



LIBR

Laureate Institute for Brain Research



THE UNIVERSITY *of*
TULSA

K Club, Week 2

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University of Tulsa

Associate Director for Training and Mentoring,
Laureate Institute for Brain Research (LIBR)

Today's Topics



- ▶ Grant: People
- ▶ Research and Training Goals
- ▶ Specific Aims
- ▶ NIH Biosketch
- ▶ Email to Program Officer
- ▶ Action Items

Grant: People



▶ Primary Mentor

- ▶ Has grant and mentoring success
- ▶ Takes overall responsibility for your training

▶ Co-Mentor(s)

- ▶ Has grant and mentoring success
- ▶ Contributing to your training to help you gain future independence from Primary Mentor

▶ Collaborators, Consultants, Other Significant Contributors

- ▶ Generally not directly involved in your career development to help you gain independence
- ▶ **Collaborator:** Scientist whose distinct expertise complements your own, while a Co-Mentor shares your area of expertise and therefore contributes in guiding the scientific direction of the overall project. One provides unique expertise, the other umbrella expertise.
- ▶ **Consultant:** People providing advice or services (often paid) and may participate significantly in the research, filling in smaller gaps (e.g., supplying software, providing technical assistance, setting up equipment)
- ▶ **Contributor:** Add to scientific development or execution of your project but are not committing any specified measurable effort to your project (“as needed” or “effort of zero person months”)

Grant: People

- ▶ We will discuss what other documents these people need to submit as we progress through this course
- ▶ **Primary Mentor and Co-Mentor** statements
- ▶ Letters of Support from **Collaborators, Consultants, and Other Significant Contributors**
- ▶ **NIH Biosketches**
- ▶ Other Forms you will need to fill out (**Senior/Key Personnel**)
- ▶ Writing some of these people into the **Budget and Budget Justification**
- ▶ These people need eRA Commons and linked ORCID accounts!!



K Application Sections

Research

- **Specific Aims** (1 page)
- **Research Strategy** (6 pages: Significance, Innovation, Approach)
- **Training in Responsible Conduct of Research** (1 page)
- **Project Summary / Abstract** (30 lines of text)
- **Project Narrative** (3 sentences)
- **Protection of Human Subjects from Research Risk**
- **Inclusion of Women and Minorities**
- **Inclusion of Individuals Across the Lifespan**
- **Inclusion Enrollment Report**
- **Budget + Budget Justification**
- **Bibliography + References Cited**

Career

- **Candidate Information and Goals for Career Development** (6 pages: Candidate Background, Career Goals/Objectives, Career Development/Training Plan)
- **Plans and Statements of Mentor and Co-Mentors** (6 pages)
- **NIH Biosketches** for you, Mentor, Co-Mentors (max 5 pages each)
- **Three Letters of Reference**
- **Letters of Support from Collaborators, Contributors and Consultants** (6 pages max)
- **Cover Letter**

Setting

- **Facilities and Other Resources**
- **Equipment**
- **Environment and Institutional Commitment to Candidate**
- **Resource Sharing Plan**



Research and Training Goals

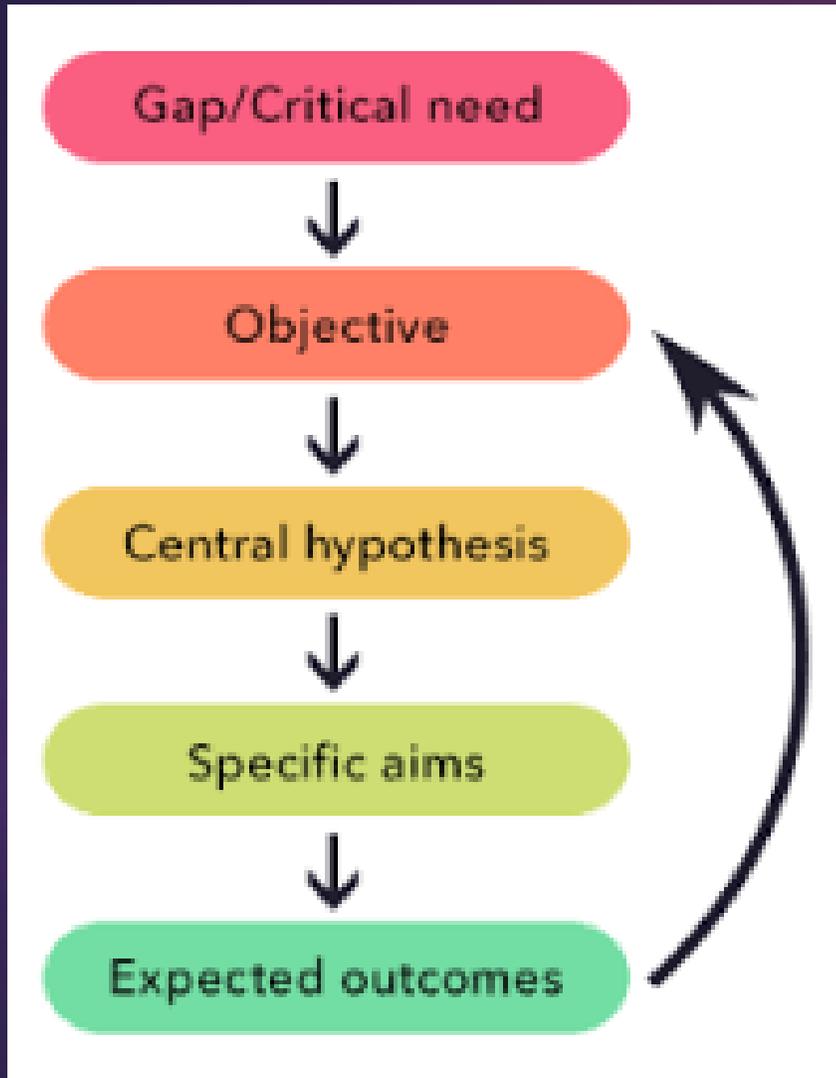
- ▶ At this point, you should have talked with your **Primary Mentor** to come up with at least one of these goals each for the:
 - ▶ K99 phase
 - ▶ R00 phase
- ▶ Next you are going to incorporate these goals into a **Specific Aims** document
 - ▶ The most important page of your application
 - ▶ Max one page long
 - ▶ Outlines the significance, innovation, and approach of your work in a concise format
 - ▶ Explains what the positive outcomes of your grant will be if it is funded



Specific Aims

- ▶ This page can be divided into four sections or paragraphs that we will go over in the next few slides
- ▶ It is important to note that you will likely be revising this page multiple times over the next six months after feedback from:
 - ▶ Your **Primary Mentor**
 - ▶ At least one **Program Officer**
 - ▶ Your grant **Co-Mentors** and anyone else on your K99/R00 team (**Collaborators**)
 - ▶ Peers and colleagues

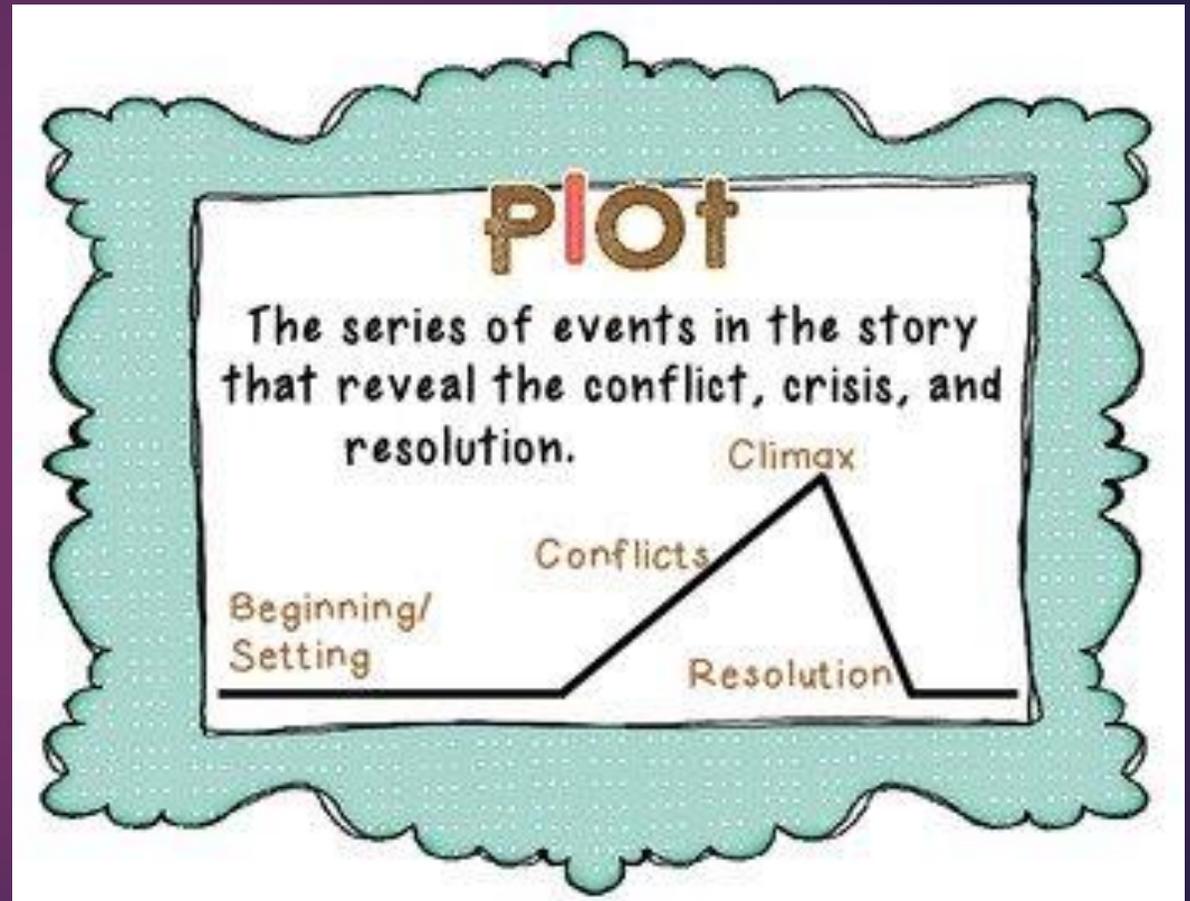




Specific Aims

(1 page)

A good **Specific Aims** page
tells an
exciting, compelling story...
in four paragraphs

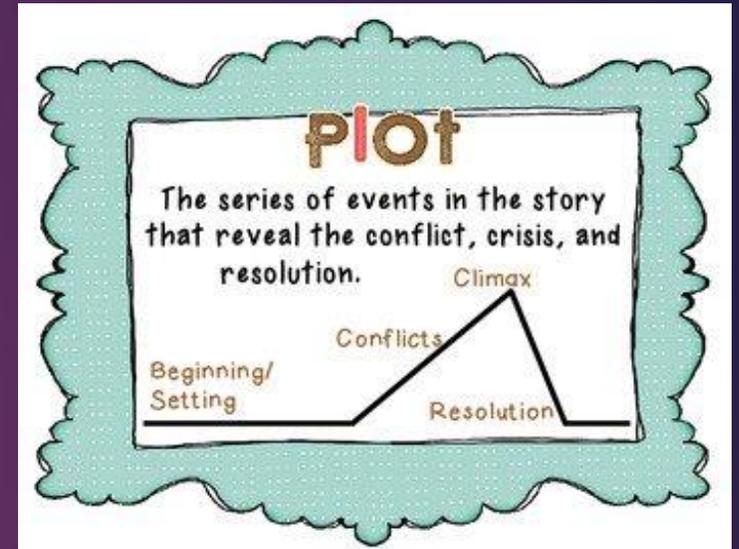


Research Example

- ▶ Let's say you're interested in sex differences in major depressive disorder (MDD)
- ▶ Your **Primary Mentor** suggested you focus on bodily inflammation = hot topic!
- ▶ You analyzed data comparing blood biomarkers of inflammation between:
 - ▶ MDD men
 - ▶ MDD women
 - ▶ Control (CTL) men
 - ▶ Control (CTL) women
- ▶ You got significant results (yay!) that you want to turn into a grant
 - ▶ Biomarker #1: MDD women > CTL women (no diffs in males)
 - ▶ Biomarker #2: MDD women > CTL women (no diffs in males)
- ▶ You came up with a study design with your Mentor
 - ▶ MDD women, MDD men, CTL women, CTL men
 - ▶ Longitudinal: Biomarkers 1 and 2 and clinical symptoms measured at two timepoints

Paragraph 1: Setting the Stage

- ▶ What is the specific problem?
- ▶ Why would solving this problem make a difference?
- ▶ What do you think should be the solution?
- ▶ What is your specific, EXCITING approach to the problem?
- ▶ Do a literature review to come up with “knowns” and “unknown(s)” (gap or critical need) regarding the problem
- ▶ If this gap or critical need isn’t solved, what bad things will happen?



Do the Literature Review



- ▶ “Knowns”:
 - ▶ MDD often chronic, relapsing illness, 50% do not respond to antidepressants or therapy so we need new innovative treatments that help this 50% get better
 - ▶ Some researchers propose that MDD linked to inflammation (blood-based biomarkers)
 - ▶ Two studies show Group effect (MDD > CTL) on Biomarker #1 (cross-sectional)
 - ▶ One study shows Sex effect (Women > Men) on Biomarker #2 (cross-sectional)
- ▶ “Unknowns” or “Gaps” or “Critical Need”
 - ▶ Is there a subset of MDD with blood-based inflammation that makes depression worse over time? If we know this, we can test whether anti-inflammatories help these people get well
 - ▶ No studies examining Group*Sex interactions in Biomarkers #1 and #2 (maybe more MDD inflammation in women)
 - ▶ No longitudinal studies identifying whether Biomarkers #1 and #2 predict future depression severity

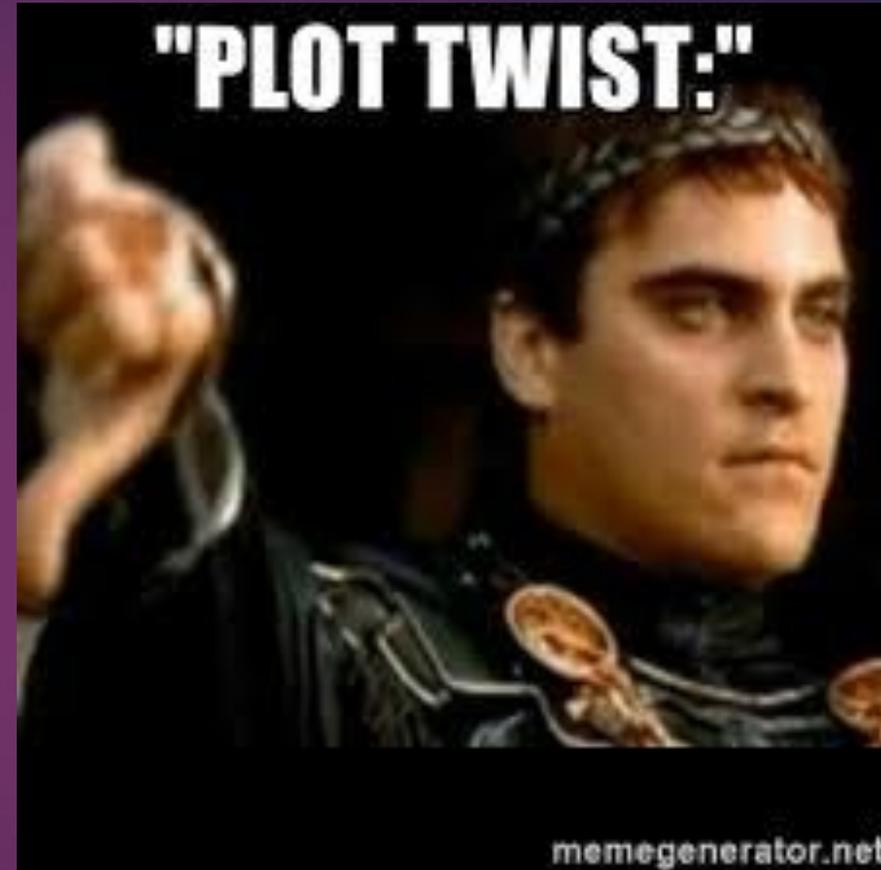
Opening Sentence: Two Parts

- ▶ Hook reviewers' attention, focusing on something that highlights the **PROBLEM** that will be addressed by your application
- ▶ Highlight the NIH's mission: apply research findings to enhance health, lengthen life, and reduce illness and disability



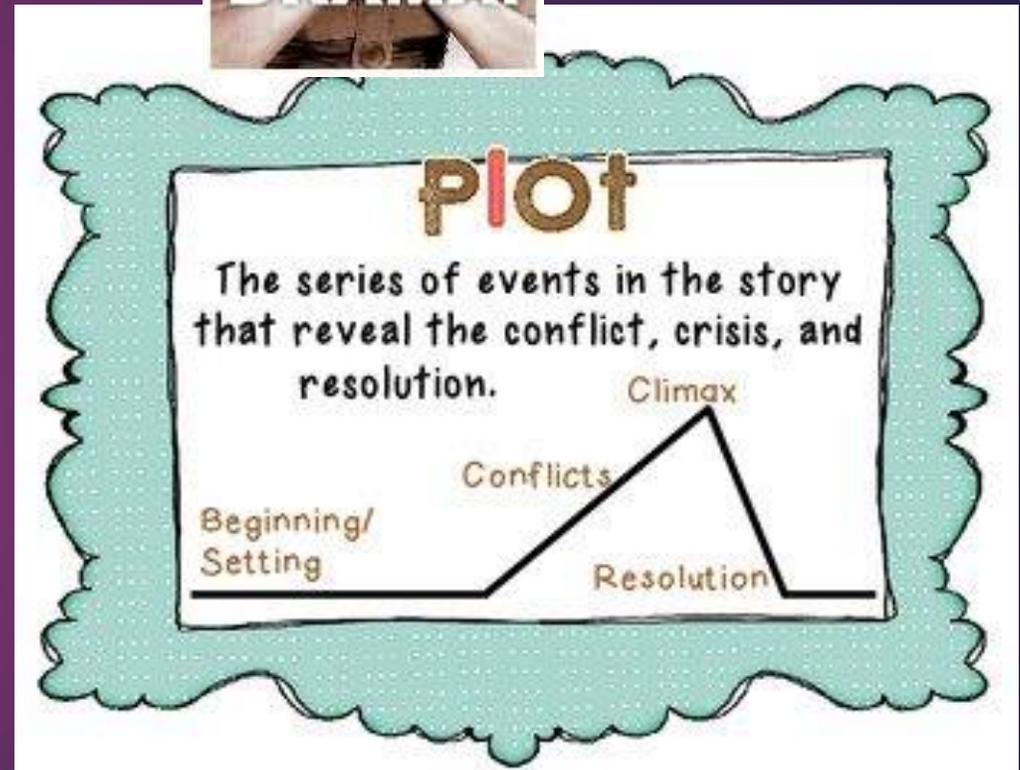
Report the “Knowns”

- ▶ 3 - 5 sentences
- ▶ Stick close to the plot
- ▶ Try not to go off on tangents



Report the “Unknown(s)”

- ▶ The start of the CONFLICTS
- ▶ 1 sentence

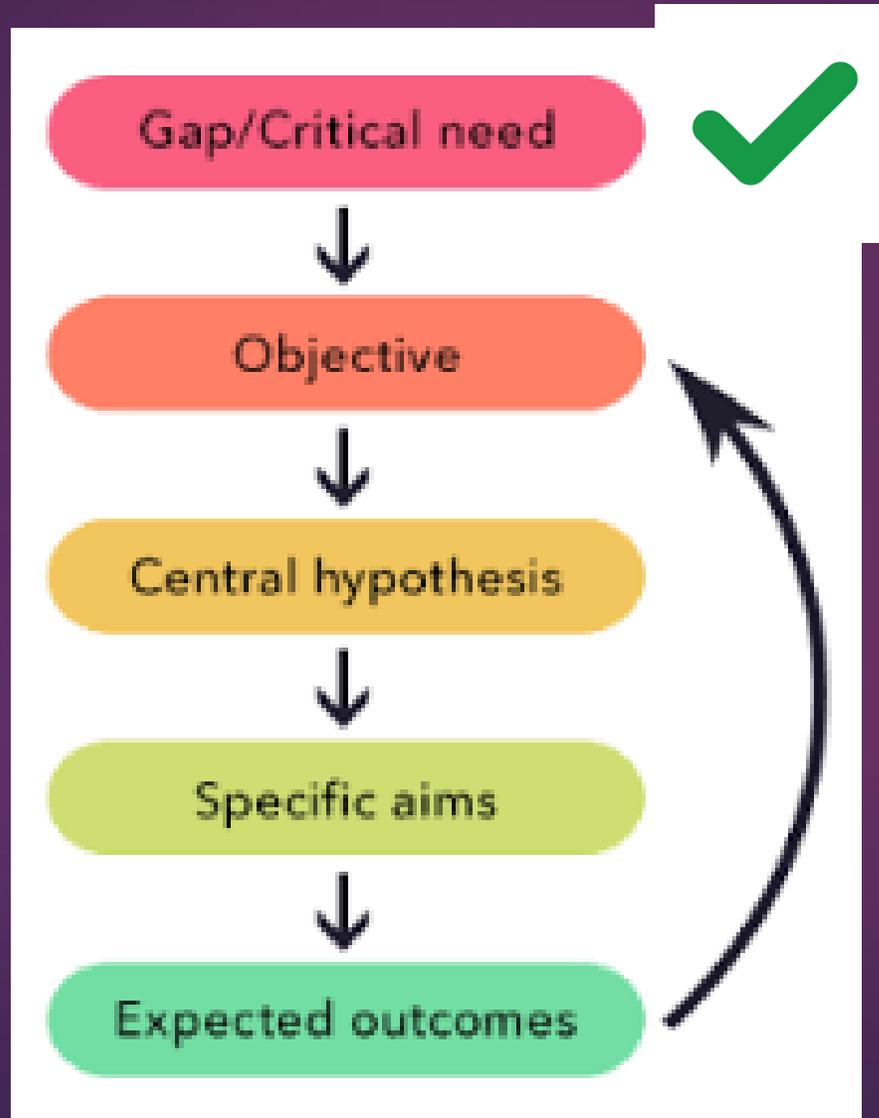


Statement of Critical Need...or else!

- ▶ 1-2 sentences
- ▶ Frame the “Unknown(s)” as a problem that demands a solution NOW
- ▶ What explicitly is needed that will drive your grant proposal?
- ▶ What bad things will happen if this problem isn't solved? [see picture to the right]



First paragraph draft = DONE!



Paragraph 2: What is your Study Objective and Central Hypothesis?

- ▶ What is your long-term goal of this research?
- ▶ What is your short-term goal of this study and how does it relate to the long-term goal?
- ▶ This study
 - ▶ What will you do? What kind of design will you use?
 - ▶ Who will be your participants?
 - ▶ Why is this the best design to answer the gap/unmet need?
- ▶ What is the central hypothesis of your study? How did you come up with it?
- ▶ What will be the next step if your central hypothesis from this project is supported?

Long-Term Goal

- ▶ 1 sentence
- ▶ What is the big picture of your research program that:
 - ▶ Is related to public health (aka NIH's mission)
 - ▶ Goes beyond the current project (but is related to it)?



Overall Objective (Short-Term Goal)

- ▶ 1 sentence
- ▶ Explain what this study seeks to accomplish and make sure to link it to the:
 - ▶ Unmet need in Paragraph #1
 - ▶ Your long term goal
- ▶ Emphasize the **PRODUCT** you aspire to provide, **NOT** the process that will produce it

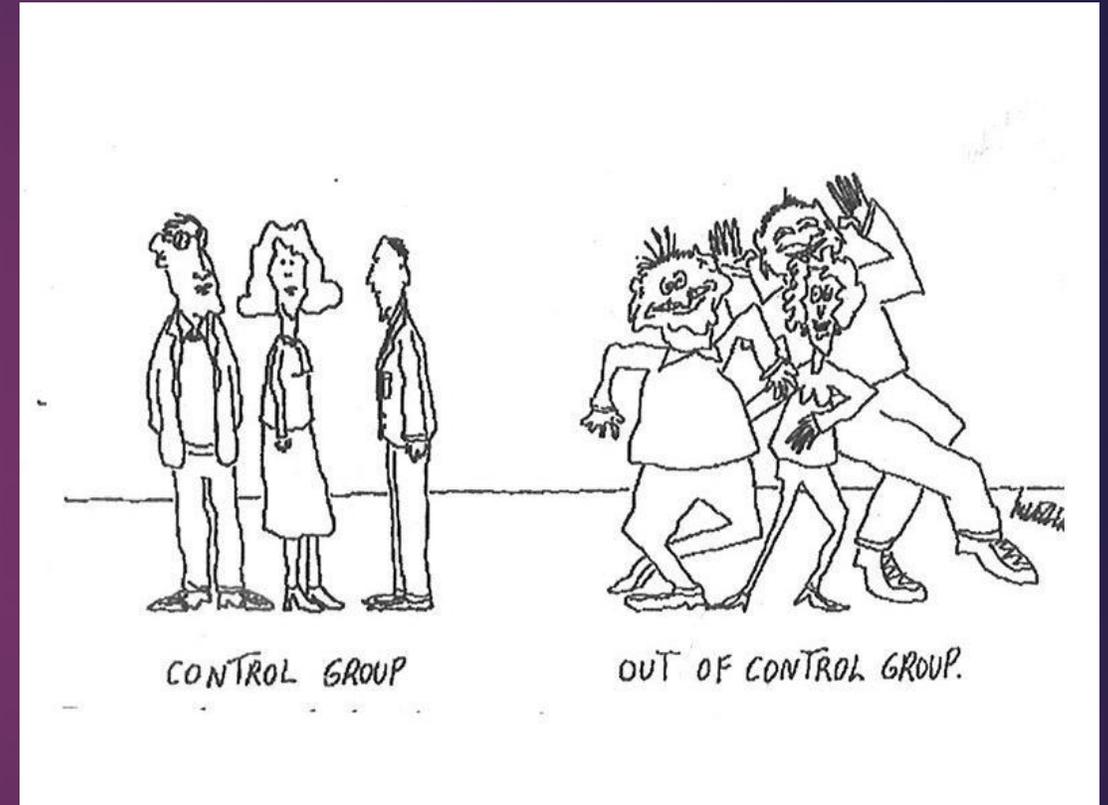
© Randy Glasbergen / glasbergen.com



“My short-term financial goal is to keep some of my paycheck until Tuesday. My long-term financial goal is to keep some of my paycheck until Friday.”

Explain Study Design

- ▶ Participants (characteristics relevant to study: age, body mass index, race/ethnicity, etc.)
- ▶ Groups (with sample sizes)
- ▶ Variables of interest
- ▶ How often data collected
- ▶ What kind of data collected



Central Hypothesis

- ▶ 1-2 sentences
- ▶ Your best bet out of all possibilities as to how you can meet your overall objective
- ▶ Explain how this was formulated – was it based on your own preliminary data or other published studies? If preliminary data, mention what you found

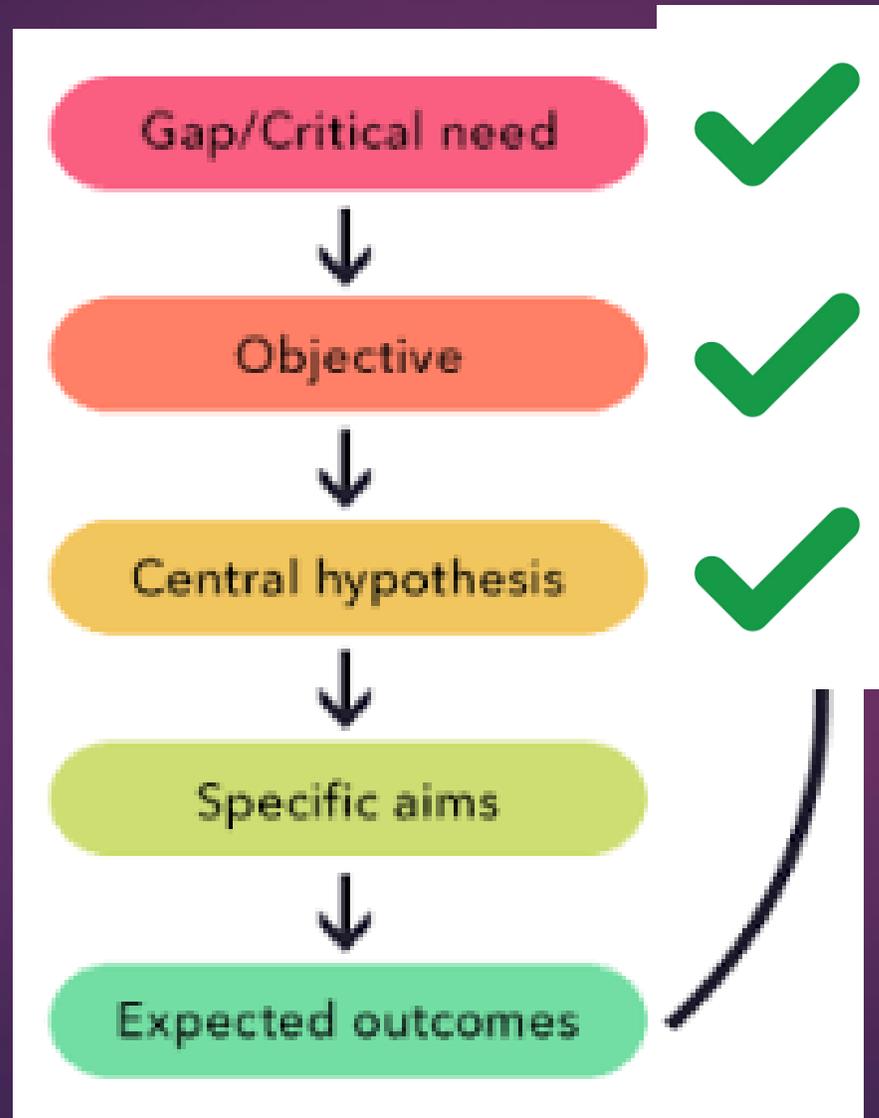


Rationale for Funding the Study

- ▶ One sentence
- ▶ Tell reviewers what will be possible after your research study is completed that is not possible now!



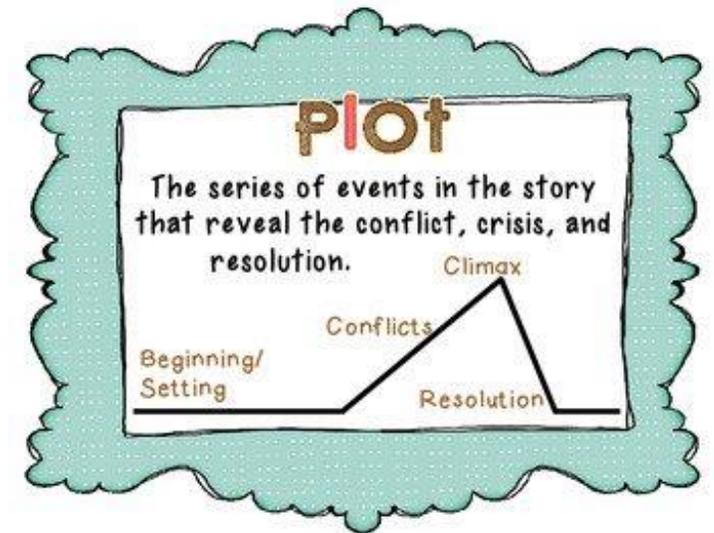
2nd paragraph draft = DONE!



Paragraph 3: Story CLIMAX

What are your Specific Aims?

- ▶ Maximum number = 3 aims!
- ▶ Explain how you will test SPECIFIC PARTS or COMPONENTS of your CENTRAL HYPOTHESIS from Paragraph #2
- ▶ Brief, informative and open-ended, followed by at least one specific DIRECTIONAL hypothesis
- ▶ The first aim should flow logically into the second aim, which should flow logically into the third aim
- ▶ No aims should be dependent on an outcome of a previous aim



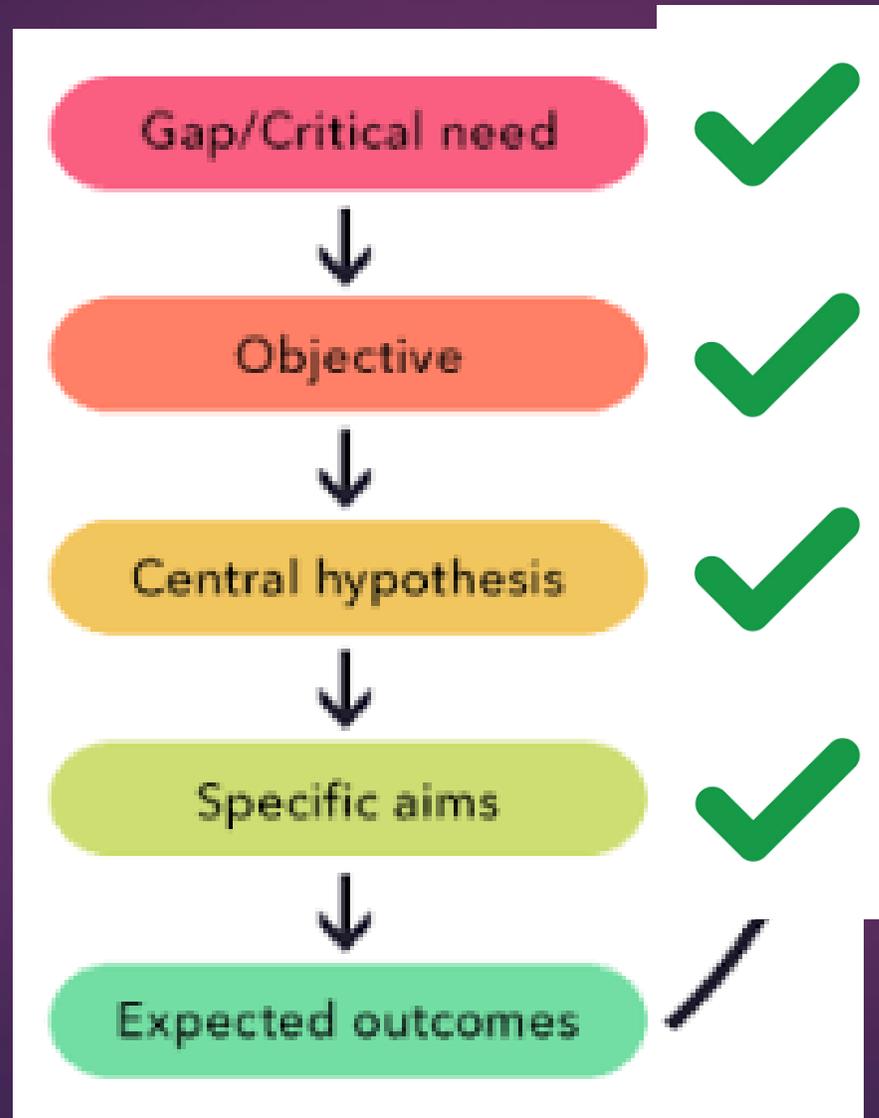
Specific Aim #1: Cross-Sectional

- ▶ Identify whether sex moderates the relationship between MDD and biomarker inflammation at baseline.
- ▶ Hypothesis: Based on our pilot data, we predict a group*sex interaction, such that within women but not men, MDD will show significantly higher levels of Biomarker #1 and Biomarker #2 than CTL at baseline.

Specific Aim #2: Longitudinal

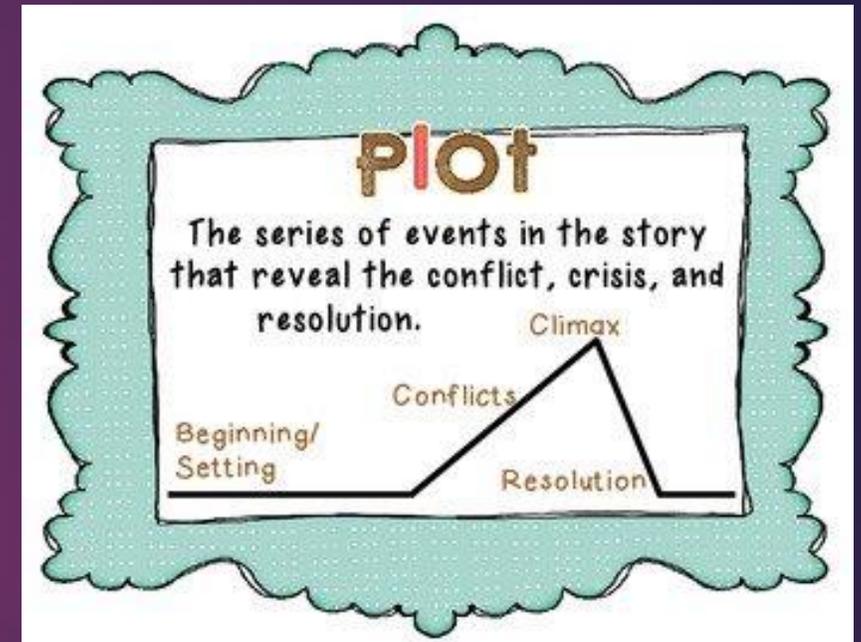
- ▶ Identify the degree to which baseline biomarker inflammation predicts follow-up depression symptoms within MDD (accounting for sex and baseline depression symptoms).
- ▶ Hypothesis: We predict that above and beyond baseline depression symptoms and sex, greater baseline Biomarker #1 and #2 inflammation will significantly predict higher depression symptoms at follow-up.

3rd paragraph draft = DONE!



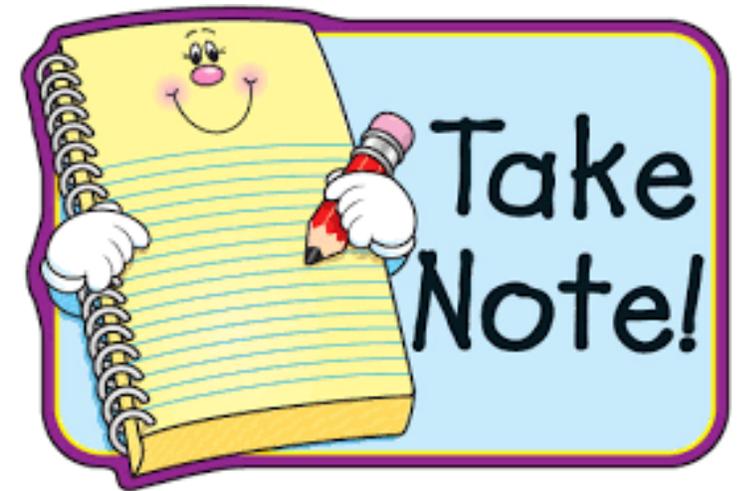
Paragraph 4: The Payoff, RESOLUTION

- ▶ **Expected Outcomes:** 1-2 sentences total explaining the payoff reviewers can expect to get if they vote to recommend funding for your project; there should be at least one expected outcome for each Aim and they should collectively relate to your overall objective from Paragraph #2
- ▶ **Generality Regarding Positive Impact:** Explain in 1 sentence how your expected results will positively advance your field of research.



Important Note

- ▶ Somewhere in your **Specific Aims** you want to mention how this project will give you the skills to transition into an Independent Investigator position!
- ▶ This sentence may fit best in Paragraph 4, The Payoff



NIH Biosketch (max 5 pages)

- ▶ Allows applicants to:
 - ▶ Describe the magnitude and significance of their scientific contributions (including publications)
 - ▶ Provide detailed info about their research experience/skills within the context of the proposed project
- ▶ Who fills this out?
 - ▶ You
 - ▶ Anyone on your K Mentorship Team
 - ▶ Typically, **Collaborators, Consultants** and most **“Other Significant Contributors”**
- ▶ Forms, instructions, and samples available at:
<https://grants.nih.gov/grants/forms/biosketch.htm>



BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: **Stewart, Jennifer Lorraine**

eRA COMMONS USER NAME (credential, e.g., agency login): jlstewar

POSITION TITLE: Assistant Professor; Associate Director for Training and Mentoring/Principal Investigator

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of California, San Diego	B.S.	06/1998	Psychology
University of Illinois, Urbana-Champaign	M.A.	05/2005	Clinical Psychology
University of Illinois, Urbana-Champaign	Ph.D.	05/2008	Clinical Psychology
University of Arizona	Postdoctoral	01/2010	Depression
University of California, San Diego (UCSD)	Postdoctoral	07/2014	Addiction

Top of
Page 1:

Basic Info about
yourself, including your
ERA Commons ID



A. Personal Statement

I have the expertise, leadership, training, expertise and motivation necessary to successfully carry out the proposed research project. I have a broad background in psychology, with specific training and expertise in ethnographic and survey research and secondary data analysis on psychological aspects of drug addiction. My research includes neuropsychological changes associated with addiction. As PI or co-Investigator on several university- and NIH-funded grants, I laid the groundwork for the proposed research by developing effective measures of disability, depression, and other psychosocial factors relevant to the aging substance abuser, and by establishing strong ties with community providers that will make it possible to recruit and track participants over time as documented in the following publications. In addition, I successfully administered the projects (e.g. staffing, research protections, budget), collaborated with other researchers, and produced several peer-reviewed publications from each project. As a result of these previous experiences, I am aware of the importance of frequent communication among project members and of constructing a realistic research plan, timeline, and budget. The current application builds logically on my prior work. During 2005-2006 my career was disrupted due to family obligations. However, upon returning to the field I immediately resumed my research projects and collaborations and successfully competed for NIH support.

1. Merryle, R.J. & Hunt, M.C. (2004). Independent living, physical disability and substance abuse among the elderly. *Psychology and Aging*, 23(4), 10-22.
2. Hunt, M.C., Jensen, J.L. & Crenshaw, W. (2007). Substance abuse and mental health among community-dwelling elderly. *International Journal of Geriatric Psychiatry*, 24(9), 1124-1135.
3. Hunt, M.C., Wiechelt, S.A. & Merryle, R. (2008). Predicting the substance-abuse treatment needs of an aging population. *American Journal of Public Health*, 45(2), 236-245. PMID: PMC9162292 Hunt, M.C., Newlin, D.B. & Fishbein, D. (2009). Brain imaging in methamphetamine abusers across the life-span. *Gerontology*, 46(3), 122-145.



Bottom of Page 1: Section A

Here is where you make your case as to why you are well-suited for your role in your project



A. Personal Statement

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What to Include:

- Key aspects of your training, past experience, technical expertise, significant collaborations, and past performance important for success of this project
- Here you can explain anything else you'd like the Reviewers to know about your career and research directions (e.g., proposing work in a new direction, or any personal/family situations impacting your work)
- You can provide up to 4 publications or "research products"

A. Personal Statement

I possess the expertise, leadership, training, and motivation necessary to successfully complete longitudinal projects using functional magnetic resonance imaging (fMRI) during decision-making to predict relapse versus abstinence in substance use disorders. I was trained as a scientist-practitioner in clinical psychology and possess 10 years of experience with fMRI data collection, analysis, and interpretation. As a post-doctoral researcher and project scientist at UCSD, I supervised research assistants on successful participant recruitment and one- and three- year follow-up retention, as well as fMRI, self-report, and behavioral assessments, on Co-Investigator Dr. Martin Paulus's NIDA-funded longitudinal studies of stimulant use disorder (R01DA027797, R01DA018307, R01DA016663). Within the past 6 years, I have co-authored 27 publications on addiction, interoception and/or decision-making that together demonstrate four important findings: (1) recent-onset/early stimulant addiction is characterized by heightened insular cortex sensitivity to pleasant touch, in contrast to chronic addiction, which is linked to blunted responsiveness; (2) both recent-onset and chronic stimulant addiction are marked by attenuated insular cortex responsivity to interoceptive/behavioral punishment, whereas early-onset non-stimulant (alcohol/marijuana) addiction shows heightened sensitivity; (3) future relapse to drug use is predicted by disruptions in decision-making, including attenuated reward learning and blunted evaluation of risk; and (4) individual differences in comorbid psychopathology and recency/chronicity of drug use moderate neural responses during decision-making. Brain biomarkers of stimulant addiction across studies implicate dysfunction in insular cortex, anterior cingulate cortex, and prefrontal cortex (inferior frontal gyrus). My current research focuses on delineating brain markers of recovery from opioid use disorder. My work was highlighted by NIDA in 2015 (<http://www.drugabuse.gov/news-events/nida-notes/2015/09/brain-imaging-predicts-relapse-to-cocaine>) and relevant articles are listed below:

- a. **Stewart JL**, May AC, Aupperle RL, Bodurka J (2019). Forging neuroimaging targets for recovery in opioid use disorder. *Frontiers in Psychiatry* 10: 117 (online publication) [PMCID: PMC641736](https://pubmed.ncbi.nlm.nih.gov/3541736/)
- b. **Stewart JL**, Butt M, May AC, Tapert SF, Paulus MP (2017). Insular and cingulate attenuation during decision making is associated with future transition to stimulant use disorder. *Addiction* 112: 1567-1577. [PMCID: PMC5544547](https://pubmed.ncbi.nlm.nih.gov/28544547/)
- c. **Stewart JL**, May AC, Poppa T, Davenport PW, Tapert SF, Paulus MP (2014). You are the danger: attenuated insula response in methamphetamine users during aversive interoceptive decision-making. *Drug and Alcohol Dependence* 142: 110-119. [PMCID: PMC4127120](https://pubmed.ncbi.nlm.nih.gov/24127120/)

You need to include PMIDs for your publications:

<https://www.ncbi.nlm.nih.gov/pmc/pmctopmid/>

B. Positions and Honors

Positions and Employment

2014-2018 Assistant Professor, Department of Psychology, Queens College, CUNY, Flushing, NY
2014-2018 Assistant Professor, Department of Psychology, The Graduate Center, CUNY, Manhattan, NY
2018-Present Assistant Professor of Community Medicine, University of Tulsa, Tulsa OK
2018-Present Associate Director for Training and Mentoring/Principal Investigator, Laureate Institute for Brain Research, Tulsa, OK

Other Experience and Professional Memberships

2000-Present Member, Society for Psychophysiological Research (SPR)
2009-Present Ad-hoc Reviewer: Biological Psychology
2013-Present Member, Society for Biological Psychiatry (SOBP)
2013-Present Ad-hoc Reviewer: Addiction, Addiction Biology, Addictive Behaviors, American Journal of Psychiatry, Biological Psychiatry, Brain and Cognition, Cerebral Cortex, Clinical Neurophysiology, Cognitive Affective and Behavioral Neuroscience, Current Directions in Psychological Science, Drug and Alcohol Dependence, Emotion, Human Brain Mapping, International Journal of Psychophysiology, Journal of Abnormal Psychology, Journal of Neuroscience, Neuroimage, Neuroscience Letters, Personality and Individual Differences, PLoS ONE, Psychopharmacology, Psychophysiology, Social Cognitive and Affective Neuroscience, and Translational Psychiatry
2016-Present Member, College on Problems of Drug Dependence (CPDD)
2017-Present Consulting Editor: Psychophysiology

Honors

2000 Massachusetts General Hospital fMRI Visiting Fellowship Program
2004 Excellence in Teaching, University of Illinois, Urbana-Champaign, IL
2005 University of Wisconsin Madison Emotion Symposium Travel Award
2007 University of Michigan Training Course in fMRI Travel Award
2008 Ed Scheiderer Dissertation Award, University of Illinois, Urbana-Champaign, IL
2010 Biological Psychology Reviewer Award (10+ reviews in one year)
2011-2013 National Institute on Drug Abuse (NIDA) Loan Repayment Award

Section B

Positions and Honors

- If you have any clinical licensure info, you would put it here
- If you have been asked to review articles for journals, you can list that here
- Teaching experience could also go here if the topic is relevant to your project
- Travel and poster awards should definitely be included

C. Contributions to Science

1. My early work demonstrated that two individual styles of anger expression, anger-out (linked to aggression and approach motivation) and anger-in (linked to suppression of angry feelings and withdrawal motivation) presented with divergent patterns of EEG/ERP activation and differential links to depression and anxiety. Anger-in was linked to heightened worry and anhedonic depression, with reduced attentional bias to negative stimuli, whereas anger-out was associated with exaggerated attentional bias to negative stimuli. Trait anger regardless of expression style was linked to greater relative left frontal lobe asymmetry, which typically characterizes approach motivation and pleasant emotions. Results suggest that facets of anger are more complex than most models of emotional processing allow. Relevant articles are listed below:

- a. **Stewart JL**, Silton RL, Heller W, Sass SM, Miller GA (2008). Anger style, psychopathology, and regional brain activity. *Emotion* 8: 701-713. PMID: PMC3047003
- b. **Stewart JL**, Silton RL, Sass SM, Fisher JE, Edgar JC, Heller W, Miller GA (2010). Attentional bias to negative emotion as a function of approach and withdrawal anger styles: An ERP investigation. *International Journal of Psychophysiology* 76: 9-18. PMID: PMC2867457

Section C Contributions to Science

- You can list up to 5 significant contributions (but it would make sense if you had 1 or 2 at this stage in your career)
- Each one = ½ page with up to 4 publications and you CAN cite conference proceedings such as abstracts, posters, or other presentations
- You can also submit a hyperlink to an on-line bibliography but it must be hosted on a federal (.gov) website. You can register on My NCBI and create one:
https://www.nlm.nih.gov/bsd/disted/pubmedtutorial/070_010.html

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/jennifer.stewart.2/bibliography/public/>



<https://grants.nih.gov/faqs#/biosketches.htm>

^ IV. Contributions to Science

1. What advice do you have for new scientists filling out their scientific contributions?

[Expand/Collapse Questions]

In general, reviewers base their expectations for contributions based on the seniority of the person filling out the biosketch. A scientist with one publication may want to summarize the key finding of the paper and its importance in a short contribution. Scientists with no publications may wish to provide a contribution describing their efforts on other peoples' papers and projects (e.g., I used this method, I conducted the literature review for this paper, I care for all the animals in this lab, etc.). If a new scientist has *no* actual research or thesis experience, they might just want to list one contribution about their training to date. You might want to consult with your colleagues who serve as reviewers in your area of science.

3. Does the PD/PI need to be an author on a publication used to reference a contribution to science in a NIH biosketch?

No, the publication does not need to be their own. It is up to the applicant to describe their contributions. Listing a key publication that builds on their work is one way of doing so.

4. Can manuscripts still in the review process be included in the Personal Statement or Contributions to Science section of the biosketch?

Yes. The NIH encourages investigators to use interim research products, such as preprints, to speed the dissemination and enhance the rigor of their work. [See the Interim Research Product FAQs](#) for more information on how to cite this information.

D. Additional Information: Research Support

Active Research Support

P20 GM121312(Paulus) 07/01/2018 – 06/30/2022

NIH/NIGMS

The Center for Neuroscience-based Mental Health Assessment and Prediction (NEUROMAP)

Administrative Core

Major Goals were to provide state of the art neuroimaging and laboratory infrastructure to conduct biological experiments with multi-level assessments, to create a career development infrastructure to accelerate the investigator's transition from young investigator to established investigator, and to build an operational infrastructure that provides the tools necessary to conduct the research projects, standardize assessments and provide a data repository for future pilot project.

Role: Associate Director of Training and Education

Completed Research Support

P20 GM121312 (Paulus) 12/01/2018 – 12/01/2019

NIH/NIGMS

Refining frontal brain asymmetry as a biomarker for major depressive disorder

The goal of this secondary data analysis project is to determine whether frontal brain asymmetry computed using fMRI regions of interest (obtained during four cognitive-emotional tasks and a resting state from the Tulsa 1000 study) are biomarkers of pure and comorbid major depressive disorder. Sex differences and two types of anxiety, anxious apprehension and anxious arousal, are included in analysis.

Role: PI, Pilot Project

Section D Additional Information: Research Support

- List ongoing and completed research support (it's not a big deal if you don't have any, you just say "None")



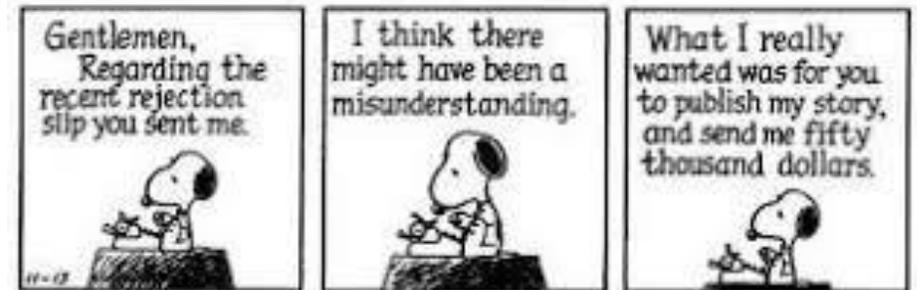
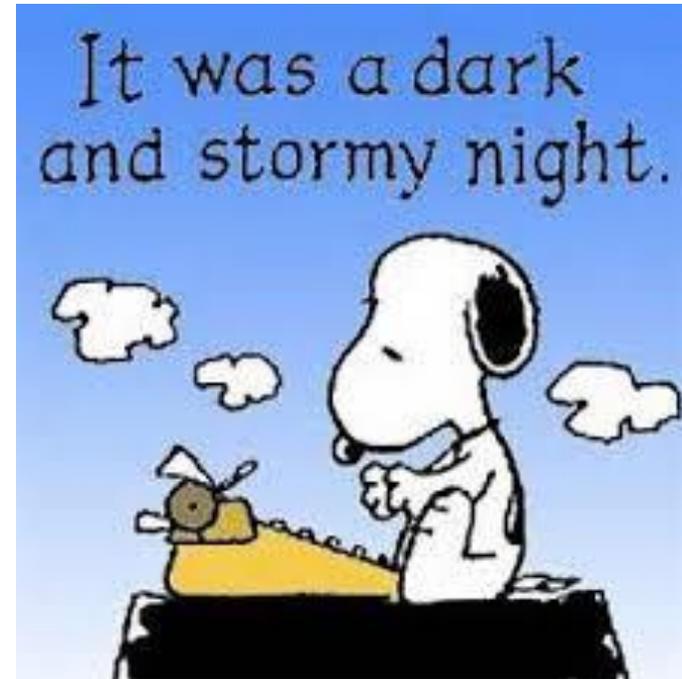
Biosketch Summary

- ▶ Make it personal: tell the Reviewers about you, your career, and your expertise
- ▶ This is where you tell the Reviewers that you are the most qualified investigator to do the work
- ▶ Reviewers are instructed that publication track records for Junior Investigators will not match more Senior Investigators
- ▶ Try not to speak in too many technical terms – write it so that your family members could (maybe) understand what you are trying to say
- ▶ Be clear and to the point!



Drafting an Email to the Program Officer

- ▶ Briefly introduce yourself, your degree/training/area of research, and your current position
- ▶ Explain that you plan to submit a K (e.g., K99/R00, K23) application for a specific deadline, listing the FOA you plan to apply under
- ▶ Explain the research project and training goals for the grant in 3-4 sentences max
- ▶ Be specific in your request for feedback on whether the project in your **Specific Aims** would be of interest to this Branch/Division of the Institute
- ▶ Attach your **Specific Aims** and **NIH Biosketch**



Action Items

- ▶ Write drafts of your **Specific Aims** and **NIH Biosketch** and get feedback from your **Primary Mentor**
- ▶ Search for a **Program Officer** fitting your research and send an email to this person, attaching your **Specific Aims** and **NIH Biosketch**
- ▶ Email Investigators to ask if they will be part of your K Mentorship Team
 - ▶ Also attach **Specific Aims** and **NIH Biosketch**
 - ▶ If they are interested in joining the Team, request feedback on both documents
- ▶ Treat yourself to a break after all this hard work! 😊

