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Andrew Murray

Despite having two American parents, Andrew Murray was born in England, where his father taught Italian history. Murray, now Associate Professor of Physiology at the University of California at San Francisco, can no longer remember why he chose to study science over the humanities. Perhaps it was simply that the British school system required 16-year-old school children to choose a career path and that science seemed as good as any.

The year after high school, Murray decided that he wanted to explore science (and his ancestral home) further and went to Boston where he could stay with relatives. There his aunt and uncle, both architects, found an old friend who was owed a favor by a scientist at MIT. This Byzantine connection led him to the laboratory of Nancy Hopkins, who, perceiving Murray's interest and potential, encouraged him to do experiments. Thanks to this generous support, he found himself in the scintillating atmosphere of the fifth floor of the cancer center, which boasted the laboratories of Hopkins, David Baltimore, Bob Weinberg, and Phil Sharp. Within a matter of days, Murray realized that he was hooked on science.

Murray returned to England and entered Clare College at Cambridge University, earning a First Class Honors degree in Biochemistry in 1978. At Cambridge, he worked in Tim Hunt's lab. Murray remembers Hunt as a warm, funny, and bright man who was a scientist's scientist and allowed his students to follow their intellectual curiosity. Murray and Hunt would later collaborate on a short book on cell cycle control. Hunt recalls that together, they wrote an outline in Woods Hole, but the final product turned out to be a much more difficult project than either of us had imagined and took four years and much transatlantic travel to complete. More importantly, Hunt says that he and Murray remain good friends in spite of the ordeal. Hunt calls Murray a remarkably fine scientist, if more than slightly mad. There is a quality of holy simplicity that marks the work of his group as peculiarly original and clear-sighted while addressing important problems.

Murray wanted to pursue a graduate degree back in the States despite the fact that many. Many of his Cambridge teachers felt that British students were further along and better prepared than the American students entering U.S. graduate schools. But with Hunt's encouragement, Murray returned to New England to enter Harvard's program in Cell and Developmental Biology. His thesis work, under Jack Szostak, was on chromosome and plasmid behavior in budding yeast.

After a part-time lecturing stint at Yale in 1985 and 1986, Murray moved to UCSF as a Research Fellow in the laboratory of Marc Kirschner. Murray studied the role of cyclin synthesis and degradation in the embryonic cell cycle. He became an Assistant Professor of Physiology in 1989, and Associate Professor in 1994.

Kirschner calls Murray an exceptional scientist who has made two very important contributions. Along with Jack Szostak, he developed techniques for making stable yeast

artificial chromosomes. In my lab he developed cell-free extracts for carrying out the cell cycle. With this he demonstrated that cyclin activates cdc2 to enter mitosis and that cyclin degradation is required to exit mitosis. Since then he has returned in part to yeast to develop a screen for genes involved in regulating the fidelity of mitosis. Andrew is recognized as a brilliant teacher, with an extraordinary capacity to intellectualize and ultimately to simplify any subject. He is the coauthor with Tim Hunt of the classic book on the cell cycle. He has taught at Woods Hole and is generally in demand at any meeting. He is known for his ability to synthesize disparate subjects, for his often unconventional dress and for his sense of humor.

Murray's major research interests are how mitosis segregates a cell's chromosomes into two identical sets before cell division. Murray and his colleagues study two aspects of mitosis: how cells make sure that the chromosomes are properly lined up on the mitotic spindle before initiating chromosome segregation, and what the glue that holds sister chromatids together is and how it is dissolved to allow the sisters to separate from each other.

Murray says he joined the ASCB in 1990 for the same reason as everyone else does, to submit abstracts to the Annual Meetings. At the invitation of ASCB Public Information Committee Chairman Robert Goldman, Murray joined the Committee to help fill a longterm interest of his to try to communicate to the public what science is and what scientists do. Murray is currently working on ideas for a video on why science is interesting and relevant to people's daily lives. Another of his goals is to write a book on general scientific themes that the lay public can understand. Murray has been involved in Genentech's program Access Excellence that helps outstanding high school science teachers with their teaching programs and plans. He is also a recurrent summer teacher at the Marine Biological Laboratory in Woods Hole.

At the invitation of UCSF colleague and ASCB President-elect Mike Bishop, Murray is serving as Local Arrangements Chair for the 1996 International Congress Annual Meeting.

Murray and his wife of five months, Barbara, an English literature graduate student, recently enjoyed a working honeymoon in Japan. Murray is a fan of the opera, theater, and the Boston Red Sox. He is especially fond of Shakespeare and finds his work one of the best excuses to go back to England.