



**Proposal to change the name of the *Department of Statistics*
to the *Department of Statistical Sciences***

September 4, 2012

The Department of Statistics and the Faculty of Arts & Science propose to change the name of the department to the “Department of Statistical Sciences” in order to reflect the breadth of academic research in the Department, future directions of the discipline, and the Department’s renewed focus on scientific problem solving and methods development.

The Department of Statistics was initially formed as a graduate department in 1977 and it began operating as a full independent department in 1979. The formation of the Department was the culmination of a rich history in statistical science at the University of Toronto. In actuarial science, the department has the oldest undergraduate program in North America. The Department has produced a number of great leaders in the discipline and its graduates populate the finest academic institutions in North America. Recent external reviews have assessed the Department as one of the top ten in North America, and the best in Canada with an international reputation for leadership and innovation in research and education.

The rationale for the proposed name reflect the following developments:

- A wider range of academic research is now conducted within the Department including: Actuarial Science, Biostatistics, Computational Statistics, Functional Data Analysis, Machine and Statistical Learning, Mathematical Finance, Probability, Statistical Genetics and Genomics, Statistical Foundations.
- Faculty and programs of research within the Department have developed many important innovations in statistical science. These include advances in conditional/structural inference and asymptotics; the development of flexible methods in statistical learning including generalized additive models, multivariate analysis, robust estimation, Bayesian nets; designing efficient Monte Carlo algorithms. The importance of these innovations is reflected in the number of significant awards bestowed on the Department’s faculty including the prestigious COPSS Award. This highest international research honour in statistics has only been awarded three times to Canadian faculty and each of these was at the University of Toronto. Only Stanford, Carnegie Mellon, and the University of Chicago have had this success.
- The proposed name is reflective of the evolution of the discipline, as the ‘science’ aspect reflects the development of its subfields and of research as scientists involved in methods development for complex data. As statistical science becomes increasingly interdisciplinary due to the pace of new technologies to create novel data types typically on a massive scale, subfields of the discipline have emerged. Statistical Genetics is an example. Machine and Statistical Learning is another. The Department has further developed its focus on scientific problem solving and the collaborative nature of statistical research and practice within the Department.

It is fitting that the Department's name reflects the above developments. Other names were considered for the Department but rejected as less appropriate. An obvious alternative is a name that includes both Statistical Science and Actuarial Science in the title such as, for example, the Department of Actuarial and Statistical Sciences. This was considered and, interestingly enough, rejected by the actuarial scientists in the Department as being too narrow. In addition, of the 6 departments in the country, three already have this name or some variation of it. Thus, such a name would not be distinctive.

Changing the name of the Department has been discussed informally for several years with consistent support expressed for the proposed name. Formal consultations took place over the 2011-12 academic year. This included a vote at a Department meeting where support was nearly unanimous (2 abstentions) and consultations that took place with cognate departments and schools (Computer Science, Mathematics, Dalla Lana School of Public Health, the Department of Computer and Mathematical Sciences – UTSC, the Department of Mathematical and Computational Sciences - UTM), tri-campus faculty, the UTSC and UTM Deans and Vice-Principals Academic, and graduate students and undergraduate students in statistics and actuarial science. All supported the name change with enthusiasm. One cognate chair remarked “Well-motivated and I like it!” graduate students commented that “it would be more descriptive of what we do” and undergraduate students felt it “would be a step in the right direction - representing the Department as being more dynamic”.

The Department offers both undergraduate and graduate programs: Statistics BSc (Specialist, Major and Minor); Actuarial Science BSc (Specialist and Major); Applied Statistics (Specialist); Statistics and Mathematics BSc (Specialist); Statistics MSc and PhD. The Department is not proposing to change the names of its undergraduate or graduate program. While the proposed name reflects the breadth of the Department and the discipline, the program names reflect depth of expertise and carry a certain professional currency.

There are no new/additional financial resources required to implement the name change. The name change is proposed to be effective pending university governance approval.