QUALITY EDUCATION FOR MINORITIES NETWORK

QEM NETWORK – BOWIE STATE UNIVERSITY NASA MUSIC PROJECT: NASA PROPOSAL DEVELOPMENT WORKSHOP FOR MINORITY SERVING INSTITUTIONS
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ESSENTIAL ELEMENTS FOR NASA PROPOSAL AND CONTRACT BIDS PREPARATION

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Essential Elements for NASA Proposals and Contract Bids Preparation
- NASA funding opportunities
- Agency requirements
- Document requirements
- Contract bid preparation
- Time management
- Evaluation

Writing an Effective Proposal Summary
- What is a proposal summary?

Intellectual Merit

Broader Impact

NASA and other resource links

Current solicitation opportunities
ESSENTIAL ELEMENTS FOR NASA PROPOSALS AND CONTRACT BIDS PREPARATION
NASA FUNDING OPPORTUNITIES

- NASA Research Opportunities
  - NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES)
  - Research Opportunities in Space and Earth Sciences (ROSES)
  - NASA's Minority University Research and Education Project MUREP
- Space Grant opportunities
- Small Business Innovation Research (SBIR) and Small Business Technology Transfer programs (STTR)
  - Contract Bids
- International Space Station Funding Opportunities
  - Human Research
  - Technology Development and Demonstration
  - Life and Physical Sciences
  - Earth and Space Sciences
NASA REQUIREMENTS

- Submitting proposals relevant to the strategic plan
  - Proposals have to fit those outlined in the current strategic plan
  - Regularly updated with the budget and are accessible

- Submissions must be consistent with the guidelines specified in NASA’s funding announcements
  - Page limit
  - Document format
  - Relevant proposal additions
NASA PROPOSAL ESSENTIALS

- Summary, business data, budget, program data, proposal team, attachments
- How to Guide on NASA’s page
  - https://science.nasa.gov/researchers/sara/how-to-guide
- NASA proposal PI checklist
  - Based on requirements for NSPIRE and ROSES
- Document Contents
  - Cover sheet
  - Proposal document
  - ROSES application proposal
  - Appendix
  - Total budget
NASA PROPOSAL ESSENTIALS

- Summary
  - 4000 character count limit

- Business data
  - Recommended start date at least six months from deadline date, unless otherwise stated
  - All dates need to match

- Budget
  - Period dates should match the start and end dates entered in the Business Data section
  - Total projects should be entered, including support requested for collaborating U.S. Government organizations
    - Agencies like federally funded research and development centers (FFRDC), Jet Propulsion Laboratory (JPL), NASA Center, etc.

- Program specific data
  - Respond to all applicable questions
NASA PROPOSAL ESSENTIALS

- Proposal team
  - Identify Key Personnel
  - Electronic confirmation of relationships must be entered into NSPIRES prior to submission

- Proposal attachments
  - Attach all required documents
  - Always Required
    - Proposal Document
  - Conditional
    - Total Budget
    - Appendix

- Table of contents
NASA PROPOSAL ESSENTIALS - PROPOSAL DOCUMENT

- Scientific/Technical/Management Section
  - The page limit is based on the solicitation requirements
  - Proposal details
    - Objectives and their significance
    - Technical approach and methodology
    - Perceived impact of the proposed work
    - Relevance of the proposed work
    - Tasks/Work flow
    - General implementation plan with milestones and management structure
    - Description of roles and expected effort of each team member
    - Any other content required by the program elements
References

Biographical Sketch(s)
- Required for PI, Co-PI and Co-Investigators (Co-I)
- 2 pages for PI/Co-PI and 1 page for Co-I(s)
  - Certain restrictions for Co-PI designated with unique responsibility exists
  - Must include professional experiences and positions, and bibliography of recent publications
Current and Pending Grants

- Required for PI and Co-PI. Required for any Co-I who proposes to devote greater than or equal to 10% of his/her time to the proposed project

Requirements for each project:

- Title of award/project; name of PI on award
- Sponsoring agency and program name (if appropriate), including the Sponsor’s point of contact information
- Period of performance
- Total amount received by the investigator
- Commitment by PI or Co-PI in terms of person-months per year
- **Statements of Commitment and Letters of Support**
  - Typically done through NSPIRES
  - Signed letter(s) of certification must be included for non-U.S. organizations
    - Give the name of the responsible organization/government agencies
  - Letters of Affirmation are typically not solicited nor evaluated by NASA
    - If submitted, they will be counted within the Sci./Tech./Mgmt. section page limitations
NASA PROPOSAL ESSENTIALS - PROPOSAL DOCUMENT

- Budget Narrative
  - Give an estimate and rationale for each proposed component
- Personnel
  - PI, Co-PI, Co-I, senior associates
- Participant support costs
- Benefits
- Fringes
- Domestic and international travel funds
- Material and supply costs
- Miscellaneous direct costs
- Indirect costs
- All information regarding salary rates, fringe rates, and indirect rates must be removed for ROSES applications
Facilities and Equipment
- Describe any existing facilities and equipment that are required for the proposed investigation
- Do not include any information that adds to the scientific or technical information

Budget Details
- Give the actual or estimated costs, in whole dollars, that correspond with the budget narrative
- Give the cost break down for the items listed in the general budget
- Include a subcontract budget narrative and details

Table of Personnel and Work Project
- List the planned work to be funded by NASA per individual per period in fractions of a work year
- Include the names and/or titles of all personnel necessary to perform the proposed effort
NASA PROPOSAL ESSENTIALS

- ROSES application proposal document assembly
  - Has its own requirements, along with those for the entire packet
  - Available on the NASA proposal PI checklist
- Appendix
  - Provide only information requested or allowed by the program element
- Total budget
  - ROSES applications
    - Provide full budget
CONTRACT BID PREPARATION

- NASA posts thousands of bid opportunities annually
  - Opportunities are found in the SBIR and STTR
- Steps you must take in order to bid on contracts posted by NASA
  - Register with SAM (System for Award Management)
  - Obtain a Data Universal Number System (DUNS)
  - Register with NASA’s vendor database
  - Familiarize yourself with the Federal Supply Class or Service codes (FSC/SVC) and NAICS (North American Identification Class System) codes for the products and services you sell
  - Familiarize yourself with FAR (Federal Acquisition Regulation) and the NASA FAR supplement
These additional steps will help you find and win federal contracts with NASA

- Review the Federal Supply Schedule (FSS) for contracts issued by the General Service Administration (GSA)
- Identify target markets within NASA
  - All 12 NASA centers post closed and non-bid opportunities
  - The top NAICS codes for NASA contracts identify a center’s procurement
- Look for subcontracting opportunities
CONTRACT BID PREPARATION

- Introduce your business directly to the NASA center in your area
  - Discuss your capabilities
  - Interact in person to build a relationship with NASA
- Visit NASA’s unique small business programs
  - The NASA Mentor Protégé Program
  - The Small Business Innovation Research Program
  - The Historically Black Colleges and Universities and Minority-Serving Institutions Program
TIME MANAGEMENT
EVALUATION

- PI project evaluation process
  - Develop a conceptual model
  - Identify key evaluation points
  - Create evaluation questions
  - Define measurable outcomes
  - Design a qualitative and/or a quantitative evaluation process
  - Collect and analyze data
We would like to study the genes regulating anal development in the fruit fly because... ...cancer
WHAT IS A PROPOSAL SUMMARY?

- First paragraph(s) in the proposal that is(are) read
- Summaries should be clear, concise, and persuasive and include the following
  - A professional description
  - A problem description
  - A few key descriptors of your program/project
  - The novel aspects of your program/project
- Keep it short!!!
INTELLECTUAL MERIT

- Intellectual merit statement
  - Do not give value judgements about the merits of the work
  - State the original contributions that the proposed research makes to the area of study
BROADER IMPACT

- Broader impact statement
  - Do not give value judgements about the broader impact of the work
  - Describe the potential interdisciplinary aspects of the research
  - Discuss the level of influence that the research may have on human resources (students, underrepresented populations, etc.)
NASA AND OTHER RESOURCE LINKS

- https://science.nasa.gov/researchers/sara/how-to-guide
CURRENT SOLICITATION OPPORTUNITIES

- NASA Research Opportunities
  - https://nspires.nasaprs.com/external/
  - https://science.nasa.gov/researchers/sara/grant-solicitations
  - https://www.nasa.gov/offices/education/programs/national/murep/eons/index.html

- Space Grant opportunities
  - https://www.nasa.gov/offices/education/programs/national/spacegrant/about/index.html#VO4mC_nF9qU

- Small Business Innovation Research (SBIR) and Small Business Technology Transfer programs
  - https://sbir.nasa.gov/content/nasa-sbirsttr-basics

- International Space Station Funding Opportunities
  - https://www.nasa.gov/mission_pages/station/research/open_source_science_ops
THANK YOU
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