

## 세미나 초록

성명	최진호
소속	(주)세니젠
발표 주제	분자진단을 활용한 식품안전기술의 기술사업화 전략
발표 내용	<p>According to "Fortune Business Insights", the size of food safety market is estimated more than USD 20 billion as of 2023. Consumer demand on food safety, Globalization of the food trade, and adaption of the new technologies are facilitating the market growth with around 7% CAGR. Recent climate change can be another threat to human society and Outbreak of foodborne illnesses could be more often than ever. PCR (Polymerase Chain Reaction) and NGS (Next Generation Sequencing) are became new standard to detect foodborne pathognes because both of them are having high accuracy and efficiency. By using genetic information, PCR can give the precise results less than one and half hour. Moreover, a fast protocol can decrease the running time up to 46 minutes. Also multiplexing is possible up to 4 or 5 pathogen detection. This method can decrease the time and human resource burden. On the other hand, NGS can detect 16 pathogens at one experiment. These 16 pathogens include <i>Salmonella</i>, <i>Campylobacter jejuni &amp; coli</i>, <i>Clostridium perfringens</i>, and so on. This simultaneous detection method can be applied for the large number sample testing.</p>