

1. Record Nr.	UNINA9910955603903321
Titolo	An assessment of balance in NASA's science programs / / Committee on an Assessment of Balance in NASA's Science Programs, Space Studies Board, Division on Engineering and Physical Sciences, National Research Council
Pubbl/distr/stampa	Washington, DC, : National Academies Press, c2006
ISBN	9786610506705 9780309180887 0309180880 9781280506703 1280506709 9780309661294 0309661293
Edizione	[1st ed.]
Descrizione fisica	1 online resource (57 p.)
Disciplina	629.40973
Soggetti	Astrophysics - Research - United States Heliosphere (Astrophysics) - Research - United States Astronautics - Research - United States Exobiology - Research - United States Earth sciences - Research - United States Reduced gravity environments - Research - United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Study is based on work supported by the Contract NASW-01001 between the National Academy of Sciences and the National Aeronautics and Space Administration.
Nota di contenuto	""Front matter""; ""Preface""; ""Acknowledgment of Reviewers""; ""Contents""; ""Summary""; ""1 Introduction""; ""2 Health of the Discipline Programs""; ""3 Findings and Recommendations""; ""A Statement of Task""; ""B Meeting Agenda""; ""C Biographical Sketches of Committee Members and Staff""; ""D Acronyms and Abbreviations""
Sommario/riassunto	When the space exploration initiative was announced, Congress asked the NRC to review the science NASA proposed to carryout under the

initiative. It also asked the NRC to assess whether this program would provide balanced scientific research across the established disciplines supported by NASA in addition to supporting the new initiative. In 2005, the NRC released three studies focusing on a portion of that task, but changes at NASA forced the postponement of the last phase. This report presents that last phase with an assessment of the health of the NASA scientific disciplines under the budget requests imposed by the exploration initiative. The report also provides an analysis of whether the science budget appropriately reflects cross-disciplinary scientific priorities.

2. Record Nr.	UNINA9910966753603321
Titolo	Small clinical trials : issues and challenges / / Charles H. Evans, Jr. and Suzanne T. Ildstad, editors ; Committee on Strategies for Small-Number-Participant Clinical Research Trials, Board on Health Sciences Policy, Institute of Medicine
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, c2001
ISBN	9780309171144 0309171148 9780309513456 0309513456
Edizione	[1st ed.]
Descrizione fisica	1 online resource (221 p.)
Collana	Compass series
Altri autori (Persone)	EvansCharles H <1940-> (Charles Hawes) IldstadSuzanne T
Disciplina	610/.72/4
Soggetti	Clinical trials Clinical trials - United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 177-200).
Nota di contenuto	""Front Matter""; ""Reviewers""; ""Preface""; ""Contents""; ""Executive Summary""; ""1 Introduction""; ""2 Design of Small Clinical Trials""; ""3 Statistical Approaches to Analysis of Small Clinical Trials""; ""4 General Guidelines""; ""References""; ""Appendix A Study Methods""; ""Appendix

**Sommario/riassunto**

Clinical trials are used to elucidate the most appropriate preventive, diagnostic, or treatment options for individuals with a given medical condition. Perhaps the most essential feature of a clinical trial is that it aims to use results based on a limited sample of research participants to see if the intervention is safe and effective or if it is comparable to a comparison treatment. Sample size is a crucial component of any clinical trial. A trial with a small number of research participants is more prone to variability and carries a considerable risk of failing to demonstrate the effectiveness of a given intervention when one really is present. This may occur in phase I (safety and pharmacologic profiles), II (pilot efficacy evaluation), and III (extensive assessment of safety and efficacy) trials. Although phase I and II studies may have smaller sample sizes, they usually have adequate statistical power, which is the committee's definition of a "large" trial. Sometimes a trial with eight participants may have adequate statistical power, statistical power being the probability of rejecting the null hypothesis when the hypothesis is false. Small Clinical Trials assesses the current methodologies and the appropriate situations for the conduct of clinical trials with small sample sizes. This report assesses the published literature on various strategies such as (1) meta-analysis to combine disparate information from several studies including Bayesian techniques as in the confidence profile method and (2) other alternatives such as assessing therapeutic results in a single treated population (e.g., astronauts) by sequentially measuring whether the intervention is falling above or below a preestablished probability outcome range and meeting predetermined specifications as opposed to incremental improvement.