BY RONALD A. CRUTCHER, PRESIDENT

Building a strong foundation in the sciences

I received a fascinating book for my 61st birthday. *The Brain That Changes Itself*, by Norman Doidge, is a popular explanation of recent research in neuroscience. The book focuses on neuroplasticity, the capacity of the brain to re-wire itself, to continue to grow and adapt, as we age and even after traumatic injury or disease.

I was particularly struck by the story of how these breakthrough findings were realized. The journey of discovery related in the book, several decades of work, included chance observations, unexpected results, dedicated leading researchers, a team of scientists working in multiple disciplines and the creation of novel experiments.

This scientific and human drama reminds me of the discovery achieved by a Wheaton alumna who celebrated her reunion this year. Dr. Mary Ellen Avery '48 was the first woman to chair a major department at Harvard Medical School and the first to serve as physician-in-chief of Children's Hospital Boston. She also was the first pediatrician to serve as president of the American Association for the Advancement of Science.

Dr. Avery's pioneering research led to the discovery of the main cause of respiratory distress syndrome (RDS) in premature babies, and helped in the development of treatments that have saved the lives of thousands of newborn infants. Her discovery started with an observation she made as a research fellow at Harvard, examining the lungs of premature newborns. It took her years to develop partnerships with other scientists and devise interdisciplinary experiments that helped to prove the importance of what she had noticed. Dr. Avery received the National Medal of Science and many other awards for her contributions to medical science. Her dedication has changed lives, and it has improved our world.

Dr. Avery's accomplishments illustrate the power of observation, critical thinking, creativity and collaboration—the essence of scientific research. Her career also reflects the strong tradition of science study at Wheaton. As an undergraduate, Dr. Avery studied with Professor of Chemistry Emerita Bojan Jennings, a pioneer in her own right who has inspired many Wheaton graduates to pursue careers in the natural sciences and related fields. In fact, Professor of Chemistry Elita Pastra-Landis '69 also counts herself among Professor Jennings's protégés, and she is helping to train the next generation of scientists.

Plans for level one of the Center for Scientific Inquiry and Innovation.

The study of science has never been more important. Questions of science lie at the heart of many of the most complicated and urgent issues facing our society, such as global warming and its myriad implications for our planet. Wheaton's liberal arts education, which encourages students to discover the connections among academic disciplines and between scholarship and contemporary issues, offers a powerful background for the pursuit of science.

The Wheaton Curriculum provides a strong grounding in math and the sciences for all students, regardless of major. Scientific and quantitative literacy is essential for every educated citizen who wants to parse a candidate's report on the economy, evaluate the health-risk factors associated with their lifestyle choices or critique the validity of environmental impact studies in their hometown.

What's more, the scientific method—formulating hypotheses and collecting empirical data to test those ideas in an open and collaborative process—is applied, every day, to questions in myriad fields, from business and marketing to education and economics (a point that Professor of Biology Robert Morris makes in an article in this issue of the magazine).

For all these reasons, the new Center for Scientific Inquiry and Innovation, for which site preparation began over the summer, stands as a critical effort for Wheaton. This $50 million project, which includes both the construction of a new three-story building and the renovation of the first floor of the existing Science Center, represents the most ambitious building project in Wheaton history.

The goal: To create a facility that promotes collaboration among students and faculty and that encourages interdisciplinary learning and research. Fittingly, the science center will also be a community center for our campus, with gathering spots to encourage interaction and community. And it will express our commitment to the future by incorporating environmental sustainability throughout its design. In short, it will represent our shared commitment to the sciences as an integral part of the liberal arts.