



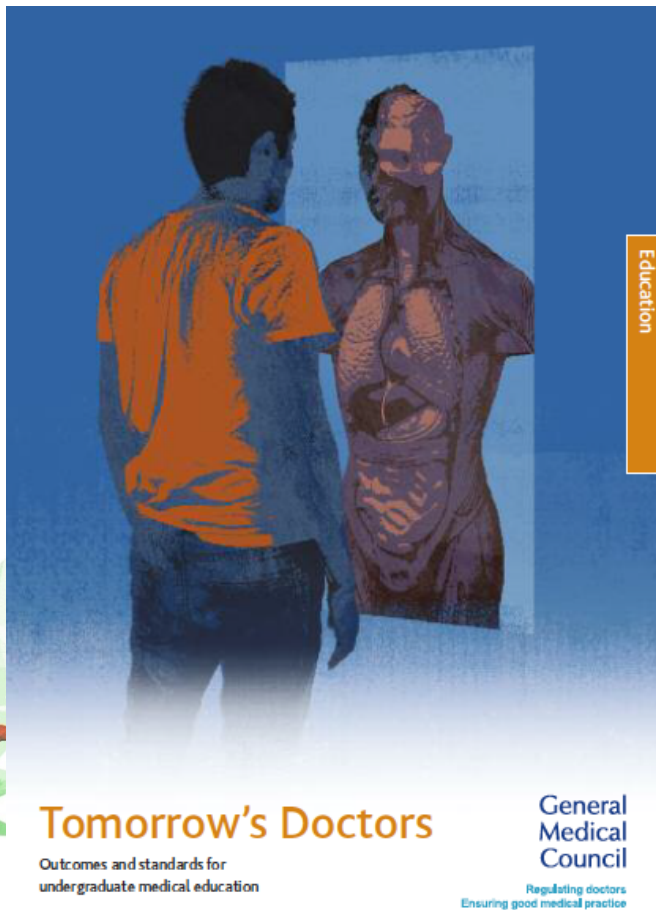
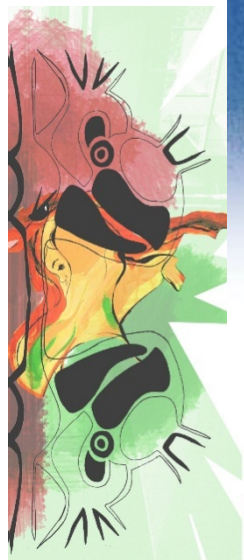
Student Selected Component (SSCs) in C21 MB BCh

Opportunities to get involved





What are SSCs?

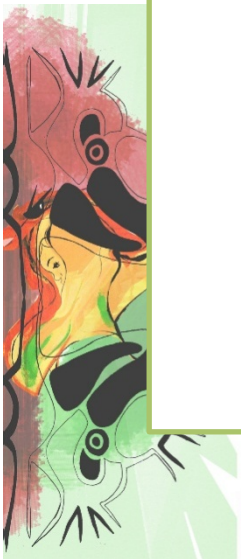


“The greatest educational opportunities will be afforded by that part of the course which goes beyond core and that engenders an approach to medicine that is constantly questioning and self critical.”



SSC Learning Outcomes

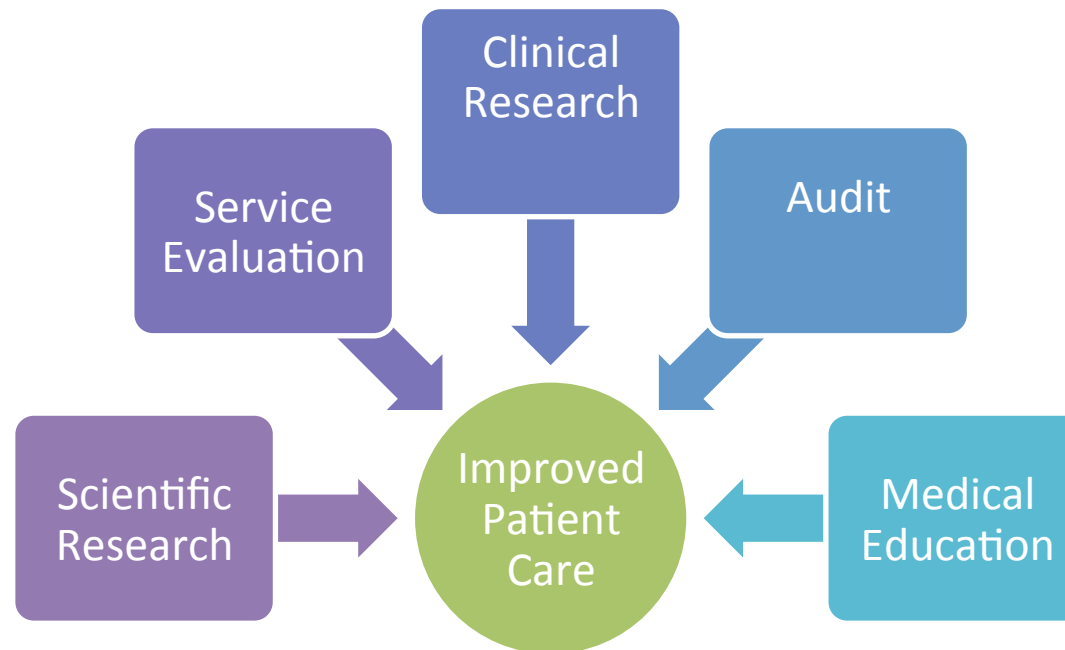
- Study a non-core topic of interest in depth
- Develop:
 - research skills/scientific methods
 - knowledge through enquiry and exploration
 - initiative, analytic and critical thought
 - skills for lifelong learning
 - professionalism & ethical values





Vision

- To embed research and evolve knowledge around patient care within MB BCh.





Themes

Patient care

National Health

Global Health

Service
Improvement

Audit

Research

Clinical

Science

Arts

Humanities

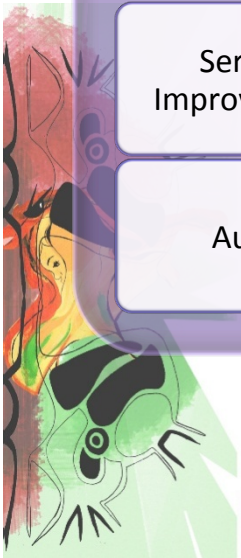
Innovation

Teaching & Learning

Medical Education

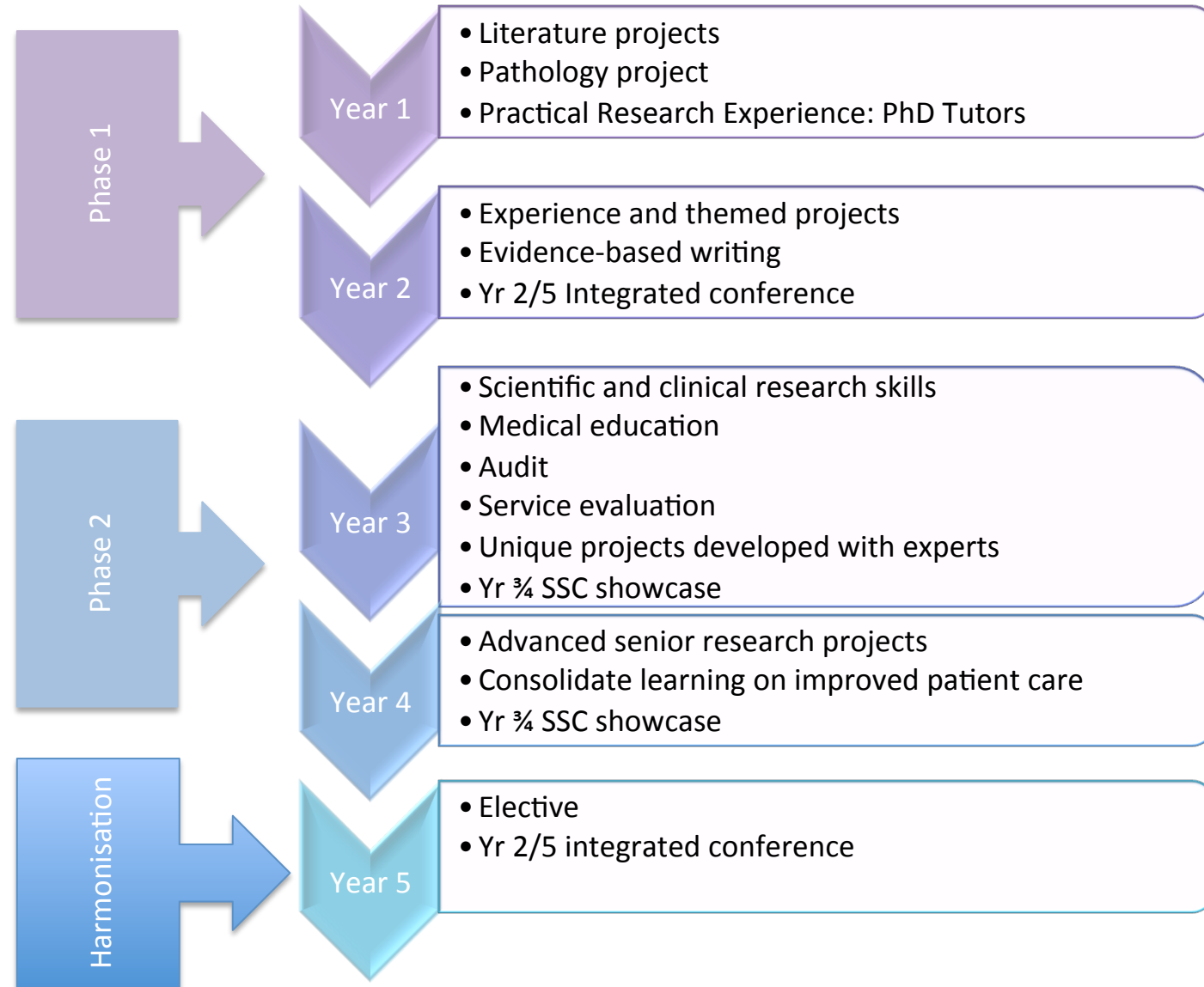
Leadership

eLearning





SSCs Focus in C21



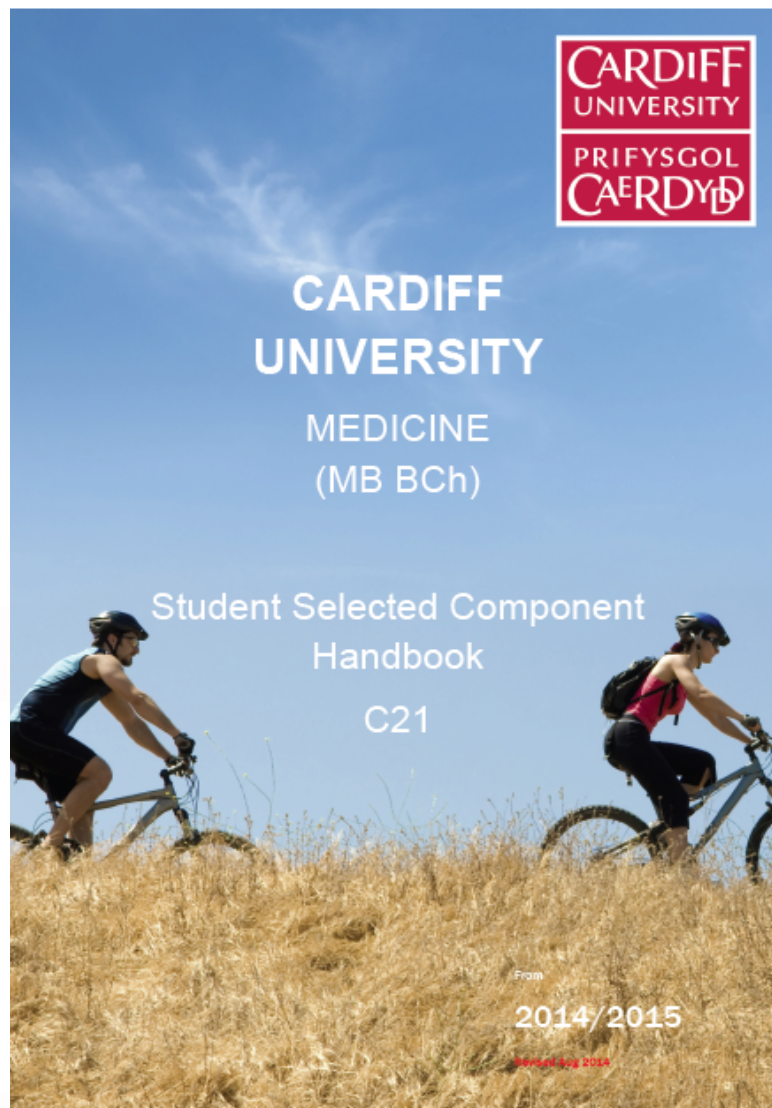


SSCs in C21 Handbook

SSC H A N D B O O K

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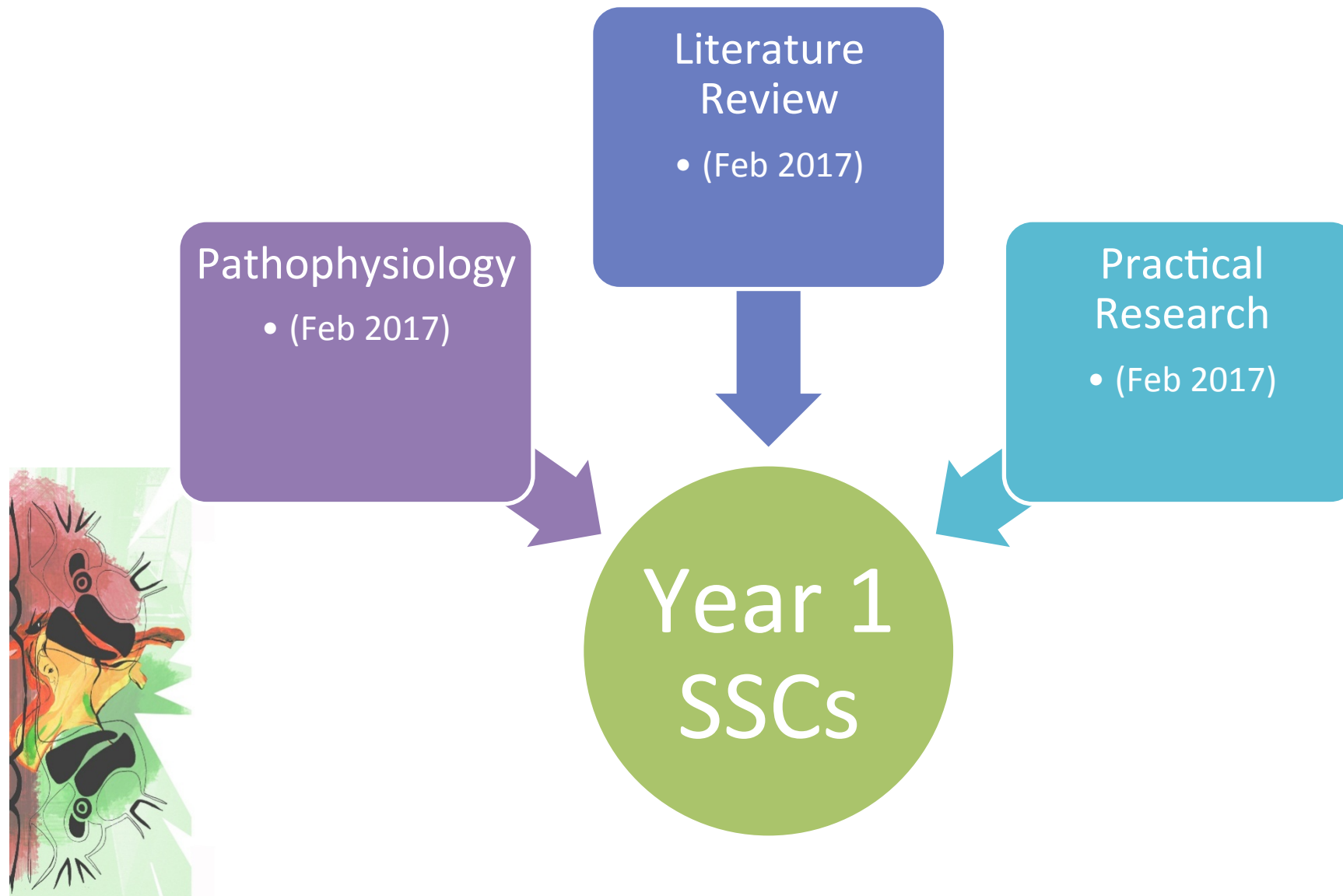


Year 1 SSC Academic Lead(s)

Dr Zarabeth Newton/ Dr Sarju Patel



Year 1 Overview





Don't Try and Read This

- **Science & Scholarship**

- Acquire knowledge through enquiry and exploration
- Exercise initiative, analytic and critical thought
- Learn, develop and practice research skills with insight into scientific methods. To include literature review and critical appraisal
- Formulate relevant research questions in bio-medical science, psychosocial science or population science, and design appropriate studies or experiments to address the questions
- Describe ethical and governance issues

- **Professionalism**

- Demonstrate study skills and skills for life-long learning including reflective learning and self-directed learning
- Learn and develop basic teaching skills
- Develop an understanding of doctors in the society
- Develop an understanding of health and social care professionals in a multi-professional team

- **Practice**

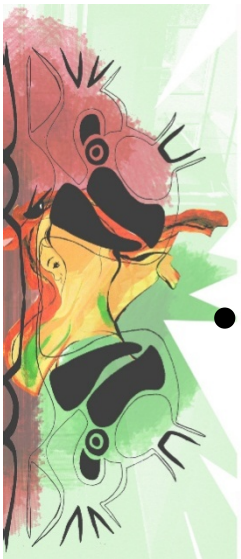
- Make effective use of IT skills including storing and retrieving information
- Develop an understanding of medical informatics applications in clinical practice
- Understand the importance of confidentiality in data handling and describe the Data Protection Act & Code of practice
- Develop a portfolio containing evidence from all elements of the SSC & projects undertaken





Literature Project

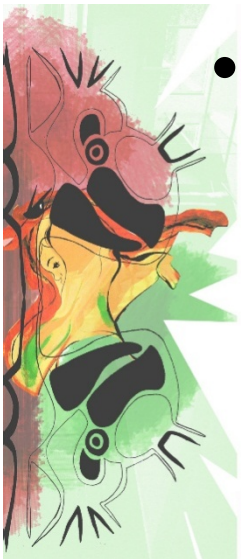
- Students conduct a literature project on a scientific topic related to clinical and scientific research
- Minimal contact time (depending on student)
- Tutor assessed





Literature Project

- Database searching (PubMed, Medline)
- Original research paper interpretation
- Critical analysis
- Scientific writing
- Referencing





Example Literature Projects 2015-2016

Lit code	Rank	Picked			SSC Project Title
		1st	Top 3	Top 5	
L02	1	31	42	50	Rural Health
L48	2	26	56	69	Doctors doing harm: Exploring the motivations, actions, discoveries and legacies of the "Nazi doctors" and viewing them in a global context of human experimentation by doctors
L45	3	16	38	49	Drugs of abuse in sport
L27	4	15	43	71	Aging, Vascular risk and cognitive decline



L36	50	0	2	4	The public understanding of human genetics: From experimental results to mass communication
L18	51	0	1	3	Molecular stratification and biomarker identification in solid tumours
L53	52	0	1	2	It doesn't just gurgle when I'm hungry: nerve, muscle and gastrointestinal movements
L35	53	0	0	2	Genetic polymorphisms and Vascular disease, does your genetics matter?



Literature Project

What we need:

- Tutors to:
 - Supervise projects
 - Support tutorials
 - Provide draft formative feedback
 - Assess final assignment

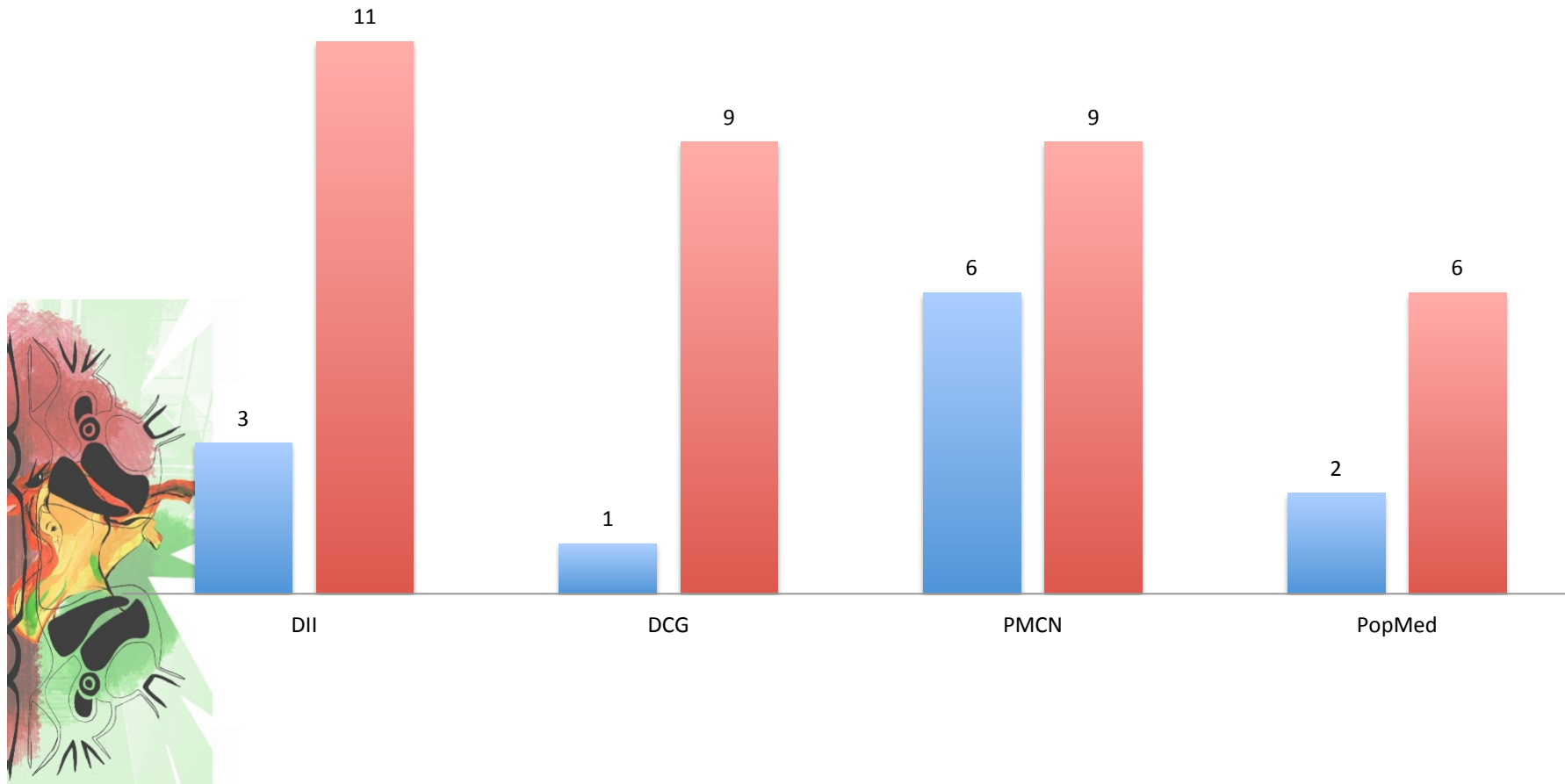




Divisional Quotas

Literature Projects

■ Year 1: 2015-2016 ■ Year 1: 2016-2017





Practical Research Experience

- Introduces first year medical students to the concepts of research
- Facilitates undergraduate medical student's first research experience.
- Provides postgraduate research students and early career postdocs with an opportunity to teach within the medical curriculum





Practical Research Experience

Student Aims:

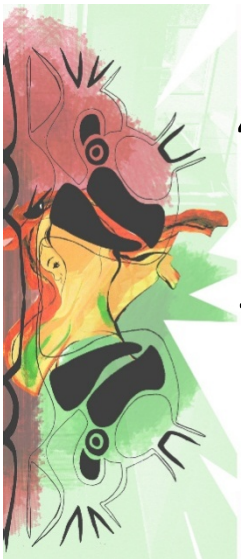
- Understand what research is
- Critical Thinking
- Scientific writing
- Presentation
- Referencing





Example Practical Research Projects

1. Links between brain white matter and hand eye coordination in children with 22q11.2 Deletion Syndrome (velocardiofacial syndrome)
2. Examining cognition in schizophrenia and bipolar disorder
3. Development of a Smartphone 'app' to help cancer patients' communicate with their clinicians in consultations
4. What factors influence people going to their GP with a symptom of cancer?
5. Polymerase Chain Reaction to test for Human papillomavirus





Practical Research Experience

What we need:

- PhD Tutors to:
 - Supervise projects
 - Support tutorials and practicals
 - Provide formative feedback or oral presentations

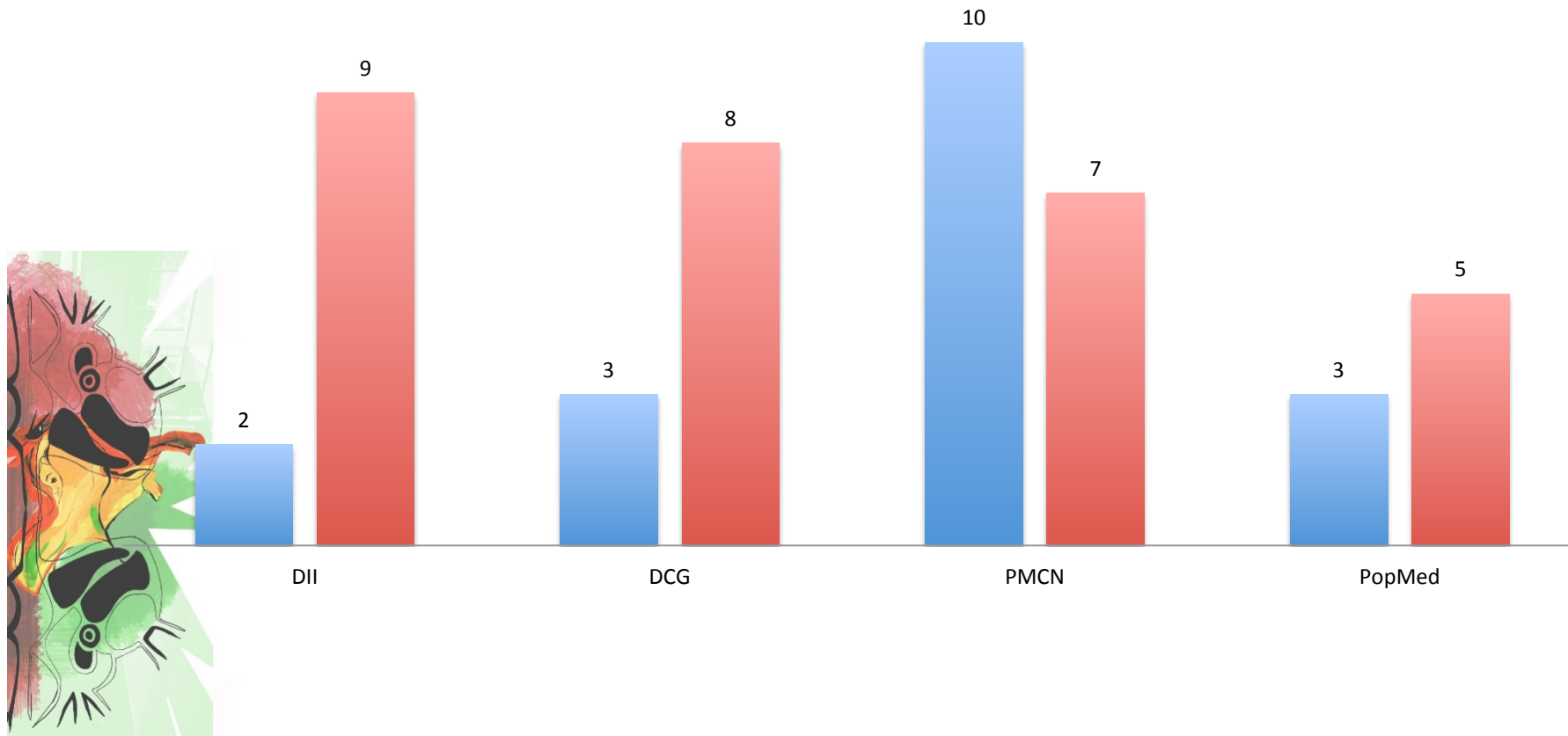




Divisional Quotas

PGR Research Experience Projects

■ Year 1: 2015-2016 ■ Year 1: 2016-2017





Pathophysiology Project

- Presentation are based on the cadaver
 - Pathology found
 - Variations of anatomy
 - Normal anatomy





Pathophysiology Project

- Group work
 - Developing a presentation
 - Presenting
 - QA
- Peer assessment
 - Engagement
 - Professionalism





Pathophysiology Project

What we need:

- Academics
 - To assess oral presentations
 - To question students about presentations





Year 2 SSC Academic Lead

Dr Ned Powell





Year 2





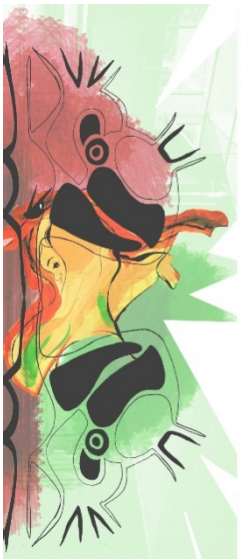
Experience projects

October 2016 and March 2017

Students spend a week with host provider
(clinical, community and laboratory settings)

Aims:

- Improve understanding of research
- Investigate area of interest to student
- Number of students is flexible
- Mode of delivery is flexible
- Method of assessment is flexible





Overview Projects



Forensic pathology

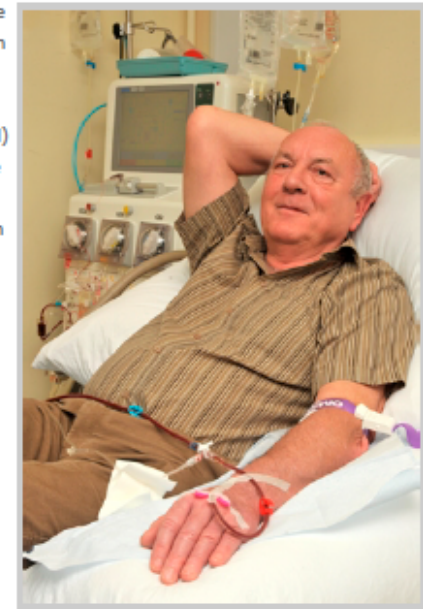
Patient Stories

David Fisher, from Salisbury, has been a regular at the unit for more than 22 years having more than 500 treatments. Here he talks in his own words about how important the service has been in his life.

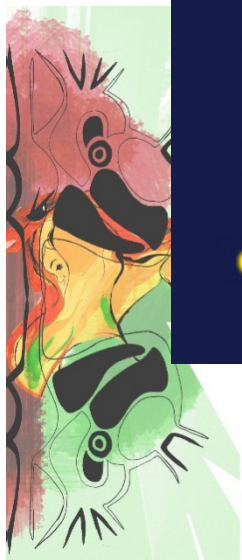
With hindsight, the first recollection of the warning signs of Familial Hypercholesterolaemia (FH) was aged 23/24 back in the late 60s early 70s. At the time I was a member of the police force stationed in Swindon. I visited my GP with my 'lumpy knuckles' as I was concerned that I was going to end up like my grandmother who had similar knuckles. Like her, I was diagnosed with arthritis, although I had no other symptoms.

In 1975 I was posted to Salisbury following the sudden death of my father aged 61 years. He had suffered a heart attack.

I was transferred to CID from the traffic department and I have to confess that I burnt the candle at both ends and lived life to the full. I smoked and drank fairly heavily and was the typical detective as portrayed in the TV programme 'Life on Mars' – even down to the leather jacket!



Just 1981 Jo, my wife, our two children and myself had spent an idyllic holiday daily to Dorset where we had a small motor boat. On 31 August



Vale of Glamorgan
Council

Barry Communities First

Communities First is a Vale of Glamorgan led, Welsh Government funded anti-poverty programme.



Example project 1

Stroke Prevention: What can be done better?

Speciality: Community & Mental Health

Type: Clinical

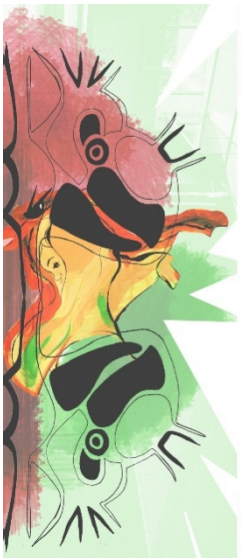
Number of Students: 3

Aim: The main aim is to explore the area of mini stroke or TIA and stroke prevention based on assessment of risk factors for the disease.

SSC description: To focus on the prevention side of the medical service and to know the best way to take

history from the patients and direct the medical investigations accordingly. This is a project that will focus mainly on TIA and Stroke patients in Royal Gwent Hospital. The students will be involved in joining the medical wardrounds and in attending the TIA clinics in Hospitals. They will observe the process of taking the clinical history and clinically examine the patient. They will then discuss each patient's case as with regards to the need for further investigations to explore further the risk factors for TIA or stroke. These diseases are common in the community and it is mainly elderly diseases. The practice in taking history and being able to explore further the risk factors is important for medical students.

Assessment: Reflection





Example project 2

An Introduction to Cancer & Genetics Research

Speciality: Research: Cancer & Genetics

Type: Laboratory

Number of Students: 12

Aim: Provide an understanding of the research carried out within the Institute of Cancer and Genetics (ICG).

SSC description: The aim of this week long SSC is to introduce students to a selection of research in the

Institute of Cancer & Genetics. There will be an introduction to genetic diseases and cancer. The burden of

cancer, the incidence of genetic disease, and the techniques used to understand disease will be discussed. How research has and will improve diagnosis and treatment will be described. There will be talks, tutorials and lab sessions. We anticipate hosting twelve students each week for each of the two weeks that the SSCs will be offered.

Assessment: Presentation





Example Project 3

Life drawing class

Speciality: Art/ Anatomy

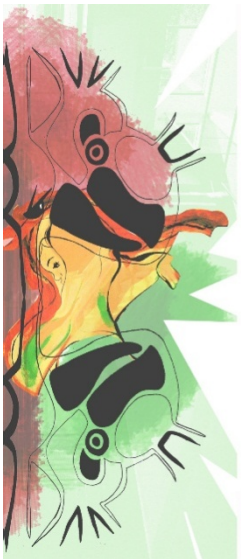
Type: Skills

Number of Students: 24

Aim: To provide students with an opportunity to develop their drawing skills by attending life drawing classes with an artistic instructor.

SSC description: To develop drawing and visual skills and enhance appreciation of surface anatomy through life drawing classes with related surface anatomy.

Assessment: Artwork

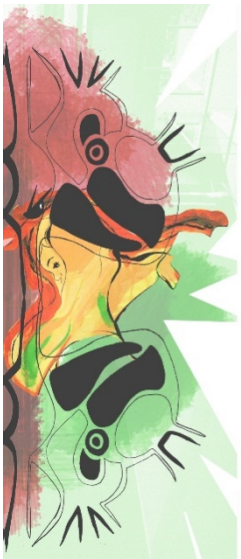




Experience projects

What we need:

- People to provide projects
 - Recruit Sept 2016
- We are very happy to support development of projects

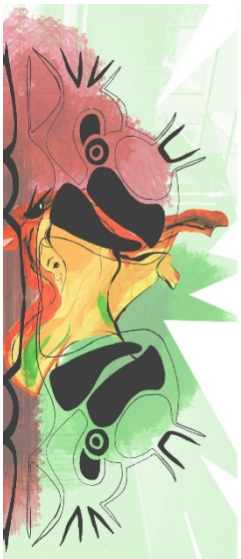




Journalistic Article Dec 2016

“If you can't explain it simply, you don't understand it well enough”

- Students choose a scientific paper
- Play the part of the science correspondent for the Daily Mail.
- Explain to non-expert readership:
 - What paper shows
 - What impact will be
 - 500 words





Journalistic Article Dec 2016

What we need:

- People to help run tutorials
- People to mark outputs





Years 2 & 5 Conference Feb 2017

Aims

- Utilise Near Peer learning
- To encourage Yr2s to look forward
- To encourage reflection by Yr5s
- To support thriving and surviving
- To provide “conference experience”





Years 2 & 5 Conference

Components

– Plenaries

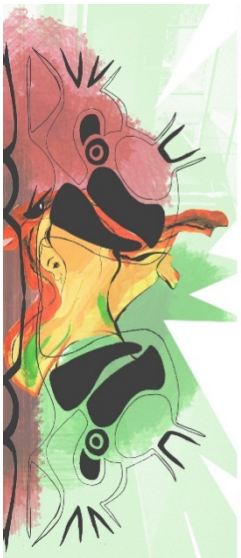
- Standards in Health Care
- Thrive and survive
- Erasmus + intercalation

– Posters

- Based on Yr2 Research experiences
- Marked by Yr 5s

– Facilitated sessions

- Elective experiences / ethics





Year 2 & 5 Conference



Cardiff University School of Medicine



Making Medicine Work

Year 2 & Year 5 Conference

Heath Park Campus Cardiff

22 - 25 February 2016

Welcome to the second Year 2/5 Conference in the School of Medicine at Cardiff University. The aim of the conference is to provide an opportunity for year 2 and year 5 medical students to share their learning.

There are three key parts of the conference:

Day 1 Thriving & Surviving in MBBCh

Day 2 Challenges in Patient Care

Day 3 Poster Session of student experiences

We would like to thank staff advisors, invited speakers and the year 5 students who will facilitate discussions.

We hope you enjoy the event and look forward to a successful conference.

Dr Sam Hibbitts, Dr Ned Powell & Dr Paul Brennan



**Follow the Student
Conference blog:**

[http://blogs.cardiff.ac.uk/
medic2and5conf20156](http://blogs.cardiff.ac.uk/medic2and5conf20156)

Twitter #CUMedYr25



Years 2 & 5 Conference

What we need:

- People to support poster marking





Phase 2 Academic SSC Lead(s)

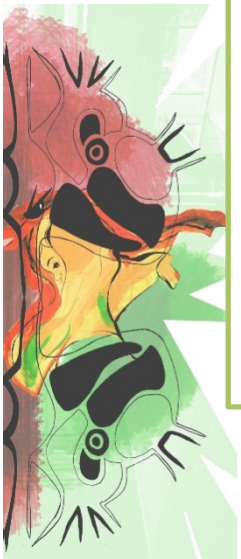
Dr Sam Hibbitts (Year 3)
& Dr Eamon McGreal (Year 4)





Phase 2

- Dedicated 6 week (year 3) and 8 week (year 4) blocks
- Two options:
 1. Choose from SSC tutor proposed portfolio
 2. Student designed bespoke project: directory of expertise

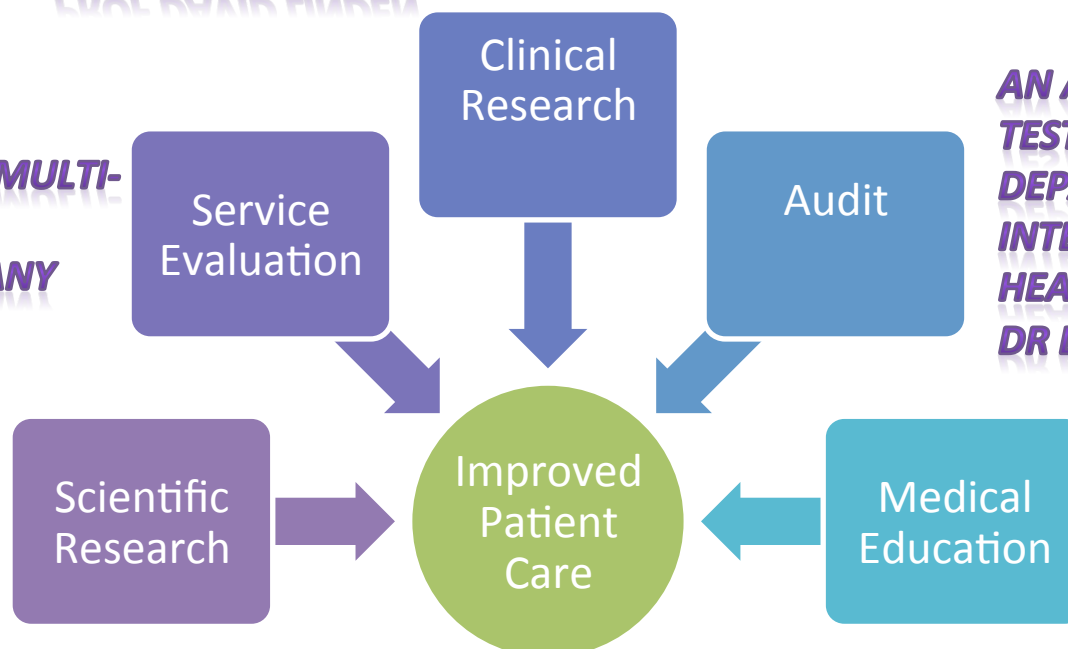


Examples

NEUROFEEDBACK IN NEUROPSYCHIATRIC DISORDERS **PROF DAVID LINDEN**

MONITORING AND MANAGEMENT OF MULTI- ORGAN FAILURE **DR TAMAS SZAKMANY**

AN AUDIT OF HIV TESTING IN THE CARDIFF DEPARTMENT OF INTEGRATED SEXUAL HEALTH **DR LAURA CUNNINGHAM**



CD38 IN CHRONIC LYMPHOCYTIC LEUKAEMIA CELL HOMING TO THE LYMPH NODE MICROENVIRONMENT **DR ELISABETH WALSBY**

MEDICAL SIMULATION AND RESUSCITATION TRAINING **DR MITRA SUMAN**







Phase 2

What we need:

- Tutor proposed Projects for 6 week year 3 projects
- Potential supervisors info for 8 week year 4 projects





Harmonisation

- Elective 8 weeks in the spring of final year:
 - Study any subject of interest anywhere in the world.
 - Undertaken in medical centres, research units or community practices.
 - Link with medical practitioners, scientists or any professional allied to medicine, or in complementary health care.



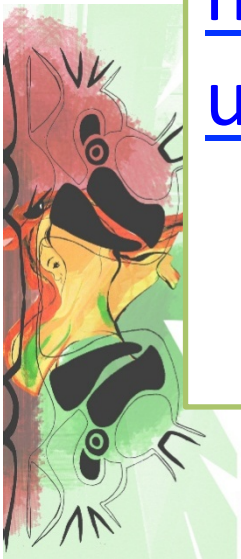


Elective Student Advisor

- 5th year medical students completed a trip advisor style feedback on their Electives

- Web pages now live on learning central:

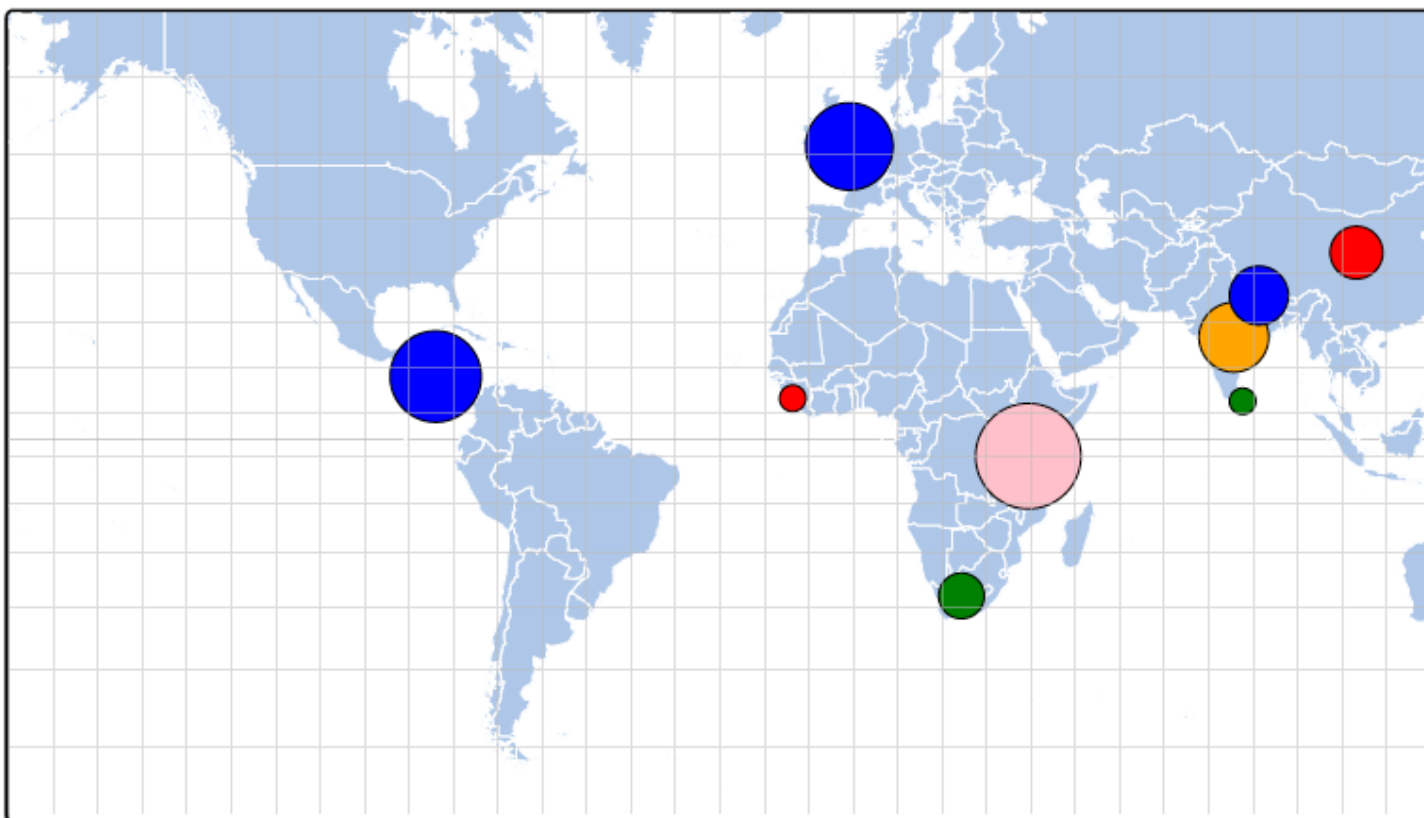
<https://learningcentral.cf.ac.uk/bbcswebdav/users/wmdpb/Electives2014/>





Cardiff University Students Elective Destinations

School of Medicine Fifth year students were surveyed about their Electives. 77 students responded.





Harmonisation

What we need:

- Assessors to mark reflective reports





Contacts

- Year 1 SSC
 - Dr Sarju Patel
 - Email: PatelS2@cardiff.ac.uk
- Year 2 SSC (Deputy SSC Director)
 - Dr Ned Powell
 - Email: PowellNG@cardiff.ac.uk
- Year 3 SSC
 - Dr Sam Hibbitts
 - Email: hibbittssj@cf.ac.uk
- Year 4 SSC
 - Dr Eamon McGreal
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- Year 5 SSC
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