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NVVI travel grant report
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Short report of Digestive Disease Week (DDW) 2012

This year the DDW takes place in San Diego, California of United State and it has lasted for 4 days (from 18 may till 22 may 2012). It is a perfect gathering place for basic researcher and clinical researcher to present their work and give the opportunity to discuss the current knowledge and development on the intestinal research field.

Since the participants are from broad spectra of intestinal research area, topics varied from basic research to clinical trials and from immune regulation to possible therapeutic approaches have been presented and discussed. Among these topics, the intestinal microbiota and the use of probiotic as a possible therapeutic approach for intestinal diseases have tracked a lot of attention. The microbiota composition from intestinal biopsies of control and IBD patient groups are characterized and compared between with each other IBD is associated with a dysbiosis characterized by changes in Firmicutes, Proteobacteria and Actinobacteria phyla (group of Marcobal,A; group of Huttenhower,C). More interesting, the microbiota composition of two patients return to initiate state after antibiotic treatment and accompanied with reduced IBD associated complains (group of Marcobal,A).
Probiotics are live organisms which when provided in adequate amount confer a beneficial effect to the host. The beneficial effect of probiotics in intestinal disease has been shown both in IBD patient and animal colitis models. In patient studies, the probiotic mixture VSL#3 has been frequent use. In treatment of mild Ulcerative Colitis patient, it is effective in induction of remission (the group of Hyun Shig Kim). Further more in treatment of children with active Crohn disease, an improved disease activity along with weight improvement have been observed (the group of Rebecca J. Hill). In animal studies, several sing strain probiotics have been tested in different colitis mocels. *Faecalibacterium prausnitzii* has induced a protective effect on dinitro-benezenesulfonic acid – induced colitis in mice (the group of Philippe Langella). *Clostridium Butyricum* suppresses dextran suldium sulfate induced colitis by converting colitogenic macrophage in colon into IL10 producing macrophage (The group of Toshifumi Hibi).

In order to participate to this congress, I have applied an abstract with the title "*Bifidobacterium* attenuates murine dextran sodium sulfate-induced colitis and increases regulatory T cell responses" for a poster presentation.