

“I don’t mind jumping into something I know not very much about. I believe I’ll be all to learn it...I think that’s a big piece of it, being willing to take a chance.”

Mary L. Good, 1997 Priestley Medalist, 1950 alumna AR State Teachers College

“It is essential, if we want to continue to reap the benefits of science, to commit as a nation to preparing more young people for extraordinary careers in science.”

Carol W. Greider, 2009 Nobel laureate in physiology & medicine

“To hobble the arts is to hamstring our future. Even scientists and inventors can agree to that.”

[Robert Root-Bernstein](#), professor of physiology, Michigan State University

“If any human being earnestly desires to push on to new discoveries instead of just retaining and using the old; to win victories over Nature as a worker rather than over hostile critics as a disputant; to attain, in fact, clear and demonstrative knowledge instead of attractive and probable theory; we invite him as a true son of Science to join our ranks.”

Sir Francis Bacon (1561 – 1626)

“Somewhere, something incredible is waiting to be known.”

Carl Sagan (1934 - 1996)

“...when you do such magnificently hard things—like sending off a Ferdinand Magellan or a Neil Armstrong—you open human possibility in ways utterly unpredictable.”

Charles Krauthammer, column from *Arkansas Democrat Gazette*, July 17, 2009.

“...What you are after—call it truth or understanding—waits patiently for you while you screw up. If scientists make progress...they do so because nature doesn’t change and we just keep trying. It’s not because we are particularly smart but because we are stubborn.”

D. Herschbach, 1986 Nobel laureate in chemistry,
as quoted in *What the Best College Teachers Do* by Ken Bain, 2004 p 144

“When I finish this process, I want students to feel like they have invented calculus and that only some accident of birth kept them from beating Newton to the punch.”

Donald Saari as quoted in *What the Best College Teachers Do* by Ken Bain, 2004 p 102

“Let [students] see us in moments of crisis and uncertainty, when the supposed expert doesn’t know either, where we’re forced to confront a problem and find creative solutions to it. We shouldn’t shy away from showing this side of ourselves to our students ... it doesn’t diminish our impact as experts, rather, it lets them know that part of being an expert is to take risks and adapt when things don’t come out the way you expect them to.”

Jennifer Blackmer, plenary address, CUR Natl. Conf., June 23, 2008.

It was pretty exciting to think that our research is the real thing and that it is applicable to individuals outside of the university community.

Anonymous student comment quoted by P. J. Pukkila and K. M. Watley
CUR Quarterly, Dec. 2001, p82.

“If people could see what we're doing with a million-and-a-half of their dollars, they'd think we are crazy. If they knew why we are doing it, they'd know we are.”

Corbin Allardice and Edward R. Trapnell *The First Reactor* Dept. of Energy 1982.

“We choose to go to the moon ... and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win ...” J. F. Kennedy, September 12, 1962.

“The emphasis on science education that *Sputnik* catalyzed more than a generation ago has sputtered and wants for revitalization.”

Myra Thayer *Chem. & Eng. News* 12/5/05, p 63.

“In order to have good ideas one has to have lots of ideas.”

Linus Pauling (1901 - 1994)

“The true delight is in the finding out rather than the knowing.”

Isaac Asimov (1920 - 1992)

“The scientist does not study nature because it is useful to do so; he studies it because he delights in it, and he delights in it because it is beautiful.”

Henri Poincar 19th century French mathematician & physicist (1854-1912)

“The frontiers of knowledge are never far away in any science, and he revealed them to us constantly, sometimes explaining how a sector had been pushed back. I did not get such good examination results..., but I did find there the spirit of science.”

a comment in September 2000 *Chem 13 News* by Sir Christopher Ingold
(renowned organic chemist) about a past science instructor

“I have also benefited from teaching; as I try to explain my views to students with critical and open minds, I find myself continually challenged to go back and rethink ideas. I know teaching and research as complementary, mutually reinforcing activities.”

M. J. Molina, 1995 Nobel Laureate in chemistry (from *J.Chem.Ed.* 2002, p. 1187)

“Maintaining that he is not gifted with a 'superior intelligence,' [Peter Siegel] attributes his success to the passion he has for his work. [Siegel says] ' There is nothing that competes with the feeling you get when after hours, days, weeks, or even years of work on a problem, you get the answer- even if it's not the one you expected!' ”

From *Chem Matters* Sept. 2002 p. 6.

Siegel is head of a NASA group at JPL specializing in terahertz atmosphere imaging technology

“Good mentors help students pass beyond the initial frustration of scientific research and move into productive work. The mentors know that the time and the mistakes are as natural as breathing to the scientist.”

“The Impact of Research on Undergraduates' Understanding of Science”
by Leo Gafney *CUR Quarterly* June 2001 p. 172.