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| Child Health Scientist Career Development Grant ApplicationDo not exceed character length restrictions indicated. | A black background with text  Description automatically generated |
| 1. TITLE OF PROJECT *(Do not exceed 81 characters, including spaces and punctuation.)*      |
| 2. RESPONSE TO SPECIFIC REQUEST FOR APPLICATIONS OR PROGRAM ANNOUNCEMENT OR SOLICITATION [ ]  NO [ ]  YES  *(If “Yes,” state number and title)* |
| Number: |       | Title: |       |
| **3. PROGRAM DIRECTOR/PRINCIPAL INVESTIGATOR** |
| 3a. NAME (Last, first, middle) | 3b. DEGREE(S) | 3h. eRA Commons User Name |
|       |       |       |       |       |
| 3c. POSITION TITLE      | 3d. MAILING ADDRESS *(Street, city, state, zip code)*      |
| 3e. DEPARTMENT, SERVICE, LABORATORY, OR EQUIVALENT      |
| 3f. MAJOR SUBDIVISION      |
| 3g. TELEPHONE AND FAX *(Area code, number and extension)* | E-MAIL ADDRESS:  |
| TEL: |       | FAX: |       |       |
| 4. HUMAN SUBJECTS RESEARCH | 4a. Research Exempt  | If “Yes,” Exemption No. |
|  [ ]  No [ ]  Yes | [ ]  No [ ]  Yes |       |
| 4b. Federal-Wide Assurance No.  | 4c. Clinical Trial | 4d. NIH-defined Phase III Clinical Trial |
|       | [ ]  No [ ]  Yes |  [ ]  No [ ]  Yes |
| 5. VERTEBRATE ANIMALS [ ]  No [ ]  Yes | 5a. Animal Welfare Assurance No.  | 00002939 |
| 6. DATES OF PROPOSED PERIOD OF  SUPPORT *(month, day, year—MM/DD/YY)* | 7. COSTS REQUESTED FOR INITIAL BUDGET PERIOD | 8. COSTS REQUESTED FOR PROPOSED PERIOD OF SUPPORT |
| From | Through | 7a. Direct Costs ($) | 8a. Direct Costs ($) |
|       |       |       |       |
| 9. APPLICANT ORGANIZATION | 10. TYPE OF ORGANIZATION |
| Name |       | Public: **→** [ ]  Federal [ ]  State [ ]  Local |
| Address |       | Private: **→** [ ]  Private Nonprofit |
| For-profit: **→** [ ]  General [ ]  Small Business [ ]  Woman-owned [ ]  Socially and Economically Disadvantaged |
| 11. ENTITY IDENTIFICATION NUMBER      |
| DUNS NO. |       | Cong. District |       |
| 12. ADMINISTRATIVE OFFICIAL TO BE NOTIFIED IF AWARD IS MADE | 13. OFFICIAL SIGNING FOR APPLICANT ORGANIZATION |
| Name |       | Name |  |
| Title |       | Title  |       |
| Address |       | Address |       |
| Tel: |       | FAX: |       | Tel: |       | FAX: |       |
| E-Mail: |       | E-Mail: |       |

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| --- | --- |
| Program Director/Principal Investigator (Last, First, Middle): |       |
|  |
| PROJECT SUMMARY: |
|       |
| RELEVANCE TO CHILD HEALTH: |
|       |
| PROJECT/PERFORMANCE SITE(S) (if additional space is needed, use Project/Performance Site Format Page) |
| **Project/Performance Site Primary Location** |
| Organizational Name: |       |
| DUNS: |       |
| Street 1: |       | Street 2: |       |
| City: |       | County: |       | State: |       |
| Province: |       | Country: |       | Zip/Postal Code: |       |
| Project/Performance Site Congressional Districts: |       |
|  |
| **Additional Project/Performance Site Location** |
| Organizational Name: |       |
| DUNS: |       |
| Street 1: |       | Street 2: |       |
| City: |       | County: |       | State: |       |
| Province: |       | Country: |       | Zip/Postal Code: |       |

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| --- | --- |
| Program Director/Principal Investigator (Last, First, Middle): |       |
|  |
| SENIOR/KEY PERSONNEL. See instructions. *Use continuation pages as needed* to provide the required information in the format shown below.Start with Program Director(s)/Principal Investigator(s). List all other senior/key personnel in alphabetical order, last name first. |
| Name | eRA Commons User Name | Organization | Role on Project |
|       |       |       |       |
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|       |       |       |       |
| OTHER SIGNIFICANT CONTRIBUTORS |
| Name | Organization | Role on Project |
|       |       |       |
|       |       |       |
|       |       |       |
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|       |       |       |
| **Human Embryonic Stem Cells** | **[ ]  No** | **[ ]  Yes** |
| **If the proposed project involves human embryonic stem cells, list below the registration number of the specific cell line(s) from the following list:** <https://grants.nih.gov/stem_cells/registry/current.htm>. *Use continuation pages as needed.*If a specific line cannot be referenced at this time, include a statement that one from the Registry will be used. |
| **Cell Line** |
|       |
|       |
|       |
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|       |
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**OTHER SUPPORT**

*List other research support including active grants, pending grants, and completed projects (going back 5 years). Include your role on project, amount of funding awarded, time of project and your % effort on project. Report any overlap of research goals between current projects and this application. If you have no Other Support, state so.*

**Active Grant Support**

Grant Title:

Grant Period:

Principal Investigator:

Overlap with current grant application:

**Completed Grant Support**

Grant Title:

Grant Period:

Principal Investigator:

Overlap with current grant application:

**Pending/Planned Grant Applications:**

Grant Title:

Grant Period:

Principal Investigator:

Overlap with current grant application:

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**Senior Personnel/Other Contributors**

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**Budget for Entire Period**

**Budget Justification**

**Biographical Sketches**

**RESEARCH PLAN**

**Specific Aims**

**Significance**

**Innovation**

**Approach**

**References**

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| DETAILED BUDGET FOR INITIAL BUDGET PERIODDIRECT COSTS ONLY | FROM | THROUGH |
|       |       |

 List PERSONNEL *(Applicant organization only)* Use Cal, Acad, or Summer to Enter Months Devoted to Project

 Enter Dollar Amounts Requested *(omit cents)* for Salary Requested and Fringe Benefits

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NAME | ROLE ONPROJECT | Cal.Mnths | Acad.Mnths | SummerMnths | INST.BASESALARY | SALARYREQUESTED | FRINGEBENEFITS | TOTAL |
|       | PD/PI |       |       |       |       |       |       |       |
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| SUBTOTALS |       |       |       |
| CONSULTANT COSTS      |       |
| EQUIPMENT *(Itemize)*      |       |
| SUPPLIES *(Itemize by category)*      |       |
| TRAVEL      |       |
| INPATIENT CARE COSTS       |       |
| OUTPATIENT CARE COSTS       |       |
| OTHER EXPENSES *(Itemize by category)*      |       |
| SUBTOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD *(Item 7a, Face Page)* | $ |       |
| TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD  | $ |       |

PHS 398 (Rev. 01/18 Approved Through 03/31/2020)

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| --- | --- |
| Program Director/Principal Investigator (Last, First, Middle): |       |
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| BUDGET FOR ENTIRE PROPOSED PROJECT PERIODDIRECT COSTS ONLY |
| BUDGET CATEGORYTOTALS | INITIAL BUDGETPERIOD*(from Form Page 4)* | 2nd ADDITIONAL YEAR OF SUPPORT REQUESTED | 3rd ADDITIONAL YEAR OF SUPPORT REQUESTED |
| PERSONNEL: *Salary and fringe benefits. Applicant organization only*. |       |       |       |
| CONSULTANT COSTS |       |       |       |
| EQUIPMENT |       |       |       |
| SUPPLIES |       |       |       |
| TRAVEL |       |       |       |
| PATIENT CARECOSTS |       |       |       |
| OTHER EXPENSES |       |       |       |
| TOTAL DIRECT COSTS |       |       |       |
| TOTAL DIRECT COSTS FOR ENTIRE PROPOSED PROJECT PERIOD | $ |       |

BUDGET JUSTIFICATION

Justify all costs and indirect costs of the research. Be specific.

BIOGRAPHICAL SKETCH

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

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 DateMM/YYYY | FIELD OF STUDY |
| --- | --- | --- | --- |
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**A. Personal Statement**

**B. Positions and Honors**

**C. Contributions to Science (including publications)**

**D. Additional Information: i.e. research support, unique experience, etc.**

**RESEARCH PLAN**

*Include separate sections for Specific Aims (1 page), Significance, Innovation, Approach, Statistical Analysis (including power calculations if appropriate), Timeline and References. Total 6 page limits (excluding Specific Aims and References).*

**Applicant Career Development and Mentoring Plan**

1. *Describe applicant’s selection process of the mentor. 2. Describe applicant’s goals for Program mentoring/training; Describe Applicant’s Career Goals. 3. Describe the anticipated mentored and research experience that is anticipated from participation in the Program. 4. List the educational/training activities planned during the award. 5. List Mentoring Committee members (at least 4 members; letter of support to be provided); 6. Outline plans for meeting with Mentoring Committee and Program Committee.* 7*. Outline a timeline for extramural grant application. Total 3 page limit.*

**MENTOR INFORMATON**

*1. Support available to applicant: Mentoring Plan; Environment including your own expertise as related to the applicant and project; Research Facilities; Research space within the mentor’s laboratory if needed. 2. Relationship of proposed research training to the applicant’s career. 3. Describe how the applicant is suited for this research mentored opportunity based on his/her academic record and research experience level. 4. State mentor’s commitment to formal and informal mentoring. 5. Describe mentor’s mentoring track record (total number of previous trainees/mentored faculty, for five representative mentees describe project your role as mentor and present position). 6. Number of direct mentees (trainees/faculty to be supervised by the mentor during the award. 7. Applicant’s qualifications and potential for a career in child health research.*

*Total 3 page limit.*

**RESOURCES**

**A. Office**:

**B. Computer**:

**C. Laboratory/Clinical**:

**D. Equipment**:

**E. Other (i.e. patient population)**:

 LETTERS OF SUPPORT

*Chair’s letter. Applicants are sponsored by their home Department Chair who provides a letter of support confirming that the applicant will have the protected time to pursue the program. Minimum of 0.4 FTE of protected research time is required. Program provides three years of salary support up to $84,840/year plus benefits; additional funding to support salary beyond the cap to allow 0.4 FTE protected time for research are provided through Departmental funding or other sources that need to be identified and stated in the Chair’s letter at the time of submission.*

*Mentoring team member letters. Applicant and mentor establish a mentoring team (with at least 4 members) that is expected to meet every 6 months to provide mentored support to the applicant. Mentoring committee members, their expertise and their commitment to serve in the committee should be addressed in a letter of support provided with the application*.

The following pages are **EXAMPLES** of **OTHER SUPPORT** and **BIOGRAPHICAL SKETCH** pages. Do not submit these pages with your completed application.

**Samples of Other Support**

**ANDERSON, R.R.**

ACTIVE

2 R01 HL 00000-13 (Anderson) 3/1/2017 – 2/28/2022 3.60 calendar

NIH/NHLBI $186,529

Chloride and Sodium Transport in Airway Epithelial Cells

The major goals of this project are to define the biochemistry of chloride and sodium transport in airway epithelial cells and clone the gene(s) involved in transport.

5 R01 HL 00000-07 (Baker) 4/1/2012 – 3/31/2017 1.20 calendar

NIH/NHLBI $122,717

Ion Transport in Lungs

The major goal of this project is to study chloride and sodium transport in normal and diseased lungs.

R000 (Anderson) 9/1/2017 – 8/31/2020 1.20 calendar

Cystic Fibrosis Foundation $43,123

Gene Transfer of CFTR to the Airway Epithelium

The major goals of this project are to identify and isolate airway epithelium progenitor cells and express human CFTR in airway epithelial cells.

PENDING

 DCB 950000 (Anderson) 12/1/2017 – 11/30/2019 2.40 calendar

 National Science Foundation $82,163

 Liposome Membrane Composition and Function

The major goals of this project are to define biochemical properties of liposome membrane components and maximize liposome uptake into cells.

OVERLAP

There is scientific overlap between aim 2 of NSF DCB 950000 and aim 4 of the application under consideration. If both are funded, the budgets will be adjusted appropriately in conjunction with agency staff.

**RICHARDS, L.**

NONE

**HERNANDEZ, M.**

ACTIVE

5 R01 CA 00000-07 (Hernandez) 4/1/2012 – 3/31/2019 3.60 academic

NIH/NCI $110,532

Gene Therapy for Small Cell Lung Carcinoma

The major goals of this project are to use viral strategies to express the normal p53 gene in human SCLC cell lines and to study the effect on growth and invasiveness of the lines.

5 P01 CA 00000-03 (Chen) 7/1/2016 – 6/30/2018 1.80 academic

NIH/NCI $104,428 (sub only) 3.00 summer

Mutations in p53 in Progression of Small Cell Lung Carcinoma

The major goals of this subproject are to define the p53 mutations in SCLC and their contribution to tumor progression and metastasis.

BE 00000 (Hernandez) 9/1/2016 – 8/31/2019 1.80 academic

American Cancer Society $86,732

p53 Mutations in Breast Cancer

The major goals of this project are to define the spectrum of p53 mutations in human breast cancer samples and correlate the results with clinical outcome.

OVERLAP

Potential commitment overlap for Dr. Hernandez between 5 R01 CA 00000-07 and the application under consideration. If the application under consideration is funded with Dr. Hernandez committed at 3.60 person months, Dr. Hernandez will request approval to reduce her months on the NCI grant.

**BENNETT, P.**

ACTIVE

Investigator Award (Bennett) 9/1/2017 – 8/31/2019 9.00 calendar

Howard Hughes Medical Institute $581,317

Gene Cloning and Targeting for Neurological Disease Genes

This award supports the PI’s program to map and clone the gene(s) implicated in the development of Alzheimer’s disease and to target expression of the cloned gene(s) to relevant cells.

OVERLAP: None

BIOGRAPHICAL SKETCH

**Provide the following information for the Senior/key personnel and other significant contributors.**

**Follow this format for each person. DO NOT EXCEED FIVE PAGES**.

NAME: 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 DateMM/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.
	1. 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.
	2. 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.
	3. 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.
	4. 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.
	1. 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.
	2. 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.
	3. 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.

1. Hunt, M.C. & Jensen, J.L. (2003). Morbidity among elderly substance abusers. Journal of the Geriatrics, 60(4), 45-61.
2. Hunt, M.C. & Pour, B. (2004). Methadone treatment and personal assessment. Journal Drug Abuse, 45(5), 15-26.
3. 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
4. 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