# The Medical Degree at the University of Wollongong

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Programme

# The context for a new school

Health workforce shortage access to care Issue for regional, rural, remote Australia Difficulty recruiting doctors from graduates of large urban medical schools Changing patterns of health care service Changing philosophies and opportunity for innovation in medical education Expansion and development of UOW, broadening of research base

# Our vision

The UOW Graduate School of Medicine aims to lead development and implementation of strategies that effectively address the shortage of medical practitioners in regional, rural and remote Australia

Small medical school addressing rural health workforce

Two campuses in years 1 and 2

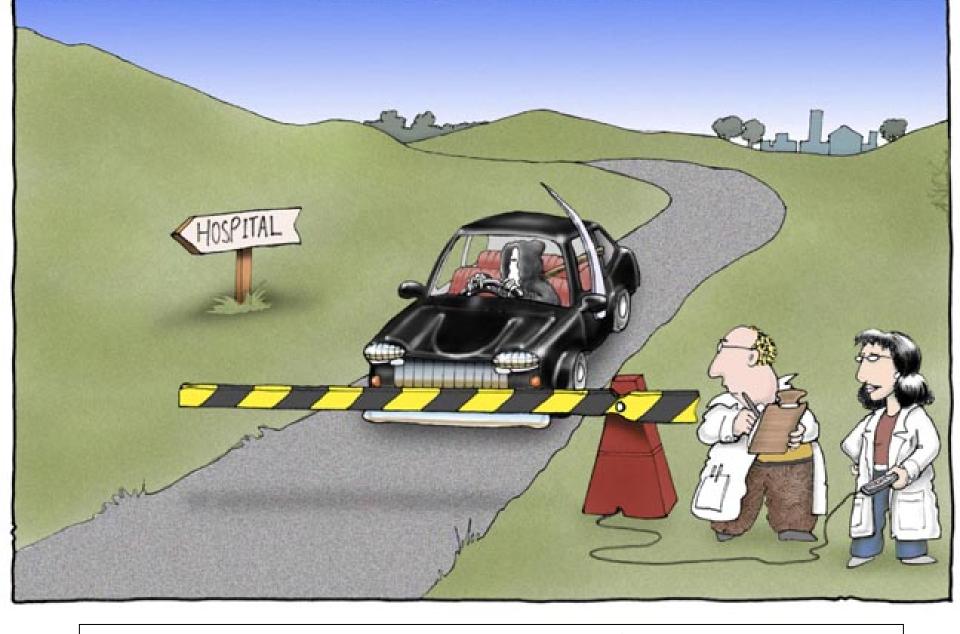
10 Rural sites through rural NSW in years 3&4



# 1 hour drive

# **Educational Goals**

- Expert, knowledgeable clinicians in all branches of medicine
- Practice patient centred, evidence based, costeffective medicine
- Reflective practitioner / self-correcting
- Caring, empathic, culturally appropriate
- Skilled communicators
- Teamwork
- Socially responsible, committed to reducing inequity of health care, esp. in rural Australia



Doctors devise yet another way of delaying death

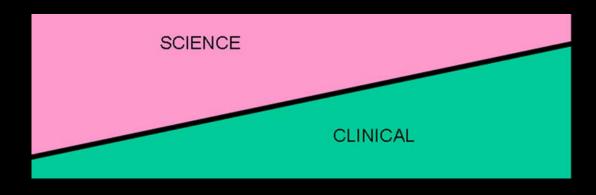
# **Educational Philosophy**

- Students are adult learners bringing life experience and broad range of educational backgrounds
- Clinical context drives need for learning
- Clinical competence requires early exposure, frequent repetition, observed practice
- Clinical problem-solving requires active engagement, critical thinking, sound grasp of science, frequent rehearsal
- Learning in context requires mastery of electronic technology
- Attitudinal and behavioural aspects of care are important

# Overview of the MBBS course

- Graduate-entry
  - any first degree, rural priority
- 84 student cohort
  - 72 domestic; 12 international
- Distributed model for campus-based delivery and clinical placements
- Phases 1 to 4







## Clinical Competencies

- Communication skills
- Clinical skills
- Procedural skills

#### Clinical decision-making

- Common
- Less common but dangerous
- Uncommon but illustrative

#### Medical sciences

- Basic science
- Clinical science
- Behavioural Science
- Population health
- Personal & Professional Development
  - Personal and professional skills and behaviours
- Research & Critical Analysis



#### An example of a case Clinical Skills Centre History taking (focus causes of chest pain) Lectures Clinical Demonstrations Importance of evidence-based **Palpitations** practice Sm Group Workshops Lectures tifying and critiquing medical Electrical activation of the he literature Lifestyle + coronary heart diseas Patrick Jones Anatomy lab dissection GP + Hospital Placement The Heart and Pericardium Understanding the clinical environment GIL/GOALs sonal and Professional Histology/Pathology Development **Endomyocardial biopsy**

Intensive Cl. al Experience
Nurse/allied h. alth/community

# Campuses & Facilities



Lectures and clinical skills sessions are conducted in purpose-built medical school facilities on both Wollongong and Shoalhaven campuses





# Educational technology

Lecture theatres in Wollongong and Shoalhaven are linked by high quality audiovisual equipment allowing interactive learning between students on both campuses.





# **Tutorial Groups**



Shoalhaven

# Learning in groups

Much of the student learning is collaborative, with students working in small groups on common learning objectives. The teamwork skills learned by our students are essential to function as an excellent medical practitioner in any context.







# Study resources

Students undertake a significant amount of independent learning as the course is designed with the needs of the adult learner in mind. Excellent study resources exist in both purpose built GSM buildings and campus libraries.





# Student Resource Room Wollongong

Wollongong



#### Clinical Skills Centres



Clinical skills sessions conducted in state of the art clinical skills centres.

# A graduated safe environment to learn

- Close supervision and monitoring
- Progression of difficulty
- Procedural skills practised on models before progressing to people
- Frequent formative and summative assessment

# Clinical skills

Students learn and master their foundation clinical skills in a supervised well equipped clinical skills centre environment, while also learning from hospital and GP patients and patient volunteers.



# Students practicing their skills on Sim Man



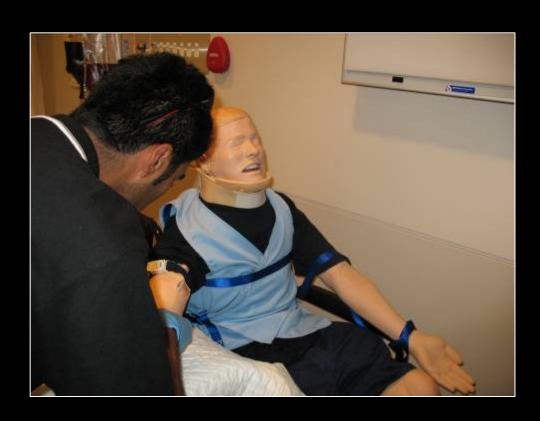
# Students practicing their skills on Sim Man



# Students practicing their skills on Sim Man



# Venepuncture clinical skills session



Clinical Skills Centre Shoalhaven

Sid Gupta and SimMan

## Venepuncture clinical skills session

Clinical Skills Centre Shoalhaven



'patient' Gabi James and Ed White

## Waste handling and infection control



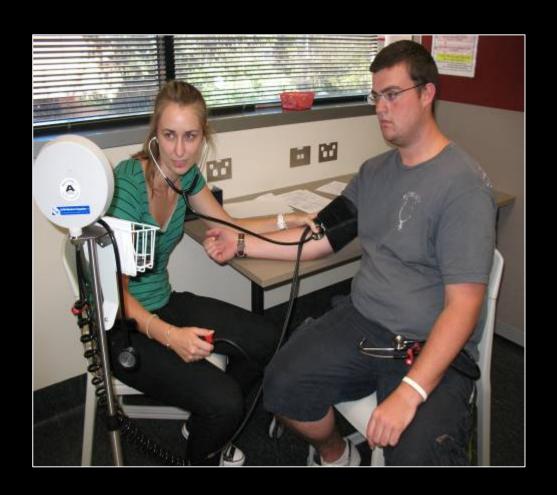
Clinical Skills Centre Shoalhaven

Vanessa Lewis & Clare Collins with Sue Vella

# Clinical Skills Centre Wollongong



Alison O'Hearn



Lauren Piatek and Jeff Masters

#### Clinical Skills Centre Shoalhaven



Luke Zdanowicz and Amanda Carter

#### Phase I - Venepuncture clinical skills session



Clinical Skills Centre Shoalhaven

(I-r) Katie McDonald, Surbhi Somaiya & Kim Bruce

## Phase I - Venepuncture clinical skills session

Clinical Skills Centre Shoalhaven



Jeremy Norden and Pip Morgan with clinical skills tutor Mary Dowswell

#### Students in Clinical Skills Sessions

Clinical Skills Centre Shoalhaven



Students in a clinical skills session with Dr Sal Sanzone

# Students in Clinical Skills Sessions

Clinical Skills Centre Shoalhaven



Vanessa Lewis & Dr Sal Sanzone

#### Students in Clinical Skills Sessions

Clinical Skills Centre Shoalhaven



Clinical skills session with Sue Vella

# Students learning waste handling and infection control

Clinical Skills Centre Shoalhaven



Students Vanessa Lewis and Clare Collins with Clinical Skills Coordinator Shoalhaven - Sue Vella

### Students learning waste handling and infection control



Clinical Skills Centre Shoalhaven

Students Katie Robinson, Louise Brightman and Russell Crighton with Academic Leader Clinical Skills Dr Sal Sanzone



Clinical Skills Centre Shoalhaven

Louise Brightman and Luke Tobin

Clinical Skills Centre Shoalhaven



Murray Schofield and Luke Tobin



Clinical Skills Centre
Shoalhaven

Clinical Skills Centre Shoalhaven





Getting 'plastered' at Shoalhaven

Clinical Skills Centre Shoalhaven

Melinda Glover and Louise Brightman

Getting 'plastered' at Shoalhaven

Clinical Skills Centre Shoalhaven



Luke Tobin and Murray Schofield



Clinical Skills Centre Shoalhaven

Jessie Griffiths

Clinical Skills Centre Shoalhaven

#### The volunteer "Patient" as a teacher:

- Volunteers are trained to act as Patients in consultation scenarios, including
  - History taking
  - Communication skills
  - Physical Examination
- Special programme of volunteers for intimate examinations

# Patient volunteers undertaking training at Shoalhaven campus





### Volunteer "patients" as teachers

- "I hear and I forget,
- I see and I remember,
- I do and I understand"

#### Clinical Placements



- Phase 1
  - 1 session/fortnight (GP & hospital setting)
- Phase 2
  - 3 days/week (hospital setting)
  - Speciality rotations
- Phase 3
  - Long term integrated community-based
    - Regional, rural or remote NSW
    - -General practice, hospital and community health
- Phase 4
  - Elective and preparation for internship



# Students during their Phase I placements at Shoalhaven District Memorial Hospital

#### 2007 cohort





# Students during their Phase I placements at Shoalhaven District Memorial Hospital



2008 cohort



#### Phase 2 clinical rotations: order of placement

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	Placement 1	Placement 2	Placement 3	Placement 4		Placement 5	Placement 6	Placement 7
				Maternal and			Child and	
				Womens			Adolescent	
Group 1	Medicine 1	Mental Health	Medicine 2	Health		Surgery 2	Health	Surgery 1
					w	Maternal and		<del>J</del>
					l ü	Womens		Child and
Group 2	Surgery 1	Medicine 1	<b>Mental Health</b>	Medicine 2	Summer vacation	Health	Surgery 2	<b>Adolescent Hea</b>
	Child and						Maternal and	
	Adolescent			Mental			Womens	
Group 3	Health	Surgery 1	Medicine 1	Health		Medicine 2	Health	Surgery 2
		Child and			i on			
		Adolescent						Maternal and
Group 4	Surgery 2	Health	Surgery 1	Medicine 1	ece	Mental Health	Medicine 2	Womens Health
	Maternal and		Child and		<u> </u>			
	Womens		Adolescent		December-January			
Group 5	Health	Surgery 2	Health	Surgery 1		Medicine 1	Mental Health	Medicine 2
				Child and	שני			
		Maternal and		Adolescent	ar			
Group 6	Medicine 2	Womens Health	Surgery 2	Health	<	Surgery 1	Medicine 1	Mental Health
			Maternal and			Child and		
			Womens			Adolescent		
Group 7	Mental Health	Medicine 2	Health	Surgery 2		Health	Surgery 1	Medicine 1
Group 1	INICITIAL HEALTH	IMEGICINE Z	Health	Surgery 2		Health	Surgery 1	Wedicine i





Katie Robinson performs a 'new-born baby check' on a new arrival she helped deliver during her O&G
Rotation at Shoalhaven District Hospital



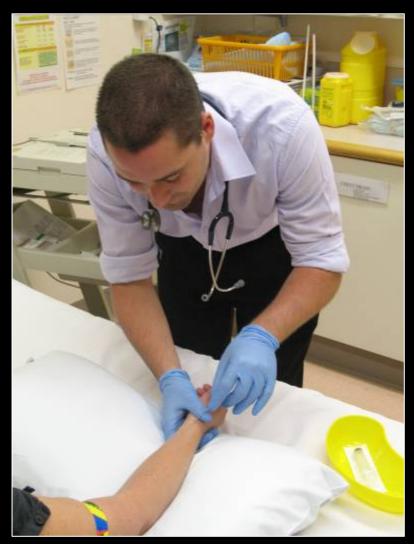
Katie French assisting in surgery at Shoalhaven District Hospital





Russell Crighton assisting Dr Hughes in anaesthetics at Shoalhaven District Hospital





John Harper inserting a cannula



John Harper inspecting a chest x-ray



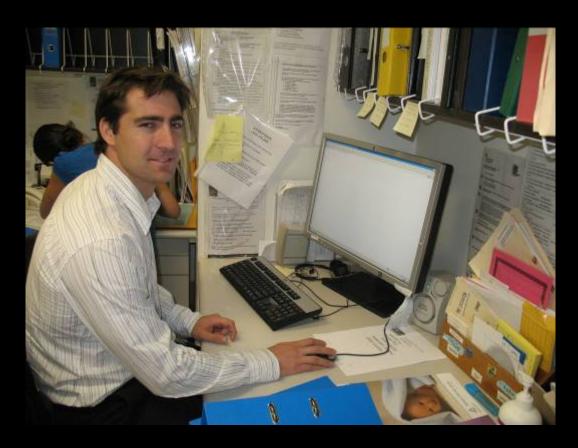
Melinda Glover checking patella reflexes



Vanessa Lewis conducting a fundoscopy







Simon Cole checking patient notes



Amanda Carter in paediatrics conducting a chest examination

#### **UOW MBBS Program Structure**

#### MEDI601

Medical Science/Introductory Clinical Competence

Phase 1



#### MEDI602

Basic Clinical Competence/Medical Science

Phase 2



#### MEDI603

Extended Clinical Competence/Medical Science

Phase 3



#### MEDI604

Advanced Clinical Competence Phase 4

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Proceeding Christop Completency

Proceding Christop Christop Completency

Riberhold Scholeren

Residency Scholeren

Residency Scholeren

Residency and Contract Analysis

Proceding Analysis

# Phase 3 longitudinal placements: continuity as the guiding principle (Irby et al, 2007)

Continuity of care

Continuity of curriculum

Continuity of supervision

Continuity of idealism









# Integrate learner into microsystem of care

- Clinical Microsystem
  - a small group of interdependent people (includes the patient) who work together on a regular basis to provide care to discrete subpopulations of patients (Nelson et al, 2007)
  - Student 'Pre-intern' role in team (s)
  - Concept of student following patients through GP practice, external agencies, district hospitals
  - Elective period of study in year 4

### Impact of all this?

 Higher level of procedural and communication skills at an earlier stage than achieved in a traditional medical programme

### Thank you for your attention



### • Questions?



# Ways Our Community is Supporting us

- Direct Involvement in teaching
  - (the Patient Teacher)
- Support for students
  - Scholarships
- Support for Research
  - Research fellowships
- Support for the School
  - Visiting fellowships