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Astrobiology and Society in Europe Today

Springer

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About this Book

This book describes the state of astrobiology in Europe today and its relation to the European society at large. With contributions from authors in more than 20 countries and over 30 scientific institutions worldwide, the document illustrates the societal implications of astrobiology and the positive contribution that astrobiology can make to European society.

The book has two main objectives: 1. It recommends the establishment of a European Astrobiology Institute (EAI) as an answer to a series of challenges relating to astrobiology but also European research, education, and society at large. 2. It also acknowledges the societal implications of astrobiology, and thus the role of the social sciences and humanities in optimizing the positive contribution that astrobiology can make to the lives of the people of Europe and the challenges they face.

Astrobiology enjoys a great deal of interest among the public, probably more than most of the other fields of research. It also has implications for human life outside the laboratories and lecture halls. It has the potential of being a flagship of European cooperation in science. It provides an ideal ground for collaborative European projects which support the ethos of cooperating countries. Astrobiology is inherently multidisciplinary and based on collaboration between disciplines, universities, and countries. For Europe to take a leading role in this research, it is very important to have a stable structure that can coordinate research, research infrastructure, funding and relations to the surrounding society in an efficient way. The establishment of a EAI, as a consortium of institutions, will provide the perfect forum for such collaborative efforts and should be a key priority for European research institutions as well as the European astrobiology community and the EU. To have an active astrobiology research programme, coordinated and fostered by such an institute, will enhance the international standards of European space research and of European science in general.

The EAI would be able to promote astrobiology research, assist in the decision-making process of relevant European institutions, be involved in mission planning, engage in science dissemination, education and communication, as well as engaging in outreach and media work in a much more efficient way than

individual research institutions. The EAI will act as a strong voice for the astrobiology community in dialogue with decision makers, funding agencies, the media, other stakeholders, and the general public. It will be proactive in the debate on important legal and ethical issues in astrobiology and space research.

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Abbreviations

AbGradE	Astrobiology Graduates in Europe
ASB	Astrobiology Society of Britain
ASSA	Astronomical Society of Southern Africa
COSPAR	Committee on Space Research
COST	Cooperation in Science and Technology
DAbG	German Astrobiology Society
EAC	European Astrobiology Campus
EAI	European Astrobiology Institute
EANA	European Astrobiology Network Association
EC	European Commission
ELSI	Earth-Life Science Institute
ESA	European Space Agency
ESO	European Southern Observatory
EU	European Union
FAST	Five Hundred Meter Aperture Spherical Telescope
IAGETH	International Association for Geoethics
IAU	International Astronomical Union
ICSU	International Council for Science
ISSI	International Space Science Institute
ISU	International Space University
JAXA	Japan Aerospace Exploration Agency
NAI	NASA Astrobiology Institute
NASA	National Aeronautics and Space Administration
NNA	Nordic Network of Astrobiology
OST	Outer Space Treaty
SFE	The French Astrobiology Society
SIA	Italian Society of Astrobiology
SOMA	Mexican Society of Astrobiology
STEM	Science, Technology, Engineering, Mathematics
STS	Science and Technology Studies

STSM	Short-Term Scientific Mission
TD	Trans Domain
UN	United Nations
UNAM	National Autonomous University of Mexico
UNESCO	UN Educational, Scientific and Cultural Organization
UNOOSA	United Nations Office for Outer Space Affairs
WG5	Working Group 5

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