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Daniela Kantor. Médanos, 2018

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Daniela Kantor nació el 23 de marzo de 1970. Es diseñadora gráfica (FADU-UBA), pintora, dibujante, historietista e ilustradora. Autora de la novela gráfica *Mujer Primeriza* (Ed. Burslesque, 2014), *Aprendiza* (2019) y *Naturella* (con guión de Arekasadaro, 2017) publicada en *Dis-Tinta* (Ed. Sudamericana, coordinado por Liniers y Martín Pérez). Con guión de Alejandro Farías dibujó *Las moradas de Santa Teresa de Jesús* en historietas (Ed. Loco rabia + CCEBA Centro Cultural de España en Buenos Aires) y *Marilyn* (*Tren en movimiento*, 2019). Es miembro de la revista de historietas “El Tripero” fundada en 1993 junto al grupo de alumnos de Alberto Breccia. En el ámbito de la enseñanza es Jefa de Trabajos Prácticos en la materia Ilustración inicial, y docente en Ilustración Editorial en la Facultad de Arquitectura, Diseño y Urbanismo FADU/UBA. Dicta talleres sobre pintura e ilustración (C C Recoleta, 2019/ Quinta Trabucco, 2020/ taller particular junto a Daniel Roldan, 2019). Es maestra de niños y niñas en Dibujo e Historieta en Escuelas primarias, talleres (Filbita, Festival de literatura de Buenos Aires, 2018-9/ CCK, 2018/ taller propio desde 2014). Estudió Dibujo de Historieta con Alberto Breccia, Técnicas de Acuarela y Pastel con Carlos Nine, charlas sobre Historieta con José Muñoz, Curso de Color con Carlos Gorriarena, Clínica de Pintura con Mariano Sapia y Tulio de Sagastizábal, y Sumi-e en el Centro Okinawense. Trabaja para editoriales y revistas con ilustraciones e historietas (Ed. Troquel, Abran Cancha, Ed. Norma, Unicef, Barcelona, Crisis, Suplemento Ñ/ Clarín, Borges en la Biblioteca Nacional- Lectores de Borges). Fue invitada a la Feria del libro de los Universitarios de UNAM para presentar el libro “Palabra de ilustrador”, y en 2019 ganó la Beca UBA Internacional en el marco de un programa de intercambio docente con la Universidad Regiomontana, Monterrey, México.

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apoptosis signaling not resulting in death. Apoptotic bacteria should be compared. Our methods will allow finding protein complexes and innate receptors inducing p21 and C23 cleavage. C23 RNA-binding phosphoprotein might be a checkpoint hub integrating p21, CDK and CK2 with innate receptors and with pathways in nucleolus, membranes and cytosol. Infection cleaved C23, so, its fragments and other PTMs should be studied

255. (308) DIRECT AND INDIRECT PROMOTION OF MYELOPOIESIS MECHANISMS BY POSTBIOTICS OBTAINED FROM LACTOBACILLUS RHAMNOSUS CRL1505

Gutiérrez F¹, Vasile B¹, Ivir M¹, Alvarez S^{1,2}, Salva S¹.

¹Laboratory of Immunobiotechnology, CERELA-CONICET, Tucuman, Argentina.

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Many attempts have been made to find safer immunomodulatory agents that enhance the immune response and reduce the number and severity of infections in at-risk populations. Our previous studies have shown that *Lactobacillus rhamnosus* CRL1505 (Lr05) and its postbiotics, peptidoglycan (PG05) and cell wall (CW05), were able to induce bone marrow (BM) myelopoiesis and to protect against respiratory pathogens in mice undergoing chemotherapy. However, the underlying mechanisms remain unknown. Hence, the role of TLR2 and G-CSF involved in the ability of Lr05, P05 and CW05 to induce basal myelopoiesis by direct or indirect interaction with BM hematopoietic stem and progenitor cells (HSPC) was evaluated. First, *in vitro* colony-forming unit assays were performed to assess whether the clonogenic capacity of BM cells responds to direct interaction with Lr05 and its postbiotics. For this, mouse BM cells were plated in the presence or absence of Lr05, PG05 or CW05 in culture medium for the granulocyte/macrophage forming unit (CFU-GM) (MethoCult™ GFM3534). The counts and the phenotypic characterization of the colonies obtained were determined. Besides, the effect of the addition of fibroblast supernatants conditioned by Lr05 or its postbiotics on the clonogenic activity of HSPC was investigated. Finally, the expression of TLR2 of CFU-GM and the levels of G-CSF in the culture medium on day 14 were determined by flow cytometry and ELISA, respectively. Lr05 significantly stimulated the TLR2 expression and secretion of G-CSF, and enhanced the clonogenic activity of HSPC and fibroblast. Interestingly, CW05 showed a strong stimulatory effect while PG05 showed immune effects that were more similar to Lr05. These results allow us to know, at least in part, the cellular and molecular mechanisms involved in the myelopoiesis-enhancing capacity of new safe products to be potentially used in patients undergoing chemotherapeutic treatment.

256. (313) ZIKA VIRUS NS4B PROTEIN TARGETS TANK-BINDING KINASE 1 TO INHIBIT TYPE I INTERFERON PRODUCTION

Maria Belen Sarratea¹, Daniela Redolfi¹, Constanza Américo¹, Laura Iannantuono Lopez¹, Sofia Noli Truant¹, Andrés Sánchez Alberti^{1,2}, Roy Mariuzza³, Marisa Mariel Fernández¹, Emilio Luis Malchiodi¹.

¹Universidad de Buenos Aires, Facultad de Farmacia y Bioquímica, Cátedra de Inmunología-IDEHU (UBA-CONICET), Buenos Aires, Argentina; ²Universidad de Buenos Aires, Facultad de Medicina, Departamento de Microbiología, Parasitología e Inmunología-IMPAM (UBA-CONICET), Buenos Aires, Argentina; ³University of Maryland, Institute for Bioscience and Biotechnology Research, Rockville, Maryland, USA.

Type I interferons (IFN I) play an essential role in antiviral innate immunity. During viral infections, cytosolic nucleic acids can be sensed by intracellular pattern recognition receptors, triggering TANK-binding kinase 1 (TBK1)-interferon regulatory factor 3 (IRF3) signaling axis to initiate IFN I transcription. However, many flavivirus use non-structural proteins to evade immune sensing favoring their survival. Here, we aimed to study the role of Zika virus (ZIKV) NS4B protein in the inhibition of IFN I induction and its interaction with host

ligands.

For this purpose, we performed transfection assays with a plasmid encoding recombinant ZIKV NS4B or ZIKV NS4B C100S mutant. Using RAW-Lucia ISG cells, an IFN reporter cell-line, we showed that cells with ZIKV NS4B were able to reduce luciferase signals compared to empty vector. Interestingly, this reduction was abrogated with ZIKV NS4B C100S mutant (ANOVA+Tukey's, $p < 0.05$). Moreover, A549 cells transfected with plasmid encoding ZIKV NS4B and stimulated with poly(I:C) secreted less IFN- β levels (ELISA) compared to control (ANOVA+Tukey's, $p < 0.05$).

TBK1, a key component in IFN I production, has been proposed as a possible target of NS4B. Using transfection assays in Hela cells, we showed that TBK1 immunoprecipitated with ZIKV NS4B. Furthermore, we recombinantly produced N-terminal ZIKV NS4B in micelles and human TBK1. We performed Surface Plasmon Resonance (SPR) assays to further characterize this interaction. SPR assays showed that NS4B interacted with TBK1 with an equilibrium dissociation constant (KD) of $3.1 \pm 0.2 \mu\text{M}$.

Our results add evidence that ZIKV NS4B is involved in disrupting TBK1/IRF3 cascade and the conserved residue C100 is important for this function. Besides, this is the first report of biophysical interaction between N-terminal ZIKV NS4B and TBK1. Altogether, the information gathered herein can be of substantial use in the rational design of antiviral inhibitors.

257. (355) MINTHSTACHYS VERTICILLATA ESSENTIAL OIL ORALLY ADMINISTERED MODULATES GASTROINTESTINAL PROINFLAMMATORY PARAMETERS IN MICE

Ivana Dalila Montironi², Noelia Anahí Campora¹, Sofia Arsaut¹, María Eugenia Cecchini¹, José M. Raviolo², Noelia Vanden Braber³, Bibiana Barrios⁴, Mariana Montenegro³, Silvia Correa⁴, María C. Grosso², Fernando Mañas², Romina V. Bellingeri⁵, Laura N. Cariddi¹

¹INBIAS-CONICET-UNRC, Río Cuarto, Argentina, ²Facultad de Agronomía y Veterinaria-UNRC, Río Cuarto, Argentina, ³CITVM-CONICET-UNVM, Villa María, Argentina, ⁴CIBICI-CONICET-UNC, Córdoba, Argentina, ⁵IITEMA CONICET-UNRC, Río Cuarto Argentina.

Farm animals are exposed to stressors that alter oxidative and immunological balance, affecting the gastrointestinal system. *Mintostachys verticillata* essential oil (EO) has shown antioxidant and immunomodulating activities and could be a natural alternative to improve animal health. The aim of this study was to evaluate the impact of EO oral administration on gastrointestinal proinflammatory parameters. For this purpose, three groups of male Balb/c mice ($n=3$) were orally administered with saline solution (control group) and EO (5 or 10 mg/kg/day) during 10 consecutive days. Subsequently, histological parameters, cytokines production and oxidative markers were evaluated. The results indicated that EO (5 mg/kg/day) improved mice growth performance compared to control and EO (10 mg/kg/day) groups ($p < 0.05$). EO did not alter the morpho-physiology of intestine, however a moderate leukocyte infiltration in the small intestine could be observed in mice treated with EO (10 mg/kg/day). No differences in colon sections were observed between groups. EO decreases the IL-6 levels and increases the IL-4 and IL-10 concentrations compared to control group ($p < 0.05$). EO improved total antioxidant capacity by decreasing malondialdehyde (MDA) concentrations, however also decreased the enzymatic activity of superoxide dismutase (SOD), compared to control group ($p < 0.05$). Results indicate that *M. verticillata* EO modulate inflammatory and oxidative parameters constituting a natural alternative which could be applied as dietary supplement to improve gastrointestinal and immune functionality of farm animals.

258. (389) REGULATION OF VIRULENCE FACTORS IN STAPHYLOCOCCUS AUREUS BY HOST INFLAMMATORY MEDIATORS

Cintia D. Gonzalez¹, Constanza Gaiá², Celeste Biani¹, Camila Ledo¹ and Marisa I. Gómez^{1,3,4}.

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