

1993

Ursula Goodenough

When Ursula Goodenough enrolled at Barnard College, her intention was to major in English and French literature. But her first class in zoology changed all that; it instilled in her a passion for life sciences, and she has never looked back.

Since the time Goodenough took that first science course as a sophomore in college, fulfilling a distribution requirement for her English major, she developed a lifelong addiction to asking questions of cells. Her senior thesis project at Barnard College analyzed the ultimobranchial gland of goldfish; her master's project at Columbia University analyzed calcium uptake by rat liver mitochondria.

In 1965 Goodenough joined Keith Porter's lab at Harvard, along with fellow graduate students, postdocs and future ASCB members Beth Burnside, Breck Beyers, Peter Hepler, Dick McIntosh, Andrew Staehelin, and Lew Tilney. Her initial project analyzed microtubule nucleation in squirrel spermatids, but she soon became interested in *Chlamydomonas*, the green alga being studied in Paul Levine's lab. Levine's group had generated mutants defective in photosynthesis, and her analysis of the ultrastructure of their chloroplasts, her Ph.D. thesis project, established some important correlations between structure and function. She completed her Ph.D in 1969.

The rich traditions of microscopy in the Porter lab and genetics/biochemistry in the Levine lab carried over in the project she initiated in 1971, the analysis of the *Chlamydomonas* life cycle. As a faculty member at Harvard and then at Washington University, she and her colleagues have made many contributions to an understanding of how the organism mates, swims, and carries out cellular differentiation. Her lab currently includes six postdocs, two graduate students, three undergraduate thesis students, and two technicians, and their research is supported by grants from the NIH, NSF, and the U.S. Department of Agriculture.

Goodenough is author of the textbook *Genetics* which she wrote as a postdoc and is recognized as a classic in the field. The book has been through three editions and translated into five languages.

Goodenough came to Washington University in 1978 as an Associate Professor of Biology and in 1982 became full Professor. She teaches Introduction to Cell Biology for junior and senior biology majors and was awarded a Faculty Teaching Award in 1986. She also directs graduate seminar courses on topics in cell biology. For her part, Goodenough enjoys Washington University's congenial environment and attitude. Sarah Elgin, her colleague at Washington University, notes that Goodenough enjoys an outstanding reputation as a teacher, particularly her ability to convey through her lectures the excitement and development of modern biology. Another Washington University colleague, David Kirk, says that her Cell Biology course is considered the highlight of the undergraduate curriculum. Kirk says that he has never heard of one student that had a critical comment — only glowing accolades — about Goodenough's teaching. He says

that she is able to inspire and enthuse every one of her students about biology, and that Goodenough's devotion to science is matched only by her devotion to her family. Regarding family and career, Goodenough feels that the critical success factor for women balancing the twin demands of raising children and developing a career is believing that you can have both. She says that realizing and accepting that a child's development are influenced by many people in their lives other than their mother has helped her achieve both her personal and professional goals.

This energy and talent also benefits the ASCB. An active member since 1967, Goodenough currently serves on the ASCB Public Policy Committee, is Chair of Women in Cell Biology (WICB), and recently completed a three-year term on Council.

In fact, her involvement in WICB goes back to its founding in 1972. Goodenough noticed at the ASCB Annual Meeting in Boston that year that all symposia speakers were male. Goodenough and fellow ASCB member Mary Clutter thought it would be a good idea to organize a dinner to allow women a forum to discuss their research. The group, originally formed as an ad-hoc committee, began writing a newsletter and in the early 1980s started presenting the Career Recognition Awards at the ASCB Annual Meetings. Goodenough felt that there was a clear need to address the concerns of many of ASCB's young women scientists. ASCB Council approved WICB as a standing committee at its 1992 winter meeting and, if ratified by the ASCB membership this summer, it will become an official committee of the Society. In the future, Goodenough would like to implement some type of informal mentoring process whereby young women scientists can meet more established women scientists.

Goodenough is also particularly active in ASCB's public policy efforts and last year accepted ASCB Public Policy Chair Marc Kirschner's invitation to represent the ASCB membership's interest in the National Science Foundation (NSF). She often reminds colleagues that the NSF strongly supports basic science in all disciplines and is often the only source of funding for some ASCB members. For these reasons, Goodenough believes that advocacy of the NSF is critical. Goodenough's public policy interests go beyond the NSF; she recently published an op-ed on the importance of biomedical research in the St. Louis Post-Dispatch.

When she escapes her busy laboratory, Goodenough enjoys spending time with her husband, ASCB member John Heuser, on Martha's Vineyard. There, she catches up with her non-science friends and writes philosophy. Of course, another fun diversion are her five children: Jason, age 22, who recently graduated from Vassar and is studying psychology; Mathea, 18, who will be a sophomore at NYU and will likely study English; Jessica, 12; Thomas, 10; and James, 7.

Editor's Note: Ursula Goodenough will serve as ASCB President during 1994-1995.