Department of Physical Medicine and Rehabilitation
Research Brown Bag: Inaugural Meeting

March 16, 2018
Overview

• Welcome - Akuthota
• RISE – Heerse
• PM&R – Pilot Grant Awards
• Disseminating Information: “Rehabilitation Research News You Can Use”
• New NIH Policies
• Our Research Brown Bag: Brenner, Stevens-Lapsley, & Uhler
• Small groups
• Report back to the community
PM&R Research Innovation Services Enterprise (RISE)

• Assisting faculty with grants and contracts
• Helping navigate the regulatory landscape
• Developing strategies for funding and collaboration
• Disseminating publications and other notable work
• Implementing studies and hiring lab personnel
PM&R Pilot Grants – Spring/Summer 2018

• Facilitating interdisciplinary collaboration
• Special area of emphasis for this call
• Scores based on interdisciplinary focus
• Collaborations within or outside the Department

PM&R Pilot Awards
Funding to Faculty Members

The Department of Physical Medicine & Rehabilitation Research Core is pleased to provide Pilot Award funding to Faculty members through its Research Pilot Award competition. The objective of the Pilot Award competition is to enhance the value and effectiveness of pilot research conducted within the Department to accomplish three objectives:

1. Improve the health outcomes of the rehab population
2. Enhance the patient experience of care (including quality, access and reliability)
3. Provide departmental researchers the opportunity to collect quality data to leverage future funding

Please direct inquiries to CUPMR.Research@ucdenver.edu.
## PM&R Pilot Grants – Spring/Summer 2018

<table>
<thead>
<tr>
<th><strong>Spring 2018 Submission</strong></th>
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<tbody>
<tr>
<td><strong>Call for proposals</strong></td>
<td>March 1, 2018</td>
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<td><strong>Applications due</strong></td>
<td>May 31, 2018 to June 1, 2018 6:00 p.m. MST</td>
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<td><strong>Awards announced</strong></td>
<td>July 20, 2018</td>
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<td><strong>Project start date</strong></td>
<td>September 4, 2018</td>
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<td><strong>Mid-year progress report due</strong></td>
<td>February 1, 2019</td>
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<td><strong>Final report due</strong></td>
<td>September 3, 2019</td>
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http://www.ucdenver.edu/academics/colleges/medicalschool/departments/pmr/Research/Pages/PMR-Pilot-Awards.aspx
NIH: “Rehabilitation Research News You Can Use”

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<thead>
<tr>
<th>In this Newsletter:</th>
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<tbody>
<tr>
<td>Notices and Funding Opportunities</td>
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<td>Application Receipt Date(s): April 30, 2018.</td>
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<td>Application Receipt/Submission Date(s): March 26, 2018.</td>
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<td>Application Receipt/Submission Date(s): Standard dates apply.</td>
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Rehabilitation Research News: February 2018

News you can use...

**Inclusion Policies from Dr. Lauer’s Office of Extramural Research Blog**

Inclusion Across the Lifespan: Last month, NIH announced a revision (NOT-OD-18-116: [https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-116.html](https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-116.html)) to a decades-old policy originally conceived in response to concerns that children were not appropriately included in clinical research. These changes broaden the policy to address inclusion of research participants of all ages, and as discussed at the last Advisory Committee to the NIH Director meeting ([https://acd.od.nih.gov/meetings.html](https://acd.od.nih.gov/meetings.html)), will apply beginning in 2019 to all NIH-supported research involving human subjects. Our goal is to ensure that the knowledge gained from NIH-funded research is applicable to all those affected by the conditions under study.

So, for application due dates on or after January 25, 2019 (yes, one year from now), if you propose a study involving human subjects, you must have a plan describing how participants across the lifespan will be included and justify the proposed age range of participants. Reviewers will consider whether the proposed age range is appropriate in the context of the specific scientific aims. Should the study be funded, keep in mind that your progress reports will include de-identified individual-level participant data on sex/gender, race, ethnicity, and age at enrollment (in units ranging from hours to years). Ongoing NIH-funded research (type 5 awards) are exempt from this policy, but the policy will apply if you are submitting a competitive renewal application on or after January 25, 2019.


Inclusion of and reporting on sex/gender and race/ethnicity: Last month, we amended our inclusion policy to enhance the public reporting of these sex/gender and race/ethnicity inclusion data (NOT-OD-18-041: [https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-041.html](https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-041.html)). With backing from the 21st Century Cures Act, this amendment specifically requires reporting the results of “valid analyses” on sex/gender and race/ethnicity to ClinicalTrials.gov after completing an applicable ([https://grants.nih.gov/grants/glossary.html#ApplicableClinicalTrial](https://grants.nih.gov/grants/glossary.html#ApplicableClinicalTrial)) NIH-defined Phase III clinical trial.

* “Valid analyses” ([https://grants.nih.gov/grants/glossary.html#ValidAnalyses](https://grants.nih.gov/grants/glossary.html#ValidAnalyses)) refers to stratified analyses that explore how well the intervention works among sex/gender and racial/ethnic groups. Though they may or may not be powered studies, they can still shed light on important trends informing the direction for future research questions.

* Applicable clinical trials. In general, study Food and Drug Administration-regulated therapeutics, biologics, and devices. The reporting requirement we are discussing today pertains to a subset of applicable clinical trials that are also known as “NIH-defined Phase III clinical trials” ([https://grants.nih.gov/grants/glossary.html#NIHDefinedPhaseIIIClinicalTrial](https://grants.nih.gov/grants/glossary.html#NIHDefinedPhaseIIIClinicalTrial)) which are studies that evaluate an intervention in large groups of people by comparing the intervention to other standard or experimental interventions. NIH funds approximately 60% of these types of trials each year. This reporting requirement applies to new and competing awards made on or after December 13, 2017. Findings from valid analyses based on sex/gender and race/ethnicity from these applicable NIH-defined Phase III clinical trials must now be reported in ClinicalTrials.gov within one year of completion of data collection for the study’s primary outcome measures.

NIH: Inclusion of Individuals Across the Lifespan as Participants in Research Involving Human Subjects

Policy

It is the policy of NIH that individuals of all ages, including children (i.e. individuals under the age of 18) and older adults, must be included in all human subjects research, conducted or supported by the NIH, unless there are scientific or ethical reasons not to include them. The inclusion of individuals across the lifespan as subjects in research must be in compliance with all applicable subparts of 45 CFR 46 as well as with other pertinent federal laws and regulations.

Applications or proposals for research involving human subjects must address the age-appropriate inclusion or exclusion of individuals in the proposed research project. Applications/proposals must include a description of plans for including individuals across the lifespan, including a rationale for selecting the specific age range justified in the context of the scientific question proposed. If individuals will be excluded from the research based on age, the recipient/offeror must provide an acceptable justification for the exclusion. Acceptable reasons for excluding individuals based on age may include:

- The disease or condition does not occur in the excluded age group, or the research topic is not relevant to the excluded age group.
- The knowledge being sought in the research is already available for the excluded age group or will be obtained from another ongoing study, and an additional study will be redundant.
  - Example: A drug studied and approved for use in children will now be studied only in adults.
- A separate, age-specific study in the excluded age group is warranted and preferable. While this situation may represent a justification for excluding individuals based on age, consideration should be given to taking age differences into account in the study design, whenever feasible.
  - Example: A clinical trial designed to promote self-monitoring of blood glucose levels in adolescents with Type 1 diabetes proposes to include only adolescents.
- The study will collect or analyze data on pre-enrolled study participants (e.g., longitudinal follow-up studies that did not include data on children, or analysis of an existing dataset) and data inclusive of individuals across the lifespan are not available to address the scientific question.
  - Example: A study which began prior to implementation of the NIH Policy and Guidelines on the Inclusion of Children proposes follow-up to examine long-term outcomes of individuals with the condition. The original study excluded children, and similar data are not available from a cohort that includes children.
- There are laws or regulations barring the inclusion of individuals in a specific age group in research.
  - Example: Regulations for protection of human subjects allow consenting adults to accept a higher level of risk than are permitted for children.
- The study poses an unacceptable risk to the excluded group, such that their participation would not be considered ethical by the local IRB, peer review and/or NIH staff.
  - Example: Children are excluded from a Phase I study for a treatment that includes significant risk, including death. Evidence suggests the potential benefits to children do not outweigh the risks.

For application due dates on or after January 25, 2019, if you propose a study involving human subjects, you must have a plan describing how participants across the lifespan will be included and justify the proposed age range of participants. This policy can be read in full here: [https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-116.html](https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-116.html)
NIH: Guidelines on the Inclusion of Women and Minorities as Subjects in Clinical Research

Scope and Applicability

The requirement for submission of results of valid analyses by sex/gender and race/ethnicity to Clinicaltrials.gov applies to all NIH conducted or supported applicable NIH-defined Phase III clinical trials. This requirement does not apply to NIH-defined Phase III trials not considered to be applicable clinical trials under 42 CFR Part 11. This requirement applies to applicable NIH-defined Phase III clinical trials involving research subjects of all ages, including foreign awards and domestic awards with a foreign component.

The requirement for submission of results of valid analyses by sex/gender and race/ethnicity to Clinicaltrials.gov applies to all new, competing grants and cooperative agreements awarded on or after December 13, 2017. Ongoing, non-competing awards will not be expected to comply with the revised policy until the grantee submits a competing renewal application. For R&D contracts, the policy will apply to all solicitations issued on or after this effective date. For the intramural program, the policy applies to intramural studies initiated on or after December 13, 2017.

The requirement for submission of results of valid analyses by sex/gender and race/ethnicity to Clinicaltrials.gov applies to all new, competing grants and cooperative agreements awarded on or after December 13, 2017.

A link to the policy can be found: https://grants.nih.gov/grants/funding/women_min/guidelines.htm
Valid Analysis

This term means an unbiased assessment. Such an assessment will, on average, yield the correct estimate of the difference in outcomes between two groups of subjects. Valid analysis can and should be conducted for both small and large studies. A valid analysis does not need to have a high statistical power for detecting a stated effect. The principal requirements for ensuring a valid analysis of the question of interest are: allocation of study participants of both sexes/genders (males and females) and from different racial and/or ethnic groups to the intervention and control groups by an unbiased process such as randomization; unbiased evaluation of the outcome(s) of study participants; and use of unbiased statistical analyses and proper methods of inference to estimate and compare the intervention effects by sex/gender, race, and/or ethnicity.

A full glossary of NIH terms can be found here:
https://grants.nih.gov/grants/glossary.htm
“I think they are simply framing this in language that amounts to, ‘are you measuring what you intend to measure.’

Considering different types of validity, they are focused on internal validity (unbiased effect estimate), rather than external validity (generalizability). It seems to me that this is just an effort to point out that study designs and statistical analyses need to reduce the potential for bias as much as possible and use appropriate methods to test the hypotheses of interest.

In the guidance below, they state this refers to stratified analyses that are likely not adequately powered. Seems they are simply trying to encourage conducting such analyses as exploratory, but saying when you do so, valid methods must be used.

Honestly, I don’t read it as anything different from what a well written grant would already do.”
“I completely agree with Claire – when I first read it I thought it was an endorsement for using small samples to justify larger trials, but it is really discussing exploratory, stratified analyses. It speaks very generally to what you should/could do with the information from these analyses and I see it as ‘hypothesis generating’, but it more importantly is saying that if you want to get anything from the stratified analyses, they need to be approached in a valid way.”
Our Research Brown Bag

• 3 rotating facilitators
• 1 presenter
• Specific topic - science and research broadly defined (e.g., grant writing, journal article review, study design)
• 2 weeks prior to Brown Bag presenter will send written materials to CUPMR.Research@CU.edu who will distribute
• Day of presentation: 5 slides regarding the topic at hand – last slide specific questions for the group
• Presenter and facilitator of the day will work together to facilitate discussion
Discussion Points – Small Groups

• *Pick a speaker who will report back to the group*

• Introduce yourself – 1 sentence regarding your current interest/program of research

• What are you hoping to get out of the brown bag meetings?

• What resources would be helpful to facilitate your program of research?
Next Research Brown Bag:
Ricardo Battaglino, Ph.D.

Bone as regulator of energy balance and reproductive health after SCI

June 8, 2018