

UNIVERSITY OF OTAGO
Te Whare Wananga o Otago

Dunedin, New Zealand

Lecturer/Senior Lecturer in Membrane and Ion Transport Physiology and
Cardiovascular and Respiratory Physiology
(Confirmation Path Positions)

DEPARTMENT OF PHYSIOLOGY
Te Tari Matai Whaiaroaro
OTAGO SCHOOL OF MEDICAL SCIENCES

The Department of Physiology is continuing to expand and is committed to excellence in research and teaching. Our research is focused on three main areas: Cellular and Molecular Neuroscience; Cardiovascular and Respiratory Physiology; Membrane and Ion Transport. The successful candidate(s) will be expected to develop a strong independent research programme in either cardiovascular and/or respiratory physiology (based on animal models or human physiology) or membrane and ion transport physiology (with particular emphasis on renal or gastrointestinal physiology).

Senior Lecturer applicants must have an established international reputation in physiological research and an ability to teach a number of physiological topics. Lecturer applicants must have a postdoctoral background in physiological research and an undergraduate degree in physiology or closely related subject; teaching experience is desirable. Applicants should have teaching experience or a strong background in one or more components of one of the following teaching areas: (1) cardiovascular and respiratory physiology and (2) cellular physiology, membrane biology, epithelial and ion transport, renal physiology or gastrointestinal physiology.

Specific enquiries may be directed to Dr Pat Cragg, Head of Department, Department of Physiology, Tel 64 3 479 7334, Email pat.cragg@stonebow.otago.ac.nz

Information about the Department can be obtained from <http://www.otago.ac.nz/physiology>

Applications quoting reference number A09/108 close on Friday 30 October 2009.

APPLICATION INFORMATION

Send applications to the Human Resources Division, Email job.applications@otago.ac.nz, Fax 03 479 8279. With each application, please include an application form, an EEO information form, a covering letter and your curriculum vitae. **The forms and a full job description are available at www.otago.ac.nz/jobs** Alternatively, contact the **Human Resources Division, Tel 03 479 8269, Email job.applications@otago.ac.nz**

Equal opportunity in employment is University policy.

*E tautoko ana Te Whare Wananga o Otago i te kaupapa
whakaorite whiwhinga mahi.*

www.otago.ac.nz/jobs

DO NOT send original documents in support of your application - copies are adequate and preferred. Documents will not be returned.

Please complete a separate application form and include a separate copy of your curriculum vitae and supporting documents for each vacancy you wish to apply for.

For ease of processing and to avoid cost and waste, we ask that applications are not presented in folders.

INFORMATION FOR CANDIDATES

for appointment as

Lecturer/Senior Lecturer in Cardiovascular and Respiratory Physiology
and Membrane and Ion Transport Physiology
(Confirmation Path)

DEPARTMENT OF PHYSIOLOGY
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The University of Otago

The University was established in 1869 and is New Zealand's oldest university. It has an international reputation for excellence in education and research. Its mission is to advance, preserve and promote knowledge, critical thinking and intellectual independence to enhance the understanding, development and well-being of individuals and society.

Based in Dunedin, a city of approximately 120,000, the University also has campuses in Christchurch, Wellington and Invercargill, and a centre in Auckland. There are currently over 18,500 equivalent full-time students enrolled at the University of Otago, which makes Dunedin very much a university city.

The University's document entitled *Strategic Direction to 2012* identifies six imperatives for the University of Otago. These are: achieving research excellence; achieving excellence in research-informed teaching; ensuring outstanding campus environments and student experience; contributing to the national good and to international progress; strengthening external engagement; and building and sustaining capability.

The University of Otago is New Zealand's most research-intensive university and it is also the top-ranked university for research quality.

Division of Health Sciences

The Department of Physiology is part of the Otago School of Medical Sciences in the Division of Health Sciences.

Health Sciences is one of the four academic Divisions in the University, the others being Commerce, Humanities, and Sciences. Although the Department is administered by the Division of Health Sciences, it is closely allied academically with the Division of Sciences through its BSc programme and the teaching of physical education, human nutrition, neuroscience and consumer and applied science students. The Department of Physiology also has research collaborations within both Health Sciences and Sciences.

The Division of Health Sciences comprises the Faculty of Medicine (Otago School of Medical Sciences; Dunedin School of Medicine; University of Otago, Christchurch; and University of Otago, Wellington), the Faculty/School of Dentistry and the Schools of Pharmacy and Physiotherapy.

Otago School of Medical Sciences

Administratively, the Department of Physiology is within the Division of Health Sciences and the Head of Department reports directly to the Dean of the Otago School of Medical Sciences (OSMS), who in turn is responsible to the Pro-Vice-Chancellor, Division of Health Sciences.

The OSMS was established at the beginning of 1996 and comprises the Departments of Anatomy and Structural Biology; Biochemistry; Microbiology and Immunology; Pharmacology and Toxicology; and Physiology. The Otago Medical School is part of the Faculty of Medicine. The original Otago Medical School was founded in 1874 and, until the establishment of the University of Auckland School of Medicine, in 1967, was the only Medical School in New Zealand.

Department of Physiology

Overview

The Department of Physiology at the University of Otago is the largest Department of Physiology in New Zealand. Established in 1905, the Otago Department of Physiology celebrated its 100th anniversary in mid-2005. Over the years we have made major contributions to undergraduate science, physical education, medical, dental, pharmacy and physiotherapy education. We are one of the larger departments in the University, and have contributed strongly to biomedical research both nationally and internationally. Many of our graduates have attained a high international reputation for their research.

Management and Staffing

Leadership and management are provided by a Head, and the Department operates via fortnightly staff meetings, committees and *ad hoc* working parties. The Department is a Cost Centre within the OSMS, giving it the flexibility to manage its own finances, establish its own priorities and act accordingly.

The Department currently employs 85 staff:

- Academic staff: One Professor, three Associate Professors, nine Senior Lecturers, five Lecturers, two Professional Practice Fellows, one Senior Teaching Fellow, nine Teaching Fellows, one Senior Research Fellow, four Research Fellows, eight Postdoctoral Fellows, nine Assistant Research Fellows, one Honorary Professor and three Honorary Research Fellows. (One Professorial position is currently being advertised).
- General staff: a Technical/Laboratory Manager, a Purchasing Officer/Compliance Officer (Head Technician), one Financial Manager, a Departmental Administrator, a Teaching/Resources Administrator, a Administrative Assistant, a Financial Administrator, a Financial Administrative Assistant, two Secretaries/Receptionists (HUBS), two Computer Support Technicians, a Senior Research Technician, three Research Assistants, a Research Technician, nine Technicians/Technical Assistants, two Electromechanical Specialists, and a part-time Assistant Compliance Officer.

The lectureship/senior lectureship vacancies have been created by growth in undergraduate and postgraduate student numbers and are available in the areas of (1) Membrane and Ion Transport Physiology (with particular emphasis on renal or gastrointestinal physiology) and (2) Cardiovascular and Respiratory Physiology.

Research

Academic and research-support staff in the 20 research laboratory groups of the Department are engaged in high quality, internationally-recognised physiological research focussed on the three themes of Cellular and Molecular Neuroscience; Cardiovascular and Respiratory Physiology; and Membrane and Ion Transport. State-of-the-art technologies, including the use of transgenic mouse models, are used to undertake integrative, cellular and molecular investigations aimed at understanding animal and human physiology. For details please visit <http://www.otago.ac.nz/physiology>.

The Department also hosts the University's Centre of Neuroendocrinology. For details please visit <http://www.otago.ac.nz/neuroendocrinology>.

Research in the Department is funded currently by international and national research organisations such as the USA National Institutes of Health; Health Research Council of NZ; Foundation for Research, Science and Technology; Royal Society Marsden Fund; Animal Health Board; Lottery Health; Neurological Foundation; National Kidney Foundation; Arthritis Foundation; Otago Medical Research Foundation; and the Maurice and Phyllis Paykel Trust. Individual researchers within the Department maintain strong collaborative links with other Departments within the University and multiple Australasian, European and US laboratories.

Much of the Department's research is published in high ranking international journals. For details please visit <http://www.otago.ac.nz/physiology>.

Teaching

In addition to degree programmes (Physiology for BSc/BSc(Hons) students and Functional Human Biology for BBiomedSc/BBiomedSc(Hons) students), the Department of Physiology contributes to an interdepartmental BSc and BSc(Hons) in Neuroscience, to the Health Sciences First Year papers and to undergraduate medical education (Early Learning in Medicine (ELM) years 2 and 3). We also provide a 200-level paper for other health science professionals (Dentistry, Medical Laboratory Science, Pharmacy, and Physiotherapy) and Human Nutrition students. Overall, we teach more than 3,250 individual students over the course of the academic year.

The Department has a history of continuing curriculum development. In 2007 two new Human Body Systems papers (HUBS 191 and 192) were introduced as part of the Health Sciences First Year (HSFY) programme jointly taught with the Departments of Anatomy and Structural Biology and Microbiology and Immunology. Consequential changes to 200-level courses occurred in 2009 for ELM, the combined cohort of dental, medical laboratory science, pharmacy, physiotherapy and human nutrition students, and BSc/BBiomedSc programmes. In particular, in 2008 new 200-level BSc/BBiomedSc papers were created - PHSL 231 Neurophysiology, PHSL 232 Cardiovascular and Respiratory Physiology, and PHSL 233 Cellular, Gastrointestinal and Renal Physiology. In the light of these changes, the 300-level BSc/BBiomedSc papers (PHSL 341 Cellular and Molecular Neurophysiology, PHSL 342 Integrative Neurophysiology, PHSL 343 Cellular and Epithelial Physiology, PHSL 344 Cardiovascular and Respiratory Physiology, and PHSL 345 Physiological Aspects of Health and Disease) have been revamped in 2009. Finally, the third year Honours paper, PHSL 360 Trends in Physiological Research, was revised in 2004.

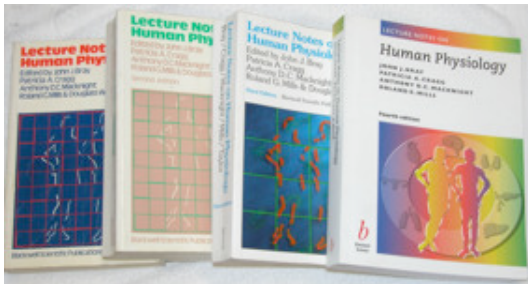
The aim in all of this work is to develop courses that are research-informed, focus on concept rather than detail, and provide students with the ability to apply what they learn to the understanding of everyday physiological situations and to gain generic skills relevant to their future careers. In addition, the Department is committed to providing the best possible support system for its teaching. For example the prime role of our Teaching Fellows is to provide the necessary guidance within small-group teaching in the laboratory and tutorials for our 100-level HSFY papers, our

health science professional papers at 200-level and in the case of medicine at 300-level, and our 200-level BSc/BBiomedSc papers.

We teach using a mixture of lectures, practicals and small-group tutorials together with aids for computer-assisted, case-based and self-directed study. Regular tests and assessments ensure that students stay on schedule. Although this is a large Department, we believe it is a friendly one. We encourage students to make contact with teaching staff who are always ready to help them.

Postgraduate study is undertaken in one of the following programmes: by papers and thesis for 400-level BSc(Hons), PGDipSci and first year MSc students; by thesis for BBiomedSc(Hons), second year MSc, BMedSc (Hons), MMedSc and PhD students. Each student has not only a supervisor but also an Advisor (400-level) or an Advisory Committee (thesis students). We currently have 47 postgraduate students – some are co-supervised with other departments. Furthermore our 300-level science teaching is linked closely with our research, and 300-level students are encouraged through research lab "open-days" to choose a supervisor and select a project for a 4th year of study – specific details about research projects are made available each year in Semester Two. Opportunities to visit research labs are also organised for our 200-level science students.

Other Activities



At the request of Blackwell Scientific Publications, Oxford, the Department wrote a textbook for the international market, Bray J.J., Cragg P.A., Mills R.G. and Macknight A.D.C. (eds.) "Lecture Notes on Human Physiology", the first edition of which was published in 1986. The fourth was published in 1999. This textbook has gained high international recognition and brought prestige to the Department. Despite this, and with some

regret, we decided not to accept Blackwell's request to provide a fifth edition.

In addition, the active encouragement and involvement of the Department led to the development of the computer-based data acquisition system (ADI's MacLab and its newer PowerLab) that is now used in virtually every department of physiology in Australasia for both teaching and research, as well as in departments and by individuals throughout the world.

Physical Resources

- The Department is housed, together with the Department of Anatomy and Structural Biology, in the Lindo Ferguson Building in the Medical School complex where we have been since the building was opened in 1927. The Department occupies in total more than three quarters of the basement, ground and first floor of the Lindo Ferguson Building, with additional space on the ground floor of the adjacent Scott Building, and on the first and second floors of the nearby Wellcome Building. New space is soon to be available in the Scott Building. Over the last 5-10 years all our teaching laboratories have been upgraded, as have most research laboratories, offices and corridors. An ongoing programme of upgrades is in place for refurbishing further research laboratories and the creation of more offices and postgraduate study space as well as grouping administrative staff into one central area.

The Department also manages:

- Emtech (Electromechanical Technology Unit): Research and teaching activities in the Department are supported by the Emtech Workshop staffed by two highly skilled engineering technicians who specialise in the construction of custom-designed teaching and research equipment, and who are overseen by a Management Committee and administrative staff.

Emtech operates under a stand-alone full cost recovery budget with contracts with the Departments of Physiology and Zoology. Non-contract work (~50% in total) is also performed for the rest of the University with a small proportion (~10%) external. Further details of the facilities and work carried out by Emtech can be found at <http://phsl.otago.ac.nz/Emtech/index.html>.

- A Cell Tissue Culture Facility (PC2) with a laminar flow hood, 37°C incubators, bacteriological incubator, microcentrifuge and a phase contrast/GFP fluorescence inverted microscope.
- A Computer Workstation and departmental server overseen by two computer support staff.
- The Otago Centre for Confocal Microscopy (jointly managed with the Department of Anatomy and Structural Biology) comprising inverted and upright Zeiss LSM510 confocal microscopes.
- Other communal facilities such as darkroom, communal equipment (e.g. milliQ, gel documentation scanner, centrifuges, β and γ counters, -80°C freezers), fume hoods, storerooms and photocopy room.

Duties and Responsibilities

Senior Lecturer applicants must have an established international reputation in physiological research and an ability to teach in a number of physiological areas.

Lecturer applicants must have a postdoctoral background in physiological research and an undergraduate degree in physiology or closely related subject; teaching experience is desirable.

The successful applicants are expected to be active in their field of research and able to establish an independent research programme within one of two overarching research themes: Cardiovascular and Respiratory Physiology (based on animal models or human physiology); and Membrane and Ion Transport Physiology (with particular emphasis on renal or gastrointestinal physiology). They must be able to bring in external funding within a year or two of appointment and be keen to interact and, where appropriate, collaborate with existing research groups in the Department of Physiology and within the University of Otago. They will also be expected to supervise postgraduate research (Honours, Postgraduate Diplomas, Masters, PhD).

Applicants should have teaching experience or a strong background in one or more components of one of the following teaching areas: (1) cardiovascular and respiratory physiology and (2) cellular physiology, membrane biology, epithelial and ion transport, renal physiology or gastro-intestinal physiology.

The successful applicants will be expected to be proficient in the discipline of physiology and engage in undergraduate teaching (lectures, and laboratories), assessment and course development. They should be willing to commit to the general teaching philosophy of the Department.

Successful applicants will have a roughly two-thirds teaching load in the initial year, incrementing to a full load by the third year, to enable them to establish their research and develop their teaching material.

Successful applicants will be expected to participate in at least one of the departmental committees that support the smooth running and life of the Department. Further administrative involvement would be expected towards the end of the confirmation period. Involvement in and type of administration/service would depend upon the individual's seniority and expertise. The University also encourages involvement in service to professional or research-related bodies, societies or organisations.

The appointees are responsible to the Head of Department.

Qualifications

All applicants should hold a PhD or equivalent qualification. The successful candidate(s) may or may not hold a medical qualification. Expertise in the discipline of physiology is expected.

Appointment

This is a confirmation path position with confirmation of appointment after five years, subject to satisfactory performance. For further information see:

<http://www.otago.ac.nz/personnelservices/Policies/ConfirmAppoint/Contents.html>

Salary

The salary range for a Lecturer (non-medical) is \$67,768 to \$81,737 per annum and for a Lecturer (medically qualified) is \$68,727 to \$86,179 per annum. The salary range for a Senior Lecturer (non-medical) is \$86,153 to \$99,632 per annum and for a Senior Lecturer (medically qualified) is \$108,359 to \$143,267 per annum. Appointment will be made at an appropriate step in these ranges depending on qualifications and experience.

Contact Person

Specific enquiries may be directed to Dr Pat Cragg, Head of Department, Department of Physiology, Tel 64 3 479 7334, Fax 64 3 479 7323, Email pat.cragg@stonebow.otago.ac.nz

Further information about the Department can be obtained from <http://www.otago.ac.nz/physiology>

Further Information

For further information about the position, the University, or New Zealand generally, the following sites may be of interest:

- The University: <http://www.otago.ac.nz>
- The Division: <http://healthsci.otago.ac.nz/>
- The School: <http://osms.otago.ac.nz/>
- The Department: <http://phsl.otago.ac.nz/>
- University Policy: <http://policy01.otago.ac.nz/policies/index.html>
- Dunedin: <http://www.cityofdunedin.com>
- Schools in Dunedin: <http://www.tki.org.nz/e/schools/>
- Otago: <http://www.otago.co.nz/>
- Real Estate: <http://www.realestate.co.nz/>
- New Zealand: <http://www.newzealand.com/International/>
- Moving to New Zealand: <http://www.newzealandnow.govt.nz/>

Equal Employment Opportunities

The University is strongly committed to diversity in staffing and we encourage applications from women and other under-represented groups who are suitably qualified. Parental leave without pay of up to 52 weeks and paid parental leave of up to 12 weeks' salary may be granted. The Parental Leave policy also makes provision for two weeks of paid leave for partners employed by the University. The Otago University Chilcare Centre operates childcare centres covering the period from birth to 5 years, and after-school and holiday care programmes for 5 to 10 year olds.

Offer of the Position

Should the University wish to offer you the position, a formal, written letter of offer will follow any verbal discussions that might be held with you. It is recommended that you do not resign from your current employment until you have received our written offer. The contents of this formal letter of offer and its attachments will constitute the entire agreement between the employee and the employer, and will supersede all previous representations, negotiations, commitments and communications, either written or oral between the parties. Any agreements will only be binding on the employer where they have been formally offered by the Human Resources Division and accepted by the employee.

Information required from applicants

In their application it is important that applicants (i) address how they will be able to perform the duties and responsibilities described above, (ii) provide an outline of their proposed research over the next five years and (iii) state the date on which they would be free to take up the appointment.

The preferred start date is mid-2010 but an earlier or later date is possible. Applicants are asked to state when they would be available.

Please note it is anticipated that interviews will occur in the week of 14 December 2009.

Applications

Applications quoting reference number A09/108 close with the Recruitment Consultant, Human Resources Division on Friday 30 October 2009. With each application you must include an application form, an EEO Information Statement, a covering letter, contact details for three referees and one copy of your full curriculum vitae.

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