

If you were to trace the history of OU Professor Mary Jo Nye's career, you would find a trail of remarkable achievements: George Lynn Cross Research Professor, National Science Foundation Postdoctoral Fellow, National Endowment for the Humanities Fellow, first woman to chair the University's noted history of science department.

Add the fact that she currently is the only Oklahoman elected to membership in the prestigious American Academy of Arts and Sciences, and the evidence is pretty clear that Nye is one of the University's most respected and valued faculty members.

Nye, who joined OU's faculty in 1970, has been credited with helping to make the academic department of the history of science as internationally known as the University's renowned research resource, the History of Science Collections—80,000 volumes featuring many rare scientific works unavailable anywhere else in the United States.

"As a collection that is accessible to the public, it's quite unusual," says Nye. "The collections are extremely highly regarded, and the resources are becoming even better known both nationally and internationally."

Those resources are composed of books and other publications, most of which date from the 17th and 18th centuries. However, many of the gems in the collections reach much further back—including several books featuring handwritten notes by their distinguished owner, Galileo.

"One of the things I've really enjoyed is working with old materials," Nye admits. "It's a thrill. It's actually a physical link with the great figures of

the past. You just have this sense of immediate contact with history."

Nye's own research into the science of history focuses on a less distant past. She studies the history of the modern physical sciences and has turned her findings into numerous articles and five books. The most recent,

Harvard University, election as president of the national History of Science Society and appointment as co-director of the OU history of science department's Rockefeller Foundation Fellowship in the Humanities program and the new Andrew W. Mellon Foundation Postdoctoral program.

Nye insists that she was not prepared for her latest national honor, which she calls "a complete surprise." But her selection by the American Academy of Arts and Sciences came as no surprise to Nye's colleagues at the University.

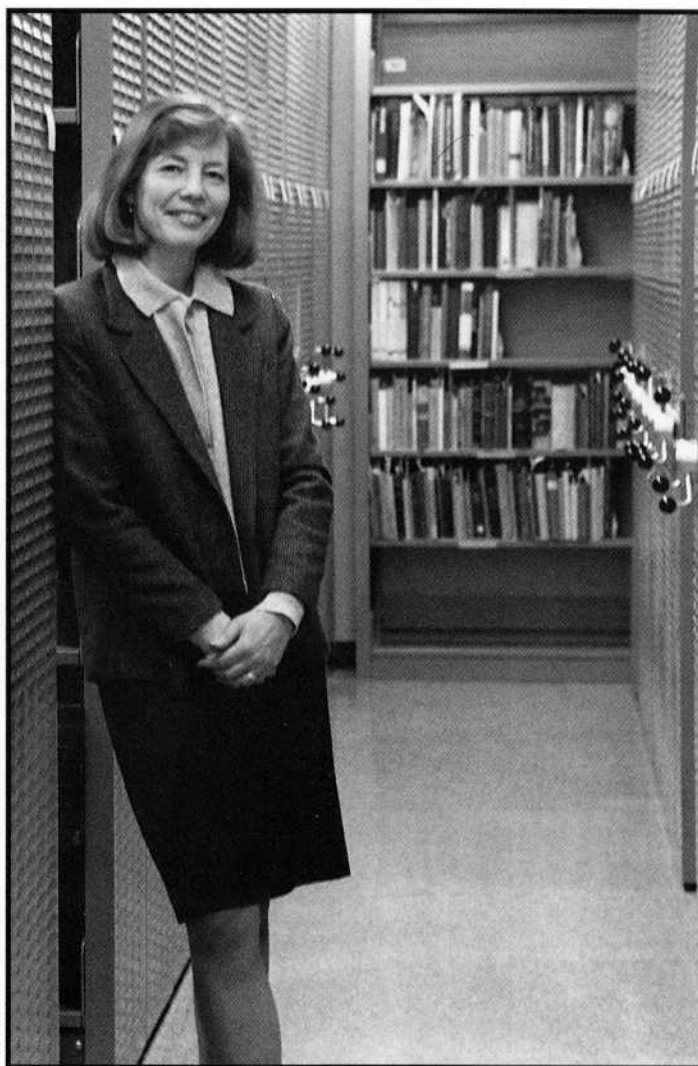
"Professor Nye is an outstanding scholar in the history of science, and her election certainly underscores that," says David Young, dean of the College of Arts and Sciences. "It's a great honor for her, the department of the history of science and the University."

Nye's current scholarly work is an exploration of the careers of physical chemist Michael Polanyi and Nobel-Prize-winning physicist Patrick Blackett. These two European scientists were colleagues in England in the midst of Hitler's rise to power during the 1930s.

Nye's project, which will require five years to complete, already has taken her to New York and London to study correspondence between Polanyi and Blackett, as well as the scientists' papers, laboratory workbooks and government documents. She has found evidence that the two scientists frequently disagreed about

the influence of politics on science, the responsibility of scientists and government's role in science. Among issues they debated were a new instrument of war—the atomic bomb—and nuclear weapons policy.

"In a very real way, my work brings

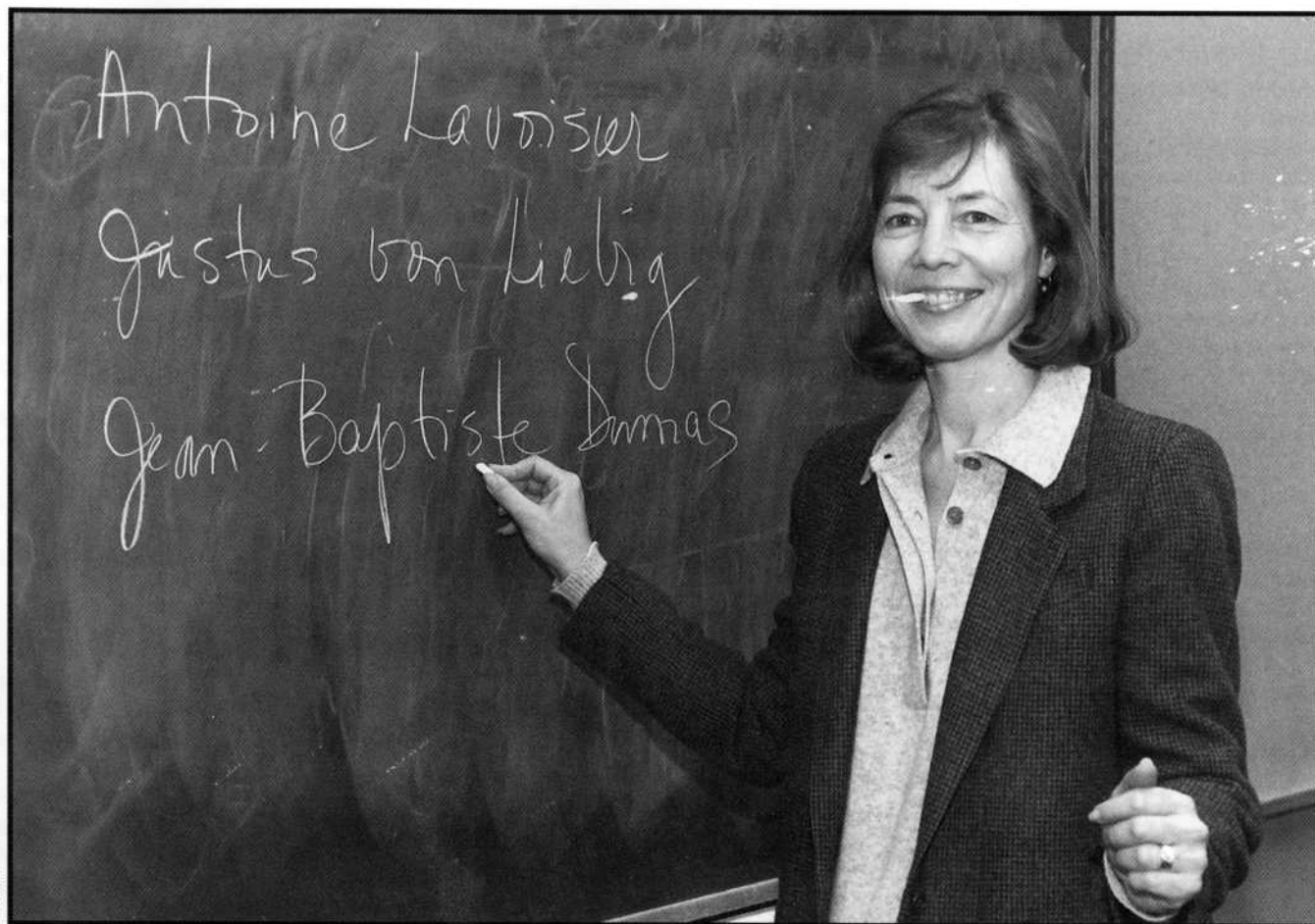


Gill Jain

To Mary Jo Nye, working with the rare materials in OU's renowned History of Science Collections is more than just a thrill: "It's actually a physical link with the great figures of the past."

*From Chemical Philosophy to Theoretical Chemistry*, was published in December by the University of California Press.

Her résumé is sprinkled liberally with accomplishments and awards, including a visiting professorship at



Gil Jain

*Mary Jo Nye's status as one of OU's most valued faculty members has been further enhanced by her election to membership in the prestigious American Academy of Arts and Sciences, the latest in a string of academic accolades. But while her research in the history of the modern physical sciences has produced five books and numerous articles, she is equally respected as a teacher.*

me into contact with some of the turning points of the 20th century," Nye says.

"One of the things that history of science does is show how scientific theory and scientific work are imbedded in our cultural world, as well as our natural world," she adds. "As scientists struggle to answer questions, there are many factors that determine what questions they're going to ask. Scientific work is very much a human enterprise."

Nye acknowledges the enterprise of science is not always readily understood. However, she contends, everyone experiences the impact of science.

"In a country like ours, a representative democracy where people vote, people need to be well informed about

what science is, how it works. Big scientific discoveries and controversies get into the news—they're part of our daily world. People realize that science is a very important part of everyday life," Nye says.

Historical research, which Nye likens to detective work, also has taught the OU professor a simple lesson that easily translates into daily life.

"You can see that the future is not predetermined," she says. "Individuals can have a real impact on the future."

Nye's research inspires an optimism and enthusiasm that extends to the classroom as well. She believes her research makes her a better teacher, and in turn, her teaching makes her a better researcher. The exchange that

occurs between students and teacher leads to new research insights and ideas. Knowledge gained through research is poured back into Nye's classroom performance.

"Students value knowing that what they're learning is really current research," she says, explaining that she has found that students benefit greatly from working with faculty who are on the cutting edge of discovery.

Feedback from the classroom reinforces the professor's conclusion.

"Teaching and research go hand in hand," Nye concludes. "If that's a cliché, it's because it rests in some truth. Faculty members learn from students, just as students learn from faculty."

—Anne Barajas