrives on working as part of a team, is compassionate and

manually dextrous, then dental surgery is for you. There are plenty of avenues that allow you to care for patients, work with others, teach, undertake research, write, develop policy and improve the quality of healthcare. It is the breadth of opportunities to help patients either by directly providing their care or by supporting those who do that makes dentistry and its various specialties a unique and rewarding profession.

I encourage you to consider a career in dental surgery. I hope this small book gives you a glimpse of the diverse opportunities dentistry offers, and what being a dental surgeon is like and how we contribute to the health of society. We can actually make a difference to peoples' lives and we do, every day.

A handwritten signature in black ink, reading 'Kathryn Harley'. The script is fluid and cursive, with the first name 'Kathryn' and last name 'Harley' clearly distinguishable.

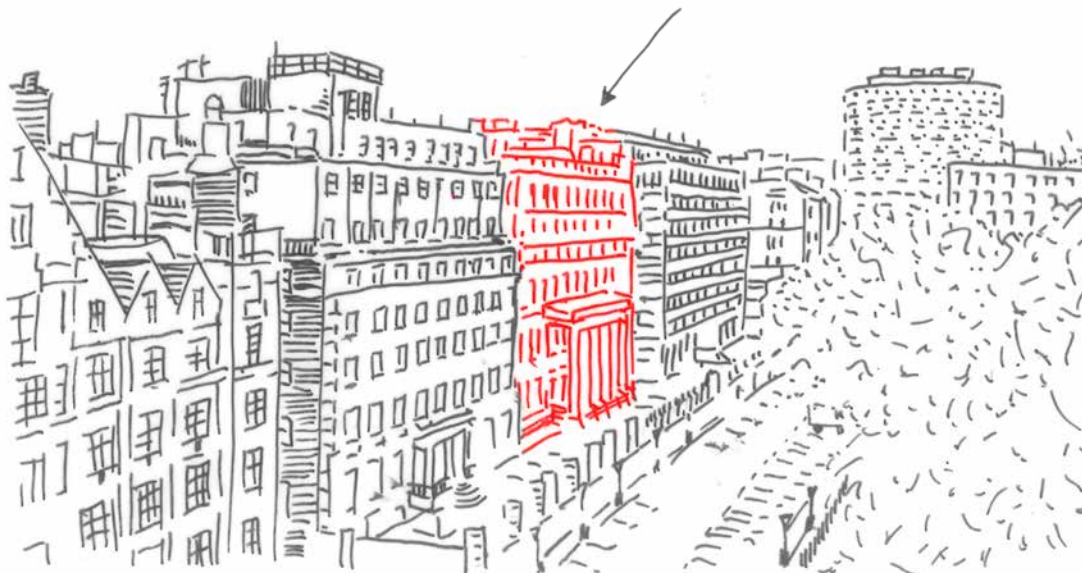
Kathryn Harley
Dean of the Faculty of Dental Surgery

ABOUT US

For over 65 years the Faculty of Dental Surgery of The Royal College of Surgeons of England has been a national and international voice for dentistry, providing informed specialist help and advice in the UK and all over the world.

Our remit includes setting curricula, conducting examinations, awarding diplomas in dental surgery and for the majority of dental specialties, providing programmes of postgraduate education and continuing professional development, and supporting dental research.

THE VOICE
OF DENTISTRY
IS HERE



What is dental surgery?

Dental surgery is one of the clinical arts and sciences devoted to maintaining the health of the teeth, gums, and other hard and soft tissues of the mouth and surrounding facial structures. A dental surgeon is both a scientist and a clinician dedicated to promoting the highest standards of health through prevention, diagnosis and treatment of oral diseases and conditions.

Although most dental surgeons work in primary care settings (such as high street dental practices), some are found in the hospital service. Others work in universities, healthcare industries, sales and marketing, and in the armed forces. There is a wide variety of careers open to dental surgeons. More specialised services are usually provided in hospitals.

There are a number of different specialties and career areas within dental surgery, each is described later in this booklet. Whatever specialty you choose, you will find that a career in specialist dentistry will challenge, stimulate and reward you throughout your working life.



Dental specialties

- Dental and maxillofacial radiology
- Dental public health
- Oral and maxillofacial pathology
- Oral medicine
- Oral microbiology
- Oral surgery
- Orthodontics
- Paediatric dentistry
- Restorative dentistry (endodontics, periodontics and prosthodontics)
- Special care dentistry

Medical specialty

- Oral and maxillofacial surgery
(requires dual qualification in dentistry and medicine)

An **academic** career within a university can be pursued in each of the above specialities

What should you expect?

Dental surgeons work in demanding clinical environments where the decisions and actions taken will directly affect the health and well-being of their patients. Dental surgeons must possess keen academic skills and considerable focus to achieve the high standards expected of them.

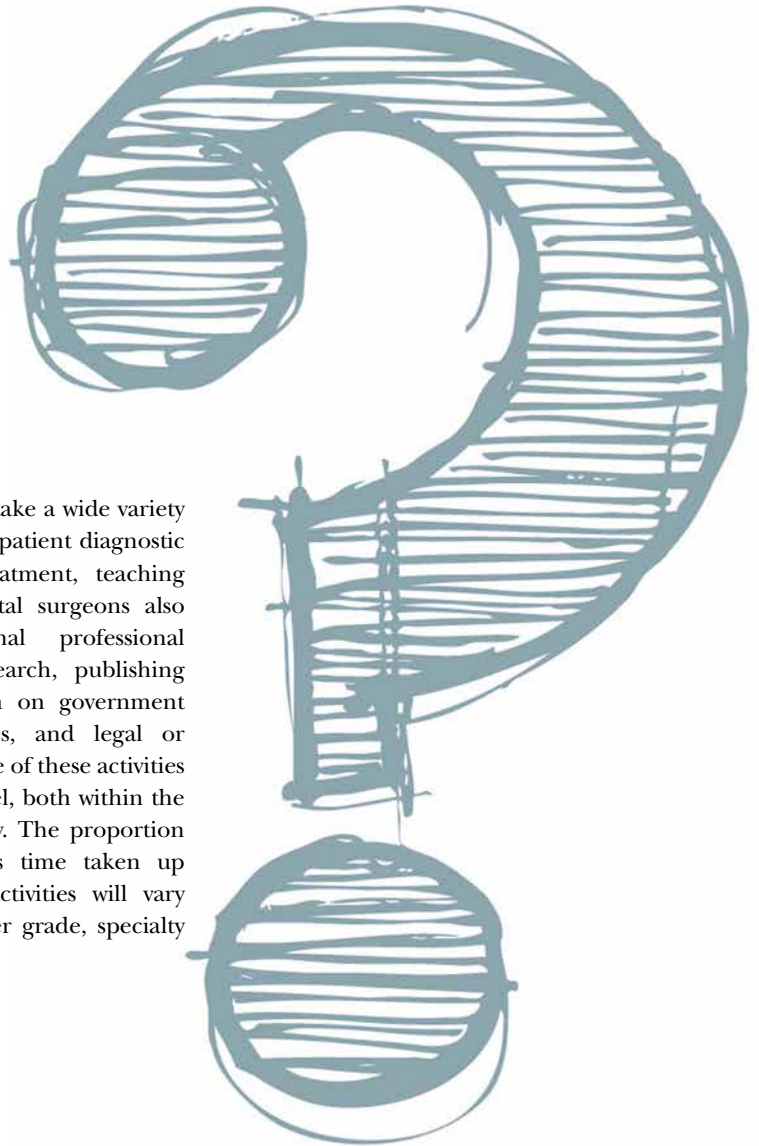
Dental surgeons don't work alone. From the early stages of their careers, dental surgeons will be expected to lead a team of healthcare professionals to provide the highest quality and standard of patient care. A successful dental surgeon will have excellent communication skills and be a supportive and responsible team worker and leader. And, of course, dental surgeons deal with patients – people – at times when they are at their most

vulnerable, nervous or scared. Being able to communicate complex information to patients while understanding and responding to their needs is essential.

Problem solving, diplomacy, continuous learning, leadership, organisational skills, professional integrity – all of these are vital for the dental surgeon. You will be joining a profession that carries a tremendous responsibility to promote and improve public health: it's one of the most challenging jobs available but one of the most rewarding too.

The majority of a dental surgeon's work takes place in general practice, either in the NHS or within the private sector. Hospital-based dental surgeons predominantly work for the NHS. Within

this setting they undertake a wide variety of tasks including new patient diagnostic clinics, outpatient treatment, teaching and audit. Many dental surgeons also engage in additional professional activities such as research, publishing articles, representation on government and regulatory bodies, and legal or political work. For some of these activities you can expect to travel, both within the UK and internationally. The proportion of a dental surgeon's time taken up with each of these activities will vary according to his or her grade, specialty and interests.



Career pathway for specialist dentistry

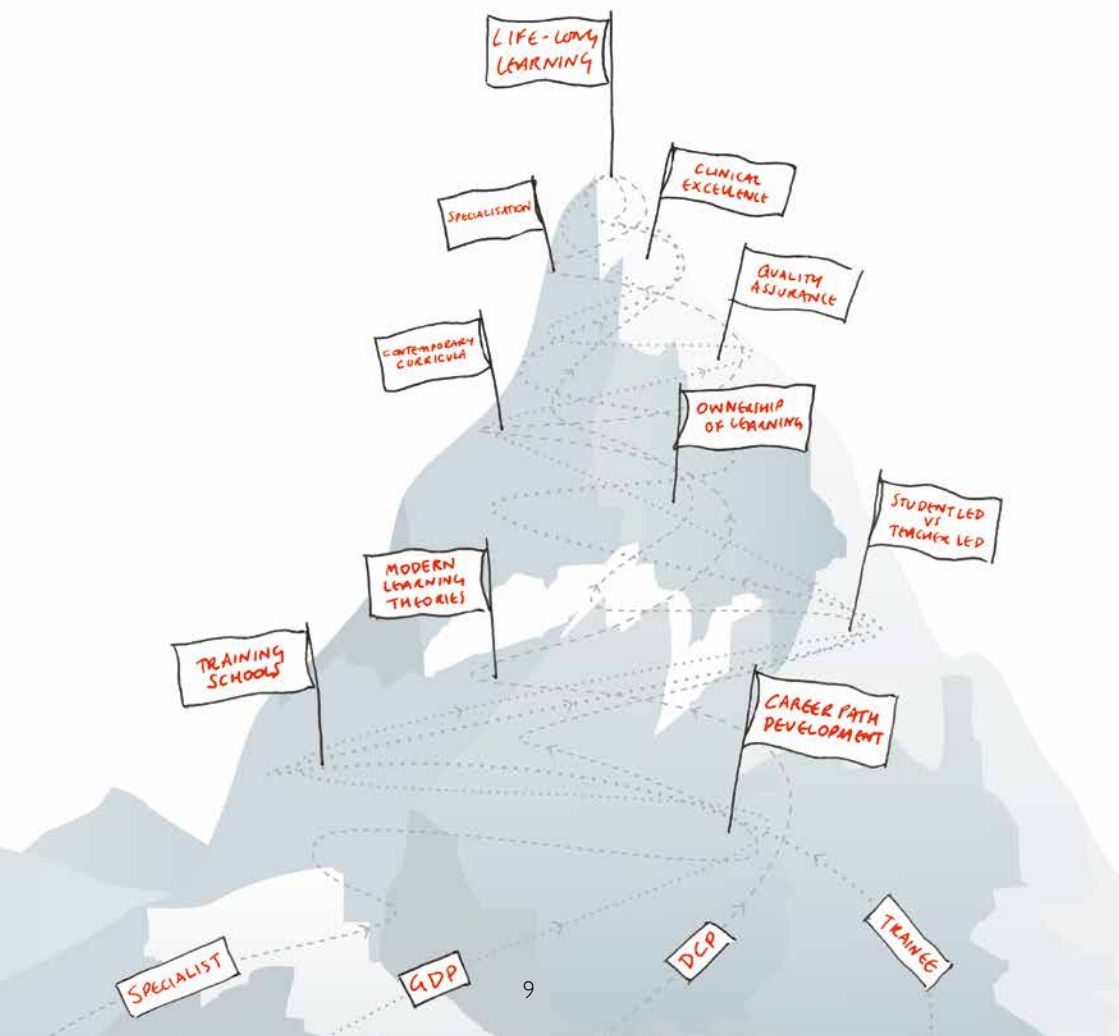
The career pathway for specialty training in dentistry typically involves five to seven years of training following completion of the Bachelor in Dental Surgery (BDS).

The pathway to becoming an oral and maxillofacial surgeon is different from that of the dental specialties as you need to qualify in both dentistry and medicine before entering specialty training. There is some additional information specific to the oral and maxillofacial surgery (OMFS) career pathway later in this booklet on page 36.

Applying to a dental school through UCAS

Dentistry is a degree course offered at a number of UK dental schools. The length of the course for school leavers is five years. The exact entry requirements differ between schools, with most requiring three high A-level grades, including two sciences.

For further details on the exact requirements please contact the individual schools or visit the UCAS



website (www.ucas.com). To secure a place in a dental school (and also pursue a successful career in dentistry!) students will need to demonstrate they can work well with the public, and have good communication skills and manual dexterity.

Bachelor in Dental Surgery (BDS)

This is a five-year degree. After completing your BDS you will be eligible to register with the General Dental Council (GDC), which enables you to practise in the UK. In your final year you apply for Dental Foundation Training.

Dental Foundation Training

The Dental Foundation Training programme is not compulsory; however, individuals wishing to work within the NHS must have completed DF1.

Year 1 (DF1)

This training usually takes place in a primary care setting where you will be expected to treat patients and also attend study days.

After completing DF1, you will be able to apply for inclusion on a ‘dental performer list’. These lists are administered by regional healthcare commissioning bodies throughout the UK and you will apply for inclusion on the appropriate list depending on where

you wish to work. Once your application to be on a dental performer list in your region has been approved, you can work for the NHS in your chosen location.

Year 2 (DF2)

A second foundation year is available and applications are made in open competition with other interested trainees.

DF2 training involves treating patients in a variety of settings and working in, and gaining experience of, the different dental specialties. The training may be carried out in either the hospital, community or salaried dental services, which provide care to patients who have problems accessing health services because they have specialised health needs.

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MJDF/MFDS CHECKPOINT

It is recommended that you study for your MJDF/MFDS examination with one of the surgical royal colleges during this time, which will take about two to three years to achieve. This qualification marks the end of foundation training and is desirable for entry to specialty training.

Career Development Posts (up to two years)

The purpose of these posts is to provide extra training to build your CV in order to apply for specialty training posts. You will gain greater clinical exposure and experience in writing papers and case reports, teaching, and management. These posts are aimed at those who are:

- pursuing training in a particular specialty
- unsure what specialty they wish to pursue and will therefore rotate through different specialist departments
- general practitioners with an interest in a particular specialty
- interested in career grade non-consultant hospital appointments.

Specialty Training Posts (three to five years)

In order for you to be accepted onto a specialty training programme as a specialty registrar:

- You will need to have a minimum of two years' broad experience in dentistry, which may include experience within hospital and community settings, and general dental practice. Typically, this experience will be gained from Dental Foundation Training or its equivalent.
- You are strongly advised to prepare a 'portfolio of evidence' demonstrating

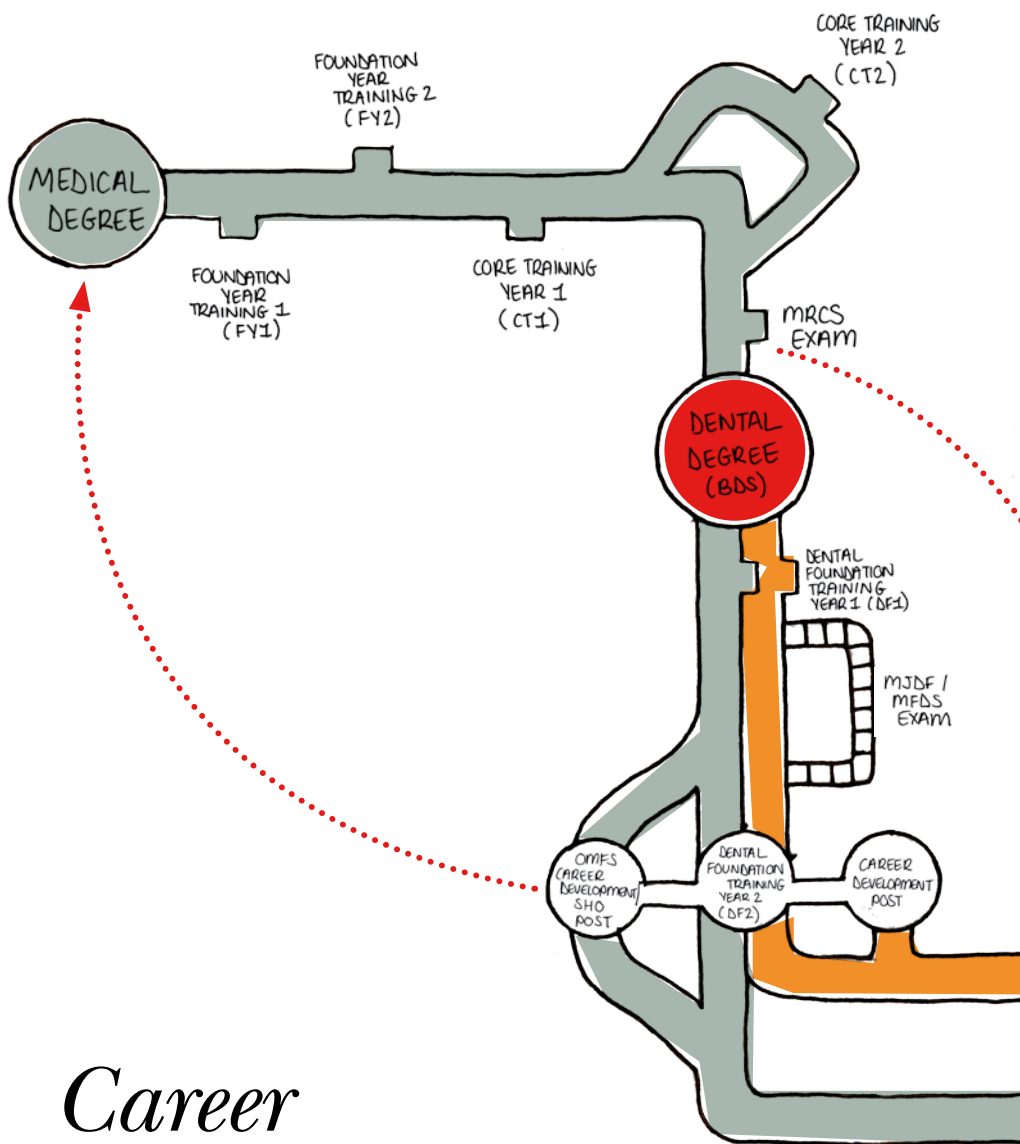
your particular skills and attainments. Evidence such as clinical audit projects, publications in recognised dental journals, continuing professional development (CPD) activities, courses you have attended, membership of specialist societies, and presentations at meetings will all be valuable as there is intense competition for specialty registrar (StR) posts.

- When you are accepted onto an StR training post you will be allocated a unique national training number (NTN), which is used for administrative and funding purposes throughout your specialty training.

Specialty Membership Exam

Your three-to-five years of specialty training culminates in the specialty membership 'exit' exam.

If successful, you will gain a Certificate of Completion of Specialist Training (CCST) and this will allow you to be included on the specialist list and be known as a specialist in your chosen area by the General Dental Council (GDC).



*Career
pathway
diagram*

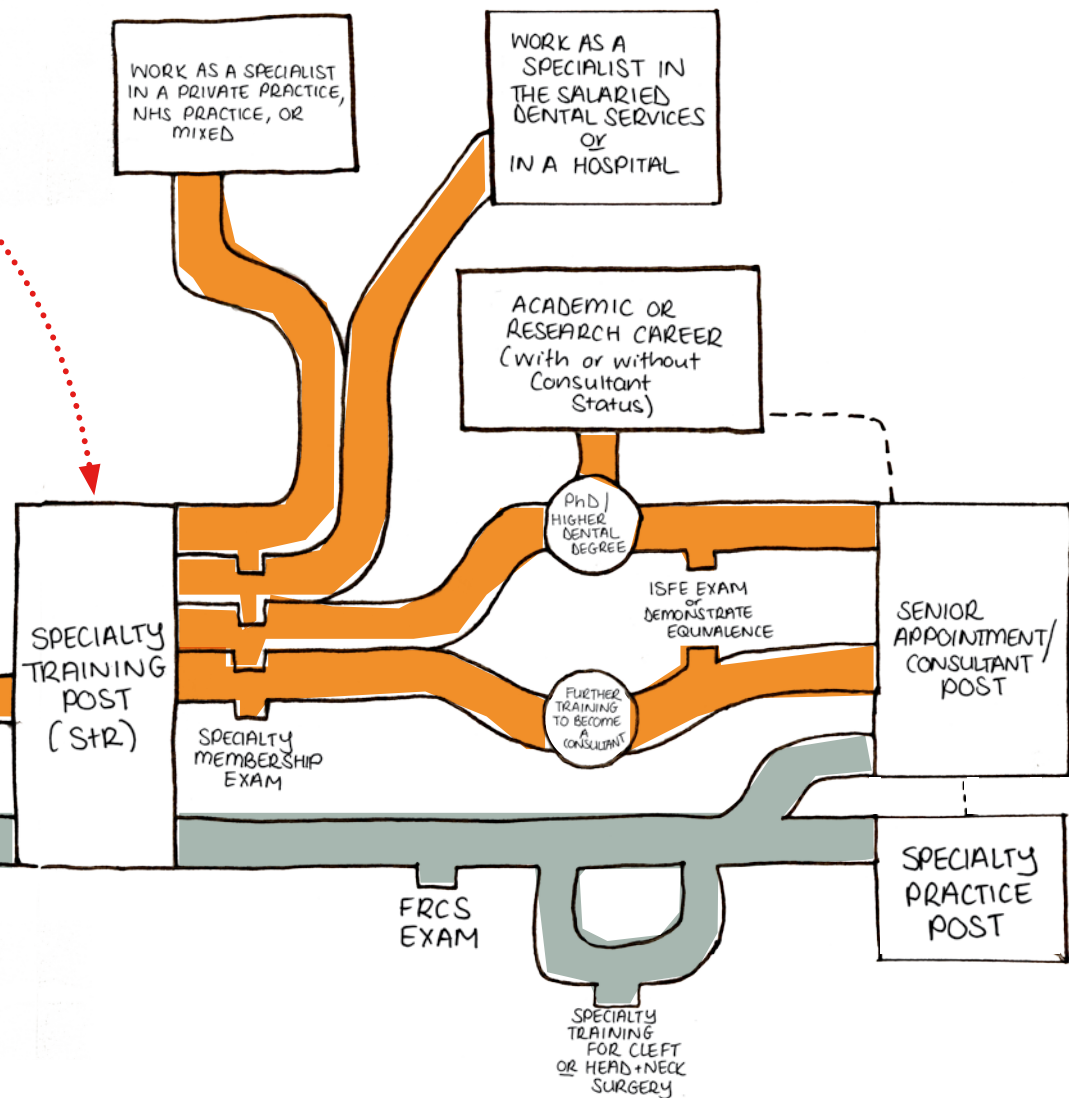


OMFS career pathway



Dental specialty career pathway

-➔ OMFS trainees who began the pathway with a UK dental degree should start their medical degree after completion of an OMFS career development/OMFS SHO/OMFS DF2 post. Once they have completed the MRCS exam they can then apply directly for a specialty training post.



OMFS career pathway information

UK Medical Degree

This is a five-year degree or possibly four years for graduate entrants.

**OMFS Career Development /
OMFS SHO / OMFS DF2 Posts**

These posts are based in maxillofacial surgery departments in hospitals and last up to two years. The postholder will be expected to assist with inpatient care, manage acutely injured patients and develop confidence and competence in dental alveolar surgery and oral medicine by working in outpatient and day surgery settings.

Foundation Year Training (FY1 and FY2)

This is a two-year generic training programme that is designed to give trainees a range of general experience in various specialties.

Surgical Core Training (CT1 and CT2)

These posts are designed to give a surgeon experience in performing different surgical procedures.

After two years, surgeons may sit the Intercollegiate Membership of the Royal College of Surgeons (Intercollegiate MRCS) exam: this is a requirement to enter specialty training in OMFS.

Specialty Training (ST3 – ST7)

Specialty training lasts five years with an exit Fellowship of the Royal College of Surgeons (FRCS) examination. The FRCS is a requirement for specialty registrars to be awarded a Certificate of Completion of Training (CCT) in Oral and Maxillofacial Surgery and register with the General Medical Council (GMC) and appear on the OMFS specialist list.

Cleft Lip / Head and Neck

Individuals wishing to pursue a career in either cleft lip and palate or head and neck surgery must apply for a relevant training post in these sub-specialties, which will provide advanced training in these areas.

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The OMFS training routes change regularly. It is advisable to contact your local deanery and/or the British Association of Oral and Maxillofacial Surgeons (www.baoms.org.uk) for updates and further information.
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Choosing your career

In the following pages you can find out more about each specialty and other career options and read about ‘a day in the life’ of someone who is working or training in that area.

Further information regarding entry requirements and examinations for each of these specialties can be found on the relevant websites listed on page 41.



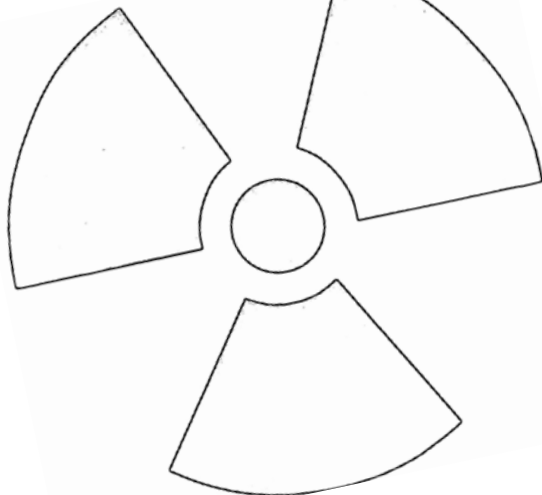
Dental and maxillofacial radiology

Dental and maxillofacial radiologists focus on operating, interpreting and understanding the diagnostic imaging used throughout dentistry (and a number of other healthcare professions) to assess the anatomy of the face, neck and head.

This field of diagnostic study is highly specialised and requires the practitioner to acquire an in-depth knowledge of a variety of areas, including:

- anatomical features as they appear on images taken using various imaging techniques
- interpreting images of diseases, disorders and conditions that affect the teeth, jaws, oral cavity, facial structures and the head and neck
- the provision of therapeutic radiology appropriate to specific conditions affecting the head and neck region
- using evidence-based knowledge of good clinical practice and diagnostic methods to justify the use of appropriate imaging.

Most specialists work in dental schools or hospitals. They will play a role in diagnosing disorders of the head and neck areas by using modern radiological techniques such as panoramic radiography, computed tomography (CT), magnetic resonance imaging (MRI) and a variety of other external and intra-oral radiology advanced imaging techniques to provide a detailed survey of these areas.



A day in the life...

Mr Jonathan Davies, King's College London Dental Institute

A typical day begins by checking the requests for dental imaging that have been received in the x-ray department – under UK legislation all imaging must be justified. The referrals are checked and the appropriate protocol for the investigation is selected.

A clinic list may include patients complaining of obstruction of a salivary gland (where the face swells on eating). Here, the investigation of choice is an ultrasound scan of the salivary glands using sound waves to investigate if the cause of the swelling can be found. A sialogram (an x-ray of the glands using a dye that shows up on the image) may assist in the location of a salivary gland obstruction caused by either a narrowing of the salivary duct or of a salivary stone.

The next patient may present with a lump on the face where the surgeon has requested a sample of the tissue. We may use ultrasound guidance to enable a fine needle to be inserted so we can take tissue from the centre of the mass with absolute precision. The session continues with reporting of dental cone beam CT scans that have been taken during the week for planning implants or surgical removal of difficult third molars.

Teaching and research are important aspects of a dental radiologist's job. Tutorials are taken with the specialist trainees, dental radiographers or with the dental students and regular meetings are held with the specialist UK, European and international dental and maxillofacial radiology societies to ensure we all remain up to date with the latest developments. Those interested in research may be preparing papers for publication or reviewing an article prior to publication for a dental journal.

The day can be varied and demanding, with both clinical and teaching aspects, since most positions are based in hospitals and dental schools.

Dental public health

Dental public health is the science and art of preventing oral diseases, promoting oral health and improving quality of life through the organised efforts of society.

A career in dental public health builds on the basis of a broad clinical dental background, and then extends that clinical understanding to encompass a population-wide approach to oral health. It does not involve one-to-one care of individual patients. It concerns itself with the environmental, social and behavioural influences on the oral health of the population. It attempts to reduce disability, dependence and health inequalities by ensuring the provision of effective and efficient services to restore those with dental disease to health.

To enter this dental specialty candidates will usually enter a four-year training programme, during which they will complete a Masters degree in Dental Public Health at a recognised institution and have the opportunity of sitting the Diploma in Dental Public Health

(DDPH). Entry requirements and examinations for this dental specialty can be found on the Faculty's website.



A day in the life...

Euan O'Neill, NHS and King's College London

My working week is both varied and challenging. I spend one day in King's College London working on academic projects, two days a week in inner north east London and two days a week in south west London. Having to move around during my working week provides me with different experiences and a richer working life.

While at King's, I have the opportunity to sit alongside academics in the university, attend journal clubs where we discuss recent research, and have joint meetings with behavioural scientists and statisticians who help with my projects.

Much of my day can be spent at a desk or attending meetings. This may seem boring but if you have an interest in public health it is great working with a team and contributing to the work of an organisation. I might visit a hospital, a community clinic, go on a fact-finding mission to a dental practice or be part of high level decision-making at the Department of Health.

My training gives me the opportunity to work with many different people and teams to meet the challenge of improving the oral health of the local population. While there is never a dull moment in training and there are always new challenges, it is important to be able to handle several projects at the one time and learn how to manage your time. Though I no longer treat patients nor directly help the individual patient to improve his or her oral health, I get great satisfaction knowing that I am helping to improve the oral health of the local population where I work.

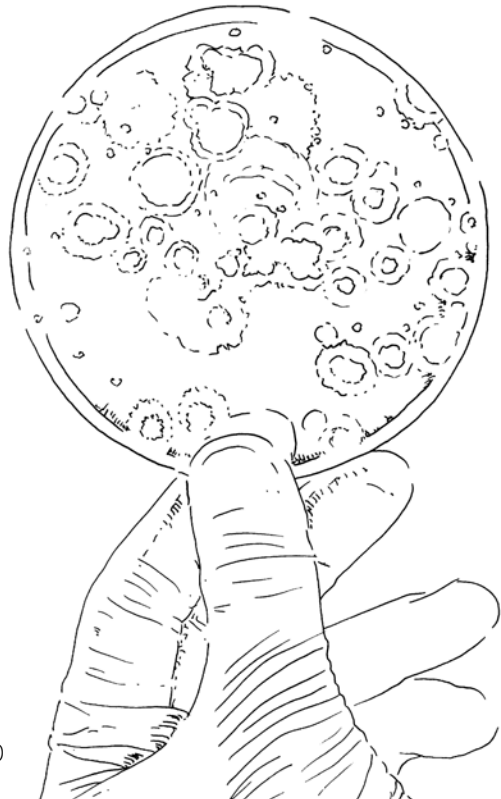


Oral and maxillofacial pathology

Oral and maxillofacial pathology focuses on the diagnosis of diseases of the mouth, jaws and salivary glands by microscopic examination of tissue samples removed by surgeons.

Most oral and maxillofacial pathologists teach and carry out research in universities as well as carry out diagnoses to support clinicians in their care of patients. They work closely with specialists in the fields of oral medicine, oral and maxillofacial surgery and oral surgery but do not usually see patients themselves.

Oral and maxillofacial pathology is a small specialty with only a few such pathologists working in the UK.



A day in the life...

Mr Adam V Jones, Cardiff and Vale University Health Board

There are two main components to my clinical work as a registrar: macroscopic and microscopic reporting. The first is commonly referred to as 'cut up' and essentially involves providing a description of the specimen and creating specimen blocks (readying a specimen for diagnostic investigation by encasing it inside a wax block) to aid accurate reporting. Small specimens such as polyps are often bisected and viewed in their entirety but large resections require representative sampling. Following cut up, the specimen blocks are processed and the slides are cut and stained by a medical laboratory scientific officer, leading to the second aspect of my work: microscopic reporting.

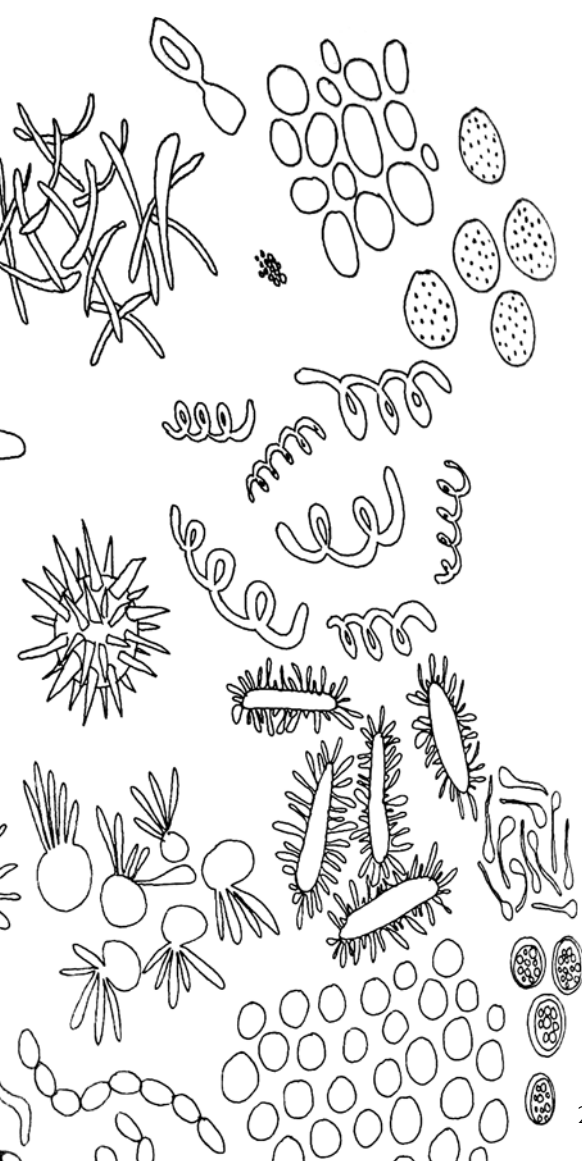
The histology slides are viewed by the registrar using a light microscope and the pertinent features described and reported. Correlation with clinical findings is essential for accurate diagnosis so review of radiographs, clinical notes or alternative tests may be required. Once the report is written and checked this is sent to the referring clinician.

A pathologist is a core member of the cancer multidisciplinary team and provides diagnostic advice that aids the team in providing optimal care to the patient. This includes presentation of histology slides as well as providing information on prognostic factors.

Teaching may form part of the trainee's responsibilities and includes the provision of lectures, small group teaching and practical classes. Opportunities to pursue a teaching certificate may also be available. There are many opportunities to pursue research and, if you seek a higher degree, the potential to study for a PhD.

During training the trainee will spend a minimum of 12 months in a general histopathology laboratory covering all areas of histopathology and cytopathology.

Oral medicine



Oral medicine is the specialty of dentistry that provides care for patients with chronic, recurrent and medically related disorders of the mouth and associated tissues, with an emphasis on non-surgical care. It sits at the interface of dentistry and medicine and this is reflected by the multidisciplinary approach to care involving input from a wide range of dental and medical specialties.

Oral medicine has at its centre patient conditions that are mainly managed without surgical intervention.

A dental degree is a requirement for entry to specialty training in oral medicine, although many specialists have both dental and medical qualifications.

A day in the life...

Dr Roddy McMillan, Eastman Dental Institute, London

The working day starts in earnest with a clinic at 9am, either an oral medicine general clinic or a facial pain clinic. Oral medicine covers a wide range of different patients and a multitude of diagnoses. Although lichen planus (an itchy rash on the skin or in the mouth) is the stereotyped oral medicine diagnosis, we see many other conditions such as pemphigus (a blistering auto-immune disease), Crohn's disease (a form of inflammatory bowel disease that can affect any part of the intestinal tract and also the mouth), trigeminal neuralgia (a nerve disorder that causes stabbing pain in parts of the face) and Sjögren syndrome (an auto-immune disease where the body attacks its own tear and saliva glands, reducing the amount of saliva and tears produced). Oral medicine as a specialty is significantly involved in the multi-disciplinary care of many patients.

Unlike when I was a senior house officer, we usually have time to sit down and eat lunch in oral medicine. After lunch we usually have another clinic or perhaps some time to complete paperwork or undertake some clinical governance or research. Occasionally, we will be called to review patients being treated under other specialties in order to help assist in their management.

An important component of my duties is the supervising and teaching of junior colleagues. We often have the opportunity to teach others such as general dental practitioners, postgraduate dentists, and undergraduate medical and dental students. The training pathway in oral medicine generally encourages clinical governance and research. There have been many opportunities to publish papers and present at both national and international meetings.

Oral microbiology

Oral microbiology is the study of the micro-organisms of the oral cavity and the interactions between the oral micro-organisms with each other and with the body. Of particular interest is the role of oral micro-organisms in the two major dental diseases: dental caries (tooth decay) and periodontal disease (a bacterial infection that affects the gums and bone supporting the teeth).

There are many different types of oral bacteria and they exist in our mouths as a diverse community. Oral microbiologists will usually be employed in research laboratories, institutions and universities.

As well as studying bacteria, oral microbiologists will also study oral and facial infections caused by viruses and fungi. They will research possibilities for causes, treatments and cures.



A day in the life...

Ms Noha Seoudi, Queen Mary, University of London

Oral microbiology is one of the most interesting dental specialties. It integrates a wonderful balance of clinical, laboratory, teaching and research activities to create an ideal training pathway.

Part of the training is dedicated to developing competencies in clinical medical microbiology, virology and infection control. This period of training is spent with the consultant medical microbiologists and their trainees; a typical Monday will start with a handover meeting, discussing all the new cases in the presence of the consultants, then delegating cases to the responsible specialty registrar. This will be followed by a period of time obtaining authorisation of the laboratory reports, requesting any relevant extra tests dictated by the clinical picture of patients and liaising with the laboratory staff. Preparation for the ward round is part of this session, ensuring that the clinical file of each patient is reviewed and the laboratory results are updated.

The research-in-progress lunchtime meeting will follow at about 12.45pm, where all new research will be discussed. This meeting is very good for any trainee who wishes to develop his or her own research interests. Specialty registrars will then join their supervising consultants to review the patients during the ward round. During these rounds cases will be discussed and microbiology advice will be communicated with the relevant team, eg surgical, renal or intensive care. The day will end with another session dedicated to liaising with the laboratory and authorising reports.

Each day comes with exciting new infection-related cases and a load of valuable knowledge that will make your training journey a rich and varied experience.



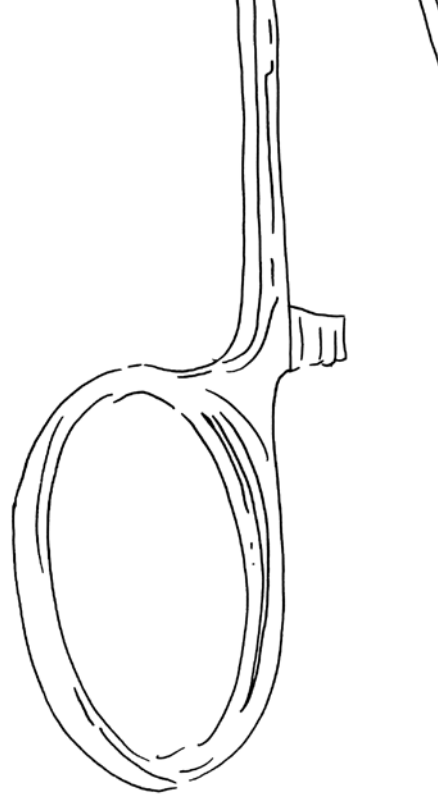
Oral surgery

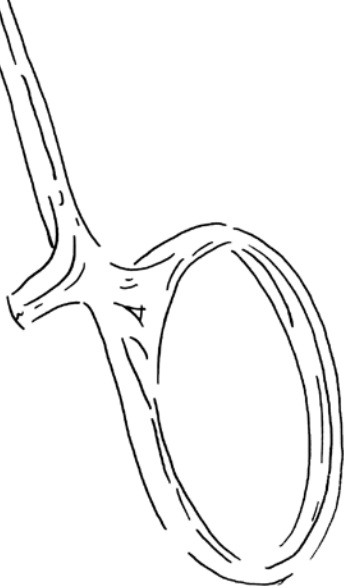
Oral surgery is involved with the diagnosis and surgical treatment of conditions affecting the hard and soft tissues in and around the oral cavity.

Specialists in oral surgery will spend much of their time dealing with the surgical aspects of patient care that are beyond the remit of general dental practice and, depending upon where a particular specialist works, may involve:

- complex dental extractions
- apical surgery
- implant placement
- dealing with minor trauma, carried out under local anaesthetic with or without sedation in a primary care setting
- dealing with more complex patients or major surgery requiring general anaesthetic in the hospital service.

It is a surgical specialty that works closely with general dental practitioners and other specialists in both medicine and dentistry. It has close ties with oral and maxillofacial surgery, but does not require a medical degree.





A day in the life...

Dr Nadine Khawaja, King's College London Dental Institute

A typical day normally starts with assessing patients in the general oral surgery consultant clinic. Most cases are discussed with the lead consultant, especially the more demanding cases involving orofacial pain. Any necessary further tests are organised including cone beam CT, MRI, ultrasound, blood tests and biopsies. We dictate letters to the patients' referrers and always send a copy to the patients, which is particularly useful if they have had a lot of information to take in on the day.

Fortnightly, a multidisciplinary audit meeting is held at lunchtime. Interesting cases are presented and discussed with the consultant radiologist and oral pathologists also present.

In the afternoon, I run a minor oral surgery list with consultant supervision. We treat a lot of patients under intravenous sedation with midazolam, which we administer ourselves. We are increasingly using minimally invasive techniques, so more procedures are performed under local anaesthesia only. I often have a good mix of challenging procedures on my list, including surgical extraction of impacted lower third molars, upper canines and supernumeraries, cyst enucleation and soft tissue laser biopsies. Other specialty lists in the week include implants and endodontic apical surgery under the supervision of restorative, oral pathology and oral medicine clinics.

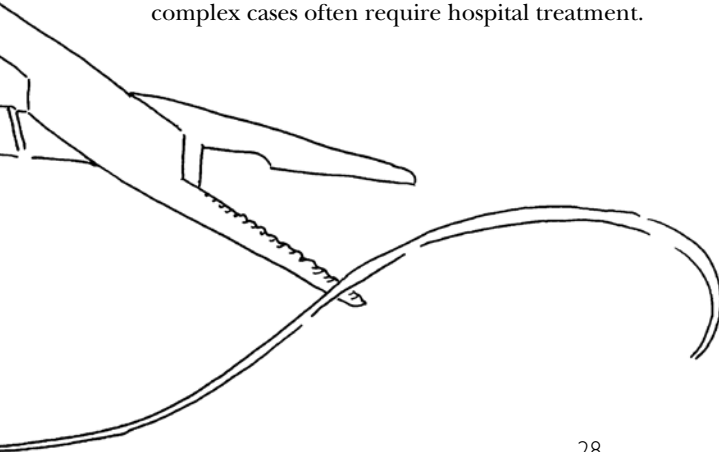
Orthodontics

Orthodontists are primarily concerned with the correction of irregularities of the teeth and jaws, such as malocclusions (improper bites), which may be a result of tooth irregularity, disproportionate jaw relationships, or both. Orthodontic treatment often involves the use of braces and retainers to set teeth into the correct positions, leading to improvements in the appearance and function of the teeth as well as the patient's psychological well-being.

Orthodontics is a popular branch of dentistry primarily because it can be both intellectually and physically challenging, requiring a high level of manual skill to correctly manipulate the devices used to correctly set each patient's teeth and jaw.

There is high demand for orthodontic treatment for both clinical and cosmetic reasons. When you become a fully qualified orthodontist, you can expect to be dealing with children, teenagers and adults so good interpersonal skills are a must.

Orthodontic practice occurs both in high street practices and in hospitals – the more complex cases often require hospital treatment.



A day in the life...

Miss Samantha Stewart, Musgrove Park Taunton, Bristol University

Orthodontics is a hugely rewarding job. There are few specialties where you can build a rapport with patients as you watch them transform from a shy individual into a confident young adult with a great smile. There is always constant questioning as to when their brace is coming off but this is all made worthwhile when the day comes and you see the delight on their face as they run their tongue round their newly straightened teeth for the first time.

The day begins on a new patient clinic. In this specialty, managing a patient's expectations is one of the most important things. Taking impressions is one of the first things you learn as a dental student; as an orthodontic trainee, attention to detail is vital and being precise about the quality of impressions is essential.

Having taken records, a plan must be decided for the patient. Careful consideration must be given to all the options available to the patient and clearly documented in the patient's records. The patient must fully understand the treatment and what it involves. It can be tricky at times explaining to young adults and their parents why healthy teeth may require removal to straighten other teeth.

The next stage could involve the 'bond up' of a patient's fixed appliances. Initial bracket placement is key. Taking the time to get this right is time well spent, especially as you see the teeth unravel and align. Routine appointments will require close monitoring at around six to eight week intervals. These will typically be shorter appointments to change arch wires, apply auxiliaries (such as elastics) or repair breakages.

Having completed and put up with an orthodontic treatment for sometimes up to three years, patients are delighted to hear the magic word 'debond' (removing the devices). A great way to end the day.

Paediatric dentistry

Paediatric dentistry is the practice, teaching and research of comprehensive and therapeutic oral healthcare for children from birth to adolescence, including care for children who demonstrate intellectual, medical, physical, and psychological or emotional problems.

Paediatric dentistry is unlike any other dental specialty in that it encompasses all treatment areas for a particular group of patients: all aspects of oral healthcare for children are included, such as restorative care, endodontic treatment and prosthetics, minor oral surgical procedures, and interceptive orthodontics.

Paediatric dentists also contribute to multidisciplinary care of children with complex medical problems which either impact on oral health, or where oral health issues may affect their general health.

Paediatric dental practice occurs both in high street practices and in hospitals. The more challenging cases are often referred to hospitals.



A day in the life...

Dr Anjali Kandiah, Leeds Dental Institute

The day started at 7.30 am on the paediatric ward in the children's hospital. On the theatre list were three children, all having dental care under general anaesthesia. One child was two years old and had significant dental decay; the second child had leukaemia; and the third was six years old and extremely anxious. After clerking these patients with another trainee and the consultant, we joined the rest of the team (including a paediatric anaesthetist) in theatre. All of the children had their dental treatment completed successfully. The treatment carried out included restoration of teeth and extraction of those with poor prognosis.

In the afternoon I attended a trauma clinic. New referrals of patients with dental injuries are assessed in addition to those who are under long-term review. The paediatric dental team work with orthodontic colleagues to formulate appropriate treatment plans. The children and parents are often grateful for the multidisciplinary attention they receive, which makes this a very rewarding clinic to work on.

Each day of the week is different. I work part of the week in a nearby community dental clinic with a specialist in paediatric dentistry. In addition to assisting on a new-patient consultation clinic once weekly, I have a session where I treat children under inhalation sedation and two other sessions in the week where children are treated under local analgesia and many of them will have special dental or medical problems. There is a strong emphasis on prevention of oral disease as well as treating existing problems. I also visit the paediatric cancer ward once a week to carry out oral health assessments on children who have been recently diagnosed with or are receiving treatment for cancer.

Finally, I have two sessions per week where I have no clinical duties during which I concentrate on my Master's research dissertation and conduct personal study. We also have a couple of hour-long seminars each week, one of which is a literature review and the other, this term, is on oral care for children with pre-existing medical problems.

Restorative dentistry

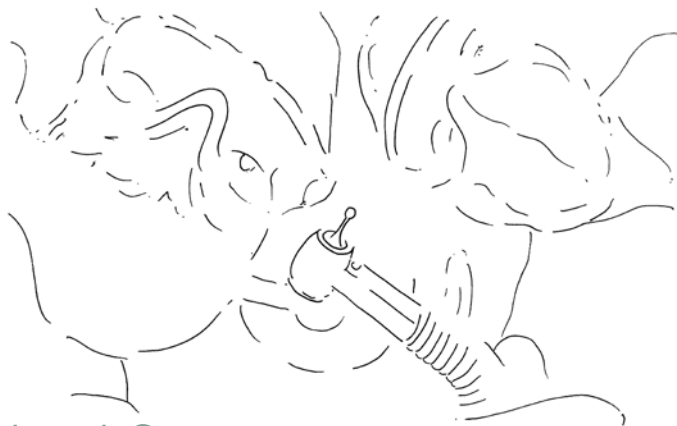
Restorative dentistry is so much more than just restoring teeth. It allows a full understanding of how to manage all of the commonly occurring problems caused by tooth decay, periodontal disease, dental trauma and tooth wear. It therefore relies on expertise in endodontics, periodontics and prosthodontics, as well as in preventive dentistry, dental materials, implants, occlusion and aesthetics. Restorative dentists also provide valuable support for general dental practitioners and medical and dental colleagues who refer patients for diagnosis and treatment planning. Restorative dentists are also deeply involved with undergraduate and postgraduate education and training.

Restorative dentistry as a specialty is essential in the management of patients who present with the most challenging of dental problems. These patients may have mouth cancer, a cleft lip and palate, hypodontia, medical problems affecting their mouth, developmental conditions of the teeth or be an adult with special needs.

Within restorative dentistry are three component specialties:

- *Endodontics*: this is concerned with the cause, diagnosis, prevention and treatment of diseases and injuries of the tooth root, dental pulp and surrounding tissue.
- *Periodontics*: the diagnosis, treatment and prevention of diseases and disorders (infections and inflammatory) of the gums and other structures around the teeth.
- *Prosthodontics*: the replacement of missing teeth and the associated soft and hard tissues by prostheses (crowns, bridges, dentures) which may be fixed or removable, or may be supported and retained by implants.

Some specialists train in one of these areas and tend to work in specialist high street practices. Other dentists train for longer in all three areas and become consultants working in hospitals.



A day in the life...

Dr Sarra Jawad, University Dental Hospital of Manchester

Describing a typical day in the life of a restorative dentistry specialty registrar (StR) is a contradiction in terms, as no two days and indeed no two StRs' experiences are ever the same. Restorative dentistry frequently involves a multidisciplinary approach, requiring liaison with colleagues within other areas of dentistry and further afield, such as oncologists, haematologists and cardiologists to name but a few.

Training is very much 'hands-on', either by treating patients yourself or by supporting consultation clinics. In both ways I am involved with a great variety and a large number of patients. Aside from the clinics, StRs are given their own patients to treat. These are selected by consultants to expose the StR to a variety of challenging cases, such as providing complete dentures, endodontic re-treatment, periodontal surgery and tooth-wear cases.

The restorative dentist has a large part to play in providing the team with dental options, such as working with oral surgeons, pathologists, oncologists and radiologists when managing head and neck cancer. Here the restorative dentist receives information regarding the proposed surgical and medical management of the patient's tumour, and will then need to plan the patient's preoperative management, postoperative prevention, and eventually definitive rehabilitation of the mouth.

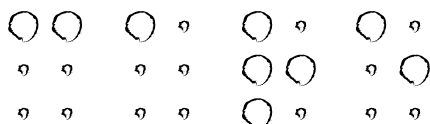
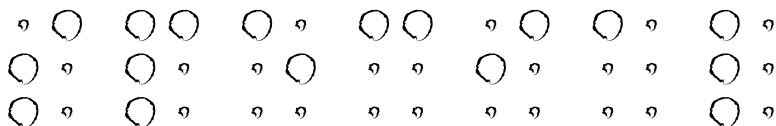
Further to this, StRs are also involved in the teaching of under and postgraduates, often supervising them at the chair-side, offering advice and practical help in the clinical situation. Research is also part of an StR's training. StRs working in the NHS are expected to develop an interest in research and often an MSc or MPhil qualification is incorporated into the training pathway. Critical analysis of evidence is a large part of the final exam, so this skill needs to be developed accordingly.

Special care dentistry

Special care dentistry is concerned with the improvement of the oral health of individuals and groups in society who have a physical, sensory, intellectual, mental, medical, emotional or social impairment or disability or, more often, a combination of these factors. It requires a holistic approach to the provision of care in order to meet the complex requirements of people with a variety of special needs.

Special care dentistry was approved as a new specialty by the GDC in October 2008 and the number of trainees, specialists and consultants in special care dentistry has grown considerably over the last three years and it continues to grow.

Training programmes are emerging across the UK for those who wish to pursue a career as a specialist. However, clinicians at all levels, including generalists, can all be expected to offer special care dentistry within their field of practice.



A day in the life...

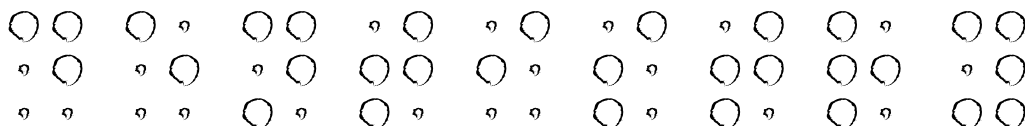
Miss Jessica Rowley, City Health Care Partnership Dental Services, Hull

Mrs Jane Temple, Sheffield Salaried Primary Dental Care Services

Both of us work under the supervision of our consultants within primary care, which in itself is unusual for a training pathway. This gives us a wide exposure and breadth of experience. Our first case of the day could be a patient with a haematological disorder for whom we must liaise closely with other medical professionals to treat. The next may be a severe phobic who needs encouragement just to enter the surgery.

The special care dentist can expect to encounter a very broad range patients, each requiring different treatment and support. In the course of a day, we can provide intravenous sedation to facilitate examination and treatment for a Down's syndrome patient with severe congenital cardiac disease, treat a quadriplegic patient who requires hoisting, travel out to a project for homeless people to treat patients with a range of social issues including drugs, alcohol and mental health problems, and carry out a home visit for a new patient who is repeatedly biting his lower lip; the patient has cerebral palsy, uses a wheelchair and can only communicate using a word pad. For this case, liaison with a speech and language therapist is required to determine the best treatment.

All of the above cases are taken from just one day at work from the both of us. Alongside treating patients, the special care dentist can expect to attend teaching sessions on a variety of techniques and observe, and participate in, home visits, urgent care referrals and treatment planning meetings. Each day is different and each patient is unique, making special care dentistry a demanding but incredibly rewarding specialty.



Oral and maxillofacial surgery

Often seen as the bridge between medicine and dentistry, oral and maxillofacial surgery (OMFS) is the surgical specialty concerned with the diagnosis and treatment of diseases affecting the mouth, jaws, face and neck.

OMFS is unique in requiring a dual qualification in medicine and dentistry, followed by a comprehensive general and specialist surgical training. Most surgeons acquire a degree in dentistry before training in medicine but it is becoming increasingly common for those acquiring a medical degree to subsequently undertake a dental qualification and then pursue a career in OMFS.

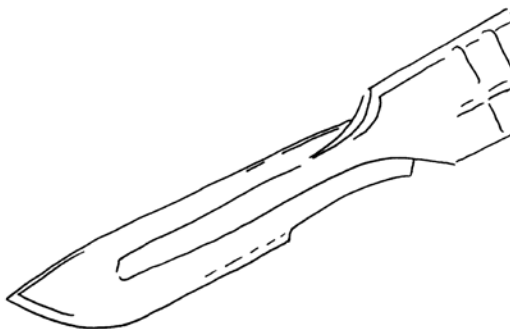
A range of oral and maxillofacial surgical operations are carried out on an outpatient basis under local anaesthesia or conscious sedation. These include pre-implant surgery, placement of dental/facial implants, removal of impacted teeth, and intra-oral and facial soft tissue procedures. More major operations, for example those for salivary gland disease, trauma, facial deformity or cancer, are carried out on an inpatient basis under general anaesthetic.

Due to the nature of the work, surgeons often work alongside a variety of specialists in other fields such as ENT, oncology, plastic surgery, orthodontics, restorative dentistry, radiology and neurosurgery.

Surgeons may choose to train and specialise in one or more specialised fields in OMFS, including head and neck cancer, craniofacial deformity, oral medicine, craniofacial trauma or cosmetic surgery.

A day in the life...

Dr Matthew Idle, Queen Elizabeth Hospital, Birmingham



Ordinarily, the day would begin at around 7.30am in order to consent and prepare patients for surgery. I would have coordinated the work-up of each case in conjunction with the consultant, senior house officer (SHO) and the prosthetics laboratory, where appropriate, prior to the day of theatre. Following this, I would then meet the rest of the team in the seminar room at 8.15am for the formal start of maxillofacial ward rounds. The ward SHO would present each of the patients in detail and a management plan would be formulated. The entire team would then review them on the head and neck ward, liaising closely with the nursing staff.

I would then go to theatre with the consultant and SHO for the team brief. We would be expected to discuss the order of the list, any equipment needs and special considerations for individual patients to ensure the list runs smoothly.

Under the supervision of my consultant I would usually undertake each procedure to completion but occasional guidance might be required. I would be expected to write a comprehensive operation note and formulate a suitable postoperative management plan. Several patients would normally arrive mid-morning for the afternoon list and I would dip out of theatre to consent them. I would continue operating through the afternoon; however, for more simple cases, I would take the SHO through the procedure or assist the consultant in more complex operations.

The postoperative ward round would be at around 5pm to ensure everyone from the list was recovering well.

If I was on-call that day I would also review the patients from other members of the maxillofacial team and liaise with the other registrars for handover. If there was any emergency work to deal with we would negotiate a slot in theatres for the evening, otherwise I would be available on my mobile overnight as required until 8am the following day.

Academic dentistry

The practice of dentistry comprises general practice as well as a number of specialties, each dealing with a particular area or aspect of patient care. If our knowledge of these areas and our ability to treat and care for patients is to evolve then the various areas of dentistry must be investigated, and our practice developed and refined. The academic dentist therefore works to increase understanding and push back the frontiers of knowledge in his or her area of interest. This process normally requires the scientific infrastructure and intellectual environment found in large universities.

A career in academic dentistry can be challenging because it involves many components, including:

- The actual practice of dentistry (or a specialty within dentistry).
- Teaching at undergraduate and postgraduate levels.
- Research to progress the subject of interest.
- Successfully completing a higher degree, such as a PhD.

Balancing these components can be difficult and usually the academic develops a bias towards either teaching or research. Consequently, if you are looking towards dental academia as a career you will need to have a genuine interest in teaching and have the ability to convey knowledge to others in an interesting and engaging way. If you are to succeed as a researcher you need an enquiring mind – one that is interested in solving problems and is always posing questions. In today's world, research is very much an interactive process and normally involves working with other research groups. It helps to be able to mix easily with others.

A day in the life...

Mr Paul Ryan, Clinical Research Fellow (Restorative Dentistry), Queen Mary, University of London

My appointment as an Academic Clinical Fellow in Restorative Dentistry initially allowed me to explore dental research and academia as a career alongside my clinical training in restorative dentistry. This post allowed me to gain my research fellowship from the Royal College of Surgeons and The Wellcome Trust and to pursue my PhD research project.

Today, my fellowship allows me to spend four out of five days every week (not to mention evenings and weekends) concentrating on my PhD and research training. My day of clinical work is divided between treatment and consultant clinics, as well as postgraduate teaching. This provides a week of varying activities and commitments, which I find challenging and extremely rewarding. The four days of research allow me time to carry out experiments in the lab, write scientific papers, learn research techniques, as well as attend conferences and disseminate my findings to the research community.

Leaving behind the demands of clinical dentistry and daily clinical patient lists and moving to academia brings with it considerable autonomy and, to some extent, the chance to be your own boss. This is a fantastic privilege but it comes with the self-imposed pressures of producing novel research and constantly questioning its future direction.

Life as a research fellow involves juggling the challenges that come with doing a PhD together with teaching and clinical commitments. Dental clinical academia is a career option that I believe all dentists should consider as it is a hugely varied and fulfilling career pathway.



Find out more

One of the best ways to learn more about any area of work is by talking to someone who does it or is in training to do it. This is certainly true of dental surgery and all of its specialties.

The benefit of speaking to a more experienced person in the field is that they can:

- demystify a programme of study or career pathway by sharing stories, including mistakes, and providing guidance based on their experiences
- help identify problems and provide solutions, or offer constructive criticism in a supportive manner, making difficult periods in your career much easier to navigate
- discuss any fears or uncertainty about pursuing a particular job or career
- introduce and refer you to other associates and colleagues that can help further.

If you'd like to arrange to speak to someone about a career in dental surgery, please contact the Faculty of Dental Surgery and we will be pleased to help you.

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Specialty associations

You can find out more details about each specialty area from the associations below.

Dental and maxillofacial radiology	British Society of Dental and Maxillofacial Radiology	www.bsdmfr.org.uk
	The Royal College of Radiologists	www.rcrac.ac.uk
Dental public health	British Association for the Study of Community Dentistry	www.bascd.org
Oral and maxillofacial pathology	The British Society for Oral and Maxillofacial Pathology	www.bsomp.co.uk
	The Royal College of Pathologists	www.rcpath.org
Oral medicine	The British Society for Oral Medicine	www.bsom.org.uk
Oral microbiology	Oral Microbiology and Immunology Group	www.bsdr.org.uk
Oral surgery	British Association of Oral Surgeons	www.baos.org.uk
Orthodontics	British Orthodontic Society	www.bos.org.uk
Paediatric dentistry	British Society of Paediatric Dentistry	www.bspd.co.uk
	International Association of Paediatric Dentistry	www.iapdworld.org
	European Academy of Paediatric Dentistry	www.eapd.gr
Restorative dentistry	British Society for Restorative Dentistry	www.bsrd.org.uk
	Association of Consultants and Specialists in Restorative Dentistry	www.restdent.org.uk
Special care dentistry	British Society for Disability and Oral Health	www.bsdrh.org.uk
Academic dentistry	Dental Schools Council	www.dentalschoolscouncil.ac.uk
Oral and maxillofacial surgery	British Association of Oral and Maxillofacial Surgeons	www.baoms.org.uk

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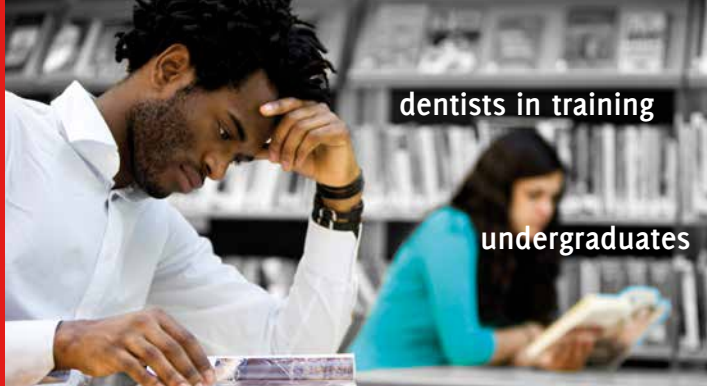
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