

The Scientist as Consultant

BUILDING NEW
CAREER OPPORTUNITIES

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Preface

We are in the midst of a revolution—one characterized by an enormous increase in technology and its applications, and especially by the emergence of almost instantaneous transfer and worldwide availability of information. One concomitant of that revolution has been unequaled expansion of opportunities for consulting by scientists skilled in acquiring, analyzing, and packaging highly technical data and offering advice on science-based problems and issues.

Scientific consulting, like many other forms of consulting, is a dynamic field of economic activity for professionals. It is populated by highly trained individuals who combine their technical expertise and good business practices to provide a service to clients in the form of science-based information and advice not generally available from other sources. This book tries to capture the essence of the scientific consultant and to sketch in some particulars about the field, such as organizing and managing a consulting group, professional ethics, objectivity in data collection and analysis, balanced interpretations of data, marketing strategies for technical skills, performing as an expert witness in legal proceedings, international consulting, and many other aspects.

Scientists usually find employment in one of three

principal consumer categories—academia, government, and industry—although the boundaries of these categories can at times be fuzzy. Consultants are, of course, a subset of the industrial group, although many academic professionals augment their university incomes by doing part-time consulting work. For clarity we note here that the term “consultant” as used in this book (except where otherwise stated) refers to the scientist who is engaged, full or part time, in paid consulting as a *job*, not as a *hobby*—although the book will show how to build a hobby into a part- or full-time profession.

Consultants, as distinguished from scientists employed in industrial research and development organizations, are often individual entrepreneurs rather than salaried employees, and make their own choices as to the kind of work they will accept. Here again, though, distinctions become just a little blurred when we include those consultants who get much or all of their incomes from annual retainer fees paid by large companies rather than from individual project contracts. Are they consultants, or are they simply industry employees without benefit packages? Distinctions can be further clouded by the inclusion of salaried professional employees of large consulting organizations. Are they consultants, or are they only industry employees with benefit packages?

This book is based on three tiers of background information: (1) that which the coauthors have brought to it, based on experiences and observations made during long professional careers, (2) that derived from responses of more than one hundred professional scientific consultants to a detailed questionnaire (a copy of the standard form that we developed is provided in Appendix 1), and (3) that supplied to us during interviews with a selected group of successful scientific consultants. The questionnaire responses have been important in developing a statistical database for the book, but the interviews have

been our best sources of information. We must acknowledge the help of those scientists who responded to the questionnaire, and especially those who discussed at length many routine and unique aspects of their work as consultants. We should point out that the italicized vignettes in the book are based on real events, but the names are fictitious and some of the details have been changed to ensure the anonymity of the individuals.

Despite some mention of the downside of scientific consulting, we have been impressed with how often the successful consultants have affirmed their satisfaction and even their pleasure with the career they have chosen. Discussions with those consultants have served to clarify the existence and nature of a discrete kind of employment for scientists, and one worthy of book-length exploration.

Many of the successful scientific consultants admit that their primary occupation is business—but a form of business that depends heavily on professional credibility. The best scientific consultants thus are an amalgam of technical competence and business acumen. These are the professionals best equipped to participate in the revolution.

We thank our editor at Plenum Press, Linda Greenspan Regan, for her initial insight about the potential utility of a book on scientific consulting and for her continuing support, enthusiasm, and editorial contributions during its development. We also thank Mrs. Dorothy Sawyer, president of Rescon Associates, Inc., for her active participation in critical phases of this project.

We acknowledge and affirm that scientists (and scientists who are consultants) may be of either gender, but we employ the pronouns “his” and “he” instead of the awkward and somewhat disruptive “his or her” and “he or she” throughout this book—however unsatisfying this usage may be to some readers.

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