



USDA Agricultural Research Service Office of Scientific Quality Review Panelist Orientation 2018



Agenda

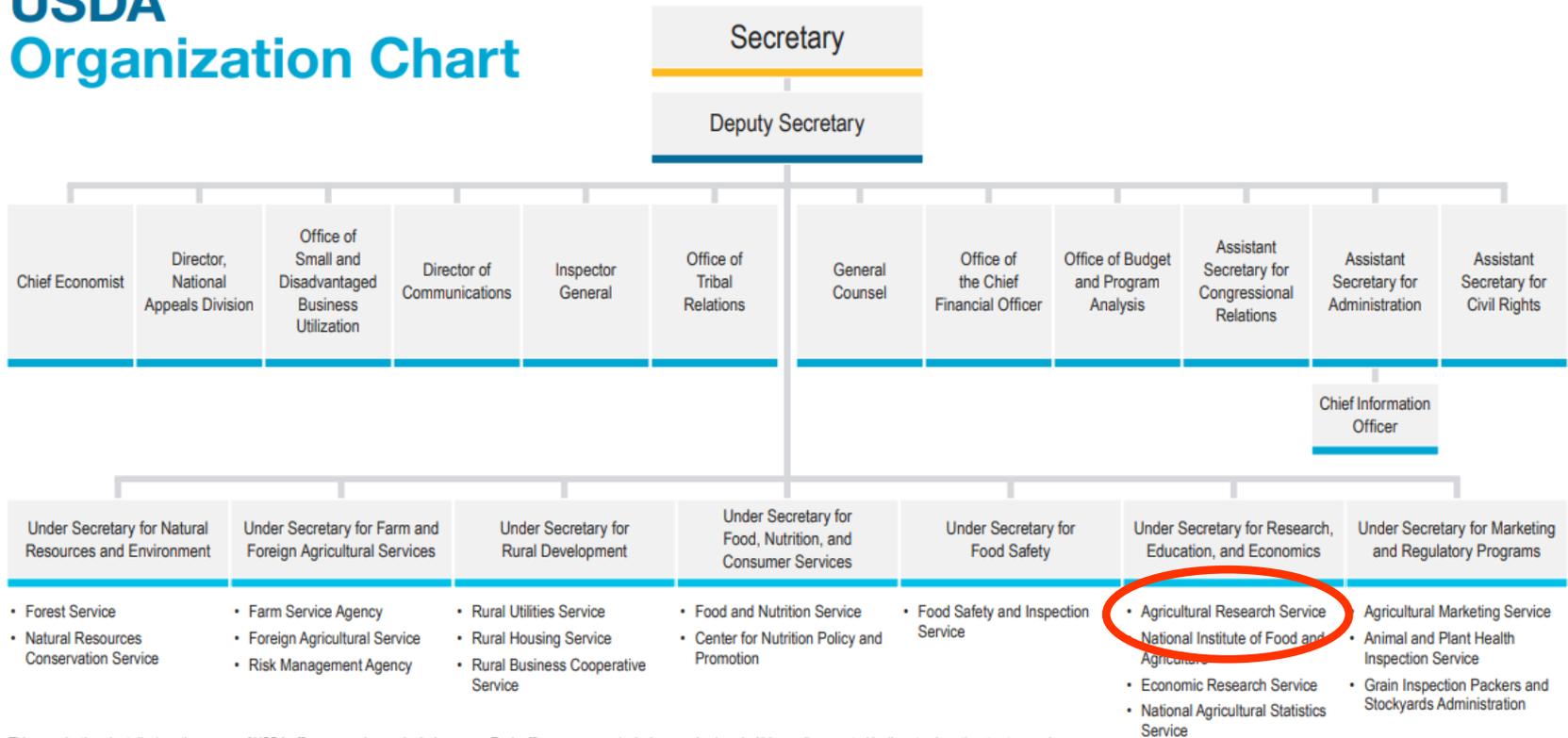
- USDA – ARS in context
- ARS – About us
- ARS Research Priorities
 - How we set them
 - How these lead to project plan objectives
- ARS Peer Review
 - Why OSQR?
 - Not a grant decision!
- Panelist Responsibilities
- OSQR Resources



USDA Structure - Where is ARS?



USDA Organization Chart



This organization chart displays the names of USDA offices, agencies, and mission areas. Each office, agency, and mission area is placed within a cell connected by lines to show the structure and hierarchy (Under Secretary, Deputy Secretary, or Secretary) for which they fall under. An HTML version that lists [USDA Agencies and Offices](#) and [USDA Mission Areas](#) is also available on usda.gov.

Research, Education, and Economics

Vacant
Under-Secretary



Chavonda Jacobs - Young
Acting Deputy Under Secretary

ARS



Chavonda Jacobs - Young
Administrator

NIFA



Scott Angle
Director

ERS



Chris Hartley
Acting Administrator

NASS



Huber Hamer
Administrator

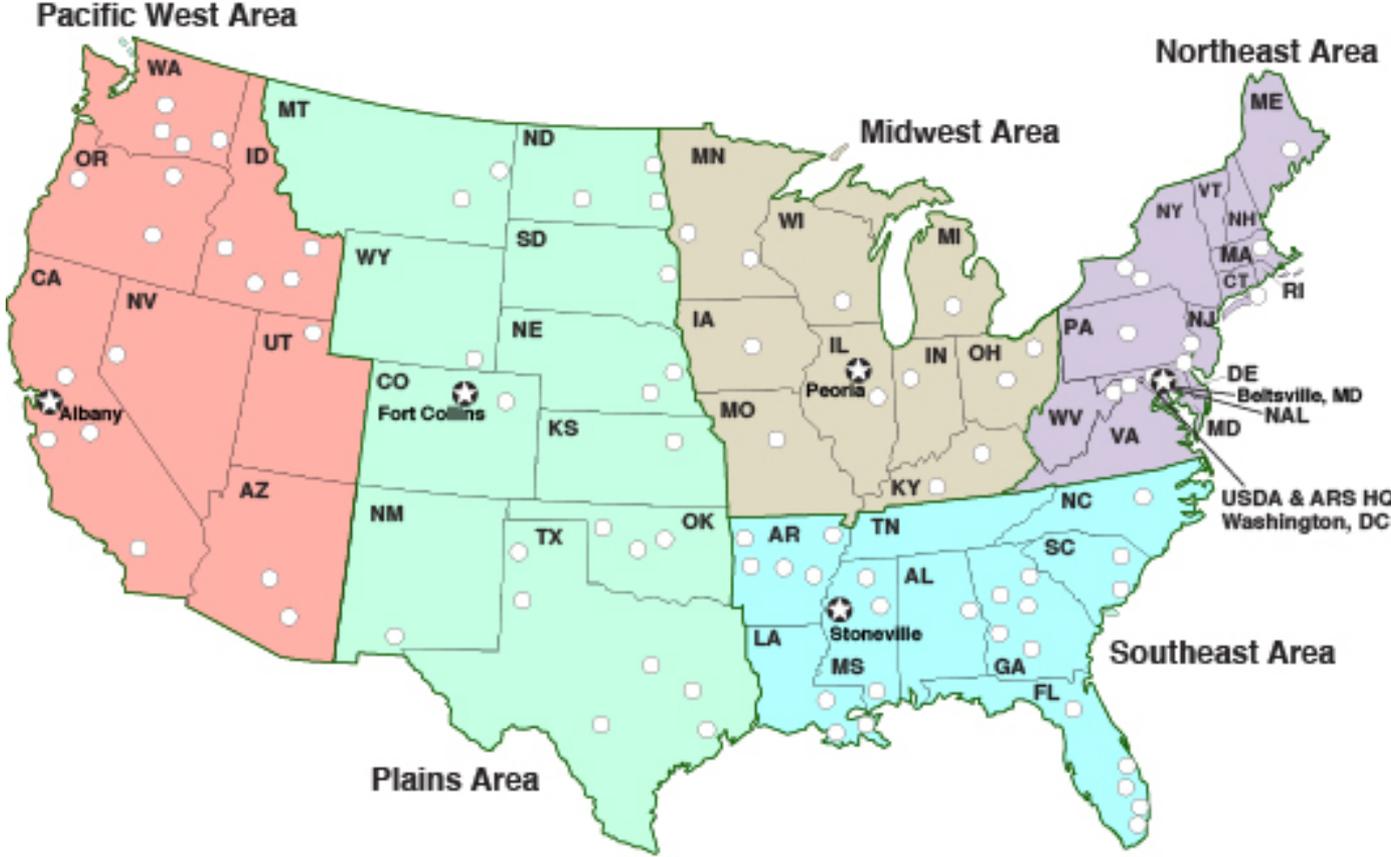


ARS Profile



- In-house science research arm of USDA
- Farm-to-table research scope
- Information and technology transfer
- Administration and stakeholder priority setting process
- National Programs in Plants, Animals, Nutrition, Natural Resources
- 690 projects
- 2,000 scientists and post docs
- 6,000 + other employees
- 90+ laboratories
- ~\$1.1 billion annual budget
- Partnerships with universities and industry
- International collaborations

ARS Areas



Administrator's Council Agricultural Research Service



Steven Kappes
Associate Administrator
National Programs



Chavonda Jacobs - Young
Administrator



Simon Liu
Associate Administrator
Research Operations

Program Planning and Coordination (National Program Staff)



Jeffrey Silverstein
Deputy Administrator,
National Program Staff
Animal Production and Protection



Marlen Eve
Deputy Administrator,
National Program Staff
Natural Resources & Agricultural Systems



Jack Okamuro
Acting Deputy Administrator,
National Program Staff
Crop Production and Protection



Pamela Starke-Reed
Deputy Administrator,
National Program Staff
Human Nutrition and Food Safety



Brian Norrington
Director,
Office of International
Research Programs

Area and NAL Directors



Larry Chandler
Plains Area



J.L. Willett
Midwest Area



Archie Tucker
Southeast Area



Dariusz Swietlik
Northeast Area



Robert Matteri
Pacific West Area



Paul Wester
National Agricultural Library

Program Support and Operations (HQ)



Joon Park
Deputy Administrator,
Administrative &
Financial Management



Sharon D. Drumm
ARS Chief of Staff



Willis Collie
Director
Office of Outreach, Diversity,
and Equal Opportunity



Michael Arnold
Director,
Budget & Program
Management Staff



Paul Gibson
Chief Information Officer



Sharon Drumm
Acting Director,
Office of Communication



Mojdeh Bahar
Assistant Administrator,
Office of Technology Transfer

ARS National Programs

Animal Production

- Food Animal Production (101)
- Animal Health (103)
- Veterinary, Medical, and Urban Entomology (104)
- Aquaculture (106)

Natural Resources

- Water Availability & Watershed Management (211)
- Soil and Air (212)
- Grass, Forage, and Rangeland Agroecosystems (215)
- Sustainable Agricultural Systems (216)

Crop Production

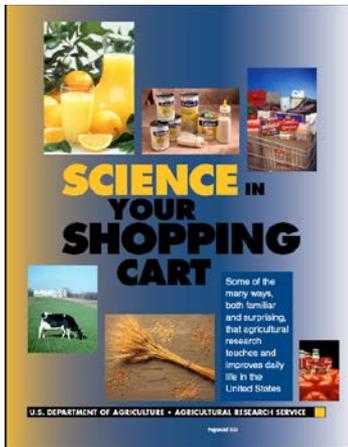
- Plant Genetic Resources, Genomics and Genetic Improvement (301)
- Plant Diseases (303)
- Crop Protection & Quarantine (304)
- Crop Production (305)

Nutrition, Food Safety/Quality

- Human Nutrition (107)
- Food Safety (animal & plant products) (108)
- Product Quality & New Uses (306)

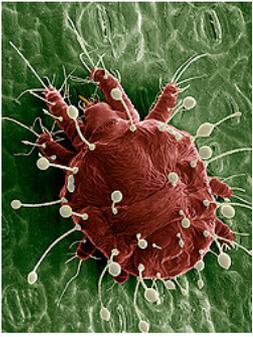


ARS Mission



- ❑ Solve high priority agricultural problems (farm to plate) through research
- ❑ Transfer solutions to customers and stakeholders





ARS Research Priorities



- Ensure high-quality, safe food, and other agricultural products;
- Assess the nutritional needs of Americans;
- Sustain a competitive agricultural economy;
- Enhance the natural resource base and the environment;
- Provide economic opportunities for rural citizens, communities, and society as a whole

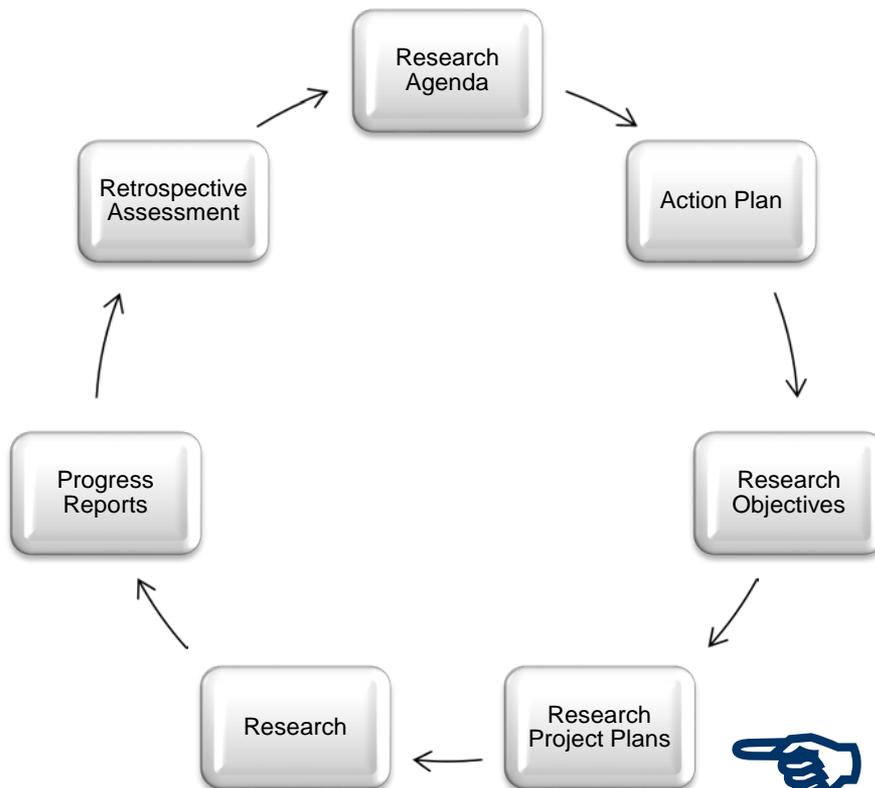


ARS Customers and Stakeholders

- Administration
- Congress
- Action and Regulatory Agencies
- Producers—Farmers and Ranchers
- Industry
- State and Local Governments
- Non-governmental Organizations (NGOs)
- Advisory Boards
- Consumers



Building Blocks of ARS Research Cycle



OSQR peer review

Inputs to Priority Setting



Executive Branch
(OMB, OSTP, USDA,
other Federal agencies)



Customers, Partners,
Stakeholders, &
Advisory Boards



Congress



Scientific Community



Agency Scientists
& Managers



<https://www.ars.usda.gov/research/programs/>

ARS Strategic Plan
&
National Programs:
Visions
Action Plans
Accomplishment Reports
Retrospective Assessments

USDA United States Department of Agriculture
Agricultural Research Service

ARS Home | About ARS | Contact Us

Research ▾ Media ▾ About ARS ▾ Work With Us ▾

[ARS Home](#) » [Research](#) » National Programs

Related Topics

- National Programs**
- Office of Scientific Quality Review
- Office of International Research Programs
- Office of Pest Management Policy
- Search for an ARS project
- Search for an ARS scientific manuscript

About the Programs

- Annual Report on Science
- ARS Strategic Plan

Related Information

- ARS Memorial Lectures
- 1890 LGU Research Fellowships
- ARS Policy for Scientific

National Programs

ARS research is organized into National Programs. These programs serve to bring coordination, communication, and empowerment to approximately 690 [research projects](#) carried out by ARS. The National Programs focus on the relevance, impact, and quality of ARS research.



[Steven M. Kappes](#)
Associate Administrator, National Programs

Nutrition, Food Safety/Quality

- [Human Nutrition](#) (NP #107)
- [Food Safety \(animal and plant products\)](#) (NP #108)
- [Product Quality and New Uses](#) (NP #306)

Animal Production and Protection

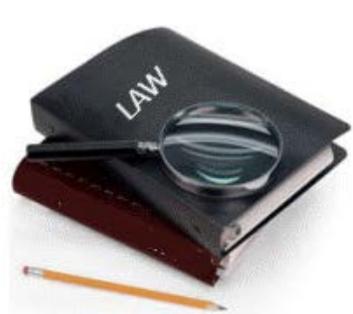
- [Food Animal Production](#) (NP #101)
- [Animal Health](#) (NP #103)
- [Veterinary, Medical, and Urban Entomology](#) (NP #104)
- [Aquaculture](#) (NP #106)

Crop Production and Protection

Peer Review is Important to ARS ... and It's the Law!

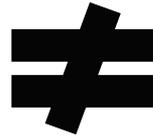
1998 Farm Bill (PL 105-185) Requires

- ARS Research Project Plans Peer Reviewed every 5 years
- External reviewers, unless expertise is not available outside of ARS
- Every plan must pass review
 - Failing plans may be revised and re-reviewed
 - Plans failing re-review will not be implemented



ARS Peer Review vs. Granting Agencies

ARS



- ASSIGNED Objectives
- NO FUNDING review/decision
- NO RANKING of plans
- FIVE-YEAR research cycle
- PLAN Review
- Like a Manuscript Peer Review
- Reviewer Feedback
 - ARS Response Required by Law
 - Plans often changed based on Panel comments, as a manuscript
- Scientist Responses Available to Review Panel

Granting Agencies

- DESIGNED Objectives
- Decide to Fund, or not to
- Rank Proposals for funding
- Cycles vary, often 1-3 years
- PROPOSAL Review
- Traditional Grant Peer Review
- Reviewer Feedback
 - May be seen by researchers
 - Proposals perhaps may not change based on Panel comments
- Scientist responses may not be available to Review Panel

ARS Project Plan Peer Review Criteria



Adequacy of Approach

- Plan and procedures appropriate?
- Sufficient information provided for understanding and review?
- Researcher understanding of methodology, technology demonstrated?
- Researcher/collaborator roles clear?
- Plan conveys a clear, logical experimental design; well-written?

Probability of Success

- Plan likely to lead to success, or produce significant new knowledge? If the risks are significant, are they worth the potential payoffs?

Merit and Significance

- Will the plan lead to new information, findings, or understandings?
- What is the potential impact to stakeholders? Society? Agriculture?

ARS Project Plan Peer Review Scores



Passing Scores

- **NO REVISION:** Excellent, no changes or additions, suggestions welcomed/responded to
- **MINOR REVISION:** Sound, feasible, minor changes needed
- **MODERATE REVISION:** Some change to approach needed, but feasible

What Happens Next?

- i. Lead Scientist responds to reviewers' comments and updates the research project plan
- ii. Science Quality Review Officer certifies each plan when panel recommendations are addressed, much like an approval from a science journal editor

ARS Project Plan Peer Review Scores



Borderline and Failing Scores

- **MAJOR REVISION**: Sound and Feasible IF significantly revised, major gaps in plan
- **NOT FEASIBLE**: Major flaws, omissions, or deficiencies; plan is unclear so as to be impossible to review

What Happens Next?

- Lead Scientist responds to reviewers' comments and revises the research project plan
- The plan is re-reviewed by the SAME panel, and a second on-line panel discussion is held
- The plan receives a second score at re-review

Re-reviewed plan scoring Major or Not Feasible a second time

- Is marked as "Failed Review"
- The plan will not be implemented

So you've agreed to be a Panelist ... now what?





Panelist Responsibilities – Preparing for the Review

- Panel Chair will assign each panelist two plans
 - One plan as the primary reviewer
 - Another plan as the secondary reviewer
 - Every panelist is expected to submit a written review for assigned plans
 - OSQR encourages comments on each plan from non-primary and non-secondary panelists
 - *We will provide non-primary/non-secondary reviewer form*
- Verify there are no Conflict of Interest (COI)
 - No collaboration in last 4 years with any of ARS researches on “your” two plans
 - No academic relationships (supervisory/advisory/etc.) in last 8 years with any of ARS researches on “your” plans
 - No institutional or individual consulting affiliation
 - No financial gain from the research reviewed
- Inform your Panel Chair/OSQR immediately
 - Of any possible COI that may have been missed
 - Of any difficulty in completing your Panelist Review Form



Panelist Responsibilities – Reviewing Assigned Plans

- Formulate feedback in the context of the ARS peer review
 - *Keep in mind differences between ARS peer review and traditional grant review processes*
 - Submit written reviews on time
 - *Late review comments bottleneck the entire process, and could impact the review discussion*
- Reviews are due ONE WEEK prior to panel discussion
- OSQR will combine all comments and send them in advance of the discussion to the entire panel for review and concurrence



Panelist Responsibilities – Preparing the Written Review Form

Adequacy of Approach and Procedures covers the plan objectives.

A common format style (circled) makes it easier to combine and discuss your review points accurately and efficiently!



Project Title: **Enhancing Production with High Throughput Phenotyping and Other Genetic Approaches**
 Lead Scientist: **Last, First** Date: Tuesday, January 23, 2018
 Name of the Review Session: **NP 500 13: Production (2018)**
 Reviewer ID Number: **EYPA7339**

PANELIST REVIEW OF ARS RESEARCH PROJECT PLAN

The purpose of this review is to judge the technical merit of the planned research and to make constructive comments for improvement. The focus of research has been determined by ARS to be essential to its mission, and, if approved, funding is available. Please provide both comments on each review criterion. For criterion 1, please follow the format provided. It is important to state briefly the rationale for suggestions or questions posed. Recommendations can include specific questions you believe should be addressed by the lead scientist.

1. **Adequacy of Approach and Procedures:** Are the hypotheses and/or plan of work well conceived? Are the experiments, analytical methods, and approaches and procedures appropriate and sufficient to accomplish the objectives? How could the project be improved?

For Adequacy of Approach and Procedures please use the following format to organize your comments:

- Overview of project and general review comments
- Objective 1
 - Subobjective 1.1.
 - Strengths
 - Questions or Recommendations
 - Subobjective 1.n...
 - Strengths
 - Questions or Recommendations
- Objective n...

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 5601 Sunnyside Avenue, Beltsville, Maryland 20705
 301-504-3282

ARS-225P (06/30/2019)



Panelist Responsibilities – Preparing the Written Review Form

Probability of Success in meeting the objectives.

Consider the team, the collaborators, and resources.



Project Title: Enhancing Production with High Throughput Phenotyping and Other Genetic Approaches
Lead Scientist: Last, First Date: Tuesday, January 23, 2018
Name of the Review Session: NP 500 13: Production (2018)
Reviewer ID Number: EYPA7339

2. **Probability of Successfully Accomplishing the Project's Objectives:** What is the probability of success in light of the investigator or project team's training, research experience, preliminary data, if available, and past accomplishments? Are the objectives both feasible and realistic within the stated timeframe and with the resources proposed? Do the investigators have an adequate knowledge of the literature as it relates to the proposed research?

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ARS-225P (08/30/2019)



Panelist Responsibilities – Preparing the Written Review Form

Merit and Significance

Will the successful completion of the project

- Lead to new information, findings, or understandings?
- Have a meaningful impact on stakeholders? Society? Agriculture?



Project Title: Enhancing Production with High Throughput Phenotyping and Other Genetic Approaches
 Lead Scientist: Last, First Date: Tuesday, January 23, 2018
 Name of the Review Session: NP 500 13: Production (2018)
 Reviewer ID Number: EYPA7339

3. **Merit and Significance:** Will the successful completion of the project enhance knowledge of a scientifically important problem? Will the project lead to the development of new knowledge and technology? Are you aware of any other data/studies relevant to this research effort? If applied research, comment on the value of the research to its customers.

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On-line Panel Discussion

- An agenda and combined reviews will be sent in advance
- Introduction of Panel members and Office of Scientific Quality Review staff
- Overview/reminder briefing of the OSQR process – some of the material covered today
- Panel Chair will lead review of each plan individually
- During the discussion, additional key points, if needed, can be added to a combined review comment document
 - Please be explicit about modifications that want to make*
- At the end of each plan discussion, the final panel recommendation form will be complete



On-line Panel Discussion

- Generally, a well focused discussion takes about 25-30 minutes for each plan
 - Read the documents provided ahead of time
 - Work with other panelists to maintain balance in discussion
 - *Identify concerns that ARS **researchers** can address or respond to*
 - *Have a clarifying discussion to agree on plan strengths, issues, and reviewer recommendations*
 - Ensure an adequate time to discuss each plan fully
- Remember, it is ultimately up to researchers to respond to, solve, or clarify issues or questions the panelists may have
- If you have a question or idea, don't hesitate to ask or share



On-line Panel Discussion

➤ Panel Chair-led Discussion Format for Each Plan

i. Overview (5 min)

Primary, then Secondary

ii. Review of each Objective (~ 20 min total for all objectives)

Primary, then Secondary, then others

iii. Probability of Success (2-3 min)

Primary, then Secondary, then others

iv. Merit and Significance (2-3 min)

Primary, then Secondary, then others

v. Scoring of EACH plan

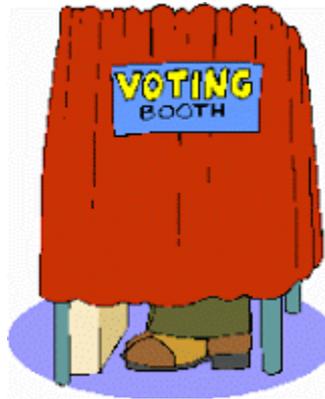
OSQR Coordinator will facilitate scoring



On-line Panel Discussion

➤ Scoring the Plans – this is **ANONYMOUS**

- Following EACH plan discussion, OSQR Coordinator will instruct the panel how to submit scores anonymously
 - The Panel Chair is required to vote as well
- Once all scores are submitted, OSQR Coordinator will share the scores and the overall score for the plan





Panelist Responsibilities

➤ **Finishing up the Panel Discussion**

- Once all plans are scored, OSQR Coordinator will review all tentative scores for final acceptance or individual revote – until the panel is in agreement – then the review panel will be complete
- OSQR Coordinator will provide information on next steps and request feedback on the review process
- OSQR Coordinator will turn it over to ARS Scientific Quality Review Officer and the Panel Chair for final statements



Panelist Responsibilities

➤ After the Panel Discussion

- The Panel Chair will provide a written statement/summary
 - If you feel something should be included, contact the Panel Chair
 - Reviewers remain anonymous, and are not named
 - No specifics or identifying information on the plan discussions
- Continue working with OSQR and other Panel members on any plans needing re-review
 - Generally re-review panels are scheduled ~12 weeks after the initial review
 - The re-review will focus on researcher responses to issues raised in the initial panel discussion of the plan only



if you haven't already...

- Finalize and Submit all Paperwork
 - Reviewer Information form
 - Panelist Additional Information form
 - Confidentiality Agreement form
 - CV
- Let your Panel Chair and OSQR know IMMEDIATELY
 - If you have a conflict of interest with your assigned plans
 - If you have any concerns over your ability to review your assigned plans

OSQR facilitates research project plan peer review panels by

- Answering all questions
- Providing and collecting documents
- Setting a date for the on-line Panel Discussion

OSQR Resources

- OSQR:
 - www.ars.usda.gov/OSQR
 - OSQR@usda.gov
- Office of National Programs:
 - www.ars.usda.gov/research/programs/
- OSQR Staff:
 - David.Shapiro@usda.gov
 - Marquee King, Coordinator OSQR@usda.gov
 - Linda.DalyLucas@usda.gov
 - Michele.Shaw@usda.gov





Thank you!

