ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Institute of Molecular
Systems Biology
IMSB

ETH Zürich
HPT E 72
Wolfgang-Pauli-Str. 16
CH-8093 Zürich

Prof. Ernst Hafen
Tel +41-44 633 36 88
Fax +41-44 633 10 51
hafen@imsb.biol.ethz.ch
www.imsb.biol.ethz.ch

Letter of Support for FuturICT Flagship Project

I am writing to endorse and strongly support the FuturICT proposal. FuturICT is addressing one of the most critical and complex issues of our time, an issue that cuts across several aspects of modern life. It aims to understand the complex relationships between the socioeconomic and technological systems by relying heavily on multiple and diverse data sources. The innovative aspect of this project is to refrain from examining these multiple systems in silos. Instead it will study them as an ecosystem formed and sustained by interactive relationships. Individual citizens, communities and countries are connected in many ways through networks that develop dynamics influenced by multiple interrelated factors. Such factors have been understudied or only studied in isolation. At the same time they evolve at a fast pace and influence our life and well-being in unprecedented ways.

FuturICT holds the promise to help us understand the complexity of the ecosystem and derive from it knowledge that will allow us to influence it by enhancing our proactive and anticipatory behavior, or policies. It will produce a new model of scientific thinking that integrates different tools and utilizes advanced technology to derive, curate and study big data. A shift towards such an approach is much needed and very timely. I expect this knowledge to become valuable in many scientific areas, and to inform policy making.

More specifically, from the perspective of biosciences and health science, understanding patterns of interacting socio-technical factors is an urgent necessity. In our interconnected world health data are becoming a new currency. Individuals connect and share data, crossing national boundaries and legal jurisdictions. Networks and interactions within such networks generate additional data that could reveal important patterns about disease, health, and well-being. Yet, we have many missing links in understanding how to harness the data (even those readily available) or how such networks operate and how they may be used to improve health and well-being. FuturICT proposes a way through which we can identify and construct these missing links. I believe this will be a valuable contribution in general and specifically in the area of bioscience, health science and health innovation.

Our own initiative to establish a Swiss not-for-profit cooperation for storage and management of personal health data directly interfaces with FuturICT and provides a concrete example for the projects planned within FuturICT. We are therefore fortunate to profit from an existing framework to establish an environment of trust, protection of privacy but also the necessary degree of publicness with which each individual can contribute to society without suffering discrimination. To establish the Swiss Health Data Initiative on a broad basis we have founded the Swiss Association *Data and Health* in which participants of the FuturICT core team are active members.

For the above mentioned reasons FuturICT is a landmark project with the potential to make a true contribution to scientific progress in bioscience and health research as well as its influences on our social development.

FuturICT_Support_Hafen
Qualified signed by Ernst Hafen
Zurich, October 13, 2012

Zürich, October 13 2012   Prof. Ernst Hafen