

# Welcome

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We are living in rapidly changing times. The end of the Cold War marks the beginning of a new era in which we are going to have different lives from the ones we've been living. This is true for every sector of American society—for industry, for government, and certainly for science and our national laboratories. Even in changing times, some things don't change. We still believe, as we always have, in the importance of exploration and discovery, in the inherent worth of understanding our universe, and in the value of long-term investment in knowledge.

Nevertheless, we know that science, even so-called basic research, always takes place in the context of the greater society, the broader society. A combination of factors over the past 50 years may sometimes have led those of us who do basic research to overlook or even to take for granted our connection to the rest of the world. First, national security needs during the Cold War, and our country's consequent willingness to pay for basic research, especially in physics, led to a scale and stability of funding for research facilities that insulated some individual scientists from thinking about our connection to the greater society. A further separation between science and society comes from the widening gulf between the layman's common-sense understanding of the world and the scientific view, with its own distinct language and culture. Even the geographic isolation imposed by huge scientific facilities, fenced off in remote places, has contributed to the disconnection between science and society. These and other factors have tended to encourage an illusion among some scientists—among them some high-energy physicists—that pure scientific research occupied a special, perhaps privileged place in our national life, somehow separated from the rest. Since the time of Vannevar Bush and the “Endless Frontier,”

we have been able to go on believing that everyone, especially the taxpayers, shared our view of pure science as a high calling that deserved generous funding. Some have compared it to a sort of secular priesthood.

Quite frankly, right now there are those who believe that science is the problem with the world. Vaclav Havel, the President of the Czech Republic, has referred to this phenomenon as the crisis of objectivism. He essentially blames science for the ills of our current society. Congressman George Brown has used Havel's comments as a starting point to talk about reconsideration of the role of science in American society in general. Suddenly, the end of the Cold War and the consequent shift in national priorities have given scientists a healthy dose of reality. Every day brings reminders that we are, and in fact always have been, firmly connected with the society in which we live.

It is a good time to take a fresh look at the connections between science and society. We are happy to have this opportunity to explore with you what the nature of these new relationships will be. The Department of Energy's national laboratories represent one of the greatest investments ever made in science and technology. In the past, we've seen how basic science at those labs has provided the foundation for our national security, and we fervently believe that science has also contributed immensely to our national prosperity. We value opportunities like the one we have today to look at new ways in which the national laboratories can serve as a resource for a productive and competitive economy. We believe that the laboratories have worthwhile, even unique, contributions to make. In fact, long before tech transfer became a buzz word, Fermilab recognized the importance of creating strong ties with the industrial community. In 1980, Fermilab's second director, Leon Lederman, founded the Industrial Affiliates to build and strengthen the connection between basic research at Fermilab and the productivity of U.S. industry. We hope to make these links even stronger in the years to come.

Since you'll hear from Leon Lederman later in the day, I will not attempt to tell you a joke, because that's something only he can do in these environs, but I do want to take the opportunity to tell you a story. We are always glad to have visitors at Fermilab. We are proud of the fact that we have an open site where anyone can visit one of America's liveliest research laboratories. I think with the close of the Cold War we can count on remaining an open site. Among our 50,000 guests last year was a 13-year-old boy from Oregon. He was extremely interested and excited about his tour of the Lab, and when we took him up to the 15th floor of Wilson Hall, he looked wonderingly out across the vast expanse of the prairie and the large accelerator ring, the cooling ponds, the Booster, the Antiproton source. Clearly, he was impressed. He said, "Gee, this is a big place." He paused. "But I don't exactly understand what crushing atoms does for the country." Welcome to Fermilab and this meeting of the Fermilab Industrial Affiliates. We should all use this process to take another look at just what crushing atoms really does do for the country and what basic science in general really does do for the country. ❖