

CHARTER OF THE EUROPEAN ASTROBIOLOGY INSTITUTE

Preamble

Fundamental questions in science like “How and when did life emerge on Earth?”, “How did our solar system and life evolve and how will it develop in the future” and “Is there life on other celestial bodies” will not be answered by one discipline alone but require a concerted and coordinated approach involving many researchers with seemingly unrelated scientific backgrounds. The European research landscape is rapidly changing on a global scale. Boundaries between disciplines disappear and new cross-disciplinary fields emerge. Astrobiology is one of them. Research in such field requires interaction and exchange of ideas and new results between scientists from many countries and fields, something that only larger research communities like the European Research Area can accomplish. In order to take astrobiology-related research forward and to prevent a counterproductive fragmentation of the European Astrobiology research community through duplicate or excessively overlapping initiatives and structures the AstroMap Report (drawn up under the EU FP7 programme) unequivocally recommends the creation of a pan-European platform for research, training outreach and dissemination in Astrobiology. The European Astrobiology Institute (EAI) aims to function as such an entity. Such an institute is required to keep Europe’s position in this interdisciplinary field relatively to other countries and regions, as it is being done for example by the NASA Astrobiology Institute in the US for several years. EAI closely collaborates with several related European organizations including ESA, EANA, Europlanet etc. but as a network of individual institutions fundamentally differs from existing bodies.

Structure and identity of the EAI

The EAI is a virtual institute consisting of research and higher education institutions in the European Research Area as well as European research bodies and infrastructures. To achieve its goals the EAI cooperates with entities engaged in education on all levels and public authorities promoting science (e.g. museums, space agencies, adult training centres, etc.) as well as industries and other stakeholders. The highest governing body of the EAI is the General Assembly, whose task is to decide about the overall research programme, the activities and the budget of the EAI as well as to elect the Chair and the Vice-Chair of the institute. Every partaking institution will nominate a representative to the General Assembly which will (a) coordinate the astrobiology activities at her/his home institutions, (b) promote astrobiology research at her/his institution, (c) inform interested colleagues about the activities of the EAI, and (d) represent the institution in the EAI. The day-to-day running of the Action will be performed by the Board. Each Member of the Board apart from the Chair and Vice-Chair will have the responsibility for one of the large science projects or networking activity (e. g. Training, Outreach, Dissemination, Finances, contact to governmental and non-governmental authorities etc.). Apart from a modest participation fee there (to be decided upon) will be no financial commitments of the Institutions participating in the EAI.

Tasks of the European Astrobiology Institute

- Foster cooperatively cutting-edge research in Europe focussing on a set of agreed themes associated with the field of Astrobiology
- Deal with legal and planetary protection issues
- Discuss historic, philosophical, societal and ethical issues in astrobiology

- Coordinate research and related scientific activities:
 - Coordinate the approach to funding agencies to finance the activities of EAI and astrobiology research in the European Research Area.
 - Foster interdisciplinary research projects by early career scientists through special efforts including a mentoring programme.
 - Enable and facilitate access to research infrastructures and field sites for European scientists and students engaged in astrobiology and organise expeditions to such sites
- Support interdisciplinary networking and interactions between researchers from different fields:
 - Function as a forum to discuss and plan new research and foster the creation of smaller research teams working on special innovative projects in order to promote interdisciplinary cooperation of scientists inside the EAI and beyond.
 - Hold high-level general conferences in astrobiology as well as smaller workshops on specific subjects in order to get together scientists from different disciplines.
 - Include both “top level researchers” and early career scientists in all activities.
 - Act as a strong voice for the European astrobiology community.
 - Approach and inform decision makers in governmental and non-governmental organisations on a national, regional and European level in order to promote astrobiology research in Europe as transdisciplinary research activity.
 - Formulate and continuously update a long-term planning of astrobiology research strategy for the European Research Area.
- Coordinating training, education and outreach activities:
 - Providing a comprehensive multidisciplinary European astrobiology curriculum for students and early career scientists offering both basic and specialised training events in the field as well as training in generic skills like proposal writing, planning of scientific projects via the European Astrobiology Campus acting as an affiliated training entity of the EAI.
 - Provide a mentoring scheme for early career scientists in the field of astrobiology.
 - Production of high quality reference works (e.g. the Encyclopedia of Astrobiology).
 - Use the wide interest of the general public to coordinate and promote involvement of citizen scientists in astrobiology research projects.
 - Organise web-streamed seminars by leading scientists in astrobiology, and also provide an interface (web based tools) to collect and share already existing and currently broadcasted astrobiology lectures.
 - Coordinate the outreach activities to the scientific community, industry and other stakeholders as well as the general public by producing and effectively promoting excellent outreach material in cooperation with entities engaged in public education (museums, schools and adult training centres).
 - Create a team for liaison between research and industry comprising of representatives on both sides.
 - Create a network for astrobiology education and provide training material for basic, secondary and higher education in Europe.
 - Promote contacts to media and ensure high quality coverage of astrobiology-related European research by maintaining an expert pool which journalists can contact.
 - Collaborate with astrobiology networks and institutes outside the European Research Area.
- Aim to act as an external advisor toward ESA

The EAI thus provides an entity to coordinate, promote and further develop European research in astrobiology one step further and will ensure that Europe takes a leading role in this comparatively new and fast developing field of research.