The Medical Degree at the University of Wollongong

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Deputy Dean
Director of the Graduate Medical 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 (Shoalhaven Campus)
Educational Goals

• Expert, knowledgeable clinicians in all branches of medicine
• Practice patient centred, evidence based, cost-effective 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
Core of 93 clinical problems

- 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
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

Clinical Skills Centre
Wollongong
Students practicing their skills on Sim Man

Clinical Skills Centre
Wollongong
Students practicing their skills on Sim Man

Clinical Skills Centre
Wollongong
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
Clinical Skills Centre Wollongong

Lauren Piatek and Jeff Masters
Clinical Skills Centre Shoalhaven

Luke Zdanowicz and Amanda Carter
Phase I - Venepuncture clinical skills session

(l-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
Phase II students learn how to scrub

Clinical Skills Centre
Shoalhaven

Louise Brightman and Luke Tobin
Phase II students learn how to scrub

Clinical Skills Centre
Shoalhaven

Murray Schofield and Luke Tobin
Phase II students learn how to scrub

Clinical Skills Centre
Shoalhaven

Luke McConnell and Katie Robinson
Phase II - Injured Limbs Stabilisation

Getting ‘plastered’ at Shoalhaven

Clinical Skills Centre
Shoalhaven

Melinda Glover and Louise Brightman
Phase II  - Injured Limbs Stabilisation

Getting ‘plastered’ at Shoalhaven

Clinical Skills Centre Shoalhaven

Luke Tobin and Murray Schofield
Phase II  - Injured Limbs Stabilisation

Clinical Skills Centre
Shoalhaven

Jessie Griffiths
Phase II - Injured Limbs Stabilisation

Clinical Skills Centre
Shoalhaven

Melinda Glover and Louise Brightman
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

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
<th>Group 5</th>
<th>Group 6</th>
<th>Group 7</th>
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<td>Placement 7</td>
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<td>Mental Health</td>
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<td>Summer vacation</td>
<td>December-January</td>
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- Placement 1, 4, 5, 6, 7: Group 1
- Placement 2, 3, 5, 6, 7: Group 2
- Placement 2, 3, 4, 6, 7: Group 3
- Placement 2, 4, 5, 6, 7: Group 4
- Placement 1, 2, 3, 5, 7: Group 5
- Placement 1, 2, 3, 4, 7: Group 6
- Placement 1, 2, 3, 4, 5: Group 7

The table above illustrates the order of placements for each group during Phase 2 clinical rotations. The summer vacation period occurs from December to January.
Phase II students on Rotation at Shoalhaven District Memorial Hospital

Katie Robinson performs a ‘new-born baby check’ on a new arrival she helped deliver during her O&G Rotation at Shoalhaven District Hospital
Phase II students on Rotation at Shoalhaven District Memorial Hospital

Katie French assisting in surgery at Shoalhaven District Hospital
Phase II students on Rotation at Shoalhaven District Memorial Hospital

Russell Crighton assisting Dr Hughes in anaesthetics at Shoalhaven District Hospital
Phase II students on Rotation at Shoalhaven District Memorial Hospital

John Harper inserting a cannula
Phase II students on Rotation at Shoalhaven District Memorial Hospital

John Harper inspecting a chest x-ray
Phase II students on Rotation at Shoalhaven District Memorial Hospital

Melinda Glover checking patella reflexes
Phase II students on Rotation at Shoalhaven District Memorial Hospital

Vanessa Lewis conducting a fundoscopy
Phase II students on Rotation at Shoalhaven District Memorial Hospital

Jessie Griffiths checking patient notes
Phase II students on Rotation at Shoalhaven District Memorial Hospital

Simon Cole checking patient notes
Phase II students on Rotation at Shoalhaven District Memorial Hospital

Amanda Carter in paediatrics conducting a chest examination
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

Year 1 2007
• Questions?

Year 1 2007
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