# Miami University
# Mid-Career Advancement (MCA) Seminar

Burr Zimmerman, PhD
Urban Venture Group, Inc.
October 6, 2022

# Purpose and Goals

Today's program will provide information about the NSF **Mid-Career Advancement (MCA) Award**

- ***"Beyond the rules"***
  - Strategy
  - Best practices
  - Keys to success



- **Introduce MCA award**
- **Contrast** with CAREER and other NSF programs
- **Keys to success** for MCA awards
- **General grantsmanship** and other best practices



*These slides will be available online at uvgltd.com/MCA*



UVG

# Desired Outcomes

- **Align your research** goals with MCA purpose and scope
- Understand the **unique requirements** of the MCA program
- Improve your articulation of **Intellectual Merit and Broader Impacts**

Improve your chances of securing MCA funding

Develop grantsmanship skills applicable to future proposals

*These slides will be available online at uvgltd.com/MCA*

# NSF MCA Seminar Agenda

| | |
|---|---|
| **9:00 – 12:00** | **Presentation** |
| 9:00 – 9:15 | Welcome and Introductions |
| 9:15 – 9:45 | MCA Nuts and Bolts |
| 9:45 – 10:30 | Planning for Your MCA Proposal |
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| **12:00 – 1:00** | **Fireside Chat / Brown Bag** |
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| **1:30 – 3:30** | **One-on-one sessions** |

# Ground Rules



**This is your time.**

My goal is to be flexible and responsive to your needs!



**Please, ask questions when they arise.**

Chances are, someone else has the same question!



**Please speak up!**

# Urban Venture Group, Inc. (UVG)

over
**$1 BILLION**
in proposal wins

- Our Mission
  - To secure the capital needed to advance early-stage innovation
  - Serve our international client base since 2009

## CLIENTS
Served



- Universities
  - New faculty
  - ***Mid-career***
  - Large centers
- Large Enterprise
- Entrepreneurs
- Startups
- Private R&D
- Hospital Systems
- Incubators and VDOs
- State Agencies
- Federal Agencies

## FIELDS
Served



Medical Device
Therapeutics • Healthcare

Defense • Aerospace
Advanced Materials

Energy • Transportation
Environment

Education
Basic & Applied Research

# If You Remember Just One Slide Today…

MCA Keys:

- **Mentored partnership**
- **Protected time**
- **New research thrust**

## A Winning Proposal Must:



**CONVEY**
clearly how protected time will have profound research impacts



**ARTICULATE**
new research directions or an extension on current research that will enable future research productivity



**INTEGRATE**
educational and research activities, as with any NSF award



**DEMONSTRATE**
Broader Impacts: Broadening participation and societal benefits (e.g., innovation, wellbeing)



"Ask Question" icon by PenSmasher, from thenounproject.com

# What initial questions do you have for me?

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# NSF MCA Program Nuts and Bolts

# What is the Mid-Career Advancement Award (MCA)?

**Opportunity for Mid-Career scientists and engineers to advance research and career trajectory**

- Funds **protected time** for research
- Supports a **mentored partnership**
- Promotes long-term **research and educational productivity**



"A key component of a successful MCA will be the demonstration that the PI's current research program could substantively benefit from the ***protected time, mentored partnership(s), and resources provided*** through this program, such that there is a substantial enhancement to the PI's research and career trajectory, enabling scientific and academic advancement not likely without this support."

# Why MCA?



- ~~Young man~~ Associate Faculty
- There's no need to feel down
- I said ~~young man~~ Associate Faculty
- There's a program to know
- When you're low on dough
- It's fun to apply for MCA
  - It's fun to apply for MCA
- **That's why MCA**

# Example MCA Efforts



## Theory Development

Partner with a theoretician to extend research in to new areas.

Can include literature review, model development, and other preparatory work.



## Experimental Development

Work with an experimental mentor to improve experimental techniques or methodologies.

Can include optimizing utilization of research assets to enhance research capacity.



## Education Integration

Collaborate with a mentor to develop new educational programming.

Also, to integrate educational programming with research in new ways.

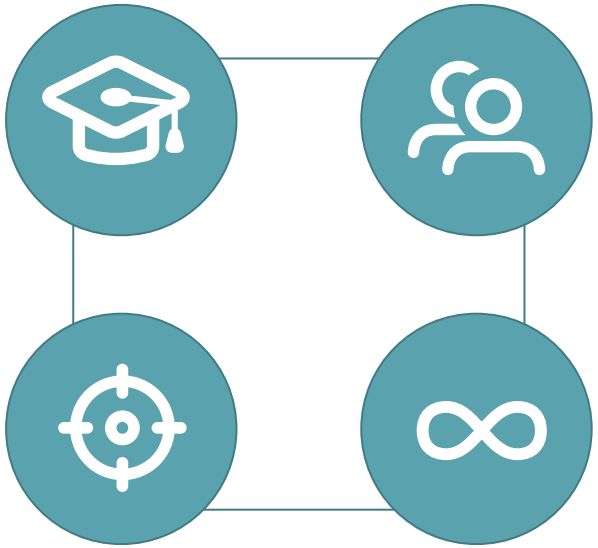
# NSF Mid-Career Advancement (MCA) Awards

## Associate Professors

Associate rank (or equivalent) with at least 3 years in the role

## Program Focus

Advancement of research and career trajectory



## Partnership Required

Partnership must be mutually beneficial

## Unlimited Proposals

No limits on number of proposals per organization, per PI or Co-PI

**NSF especially encourages applications from:**

- *Women*
- *Underrepresented minority groups*
- *Persons with disabilities*

# Award Details

**STANDARD GRANT**

**TYPE OF AWARD**

**UP TO 3 YEARS**

**DURATION**

**35-45**

**NUMBER OF AWARDS**

**$14-$18 MILLION**

**FUNDING AMOUNT**

**FEB 1-MAR 1 2023 5PM**

**SUBMISSION WINDOW**

*February 1-March 1 Annually*

## AWARD AMOUNT

**$100K**

in direct cost allotment

**UP TO 6.5 MONTHS**

salary support for the PI over the total life of the award (plus fringe)

**1 MONTH**

summer support for each collaborative partner

**$350K**

approximate average award

# NSF Mid-Career Advancement (MCA) Awards

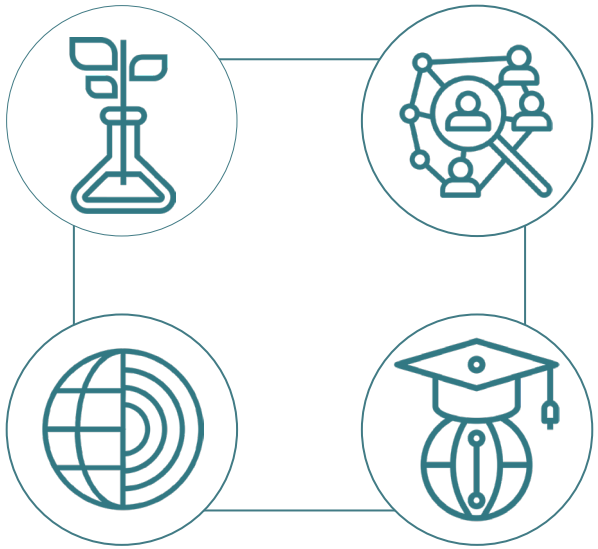
**NSF has 10 directorates supporting research and education efforts. The following participate in the MCA program:**

## Biological Sciences

Division of Environmental Biology
Division of Molecular and Cellular Biosciences
Division of Biological Infrastructure
Division of Integrative Organismal Systems

## Geosciences

Division of Atmospheric and Geospace Sciences
Division of Earth Sciences
Division of Ocean Sciences
Office of Polar Programs



## Social, Behavioral and Economic Sciences

SBE Office of Multidisciplinary Activities
Division of Behavioral and Cognitive Sciences
Division of Social and Economic Sciences

## Education and Human Resources

Division of Graduate Education
Division of Undergraduate Education
Division of Human Resource Development
Research on Learning in Formal and Informal Settings

## Office of Integrative Activities

# Investigator Eligibility Criteria

## Research and Educational Appointment

***Must hold Associate Professor (or equivalent) rank***

- The employee has a continuing appointment that is expected to last for at least the duration of the grant
- The appointment has substantial research and educational and/or service responsibilities
- The proposed project relates to the employee's career goals and job responsibilities as well as to the mission of the department or organization

** "Pilot Track" for Full Professors only at PUIs*

## NSF Alignment

Research in an NSF-supported area of science, engineering, or education

## Award History

PI may have prior/concurrent Federal support

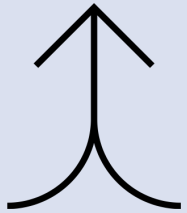
# Partnering



## Mutually Beneficial

Mutually beneficial partnerships are required for an MCA award

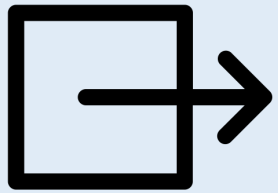
Image created by Adrien Coquet from Noun Project



## Synergistic

The synergistic partnership should go beyond what would typically occur in a collaborative grant

Image created by Toli from Noun Project



## Extra-Discplinarity Encouraged

MCA encourages partnerships outside of the PI's discipline or sub-discipline



## Different Institutions

Partners are typically at different institution than the PI, and may be of any academic rank

Image created by Icongeek26 from Noun Project



## Industry Partner Allowed

PIs may choose a partner from industry

Image created by DinosoftLab from Noun Project

The PI and partner must be engaged in a research project that addresses fundamental challenges in the selected scientific discipline

Image created by Mangiayang studio from Noun Project

# Comparing NSF Proposal Types

| MCA Proposals | CAREER Proposals | Unsolicited Proposals | Other Solicited Proposals |
|---|---|---|---|
| Protected time to expand existing research | Establish enduring foundation of research | Primary funding for research activities | Agency-defined research topics and scope |
| Annual Submission (March 1) | Annual submission (4th Wednesday in July) | Rolling submission | See announcements |
| ~$350,000 | $400,000+ | Varies | See announcements |
| Up to 3 years | 5 years | Varies | See announcements |
| Fewer awards, but also fewer applicants | High win rate if you “crack the code” | Higher funding rate than other agencies like NIH | Large centers are highly competitive |

# Recently Funded MCA Awards

MCA: Understanding Logistics Through Multimodal Experiments in Ethnography

MCA: Incorporating Carbon Use Efficiency into Strategies for Ecosystem Restoration

MCA: Modeling Surface Aerodynamic Temperature over Agricultural Fields

MCA: Scalable Nanomanufacturing of Earth-Abundant Electrochromics

MCA: Characterizing the role of alternative oxidases in marine bacteria

MCA: Partnering Land and communities for equitable and inclusive STEM learning

PFI (MCA): Autonomous Unmanned Aerial Vehicles for Remote Sensing of the Arctic

PFI (MCA): Translation and education of high-throughput microbial strain engineering

# If You Remember Just One Slide Today…

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# Planning for your MCA Proposal

# Key Features of an MCA Proposal

## MCA is different from standard research proposals

- You are proposing how to allocate 6.5 months of protected time to meaningfully impact your research and educational vision
- Articulate how the protected time will have an impact
- ***This plan must enhance the PI's research and career trajectory!***



**KEY CONSIDERATIONS**

- Focus on your vision: demonstrate how this project and protected time will enable new research or expand existing research in a way that traditional awards could not do
- Like CAREER awards, you should integrate education, training, and workforce development into your research goals

# Key to Success: Framing

**Goal:**
**Convince your reader**

- Big picture before details
- The NSF merit criteria still apply: Scientific merit and broader impacts
- Demonstrate the need to protect time for your work



**THINK OUTSIDE OF YOUR OWN BOX**

Think about your research project as an outsider might see it

- The MCA program is broader in scope than an investigator-initiated application, so the reviewers are going to be more diverse than a traditional research grant
- Provide context and perspective, beyond experimental details
  - For someone in your field, but not an expert in your area
  - For a researcher in your discipline, but not in your specific field

*Box image created by Kokota from Noun Project*

# Small-Group Activity




**Pair up!**

## Speaker (2-3 minutes)

1. Explain your vision for the scope of your MCA project?
   - How does this research idea represent a new or different thrust in your research?
   - How will this protected time be impactful to your research?
   - How does this research align with NSF goals?
   - Who will you partner with?
2. Explain what Broader Impacts will your research have?
   - How will you integrate your research and educational goals?

## Listener – Provide feedback

- Was the message clear?
- Did you understand the context and importance?
- Was it compelling?

**Switch & Repeat**

## Assessment

- What did you learn?
- What was unexpected?

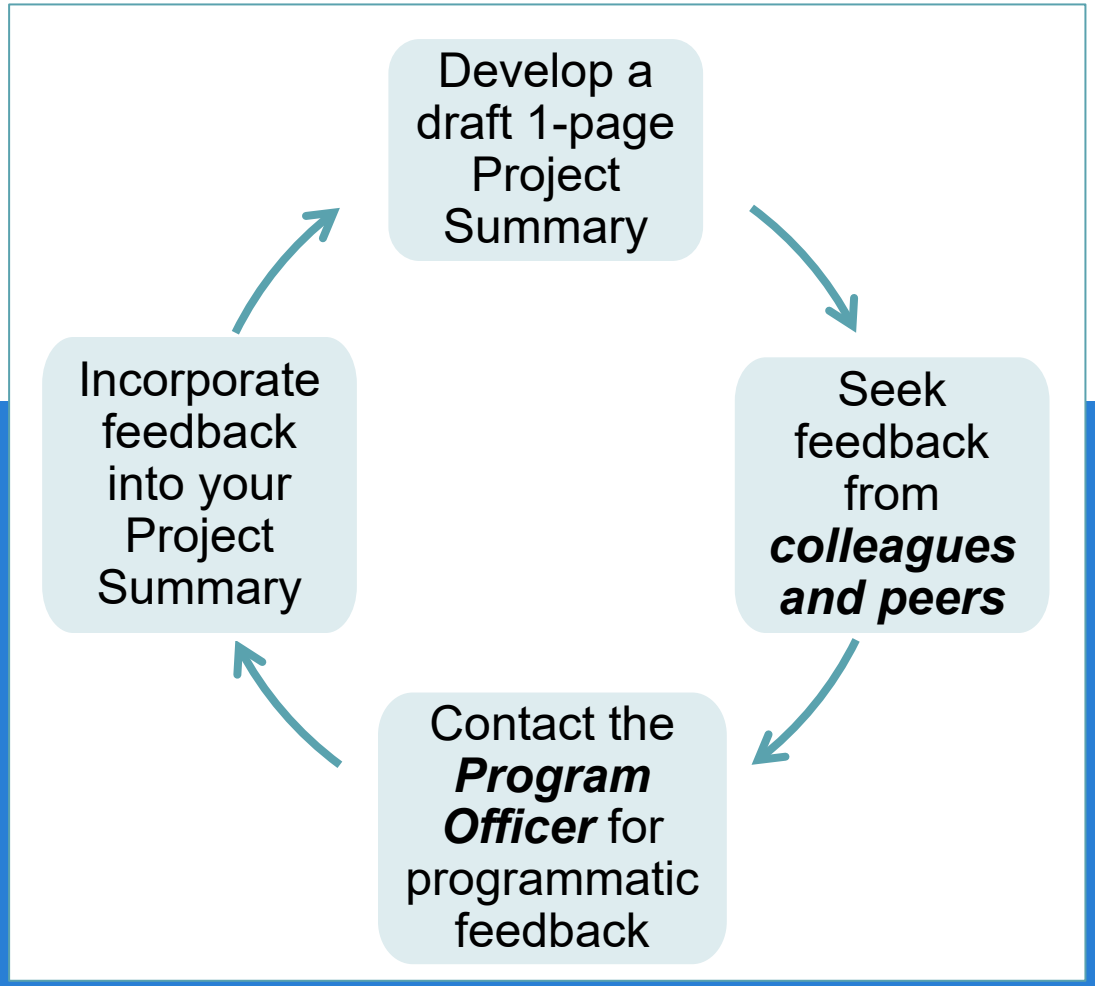
# Worksheet

| | | Addressed | | |
|---|---|---|---|---|
| **Area** | **Goal** | **Yes** | **Somewhat** | **No** |
| **Vision and Scope** | The investigator has a clear vision for the scope of their MCA project. | | | |
| **Expansion of Research** | The investigator plans an expansion of their current research beyond that which can be supported by traditional funding. | | | |
| **Protected Time** | The investigator articulated why protected time will be impactful. | | | |
| **Scientific Merit** | The investigator described their project's Scientific Merit. | | | |
| **Broader Impacts** | The investigator's Broader Impacts include not only broadening participation, but also societal benefits. | | | |

# Contents of Project Summary

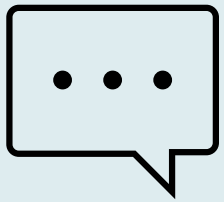


# Drafting a Project Summary

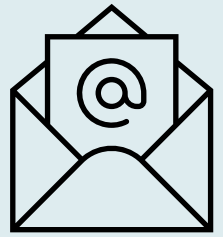



- While developing your draft Project Summary, seek feedback from colleagues and peers
- When you have finalized the Project Summary, proceed with creating the Project Description

# Contacting your Program Officer (PO)

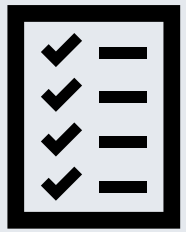


- Contact your PO by email
  - Introduce yourself and your field of research by email
  - Request a time to speak
  - Offer to send executive summary
  - Follow up with a phone call



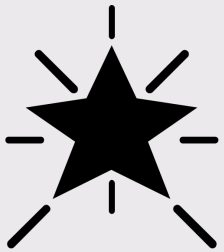
- All inquiries should be directed to mca.info@nsf.gov
  - Inquiries sent to this address will be directed to the appropriate MCA Cross-Directorate Interest Group
  - Cognizant Program Officer
    - Leslie J. Rissler, (703) 292-4628, lrissler@nsf.gov
  - Find program contacts at: nsf.gov/bio/MCA_contacts.jsp

# How to Get the Most Out of Your PO Conversation



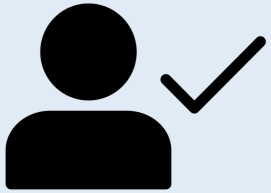
## Be Prepared!

- Prepare an agenda with specific questions to ask
- Have backup information ready (Biosketch, Preliminary Data) and ready to send



## Put Your Best Foot Forward!

- Communicate clearly, follow-up, follow through
- Do your homework (know the state of the art).
- Be honest (about your goals, strengths, weaknesses, and questions).



## Explicitly Seek Feedback

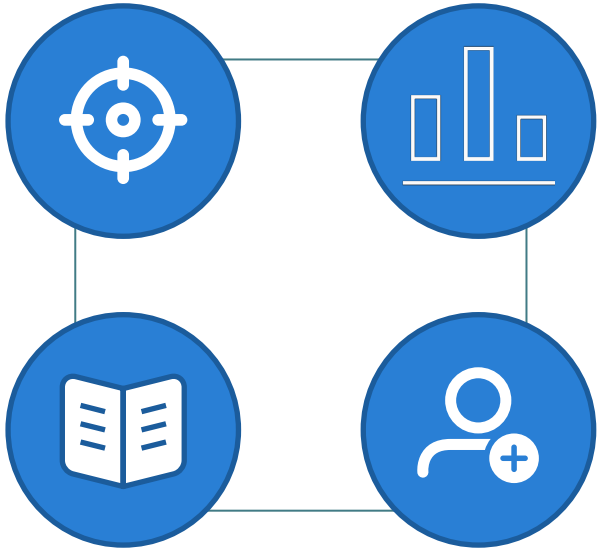
- Get them talking – the more you talk, the less information you'll receive
- It is the PO's job to talk to you.
- Be respectful, respect your PO's time, don't demand

*Image created by Santri Icon from Noun Project*

# Example Questions for Your PO

Are the scope and timeline appropriate for the MCA program?

Is additional feasibility data needed?



Are there any other relevant works/citations I should consider?

Do you see any expertise missing from the proposal team?



**Vague questions produce misleading answers. Avoid "fishing" expeditions.**

- ~~***What do you think?***~~
- ~~***Do you have any advice?***~~

**TOO BROAD!**

*Data image created by Popular from Noun Project*



"Ask Question" icon by PenSmasher, from thenounproject.com

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# MCA Proposal Strategy

# Proposal Contents

- Cover Sheet
- ***Project Summary*** (1 page)
- Table of Contents (automatic)
- ***Project Description*** (12 pages)
- References Cited
- Biographical Sketch of the PI and each partner
- ***Budget***
- ***Budget Justification*** (5 pages)
- Current and Pending Support
- ***Departmental Letter***
- ***Letters of Collaboration by partners***
- Facilities, Equipment, and Other Resources
- Data Management Plan
- ***MCA Impact Statement (2 pages)***
- Collaborators & Other Affiliations (COA) Information
- Suggested reviewers

# Project Summary (1 page)

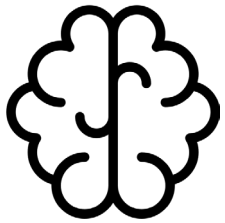


## Overview

Scientific foundation for your work, the transformative opportunity

Frame the overall research and impact (not just methods)

*Image created by Adrien Coquet from Noun Project*



## Intellectual Merit

Why protected time is necessary

What partners will do

Potential to advance knowledge

*Image created by IconMark from Noun Project*



## Broader Impacts

The potential of the project for education, broadening participation, **and** societal impacts

*Image created by Nithinan Tatah from Noun Project*

# Project Description (12 pages)

*Formerly 15 pages, now reduced to 12 pages*

## Results of Prior NSF Support

- Candidate's Past Research: The past (and current) research efforts and accomplishments of the candidate to their field of science or engineering

## Candidate's Proposed Research Advancement and Training Plan (Intellectual Merit)

- Describe impacts of the protected time
- Describe the scientific research and training enhancement experiences to be undertaken
- Explain how the collaboration between the candidate and partner(s) is likely to be mutually beneficial and create "added value"

## Candidate's Long-Term Career Plans

- Describe how the proposed work builds upon past (and current) research and related accomplishments of the candidate to enable a productive long-term scientific career extending well beyond the award period

## Broader Impacts

- Integrated Education and Research Plan

# Project Description – Intellectual Merit

# Candidate's Proposed Research Advancement and Training Plan: Intellectual Merit

## Show an impact of the protected time to your research career

- How will you challenge paradigms / accepted practice?
- What new theory might you develop?
- What new experimental techniques might you develop?
- How will you disseminate your innovations?

Extra-Disciplinarity is encouraged

## Show an impact to the field

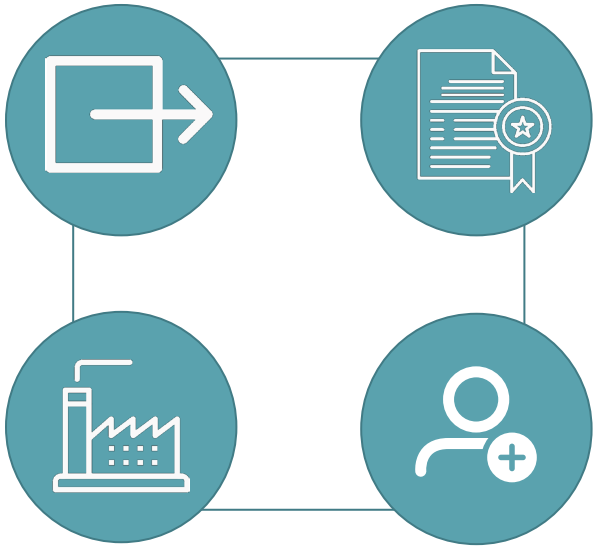
- How are you expanding capabilities in your field?
- How are you expanding avenues or challenging the dogma of your field?
- How are you applying existing principles in new fields via new applications or collaborations?

## Demonstrate how your partnership will be mutually beneficial

- Mutual publications
- Potential for future collaborative research
- New capabilities provided to each partner

# Think Beyond the Science

How can your work attract collaborators from disparate fields?



Could your research result in patents or spinouts?

Is your research potentially of interest to industry?

What non-academic partners might you attract?

**Costs associated with entrepreneurship or industry partnerships are allowable**

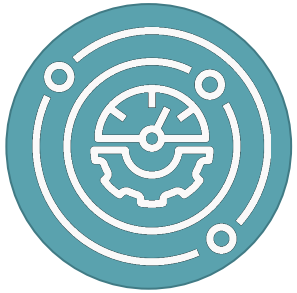
*Patent image created by SAM Designs from Noun Project*

# Project Description – Broader  Impacts

# Broader Impacts

**Broader impacts go beyond broader participation**

Broader Impacts may be accomplished through your research, or through activities that are supported by the project



“Broader impacts for the MCA may be more narrowly circumscribed in comparison to a normal core program proposal because the MCA is an award that will provide protected time so that you can concentrate on research and training. This is a program created to help scientists and engineers who have had constraints on their time or resources due to extensive service, teaching, administrative duties, or other activities."

# Different Types of Societal Impacts

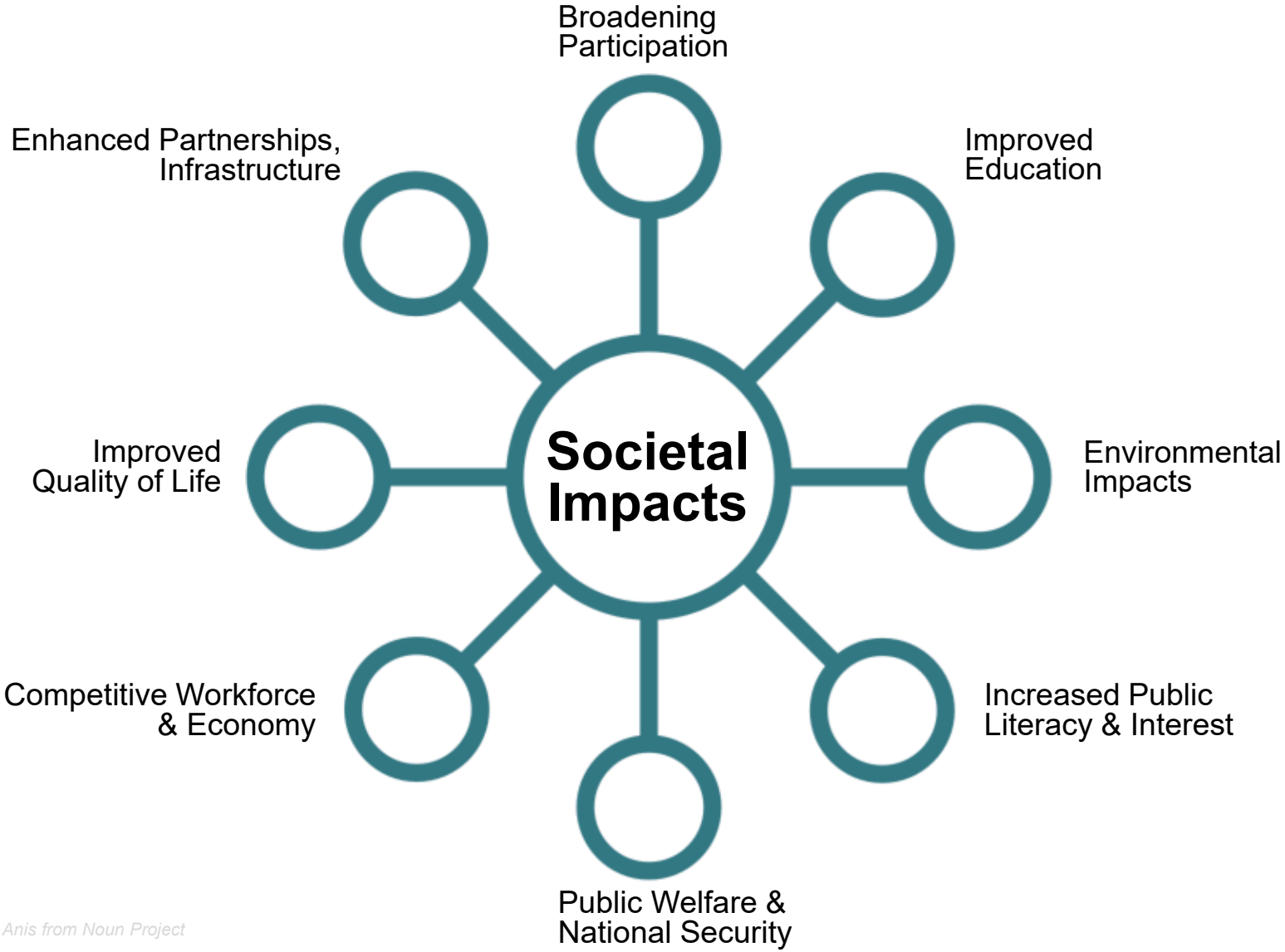


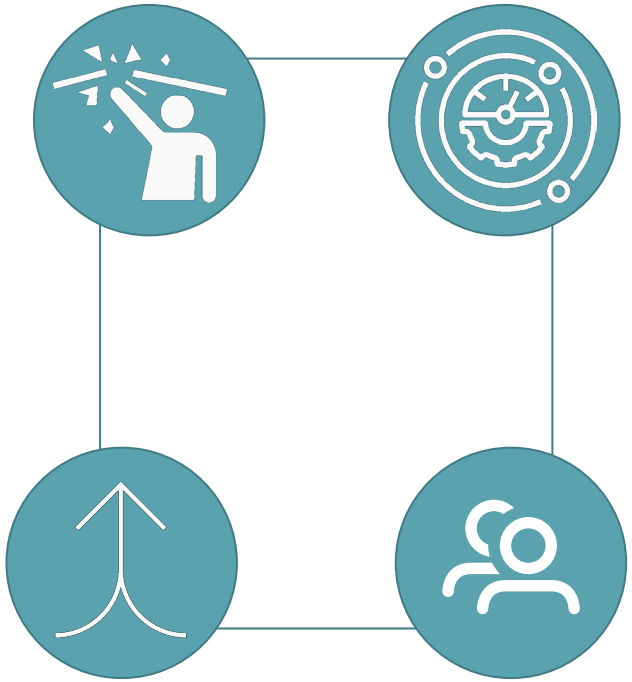

*Image created by Maassam Mohammed Anis from Noun Project*

# Think Beyond the Science

**Develop a plan to engage underserved/underrepresented groups in education and/or research**

**Ensure activities synergize with your research**

- Activities make sense in the context of the research being performed
- Tell how you are engaging a community relevant to your research



**Describe the outcomes/ impacts you plan to achieve**

- Present clear goals; don't just list activities
- ***How will you measure success?*** (include assessment element)

**Leverage partnerships**

- Who are your partners? Be specific
- What resources at MU can you engage to identify community partners?

# Educational Activities for Broader Impacts

**What is your educational goal? What level of student is appropriate to engage?**

- K-12 – Basic science concepts, excitement about STEM education
- Undergraduate – Professional STEM fields, graduate school readiness
- Graduate Students – Preparation for professional research careers
- General public – Policy education (e.g., environment, ethics, etc.)



**Show your commitment and feasibility**

- Show partner engagement
- Demonstrate feasibility through past experience (yours or partners')
- Take advantage of existing MU offices

*Image created by SBTS from Noun Project*

Be creative!
Don't just replicate others' ideas

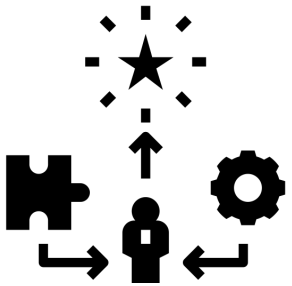
# Examples of Educational Activities with Broader Impacts



## Partner with a School District or Science Club

*Example:* Develop a K-12 microbiology module that teaches about germs or food safety).

*Image created by Alzam from Noun Project*

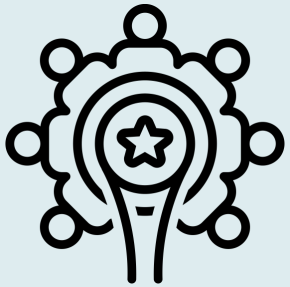


## Offer Experiential Education

Provide experiential education that is relevant to your research. Recruit from an undergrad organization or course.

*Example*: Provide laboratory experiences for undergraduate students.

*Image created by Nithinan Tatah from Noun Project*



## Work with a Local Union or Community College

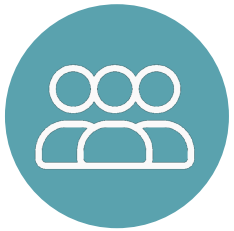
*Example*: Develop training modules for technical school students to learn to build the electronic devices your lab uses.

*Image created by WEBTECHOPS LLP from Noun Project*

# Broader Impacts – Assessment

**In the Intellectual Merit section, you define how you will measure the success of your research.**

## You Must Define How You Will Measure the Success of Your BI



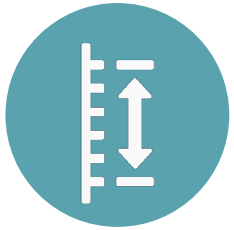
**HEADCOUNT**
Track the number of participants taking part in your activities



**GRADING**
Evaluate work completed by participants in your activities



**QUANTITY**
Track the number of new technicians trained in your field



**OTHER**
Identify other measurable impacts

*Image created by Mada Creative from Noun Project*
*Image created by Made by Made from Noun Project*
*Image created by Adrien Coquet from Noun Project*
*Image created by Adrien Coquet from Noun Project*

# Project Description – Other Components

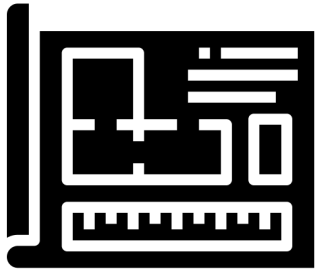
# MCA-Specific Sections



## Candidate's Past Research

- Describe past and current research efforts and accomplishments
- Include up to 6 publications
- Provide information about the significance, your role, and funding sources

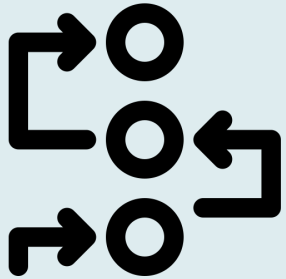
*Image created by Prashanth Rapolu from Noun Project*



## Candidate's Proposed Research Advancement and Training Plan

- Describe the research and training enhancement experiences you plan
- Describe how your partnership will be mutually beneficial, and will have value beyond what is typical in a collaboration

*Image created by Nhor from Noun Project*



## Candidate's Long-Term Career Plans

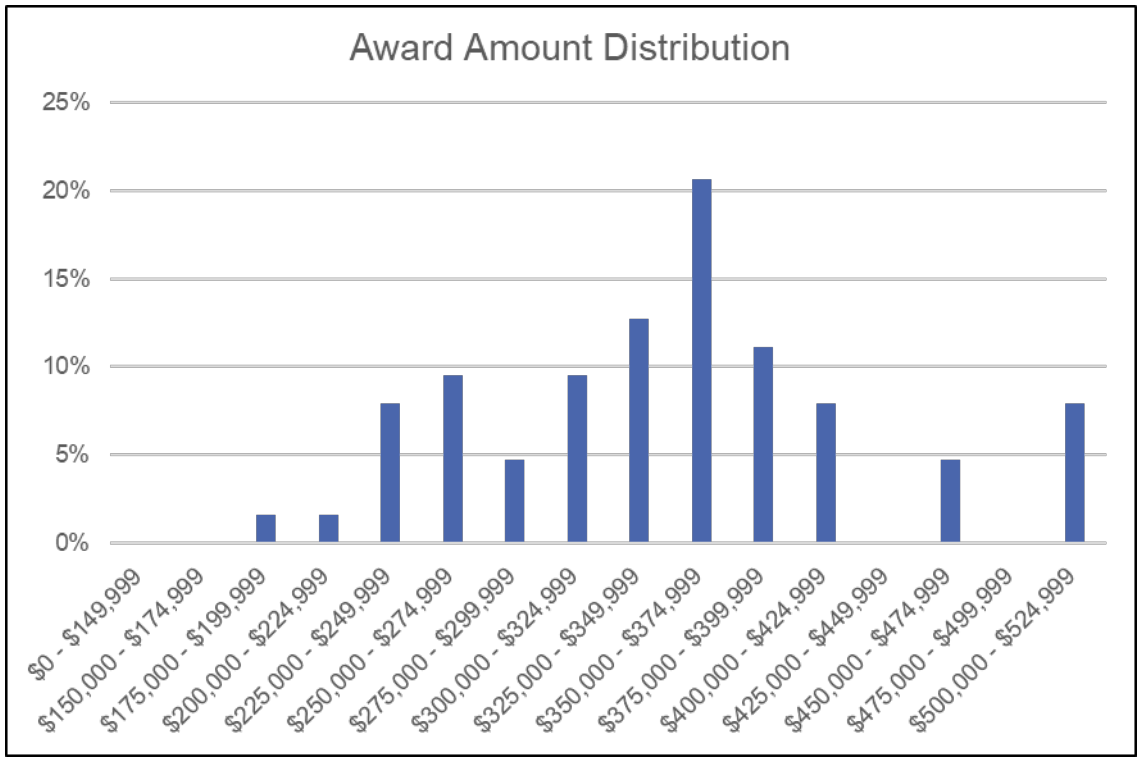
- Explain how the proposed work builds upon your research path
- Describe how this accomplishment will enable a long-term, productive research career
- Incorporate a timeline for career enhancement activities and associated products
- Describe expected outcomes from MCA activities that will serve as a foundation for future research

*Image created by M. Oki Orlando from Noun Project*

# Budget

# MCA Budget

- Recent awards range from $150,000 to $500,000
- ***75% of awards are between $225,000 and $425,000***
- Use this data to inform your budget planning for when you speak to your PO



# Award Amounts by Directorate and Organization

- Overall average award approximately $350,000
- Largest quantity of awards in biology
- Highest award amounts in TIP (Technology, Innovation, and Partnerships)

| Directorate / Division | Count | Min Award | Avg Award | Max Award |
|---|---|---|---|---|
| **BIO** | **29** | **$ 183,422** | **$ 324,839** | **$ 413,329** |
| DBI | 2 | $ 358,345 | $ 378,568 | $ 398,791 |
| DEB | 13 | $ 183,422 | $ 312,800 | $ 404,316 |
| IOS | 8 | $ 218,472 | $ 315,807 | $ 413,329 |
| MCB | 6 | $ 263,393 | $ 345,056 | $ 409,923 |
| **EHR** | **4** | **$ 227,519** | **$ 350,080** | **$ 459,224** |
| DGE | 2 | $ 227,519 | $ 343,372 | $ 459,224 |
| DUE | 2 | $ 306,762 | $ 356,788 | $ 406,813 |
| **ENG** | **7** | **$ 332,552** | **$ 361,786** | **$ 395,742** |
| CMMI | 7 | $ 332,552 | $ 361,786 | $ 395,742 |
| **GEO** | **12** | **$ 250,644** | **$ 326,441** | **$ 399,904** |
| EAR | 8 | $ 250,644 | $ 335,743 | $ 399,904 |
| OCE | 2 | $ 273,464 | $ 305,833 | $ 338,202 |
| OPP | 1 | $ 359,841 | $ 359,841 | $ 359,841 |
| RISE | 1 | $ 259,850 | $ 259,850 | $ 259,850 |
| **SBE** | **3** | **$ 246,665** | **$ 322,681** | **$ 374,395** |
| BCS | 2 | $ 246,665 | $ 310,530 | $ 374,395 |
| SES | 1 | $ 346,983 | $ 346,983 | $ 346,983 |
| **TIP** | **8** | **$ 381,788** | **$ 475,979** | **$ 500,000** |
| TI | 8 | $ 381,788 | $ 475,979 | $ 500,000 |
| **Total** | **63** | **$ 183,422** | **$ 349,942** | **$ 500,000** |

# Budget Nuts and Bolts

## Allowable Costs

- Funds to support the mid-career researcher (PI) up to 6.5 months
- One month of summer support for each collaborative partner
  - In lieu of summer support, other reasonable costs may be considered
- Up to $100,000 for other direct costs in support of the research advancement and training plan
  - Postdoctoral fellows, graduate students, undergraduate students
  - Consultant expenses
  - Education or outreach activities
  - Travel for 2-day awardee networking meeting
- Indirect costs



**Budget totals are not yearly allocations, but amounts to be expended over the course of the award.**

*Image created by Adrien Coquet from Noun Project*

Cost sharing is *not* allowed

# Budget Nuts and Bolts

- Maximum of 5 pages
- Justify the expense for ***each line item*** proposed
- Provide estimates from consultants, if applicable
- Use tables to show calculations whenever possible
- ***Show your math!***



"$6,000 per year is required for a post-doc fellow."



"The post-doc fellow will [insert activities here]. Their annual compensation is $30,000 during the academic year. They will devote 20% effort (2 academic months) over the course of one year to the proposed work, resulting in $6,000 in salary for the post-doc fellow."

# Other Proposal Components

# MCA Impact Statement (2 pages)

- ***Formerly optional, now required.***
- Provide details on how the proposed work will:
  - Enhance your research and career trajectory
  - Enable scientific and academic advancement not likely without this support
- Detail past or current constraints on your time and resources available for research
- Explain how the MCA would impact your research and career trajectory
- Describe far-reaching impacts on your department, institution, and/or scientific discipline

# Departmental Letter (2 pages)

- Demonstrates departmental support for the candidate's proposal
- State that the PI is eligible for the award as defined in solicitation
- Describe PI's past successes
- Acknowledge that protected time will be honored if awarded
- Assess the value of the proposed activity for advancing the PI's research and academic career



**The Departmental letter must:**

1. Establish eligibility
2. Describe past successes
3. Demonstrate support
4. Assess the value of the proposed work

*Image created by Adrien Coquet from Noun Project*

*A departmental letter template will be available online at uvgltd.com/MCA*

# Letter(s) of Collaboration by Partner(s)

- Provide a letter of collaboration from each partner
- Partners may be at any academic rank, but must hold a faculty appointment or equivalent at their institution
- Research partners in industry are allowed
- Letters must be:
  - On letterhead
  - Signed
  - No more than 2 pages



**Your Partner's Letter must include:**

- Description of the research project
- Partner's expertise
- Partner's role in research, training, and mutually beneficial mentorship plan
- Acknowledgment that the partner and PI have discussed and agree on plans in the proposal

*Image created by Adrien Coquet from Noun Project*



"Ask Question" icon by PenSmasher, from thenounproject.com

# What questions do you have for me?

# NSF MCA Seminar Agenda

| | |
|---|---|
| **9:00 – 12:00** | **Presentation** |
| 9:00 – 9:15 | Welcome and Introductions |
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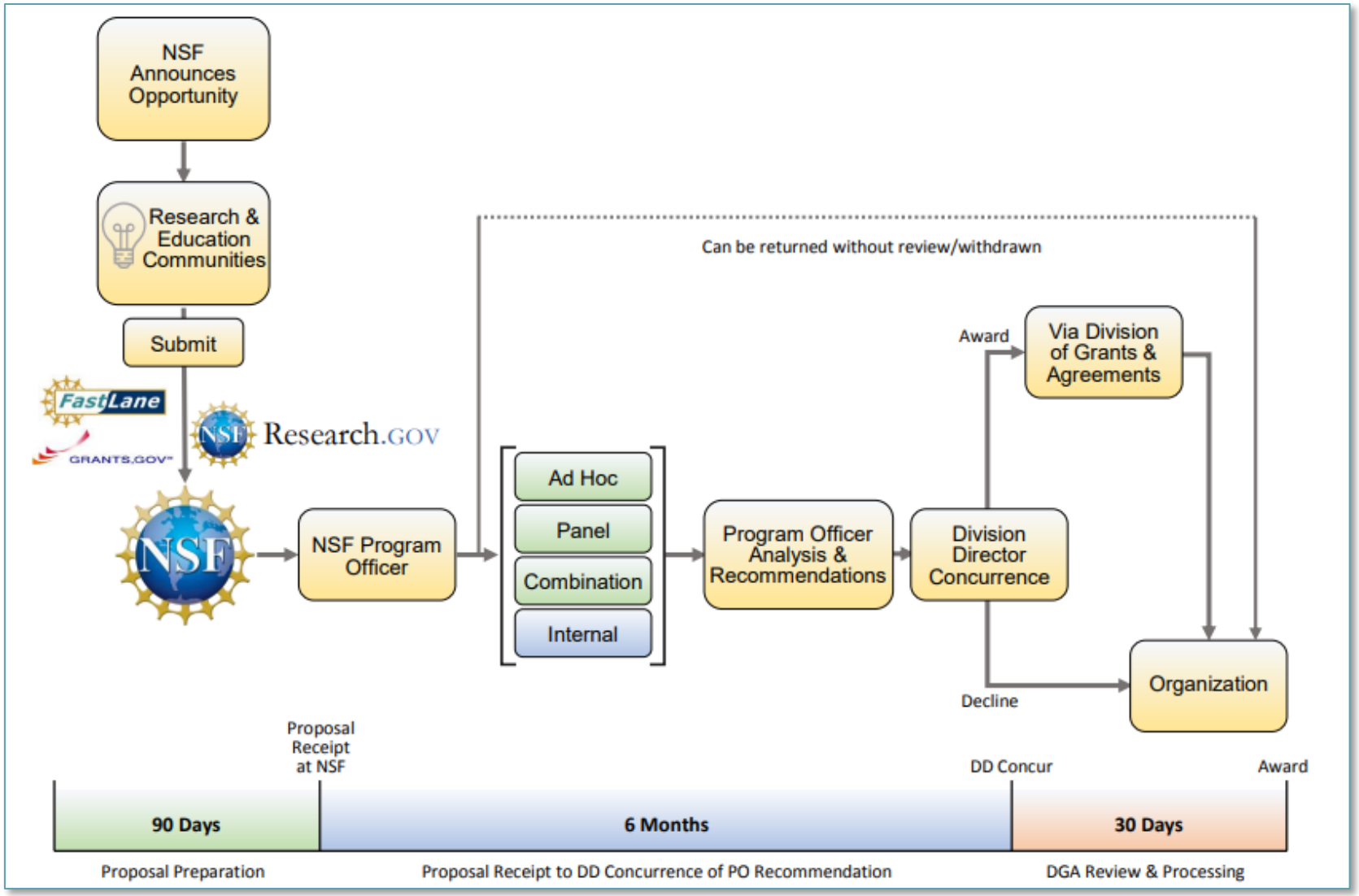
# Proposal Review

# NSF Proposal and Award Process and Timeline



# Proposal Review Process

- Proposals are reviewed by a panel of 3-10 peer reviewers
  - Ad hoc reviewers, panelists, or both
  - The reviewers may not be experts in the field(s) represented in the proposal, so write with these reviewers in mind

- Good idea to suggest reviewers, and who should not review
- Feedback provided after award decision



- Don't pick fights!
- Avoid "landmines"
  - Don't give them easy excuses to dismiss you (e.g., omitted key citations)

*Image created by ka reemov from Noun Project*



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# Proposal Writing Strategies, Tips, and Tactics

# What is the Mid-Career Advancement Award (MCA)?

## Write with the reviewers in mind.

- *It's easy to assume the reader knows more about you and your project than they do.*
- Introduce new key subjects and terms. Don't assume the reader knows the fundamentals as well as you do.
- Present information ***simply*** and ***sequentially***



**Explicitly follow BAA/FOA/RFP requirements**

- Address the merit criteria explicitly, and in order.
- Provide a separate heading for each.
- Follow the order of content and page limits explicitly.

# General Rules for Good Proposal Writing

**Clear writing underscores your credibility!**



*Image created by Eucalyp from Noun Project*

**Write for your reader, not for yourself**

- Present background information needed to understand your message.
- Mentally keep track of what your reader needs to understand. Take the time to give them a foundation

**Place information where your reader expects it**

- Follow the opportunity instructions explicitly!

***Convoluted writing doesn't make you look smarter***

- Explain acronyms and avoid jargon.
- Avoid unnecessary controversy. Don't pick fights.

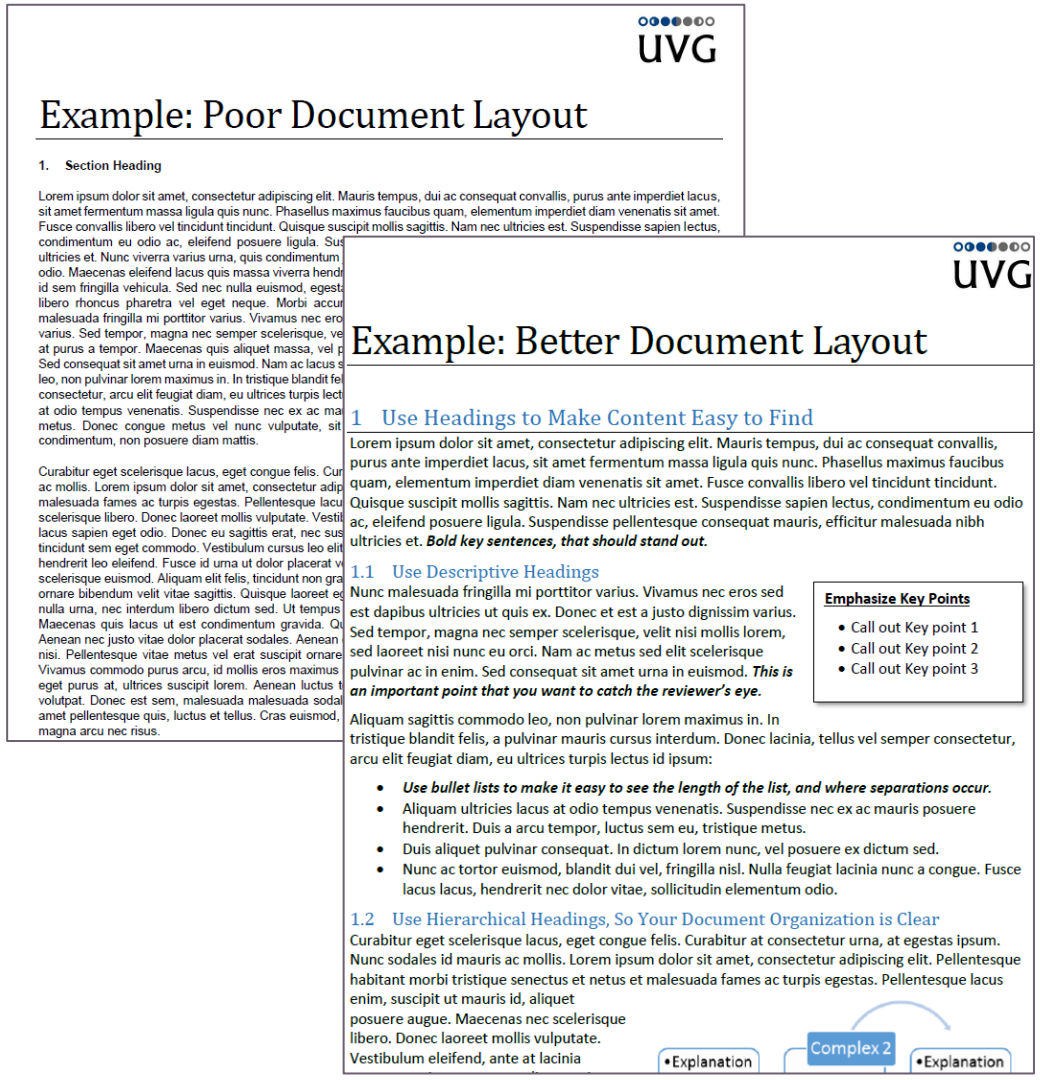
# General Rules for Good Proposal Writing

- Make your document ***skimmable***
  - Reviewers may have dozens of proposals to review.
  - If a reader skims only headings and bolded information, will your content still be clear and logical?

- Make your document ***indexable***
  - Reviewers may only once, if ever, read your proposal fully, front-to-back
  - More often, they will skip around, or refer back to specific sections
  - Use visual devices, headings, and other visually distinct elements to make key information easy to find
  - ***Make the pages look different!***

# Document Layout

- Use lots of headings and subheadings.
- Use graphical devices to illustrate complex subjects.
- Use paragraphs thoughtfully
  - Short, simple paragraphs signal idea transitions
  - One Paragraph = One idea supported by 1-3 sentences
- Use bullets to break up long lists.
  - Don't bury lists in your narrative.
- Don't right-justify (full-justify) text.
  - It might look "cleaner" from a distance, but it makes your prose harder to read.






UVG

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# If You Remember Just One Slide Today…

MCA Keys:

- **Mentored partnership**
- **Protected time**
- **New research thrust**

## A Winning Proposal Must:



**CONVEY**
clearly how protected time will have profound research impacts



**ARTICULATE**
new research directions or an extension on current research that will enable future research productivity



**INTEGRATE**
educational and research activities, as with any NSF award



**DEMONSTRATE**
Broader Impacts: Broadening participation and societal benefits (e.g., innovation, wellbeing)



# What questions do you have for me?

"Ask Question" icon by PenSmasher, from thenounproject.com

# These Slides Will Be Available Online




We will upload this full presentation, as well as additional information on our website

uvgltd.com/MCA



UVG

**Thank you for attending!**

Questions? Feel free to contact me!


**DR. BURR ZIMMERMAN**



burr@uvgltd.com



(614) 425-1230

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**Thank you for attending!**

**Questions?**

*Feel free to contact me!*


## Dr. Burr Zimmerman



burr@uvgltd.com



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