Scientific Committee Dr. Benito Regueiro Dr. Jose Luis Ulla Rocha Dr. Alejandro Pazos Sierra Dr. Jose Manuel Vázquez Dr. Francisco Blanco Dr. Javier Maestro Dr. Humberto González

Organizing Committee

Dra. Ana Belén Porto Pazos Dr. Cristian R. Munteanu Dr. Francisco Cedrón Dr. Jesús Fraiz Calvo Dra. Aliuska Duardo D. José Liñares Blanco Dña. Candela Rodríguez Suárez

In our organism, we are living with an estimated population of approximately 100 trillion microorganisms, known as microbiota. It is distributed in the most diverse locations of our anatomy: digestive tract, respiratory system, urinary system, skin, buccalpharyngeal cavity, etc. Its composition is supposed to be specific and individualized for each individual, conforming a miscellaneous population constituted by diverse and multiple different families of viruses, bacteria, fungi, arches and even protozoa and other animal and vegetable families. Scientific and clinical research, in recent years, has turned his attention on the crucial importance that this biological diversity could have in basic processes for our health. The microbiota seems to have evolved with our species for millions of years, collaborating in shaping us to reach what we are now and will accompany us in the future in the future of our existence.

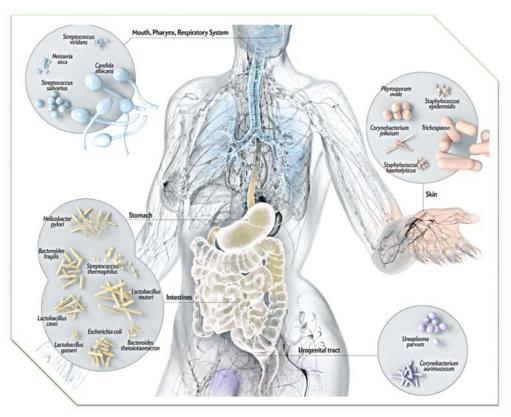
In addition to the important beneficial role that the microbiota plays in the functioning of our organism in a state of health, it has recently been discovered that some of its components may be involved in a wide range of systemic pathologies.

This meeting aims to raise awareness of the importance of further research on this crucial subject and to present a state of the question of existing knowledge about the microbiota, and the microbiome, understood as the set of genes that make up the microbiota in the most varied clinical areas in which clinical evidence has recently been found of its influence on the etiopathology of the same.

In the development of the conference will participate recognized specialists grouped in 3 perspectives: scientific, clinical and technological. We intend that the conference constitutes a pioneering multidisciplinary meeting point that serves as a focus of inspiration for research actions that generate new protocols of care action, including the creation of patents on diagnostic devices, prognosis, therapy, control and care monitoring. The ultimate objective would be to do our bit to improve the quality of care and increase the sustainability of the Public Health System. The broadly multidisciplinary component, together with the support of the Galician Universities and the industry that may be related and interested in the subject, we hope that they will be sufficiently attractive for clinicians, researchers, those responsible for health administration and companies.



I International Conference and Workshop: Microbiota: What's cooking?



Pazo de Lestrove, Padrón (A Coruña) October 10, 2019

Free registration in Conference and Workshops Places are limited on a first-come, first-served basis. Registration at candela.rsuarez@udc.es Free bus (07.45h) and return (20.00h) from Computer Science Faculty (UDC)



9:00 – 9:15h Reception of attendees

09:15- 9:30 Welcome words: Representante de la Consellería de Educación/Sanidad

9:30 – 10:00h Inaugural speech: Microbiota: What's cooking Dr. Benito Regueiro, USC Medical Microbiology Professor. Head of microbiome unit Álvaro Cunqueiro Hospital

10.00 : 11.30h Scientific bases

10:00 – 10:15h Microbiota in infectious diseases

Dr. Enrique Míguez, Head of the infectious diseases section, University Hospital Complex of A Coruña 10:15 – 10:30h Microbioma and implications in human health Dr. Ángel Carracedo, Professor of Legal Medicine USC. Director of the FPGMX 10:30 - 10:45h Developing drugs to improve Microbiota Dra. Mabel Loza / Dr. Eduardo Domínguez, Prof. Pharmacology USC. Kaertor Fdn. / Biofarma group 10:45 – 11:00h Oral hygiene might prevent cancer Dr. Óscar Cordero Assoc. Professor of Biochemistry and Molecular Biology, USC 11:00 – 11:15h The Human Microbiome: Which is normal and pathological? Dr. German Bou, Head of Microbiology Service, University Hospital Complex of A Coruña 11:15 – 11:30h Food and microbiota. Do we know anything? Dr. Alberto Cepeda, Professor Nutrition and Bromatology, USC

11:30 - 12:00h Networking

12:00 – 13:30h Oncological and Digestive Inflammatory Disease Area 12:00 – 12:15h Inflammatory bowel disease in relationship with gut microbiota Dr. Javier Castro Alvariño, Head of Digestive Service Hospital Complex of Ferrol 12:15 – 12:30h Colorectal cancer and microbiota Dr. Jose Luis Ulla-Rocha, Digestive area specialist, University Hospital Complex of Pontevedra 12:30 – 12:45h Lung cancer and microbiota Dr. Luís Antón Aparicio, Head of Oncology Service, University Hospital Complex of A Coruña 12:45 – 13:00 h Microbiota and Kidney Cancer. Dr. Sergio Vázquez, Head of Oncology Service, Lucus Augusti University Hospital, Lugo 13:00 – 13:15h Microbiome promotes pancreatic cancer? Dr. Luis Leon / Paula Peleteiro, Specialist in the Oncology area, University Hospital Complex of Santiago 13:15 – 13:30h Prostate and bladder cancer, microbiota implications Dra. Cristina Plaza Alonso, Specialist in the area of Urology, University Hospital Complex of Pontevedra

13:30 - 15:30H Networking and nutrition

15.30 – 18.00h Other related pathologies

15:30 – 15:45h Obesity and diabetes and their relationship with microbiotaDr. Roberto Peinó, Head of the endocrine unit, University Hospital Complex of Santiago de Compostela15:45 – 16:00 h Neurology, Aging and longevity relationship with microbiotaDra. Mar Castellanos, Head of neurology service, University Hospital Complex of A Coruña

16:00 – 16:15h Multiple sclerosis and microbiota

Dr. Jose M^a Prieto, Head of the Neurology Service of the University Hospital Complex of Santiago de Compostela. 16:15 – 16:30h Making guts heart.

Dr. Guillermo Aldama, Specialist in cardiology area, University Hospital Complex of A Coruña

16:30 – 16:45h Microbiota and Pathogenesis of Rheumatic Diseases Dr. Francisco Blanco, Rheumatology Specialist, CHUAC; UDC; INIBIC Scientific Director; SR Foundation Scientific Advisory 16:45 – 17:00h Role of Microbiota in Clinical manifestation and treatment of Rheumatic Diseases Dr. Javier de Toro, Head of Rheumatology Service, University Hospital Complex of A Coruña

17:00 – 17:15h Pediatrics relationship with microbiota

Dr. Alfonso Solar, Head of Pediatric Gastroenterology Unit, University Hospital Complex of A Coruña

17:15 – 17:30h Intestinal Microbiota and Chronic Kidney Disease

Dr. Rafael Alonso Valente, Head of Domiciliary Dialysis Unit of the University Hospital Complex of Santiago de Compostela 17:30 – 17:45 h Traumatology: Bone strength and the microbiome

Dr. Jose R Caeiro Rey, Head orthopedic surgery and traumatology, University Hospital Complex of Santiago de Compostela

17:45 – 18:30h Networking

18:30 - 19:45h Technological solutions

18.30 : 18.45h Artificial Intelligence and microbiota: methods and challenges
Dr. Victor Maojo, Professor of the CS area. Computation and Artificial Intelligence, Polytechnic University of Madrid
18.45 : 19.00 h Towards programmable antibiotics and in silico microbiota
Dr. Alfonso Rodríguez Patón, Professor of the CC area. Computation and Artificial Intelligence, UPM
19.00 : 19.15h IT Platforms for microbiota analysis
Dr. Guillermo Vázquez, Deputy Director of EOXI information systems
19.15 : 19.30h Towards computer-made antibiotics (videoconference)
Dr. César de la Fuente, Presidential Assistant Professor University of Pennsylvania, USA.

19:30 - 20:00h Relator

Dr. Alejandro Pazos Sierra, Professor of the CS area. Computation and Artificial Intelligence, University of A Coruña

20:00 - 22:00 Parallel Workshops

WS1: Artificial Intelligence Workshops oriented to Microbiota data

Dr. Adrián Carballal, Dr. Francisco Cedrón Santaeufemia, Dr.Carlos Fernández-Lozano, Dr.Marcos Gestal Pose Dr. Cristian Munteanu , Dr. Daniel Rivero Cebrián, Dr. Enrique Fernández Blanco, D. Jose Liñares Blanco (RNASA-IMEDIR Group, UDC)

WS2: Nutritional Health Diet in Microbiota repair

Dr. Ana B Porto Pazos *, Dr. Alejandra Cardelle **, Dr. Cristina Fente ** (RNASA-IMEDIR* Group, UDC; LHICA** Group, USC)