

Convergent Opportunity of Skin Diagnostics and Therapeutics

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Nowadays, convergence of various fields is a global trend of diverse researches. One of most important examples is the convergence of diagnostics and therapeutics due to personal variation of therapeutic target. Here, various diagnostic and therapeutic researches and their convergent opportunity are introduced. New biomarker sampling technique preserving genuine activity was successfully transferred to company and can be widely applied to the biomarker sampling agent. Array biosensor detects 11 pathogens simultaneously and can be extended to microbiome study or personal variation detection for theranostics. Acne nanotherapy focusing sebaceous gland treatment showed promising pilot clinical results as a new acne therapy without side effects of drugs. These researches are suggesting great potential for convergent study such as pathogen detection and sterilization. This fascinating topic will become main subject of new bioconvergent diagnostic and therapeutic laboratory. In addition, because mussel adhesive protein showed great potential for skin and internal tissue adhesive by in vivo study, further applications and commercialization will be continued.