before caged, had their estrus regulated by chorionic gonadotrophin. Soon after birth, offspring from uninfected mothers were suckled in *S. mansoni*-infected mothers and vice versa. Male offspring, 7-wk old, were infected with 80 cercariae and the groups (n=5) were formed: 1)Infected mice Born from Schistosomotic Mothers (Inf.BSM) 2)Infected mice Suckled in Schistosomotic Mothers (Inf.SSM) 3)Infected mice Born and Suckled in Uninfected-mothers (Inf.BSU) 4)Uninfected mice Born and Suckled in Uninfected-mothers (Unif.BSU). The mice were immunized with OA, s.c., in adjuvant. On 8th day, we compared the hypersensitivity reactions (HR) after challenged with aggregated OA in the footpad, the levels of OA-specific IgG1 and IgG2a, IL-4/IFN-γ/IL-10 cytokines in the supernatants from OA- or mitogen-stimulated splenocytes culture and regulatory T cells frequency. **Results:** Comparing to control Unif.BSU, anti-OA immediate HR was suppressed in all infected groups, but it was strongly decreased in Inf.SSM. In this last, there was high regulatory T cells frequency. After mitogen-stimulation there were higher IL-4 and IL-10 production and lower of IFN-γ in infected groups compared to Unif.BSU. Upon OA-stimulation, in Inf.BSM, IL-4, IL-10 e IFN-γ levels were decreased, while in Inf.SSM the IL-10 levels were not altered. There was not enhancement or suppression of anti-OA IgG1 and IgG2a production, since there was no difference among the groups. **Conclusions:** Post-natal infection restored the anti-OA humoral immunity in offspring or lactants from Schistosomotic mothers and induced an immunosuppressive potential in previously breastfed mice in these mothers. **E-mail:** valdenia.souza@gmail.com

DIAGNOSIS AND CHARACTERIZATION

Diagnosis001- **DiversiLab rep-PCR system for characterization of *Serratia marcescens***

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Introduction: *Serratia marcescens* is a pathogen associated with nosocomial infections, mainly in the Neonatal Intensive Care Units (NICU). The emergency and the costs associated to them increase the need for refinement of molecular approaches to aid in the diagnosis and epidemiological analysis of nosocomial infections. The pulsed field gel electrophoresis (PFGE) is generally considered one of the most reproducible and highly discriminatory typing techniques available. However, this method requires specialized equipment and besides being labor-intensive. Recently, one semi-automated system for strain typing based on the rep-PCR technology has become available: the DiversiLab Microbial Typing System (DiversiLab). The objective of this study was to assess the reliability of the DiversiLab rep-PCR system for characterization of *S. marcescens*. **Material and Methods:** The thirty-eight *S. marcescens* isolates were obtained in the outbreak occurred in NICU of a reference hospital in Belém, Pará, Brazil. For the Automated rep-PCR the DNA was extracted, amplified and analyzed using an UltraClean Microbial DNA isolation kit and DiversiLab Serratia (MoBio Laboratories and bioMérieux), according to the manufacturer's instructions. The PFGE was performed after restriction enzyme XbaI. The electrophoretic profiles were analyzed using the BioNumerics 6.5 software (Applied Maths, Belgium), using Dice coefficient (3% of tolerance). **Results**: The PFGE provided 4 clusters called from A to D where each cluster has been divided into 13 subsets according to the patterns obtained, the cluster A (A1 and A2), B (B1 through B4), C (C1) and D (D1 through D6). By DiversiLab system, thirteen different patterns (type I through XIII) were identified. There was an agreement of 82% by rep-PCR (31 out of the 38 strains) compared to PFGE. Seven strains were differently distributed by rep-PCR: six were added with strains of different groups by PFGE and one, formerly belonging to subgroup A1, became a unique pattern. The cluster B showed a greater diversification by DiversiLab, divided into 7 subgroups (types I through VI and VIII) approximately 75% similar, and the subgroup B4 (100% similar by PFGE) showed similarity above 93% between 7 isolates of this subgroup. **Conclusions**: There was a significant agreement between the techniques tested, however, some differences were found. BioNumerics software allows user

modifications having the freedom to manually identify the bands, while the DiversiLab can differ them automatically by the presence and intensity of bands. The DiversiLab is a simple and fast procedure compared to PFGE, which is valuable in case of outbreak. **E-mail:** wana.lailan@gmail.com

Diagnosis002- **Characteristic on adaptation to *in vitro* culture of wild isolates from Southeast Asia and Eastern Indonesia**

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Preservation of wild isolates of human malaria parasites in wet ice and adaptation efficacy to in vitro culture. Wild isolates of the human malaria parasites were preserved at fields in wet ice for 2-12 days, and cultivated at a laboratory in Indonesia by a candle jar method. In four isolates of Plasmodium falciparum collected from Myanmar and preserved for 12 days, parasitaemias were much decreased from the original values, and all isolates failed to grow. In 31 isolates preserved for 5-10 days, nine were transformed to young gametocytes within Day 6, and stopped asexual growth. However, other 22 isolates grew well. Particularly, 14 isolates grew well for a month or more, and stocked as culture-adapted isolates. From Ranong, Thailand, nine isolates were cultivated after preserved for 7 days, and six isolates grew well. On the other hand, all of 59 isolates collected from eastern Indonesian islands (Buru, Halmahera and Flores) failed to establish as culture-adapted isolates, even though most of them were preserved only for 2-3 days: 49 isolates were transformed to sexual stages within Day 5-10, and ten isolates stopped to grow on Day 3-5 by unknown reason. These results indicated that a great different characteristic on adaptation to in vitro culture may exist between wild isolates distributing in continental Southeast Asia (Myanmar and Thailand) and in eastern Indonesia, and gametocytogenesis might be easily switched-on in Indonesian isolates after new ring forms appeared in culture. In wild isolates of *P. vivax*, *P. malariae* and *P. ovale* collected from Myanmar and Indonesia and preserved for 2-9 days, ring forms or young trophozoites were survived, but adaptation to in vitro culture was failed. These results may indicate that wild isolates of the four human malaria parasites could be preserved in wet ice for around 10 days. **E-mail:** hiko@oita-u.ac.jp

Diagnosis003- **Ultra-sensitive pathogen detection to avoid false negatives diagnostics using the ApoH-sample pretreatment technology**

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All diagnostic methods are evaluated through their both sensitivity and specificity, which in turn depend on the number of false-positives and false-negatives. We present here a new method to prepare the sample to strongly enhance sensitivity without impacting specificity, by making the targeted organism more accessible and concentrated. Complex biological samples are pre-treated with Apolipoprotein H (ApoH), which is a human acute-phase protein exhibiting capturing and scavenging activities on different kind of microorganisms: bacteria (Gram+, Gram-), viruses (DNA or RNA enveloped or non-enveloped), yeasts, parasites. Solid supports such as ApoH-coated magnetic beads or ApoH-ELISA-coated plates bind microorganisms from complex biological samples such as blood, plasma urine, feces, etc. This remarkable ability of ApoH allows microorganisms to be washed, concentrated and re suspended in controlled media for their highly improved detection sensitivity (from 1 to several $logs_{10}$). Since captured microorganisms are still whole and living, subsequently, all current detection methods can be applied (qPCR, ELISA, fluorescence, electron microscopy, cultivation...). Current methods without the pre-concentration and washing steps generate high rates of false negatives diagnostics that could lead to dramatic consequences in terms of pathogens diffusion or in terms of treatment follow-up efficacy, as can be the case of nosocomial contaminations in hospitals, viral (HCV) or antibiotic multi-resistant bacteria. Thus, this sources false negatives diagnostics are drastically reduced: (i) interfering agents present in the