Reporting your successes: Writing an Effective RPPR and More

EHS Festival – Wednesday December 7

National Institutes of Health • U.S. Department of Health and Human Services
Reporting your successes: Writing an Effective RPPR and More

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National Institutes of Health • U.S. Department of Health and Human Services
Wait, someone actually reads this??

Yes! Your program officer (not a robot!) reads your RPPR.

- Have you made adequate progress towards the aims?
- Have you encountered any difficulties?
- Are you spending your funds as expected, and if not, why?
- What were your major research products and findings this year?
Profile of a Program Officer at NIEHS

Excited to hear about your project, hopes it is going well!

Responsible for many different scientific areas, not just yours!

About to run to another meeting

Has lots of things due, all at the same time

Hasn’t worked in a lab for a while
1% Caffeine
9% Human
90% Microbe

RPPR review: SIMULATION

Your RPPR from this year

The aims of this grant are:
1. Be awesome
2. Solve the problem
3. Write lots of papers

-02 progress report
Notes notes notes notes

-03 progress report
Notes notes notes notes notes
Writing your progress update: DO’S and DON’TS

**DO:** Tell me what you accomplished this year, and only this year

**DON’T:** Use the same text every year, and just add a sentence or two

**DO:** Be concise and clear

**DON’T:** Tell me every experimental detail, right down to the concentration of buffer you used

**DO:** Tell me about experimental challenges preventing progress, and how you’ve tried to solve them

**DON’T:** Just hope that I won’t notice that you haven’t made progress on something
DO: Remember to cite the grant number in publications that are related to this grant

DON’T: Cite this grant number in EVERY paper you write this year, on any topic

DO: Note if you’ve completed all of the experiments for a given aim in a previous year

DON’T: Copy the progress update for an aim from previous year’s report

DO: Tell me how you shared your data

DON’T: Assume that I know you’re following your initial sharing plan

DO: Discuss any change in scope that is required for next year

DON’T: Suddenly add a human study without telling me

DO: Think big picture

DON’T: Drown me in pages and pages of detail
Have carryover? Have no fear.

Do you have >25% carryover? (of this year’s budget)

• Verify that you have (or don’t have) carryover, and verify how much.
• Explain why you have the carryover
• Explain how you will spend the funds out next year
Sample structure for Progress Summary

Major accomplishments

- I was awesome at doing sequencing and sequenced a lot of things.
- I was also awesome at doing biochemistry and identified the Exciting Binding Domain.
- I completed the first phase of Solving the Problem and found that the Problem was bigger than I anticipated.

Aim 1: The goal of aim 1 was to be awesome. I first tried to be awesome by just simply wishing I was. Unfortunately, that did not work, so I am trying several alternative strategies. Right now I am trying to be awesome by using my voice to inform people that I’m awesome. If this is not successful, in year three I plan to actually do something awesome.

I published one paper describing this work.

Aim 2: The goal of aim 2 was to Solve the Problem....

Start with a bulleted list of the big achievements from this project year

Break it down aim by aim.
Your Program Officer: Not *that* scary

- Don’t be afraid to contact us!
- Don’t be afraid to contact us AGAIN after we don’t respond the first time
- Don’t be afraid to ask us questions

We are from the government and we are here to help!
(no, really! we are! we mean it! )
Helping you Help Us Report your Success!

Christie Drew, Program Analysis Branch

National Institutes of Health • U.S. Department of Health and Human Services
Results of your work are used to:

- Justify taxpayer investment
- Ensure accountability
- Answer questions – all kinds!
  - *What are you spending on ______?*
  - *What are important outcomes from ______ program?*
  - *Who is involved in __________?*
  - *How are grantees solving ________?*
Overview

• Introduce the Program Analysis Branch
• Knowledge Management tools
• Cite your grant number properly when you publish
• Claim your work
• Changes to the RPPR
NIEHS Program Analysis Branch

- Short and long term program evaluation & portfolio analysis
- Information technology to support analysis and strategic planning
- Communicate research impact

Christie Drew
Branch Chief

Helena Kennedy
Program Analyst

Kristi Pettibone
Evaluator

Joel Collinson
Administrative Support

Sarah Luginbuhl
Analyst CareerTrac

Elizabeth Ruben
IT Liaison, Analyst

Steven Tuyishime
Presidential Management Fellow

National Institutes of Health
U.S. Department of Health and Human Services
Why evaluate?

- Better program design
- Improved outcomes
- Stronger partnerships
- More effective data collection
- Continuous improvement loops
- Replicate programs
- Inform strategic planning

You have to know where you are going (and why) before you figure out how to get there!
Tools to amplify your success

• Technical assistance to help you achieve your goals
  – PEPH Evaluation Metrics Manual
  – Environmental Health Economics Annotated Bibliography

• Knowledge management systems
  – HITS, CareerTrac
Logic Model – organized, project specific, informs metrics

- **Inputs** – resources available
- **Activities** – actions that use available resources
- **Outputs** – direct products of activities
- **Impacts** – benefits or changes resulting from activities, outputs
Neurodegeneration Program Logic Model

**ACTIVITIES**

Conduct Research on:
- The Role of Environment on NDG Diseases (Parkinson’s, ALS, Alzheimer’s)
- Gene x Environment
- Basic/Mechanistic
- Epidemiological/Risk Factors
- Clinical (Prevention, Diagnosis [PD], & Treatment [ALS])
- Developmental Basis of Disease
- Windows of Susceptibility/Exposures
- Translational Research

Collaborate
- To promote interdisciplinary research
- To generate translational research

Training
- To attract new researchers to the field
- To retain current NDG researchers

**OUTPUTS**

- Joint Research Programs/RFAs/Meetings
- Novel Strategies for Treatment and Drugs
- Novel Animal and Alternative Models
- Novel Research Approaches and Tools

Capacity
- Trained ESI/NI NDG Scientists
- Pilot Data
- LMIC Capacity to Address Neuro and Brain Disorders

Publications

Presentations

Common Elements Instruments

Synaptic Model

Statistical Applications/Modeling Approaches

**IMPACTS/GOALS**

- Rejuvenate interest and research on NDG
- Firmly establish linkage between environment and NDG
- Sustained research capacity in developing countries

**POTENTIAL FUTURE IMPACTS/GOALS**

- Medical School Curriculum
- Regulations/Policy
- Clinical Protocols
- Pharmaceutical Development
- New Technologies
- Follow-on Research
- Patents
- Behavioral Changes
- Decreased Morbidity & Mortality
- Improved Environmental Quality

**INPUTS**

- Program Staff
- Funding • RFAs • Unsolicited • Meetings
- Support for Collaborations (among researchers, other ICs and agencies) – not separate from staff and $
PEPH Evaluation Metrics Manual

• Helping grantees measure success

• www.niehs.nih.gov/pephmetrics

• PDF and online training available for developing goal-based logic models and related metrics

• Chapters focus on measuring partnerships, “leveraging,” products and dissemination, education/training, and capacity building

• Can be applied to any kind of research project
Environmental Health Economic Analysis: Annotated Bibliography

• Contains >70 papers
• Search for exposures, outcomes, or methods
• Find experts working in the area
• Links to datasets and resources for economic assessment

www.niehs.nih.gov/EHEA
Knowledge Management: NIH Data Infrastructure

• **NIH IMPAC II Database:** Comprehensive NIH-Wide grant information, including applications, payments, specific aims, progress reports, publications, etc.
  
  – RPPR: Progress report module
  
  – Review Module: Reviewers and review staff interact to submit scores
  
  – xTRAIN: Trainee appointment module for T32 and R25
  
  – xTRACT: Trainee progress and outcome data (new)
  
  – SPIRES: links NIH grants to PubMed and PubMedCentral
  
  
  – MYNCBI: Grant PI can link publications to a specific grant ([https://publicaccess.nih.gov](https://publicaccess.nih.gov))
Knowledge Management at NIEHS

• Most IMPAC II systems are not focused on grant outputs and outcomes
  – New features of the RPPR are an exception (more about this later)

• Institutes often build additional tools to add IT capacity and features to IMPAC II

• Two major KM systems in use at NIEHS
  – CareerTrac
  – High Impacts Tracking System
What is HITS?

- **High Impacts Tracking System**
- Progress reports and program notes accessible, searchable
- Robust free-form and structured coding (“tags”)
  - Coding: Portfolio characteristics, outputs, impacts, dissemination; Grants management information
- Dynamic query and reporting
- Imports data from IMPAC II, SPIRES
- Complements existing tools: QVR, SPIRES, CareerTrac
Outputs

- Scientific Findings
- Publications
- Patents
- Collaborations
- Animal Models
- Biomarkers
- Curricula and Guidelines
- Databases and Software
- Measurement Instruments and Sensors
Impacts

- Improved Health
- Disease reduction
- Exposure reduction
- Policies and Regulations
- Community Benefits
- Economic Benefits
Portfolio Coding

– Landmark Programs
– Science Areas
– Strategic Plan Goals
How do we use HITS?

• Aggregates critical grant information on one screen for analysis
• More easily identify outputs and impacts that program officers find “important”
• Respond to frequent requests from NIEHS and NIH OD
• Congressional Justifications
• NIH Director Data Calls
• Presentations and Publications
• Media Requests
• ARRA Reports and Highlights
C.2 Website(s) or other Internet site(s)

List the URL for any Internet site(s) that disseminates the results of the research activities. A short description specified above.

For awards not designed to create or maintain one or more websites select "Nothing to Report". A describe the response to this reporting period.

☐ Nothing to Report
or list URL(s) for Internet site(s) and provide description(s) below (NIH recommended length is up to 1 page.

Total remaining allowed limit is 8000 characters.

C.3 Technologies or techniques

Identify technologies or techniques that have resulted from the research activities. Describe the technologies period.

☐ Nothing to Report
or identify and describe technologies or techniques below (NIH recommended length is up to 1 page. Limit

Total remaining allowed limit is 8000 characters.
Section C: Products

C5. Other:

- audio or video products;
- instruments or equipment;
- protocols;
- clinical interventions;
- data and research material (e.g., cell lines, DNA probes, animal models);
- educational aids or curricula;
- software or netware;
- databases;
- models;
- new business creation.

C5. Other products and resource sharing

C5.a Other Products

Identify any other significant products that were developed under this project.

Describe the product and how it is available to be shared with the research community. Do not repeat information provided above. Limit the response to this reporting period.

Examples of other products are: audio or video products; data and research material (e.g., cell lines, DNA probes, animal models); databases; educational aids or curricula; instruments or equipment; models; protocols; and software or netware.

C5.b Resource sharing

If the initial research plan addressed, or the terms of award require, a formal plan for sharing final research data, model organisms, Genome Wide Association Studies data, or other such project-specific data, describe the progress in implementing that plan. For sharing model organisms, include information on the number of requests received and number of requests fulfilled during this reporting period. If the sharing plan is fully implemented, provide a final statement on data sharing.
New RPPR section C structures products

Identify any other significant products that were developed under this project.

PD/PIs are required to report all products that arise from their NIH award in section C. If there are other products to report not covered in Sections C1 - C4, enter a description for the product and choose the appropriate product category(ies) from the pull down menu (select multiple categories by holding down the Ctrl button while selecting the categories). If there is more than one product to report, select "add product" to create a workspace to report an additional product. Limit the response to this reporting period.

Nothing to Report

or list URL(s) for Internet site(s) and provide description(s) below (NIH recommended length is up to 1 page. Limit is 2000 characters or approximately 3 pages.)

Audio or video
Data or Databases
Research Material
Educational aids or curricula
Evaluation Instruments
Instruments or equipment
Models
Physical collections
Protocols
Software
Surv & SW

Total remaining allowed limit is 2000 characters.

Category

Other products and resource sharing

Action

Nothing found to display.
Advice:

Cite your grant number properly

and

Claim your work
Understanding Grant Numbers

NIH Grant Number

5 R01 ES 123456 - 01 A1

5 = Type Code

Broad categorization
1. new
2. competitive renewal
3. Supplement
4. Continuing (R00)
5. non-competitive renewal
6. Competitive renewal with change of org
7. Competitive renewal with change of recipient or training org
8. Non competitive change in IC or Div
9. Competitive change in IC or Div

R01 = Activity Code

Type of grant
R01- Primary research grant
R15- AREA grant
R21- Developmental research
R41-44 SBIR/STTR
U01- Cooperative agreement
P01- Research program
P30- Core Center (infrastructure)
K - Career development
F - Fellowship
T - Research training

ES = IC Code

Institute or Center to which the application was assigned. ES is the 2 letter code for NIEHS

123456 = Serial Number

Unique 5-6 digit number that identifies the application

01 = Support year

Current year of support

A1 = Suffix Code

Used for supplements, amendments, etc.

Cite this in publications

This is a zero, not the letter O

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Take Credit for your work

- Use RePORTER to see what publications are linked to what grant (www.projectreporter.nih.gov)
- Use MYNCBI to make corrections (www.ncbi.nlm.nih.gov/sites/myncbi)
- Sign up for an ORCID – unique author identifier (http://orcid.org)
- Use SienCV to create biosketches (https://www.ncbi.nlm.nih.gov/sciencv/)
  - Automatically pull in publications from MyNCBI or ORCID
- ResearchGate or other social networks for researchers (www.researchgate.net)
Relevant Publications

• Logic Models

• HITS

• ARIA/RePARS
Questions?

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