

# Foreword – Getting Started in Physics Education Research

Physics Education Research (PER) is a rapidly growing field. Some researchers entering the field are interested in pursuing a graduate degree in PER. Others are physicists who obtained a Ph.D. in a more traditional field of research and are now looking to explore the teaching and learning of physics in a scholarly manner. Still others may be practicing classroom teachers who are intrigued by this pursuit and want to conduct research in their classrooms. We have striven to collect a set of articles that will be of benefit to each of these populations, or to anyone who is simply interested in knowing more about this multifaceted field. Of course, we also expect this volume to be a useful reference for current PER practitioners, as no one is an expert in every aspect of this broad field. All articles have been carefully peer reviewed.

This first volume will ultimately contain 4 fairly broad articles, 2 of which are now available. Future volumes will contain articles that are somewhat more specific in nature. The first article, “An Introduction to Physics Education Research,” by Robert J. Beicher, gives the reader exactly what the name implies, a good overview of the field of physics education research, along with a short history of the field. In the second, “An Introduction to Classical Test Theory,” Paula V. Engelhardt describes the issues involved in designing a valid and reliable multiple-choice assessment instrument. We will soon be adding articles detailing qualitative and quantitative research methods in PER.

We hope that this collection of articles, as well as those that follow in future volumes, will be a useful resource for the PER community. We welcome comments about this volume, as well as suggestions for topics to be addressed by future volumes.

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