

Letter to a Young Researcher

When we hire someone at PARC, there is one qualification we consider more important than technical expertise or intellectual brilliance: intuition. A well-honed intuition and the ability to trust it are essential tools for doing the kind of research we do here.

Our approach to research is "radical" in the sense conveyed by the word's original Greek meaning: "to the root." At PARC, we attempt to pose and answer basic questions that can lead to fundamental breakthroughs. Our competitive edge depends on our ability to invent radically new approaches to computing and its uses and then bring these rapidly to market.

This is different from what goes on at most corporate research centers, where the focus is on improving current technology and advancing the status quo. If you take a job somewhere else, when you embark on a project you will probably have a pretty good idea of how and when your work will pay off. The problems you address will be well defined. You will help to improve computer technology state of the art by going one step farther along a well-plotted path.

If you come to work here, there will be no plotted path. The problems you work on will be ones you help to invent. When you embark on a project, you will have to be prepared to go in directions you couldn't have predicted at the outset. You will be challenged to take risks and to give up cherished methods or beliefs in order to find new approaches. You will encounter periods of deep uncertainty and frustration when it will seem that your efforts are leading nowhere.

That's why following your instinct is so important. Only by having deep intuitions, being able to trust them, and knowing how to run with them will you be able to keep your bearings and guide yourself through uncharted territory. The ability to do research that gets to the root is what separates merely good researchers from world-class ones. The former are reacting to a predictable future; the latter are enacting a qualitatively new one.

Another characteristic we look for in our research staff is a commitment to solving real problems in the real world. Our focus is on technology *in use*, and people here are passionate about seeing their ideas embedded in products that shape the way people work, think, interact, and create.

At Xerox, both corporate executives and research scientists are strongly committed to making research pay off. Over the last few years, new channels of dialogue have opened between research and other parts of the company. In particular, corporate strategy and research shape and inform each other. PARC's strategic role will undoubtedly be further strengthened by the emergence of digital copying and the company's new focus on documents of all kinds, whether in digital or paper form. The fusion of two previously separate Xerox businesses - information systems and copying - means that the company will be able to capitalize on PARC's expertise in ways it has been unable to do in the past.

This is an exciting time to be embarking on a career in systems research. New tools and technologies make it possible to deliver large amounts of computing power to users, and this increase in power opens up possibilities for using computation in new ways.

If you come to work here, you will sacrifice the security of the safe approach in which you can count on arriving at a predictable goal. But you will have an opportunity to express your personal research "voice" and to help create a future that would not have existed without you.

Sincerely,

John Seely Brown
Corporate Vice President

Frank Squires
Vice President, Research Operations