To begin...

- Disclaimer
- Conflict of Interests
- Acknowledgments
**Scientific Research Spectrum**

- **Laboratory-or Clinic-based Research**
- **Clinical Trials/Health Services Research**
- **Community-based /Patient Care Health Services Research**

**Translational Research**

- **Basic Research**
  - Drug Discovery Research & Development Phases
- **Clinical Research**
  - Drug Treatments, Health Care & Services
- **Applied Research**
AHRQ Research Focus: How it Differs

- Patient-centered, not disease-specific
- Dual Focus -- Services + Delivery Systems

Effectiveness research focuses on actual daily practice, not ideal situations ("efficacy")

- AHRQ mission includes production and use of evidence-based information

- Health Services Research *
“Health services research (HSR) is the multidisciplinary field of scientific investigation that studies how social factors, financing systems, organizational structures and processes, health technologies, and personal behaviors affect access to health care, the quality and cost of health care, and ultimately our health and well-being. Its research domains are individuals, families, organizations, institutions, communities, and populations.”
Agency for Healthcare Research and Quality

- AHRQ
- Training Grants
- Research Grants
- Peer Review Committees
- Tips
Continue to foster the growth, dissemination, and translation of Health Services Research

Fostering the “next generation of researchers” who actively engage in workforce and knowledge production
Grant Opportunities*

- Pre and Postdoctoral Training
  - NRSA Institutional Training Programs (T32)
  - NRSA Postdoctoral Fellowships (F32)
  - Dissertation Grants (R36)

- Career Development Awards
  - Mentored Clinical Scientist Awards (K08)
  - Mentored Research Scientist Development Award (K01)
  - Independent Scientist Awards (K02)

*All of these are open program announcements, with the exception of the T32, which is announced every five years. Next announcement will be published this year for FY 13 five-year starts.
# 28 T32 Institutional Training Programs

(www.ahrq.gov/fund/training/t32.htm)*

<table>
<thead>
<tr>
<th>University of Alabama, Birmingham</th>
<th>University of Minnesota</th>
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<td>Brandeis University</td>
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<td>Yale University</td>
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*Programs in yellow support predoctoral and postdoctoral students. Those listed in green support only predoctoral students and those listed in pink support only postdoctoral students.
Postdoctoral Fellowships (F32)

- Up to three years of support; recommended at least two for clinical researchers
- Full-time effort, some part-time employment allowed
- Three application deadlines annually
- Stipend and partial tuition benefits, same as T32
  - Stipend – approximately $38,000 to $53,000, can be supplemented with non-Federal funds
  - Tuition and fees reimbursed partially – formula applies
Mentored Research Scientist Awards (K01)

- **Audience** — research trained doctorates (e.g., Ph.D., Sc.D., Dr.P.H.) who require mentoring and have potential to develop into independent investigators

- **Duration** — 3 to 5 years, nonrenewable

- **Level of Support** — $90,000 annually, plus fringe benefits and research development support up to $25,000
Dissertation Grants (R36)

- Support provided for dissertation work of full-time students for 12 to 17 months

- Four application deadlines annually

- Total direct costs up to $40,000 per grant, can be used for tuition, stipends, research, etc.
Mentored Clinical Scientist Awards (K08)

- **Audience** -- clinical doctorates (including those in patient-oriented research) who require mentoring and have potential to develop into independent investigators

- **Duration** -- 3 to 5 years, nonrenewable

- **Level of Support** -- $90,000 annually, plus fringe benefits and research development support up to $25,000
Independent Investigator Awards (K02)

- **Audience** -- promising new clinical and nonclinical investigators who are out of training 5 years or less, with demonstrated need of intensive research focus

- **Duration** -- 3 to 5 years, nonrenewable

- **Level of Support** -- $90,000 annually, plus fringe benefits and research development support up to $25,000
Open for Business

Training grants...

http://www.ahrq.gov/fund/training/trainix.htm
Agency for Healthcare Research and Quality

- AHRQ
- Training Grants
- Research Grants
- Peer Review Committees
- Tips
In Short

- AHRQ funding priorities have some stability/volatility
- Internet is funding gateway
  www.ahrq.gov/funding
- AHRQ and NIH use essentially same application process
Announcement publication:

Application forms:
- Form 424 Research and Related (SF 424 R&R)

Application submission and referral – NIH Center for Scientific Review
Application Process

- Applications sent from NIH to AHRQ
  - Assigned to an AHRQ study section
  - Assigned to a specific PO at AHRQ
- Review typically occurs 4 months after applications received
  - dissertations, three months later
- Funding decisions occur 1-3 months later
  - Summary Statements issued *
- Resubmission – one allowed
Once applications are reviewed, the results are documented by the SRO in a summary statement and posted on the eRA Commons & IMPACII system.

The summary statement contains:

- Overall Resume and Summary of Review Discussion
- Essentially Unedited Critiques provided by the Reviewers
- Priority Score and Percentile Ranking
- Budget Recommendations
- Appropriate Human Subjects Protections and Inclusions Coding
- Administrative Notes
What Determines Which Awards Are Made?

- Scientific merit
  - Significance and originality
  - Methods

- Program considerations
  - What is uniquely AHRQ
  - Existing portfolio balance
  - Anticipated IMPACT of research

- Availability of funds
<table>
<thead>
<tr>
<th>Score</th>
<th>Descriptor</th>
<th>Additional Guidance on Strengths/Weaknesses</th>
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<tbody>
<tr>
<td><strong>High</strong></td>
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<tr>
<td>1</td>
<td>Exceptional</td>
<td>Exceptionally strong with essentially no weaknesses</td>
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<tr>
<td>2</td>
<td>Outstanding</td>
<td>Extremely strong with negligible weaknesses</td>
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<tr>
<td>3</td>
<td>Excellent</td>
<td>Very strong with only some minor weaknesses*</td>
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<tr>
<td><strong>Medium</strong></td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td>Very Good</td>
<td>Strong but with numerous minor weaknesses</td>
</tr>
<tr>
<td>5</td>
<td>Good</td>
<td>Strong but with at least one moderate weakness**</td>
</tr>
<tr>
<td>6</td>
<td>Satisfactory</td>
<td>Some strengths but also some moderate weaknesses</td>
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<tr>
<td><strong>Low</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Fair</td>
<td>Some strengths but with at least one major weakness</td>
</tr>
<tr>
<td>8</td>
<td>Marginal</td>
<td>A few strengths and a few major weaknesses***</td>
</tr>
<tr>
<td>9</td>
<td>Poor</td>
<td>Very few strengths and numerous major weaknesses</td>
</tr>
</tbody>
</table>

**Non-numeric score options:**
DF = Deferred, AB = Abstention, CF = Conflict, NP = Not Present, ND = Not Discussed

*Minor Weakness*: An easily addressable weakness that does not substantially lessen impact
**Moderate Weakness**: A weakness that lessens impact
***Major Weakness**: A weakness that severely limits impact

- Applications that are not discussed at the meeting will not be given an overall Final Impact Score, but the applicant, as well as the AHRQ staff will see the preliminary scores for each review criterion as additional feedback on their summary statement.
- For each criterion rating, the strengths and weaknesses within that review criterion should be considered.
Agency for Healthcare Research and Quality

- AHRQ
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- Research Grants
- Peer Review Committees
- Tips
Peer Reviewers...

- Diverse scientific expertise
- Appropriate representation of stakeholders
Scientific Peer Review Committees (Study Sections):

- **Standing Committees**
  - Chartered; multi-year commitment
  - Temporary members added as needed
  - Roster posted on NIH/AHRQ websites

- **Special Emphasis Panels (SEPs)**
  - All Temporary (Ad-hoc) members
Criteria For Selection of Peer Reviewers

- Demonstrated Scientific Expertise
- Doctoral Degree or Equivalent
- Mature Judgment
- Work Effectively in a Group Context
- Breadth of Perspective
- Impartiality – Objective Judgment
- Adequate Representation of Women and Minority Scientists
- Interest in Serving
Agency for Healthcare Research and Quality

- AHRQ
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- Tips
Tips for Success

- General and Practical Tips
- Preparing an Application
- Strengthening an Application
- Common Problems
  - No apparent translatability of research into practice or policy
  - Not unique to AHRQ or relevant to mission or priority of AHRQ
General Tips

- Know Electronic Application Process (424 R&R)
- Know the Funding Agency and Staff
- Understand Agency Budget & Research Priorities
- Know the Grant Mechanisms
- Know the Grant Process and Key Changes
Practical Tips

Make a rough draft of your application … then let it sit so you can distance yourself and review it a bit more dispassionately.

Does the draft seem coherent? Are transitions logical?

Have you checked for grammar, spelling and typographical errors? Is the draft readable?

Have an objective person review the draft and final copy; involvement of mentors is critical.

All of this requires hard work, study, and mental discipline.
Common Problems in Applications

- Lack of original idea and/or scientific rationale
- Diffuse, superficial, or unfocused research plan
- Questionable methodology
- Lack of important details
- Lack of experience in methodology
- Lack of generalizability of findings or methods
- No attention to human subjects and/or population representation issues
- Unrealistically large amount of work
New Common Problem – “Applications of Application”

- No apparent translatability of research into practice or policy
- Not unique to AHRQ or relevant to mission or priority of AHRQ
PREPARING AN APPLICATION

- Start early
- Read and follow instructions
- Clarify any confusing instructions early
- Do not assume staff or reviewers “will know what you mean”
- Include well designed tables and figures
- Format - consider the reviewers
- Proofread and check before sending
- Explicitly state the purpose of the proposed work
- Refer to the literature thoroughly but thoughtfully
- Present an organized, lucid write-up
- Be mindful of the review criteria to be used
- Get advice from colleagues
- Ask scientist with AHRQ support to critically review your application prior to submission – more than once
Strengthening Applications - The Long List:

- Significance of problem: Best if transparent yet not insultingly obvious
- Scientific Rationale: New &/or original ideas clearly identified
- Include a plan for acquiring needed expertise, if needed
- Discuss the limitations of the chosen approach
- Include abundant detail about the methodology
- Scope of work midway on the trivial – grandiose continuum
- Describe the participants & their involvement in the study in detail
- Include pilot or preliminary data
- Describe future research directions
Help Reviewers See the Merits

- Think like a reviewer –
- Learn as much as possible about The System (e.g., figure out the likely review group)
- Preempt criticism
- Include collaborators who can compensate for your deficiencies
- Learn as much as possible about what research projects in your area that have been funded by the NIH/AHRQ/HRSA/CDC/etc.

AHRQ Grant Database: (http://www.gold.ahrq.gov/)
Assumptions about the Grants Review Process

- Reviewers are knowledgeable and committed to doing a thorough job of evaluating each application
- Reviewers have less time to complete the task than desirable
- Good formatting will assist reviewers to remember your organization and the thrust of your arguments
Two Tips of Important

- Talk with an Agency (AHRQ, etc.) program officer(s)

- Previously funded work can be informative. See AHRQ Grant Database: www.gold.ahrq.gov/
Funding Announcements

Sign up for Grant Announcements E-Mail Updates

Requests for Applications
- Program Announcements
- Archive

Notice: Salary Limitation on FY2012 AHRQ Grants, Cooperative Agreements, and Contracts

Request for Applications

Requests for Applications (RFAs) are issued to invite grant applications in a well-defined scientific area to stimulate activity in AHRQ programmatic research priority areas. A single application receipt date is specified, and the announcement identifies the amount of funds earmarked for the initiative and the number of awards likely to be funded. Applications are evaluated for responsiveness to the RFA before review. Applications received in response to a particular RFA are reviewed by an appropriate AHRQ Study Section or by a special review group.


AHRRQ Primary Announcements

AHRRQ primary announcements are those for which AHRRQ is the sole sponsor of the RFA.

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<th>RFA Number</th>
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<tr>
<td>RFA-HS-12-006</td>
<td>Patient-Centered Outcomes Research—Dissemination by Health Professionals Associations (PCOR-DHPA) (R18) Frequently Asked Questions</td>
</tr>
<tr>
<td>RFA-HS-12-005</td>
<td>Partnerships for Sustainable Research and Dissemination of Evidence-based Medicine (R24) Frequently Asked Questions—Now!</td>
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# Program Announcements

Program Announcements (PAs) describe continuing, new, or expanded program interests for which grant or cooperative agreement applications are invited. Applications in response to PAs are reviewed in the same manner as unsolicited grant applications (i.e., by peer review committees of the AHRQ Initial Review Group [IRG]).


## AHRQ Primary Announcements

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<table>
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<tr>
<td>PAR-12-115</td>
<td>AHRQ Mentored Career Enhancement Award in Patient Centered Outcomes Research (PCOR) for Mid-Career and Senior Investigators (K18) — New!</td>
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<tr>
<td>PA-12-114</td>
<td>Infrastructure Development Program in Patient-Centered Outcomes Research (PCOR) (R24)</td>
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<tr>
<td>PA-11-199</td>
<td>Understanding User Needs and Context to Inform Consumer Health Information Technology (IT) Design (R01)</td>
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<td>PA-11-198</td>
<td>Understanding Clinical Information Needs and Health Care Decision Making Processes in the Context of Health Information Technology (IT) (R01)</td>
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<td>PAR-11-024</td>
<td>Advances in Patient Safety through Simulation Research (R15)</td>
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<td>PAR-10-168</td>
<td>AHRQ Small Research Grant Program (R03)</td>
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<td>PAR-10-089</td>
<td>Prevention and Management of Healthcare Associated Infections (R18)</td>
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<td>PAR-10-022</td>
<td>Partnerships in Implementing Patient Safety II (R18)</td>
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<td>PAR-09-257</td>
<td>AHRQ Grant Program for Large or Recurring Conferences (R13)</td>
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<tr>
<td>PAR-09-231</td>
<td>Change in Application Receipt Dates</td>
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<td>PAR-09-231</td>
<td>AHRQ Small Grant Program for Conference Support (R13)</td>
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<td>PAR-09-229</td>
<td>AHRQ Individual Awards for Postdoctoral Fellows (F32) — Ruth L. Kirschstein National Research Service Awards (NRSA)</td>
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<td>PAR-09-229</td>
<td>Stipends, Tuition/Fees and Other Budgetary Levels Effective for FY 2012</td>
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<td>PAR-09-229</td>
<td>Extension of Expiration Date and Use of Adobe R1 Application Form</td>
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<td>PAR-09-212</td>
<td>AHRQ Grants for Health Services Research Dissertation Program (R36)</td>
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<td>PAR-09-087</td>
<td>Mentored Research Scientist Research Career Development Award (K01)</td>
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Thank you!

www.ahrq.gov

Beth.CollinsSharp@AHRQ.gov