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Nota di contenuto	Chapter1. Introduction – The Relevance of Ethics Education in STEM (Elisabeth Hildt, Kelly Laas, Christine Z. Miller, Eric M. Brey:) -- Part I: Restructuring Ethics Education in STEM: Chapter2. Social Responsibility Development in Undergraduate STEM Students: Influences and Inhibitors (Daniel Schiff, Jason Borenstein, Ellen Zegura) -- Chapter3. Ethics education in engineering and technological institutes in India: Challenges and looking forward (Reena Cheruvalath:) -- Chapter4. Developing an Ethics Credential for Undergraduate STEM Majors (Alexandra Bradner, Rebecca A. Bates) -- Chapter5. Enhancing Ethics Culture in STEM in Eastern Europe, Practices in Use (Aive Pevkur) -- Chapter6. Engineering Ethics Education in China: Development, Promoters and Challenges for the Future (Lina Wei) -- Part II: Underrepresented Groups, Inclusivity, and Ethical Cultures : Chapter7. Race Matters as a Matter of Ethics in Engineering and Technology: Reflections on exclusivity in device design(Rosalyn Berne) -- Chapter8. Building Connections Using Culturally Relevant Practices in STEM Departments (Karina Vielma) -- Chapter9. Ethics Education in Science, Technology, Engineering and Mathematics (STEM) in Africa: A Reflection on the Successes, Failures and the Way Forward in the Era of a Global

Pandemic(F. K. Abagale and M. A. Akudugu) -- Part III: Embedding Ethics Education in Practice Contexts and Labs: Chapter10. Towards a Virtue-based RCR Training for Data Scientists (Louise Bezuidenhout, Emanuele Ratti) -- Chapter11. Encouraging Transparency in Lab Safety via Teachable Moments and Positive Feedback (Melinda Box, Maria Gallardo Williams) -- Chapter12. A Bottom-Up Approachto Building a Culture of Responsible Research and Practice in STEM (Elisabeth Hildt, Kelly Laas, Christine Z. Miller, Eric M. Brey, Laura Gaviria, Francisca Acosta) -- Chapter13. Towards a Neuroethical Ethos: A Case Study in Reframing Neuroethics Education for Engineers and Researchers (Juhi Farooqui, Devapratim Sarma, Josep-Maria Balaguer) -- Part IV: New Approaches in Framing Ethical Issues. Chapter14. Using a Brain Processes Map as a Framework to Strengthen Ethical Culture in Research Labs (J. Brooke Hamilton) -- Chapter15. Inclusivity in the Education of Scientific Imagination (Mike Stuart, Hannah Sargent) -- Chapter16. Tinkering with Technology: An Exercise in Inclusive Experiential Engineering Ethics (Janna van Grunsven, Lavinia Marin, Trijsje Franssen) -- Chapter17. Storytelling as Facilitation Tool for Inclusive Ethics Training (Marietjie Botes) -- Part V: Community Outreach Approaches: Chapter18. Philosophy in the Rainforest: Reflections on Integrating Philosophy and Fieldwork (Clair Mossiry) -- CChapter19. Building Inclusive Cultures through Community Research (Jennifer Nyland, Timothy Stock, Michéle Schlehofer) -- Chapter20. Concluding chapter: Reflection on Promising Approaches and Outlook.

Sommario/riassunto

This book shares innovative approaches to effectively engage students and faculty working in research labs, lab-based classrooms and courses to build inclusive ethical cultures. The frameworks and approaches presented move beyond traditional research ethics training to strengthen the ethical culture in research labs. The chapters in the book showcase best practices and approaches to embedding educational interventions in courses, research labs and departments. The book is based on the two-day workshop “Building Inclusive Ethical Cultures in STEM” (April 23-24, 2021). Moving beyond the two-day conference that inspired this collected volume, the various chapters address questions like: What are approaches and tools to integrate ethics education in STEM effectively? How can STEM ethics education be improved? What can researchers do to build more inclusive research environments? How can meaningful discussions about ethics be effectively integrated into STEM courses, research labs, and workplace environments? While each chapter takes a different perspective and is located in its respective context, the contributions are united by the goal of effectively including ethical reflection in STEM education. Instructors from both four-year and two-year colleges who teach STEM and lab-based STEM courses; young principal investigators/junior faculty who are in the process of building their research groups; departmental chairs interested in programmatic approaches for improving mentoring, research ethics education, and the research culture of their department, will find this work to be a very valuable resource in their daily practice.