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DEFINE YOUR NEEDS

As part of the bioinformatics community AllBio detects gaps in existing tools to handle biological data. We will identify your needs in a questionnaire found at www.allbioinformatics.eu which you will help to fill out, describing the issue(s) that you want solved, which methods you have tried before and how you would ideally see the results visualised. The test cases created in the questionnaire will be forwarded to the AllBio consortium to define which challenges should be met by bioinformatics tools from the perspective of the end user.

www.allbioinformatics.eu



BROADENING THE BIOINFORMATICS INFRASTRUCTURE TO UNICELLULAR, ANIMAL, AND PLANT SCIENCE

KBBE.2011.3.6-02: Supporting the development of Bioinformatics Infrastructures for the effective exploitation of genomic data: Beyond health applications. Coordinator: Prof. Erik Bongcam-Rudloff











INTRODUCTION

The completion of the human genome sequence has triggered worldwide bioinformatics efforts to unravel its information content. Many projects have been successfully completed in areas such as gene hunting, functional annotation, post-translational modification prediction, protein-protein interactions, transcriptomics, or systems biology. These projects have produced large numbers of novel analytic and predictive computer programs. The majority of these developments, though, have focused on Homo sapiens, and considerably less effort has been invested in the thousands of other genomes in life science research fields related to

unicellular organisms, plants, or animals. These three fields cover a large number of the activities in the FP7 work programme KBBE-2011, "FOOD, AGRICULTURE AND FISHERIES, AND BIOTECHNOLOGY".





COORDINATION THROUGH COLLABORATION

All the partners in AllBio work with generic bioinformatics theory, technology, and application, and also coordinate the design of novel software and databases. These activities require that the partners start to structure and coordinate their collaborations with national researchers in life sciences such as biotechnology, cell biology, functional and comparative genomics, or biochemistry, and carry these collaborations to an international level.

EUROPEAN DIMENSION

Non-human life science communities exist with different degrees of scientific coordination, and some areas have already agreed on ontologies and common procedures and standards. But only minor effort has gone into the wider task of harmonizing the research efforts of these communities. This coordination will require that the partners collaborate on a series of activities such as the design of ontologies for data and methods, and choosing common interoperability standards. These activities require that the coordination efforts of this Coordination Action take place at a Europe-wide scale because databases, software, and human expertise needed simply are not available at any national scale. The fact that the activities described in this project all are core activities to AllBio consortium members will greatly enhance the overall success and the longevity of the results of this bioinformatics coordination project.

