

**Astrobiology Problems as Interdisciplinary Science.** M. Ebrahimi , A. Khanlar, M. H. Yoosefi I , M. Tabatabaifar, A, Azhari , M, Feizabadi , 39, Hayati Sarkany, 1 Niroye Havaei, Piroozi St, Tehran, Iran, iranastrobiology@gmail.com, civick@gmail.com

**Introduction:** Development and expansion of different sciences have brought about emergence of other majors called Interdisciplinary Sciences (IS) of which astrobiology is known as one of the main progressive approaches.

The recent studies carried out in this field have less concentrated on finding a proper solution for the upcoming impediments before progression of IS. As a matter of fact, identification of some problems is fulfilled in the investigations and they suffer from lack of comprehensive solutions in this regard. Interdisciplinary research incorporates a greater degree of integration than either disciplinary or multidisciplinary research. Unified problem formulation, sharing of methods, and perhaps the creation of new questions are aspects of this type of work (Eigenbrode et al. 2007) [1].

In this study, we have tried to elaborate the problems encountered in astrobiology as an IS and recommend novel solutions to expedite development of astrobiology.

**Discussion:** Interdisciplinary science is mainly known as an unusual science for public while people are tackling their common problems by employing several fields of science simultaneously.

**Robert.J.Sternberg** [2] described the significance of IS by considering the management of epidemics. Successful management of epidemics may well require biologists to understand the cellular mechanisms by which diseases cause harm, medical researchers to study potential cures, epidemiologists to understand how the diseases spread, psychologists to understand how people can be persuaded to behave in ways to minimize spread of the diseases, political

scientists to weigh in on how to work with governments to adopt national and international policies that promote disease prevention, economists to study the costs of and funding mechanisms for managing epidemics, sociologists to understand how societies perceive health threats and react to them, historians to see whether we can learn from the past so as not to repeat mistakes, and perhaps others as well. Ideally, a single individual would have some background in each of the areas so that he or she can understand the issues from a variety of disciplinary standpoints, rather than just his or her own. In the absence of such background, the individual is like the blind person feeling one part of an elephant, but not understanding that it is an elephant that he or she is feeling.

As a matter of fact, **Robert.J.Sternberg** emphasized on the insight and substantial effect of IS on human life.

Mostly the benefits and advantages of IS with emphasis on astrobiology as one of the most crucial sections of this science have been considered so far while a limited attempts have been made to remove the impediments before development of this science.

Here are some prominent and conspicuous problems that an interdisciplinary scientist might face:

1. An interdisciplinary scientist should have a background in different branches of science when confronting a challenge to make a right analysis about the subject.
2. The pertinent researchers are highly suffering from lack of an appropriate encyclopedia or comprehensive book respecting interdisciplinary sciences especially astrobiology to find a common knowledge and language in this field.
3. Since IS is mainly comprised of overlap of different branches of science, it is consi-

dered as a must for scientists to have, at least, a preliminary knowledge in all relevant majors. Hence, they could convey their ideas efficiently to make an appreciable progress in their common scientific projects.

4. Encountering unpredictable questions or problems in scientific researches on IS and specifically astrobiology is a common state of trouble and it highly demands a well-cooperative team of scientists with flexible minds to embrace new ideas from other fields of science and the pertinent scientists. Ultimately, It could be inferred that employing IS while tackling the common problems we are facing in our lives could direct our minds to a better understanding of the current astonishing order in the universe.

**Summary:** Astrobiology as an interdisciplinary science could be considerably challenging for researchers due to wide range sciences such as chemistry, physics and geology influential in different aspects of this field.

**Conclusion:** Development of IS and especially astrobiology could be considered as one of the main approaches in order to solve the upcoming problems in the human life and begin a new era for scientists to present a hopeful future for the public in the world.

**Acknowledgment:** special thanks of Iran astrobiology group. (First Astrobiology group in Iran) [www.astrobiology.ir](http://www.astrobiology.ir), and special thanks of DGTCal science group. [www.dgtcal.com](http://www.dgtcal.com).

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