## **STATISTICS**

Statistics is the science of learning from data. It is concerned with the development of theory and with the application of that theory to the collection, analysis, and interpretation of quantitative information.

Because statistics is important in many scholarly disciplines, a degree in statistics provides the opportunity to enter not only the statistics profession but also many other fields which make extensive use of statistics. The areas of application include agriculture, the biological sciences, engineering, the physical sciences, the social sciences, education, business, and home economics, among others. Statistics also promises to be important in emerging endeavors such as pollution and environmental research, energy utilization, and health-care administration.

Those who pursue the study of statistics should be interested in scientific inquiry and should have a good mathematical background. In addition, it is desirable that they have a genuine interest in another discipline and learn some application of statistics in that discipline.

Careers in government, industry, and education, involving the disciplines previously mentioned, are open to the statistics graduate. In government and industry a statistician usually serves as a researcher or as a consultant to research scientists and decision-makers. In education, of course, the teaching function is added to those of research and consultation.

The Department of Statistics offers the BS and MS degrees to those interested in applications of statistics, and the PhD degree to those who wish to make original contributions to the theory of statistics.