

## INFORMATION FOR CANDIDATES

for appointment as

Lecturer/Senior Lecturer in Statistics  
(Confirmation Path)

### DEPARTMENT OF MATHEMATICS AND STATISTICS

#### THE UNIVERSITY

The University of Otago, the oldest university in NZ, is based in Dunedin, a city of approximately 120,000. There are currently over 18,000 equivalent full-time students enrolled at the University of Otago, which makes Dunedin very much a University city. The University campus is on the edge of the city centre, which has many amenities, theatres and excellent restaurants and cafes nearby.

Compared with other centres in New Zealand and the rest of the world, Dunedin offers a good quality of life with moderate living costs. The Otago region is one of the world's great eco-tourism locations, with beautiful beaches, fabulous hiking and wildlife viewing opportunities nearby. Additionally, scenic mountains, wine country, and skiing are all within a four hour drive. Further information on the city is available through the web page [www.cityofdunedin.com](http://www.cityofdunedin.com).

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

The University has four teaching divisions. Mathematics and Statistics is within the [Division of Sciences](#) but maintains a number of links with other departments in other Divisions. The relatively compact but attractive campus contributes to easy relationships between departments.

The University teaching year ranges from mid-late February to the end of November. The teaching period is broken into two 13-week semesters. Most papers are offered in a single semester.

#### THE DEPARTMENT OF MATHEMATICS AND STATISTICS

Mathematics has been taught at the University of Otago since 1870, while statistics teaching is more recent, the first Professor of Mathematical Statistics having been appointed in 1962. Currently the Department has six Professors, four Associate Professors, 10 Lecturers and Senior Lecturers, two Professional Practice Fellows, two Assistant Lecturers, five Postdoctoral Fellows, one Statistical Consultant, and five support staff.

#### UNDERGRADUATE PROGRAMME

A full range of undergraduate courses is offered, primarily within the Division of Sciences. Courses lead to BSc, BA, BAppSc and to BSc(Hons), BA(Hons) degrees. Three first-year Mathematics courses, one Computational Mathematics course, and two Statistics courses are offered. Students majoring in Mathematics or Statistics can choose from 200-level and 300-level papers that cover a wide range of interests. The 400-level programme for Honours and first-year Masters students consists of lecture or tutorial-based papers that have a substantial research component. The Department currently has 387 effective full-time students.

## **POSTGRADUATE PROGRAMMES**

These include the Postgraduate Diplomas (PgDipSci, PGDipApStat, DipGrad), two-year Master of Science, Master of Arts, Master of Applied Science degrees (requiring one year of course work and one of research), and a three-year PhD programme (entirely research).

29 postgraduate students are enrolled in 2011 for honours, diploma or master's, and 12 for PhD degrees.

## **DEPARTMENTAL RESEARCH ACTIVITIES AND INTERESTS**

This position offers the opportunity to join a dynamic group of staff committed to high standards in teaching and research. Regular seminars, often with visiting speakers, take place during each semester.

Statistical research interests are primarily in the area of Bayesian inference, and environmental and ecological statistics. Research also focuses on various other topics in statistics. Current mathematical research interests in the Department include algebra, anomalous diffusion, applied continuum mechanics, approximation of PDEs, complex analysis, computational modelling, fractional calculus, functional analysis, graph theory, mathematical relativity, numerical methods, numerical relativity, operator algebra, operator semigroups, and polar marine physics and modelling. Close collaboration is maintained with other departments in the University, notably Zoology, Botany, Marine Science and Physics, with other Universities in New Zealand and abroad, and with relevant Crown Research Institutes. The Department operates a consulting unit, The Centre for Applications of Statistics and Mathematics.

Further details about the Department of Mathematics and Statistics, its staff, courses, and research interests can be obtained from their web site: [www.maths.otago.ac.nz](http://www.maths.otago.ac.nz).

## **DUTIES AND RESPONSIBILITIES**

The successful applicant should have a PhD with expertise in the area of statistics, with an aptitude for teaching. For appointment to Senior Lecturer the applicant will need to have demonstrated that they have met the criteria for promotion to this level.

The successful applicant will be required to establish their own research programme, to participate in undergraduate- and postgraduate-level teaching, to undertake research, either independently and/or complementary to an established programme, to contribute to the continuing development of programmes in Statistics, and to carry out such administrative duties as the Head of Department may require.

The area of research that could be pursued by the applicant will not be prescribed. It is anticipated that in due course the appointee will develop an autonomous research programme.

The appointee will be directly responsible to the Head of Department, and have functional relationships with academic and general staff colleagues, undergraduate and postgraduate students.

## **WORKLOAD EXPECTATIONS**

In general, the University of Otago expects academic staff to devote 40% of their work time to research, 40% to teaching, and the balance to community service and administration.

The research/teaching nexus is emphasized at Otago and the Department structures teaching loads to facilitate personal scholarship of its academics as well as to expose students to research-informed teaching.

In Statistics, most permanent staff teach part of a 100-level paper (10-18 lectures), a 200- or 300-level paper (24-26 lectures), and a 400-level graduate paper.

## **EQUAL EMPLOYMENT OPPORTUNITIES**

The Department is strongly committed to diversity in staffing and we encourage applications from women and other groups that are under-represented in the mathematical and statistical sciences. Parental leave of 52 weeks is available, including twelve weeks of paid leave. The parental leave policy is flexible, and if both parents work for the University they may choose to share the leave entitlements as best suits the needs of their family. The University operates childcare centres covering the period birth to eight years.

To ensure that appropriate credit can be given by the search committee to a variety of areas of activity, not only academic achievements, we encourage you to supply a broad-based curriculum vitae describing your productivity and creativity in all areas you wish to have considered.