

## Take Home Question

Question: In the context of earth's impact on health, authors such as James Lovelock and many others have introduced the concept of "Gaia", Gaia is the "living Earth" and many scientists and others claim that Gaia "corrects" mistakes made by man or natural phenomena.

Write an essay on your interpretation of the Gaia world of self-correction as put forward by many scientists such as James Lovelock.. This can be an essay discussing Lovelock's views, or other aspects of why life is resilient and adaptable on our planet. Nisbett's chapter in the Treatise on Geochemistry which I adapted for the lectures on Biogeochemistry and the evolution of life on Earth may be a typical source of inspiration. You could also look at different geological events around the world and how life adapts after major catastrophic situations.

You have to think about time scales, or even the whole climate change or global warming and how Gaia might adapt. Remember the Earth has been very rich in 'green house gases' naturally in the past and been very warm and very cold at times. In any event, please try to put a "spin" (no pun intended) to the essay based on health and the earth.

### Guidelines

1. 7-10 pages
2. Double spaced lines
3. Possibility of having 1-2 diagrams
4. Due on Friday, February 10, 2017

### Possible References

James Lovelock – *Gaia: A new look at life on earth*

James Lovelock – *Gaia, the practical science of planetary medicine*

Camelford conference – *Gaia, the thesis, the mechanisms and the implications*

Lovelock, J. **The living Earth.** Nature 426 (6968): 769-770, December 18, 2003.

Lovelock, J. **A geophysicologist's thoughts on the natural sulphur cycle.** PHILOS T ROY SOC B 352 (1350): 143-147, February 28, 1997.

Treatise on Geochemistry (<http://www.sciencedirect.com/science/referenceworks/9780080437514>)