

## An Analysis of the need of creating microalgae library for future global research

Eugene Y. Wang

### Abstract

Studies on single cell creatures will be important for the development of the future technologies ranging from food, nutrients, pharmaceuticals, energy, to the environmental protection (greenhouse gas and more). There are estimated 300,000 to 1 million different species of microalgae around the world. Companies and institutes had done a lot of studies on different land based microorganisms (fungi, yeast, and bacteria). There are hundreds of thousands of species collected and studied in various organizations. However, there are very little collections and research being done on microalgae. Lack of commercial interest is one of the key reasons, difficulties in collection process is another. With growing population, it has become ever more evident that we need to rely more on these single cell creatures to help us function in a more efficient way in the future. More importantly, a lot of the species of microalgae might come from another planetary system which may help us understand more about our universe. This is a task that currently cannot be fulfilled by one single entity. I am calling on an initiative to start a global effort in collecting, studying, and maintaining different species of microalgae from different waters around the world. These species can be found in cold arctic water, highest mountain peak, hot volcanic environment, and even the deepest ocean trenches. Some of these studies may hold the answers to the questions we are facing today on this planet, some may even help us explore our new world in another planetary system tomorrow.

### Biography:

Eugene Y. Wang is the Abby Aldrich Rockefeller Professor of Asian Art. A Guggenheim Fellow (2005), he is the art history editor of the Encyclopedia of Buddhism (2004). His extensive publications range from early Chinese to contemporary art.

### References:

1. Kerasidou A. *Bioethics*. 2019 May;33(4):495-501. doi: 10.1111/bioe.12536. Epub 2018 Nov 27. PMID: 30480821
2. Yegros-Yegros A, van de Klippe W, Abad-Garcia MF, Rafols I. *Health Res Policy Syst*. 2020 May 15;18(1):47. doi: 10.1186/s12961-020-00560-6. PMID: 32414373
3. Ha TC, Ng S, Chen C, Yong SK, Koh GCH, Tan SB, Malhotra R, Altermatt F, Seim A, Biderman A, Woolley T, Østbye T. *BMC Med Educ*. 2018 May 2;18(1):86. doi: 10.1186/s12909-018-1202-6. PMID: 29716587
4. Steneck NH. *Science*. 2013 May 3;340(6132):552-3. doi: 10.1126/science.1236373. PMID: 23641099
5. Ehni HJ, Wiesing U. *Chirurg*. 2018 Mar;89(3):178-184. doi: 10.1007/s00104-017-0570-5. PMID: 29305633

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