2018 UNM NSF CAREER Planning Workshop Appendix

April 26, 2018

Hosted by OVPR Faculty Research Development Office

Table of Contents

Title	Page
CAREER Proposal Timeline	1
CAREER Solicitation Highlights	2
Additional CAREER Information	6
UNM CAREER Awardees Information	7
So You Want to Win a CAREER Award Paper	11
CAREER Workshop Contact Information	13



CAREER Proposal Timeline

Time Frame	Task
D – 12 months	Start making outreach connections if part of your proposal
D – 6 months	Select expert readers to advise on proposal (Internal & External)
D – 2 months	• Talk to your chair about required resources you'll need to include in department letter
	 Share a rough draft with readers (non-expert & expert)
	Start working with department FRSO or administrator to develop proposal
D – 5 weeks	Polished draft to readers (non-expert & expert)
D – 3 weeks	Chair should have your draft proposal including their department letter and your CV
D – 2 weeks	Proofreading of proposal by readers (non-expert)
D – 5 days	Route your proposal with final budget and other non-technical pieces + drafts of technical pieces
D – 2 days	OSP should have your final proposal
Due Date	NSF has your proposal



CAREER Solicitation Highlights

Goals of the NSF CAREER Award

- 1. Provide substantial support for five years to allow the career development of outstanding new teacher-scholars.
- 2. Build a foundation for a lifetime of integrated contributions to research and education.
- 3. Provide incentives to Universities to value that integration.
- 4. Increase participation of those traditionally underrepresented in STEM disciplines.

What Makes the CAREER Different?

- Tenure-track, assistant professors (or equivalent) ONLY
- No co-PIs allowed
 - Paid senior personnel can now be included in <u>NSF 17-537</u> if effectively justified
 - Subawards for collaborators are allowed
 - Primary budgetary support should be to PI and their research efforts
- PIs awarded other federal funding are still eligible for the CAREER.
- PIs can apply for CAREER up to 3 times, but only once per cycle.
- CAREER emphasizes the start of an integration between research and education

CAREER Basics

- Project Title CAREER: Title of Your Proposal
- Project Description 15 pages
 - A description of the proposed research project, including preliminary supporting data where appropriate, specific objectives, methods and procedures to be used, and expected significance of the results
 - A description of the proposed educational activities and their intended impact
 - A description of how the research and educational activities are integrated or synergistic
 - Individual sections specifically labeled: Broader Impacts and Intellectual Merit
 - Results of prior NSF support, if applicable.
- Departmental Letter 2 pages
 - Statement indicating eligibility of PI.
 - Indication that proposed CAREER research and education activities are supported by and advance the educational and research goals of the department and the organization.
 - Departmental commitment to the support and professional development of the PI including mentoring plan
- Letters of Collaboration Single sentence on letterhead stationery
 - "If the proposal submitted by Dr. [insert the full name of the Principal Investigator] entitled [insert the proposal title] is selected for funding by the NSF,



it is my intent to collaborate and/or commit resources as detailed in the Project Description or the Facilities, Equipment or Other Resources section of the proposal."

Additional NSF Requirements

- Project Summary 1 page
 - Overview
 - Intellectual Merit
 - Broader Impacts
 - DO NOT upload as a supplementary document unless the use of special characters is absolutely necessary.
- References Cited
- Biographical Sketch 2 pages
- Collaborators & Other Affiliations Information
- Current and Pending Support
- Facilities, Equipment and Other Resources
- Budget
- Budget Justification 3 pages
- Data Management Plan 2 pages
- Postdoctoral Mentoring Plan 1 page (if applicable)
- <u>Proposal Classification Form</u> All proposals submitted to the **Directorate for Biological Sciences** must include BIO's proposal classification form.

2018 Due Dates

- July 18 (Biological Sciences, Computer & Information Science and Engineering, and Education and Human Resources directorates)
- July 19 (Directorate for Engineering)
- July 20 (Geosciences; Mathematical and Physical Sciences; and Social, Behavioral, and Economic Sciences directorates)

Budget

The minimum CAREER award is \$400,000 for a five-year period, except for proposals to the Directorate for Biological Sciences, the Directorate for Engineering, or the Division of Polar Programs. For BIO, ENG, and PLR, the minimum award size is \$500,000 over five years. **Note:** While these are minimum award amounts, in many cases they are also the maximum award amounts. OCG recommends discussing any significant deviations from these amounts with the cognizant program officer in the directorate, division, or program to which you are applying.

Specific Tips from the NSF Related to the Project Description

Education Activities – The education component of the proposal may be in a broad range of areas and may be directed to any level: K-12 students, undergraduates, graduate students, and/or



the general public, but should be related to the proposed research and consistent with the career goals of the PI. Some examples are: incorporating research activities into undergraduate courses; teaching a graduate seminar on the topic of the research; designing innovative courses or curricula; providing mentored international research experiences for U.S. students; linking education activities to industrial, international, or cross-disciplinary work; supporting teacher preparation and enhancement; conducting outreach and mentoring activities to enhance scientific literacy or involve students from groups that have been traditionally underrepresented in science; researching students' learning and conceptual development in the discipline; implementing innovative methods for evaluation and assessment; or creating cyberinfrastructure that facilitates 6 involvement of the broad citizenry in the scientific enterprise. Education activities may also include designing new or adapting and implementing effective educational materials and practices. Such activities should be consistent with research and best practices in curriculum, pedagogy, and evaluation. Proposers may build on, or otherwise meaningfully participate in, existing NSF-supported activities or other educational projects ongoing on campus.

Cross-Disciplinary Perspectives - NSF recognizes that disciplinary boundaries evolve with time and that inter-, multi-, transdisciplinary approaches are often needed to push the frontiers of research and education. We invite proposals from early-career investigators who wish to pursue research and education activities that cross disciplinary boundaries. Increasingly, CAREER proposals are co-reviewed by more than one program within a Division or a Directorate, or across Directorates/Offices. We encourage investigators to seek research and education collaborations with partners in other areas of academia as well as from other sectors (for example, partnerships with industry, national laboratories, schools and school districts, or museums). Investigators have the option of including the associated costs in the budget line items of the proposal, or in subawards to another institution for all necessary research and educational activities (for example, hiring an external evaluator, or securing time at a shared research facility). Because the CAREER program is designed to foster individual career development, partners or collaborators may not be listed as co-principal investigators on the cover page. If critical for a given project, support for collaborators may be requested in the senior personnel or consultant services budget line items of the proposal, or in subawards to another institution. However, while recognizing that projects may entail cross-disciplinary collaborations, it is expected that the primary support for a CAREER award will be for the PI and his/her research efforts, with support for other senior personnel commensurate with their limited role in the project. Proposals submitted with co-principal investigators will be returned without review. Ensuring that the CAREER program continues to focus on fostering individual career development of early-career scientists and engineers will be an integral part of the merit review of CAREER proposals.

Cross-Sector Perspectives – NSF recognizes that individual investigators may have disciplinary and career interests that enhance their research and education plans through an additional activity such as entrepreneurship, industry partnerships, or policy. We invite proposals from early-career investigators who wish to enhance their research and education activities along these lines. If critical for a given project, investigators have the option of including the associated costs in the budget line items of the proposal or in subawards to another institution.



Scientific Software Development – Proposed research activities may involve development of innovative scientific software, along with related studies of reproducibility, provenance, usability, security, adoption, and sustainability of the software, as well as its adaptability to emerging technologies and requirements. If software artifacts are anticipated in a given project, investigators should state and justify which software license(s) will be used for the released software.

International/Global Dimensions – NSF encourages PIs to include international/global dimensions in their projects. As appropriate, the CAREER proposal should delineate how its activities fit within the context of expertise, facilities, data, and other resources that are being applied globally in relevant areas of research and education, and how the CAREER award would position the Principal Investigator and his/her organization to take a leadership role. If applicable, the proposal should clearly state how the research and education activities will be enhanced by international engagements, and should describe the benefits to participants in the U.S. and abroad. If an international component is included, proposers are encouraged to contact the relevant country Program Officer in the Office of International Science and Engineering (OISE) listed in http://www.nsf.gov/od/iia/ise/countrylist.jsp.

Field Work in the Polar Regions – For guidance on submitting information about field work proposed in the Arctic or Antarctica, proposers should contact the Program Officer in <u>Polar</u> <u>Programs</u> who is associated with the program most closely aligned with the research being proposed.

Proposals Requiring Seagoing Facilities – For guidance on submitting proposals that require use of sea-going facilities such as ships (including those participating in the University National Oceanographic Laboratory System [UNOLS], foreign vessels under charter or other arrangements, submersibles, remotely operated vehicles, autonomous underwater vehicles, etc.), proposers should contact the Program Officer in <u>Ocean Sciences</u> who is associated with the program most closely aligned with the research being proposed.

Additional CAREER Information

2018 CAREER solicitation - https://www.nsf.gov/pubs/2017/nsf17537/nsf17537.pdf

NSF CBET Mock Review Panel - <u>https://www.nsf.gov/eng/cbet/multimedia/webinar.jsp</u> NSF 2015 CAREER webinar video -

<u>http://www.tvworldwide.com/events/nsf/151102/globe_show/default_go_archive.cfm?gsid=2854&typ</u> e=flv

NSF 2015 CAREER webinar slides https://www.nsf.gov/mps/dms/career_and_pecase_information/career_webinar_slides_2015.pdf

NSF Broader Impacts brochure - https://www.nsf.gov/od/oia/publications/Broader_Impacts.pdf

Additional Resources from UNM - http://frdo.unm.edu/early_investigator/resources

Principal Investigator	PI Email Address	Title	NSF Org	Start Date
Peng, Zhen	pengz@unm.edu	CAREER: Physics-Oriented Statistical Wave Analysis Integrating Order and Chaos	<u>ECCS</u>	2018
Svihla, Vanessa	vsvihla@unm.edu	CAREER: Framing and Reframing Agency in Making and Engineering (FRAME)	<u>EEC</u>	2018
Becerra, Francisco Elohim	fbecerra@unm.edu	CAREER: Quantum Measurements for Optical Communications	<u>PHY</u>	2017
Cerrato, Jose	jcerrato@unm.edu	CAREER: Understanding Reactivity in American Native Impacted Uranium Mines (URANIUM): Research, Education and Outreach	<u>CBET</u>	2017
Habteyes, Terefe	habteyes@unm.edu	CAREER: Near-Field Imaging for Nanoscale Visualization of Exciton-Plasmon Energy Transfer	<u>CHE</u>	2017
Giri, Ramesh	rgiri@unm.edu	CAREER: SusChEM: Development of Tandem and Multi- Component Couplings with Base Metals and Organic Electron Donors	<u>CHE</u>	2016
Han, Sang Eon	sehan@unm.edu	CAREER: Symmetry Control in Photonic Nanostructures for Enhanced Optical Properties	<u>DMR</u>	2016
Schmandt, Brandon	bschmandt@unm.edu	CAREER: Mantle Seismic Structure Beneath North America and Evolving Seismcity in the Raton Basin	EAR	2016
Skripka, Anna	skripka@math.unm.edu	CAREER: Noncommutative Analysis CAREER: Modeling and Analyzing High-Dimensional Molecular	DMS	2016
Tapia, Lydia	tapia@cs.unm.edu	Assembly: Quantifying the Impact of Allergen Structure CAREER: Novel Nonlinear and Quantum Multimode Optical Fiber	IIS	2016
Mafi, Arash Feezell, Daniel	mafi@unm.edu dfeezell@unm.edu	and Waveguide Devices CAREER: Short-Wavelength Vertical-Cavity Surface-Emitting Laser Arrays Using Nonpolar and Semipolar GaN	ECCS	2015 2015
Qin, Yang	yangqin@unm.edu	CAREER: Bottom-Up Approaches for Precisely Nanostructuring Hybrid Organic/Inorganic Multi-Component Composites	DMR	2015
Estrada-Piedra, Trilce	estrada@cs.unm.edu	CAREER: Enabling Distributed and In-Situ Analysis for Multidimensional Structured Data	ACI	2015
Dirk, Elizabeth	edirk@unm.edu	CAREER:Engineering Three-Dimensional Environments for the Generation of Functional Aortic Heart Valve Tissue	<u>CBET</u>	2014
Oishi, Meeko	oishi@unm.edu	CAREER: Formal Tools For Analysis and Design of Collaborative Hybrid Systems	<u>CMMI</u>	2013

		CAREER: Evaluating the Impacts of River Engineering and Stream		
		Restoration Projects on the Ecosystem Service of Floodwave		
Stone, Mark	stone@unm.edu	Attenuation	<u>CBET</u>	2013
		CAREER: Interface-induced misfolding and aggregation of		
Chi, Eva	evachi@unm.edu	intrinsically disordered proteins	<u>CBET</u>	2012
		CAREER: Innovations in Markov Chains: Metrics, Duality and		
Hayes, Thomas hay	hayes@cs.unm.edu	Liftings	<u>CCF</u>	2012
		CAREER: RADIATION PRESSURE BASED OPTOMECHANICAL		
		RF SIGNAL PROCESSING FOR COMMUNICATION AND		
Hossein-Zadeh, Mani	mhz@chtm.unm.edu	SENSING	ECCS	2011
		CAREER: Phononic Crystals: Theory and Practical		
Leseman, Zayd	zleseman@ksu.edu	Implementations	<u>CMMI</u>	2011
		CAREER: Understanding Structure-Function Relationships in		
		Polymeric Semiconductor Materials from Top-Down and Bottom-Up		
Grey, John	jkgrey@unm.edu	Perspectives	<u>CHE</u>	2010
		CAREER: 3-D Global Full Maxwell's Equations Modeling of the		
Simpson, Jamesina	jamesina.simpson@utah.edu	Effects of a Coronal Mass Ejection on the Earth	<u>AGS</u>	2010
		CAREER: A Computational and Analytical Approach to Single-		
		Molecule Fluorescence Imaging for the Quantitative Analysis of		
Lidke, Keith	klidke@unm.edu	Protein Interactions in Living Cells.	<u>PHY</u>	2010
		CAREER: Phylogenetic Revisions of South American Water		
		Beetles (Coleoptera: Adephaga: Hydradephaga): A Model for		
Miller, Kelly	kbmiller@unm.edu	Teaching Systematic Biology	<u>DEB</u>	2009
		CAREER: Elucidating the regulation mechanisms of ErbB signaling		
Lidke, Diane	dlidke@salud.unm.edu	using quantitative imaging	<u>MCB</u>	2009
Petsev, Dimiter	dimiter@unm.edu	CAREER: Transport Control in Fluidic Micro and Nanochannels	<u>CBET</u>	2009
		CAREER: Internet Measurement in the Cat's Cradle of Global		
Crandall, Jedidiah	crandall@cs.unm.edu	Internet Censorship	<u>CNS</u>	2009
		PECASE: Compressive Cooperative Sensing and Navigation in		
Mostofi, Yasamin	ymostofi@ece.ucsb.edu	Mobile Networks	<u>CMMI</u>	2009
		CAREER: A Framework for Sparse Signal Reconstruction for		
Sen, Pradeep	psen@ece.ucsb.edu	Computer Graphics	<u>IIS</u>	2009
		CAREER: Next Generation Multifunctional Composites for		
Shen, Yu-Lin	shenyl@unm.edu	Radiations and Impact Hazards Mitigation	<u>CMMI</u>	2009
		CAREER: Characterization and Modeling of Asphalt Concrete for		
Tarefder, Rafiqul	tarefder@unm.edu	Moisture-Induced Damage	<u>CMMI</u>	2007

		CAREER: Quantum State Preparation via Continuous		
Geremia, JM jgeremia@unm.edu	jgeremia@unm.edu	Measurement and Feedback	<u>PHY</u>	2007
		CAREER: Coordination of Dynamic Networks - A Hybrid System		
Fierro, Rafael rfierro@unm.edu	Approach	ECCS	2007	
		CAREER: Dynamic Multi-Domain/Multi-Granularity Network		
Ghani, Nasir nghani@usf.edu	Provisioning	<u>CNS</u>	2007	
		CAREER: Foundations for Attack-Resistant, Collaborative Peer-to-		
Saia, Jared saia@cs.unm.edu	saia@cs.unm.edu	peer Systems	<u>CNS</u>	2007
		CAREER: Microbial Storage Products and Density: Overlooked		
		Fundamentals and Promising Opportunities in Biological Solids		
Schuler, Andrew	schuler@unm.edu	Separation	<u>CBET</u>	2007
		CAREER: Development of a New Generation of Gas-based		
Loomba, Dinesh	dloomba@unm.edu	Detectors for the Directionality Signature from Dark Matter	<u>PHY</u>	2006
		CAREER: Structural-functional Analysis of the V-ATPase Subunit d		
Parra, Karlett	kjparra@salud.unm.edu	by Site-directed Mutagenesis and Overexpression in Yeast	<u>MCB</u>	2006
		CAREER: Formal Cooperative Planning of Decentralized Robot		
Tanner, Herbert	btanner@udel.edu	Actions - Career Development Plan	<u>IIS</u>	2005
		CAREER: Integrated Stratigraphic and Hydrogeologic Aquifer		
		Analysis: Toward Improved Multi-scale Characterization of Alluvial		
Weissmann, Gary	weissman@unm.edu	Aquifer Systems	<u>EAR</u>	2005
		PECASE: Bridging the Gap Between Theory and Practice in		
		Teacher Education: Guided Interactive Virtual Environments		
Moreno, Roxana	moreno@unm.edu	(GIVEs) for Case-Based Learning	<u>DRL</u>	2003
		CAREER: Polarimetry in Remote Sensing, Communications, and		
Tyo, J. Scott tyo@optics.arizona.edu	tyo@optics.arizona.edu	Biological Sciences	ECCS	2003
		CAREER: Deoxyribozyme-Deoxyribozyme Logic, a New		
Stefanovic, Darko darko@cs.unm.edu	darko@cs.unm.edu	Computational Substrate	<u>CCF</u>	2003
		CAREER: Museum-based Approaches to Ecology and Evolution of		
		Aquatic Systems: An Integrated Research and Educational		
Turner, Thomas	turnert@unm.edu	Program	<u>DEB</u>	2002
			•	
Bader, David	bader@cc.gatech.edu	CAREER: High-Performance Algorithms for Scientific Applications	<u>CCF</u>	2001
		CAREER: In Situ Monitoring of Surface Phenomena during Silicon		
Han, Sang	meister@unm.edu	Germanium Deposition and Etching	<u>DMR</u>	2001
		CAREER: Energy Scavenging for MEMS and Engineering		
Tran, Hy	tran@me.unm.edu	Education Development	ECCS	2001

		CAREER: The Interstellar Disk-Halo Connection in Edge-on		
Rand, Richard	rjr@unm.edu	Galaxies - Bringing Research to a Large Audience	<u>AST</u>	2000
		CAREER: Simulation and Control of Electron Dynamics in Thin		
Evans, Deborah	debi@unm.edu	Films and Dendrimers	<u>CHE</u>	1999
		CAREER: Thermo-mechanical Reliability of Metal Interconnects in		
Shen, Yu-Lin	shenyl@unm.edu	Microelectronics	<u>CMMI</u>	1999
		CAREER: Bayesian Source Separation and Localization Using		
Pearlmutter, Barak	barak@pearlmutter.net	Modular Neural Networks	<u>IIS</u>	1997
		CAREER: Investigation of Femtosecond Dynamics and Optical		
Sheik-Bahae, Mansoor msb@unm.edu	or msb@unm.edu	Switching in Active Semiconductors	ECCS	1996
		CAREER: Hybrid Material Routes to Porous Amorphous Ceramics		
Lopez, Gabriel	gplopez@unm.edu	with Controlled Microstructure	<u>CBET</u>	1996
Miller, Robert	rdmiller@unm.edu	CAREER: Immunological Development In A Marsupial	<u>MCB</u>	1996
Lester, Luke	lflester@vt.edu	CAREER: The Development of Group-III Nitride LED's and Lasers	ECCS	1995
Henning, Patricia	henning@phys.unm.edu	CAREER: The Distribution of Optically-Obscured Galaxies, and Asymmetric Isolated Galaxies	<u>AST</u>	1995

Chemical Engineering Education, 36(1), 32-33 (Winter 2002).

SO YOU WANT TO WIN A CAREER AWARD

Richard M. Felder North Carolina State University

The NSF Early Faculty Development (CAREER) Program Award is the most sought-after recognition a new faculty member can receive. Besides being an impressive addition to the recipient's resume, the award gives major bragging rights to his or her department and institution. As soon as most new assistant professors move into their offices and boot up their computers, they are expected to begin work on their CAREER proposals— and if they don't make it on the first attempt they are expected to keep plugging away until they either win the award or are no longer eligible.

When I recently had the pleasure of serving on an NSF review panel, I noticed that certain common mistakes tended to land proposals in the "Sorry—good try, but not quite good enough to get funded" category. If you're a new faculty member planning to go for a CAREER award, you might consider taking several precautions to avoid these mistakes.

According to the NSF program solicitation, CAREER proposals must include "creative, integrative, and effective research and education plans," and show "excellence *in both* education and research." The most common mistake I've seen is discounting the importance of the education part. It appeared that many of the authors of proposals I reviewed worked long and hard on their research plans, then thought briefly about their education plans and wrote one or two cursory paragraphs about sponsoring undergraduate research projects or developing a new graduate course related to the proposal topic. With very few exceptions, those proposals were not funded.

This outcome makes sense if you think about it. Most CAREER applicants have spent at least four years thinking about the research topic of their proposals and are also smart enough to get knowledgeable senior colleagues to review their research plans. Those plans are consequently excellent in most proposals that make it past the first cut, which means that the education plans often determine who gets the awards. If the education plans are hastily or unimaginatively written, the proposals are not likely to be competitive.

Here are several more specific suggestions.

- *Read the program solicitation carefully and follow all instructions*. When the solicitation says that the program wants an integrated plan of research and education, provide exactly that. When it tells you that you must obtain the written endorsement of your department head and your bio must contain no more than 10 references and your project description has a 15-page maximum and you may submit letters of support from prospective collaborators but not reference letters, believe it.
- After you have outlined your plans, run your ideas by the CAREER contact person in the NSF division or program to which you plan to submit. This is legal; in fact, NSF program officers expect it. You will find them extremely helpful—they don't want you to waste your time, reviewers' time, and ultimately their time by writing a proposal that doesn't fit their program's goals and guidelines. They might recommend modifications that would make your proposal more suitable for them, or they might suggest sending the proposal to another program for which it would be a better fit.
- Do a thorough literature review and make sure you cite the most important theoretical and experimental work and most important researchers in the areas covered by the proposal. Search the literature in the area of the education part as well: if you're proposing a new approach to cooperative learning or distance education or K-12 outreach or the undergraduate laboratory, be sure to find the relevant published work and cite it. Ignoring important research in your proposal reflects poorly on your expertise and looks like you haven't done your homework, and omitting an important researcher will also do very little for your cause, especially if he or she turns out to be a reviewer. Try to avoid negativity in your citations, proposing to build on previous work rather than correcting it *"Frobish [1998] attempted something similar but got it*

SO YOU WANT TO WIN A CAREER AWARD

all wrong—my work will repair his blunders" is likely to backfire on you. You'd be surprised at how often those important people will get to review your proposals and how surly they can become if they don't see their names in the reference list or their work is trashed.

- *Pay attention to assessment, especially in the education plan.* Be specific about how you will know whether your research and education plans were successful. State your hypotheses, itemize the data you plan to collect, and make explicit connections between the hypotheses and the data. If you're trying something novel in your education plan (or if your research involves teaching and learning) and your "assessment" consists only of surveying students to see how they liked it, you will not get a warm reception from the reviewers. What they want to know is how you plan to demonstrate that your intervention improved learning or skill development or retention in engineering or science.
- *Don't overreach*. If you submit a proposal for a five-year \$300,000 study and propose to do research that would clearly require a large team of investigators and a much higher level of funding, it will probably not be funded, especially if you're also going to be teaching three courses a semester throughout the award period. You're much better off proposing something of more limited scope that you have a reasonable chance of accomplishing.
- Don't forget that you're writing a career development plan and not just a research proposal. In the project description and/or the biographical sketch, take a little time to spell out your long-range goals and how the proposed work will further them.
- *Push your credentials*. A biography in a proposal is not a good place to be modest. Include anything that suggests your ability to carry out your plans successfully—prior job and research experience, publications (summarize the relevant findings if they're not in your project description), awards, collaborations with leaders in the field, and so on. Since you can't include reference letters in the proposal, the only one in a position to blow your horn is you—and you can be sure that your competitors will be blowing theirs.
- *Get internal feedback before submitting the proposal*. Beg, bribe, do whatever it takes to get knowledgeable colleagues to act like picky NSF reviewers and bleed red ink all over your proposal draft. Ask them to focus on the things that the real reviewers will be rating: (a) the "intellectual merit of the proposed activity," (b) the "broader impacts of the proposed activity," (c) the level of integration of research and education, and (d) the degree to which the work will "broaden opportunities and enable the participation of all citizens—women and men, underrepresented minorities, and persons with disabilities."¹ Revise the proposal to take into account the criticisms and suggestions you get, and *then* send it in.

Doing all these things may not make your proposal a guaranteed winner, but it will unquestionably improve your odds. Good luck.

Reference

1. <http://www.nsf.gov/pubs/2001/nsf0184/nsf0184.htm>

CAREER Workshop Contact Information

FACULTY RESEARCH DEVELOPMENT OFFICE STAFF

Mary Jo Daniel, Ph.D. Director Email: <u>mjdaniel@unm.edu</u> Phone: (505) 277-0168 Faculty Research Development Office

Monica Fishel Faculty Research Support Officer Email: <u>mlfishel@unm.edu</u> Phone: (505) 277-8114 Faculty Research Development Office

Carman Melendrez, Ph.D. Faculty Research Scholar Email: <u>carmanmelendrez@unm.edu</u> Phone: (505) 277-0700 Faculty Research Development Office

Stephanie Tofighi, M.S.P.P. Faculty Research Support Officer Email: <u>sctofighi@unm.edu</u> Phone: (505) 277-7452 Faculty Research Development Office

COLLEGE EMBEDDED FACULTY SUPPORT TEAM

Mary Woodruff Contract & Grant Administrator Email: <u>mwoodr01@unm.edu</u> Phone: (505) 277-0071 <u>School of Architecture+Planning Research</u>

Jennifer Kavka, CRA Faculty Research Support Officer Email: <u>jekavka@unm.edu</u> Phone: (505) 277-5508 College of Arts & Sciences Research

Elizabeth Nocella Sr. Contract & Grant Administrator Email: <u>enocella@unm.edu</u> Phone: (505) 277-2111 <u>College of Fine Arts Research</u> Isela Roeder Faculty Research Support Officer Email: <u>iroeder@unm.edu</u> Phone: (505) 277-5758 <u>School of Engineering Research</u>

Christine Marquez, M.A. Contract & Grant Administrator Email: <u>cmarquez24@unm.edu</u> Phone: (505) 277-6797 <u>College of Education Research</u>

RELEVANT CAMPUS RESOURCES CONTACT INFORMATION

Jon Wheeler, M.S. Subject Librarian Email: <u>jwheel01@unm.edu</u> Phone: (505) 277-1687 UNM Library Data Research Support

Karl Benedict, Ph.D. Director of Research Data Services Associate Prof. Geography Email: <u>kbene@unm.edu</u> Phone: (505) 277-5256 UNM Library Data Research Support

Brooke Cholka, M.A. Human Protections Specialist Office of Research and Compliance Email: <u>cbcholka@unm.edu</u> Phone: (505) 277-0685 <u>Office of the Institutional Review Board (IRB)</u>

Tim Schroeder, Ph.D. Director, STEM Collaborative Center Email: <u>timschroeder@unm.edu</u> Phone: (505) 277-1761 <u>UNM STEM Collaborative Center</u>