

NCAUR Highlights: 1940-2000

Year	Innovation	Outcome	Links
1940s	Improved soybean oil quality.	Elevation of soybean as a midwestern crop through identification of off-flavor sources, remedial action, and low linolenic-acid germplasm.	Soybean Oil (pdf)
1940s	Large-scale production of penicillin.	Enabled treatment of World War II soldiers, starting with D-Day, and led to NCAUR's Historical Chemical Landmark designation among other outcomes.	The Rescue of Penicillin
1950s	Mass-production of dextran.	Rushed to the frontlines of the Korean War, this blood-plasma extender improved wounded soldiers' odds of surviving severe blood loss.	Dextran, Xanthan Gum, and Levan (pdf)
1960s	Xanthan gum.	Became a standard ingredient in many everyday products, from soups and sauces, to toothpaste and skin creams.	Dextran, Xanthan Gum, & Levan (pdf)
1970s	SuperSlurper.	The starch-based copolymer generated over 40 nonexclusive licenses to make, use, or sell the technology, including such spin-offs as synthetic absorbents used in diapers, batteries, wound dressings, and fuel filters.	Starch That Slurps
1980s	Identification of pentose-fermenting yeasts.	Enabled the first-ever conversion of a family of woody-plant-cell-wall sugars into ethanol—a renewable, biobased alternative to fossil fuels like gasoline.	Bioenergy Today
1990s	Oatrim.	Made from soluble oat fiber, this fat replacer offers diverse food and beverage uses. In 1999, Oatrim production exceeded 20 million pounds, resulting in more than \$1 billion in retail sales.	For You, the Consumer
2000	Nutrim.	This beta-glucan-rich descendent of Oatrim is used in food and beverage products like smoothies as a cholesterol-lowering ingredient.	Nutrim Enhances Foods' Nutritional Value