

VII JORNADAS DE MEDICINA GENÓMICA Y ONCOLOGÍA GENYO 2019

Wednesday, 11th December

09.30- 09.45 WELCOME AND INTRODUCTION

Prof. José Antonio Lorente Scientific Director – GENyO / Professor UGR
Ms. Ana Agudo Martínez Director - PTS Granada

MASTER STUDENT SESSIONS

Session Chair: Ana Soriano

09.45-10.05 **Pedro Luis Justicia Lirio**

“Generation of lentiviral vectors that mimic the expression pattern of TCR in T cells for immunotherapy applications”

10.05-10.25 **Alba Ortigosa Palomo**

“Estudio transcriptómico de subpoblaciones celulares en pacientes con cáncer de mama”

10.25-10.45 **Juan Sanjuán Hidalgo**

“CRISPR/Cas9-mediated edition of KRAS driver mutations in Non-Small Cell Lung Cancer (NSCLC)”

10.45-11.15 COFFEE BREAK

11.15-12.00 **TECHNO-SCIENTIFIC SESSION**

Jose Manuel Ligos PhD, Scientific Application de Cytex Biosciences Inc.
Fremont, California

“Full-spectrum flow cytometry: How new technologies may drive changes in multicolor flow cytometry”

PhD STUDENT SESSIONS (<3 YEARS EXPERIENCE)

Session Chair: María Benítez

12.00-12.20 **Margarita Barriga García-Mauriño**

“Estudio del papel de Cortistatina como regulador endógeno de los procesos de fibrosis asociados a patologías crónicas”

12.20-12.40 **Adrián González González**

“Knockdown of TGF-activated NDRG1 inhibits migration and epithelial-mesenchymal transition of metastatic triple negative breast cancer cells”

12.40-13.00 **Noelia Maldonado Pérez**

“Assessment of efficacy and safety of universal CD19-CAR T cells”

13.00-14.00 **POSTER SESSION (MASTER AND > 3 YEARS EXPERIENCE)**

14.00-15.00 **LUNCH PROVIDED BY ORGANIZERS**

15.00-16.00 **POSTER SESSION (< 3 YEARS EXPERIENCE AND POSTDOCTORAL)**

FLASH TALKS

Session Chair: María Tristán y Juan Carlos Alvarez

16.00-17.00 **“YOUR SCIENCE IN 4 MINUTES”**

Rita Caracuel Peramos

“Study of the role of ADAMTS1 to modulate macrophage polarization toward a protumorigenic”

Iris Ramos Hernández

“Optimization of the delivery method for the knock-in in vitro with the CRISPR-Cas9 system”

Araceli Aguilar González

“Generation of cellular models to study gene therapy strategies for Pompe disease”

Juan Elías González Correa

“Gene-cell therapy for pompe disease”

Carlos Baliñas Gavira

“Frequent mutations in the amino-terminal domain of BCL7A impair its tumor suppressor role in DLBCL”

Pablo Tristán Ramos

“The tumor suppressor microRNA let-7 inhibits human LINE-1 retrotransposition”

María Dolores Moya Garzón

“Design, synthesis and evaluation of salicylates as double GO/LDHA inhibitors with application in the treatment of primary hyperoxaluria type 1”

Antonio Delgado González

“Metallofluorescent nanoparticles as mass-tag barcodes for multiparametric mass-tag cellular barcoding of ovarian cancer cells by mass cytometry”

DIVULGATION SESSIONS

Session Chair: Oscar Huertas

- 17.00-17.15 **Gisele Hipola**, Universidad de Granada
“La ciencia de la política”
- 17.15-17.30 **Enrique Pérez**, Instituto de Astrofísica de Andalucía - CSIC
“Sonificación de datos”
- 17.30-17.45 **Pablo Caballero**, Oncodieta
“Nutrir el cuerpo”
- 17.45-18.00 **Matilde Barón**, Estación Experimental del Zaidín - CSIC
“Estrés vegetal”
- 18.00-18.30 **Final Show: Daniel Guirado**, Instituto de Astrofísica de Andalucía - CSIC
"Genopoder"

Thursday, 12th December

PhD STUDENT SESSIONS (>3 YEARS EXPERIENCE)

Session Chair: Meriem Benkaddour

09.30-09.50 **Matilde Ortiz González**

“A new member of Curvicollide family kills African trypanosomes by inhibiting transcription”

09.50-10.10 **Carlos Peris Torres**

“Extracellular protease ADAMTS1 is required for uveal melanoma development by inducing stemness and endothelial-like features on tumor cells”

10.10-10.30 **María Tristán Manzano**

“Development of lentiviral vectors for a fine-tuned regulated immunotherapy”

POSTDOCTORAL SESSIONS

Session Chair: Carmen Garrido

10.30-10.50 **Juan Carlos Alvarez Pérez**

“Targeting of KRAS oncogenic mutations with CRISPR-Cas9 reduces the tumorigenic potential of humanized MEFs”

10.50-11.10 **Maria Belen Lopez-Millan**

“NG2 antigen is a therapeutic target for MLL-rearranged B-cell acute lymphoblastic leukemia”

11.10-11.30 **Belén Rubio Ruiz**

“Development of pd-loaded exosomes for targeted bioorthogonal catalysis”

11.30-12.00 **COFFEE BREAK**

12.00-13.00 **FROM THE CLINIC TO THE BENCH**

Session Chair: Juan Sainz

Ignacio Puche, Servicio de Urología del HUVN

Jon Badiola, Servicio de Hematología del HUVN

Juan José Cruz Rueda, Servicio de Neumología del H. Universitario Torrecárdenas.

13.00-14.00 **KEYNOTE SPEAKER (CANCELLED SESSION)**

Session Chair: Juan José Díaz Mochón

Dr. Valerie Lebleu, MD Anderson Cancer Center

“Precision Medicine for Pancreatic Cancer using Engineered Exosomes”

14.00-14.30 **MEETING AWARDS AND CLOSING**

Awards presented by organizers



CENTRO PFIZER-UNIVERSIDAD DE GRANADA-JUNTA DE ANDALUCIA
DE GENÓMICA E INVESTIGACIÓN ONCOLÓGICA

Organising entity:

Fundación Pública Andaluza Progreso y Salud through GENYO.

Organizer Committee:

Dr. Pedro J. Real
Dr. Juan José Díaz
Dr. Juan Sainz

Collaborators:

Alberto Ramirez
Raffaele Donnabella
Noemí Dougnac

Sponsors:



Genyo



Universidad de Granada

POSTERS:

MASTER STUDENT

1. *Study of the role of ADAMTS1 to modulate macrophage polarization toward a protumorigenic.* Rita Caracuel Pernos, Genyo.
2. *Optimization of the delivery method for the knock-in in vitro with the CRISPR-Cas9 system.* Iris Ramos Hernández, Genyo.
3. *Validación de hPSCs con expresión de NUP98-JARID1A como un modelo in vitro de leucemia mieloide aguda infantil.* Natividad Alcorta Sevillano, Genyo.
4. *Computational T-cell receptor repertoire analysis from high-throughput sequencing data.* María Soledad Benítez Cantos, UGR.
5. *Inhibition of taxane-induced TGF signaling by the targeted therapy against ATF4.* José Lucas Blaya Cánovas, Genyo.
6. *Genetic rescue of a human model of Bernard-Soulier syndrome based on CRISPR-Cas9 gene Therapy.* Jorge Cerón Hernández, Genyo.
7. *Búsqueda de biomarcadores accionables en biopsia líquida para la detección del cáncer de Próstata.* Miguel Encinas Giménez, Genyo.
8. *Magnetoliposomes production and evaluation as hyperthermia agents.* Abel García Díaz, Genyo.
9. *Generación de modelos celulares de Síndrome de Bernard-Soulier mediante edición con CRISPR/Cas9.* María Martínez Manzano, Genyo.
10. *Analysis of the reliability of the imputation of rare variation through the use of genotyped common variation.* Eva Suárez Pajés, Genyo.
11. *MetaAnalysis of gene expression data.* Juan Antonio Villatoro García, Genyo.
12. *Improving Chimeric Antigen Receptor T Cells with CRISPR Genome Editing technology.* Marco Viteri, Genyo.

< 3 YEARS EXPERIENCE

13. *Generation of cellular models to study gene therapy strategies for Pompe disease.* Araceli Aguilar González, Genyo.
14. *Gene-cell therapy for pompe disease.* Juan Elías González Correa, Genyo.
15. *Development of a pipeline for identifying non-coding driver mutations in lung adenocarcinoma.* Álvaro Andrades Delgado, Genyo.
16. *Suicide gene therapy directed by miRNA activity.* Alberto Arenas Molina, Genyo.
17. *Incorporation of Scaffold Attachment Region (SAR) and/or CHS4 sequence to integrative deficient lentiviral vector increase the level of transgene expression.* Marina Cortijo Gutiérrez, Genyo.
18. *Integrative Genetic Analysis of SWI/SNF Chromatin Remodeling Complex in Lung Adenocarcinoma.* Daniel Jesús García García, Genyo.
19. *Pateamine A. Inhibition of translation process as a treatment for Systemic Lupus Erythematosus.* Gonzalo Gomez Hernandez, Genyo.
20. *Development of a nanodevice for the detection and isolation of EVs based on antibody specific recognition.* José Antonio Laz-Ruiz, Genyo.

21. *Studying epigenetic plasticity during epithelial to mesenchymal transition in cancer cells.* Aldara Molina Sánchez, Genyo.
22. *The role of ARID2 in lung adenocarcinoma.* Juan Rodrigo Patiño Mercau, Genyo.
23. *Kinase inhibition and mitochondrial function of LRRK2 in Human Nerve-Like Differentiated Cells Exposed to Paraquat and Maneb stimuli: Insights in Autosomic dominant Parkinson's disease* Diana Alejandra Quintero Espinosa, Universidad de Antioquia.
24. *Cytometric analysis of adipose tissue reveals increments of adipocyte progenitor cells after weight loss induced by bariatric surgery.* Anaís Redruello Romero, Hospital Universitario San Cecilio, Ibs.
25. *Unrevealing the mechanisms to generate tumour educated platelets from prostate cancer cells.* Iris Simón Sáez, Genyo.
26. *Metagenomic insight into the effects of hyaluronic acid in periimplantitis: a randomized controlled clinical trial.* Ana Soriano Lerma, Genyo.
27. *Role of Tankyrase1/2 in the hypoxic response.* Esteban Zamudio Martínez, Instituto de Parasitología y Biomedicina López Neyra – CSIC.
46. *The molecular clock protein Bmal1 regulates cell differentiation in pluripotent mouse embryonic stem cells.* Amador Gallardo de los Reyes, Genyo.

> 3 YEARS EXPERIENCE

28. *Frequent mutations in the amino-terminal domain of BCL7A impair its tumor suppressor role in DLBCL.* Carlos Baliñas Gavira, Genyo.
29. *The tumor suppressor microRNA let-7 inhibits human LINE-1 retrotransposition.* Pablo Tristán Ramos, Genyo.
30. *Defining the interactome of human active LINE-1 retrotransposons in pluripotent cells: understanding how new LINE-1 insertions are epigenetically silenced during embryogenesis.* María Benítez Guijarro, Genyo.
31. *Post-surgery circulating tumor cells and AXL overexpression as new poor prognostic biomarkers in resected lung adenocarcinoma.* Diego De Miguel Pérez, Genyo.
32. *Validation of a model of pediatric leukemia based on pluripotent stem cells using mass cytometry.* Joan Domingo Reines, Genyo.
33. *Polycomb regulation is coupled to cell cycle transition in pluripotent stem cells.* Helena Gómez Asenjo, Genyo.
34. *ARID1A, the good, the bad and the ugly.* Paola Peinado Fernández, Genyo.
35. *ADAMTS1: from angiogenesis-related protease to immune system modulator.* Silvia Redondo García, Genyo.
36. *In situ ChemNAT: Proof of concept in repetitive genomic sequences.* Agustín Robles Remacho, Genyo.
37. *Experimental design and high-dimensional data preprocessing to obtain high-quality data for mass cytometry analysis.* Paulina Rybakowska, Genyo.
38. *Polymorphisms within autophagy-related genes influence the risk of developing colorectal cancer.* Jose Manuel Sanchez Maldonado, Genyo.
39. *ADAMTS1 has a role in the invasiveness and plasticity of glioblastoma cells.* Orlando Serrano Garrido, Genyo.
47. *Extracellular-vesicle associated miRNAs as liquid biopsy biomarkers for the identification and prognosis in metastatic colorectal cancer patients.* Alba Rodríguez Martínez, Genyo.

POSTDOCTORAL

40. *Design, synthesis and evaluation of salicylates as double GO/LDHA inhibitors with application in the treatment of primary hyperoxaluria type 1.* María Dolores Moya Garzón, UGR.
41. *Metallofluorescent nanoparticles as mass-tag barcodes for multiparametric mass-tag cellular barcoding of ovarian cancer cells by mass cytometry.* Antonio Delgado González, Genyo.
42. *Specific Inhibition of Mammalian LINE-1 Reverse Transcriptases.* Guillermo Bañuelos Sánchez, UGR.
43. *A novel multifunctional nanodevice for cancer theranostic.* Victoria Cano Cortés, Genyo.
44. *Enrichment of missense variants in axonal guidance signalling pathway genes in sporadic MD cases.* Alvaro Gallego Martinez, Genyo.
45. *The chemistry behind ChemNAT technology: Synthesis of ChemNAT Reagents.* Francisco Javier López Delgado, Genyo.