

Academic Promotion Discipline Statement

Discipline area: Biomedical and Clinical Sciences

Discipline: Clinical Sciences

Sub Disciplines: Pathology, Medical Biochemistry

School: Dentistry and Medical Sciences

Discipline Overview

These are well-established disciplines with a focus on

- **Pathology** - the study and diagnosis of disease through examination of organs, tissues and fluids, and
- **Medical Biochemistry** - integrating knowledge of chemical processes in living cells with strategies to understand disease, maintain health and identify potential therapies, as well as enhancing our understanding of the origins of life on earth
-

Most academics have a background in basic or translational research. They typically enter academia via a period of PhD research, often with further 'postdoctoral research'. Thus, a typical career pathway might start with honours, PhD, and then at least 2 years of full-time postdoctoral research before being competitive for a level B position. Some enter with many more than 2 years of full-time research experience.

Profession/Industry	71% female / 29% male
Source: Job Outlook (2018)	(Medical Laboratory Scientist)
Higher Education Sector	Not currently available.
University	27% female / 73% male

Discipline Context and Expectations

INDUSTRY ACCREDITATION	<p>Courses within the discipline (e.g. Bachelor of Medical Science) are subject to accreditation of the Australian Institute of Medical and Clinical Scientists (AIMS)</p> <p>Where clinical biochemistry subjects are taught as part of other disciplinary courses (service teaching) and where those courses require accreditation, subjects would need to meet accreditation requirements.</p>
DISCIPLINE PEDAGOGIES	<p>Most academics will have a teaching load that involves teaching a mix of large/small subjects (on-campus and online). Generally, teaching would involve weekly lectures and tutorials, and compulsory practical laboratory sessions. Laboratory classes can be delivered regularly during session or through residential schools.</p>

STUDENT PROFILE	The discipline teaches into a range of courses within the School and in addition provides service teaching of key subjects. Some subjects (e.g. MCR101) are among the largest in the university, with enrolments greater than 500 students and taught to over 12 or more courses. Advanced clinical subjects may have as few as 10 students enrolled. Students are a mix of online and on-campus and predominantly domestic.
STUDENT FEEDBACK/PERFORMANCE	No discipline specific attributes.
RESEARCH APPROACH	<p>The discipline is well established and occupies a highly competitive environment where publication in top-tier journals requires substantial pieces of work often supported by high-end technologies and infrastructure.</p> <p>Typically research in the discipline is conducted by groups, with most laboratory research requiring full time attention and hence much hands-on research is conducted by students and postdocs. Research may also be interdisciplinary.</p>
PUBLICATION	<p>Publication typically targets major international peer reviewed journals, with high impact factors. Journals with impact factors in the range 2-5 are most often realistic options for research in this discipline conducted at Charles Sturt. Journal article size varies dependent on journal publishing requirements. Peer reviewed conference papers often lead to publication. Publication of book chapters and books is less common.</p> <p>Membership of editorial boards of scholarly journals is considered noteworthy. Peer review of journal manuscripts would be undertaken by most academics.</p> <p>Following the conventions of most biomedical research, first authors may be junior researchers (research students/ postdocs) with the last author typically being the senior author (research group head/chief investigator).</p>
CONFERENCES	Conference attendances (national and international) vary greatly and are frequently quite specialised. National and international conferences offer greater prestige than local or regional meetings. Invited presentations at national / international conferences are considered noteworthy.
GRANTS	<p>Within Australia most research across the discipline would be funded by the National Health and Medical Research Council and Australian Research Council (category 1). Charles Sturt academics who obtain Category 1 funding frequently have established collaborations outside the University or collaborations with clinicians in areas such as the veterinary school. Grants obtained from these collaborations can yield wide ranging funding: typically ranging from \$10,000 to \$100,000 or more (may include salaries for researchers/research assistants or student stipends). Sometimes work is undertaken at collaborating institutions, primarily due to availability of laboratory equipment required.</p> <p>Peer review of national or international grant submissions is generally considered in high regard. Membership of high-level Category 1 panels is most prestigious in this context.</p>
HDR SUPERVISION	Supervision of one or more HDR students is not uncommon. The need for substantial infrastructure means that there are disparities between campuses due to availability of laboratories and equipment and access to motivated undergraduate, honours and research-orientated students.
RECOGNITION	Fellowships and memberships in some professional societies (e.g. societies that have a peer review process/examination as part of the evaluation of the fellowship



	application - Full Membership (e.g. Member of Australian Institute of Medical and Clinical Scientists (MAIMS)) are noteworthy.
EXTERNAL ENGAGEMENT	<p>Academics who are associated with accredited courses (e.g. B. Medical Laboratory Science) have strong engagement with the profession and community. Some may have expertise that lends itself to public lectures or other engagement with the community, whilst others have expertise that is very much basic research focussed and does not translate well to public engagement.</p> <p>Membership of professional society committees/working parties/special interest groups are considered important and would be evidence of a high level of engagement with the profession.</p>
PROFESSIONAL REGISTRATION	There is no professional registration requirement for academics in this discipline, however some accrediting bodies, e.g. AIMS, strongly recommends academics teaching into the program have relevant clinical pathology experience and associated membership.

Prepared by	Academic Promotion Team	
Authorisation	Name	Approval Date
Discipline Adviser	Associate Professor John Rae	
Head of School	Associate Professor John Rae	18 August 2022
School	Dentistry and Medical Sciences	

