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Thomas F. Hilton • Carl G. Leukefeld

Grantsmanship for New Investigators

 Springer

Thomas F. Hilton (Retired)
Indian Harbour Beach, FL, USA

Carl G. Leukefeld
School of Medicine
Center on Drug and Alcohol Research
University of Kentucky
Lexington, KY, USA

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To Frank Tims, Ph.D., friend, mentor, and scholar, whose work over many decades has advanced the careers of so many scientists in health services research

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About the Authors

Over the span of more than four decades, both Tom Hilton and Carl Leukefeld have worked as bench and field researchers as well as federal grant and contract administrators at various federal agencies including the world's largest grantor, the National Institutes of Health (NIH). Tom's career has focused on applied research and grants administration in mostly nonacademic roles, whereas over half of Carl's career as a public health researcher has been spent in academic settings.

Tom Hilton is a retired Navy captain and a retired industrial/organizational psychologist. While a pre- and postdoctoral fellow at the Institute of Behavioral Research, Tom's work involved drafting applications and conducting both grant and contract research projects for the Departments of Defense, Transportation, and Health and Human Services. Projects also involved county, state, and private sector organizations. In 1979, Tom joined the psychiatry faculty at Southwestern Medical School where he started a small lab evaluating public health services after winning his first grant from a private foundation. In 1982, Tom was recalled to active Navy duty to lead research projects in shipboard and hospital health services delivery systems and later oversaw Navy's applied personnel and training research programs at the Pentagon. Spanning much of his Navy career, Tom served on Office of Naval Research grant and contract review panels. In 1992, Tom became the founding manager of a Federal Aviation Administration laboratory studying employee development, process improvement, and personnel selection. Coincident with that role, he also completed a 3-year detail to the White House Office of Reinventing Government until 2000 when he retired from the Navy and joined the National Institute on Drug Abuse at NIH. Until his retirement in 2012, Tom served on the NIH extramural faculty that trains new grant program officials, the advisory group for NIH grants administration IT systems, and science officer for a 9-year research project involving all 28 NIH institutes and centers. Over the years, Tom has attended hundreds of grant and contract proposal review meetings, and he has served as project officer for many of the grants and contracts that were funded. He has 56 refereed publications and has presented over 80 papers, symposia, and professional development workshops.

Carl Leukefeld is Professor of Behavioral Science and Psychiatry as well as Chair of the Department of Behavioral Science and founding Director of the Center on Drug and Alcohol Research at the University of Kentucky. He is also the Bell Alcohol and Addictions Endowed Chair. He joined the University of Kentucky in 1990 to establish the Center on Drug and Alcohol Research from the National Institute on Drug Abuse (NIDA) where he held administrative and research positions including grant and contract planning, developing requests for applications and proposals, grant reviews, developing grant review summary statements, and research project administration. He was also the Chief Health Services Officer of the United States Public Health Service. Carl's external grant support experience includes funded grants from NIH, NSF, as well as contracts from states, community organizations, and industry. Carl has also served as a reviewer and consulting journal editor, ad hoc grant reviewer for federal agencies like the CDC and NIH, and has been a standing member of National Institutes of Health initial review groups (IRG) – sometimes referred to as study sections. In addition to workshops and courses on grant preparation, he has taught undergraduate, graduate, and medical students. His publications include over 350 articles, chapters, books, and monographs.

Introduction

What This Book Is

This brief book introduces readers to grantsmanship by discussing strategies that will help you put forth the best argument for funding your research project. We focus on the National Institutes of Health application process because it is the most comprehensive of all grant review and administrative systems. With an annual budget of over \$68 billion, NIH dwarfs all other sources of external research funding globally. As such, most funding institutions, public or private, tend to model their systems and procedures after NIH. We will touch on some notable differences between NIH and other agencies and funders that may affect how you decide to approach them.

There are many grantsmanship books available which describe rules, regulations, and application procedures. Unfortunately, they tend to be long on description but short on helping you understand how to work the process to your advantage. We hope this book fills that niche in the grantsmanship literature.

We apply our combined eight-plus decades of experience as researchers; grant and contract applicants; application reviewers; and contract, grant, and research program administrators in Academia, DOD, DOT, HHS, and the private sector to highlight ways in which new investigators can help convince targeted funding institutions that their research project is worthy of support. Specifically, we hope you will learn more about:

- Identifying factors to consider when exploring funding options for your project
- Understanding available grant mechanisms for new investigators
- Understanding what is involved in pursuing federal support, including common misconceptions
- Building your entire career using grant support
- Thinking strategically throughout the application process (not just before formal submission)
- Understanding ideal ways to describe your project when completing application forms

- Understanding the peer technical review process
- Identifying strategies for responding to concerns if you are not funded or funding is deferred
- Appreciating the grant vetting process and identifying ways to increase your odds of funding once your project has been favorably reviewed

What This Book Is Not

This book is not a cookbook, nor is it an official procedural manual or even a comprehensive description of the grants process. Some policies and procedures we mention may be revised before this book is even published. Government agencies continually try to improve procedures or modify them to meet new legislation. We have overlooked a few nuanced topics not because we were unaware of them necessarily but because new investigators are unlikely to encounter them or are well-prepared to address them.

We encourage all grant applicants to read published grant and contract Funding Opportunity Announcements (FOAs) carefully. Each government and private sector institution's FOA will specify required information, forms, formats, and the submission system to use when applying for their grants or contracts. Go to the websites of your target funding institutions to learn more about their general mission focus and to clarify any specific requirements that were unclear in the FOA.