



Meet an MPRINT Scientist



Rick Vierling

Rick graduated from the University of Missouri-Columbia with a major in Biochemistry and earned an M.S. degree in Genetics from the same institution. He earned his Ph.D. in Genetics from Texas Tech University. Since 1992, he has been Director of the Genetics Program at the Indiana Crop Improvement Association and is currently an adjunct Associate Professor in the Department of Agronomy at Purdue.

Besides his work with genes conferring broad-based resistance to soybean cyst nematode, Rick has an active research program in other areas. One project is the production of Human Interest Proteins and industrial enzymes in soybean. Rick's patented system takes advantage of unique characteristics found in the soybean seed coat. The goal of his soybean peroxidase research is to genetically modify soybean lines for higher quantities of peroxidase. Soybean peroxidase is a highly reactive and thermally stable enzyme that is an effective substitute for formaldehyde and chlorine bleach in industrial applications.

Some MPRINT Science

Bula, R. J., R. A. Vierling, and S. L. Goldman. (2000) Genetic engineering in a micro gravity environment. *Chem. Innovations* 1:30-34.

Chen, H. and R. A. Vierling. (2000) Molecular cloning and characterization of soybean peroxidase gene families. *Plant Science* 150:129-137.

R. A. Vierling. (1998) A soybean peroxidase gene family and an assay for detecting soybean peroxidase activity. Patent #5,840,558.



MPRINT's Jamal Faghihi, Rick Vierling, and Virginia Ferris inspect greenhouse soybeans.

Personal MPRINT

Rick had a soybean experiment aboard the Space Shuttle Discovery in October, 1998, and Senator John Glenn was the "technician" who performed the experiment. Rick's hobbies include hunting, fishing, and baseball collectibles.