that 22 *B. subtilis* 11 *B. licheniformis* and two *B. cereus* formed biofilm at 48 hours. Biofilm formation increased contamination risk via strengthening *Bacillus* to environmental conditions in diary plants. Therefore, it is very important that presence of *Bacillus* species and biofilm formation in milks. In conclusion, it should be considered *Bacillus* which are forming biofilm due to their harmful effects on health at food industry.

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Basal cell adenocarcinoma of the palate: report of a case with Aurora-B kinase expression

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Basal cell adenocarcinoma is rare, particularly those occurring in minor salivary glands. The tumour cells of basal cell adenocarcinoma have been demonstrated to be strongly reactive for cytokeratin and some cells exhibit reactivity for S100 protein, carcinoembryonic antigen and epithelial membrane antigen. The expression of Aurora-B kinase, one of the key proteins maintaining proper mitosis and a frequently overexpressed protein in a range of human cancers, has never been investigated in basal cell adenocarcinoma of salivary gland origin. The purpose of this study was to report an extremely rare case of basal cell adenocarcinoma of the palate with the immunohistochemical study of Aurora-B kinase protein expression. We present here a male patient, aged 47 years old, with a history of palatal swelling for six months, histopathologically diagnosed with basal cell adenocarcinoma. The specimen showed numerous islands of small, hyperchromatic, basaloid cells with scattered small duct-like structures without encapsulation. Immunohistochemical staining demonstrated that Aurora-B kinase localized within the nucleus and nuclear expression of Aurora-B kinase was observed in all tumour nests, suggesting an overexpression of this protein. The study of Aurora-B kinase as a diagnostic marker and therapeutic target in the malignant salivary gland tumours should therefore merit further investigation.

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Three essential human based projects that directs the medical biotechnology research and their future prospects

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Medical biotechnology's fundamental information source consists of three essential human based projects mainly. These are: The Human Genome Project, The Human Microbiome Project and The Human Brain Project. In addition to that projects of course there are other projects as well, like 1000 genomes project, HapMap project, etc. But that three projects have a wide range of participation and their outcomes will directly affect the future prospects of medical biotechnology. Their findings will lead the discoveries in diagnostics, therapeutics, bench to bedside kits, etc. Human genome project was started in the year of 1990 and completed in 2003. But its results are not clearly understood due to lack of information in the field. Human Microbiome Project aims to characterize the microbial communities found at several different sites on the human body and their interactions with us. Human Brain Project is a brand new project aimed to understand the human brain and brain related disorders. Both United States of America and European Union support the brain project as a little known about human brain and a lot to be sold about. Brain-Mapping project was announced in United States recently. In this poster presentation; we will mainly discuss these three projects and their possible results that can unravel new biotechnological developments at a glance.

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Crevicular fluid markers of inflammation in periodontal disease

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Periodontal disease (PD) is chronic inflammatory disease produced by local infection and is characterized by the resorption of the tooth-supporting structures. The aim was to identify in the gingival crevicular fluid (GCF) the markers of local inflammation. The ELISA method has been used for the determination of the immune-inflammatory markers from GCF in aggressive periodontitis (28 patients), chronic periodontitis (16 patients) compared with 22 healthy subjects. A local increase of pro-inflammatory (IL-1α, IL-1β, IL-6, TNF-α) and immunomodulating (IFN-γ) cytokines in GCF has been shown to the patients with different stages of periodontitis ($P < 0.0001$, respectively $P < 0.001$), compared to healthy subjects. The anti-inflammatory cytokine (IL-4) was significantly decreased in all periodontal diseases ($P < 0.0001$, respectively $P < 0.0004$). IL-6 and IFN-γ had an increasing evolution as the disease progresses. IL-6 and TNF-α are important parameters in periodontal stabilization because of their role as mediators of local inflammation resulting bone resorption by stimulating the activity of the osteoclasts. Our study demonstrates the increased production of IL-1α, IL-1β, IL-6, TNF-α, IFN-γ and decreased secretions of IL-4 in GCF of patients with periodontitis as an expression of the inflammatory response in periodontitis. The imbalance favours the progressive inflammatory destruction and alveolar resorbtion in periodontal diseases.

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