Application Cover Sheet

Principal Investigator: John Doe

Rank and Department: Professor, Department of *NAME*

Address: 111 D St. Little Rock, AR 77777

Telephone: 501-555-5555

Project Title: Title here

Co-Investigators/Collaborators:

Co-Investigator : Jane Smith, Professor, Project Co-Director

:

:

:

:

Abstract:

120 word limit here

State the application's broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Describe the research design and methods for achieving the stated goals. **(120-word limit)**

SPECIFIC AIMS (Max 1 page)

Content:

Present a **brief background** for the object to the addressed by the proposed research.

State concisely the hypothesis of the proposal research and list the **specific aims** of the project.

Summarize the **expected outcome(s)**, including the impact that the results of the proposed Research will have on the research field(s) involved.

Hints:

A Strong grant application is driven by a strong, solid hypothesis with clear research objectives

The specific aims are a formal statement of the objectives and milestones of the research project towards testing the hypothesis

Avoid having specific aims that are overly interdependent

List succinctly the specific objectives of the research proposed

Briefly describe the methods to be used

Indicate the value of the proposed research

- Sell the proposal and its importance
- Indicate the significance of the work

RESEARCH STRATEGY (Max 5 pages total) include:

1- SIGNIFICANCE (~1.5 pages)

Content:

Present a review of literature explaining the scientific premise for the proposed project, including consideration of the strengths and weaknesses of published research or preliminary data crucial to the support of the application.

- Identify key references
- Reflect up-to-date references and knowledge of the field

Explain the importance of the problem or critical barrier to progress that the proposed project addresses.

Describe the potential impact on the concepts, education, method technologies, treatments, services, or prevention interventions that drive this field upon achieving the proposed aims.

Hints:

Include sufficient justification for the significance of the problem and rationale for the project

Provide an information narrative that directly pertains to the scientific need for the project

State the significance of the topic explicitly

Highlight the application of the research beyond the specific research project

2- INNOVATION (~0.5 pages)

Content:

Explain **challenges to and shifts in current research, education or clinical paradigm**s by the proposed project

Describe any novel theoretical concepts , new education approaches, methodologies, instrumentation, or interventions to be used and their advantages

Explain an refinements, improvements, or new applications of theoretical concepts, education approaches, methodologies, interventions

3- APPROACH (~3 pages)

Content:

Provide an overview of the proposed study design and conceptual framework. Describe the plan to carry out data collection, analysis, and interpretation.

Detail any new concepts, education approaches, tools or technologies for the proposed studies

Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims

Present **statistical design and methods**

Include a proposed work plan and timeline (Time Table for duration of project)

Hints:

Demonstrate a clear, organized, and thoughtful study design that test the central hypothesis

Relate the research approach directly to the aims described

Justify the proposed methods as the best to accomplish study goals

Presenting Preliminary Data (if available):

Construct statistical plans with a statistical expert

Determining the correct sample size is imperative

Statistical analysis of the findings provides a valid interpretation

Presenting Statistical Design and Methods:

Construct statistical plans with a statistical expert

Determining the correct sample size is imperative

Statistical analysis of the findings provides a valid interpretation

4- BIBLIOGRAPHY & REFERENCES CITED

Content:

Include a full bibliographic reference for each citation

Hint:

Consider using reference database software

APPROVAL REQUIREMENTS

Approval of internal committees (IRB, IACUC, etc.) may occur after the grant is approved but funding will not occur until all the appropriate internal review committees have approved

BUDGET
JUSTIFICATION

A. Personnel

Jane Doe, Ph.D., Principal Investigator (effort = 2.4 calendar months). Dr. Doe will be responsible for the overall coordination and supervision of all aspects of the study. This includes hiring, training, and supervising staff/students; recruiting study participants; coordinating treatment and assessment components; scheduling and staff assignments; and data management. In addition, she will conduct the orientation sessions, assist with statistical analyses, and be responsible for reporting the study's findings. **Dr. Doe will spend 20% of her time on this project with no salary requested**.

Suzan Raines, Ph.D., Co-Investigator (effort = 0.6 calendar months). Dr. Raines will be responsible for the collection and analyses of the fecal materials. She will also assist in manuscript preparation. **Dr. Raines will spend 5% of her time on this project with no salary requested**.

Susan Miller, Ph.D., Collaborator (effort = 0.6 calendar months). Dr. Miller will be responsible for the collection and analyses of materials. She will also assist in the manuscript preparation. **Dr. Miller will spend 5% of her time on this project with no salary requested**.

B. Other Personnel

TBA Associate (effort = 12 Calendar Months effort). This individual will coordinate the day-to-day management of the study, assist in assessments, be responsible for data entry of all treatment-related data (i.e., scheduling and conducting weights, attendance, self-monitoring), and serve as an interventionist.

TBA Project Coordinator effort = (6.0 Calendar Months). This individual will assist with recruitment, assessments, and serve as an interventionist. Additionally this person will aid with preliminary data analyses and manuscript preparation. It is anticipated that this individual would start with 1-year of previous experience.

TBA Research Assistant (effort = 12 Calendar Months). This individual will assist with recruitment, ordering supplies and intervention materials, assessments, collection of dietary data, daily management of study data, and scoring and data entry of assessments.

C. Equipment

Funds are requested to purchase three Biologs ($7,150 each). These are ambulatory physiological data recorders with multiple channels that will be used to record mothers' heart rate (RSA), activity level, and electrodermal activity (e.g., skin conductance). Recorded data is compactly stored on a removable memory card. When recording is complete, the card is inserted into a card reader which is connected to a PC through a serial port. The affiliated Downloading and Plotting Software ($1,100 under supplies) which operates on the PC supervises the downloading of data to the PC and ensures data is recorded according to the needs specified by the researchers. From this program, the data can be converted into separate data files for each physiological measure. These measures are all synchronized with one another and can be synchronized with video files as well. Three Biologs are needed because there are several periods when assessment points overlap (e.g., parental interviews, 6 months laboratory visits, 6 months home visits), and dedicated equipment for each type of visit will ease scheduling demands.

D. Travel

No travel is funded with the CHPSG application but example for future external funding provided.

E. Participation/Trainee Cost

NONE

F. Other Cost

Materials and Supplies

General research supplies – Research supplies are calculated at approximately $3,000 per year, and include blank DVD’s for data storage as well as testing materials.

CHPSG Intramural Research & Related Budget (Year 1)

Senior/Key Personnel

Name	Project Role	% Effort	UAMS	Salary Requested	Fringe Benefits	Funds Requested
John Doe	PI	20.0%	yes	$ -	$ -	$ -
Jane Smith	Co-I	10%	yes	$ -	$ -	$ -
				$ -	$ -	$ -
			Subtotal	$ -	$ -	**$ -**

Other Personnel

Name	Project Role	% Effort	UAMS	Salary Requested	Fringe Benefits	Funds Requested
Sally Smith	Statistician	1%	yes	$ -	$ -	$ -
Julie Doe	Research Assistant	0%	yes	$ -	$ -	$ -
Jamie Smith	Graduate Assistant	10%	yes	$ 2,000.00	$ -	$ 2,000.00
				$ -	$ -	$ -
				$ -	$ -	$ -
			Subtotal	$ 2,000.00	$ -	**$ 2,000.00**

Equipment

Description	Price	Quantity	Total
			$ -
			$ -
		Subtotal	**$ -**

Travel

No funding available

Description	
	$ -
Subtotal	**$ -**

Patient Care Costs

No funding available

Description	
	$ -
	$ -
Subtotal	**$ -**

Other Costs

Description	
Materials and Supplies **(Detailed supplies)**	$ 3,000.00
Consultant Costs	$ -
Subawards/Consortium/Contractural Costs	$ -
Animal Procurement	$ -
Animal Per Diem	$ -
Study Participant Stipends **(Detail)**	
Core Lab Charges	$ -
	$ -
	$ -
Subtotal	**$ 3,000.00**

Total

	$ 5,000

CHPSG Intramural Research & Related Budget (Year 2)

Senior/Key Personnel

Name	Project Role	% Effort	UAMS	Salary Requested	Fringe Benefits	Funds Requested
John Doe	PI	20.0%	yes	$ -	$ -	$ -
Jane Smith	Co-I	10%	yes			$ -
				$ -	$ -	$ -
			Subtotal	$ -	$ -	**$ -**

Other Personnel

Name	Project Role	% Effort	UAMS	Salary Requested	Fringe Benefits	Funds Requested
Sally Smith	Statistician	1%	yes	$ -	$ -	$ -
Julie Doe	Research Assistant	0%	yes		$ -	$ -
Jamie Smith	Graduate Assistant	10%	yes	$ 1,000.00	$ -	
				$ -	$ -	$ -
				$ -	$ -	$ -
			Subtotal	$ 1,000.00	$ -	**$ -**

Equipment

Description	Price	Quantity	Total
			$ -
			$ -
		Subtotal	**$ -**

Travel

No funding available

Description	
	$ -
	$ -
Subtotal	**$ -**

Patient Care Costs

No funding available

Description	
	$ -
	$ -
Subtotal	**$ -**

Other Costs

Description	
Materials and Supplies **(Detailed supplies)**	
Consultant Costs	$ -
Subawards/Consortium/Contractural Costs	$ -
Animal Procurement	$ -
Animal Per Diem	$ -
Study Participant Stipends **(Detail)**	$ -
Core Lab Charges	$ -
	$ -
	$ -
Subtotal	**$ -**

Total

	$ -

Bio Sketch Information Requirement

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:

POSITION TITLE:

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

A. Personal Statement

Briefly describe why you are well-suited for your role(s) in the project described in this application. The relevant factors may include aspects of your training; your previous experimental work on this specific topic or related topics; your technical expertise; your collaborators or scientific environment; and your past performance in this or related fields (you may mention specific contributions to science that are not included in Section C). Also, you may identify up to four peer reviewed publications that specifically highlight your experience and qualifications for this project. If you wish to explain impediments to your past productivity, you may include a description of factors such as family care responsibilities, illness, disability, and active duty military service.

B. Positions and Honors

List in chronological order previous positions, concluding with the present position. List any honors. Include present membership on any Federal Government public advisory committee.

C. Contribution to Science

Briefly describe up to five of your most significant contributions to science. For each contribution, indicate the historical background that frames the scientific problem; the central finding(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the described work. For each of these contributions, reference up to four peer-reviewed publications or other non-publication research products (can include audio or video products; patents; data and research materials; databases; educational aids or curricula; instruments or equipment; models; protocols; and software or netware) that are relevant to the described contribution. The description of each contribution should be no longer than one half page including figures and citations. Also provide a URL to a full list of your published work as found in a publicly available digital database such as SciENcv or My Bibliography, which are maintained by the US National Library of Medicine.

D. Research Support

List both selected ongoing and completed research projects for the past three years (Federal or non-Federally-supported). *Begin with the projects that are most relevant to the research proposed in the application.* Briefly

indicate the overall goals of the projects and responsibilities of the key person identified on the Biographical Sketch. Do not include number of person months or direct costs.

Example Biosketch MSCN Student

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: **Andrea Bell, RD, LD**

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

POSITION TITLE: **Graduate Research Assistant, Department of Dietetics and Nutrition**

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
Colorado State University, Fort Collins, CO	BS	05/2014	Nutrition and Food Science
University of Arkansas for Medical Sciences, Little Rock, AR	Certificate	05/2015	Dietetic Internship
University of Arkansas for Medical Sciences, Little Rock, AR	MS	In progress	Clinical Nutrition

A. Personal Statement

The proposed study evaluates how components of diet affect measures of health. As a Registered Dietitian, I am well-versed in nutrient metabolism, how those nutrients interact with metabolic pathways, and how those interactions affect health. I am also the graduate research assistant for Dr. Reza Hakkak, who has more than 20 years of research experience in the area of diet and cancer prevention and promotion.

As Dr. Hakkak's research assistant, I learned about the principles of the obese Zucker rat model, and oversaw the care of 19 obese female Zucker rats during an 8-week experiment. I was responsible for measuring their body weight and feed intake weekly, collecting fecal samples periodically, and monitoring their welfare daily. At the end of the experiment, I assisted with euthanization and collection of blood, heart, kidney, liver, adipose tissue, and colon content samples. I am also responsible for manuscript preparation.

I have worked diligently over the past six months to become fluent in existing research pertaining to connections between obesity, breast cancer, soy isoflavones (daidzein extensively), and gut microbiota. Through my position as Dr. Hakkak's assistant I became interested in focusing my master's thesis on daidzein's effects on liver steatosis, which Dr. Hakkak also studies in connection with obesity and soy. As part of my master's coursework, I have been trained in the enzyme-linked immunosorbent assay (ELISA) technique in order to be proficient with ELISA prior to using it in this proposed study. The study outlined in this proposal will contribute to my master's thesis research.

B. Positions and Honors

Positions and Honors

2008-2011	Active duty, E-4, United States Air Force
2008-2011	Database Manager/Analyst, United States Air Force, Little Rock Air Force Base, AR
2011	Outstanding Professional of the Year 2010, Little Rock Air Force Base, AR
2011	Air Force Commendation Medal, Little Rock Air Force Base, AR
2011-2014	Guardsman, E-5, Air National Guard
2011-2014	Database Manager/Analyst, Wyoming Air National Guard, Cheyenne, WY
2014	Magna Cum Laude, Colorado State University, CO
2014-2015	Dietetic Intern, University of Arkansas for Medical Sciences, Little Rock, AR
2015-present	State Professional Recruitment Coordinator, Arkansas Academy of Nutrition and Dietetics
2015-present	CITI Laboratory Animal Welfare Training
2015-present	Registered Dietitian
2015-present	Licensed Dietitian, Arkansas
2015-present	Graduate Research Assistant, University of Arkansas for Medical Sciences, Little Rock, AR

Professional Memberships

2013-present	Member, Academy of Nutrition and Dietetics
2013-2014	Member, Northern Colorado Dietetics Association
2014-present	Member, Arkansas Academy of Nutrition and Dietetics
2015-present	Member, Dietitians in Integrative and Functional Nutrition, Dietetic Practice Group

C. Contribution to Science

Rates of childhood and adult obesity in the US are reaching epidemic proportions. Previous research in Dr. Hakkak's laboratory has shown that a diet containing soy protein compared to a diet containing casein protein causes greater weight gain in obese Zucker rats. To understand the physiologic mechanisms responsible for this weight gain, I analyzed raw data from a previous experiment to determine kilocalorie intake and to compare serum leptin levels. Results showed that obese Zucker rats fed a diet containing soy protein ate more kilocalories per kilogram of body weight than the obese Zucker rats fed a diet containing casein protein over the 8-week experiment; this kilocalorie difference was statistically significant ($p<0.05$) and likely accounted for increased weight gain. Additionally, serum leptin levels were higher in obese Zucker rats fed the soy diet compared to the casein diet, but the difference did not reach statistical significance ($p<0.06$). I presented the results of this data analysis at a Graduate Student Symposium poster session, and Dr. Hakkak will present these results at the Experimental Biology Meeting in April 2016. As a result of this data analysis, we now know there may be a component of soy protein that is affecting hunger and causing increased kilocalorie intake in genetically obese rats, which in turn causes increased weight gain. My research goals include further investigation of the effect of obesity and soy isoflavones on leptin and adiponectin levels.

a. Hakkak R, **Bell A**, Korourian S. Effects of obesity and soy protein diet on feed intake and serum leptin level in Female Zucker rats. *J Exp Biol*. In press.

D. Research Support

Ongoing Research Support

Source:	College of Medicine University Medical Group
Dates:	08/01/15 – 07/30/16
Title:	"Effects of Low and High Doses of Daidzein Supplementation on Gut Microbiota and Equol Production in Obese Rats"
Summary:	The goal of the pilot project is to determine the effects of low and high daidzein on gut microbiota.
Role:	Graduate Research Assistant – Responsible for animal care, sample collection and analysis, and manuscript and presentation preparation and delivery.

OMB No. 0925-0001 and 0925-0002 (Rev. 09/17 Approved Through 03/31/2020)

Bio Sketch Example Post-Doctoral

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: Robertson-Chang, Leilani

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

POSITION TITLE: Graduate Student Research Assistant

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*)*	START DATE MM/YYYY	END DATE MM/YYYY	FIELD OF STUDY
Swarthmore College	BA	08/2008	05/2012	Biology
UC San Diego	PHD	08/2012	05/2018	Molecular Biology

A. Personal Statement

My long term research interests involve the development of a comprehensive understanding of key developmental pathways and how alterations in gene expression contribute to human disease. My academic training and research experience to date have provided me with an excellent background in molecular biology and microbiology. While in high school I was awarded an NIH Diversity Supplement award to work as a research technician for two summers in Dr. Indira Creative's lab at the University of Hawaii. As an undergraduate at Swarthmore College, I conducted research with Dr. Xavier Factor on the mechanisms of action of a new class of antibiotics. This resulted in a co-authorship publication, as well as an invitation to present a poster at the annual Antibiotica meeting in Denver, Colorado. For my graduate training at UC San Diego, I have moved into the fields of genetics and biochemistry by studying the regulation of transcription in yeast, under Dr. Tanti Auguri. Dr. Auguri is an internationally recognized leader in the field of yeast genetics and has an extensive record for training predoctoral and postdoctoral fellows. Along with giving me new conceptual and technical training, the proposed training plan outlines a set of career development activities and workshops – e.g. public speaking, literature analysis, biomedical ethics, and career options. For my initial project I am currently developing a novel protocol for the purification for components of large transcription complexes which I hope to submit as a first author publication in the next few months. As a native Hawaiian, I am the first in my family to graduate from college so I am excited to keep pushing forward with my education. Overall, I feel that my choice of sponsor, research project, and the training I will get from this fellowship will give me a solid foundation for my long-term goal to become an academic researcher.

1. Robertson-Chang L, Factor X. Testing the ability of antibiotic Gen Y to kill Gram-negative bacteria. Antibiotica annual meeting; 2011 September; Denver, CO.
2. Robertson-Chang L, Auguri T. A tandem affinity purification tag approach allows for isolation of interacting proteins in Saccharomyces cerevisiae. Yeast Genetics and Molecular Biology Meeting; 2013 September; Seattle, WA.

B. Positions and Honors

Positions and Employment

2007 - 2008 Lab Technician, University of Hawaii
2012 - Graduate Student Research Assistant, UC San Diego

Other Experience and Professional Memberships

2007 - Member, Association for Women in Science
2009 - Member, Sigma Xi

Honors

2007 - 2008 Diversity Supplement, National Institutes of Health
2008 Scholarship, Daughters of Hawaii Society
2008 - 2012 Scholarship, National Merit Scholarship Program
2012 Paula F. Laufenberg award for best senior project in the Biology Department, Swarthmore College

C. Contribution to Science

1. **High School Research:** I spent two summers doing research in the laboratory of Dr. Indira M. Creative at University of Hawaii, funded by a NIH Diversity Supplement award. Dr. Creative has developed several new anti-fungal drugs that might protect against skin infections. Over the course of two summers I set up in vitro cultures of skin cell lines and conducted a wide range of toxicity assays. We were excited to find that one of the new agents showed almost no toxicity, even at fairly high doses. Dr. Creative is now testing the drug in animals exposed to different types of fungal infections, including *Candida albicans*.
    a. Footman B, Eisser JK, Robertson-Chang L, Creative IM. Testing XXH for toxicity in vitro. University of Hawaii Research Symposium; 2008 May; Manoa, HI.
2. **Undergraduate Research:** I was part of a project in the laboratory of Dr. Xavier Factor at Swarthmore College. Dr. Factor's laboratory studies the mechanisms of action of antibiotics. During my time in his lab I was looking at how a new antibiotic, Gen Y, is able to unravel bacterial DNA. My contributions to this work were included in a publication recently accepted in Cellular and Molecular Biology. The work was particularly exciting because it looks like the mechanism used by Factor Y might be completely novel, making it a potential candidate for treating patients infected with antibiotic resistant organisms. Dr. Factor was recently awarded a patent for this new drug.
    a. Nieman PY, Robertson-Chang L, Factor X. Gen Y: a novel antibiotic with DNA unwinding abilities. Cellular and Molecular Biology. In press.
    b. Robertson-Chang L, Factor X. Testing the ability of antibiotic Gen Y to kill Gram-negative bacteria. Antibiotica annual meeting; 2011 September; Denver, CO.
3. **Graduate Research**: My ongoing predoc research is focused on transcriptional gene regulation in Saccharomyces cerevisiae. I believe the results from my research will likely be highly relevant to human health as they will provide new details into the workings of complex biological systems, which will allow for further extrapolations into the development of certain diseases and their progression. I am currently developing a novel protocol for the purification of components of large transcription complexes which I hope to submit as a first author publication in the next few months.

a. Robertson-Chang L, Auguri T. A tandem affinity purification tag approach allows for isolation of interacting proteins in Saccharomyces cerevisiae. Yeast Genetics and Molecular Biology Meeting; 2013 September; Seattle, WA.

D. Additional Information: Research Support and/or Scholastic Performance

Scholastic Performance

YEAR	COURSE TITLE	GRADE
	SWARTHMORE COLLEGE	
2008	Cellular and Molecular Biology	A
2008	Foundations of Chemical Principles	A
2009	Organismal and Population Biology	B
2009	Omics	B
2008	First Year Seminar: Nation and Migration	A
2009	Statistics, Probability, and Reliability	A
2009	Calculus I	B
2009	General Physics I	B
2009	Introductory Chemistry	A
2009	Organic Chemistry	B
2010	American Literature	B
2010	General Physics II	B
2010	Organic Chemistry II	B
2010	Microbial Pathogenesis and the Immune Response	A
2010	Introduction to Cognitive Science	A
2010	Biological Chemistry	B
2011	Anthropology of Childhood and the Family	A
2011	Disease, Culture, and Society in the Modern World	A
2011	Human Genetics	A
2011	Senior Project	A
2011	Bioinformatics	B
2012	Cell Biology	A
2012	Physics in Modern Medicine	A
2012	Genomics and Systems Biology	A
2012	Senior Project	A
	UC SAN DIEGO	
2012	Seminar in Genetics	P
2013	Statistics for the Life Sciences	P
2013	Ethics in Biological Research	CRE
2014	Seminar in Physiology and Behavior	P

Except for the scientific ethics course, UC San Diego graduate courses are graded P (pass) or F (fail). Passing is C plus or better. The scientific ethics course is graded CRE (credit) or NC (no credit). Students must attend at least seven of the eight presentation/discussion sessions for credit.

Bio Sketch Example Associate Professor

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: Hunt, Morgan Casey

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

POSITION TITLE: Associate Professor of Psychology

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, Berkeley	B.S	05/1990	Psychology
University of Vermont	Ph.D.	05/1996	Experimental Psychology
University of California, Berkeley	Postdoctoral	08/1998	Public Health and Epidemiology

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. PMCID: PMC9162292 Hunt, M.C., Newlin, D.B. & Fishbein, D. (2009). Brain imaging in methamphetamine abusers across the life-span. Gerontology, 46(3), 122-145.

B. Positions and Honors

Positions and Employment

1998-2000	Fellow, Division of Intramural Research, National Institute of Drug Abuse, Bethesda, MD
2000-2002	Lecturer, Department of Psychology, Middlebury College, Middlebury, VT
2001-	Consultant, Coastal Psychological Services, San Francisco, CA
2002-2005	Assistant Professor, Department of Psychology, Washington University, St. Louis, MO
2007-	Associate Professor, Department of Psychology, Washington University, St. Louis, MO

Other Experience and Professional Memberships

1995-	Member, American Psychological Association
1998-	Member, Gerontological Society of America
1998-	Member, American Geriatrics Society
2000-	Associate Editor, Psychology and Aging
2003-	Board of Advisors, Senior Services of Eastern Missouri
2003-05	NIH Peer Review Committee: Psychobiology of Aging, ad hoc reviewer
2007-11	NIH Risk, Adult Addictions Study Section, members

Honors

2003	Outstanding Young Faculty Award, Washington University, St. Louis, MO
2004	Excellence in Teaching, Washington University, St. Louis, MO
2009	Award for Best in Interdisciplinary Ethnography, International Ethnographic Society

C. Contribution to Science

1. My early publications directly addressed the fact that substance abuse is often overlooked in older adults. However, because many older adults were raised during an era of increased drug and alcohol use, there are reasons to believe that this will become an increasing issue as the population ages. These publications found that older adults appear in a variety of primary care settings or seek mental health providers to deal with emerging addiction problems. These publications document this emerging problem but guide primary care providers and geriatric mental health providers to recognize symptoms, assess the nature of the problem and apply the necessary interventions. By providing evidence and simple clinical approaches, this body of work has changed the standards of care for addicted older adults and will continue to provide assistance in relevant medical settings well into the future. I served as the primary investigator or co-investigator in all of these studies.
    a. Gryczynski, J., Shaft, B.M., Merryle, R., & Hunt, M.C. (2002). Community based participatory research with late-life addicts. American Journal of Alcohol and Drug Abuse, 15(3), 222-238.
    b. Shaft, B.M., Hunt, M.C., Merryle, R., & Venturi, R. (2003). Policy implications of genetic transmission of alcohol and drug abuse in female nonusers. International Journal of Drug Policy, 30(5), 46-58.
    c. Hunt, M.C., Marks, A.E., Shaft, B.M., Merryle, R., & Jensen, J.L. (2004). Early-life family and community characteristics and late-life substance abuse. Journal of Applied Gerontology, 28(2),26-37.
    d. Hunt, M.C., Marks, A.E., Venturi, R., Crenshaw, W. & Ratonian, A. (2007). Community-based intervention strategies for reducing alcohol and drug abuse in the elderly. Addiction, 104(9), 1436-1606. PMCID: PMC9000292

2. In addition to the contributions described above, with a team of collaborators, I directly documented the effectiveness of various intervention models for older substance abusers and demonstrated the importance of social support networks. These studies emphasized contextual factors in the etiology and maintenance of addictive disorders and the disruptive potential of networks in substance abuse treatment. This body of work also discusses the prevalence of alcohol, amphetamine, and opioid abuse in older adults and how networking approaches can be used to mitigate the effects of these disorders.
    a. Hunt, M.C., Merryle, R. & Jensen, J.L. (2005). The effect of social support networks on morbidity among elderly substance abusers. Journal of the American Geriatrics Society, 57(4), 15-23.
    b. Hunt, M.C., Pour, B., Marks, A.E., Merryle, R. & Jensen, J.L. (2005). Aging out of methadone treatment. American Journal of Alcohol and Drug Abuse, 15(6), 134-149.

c. Merryle, R. & Hunt, M.C. (2007). Randomized clinical trial of cotinine in older nicotine addicts. Age and Ageing, 38(2), 9-23. PMCID: PMC9002364

3. Methadone maintenance has been used to treat narcotics addicts for many years but I led research that has shown that over the long-term, those in methadone treatment view themselves negatively and they gradually begin to view treatment as an intrusion into normal life. Elderly narcotics users were shown in carefully constructed ethnographic studies to be especially responsive to tailored social support networks that allow them to eventually reduce their maintenance doses and move into other forms of therapy. These studies also demonstrate the policy and commercial implications associated with these findings.

   a. Hunt, M.C. & Jensen, J.L. (2003). Morbidity among elderly substance abusers. Journal of the Geriatrics, 60(4), 45-61.
   b. Hunt, M.C. & Pour, B. (2004). Methadone treatment and personal assessment. Journal Drug Abuse, 45(5), 15-26.
   c. Merryle, R. & Hunt, M.C. (2005). The use of various nicotine delivery systems by older nicotine addicts. Journal of Ageing, 54(1), 24-41. PMCID: PMC9112304
   d. Hunt, M.C., Jensen, J.L. & Merryle, R. (2008). The aging addict: ethnographic profiles of the elderly drug user. NY, NY: W. W. Norton & Company.

Complete List of Published Work in MyBibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/collections/public/1PgT7IEFIAJBtGMRDdWFmjWAO/?sort=date&direction=ascending

D. Additional Information: Research Support and/or Scholastic Performance

Ongoing Research Support

R01 DA942367 Hunt (PI) 09/01/08-08/31/16
Health trajectories and behavioral interventions among older substance abusers
The goal of this study is to compare the effects of two substance abuse interventions on health outcomes in an urban population of older opiate addicts.
Role: PI

R01 MH922731 Merryle (PI) 12/15/07-11/30/15
Physical disability, depression and substance abuse in the elderly
The goal of this study is to identify disability and depression trajectories and demographic factors associated with substance abuse in an independently-living elderly population.
Role: Co-Investigator

Faculty Resources Grant, Washington University 08/15/09-08/14/15
Opiate Addiction Database
The goal of this project is to create an integrated database of demographic, social and biomedical information for homeless opiate abusers in two urban Missouri locations, using a number of state and local data sources.
Role: PI

Completed Research Support

R21 AA998075 Hunt (PI) 01/01/11-12/31/13
Community-based intervention for alcohol abuse
The goal of this project was to assess a community-based strategy for reducing alcohol abuse among older individuals.
Role: PI