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| Altri autori (Persone) | AdamsDavid J (David James) |
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| Soggetti | Life sciences - Study and teaching (Higher)<br>Life sciences - Study and teaching (Higher) - Great Britain<br>Creative teaching<br>Biological laboratories<br>Life sciences - Research<br>Life sciences - Fieldwork<br>Case studies.<br>Great Britain |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
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| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Effective Learning in the Life Sciences: How Students Can Achieve Their Full Potential; Contents; List of contributors; Introduction; 1 Creativity; 1.1 Introduction; 1.2 Adaptors and creators; 1.3 Defining problems; 1.4 Accessing your creative potential; 1.5 Creativity techniques; 1.6 Incubation; 1.7 Working in groups - creative environments; 1.8 Working in groups - facilitated creativity sessions; 1.9 How many uses for an old CD?; 1.10 Evaluating your ideas; 1.11 Putting your ideas into action; 1.12 How you can achieve your creative potential; 1.13 References; 1.14 Additional resources<br>2 Problem solving - developing critical, evaluative and analytical thinking skills2.1 What is problem solving?; 2.2 Problem-solving |

strategies; 2.3 Critical thinking; 2.4 Critical reading; 2.5 Using judgement; 2.6 Constructing an argument; 2.7 Visualisation - making representations; 2.8 Other strategies; 2.9 Pulling it together; 2.10 How you can achieve your potential as a problem solver; 2.11 References; 2.12 Additional resources; 3 In the laboratory; 3.1 Introduction; 3.2 The Scientific Method; 3.3 Preparing for a laboratory class; 3.4 Laboratory notebooks; 3.5 Laboratory equipment
3.6 Calculations in the laboratory3.7 Working in a group; 3.8 Working on your own; 3.9 Writing-up experiments - the laboratory report; 3.10 Concluding comments; 3.11 How you can achieve your potential in the laboratory; 3.12 Acknowledgements; 3.13 References; 3.14 Additional resources; 3.15 Problems associated with Koch's postulates; 4 Fieldwork; 4.1 Introduction; 4.2 Fieldwork - exciting or overwhelming?; 4.3 Planning and time management; 4.4 Group work and social aspects of fieldwork; 4.5 Collecting the right data; 4.6 Technology in the field; 4.7 Costs, sustainability and ethics
4.8 Safety and permissions4.9 Accessibility; 4.10 Making the most of different types of fieldwork; 4.11 Overcoming the problems that WILL occur; 4.12 Feedback and assessment; 4.13 Concluding comments; 4.14 How you can achieve your potential during fieldwork; 4.15 References; 4.16 Additional resources; 4.17 Potential solutions for kick-sampling case study; 5 In vivo work; 5.1 Introduction; 5.2 Animal welfare legislation; 5.3 The principles of the 3Rs; 5.4 Alternatives to the use of animals in the development of new medicines; 5.5 Animal models of disease; 5.6 Experimental design
5.7 Recognition of pain, suffering or ill health in animals used for research5.8 Ethical review of in vivo studies; 5.9 Harm/benefit analysis; 5.10 The arguments for and against animal experimentation; 5.11 How you can achieve your potential in in vivo work; 5.12 References; 5.13 Additional resources; 6 Research projects; 6.1 Introduction; 6.2 Research project - role and purpose; 6.3 Applying the Scientific Method; 6.4 Types of project and ideas for research; 6.5 Characteristics of good research projects; 6.6 Working in groups; 6.7 Writing up; 6.8 The possibility of publication
6.9 How you can achieve your potential during final-year project studies

Sommario/riassunto

"Draws on experience from a major project conducted by the Centre for Bioscience, with a wide range of collaborators, designed to identify and implement creative teaching in bioscience laboratories and field settings"--Provided by publisher.