Department of Statistics

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Uncertainty is inescapable: randomness, measurement error, deception, and incomplete or missing information complicate all our lives. Statistics is the science and art of making predictions and decisions in the face of uncertainty. Statistical issues are central to big questions in public policy, law, medicine, industry, computing, technology, finance, and science. Indeed, the tools of Statistics apply to problems in almost every area of human activity where data are collected.

Statisticians must master diverse skills in computing, mathematics, decision making, forecasting, interpretation of complicated data, and design of meaningful comparisons. Moreover, statisticians must learn to collaborate effectively with people in other fields and, in the process, to understand the substance of these other fields. For all these reasons, Statistics students are highly sought-after in the marketplace.

Recent Statistics majors at Carnegie Mellon have taken jobs at leading companies in many fields, including Intel, Proctor and Gamble, Price Waterhouse-Coopers, D.E. Shaw, Harvard Management Company, and Marketing and Planning Systems. Other students have been taken research positions at the National Security Agency, the Census Bureau, and internships at the Joint Program in Survey Methodology in Washington D.C. and the Epidemiology Data Center at the University of Pittsburgh. Many of our students have also gone on to graduate study at some of the top programs in the country, including Statistics at Carnegie Mellon, Yale, and the University of Washington; Biostatistics at Michigan, Harvard and Johns Hopkins; Industrial Engineering at Stanford; Operations Research at Penn State; and Clinical Psychology and Neuroscience at the University of Pittsburgh.

The Department and Faculty

The Department of Statistics at Carnegie Mellon University is world-renowned for its contributions to statistical theory and practice. Research in the department runs the gamut from pure mathematics to the hottest frontiers of science. Current research projects are helping make fundamental advances in neuroscience, cosmology, seismology, finance, and genetics.

The faculty members are recognized around the world for their expertise and have garnered many prestigious awards and honors. (For example, three members of the faculty have been awarded the COPSS medal, the highest honor given by professional statistical societies.) At the same time, the faculty is firmly dedicated to undergraduate education. The entire faculty, junior and senior, teaches courses at all levels, including the introductory courses. The faculty are accessible and are committed to involving undergraduates in research.

The Department augments all these strengths with a friendly, energetic working environment and exceptional computing resources. Talented graduate students join the department from around the world, and add a unique dimension to the department's intellectual life. Faculty, graduate students, and undergraduates interact regularly.

How to Take Part

There are many ways to get involved in Statistics at Carnegie Mellon:

- The Bachelor of Science in Statistics in the College of Humanities and Social Sciences (H&SS) is a broad-based, flexible program that helps you master both the theory and practice of Statistics. The program can be tailored to prepare you for later graduate study in Statistics or to complement your interests in almost any field, including Psychology, Physics, Biology, History, Business, Information Systems, and Computer Science.
- The Minor (or Additional Major) in Statistics is a useful complement to a (primary) major in another Department or College. Almost every field of inquiry must grapple with statistical problems, and the tools of statistical theory and data analysis you will develop in the Statistics minor will give you a critical edge.
- The Bachelor of Science in Economics and Statistics provides an interdisciplinary course of study aimed at students with a strong interest in the empirical analysis of economic data. Jointly administered by the Department of Statistics and the Undergraduate Economics Program, the major's curriculum provides students with a solid foundation in the theories and methods of both fields. (See H&SS Interdepartmental Majors as well as later in this section)
- The Statistical and Mathematical Sciences Program (within the Science and Humanities Scholars Program), is an alternative path for the study of Statistics that is jointly administered by the Department of Mathematical Sciences and the Department of Statistics.
- The Statistics Concentration within the Mathematical Sciences Major (see Department of Mathematical Sciences) is jointly administered by the Department of Mathematical Sciences and the Department of Statistics.
- Many exciting Research Projects are ongoing in the Statistics Department, and the department enthusiastically seeks to involve undergraduates in this work. Both majors and non-majors are welcome.
- Non-majors are eligible to take most of our courses, and indeed, they are required to do so by many programs on campus. Such courses offer a good way to get involved in cutting-edge research within the Statistics Department.

Curriculum

Statistics consists of two intertwined threads of inquiry: Statistical Theory and Data Analysis. The former uses probability theory to build and analyze mathematical models of data in order to devise methods for making effective predictions and decisions in the face of uncertainty. The latter involves techniques for extracting insights from complicated data, designs for accurate measurement and comparison, and methods for checking the validity of theoretical assumptions. Statistical Theory informs Data Analysis and vice versa. The Statistics Department curriculum follows both of these threads and helps the student develop the complementary skills required.

Below, we describe the requirements for the Major in Statistics and the different categories within our basic curriculum. This is followed by the requirements for the Minor in Statistics and the requirements for the Major in Economics and Statistics.

Note: We recommend that you use the information provided below as a general guideline, and then schedule a meeting with the Statistics Undergraduate Advisor, Oded Meyer (meyer@stat.cmu.edu) to discuss the requirements in more detail, and build a program that is tailored to your strengths and interests.

The Major in Statistics

(B.S. in Statistics)

Students in the Bachelor of Science program develop and master a wide array of skills in computing, mathematics, statistical theory, and the interpretation and display of complex data. In addition, Statistics majors gain experience in applying statistical tools to real problems in other fields and learn the nuances of interdisciplinary collaboration. The requirements for the Major in Statistics are detailed below and are organized by categories #1-#6.

1. Mathematical Foundations (Prerequisites): 28-29 units

Mathematics is the language in which statistical models are described and analyzed, so some experience with basic calculus and linear algebra is an important component for anyone pursuing a program of study in Statistics.

Calculus*:

Complete *one* of the following three sequences of mathematics courses at Carnegie Mellon, each of which provides sufficient preparation in calculus:

Sequence 1

21-111 Calculus I
21-112 Calculus II

Sequence 2

21-120 Differential and Integral Calculus
21-122 Integration, Differential Equations and Approximation

Sequence 3

21-120 Differential and Integral Calculus
21-256 Multivariate Analysis and Approximations

Note: Other sequences are possible, and require approval from the undergraduate advisor.

Linear Algebra**:

Complete *one* of the following two mathematics courses at Carnegie Mellon each of which provides sufficient preparation in linear algebra:

21-241 Matrix Algebra
21-341 Linear Algebra I ***

* It is recommended that students complete the calculus requirement during their freshman year.

** The linear algebra requirement needs to be completed before taking 36-401

*** A more mathematically rigorous course and usually taken only by mathematics majors

2. Data Analysis: 45 units

Data analysis is the art and science of extracting insight from data. The art lies in knowing which displays or techniques will reveal the most interesting features of a complicated data set. The science lies in understanding the various techniques and the assumptions on which they rely. Both aspects require practice to master.

The *Beginning Data Analysis* courses give a hands-on introduction to the art and science of data analysis. The courses cover similar topics but differ slightly in the examples they emphasize. 36-201 draws examples from many fields and satisfies the H&SS College Core Requirement in Statistical Reasoning. It is therefore the recommended course for students in the College. (Note: A score of 5 on the Advanced Placement (AP) Exam in Statistics may be used to waive this requirement). Other courses emphasize examples in business (36-207), engineering and architecture (36-220), and the laboratory sciences (36-247).

The *Intermediate Data Analysis* courses build on the principles and methods covered in the introductory course, and more fully explore specific types of data analysis methods in more depth.

The *Advanced Data Analysis* courses draw on students' previous experience with data analysis and understanding of statistical theory to develop advanced, more sophisticated methods. These core courses involve extensive analysis of real data and a substantial component of independent research.

Beginning*

Choose *one* of the following courses
36-201 Statistical Reasoning and Practice
36-207 Probability and Statistics for Business Applications
36-220 Engineering Statistics and Quality Control
36-247 Statistics for the Laboratory Sciences

* Students who enter the program through 36-225 or 36-226 (like math or CS majors choosing statistics as an additional major), usually skip the beginning data analysis course and take an additional statistics elective instead (see category #5, Statistical Electives, below)

Intermediate

Choose *one* of the following courses
36-202 Statistical Methods
36-208 Regression Analysis (cross listed as 70-208)
36-309 Experimental Design for Behavioral and Social Sciences

Advanced

Choose *one* of the following three courses:

36-303 Sampling, Surveys, and Society
36-315 Statistical Graphics and Visualization
36-350 Data Mining

and take the following *two* courses

36-401 Modern Regression
36-402 Advanced Data Analysis

3. Probability Theory and Statistical Theory: 9 or 18 units

The theory of probability gives a mathematical description of the randomness inherent in our observations. It is the language in which statistical models are stated, so an understanding of probability is essential for the study of statistical theory. Statistical theory provides a mathematical framework for making inferences about unknown quantities from data. The theory reduces statistical problems to their essential ingredients to help devise and evaluate inferential procedures. It provides a powerful and wide-ranging set of tools for dealing with uncertainty.

The Statistics Department offers three options for satisfying the theory requirement. The options are given below and are followed by a set of comments which explain the difference between the options and provide general guidelines about choosing among them. The final choice, however, should be made in consultation with the Undergraduate Advisor of the Statistics Department.

Option 1:

Take the following course:
36-310 Fundamentals of Statistical Modeling

Option 2:

Take the following theory sequence :
36-225* Introduction to Probability and Statistics I
36-226 Introduction to Probability and Statistics II

* It is possible to substitute 36-217 or 21-325 for 36-225. (36-225 is the standard introduction to probability, 36-217 is tailored for engineers and computer scientists, and 21-325 is a rigorous Probability Theory course offered by the Department of Mathematics.)

Option 3:

Take the following theory sequence :
36-625 Probability and Mathematical Statistics I
36-626 Probability and Mathematical Statistics II

Comments:

(i) Students who take option 1 will learn probability theory in the first part of the course 36-310 and statistical theory in the second part of the course. In options 2 and 3, students take a full course in probability theory followed by a full course in statistical theory.

(ii) Option 1 is intended for students with less experience in mathematics and probability and provides a conceptual bridge between data analysis methods and the theory underlying them. Options 2 and 3 cover the theory in greater depth and with more

mathematical content for students who are concentrating in technical fields. Option 3 is much more mathematically rigorous and is good preparation for later graduate work in Statistics or other disciplines.

(iii) The vast majority of students are advised to choose among Option 1 or Option 2. Statistics Majors who are also majoring in Computer Science, Operations Research, or Mathematics or who are considering graduate study in Statistics should carefully consider (in consultation with the Undergraduate Advisor) taking Option 3 in order to satisfy their Theory requirement.

(iv) Students who take Option 2 or Option 3, can use the first course in the sequence (i.e., 36-225 or 36-625), to satisfy the "Elective Within Statistics Requirement " (see the Statistical Electives category).

(v) **Important:** In order to be a Major or a Minor in good standing, a grade of at least a C is required in 36-310 (Option 1) or in 36-226 (Option 2). In particular, this is required in order or be able to continue to senior level courses.

4. Special Topics: 9 units

The Statistics Department offers seminar courses that focus on specific statistical applications or advanced statistical methods. At least one of these courses (36-461) will be offered every year (usually in the Fall); the other (36-462) is offered intermittently according to interest and demand. Past topics included statistics and the law, Bayesian statistics, non-parametric statistics, statistical genetics, and statistical methods in epidemiology. The objective of the seminar course is to expose students to important topics in statistics and/or interesting applications which are not part of the standard undergraduate curriculum.

Choose *one* of the following courses:

36-461	Topics in Statistics
36-462	Topics in Statistics

5. Statistical Electives: 9 or 18 units*

Statistical electives courses can be either within or outside the statistics department. Students are required to take *two* electives, *only one* of which can be outside statistics.

* Students who take Option 2 or 3 in the Theory requirement (see Category 3 above), can use the first course in the theory sequence as an elective within statistics and therefore are required to take only one additional elective which can be either within or outside statistic.

Courses within Statistics

Any course in Probability Theory, Advanced Data Analysis, or Special Topics categories that does not satisfy any other requirement for a Statistics Major may be counted as a Statistical Elective.

Courses outside Statistics

The following is a partial list of courses that qualify as electives as they provide intellectual infrastructure that will advance the student's understanding of statistics and its applications. Other courses may qualify as well; consult with the Statistics Undergraduate Advisor.

15-100	Introductory/Intermediate Programming
15-111	Intermediate/Advanced Programming
15-200	Advanced Programming/Practicum
21-127	Concepts of Mathematics
21-259	Calculus in Three Dimensions
21-260	Differential Equations
21-292	Operations Research I
21-301	Combinatorial Analysis
80-220	Philosophy of Science
80-221	Philosophy of Social Science
80-222	Philosophy of Economics
80-310	Logic and Computability I
85-310	Research Methods in Cognitive Psychology
85-340	Research Methods in Social Psychology
88-223	Decision Analysis and Decision Support Systems
88-302	Behavioral Decision Making

Note: Additional prerequisites are required for some of these courses. Students should carefully check the course descriptions to determine if additional prerequisites are necessary.

6. Concentration Area: 36 units*

The power of Statistics, and much of the fun, is that it can be applied to answer such a wide variety of questions in so many different fields. A critical part of statistical practice is understanding the questions being asked so that appropriate methods of analysis can be used. Hence, a critical part of statistical training is to gain experience applying the abstract tools to real problems. The Concentration Area is a set of four related courses outside of Statistics that prepares the student to deal with statistical aspects of problems that arise in another field. These courses are usually drawn from a *single* discipline of interest to the student and are chosen in consultation with the Statistics Undergraduate Advisor. For example, students intending to pursue careers in public policy could take further courses in History or Economics, students intending to pursue careers in the health or biomedical sciences could take further courses in Biology or Chemistry, and students intending to pursue graduate work in Statistics could take further courses in advanced Mathematics.

* Note: This requirement is only for students whose primary major is statistics with no other additional major or minor. Double majors usually satisfy this requirement by default (see "Additional Majors" section below)

Total Number of Units for the Major:	145*
Total Number of Units for the Degree:	360

*Note:
This number can vary since, for example, it includes the 36 units of the "Concentration Area" category which may not be required (see category 6 above for details).

Recommendations

Students in the College of Humanities and Social Sciences who wish to major or minor in Statistics are advised to complete both the calculus requirement (one Mathematical Foundations calculus sequence) and the Beginning Data Analysis course 36-201 (Statistical Reasoning and Practice) by the end of their Freshman year.

The linear algebra requirement is a prerequisite for the course 36-401. It is therefore essential to complete this requirement during your junior year at the latest!

Statistics Majors who are also majoring in Computer Science, Operations Research, or Mathematics or who are considering graduate study in Statistics should carefully consider (in consultation with the Undergraduate Advisor) taking Option 3 in order to satisfy their Theory requirement.

Additional Majors

Students who elect Statistics as a second or third major must fulfill all Statistics degree requirements, however, the Concentration Area requirement is usually waived in consultation with the student's advisor. Majors in many other programs would naturally complement a Statistics Major, including Tepper's undergraduate business program, Social and Decision Sciences, Policy and Management, and Psychology.

Students are advised to begin planning their curriculum (with appropriate advisors) as soon as possible. This is particularly true if the other major has a complex set of requirements and prerequisite or when many of the other major's requirements overlap with the requirements for a Major in Statistics

Research

One goal of the Statistics program is to give students experience with statistical research. A wide variety of exciting research projects is ongoing in the department, and students have many opportunities to get involved in a project that interests them.

Before graduation, students will be expected to participate in an independent research project under faculty supervision. Students do this through projects in specific courses, such as 36-303 and 36-402, through an independent study, 36-295, or through a summer research position.

Qualified seniors are also encouraged to participate in an advanced research project or independent study under the supervision of a Statistics faculty advisor. Students earn credit for this work by enrolling in 36-495. Students who maintain a quality point average of 3.25 overall may also apply to participate in the H&SS Senior Honors Program (see relevant section in the catalog for details).

Sample Programs

The following sample programs illustrate two (of many) ways to satisfy the requirements of the Statistics Major. However, keep in mind that the program is flexible enough to support many other possible schedules and to emphasize a wide variety of interests. The first schedule below has a heavier emphasis on data analysis; it includes Mathematical Foundations Sequence 1 and 15-127 as a Statistical Elective outside of Statistics.

The second schedule below has a heavier emphasis on statistical theory and probability; it substitutes an extra Statistical Elective (36-225) for Beginning Data Analysis, and includes Mathematical Foundations Sequence 2.

In both schedules, C.A. refers to Concentration Area courses.

Schedule 1

Year	Fall	Spring
Freshman	36-201 21-111	36-202 21-112
Sophomore	15-127 (elective)	36-303 36-315
Junior	36-310 C.A.	21-241 C.A.
Senior	36-401 36-461 C.A.	36-402 C.A.

Schedule 2

Year	Fall	Spring
Freshman	21-120	21-256
Sophomore	36-225	36-226 21-241
Junior	36-350 36-309 C.A.	36-315 C.A
Senior	36-401 36-461 C.A.	36-402 36-410 C.A.

The Minor in Statistics

The Minor in Statistics develops skills that complement major study in other disciplines. The program helps the student master the basics of statistical theory and advanced techniques in data analysis. This is a good choice for deepening understanding of statistical ideas and for strengthening research skills.

In order to get a minor in Statistics a student must satisfy the requirements in the first three categories of the Major's requirements. (read the section about the Major in Statistics for details). In other words, the requirements for the minor are:

1. Mathematical Foundation

Calculus: 19-20 units via Sequence 1, 2, or 3

Algebra: 9 units via 21-241 or 21-341

2. Data Analysis

- Beginning Data Analysis

9 units (one course) or Statistical Elective*

- Intermediate Data Analysis

9 units (one course)

- Advanced Data Analysis

27 units: one of 36-303, 36-315, or 36-350 + both 36-401 and 36-402

3. Theory

9-18 units: via Options 1, 2 or 3**.

Total 82 Units

* For students who enter the program with 36-225/226 or 36-625/626, in which case either 36-225 or 36-625 can serve as the elective.

** In order to be a Major or a Minor in good standing, a grade of at least a C is required in 36-310 or in 36-226. (In particular, this is required in order or be able to continue to senior level courses.)

Sample Programs

The following two sample programs illustrates two (of many) ways to satisfy the requirements of the Statistics Minor. Keep in mind that the program is flexible and can support many other possible schedules. The first schedule has a heavier emphasis on data analysis, and is one that would be typically taken by students in the College of Humanities and Social Sciences (such as psychology majors). The second schedule (or similar) is more mathematical, and is suggested, for example, for students who major in Computer Science.

Schedule 1

Year	Fall	Spring
Freshman	21-111 36-201	21-112
Sophomore	36-309	36-303
Junior	36-310	21-241
Senior	36-401	36-402

Schedule 2

Year	Fall	Spring
Freshman	21-120 21-241	21-256
Sophomore	36-225	36-226
Junior	36-309	36-315
Senior	36-401	36-402

The Major in Economics and Statistics (B.S. in Economics and Statistics)

The major in Economics and Statistics provides an interdisciplinary course of study aimed at students with a strong interest in the empirical analysis of economic data. Jointly administered by the Department of Statistics and the Undergraduate Economics Program, the major's curriculum provides students with a solid foundation in the theories and methods of both fields. Students in this major are trained advance the understanding of economic issues through the analysis, synthesis and reporting of data using the advanced empirical research methods of statistics and econometrics. Graduates are well positioned for admission to competitive graduate programs, including those in statistics, economics and management, as well as for employment in positions requiring strong analytic and conceptual skills – especially those in economics, finance, education, and public policy.

The requirements for the B.S. in Economics and Statistics are the following:

I. Prerequisites 74 Units

1. Writing Prerequisite 9 units

Choose one:
73-270 Professional Writing for Economics
76-270 Writing in the Professions
76-271 Intro to Professional and Technical Writing

2. Mathematical Foundations 38 units

21-120 Differential and Integral Calculus
21-122 Integration, Diff Equations, and Approximations
21-256 Multivariate Analysis and Approximation
21-241 Matrix Algebra

3. Economics Foundations 9 units

73-100 Principles of Economics

4. Statistical Foundations 18 units

36-201 Introduction to Statistical Reasoning and Practice*

and *one* of the following:
36-202 Introduction to Statistical Methods
36-208 Regression Analysis (cross listed as 70-208)
36-309 Experimental Design for Behavioral & Social Sciences

* Acceptable equivalents for 36-201 are 36-207, 36-220, 36-247, and 70-207.

II. Disciplinary Core 111 units

1. Economics Core 39 units

73-150 Microeconomics
73-200 Macroeconomics
73-252* Advanced Microeconomic Theory
73-253* Advanced Macroeconomic Theory
73-261 Econometrics
* Mini courses

2. Statistics Core 36 units

36-225 Introduction to Probability and Statistics I
36-226 Introduction to Probability and Statistics II
36-401 Modern Regression
36-402 Advanced Data Analysis (Project Course)

3. Economics Electives 18 units

Choose two advanced courses.
(numbered 73-300 through 73-495)

4. Statistics Electives 18 units

Choose two courses at the 36-300 level or above.

Total number of units for the *major* 185 units
Total number of units for the *degree* 360 units

Sample Program

The following sample program illustrates one (of many) ways to satisfy the requirements of the Economics and Statistics Major. Keep in mind that the program is flexible and can support other possible schedules (see comment following the schedule).

Year	Fall	Spring
Freshman	21-120 36-201 ----- ** ----- -----	21-122 36-202 73-150 ----- -----
Sophomore	21-256 36-225 73-200 ----- -----	21-241 36-226 73-252/3 ----- -----
Junior*	36-401 73-261 Writing Req. Econ Elective -----	36-402 Stats Elective ----- ----- -----
Senior	Stats Elective ----- ----- ----- -----	Econ Elective ----- ----- ----- -----

* A student could spend, for example, year 3 abroad and move year 3 courses to year 4.
** In each semester, ----- represents other courses (not related to the major) which are needed in order to complete the 360 units that the degree requires.

Substitutions and Waivers

Many departments require Statistics courses as part of their Major or Minor programs. Students seeking transfer credit for those requirements from substitute courses (at Carnegie Mellon or elsewhere) should seek permission from their advisor in the department setting the requirement. The final authority in such decisions rests there. The Statistics Department does not provide approval or permission for substitution or waiver of another department's requirements.

However, the Statistics Director of Undergraduate Studies will provide advice and information to the student's advisor about the viability of a proposed substitution. Students should make available as much information as possible concerning proposed substitutions. Students seeking waivers may be asked to demonstrate mastery of the material.

Statistics Majors and Minors seeking substitutions or waivers should speak to the Statistics Director of Undergraduate Studies.

Faculty

BERNIE DEVLIN, Adjunct Associate Professor — Ph.D., Pennsylvania State University; Carnegie Mellon, 1994—.

MICHELE DIPIETRO, Instructor and Associate Director, Eberly Center Ph.D., Carnegie Mellon, 2001—.

WILLIAM F. EDDY, John C. Warner Professor of Statistics — Ph.D., Yale University; Carnegie Mellon, 1976—.

STEPHEN E. FIENBERG, University Professor and Maurice Falk Professor of Statistics and Social Sciences — Ph.D., Harvard University; Carnegie Mellon, 1980–1991; 1993—.

CHRISTOPHER GENOVESE, Professor of Statistics — Ph.D., University of California, Berkeley; Carnegie Mellon, 1994—.

JOEL B. GREENHOUSE, Professor of Statistics — Ph.D., University of Michigan; Carnegie Mellon, 1982—.

MATTHEW HARRISON, Visiting Assistant Professor— Ph.D., Brown University; Carnegie Mellon, 2006—.

JIASHUN JIN, Associate Professor— Ph.D., Stanford University; Carnegie Mellon, 2007—.

BRIAN JUNKER, Professor of Statistics — Ph.D., University of Illinois; Carnegie Mellon, 1990—.

ROBERT E. KASS, Professor of Statistics — Ph.D., University of Chicago; Carnegie Mellon, 1981—.

ANN LEE, Assistant Professor – Ph.D., Brown University; Carnegie Mellon, 2005—.

JONG SOO LEE, Visiting Assistant Professor— Ph.D., Rice University; Carnegie Mellon, 2006—.

JOHN P. LEHOCZKY, Thomas Lord Professor of Statistics and Dean of the College of Humanities and Social Sciences — Ph.D., Stanford University; Carnegie Mellon, 1969—.

ODED MEYER, Associate Teaching Professor — Ph.D., University of Pittsburgh; Carnegie Mellon, 1999—.

REBECCA NUGENT, Visiting Assistant Professor – Ph.D., University of Washington; Carnegie Mellon, 2006—.

ALESSANDRO RINALDO, Assistant Professor — Ph.D. Carnegie Mellon; Carnegie Mellon, 2005—.

KATHRYN ROEDER, Professor of Statistics — Ph.D., Pennsylvania State University; Carnegie Mellon, 1994—.

CHAD M. SCHAFER, Assistant Professor — Ph.D., University of California, Berkeley; Carnegie Mellon, 2004—.

MARK J. SCHERVISH, Department Head and Professor of Statistics Ph.D., University of Illinois; Carnegie Mellon, 1979—.

TEDDY SEIDENFELD, Herbert A. Simon Professor of Philosophy and Statistics — Ph.D., Columbia University; Carnegie Mellon, 1985—.

HOWARD SELTMAN, Associate Research Professor — Ph.D., Carnegie Mellon University; Medical College of Pennsylvania — M.D. Carnegie Mellon, 1999—.

COSMA SHALIZI, Assistant Professor – PhD. University of Wisconsin, Madison, Carnegie Mellon, 2005—.

SURYA TOKDAR, Visiting Assistant Professor – Ph.D. Purdue University; Carnegie Mellon, 2006—.

VALERIE VENTURA, Associate Research Professor — Ph.D., University of Oxford; Carnegie Mellon, 1997—.

ISABELLA VERDINELLI, Professor in Residence — Ph.D., Carnegie Mellon University; Carnegie Mellon, 1991—.

PANTELIS K. VLACHOS, Associate Teaching Professor — Ph.D., University of Connecticut; Carnegie Mellon, 1996—.

LARRY WASSERMAN, Professor of Statistics — Ph.D., University of Toronto; Carnegie Mellon, 1988—.

Emeritus Faculty

GEORGE T. DUNCAN, Professor of Statistics and Public Policy — Ph.D., University of Minnesota; Carnegie Mellon, 1974—.

JOSEPH B. KADANE, Leonard J. Savage Professor of Statistics and Social Sciences — Ph.D., Stanford University; Carnegie Mellon, 1969—.