

## THE CENTER

The largest USDA-ARS research center west of the Mississippi. Central to the nation's most diverse and productive agriculture and to high-technology innovation leaders. More than 250 scientists in plant biochemistry, genetics, molecular biology, natural product chemistry, microbiology, chemical engineering, and ecology.



## MISSIONS

Novel foods, crop refining, crop improvement, understanding gene structure, cell wall architecture and other features of plants that are critical to use in foods, feed, biofuels and biobased products. The Center also emphasizes food safety and biological control of invasive weed, insects and diseases.

INNOVATION FOR FOOD  
AND AGRICULTURE:  
GROWERS-PROCESSORS-CONSUMERS



# WRRRC

## RESOURCES

Modern laboratories, pilot plants and greenhouses, functional genomics and sequencing, mass spectrometry-based proteomics, bioinformatics, bio-safety rated small animal facility, NMR, electron microscopy, and other advanced instrumentation.

## COLLABORATORS & PARTNERS

Businesses, federal agencies, state and local governments, and universities. International collaborations with European Union, Former Soviet Union countries and the Pacific Rim. More than 20 Cooperative Research and Development Agreements (CRADAs) for technology transfer.

## CONTACT

[www.ars.usda.gov/pwa/wrrc](http://www.ars.usda.gov/pwa/wrrc)  
(daily updates)





# WESTERN REGIONAL RESEARCH CENTER

INNOVATION FOR FOOD  
AND AGRICULTURE:  
GROWERS-PROCESSORS-CONSUMERS



**CENTER DIRECTOR**  
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## WRRRC RESEARCH UNITS & LEADERS

**BIOPRODUCT CHEMISTRY & ENGINEERING**  
*New products, biobased products and biofuels from grains and crop residues.*  
William Orts [orts@pw.usda.gov](mailto:orts@pw.usda.gov)

**GENOMICS & GENE DISCOVERY**  
*Molecular, genomic, and bioinformatic strategies to enhance agronomic performance and end uses of cereal crops*  
Olin Anderson [oanderson@pw.usda.gov](mailto:oanderson@pw.usda.gov)

**CROP IMPROVEMENT/UTILIZATION**  
*Biochemical and molecular approaches to enhance agronomic performance and uses of crop plants.*  
Maureen Whalen [mwhalen@pw.usda.gov](mailto:mwhalen@pw.usda.gov)

**PLANT MYCOTOXIN RESEARCH**  
*Combat mycotoxin contamination of foods by inhibiting fungal growth and mycotoxin synthesis, controlling insect pests and removing contaminated products.*  
Bruce Campbell [bcc@pw.usda.gov](mailto:bcc@pw.usda.gov)

**EXOTIC & INVASIVE WEEDS**  
*Novel methods for managing exotic and invasive rangeland and aquatic weeds.*  
Ray Carruthers [ric@pw.usda.gov](mailto:ric@pw.usda.gov)

**PROCESSED FOODS RESEARCH**  
*New markets and healthfulness for grains, legumes, fruits and vegetables and their processed products*  
Tara McHugh [thm@pw.usda.gov](mailto:thm@pw.usda.gov)

**FOODBORNE CONTAMINANTS RESEARCH**  
*Better food security and safety by improvements to existing and creation of new technologies for analysis of pathogens, prions, and toxins*  
Mark Carter [mcarter@pw.usda.gov](mailto:mcarter@pw.usda.gov)

**PRODUCE SAFETY AND MICROBIOLOGY**  
*Better safety of foods through intervention to control pathogenic bacteria and minimize naturally occurring or process-induced toxicants*  
Robert Mandrell [mandrell@pw.usda.gov](mailto:mandrell@pw.usda.gov)

**TECHNOLOGY TRANSFER**  
David Nicholson [drn@pw.usda.gov](mailto:drn@pw.usda.gov)

BIOBASED PRODUCTS & INDUSTRIAL CROPS    ENVIRONMENTAL QUALITY & INVASIVE SPECIES    HEALTHY FOODS  
BIOFUELS    FOOD & CROP IMPROVEMENT FOR PRODUCTION & PROTECTION    FOOD PROCESSING & FOOD SAFETY