Genetic Transformation of unicellular microalga *Chlamydomonas reinhardtii* to increase biofuel productivity

<u>이정섭</u>, 신예솔, 심상준[†] 고려대학교 (simsj@korea.ac.kr[†])

Microalgae are source of bio-fuel that have attained considerable amount of attention in the scientific community. Here we describe a successful genetic modification of microalgae, Chlamydomonas reinhardtii, using antisense RNA vector system to inhibit functional mRNA. The resulted microalgae have increased lipid production when compared to the wild type strain, while keeping their growth level similar to the wild type strain. This research will take us one step closer to realize our goal of producing bio-fuel in the industrial scale and economically compete with fossil fuel.