International Center for Deep Life Investigation: A global platform for the entire deep life community

*FengPing Wang^{1,2}

1. School of Oceanography, Shanghai Jiao Tong University, Shanghai, China, 2. State Key Laboratory of Microbial Metabolism, School of Life Sciences and Biotechnology, Shanghai JiaoTong University, Shanghai, China

Life persists and thrives in the dark subsurface of the Earth in the absence of surface light energy. More than 50 years of investigations on the so-called "Deep Life" (or the "deep biosphere") has revolutionized various aspects of our understanding of life and its origin and evolution. Still, large research gaps remain, e.g. what are the fundamental mechanisms of deep life persisting and evolving in the low-energy environments? What are the relationship and Interaction of deep life with the surface life and the environment? What are the ecological fundamentals governing the origin, distribution, and dispersal of the deep life? Aiming to resolve these large research questions through international joint efforts, the Deep Life community announced the inauguration of the International Center for Deep Life Investigation (IC-DLI) on October 2018 (https://icdli.sjtu.edu.cn/). The IC-DLI will seek domestic and international funding resources to assist researchers to organize projects related to Deep Life within the scope of the Deep Carbon Research beyond 2020. The IC-DLI is an open platform that welcomes constructive ideas and suggestions that will lead to a world-class hub for Deep Life investigators from around the world.

Keywords: deep life, extremophiles, subsurface, low energy, life limit, high pressure