

1. Record Nr.	UNINA9910150243703321
Autore	Barnard C. J (Christopher J.)
Titolo	Asking questions in biology : a guide to hypothesis testing, experimental design and presentation in practical work and research projects / / Chris Barnard, Francis Gilbert, and Peter McGregor
Pubbl/distr/stampa	Harlow, England : , : Benjamin Cummings, , [2011] ©2011
ISBN	1-283-17326-3 9786613173263 0-273-73469-5
Edizione	[Fourth edition.]
Descrizione fisica	1 online resource (x, 248 p.) : ill
Disciplina	570.72
Soggetti	Science - Methodology Biology - Methodology Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous ed.: 2007.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface 1 Doing Science Where do questions come from? 1.1 Science as asking questions 1.2 Basic considerations 1.3 The skill of asking questions 1.4 Where do questions come from? 1.5 What is this book about References 2 Asking questions The art of framing hypotheses and predictions 2.1 Observation 2.2 Exploratory analysis 2.3 Forming hypotheses 2.4 Summary References 3 Answering questions What do the results say? 3.1 Confirmatory analysis 3.2 What is statistical significance 3.3 Significance tests 3.4 Testing hypotheses 3.5 Testing predictions 3.6 Refining hypotheses and predictions 3.7 Summary References 4 Presenting information How to communicate outcomes and conclusions 4.1 Presenting figures and tables 4.2 Presenting results in the text 4.3 Writing reports 4.4 Writing for a more general readership 4.5 Presenting in person: spoken papers and poster presentations 4.6 Plagiarism 4.7 Summary References Test finder and help guide Some self-test questions Appendix I: Table of confidence limits to the median Appendix II: How to calculate some simple significance tests Appendix III: Significance tables Appendix IV: The

common codes for the important graphical parameters of R Answers to self-test questions Index Quick test finders

Sommario/riassunto

Asking the right questions in the right way is a fundamental skill in scientific enquiry. This text introduces students of the biological sciences to the skills of observation and enquiry.