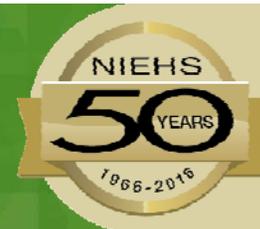
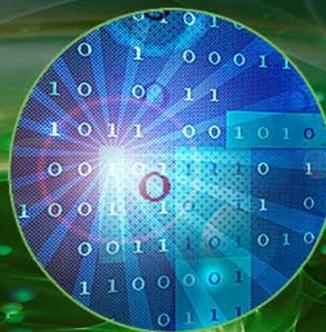
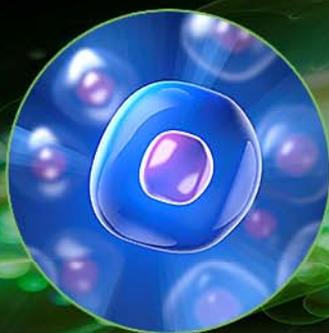




National Institute of Environmental Health Sciences
Your Environment. Your Health.



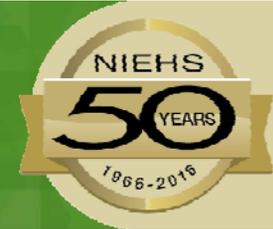
Reporting your successes: Writing an Effective RPPR and More



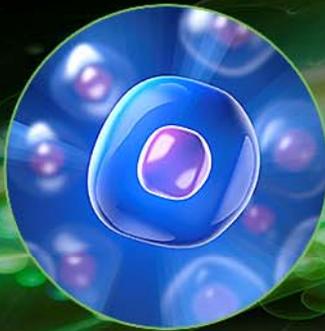
EHS Festival – Wednesday December 7



National Institute of Environmental Health Sciences
Your Environment. Your Health.



Reporting your successes: Writing an Effective RPPR and More



Lisa Chadwick, Genes Environment and Health Branch

Wait, someone actually reads this??



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

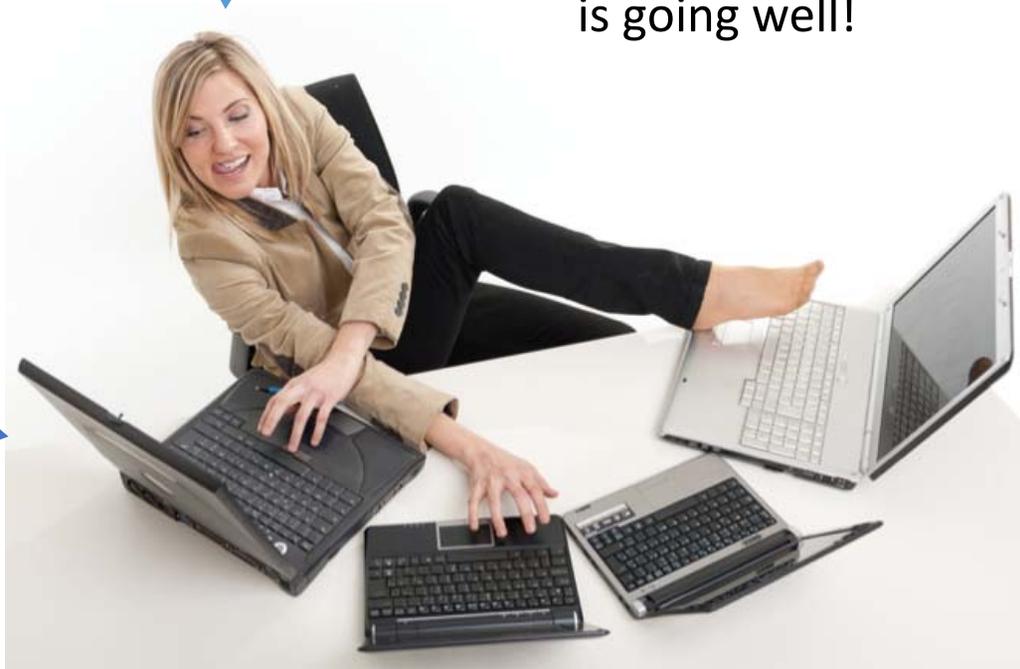
- Have you made adequate progress towards the aims?
- Have you encountered any difficulties?
- Are you spending your funds as expected, and if not, why?
- What were your major research products and findings this year?

Profile of a Program Officer at NIEHS

Responsible for many different scientific areas, not just yours!

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

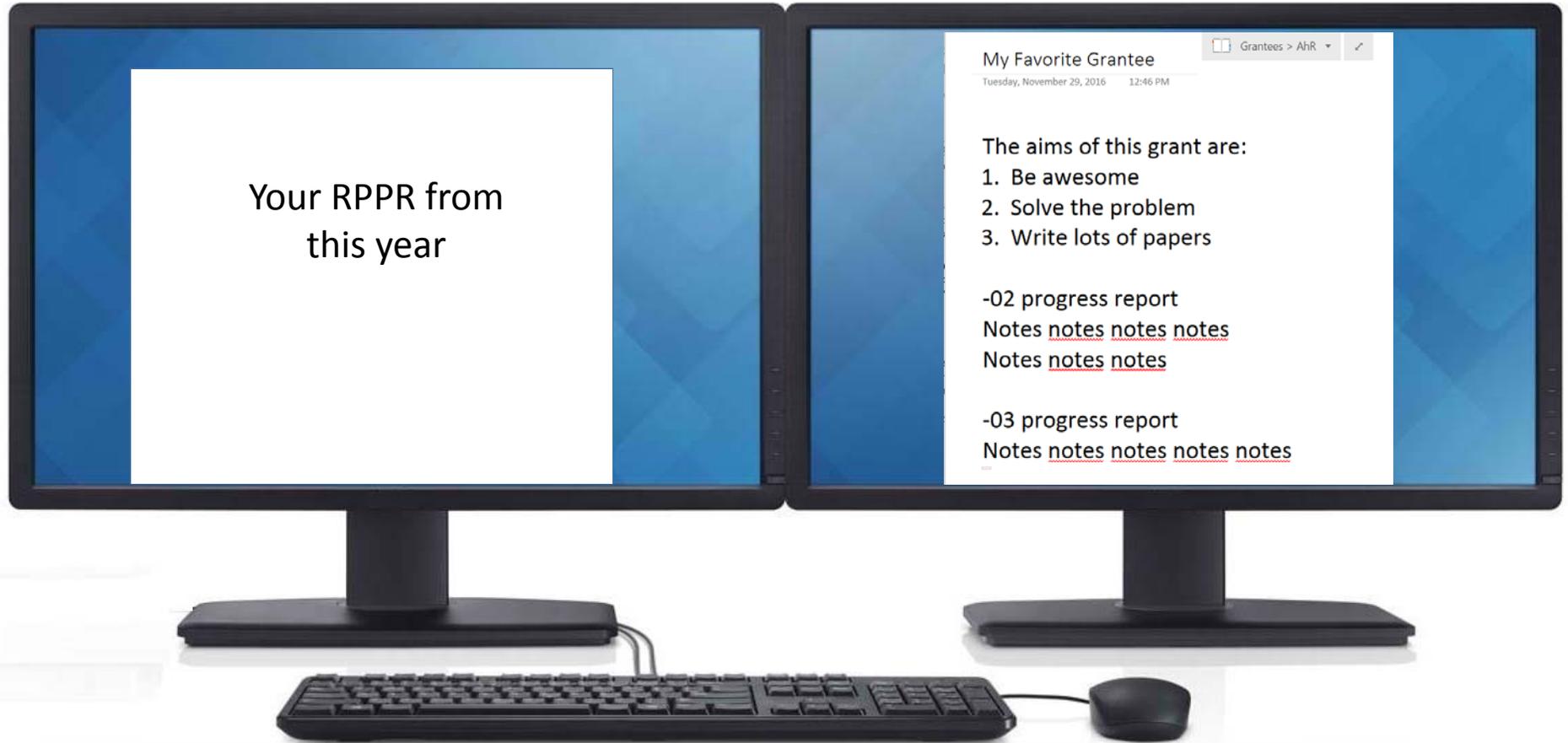
Has lots of things due, all at the same time



About to run to another meeting

Hasn't worked in a lab for a while

RPPR review: SIMULATION



Writing your progress update: DO'S and DON'TS

- DO:** Tell me what you accomplished this year, and only this year
- DO:** Be concise and clear
- DO:** Tell me about experimental challenges preventing progress, and how you've tried to solve them

- DON'T:** Use the same text every year, and just add a sentence or two
- DON'T:** Tell me every experimental detail, right down to the concentration of buffer you used
- 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

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

DO: Tell me how you shared your data

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

DO: Think big picture

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

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

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

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

DON'T: Drown me in pages and pages of detail

Have carryover? Have no fear.



**KEEP
CALM
AND
JUSTIFY YOUR
CARRYOVER**

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.

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

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.

Break it down aim by aim.

I published one paper describing this work.

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

Your Program Officer: Not *that* scary

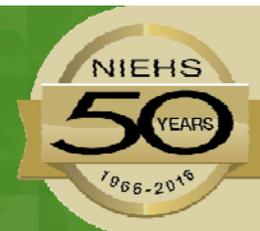


- Don't be afraid to contact us!
- Don't be afraid to contact us AGAIN after we don't respond the first time
- Don't be afraid to ask us questions

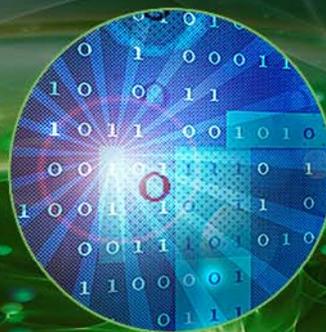
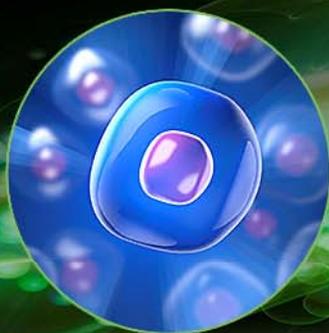
**We are from the government
and we are here to help!
(no, really! we are! we mean it!)**



National Institute of Environmental Health Sciences
Your Environment. Your Health.



Helping you Help Us Report your Success!



Christie Drew, Program Analysis Branch



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



Joel Collinson
Administrative
Support



Helena Kennedy
Program Analyst



Sarah Luginbuhl
Analyst
CareerTrac



Kristi Pettibone
Evaluator



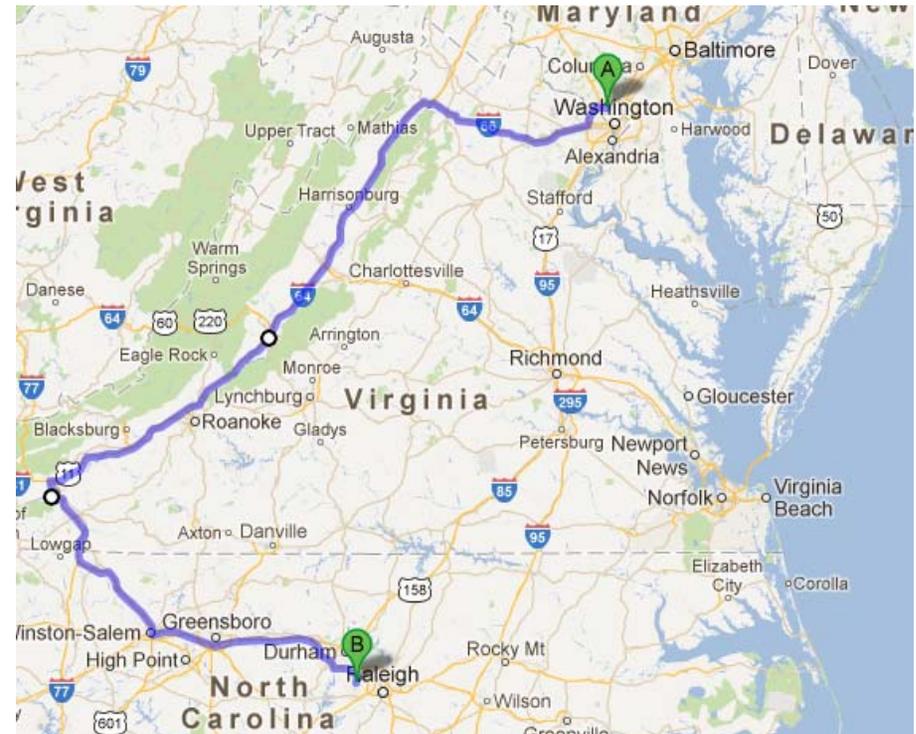
Elizabeth Ruben
IT Liaison, Analyst



Steven Tuyishime
Presidential
Management
Fellow

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!



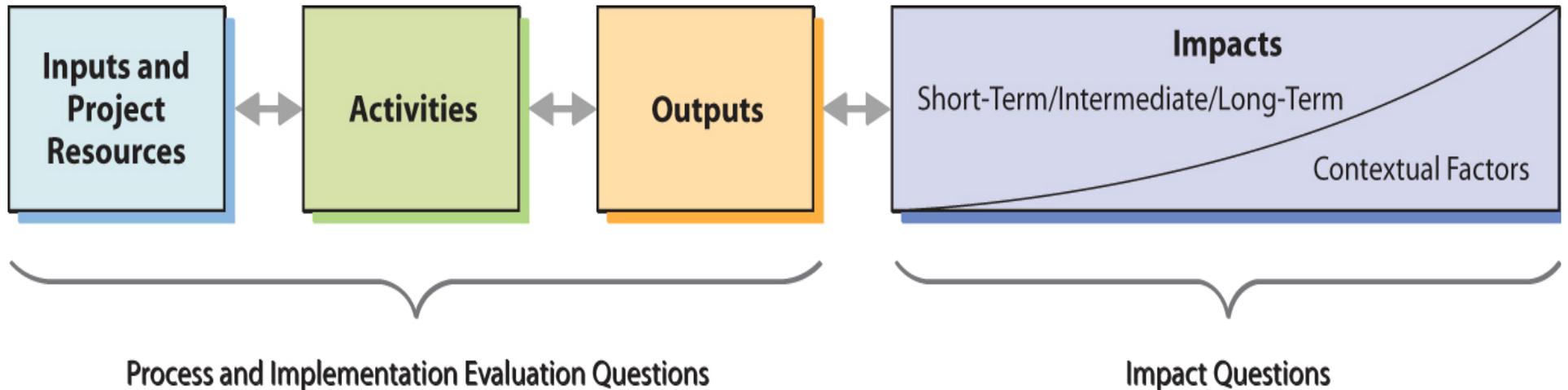
Tools to amplify your success

- Technical assistance to help you achieve your goals
 - PEPH Evaluation Metrics Manual
 - Environmental Health Economics Annotated Bibliography
- Knowledge management systems
 - HITS, CareerTrac

High Impacts Tracking System

CareerTrac
Tracking Trainees to Success

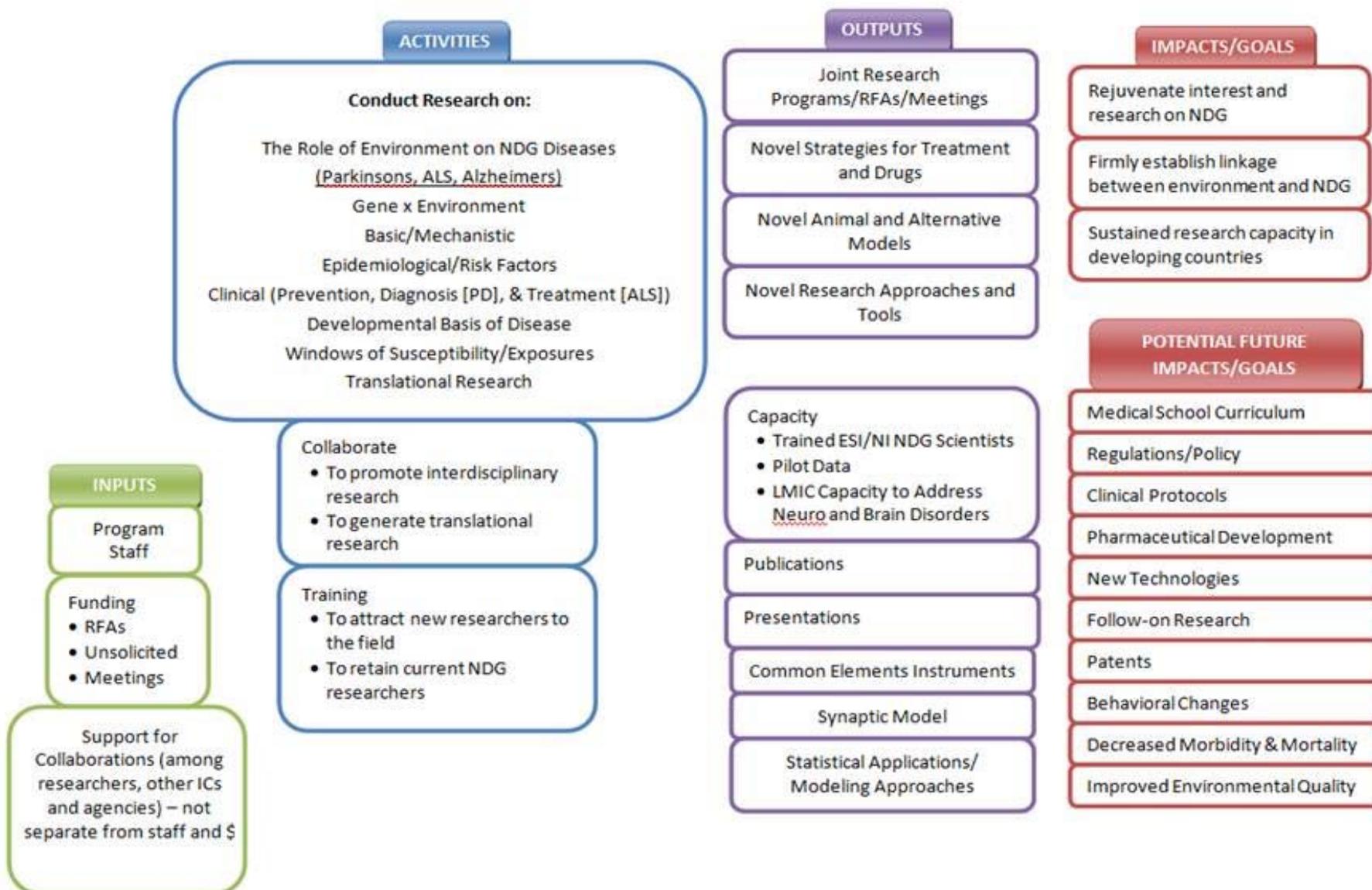




Logic Model – organized, project specific, informs metrics

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

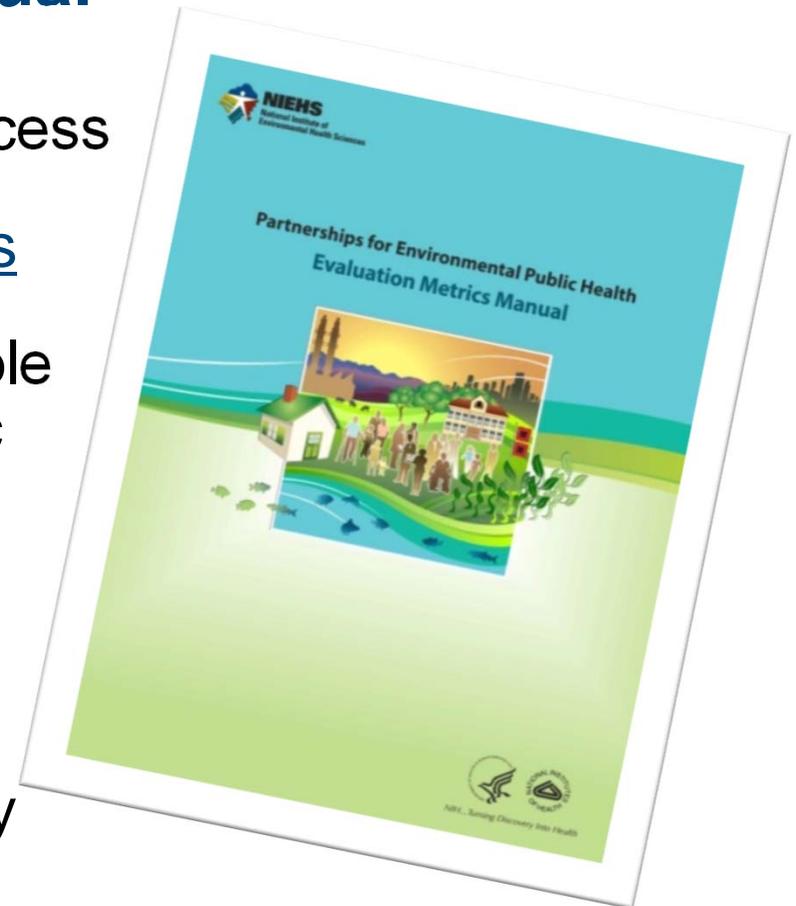
Neurodegeneration Program Logic Model





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

The screenshot shows the search results for the term "child". The page is titled "Environmental Health Economic Analysis Annotated Bibliography". It includes a search bar with the term "child" and a "Search" button. Below the search bar, there are several filters and a list of results.

Article Type	Results
Research article	10
Review	1

Environmental Agents	Results
Air pollutants	3
Allergens	1
Environmental pollutants	1
Metals	4

Health Outcomes	Results
Birth outcomes	1
Cancer	1
Metabolic outcomes	1
Metals poisoning	1
Mortality	1
Neurological/Cognitive outcomes	6
Respiratory outcomes	3

Economic Evaluation	Results
Cost analysis (CA)	5
Cost-benefit analysis (CBA)	7
Cost effectiveness analysis (CEA)	1

11 results for child [Return to all bibliographies](#)

Use checkboxes to select articles to generate a Printable PDF [Generate PDF](#)

- [The economic burden of exposure to secondhand smoke for child and adult never smokers residing in U.S. public housing](#)
 Authors: Mason J, Wheeler W, and Brown MJ
 Journal: Public Health Rep
 Year: 2015
 Economic Evaluation: Cost analysis (CA)
- [Assessing the health benefits of air pollution reduction for children](#)
 Authors: Wong EY, Gohike J, Griffith WC, Farrow S, and Faustman EM
 Journal: Environmental Health Perspectives
 Year: 2004
 Economic Evaluation: Cost-benefit analysis (CBA)
- [The social costs of childhood lead exposure in the post-lead regulation era](#)

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
 - RePORTER: publicly available database of funded NIH Grants (<https://projectreporter.nih.gov>)
 - MYNCBI: Grant PI can link publications to a specific grant (<https://publicaccess.nih.gov>)

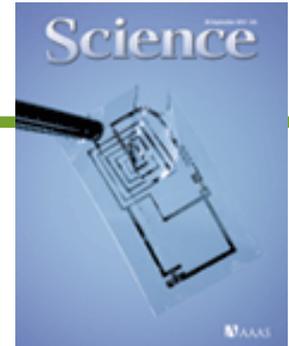
Knowledge Management at NIEHS

- 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



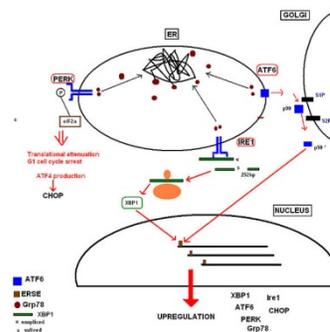
What is HITS?

- 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

WSDA
WASHINGTON STATE DEPARTMENT OF AGRICULTURE
WASHINGTON PESTICIDE LAWS
and
OTHER RELATED REGULATIONS
Hand-Out Booklet
INDEX

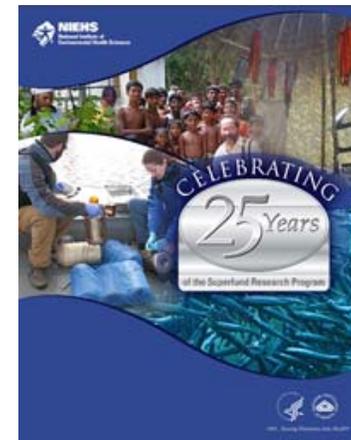
License & Recertification Requirements	1
What to Expect as a New Licensee	2
Recertification	3-4
Direct Supervision	3-4
Restricted Use Pesticides	5
Legal Label Deviations	6
Records	
Dealer	7
Applicator	7-9
Wood Destroying Organism (WDO) Inspection Reports	9
Landscape & Right of Way Application Requirements	
Notification of Pesticide Sensitive Individuals	10
Apparatus Display Signs	10
Posting Landscape Applications	11
Posting and Notification Requirements for Schools and Day Care	12
Storage	13-14
Hazardous Material Transportation	15-16
Worker Protection Standard (WPS)	17-18
Order Form for WSDA Laws and Rules	19-20
Pesticide Management Division Contact List	21
User Notes	Back pages

Persons of disability should notify WSDA in advance at (360) 902-2011 [TTY Relay at (800) 833-4383] if accommodation is necessary.
Rev. 11/11



Portfolio Coding

- Landmark Programs
- Science Areas
- Strategic Plan Goals



Partnerships for Environmental Public Health (PEPH)

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

Environmental Factor
Your Online Source for NIEHS News



eRA: RPPR (Current View)

Section C: Products

- **C1. Publications; (reported through MyNCBI)**
- **C2. Web sites**
- **C3. Technologies or techniques**
- **C4. Inventions, patent applications and licenses (reported through iEdison)**
- **C5. Other**

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 or techniques below (NIH recommended length is up to 1 page. Limit

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

C.5 Other products and resource sharing

C.5.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.

Nothing to Report

or upload Response

Add Attachment

Delete Attachment

View Attachment

C.5.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.

Nothing to Report

or upload Response

Add Attachment

Delete Attachment

View Attachment

New RPPR section C structures products

C.5 Other products and resource sharing

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
- Survey Instruments

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



This is a zero, not the letter O

Understanding Grant Numbers

Cite this in publications

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.

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)

My NCBI



ResearchGate

Relevant Publications

- **Logic Models**

- Engel-Cox, J. A., Van Houten, B., Phelps, J., & Rose, S. W. (2008). Conceptual model of comprehensive research metrics for improved human health and environment. *Environmental Health Perspectives*, 116 (5), 583–592. doi:10.1289/ehp.10925. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/18470312>.
- Liebow, E., Phelps, J., Van Houten, B., Rose, S., Orians, C., Cohen, J., et al. (2009). Toward the assessment of scientific and public health impacts of the National Institute of Environmental Health Sciences Extramural Asthma Research Program using available data. *Environmental Health Perspectives*, 117 (7), 1147–1154. doi:10.1289/ehp.0800476. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19654926>.
- Orians, C., Abed, J., Drew, C., Rose, S. W., Cohen, J., & Phelps, J. (2009). Scientific and public health impacts of the NIEHS Extramural Asthma Research Program—Insights from primary data. *Research Evaluation*, 18(5), 375–385. doi:10.3152/095820209X480698. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21921976>.
- National Institute of Environmental Health Sciences (NIEHS). (2012). Partnerships for environmental public health evaluation metrics manual (NIH publication no. 12-7825). Durham, NC. http://www.niehs.nih.gov/research/supported/assets/docs/a_c/complete_peph_evaluation_metrics_manual_508.pdf.

- **HITS**

- Drew, CH, Pettibone, KG; Ruben, E. (2013) Greatest 'HITS'; A new tool for tracking impacts at the National Institute of Environmental Health Sciences. *Research Evaluation* 22: 307-315; DOI 10.1093/reseval/rvt022.

- **ARIA/RePARS**

- Drew, CH, Pettibone, KG; Finch, FO; Giles, D; Jordan, P. (2016) Automated Research Impact Assessment: a new bibliometrics approach. *Scientometrics*.106:987–1005; DOI 10.1007/s11192-015-1828-7

Questions?

Christie Drew, Ph.D.
Chief, Program Analysis Branch
drewc@niehs.nih.gov
919.541.3319

