

First International Scientific Research Summit GW – Spanish Consortium Madrid, Spain December 1 – December 2, 2017

PARTICIPATING INSTITUTIONS

- Puerta de Hierro Hospital and Research Institute, Universidad Autónoma de Madrid (UAM), Madrid, Spain - Host Institution
- George Washington University (GW), School of Medicine and Health Sciences, Washington, DC, USA
- Cajal Institute, Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain
- Catholic University of Valencia (UCV), School of Medicine and Odontology, Valencia, Spain
- Principe Felipe Research Center (CIPF), Valencia, Spain

COMMITTEES

Organizing Committee

- Chair:
 - Mariano Provencio, Director, Puerta de Hierro Hospital and Research Institute
- Members:
 - Fernando Vidal-Vanaclocha, Chief Science Officer, School of Medicine and Odontology, UCV
 - Huda Ayas, Associate Dean for International Medicine, GW
 - Rachael Fellabaum, Program Manager and International Liaison, GW

Scientific Committee

- Co-Chairs:
 - Mariano Provencio, Director, Puerta de Hierro Hospital and Research Institute, UAM
 - Fernando Vidal-Vanaclocha, Chief Science Officer, School of Medicine and Odontology, UCV
- Members:
 - Robert Miller, Senior Associate Dean for Research, GW
 - Eduardo Sotomayor, Director, GW Cancer Center, GW
 - Ignacio Torres, former Director, Cajal Institute, CSIC
 - Deborah Burks, Director, Principe Felipe Research Center, CIPF

Institutional Committee

- Rafael Garesse, Rector, Universidad Autónoma de Madrid
- Jeffrey S. Akman, Vice President for Health Affairs, and Dean, School of Medicine and Health Sciences, GW
- Deborah Burks, Director, Principe Felipe Research Center (CIPF), Valencia
- Germán Cerdá, Dean, School of Medicine and Odontology, UCV
- Ricardo Martínez, Scientific Director, Cajal Institute, CSIC
- Ricardo Herranz, General Manager, Puerta de Hierro Hospital and Research Institute
- Madrid Regional Government

WELCOME LETTER FROM ORGANIZING COMMITTEE

Dear colleagues,

Welcome to the *First International Scientific Research Summit of the George Washington University – Spanish Consortium*. Our purpose in organizing this Summit is to engage our respective scientific communities around common goals and interests in the areas of oncology, neuroscience, and neuro-oncology. Over the next two days, we hope to learn from each other and find ways to work together to advance our research agendas and prepare the next generation of investigators.

Special thanks goes to our Scientific Committee for assembling this remarkable group of researchers and to our Institutional Committee for their leadership, vision, and commitment to furthering international research partnerships. We are especially grateful to our hosts, the Universidad Autónoma de Madrid and Puerta de Hierro Hospital and Research Institute, without whom this Summit would not be possible.

Finally, we thank each of you for devoting your time and attention to what we expect will be stimulating conversations over the next two days – and we challenge you to identify synergies and opportunities for future collaboration.

Yours truly,



Mariano Provencio
Director

Puerta de Hierro Hospital
and Research Institute



Fernando Vidal-Vanaclocha
Chief Science Officer

School of Medicine
Catholic University of Valencia



Huda M. Ayas
Associate Dean for
International Medicine
School of Medicine and
Health Sciences.
George Washington University

SUMMIT GOALS

1. Learn about the breadth and depth of research projects at each institution in the areas of Oncology and Neuroscience and promote in depth discussions between researchers
2. Establish and strengthen scientific networks that will lead to joint research collaborations which will:
 - a. Further the research activities of each institution
 - b. Create a training platform for students, research staff, and/or junior faculty
 - c. Lead to joint manuscripts and grant applications
3. Gain the commitment of researchers to establish and participate in research training platforms for each institution's respective faculty and students by supporting visiting research scholars, research fellows, summer research internships, research electives, and the recently-launched GW Global Physician-Scientists Pathway (GW GPS).

GW GLOBAL PHYSICIAN-SCIENTISTS PATHWAY (GW GPS)

The George Washington University (GW) School of Medicine and Health Sciences (SMHS) recently launched the GW Global Physician-Scientists (GW GPS) Pathway which responds to the well-established need for physician-scientists. The importance of physician-scientists is best described by Andrew Schafer, MD, chair of the department of medicine at Weill Cornell Medical College, who stated, "the thing that's so irreplaceable about physicians is that they approach research questions differently because they are inspired by their personal experience taking care of patients." Physician-scientists serve as strong linkages between the worlds of "science" and "medicine" as clinical caretakers who undertake novel translational biomedical research. Unfortunately, the 2014 National Institutes of Health (NIH) Physician-Scientist Workforce Working Group Report demonstrated a current and future shortage of physician-scientists, highlighting the urgent need to invest in the development and training of young clinical investigators. Key recommendations from this report include galvanizing physician-scientists in the early stages of their careers and focusing on individualized professional development. Studies have also shown that early international research experience can "lead U.S. researchers to reap benefits such as increased visibility in the research community, access to more substantial funding and resources, and the opportunity to benefit from the expertise of international peers"(Rees and Monrouxe, 2012; Martinez et al., 2012).

The GW GPS Pathway will provide qualified GW medical students, who demonstrate an interest in and commitment to biomedical research, with a five-year comprehensive clinical-based research education and a unique opportunity to gain a quality medical education alongside mentored research training and meaningful international experience. This will prepare them to become physician-scientists who are leaders in academic medicine committed to the alleviation of human suffering through care, research, and collaboration. The key features of this Pathway include strong one-on-one mentorship from investigators at GW and at partner institutions in Spain,

engagement in a longitudinal research project, an eight-week summer research internship in Spain, a one-year translational biomedical research fellowship in Spain, research didactics and workshops, and career and professional development activities. Students will finish the Pathway with an MD from GW and strong qualifications for competitive research residency programs and funding opportunities.

Given the current and projected shortages of physician-scientists in the U.S. and around the world, the scientific and medical community must consider multiple approaches to expand this “vanishing” workforce. The GW GPS Pathway seeks to contribute to these efforts by preparing future physician-scientists from the first day of medical school, building the translational mindset of physician-scientists at the genesis of medical learning. Through mentorship, hands-on research, international experience, and professional development, GW GPS will equip aspiring physician-scientists with the knowledge, skills, and scientific networks to advance the science of medicine and contribute to the alleviation of disease and human suffering through care and research.

DAY 1: FRIDAY, DECEMBER 1, 2017

START	END	
9:00 AM	11:00 AM	JOINT SESSION
9:00 AM	9:30 AM	Welcome and Opening Remarks: <ul style="list-style-type: none"> - Enrique Ruiz Escudero, Consejero de Sanidad, Comunidad de Madrid - Rafael Garesse, Rector, Universidad Autónoma de Madrid. - Mariano Provencio, Director, Puerto de Hierro Hospital and Research Institute, Chairman of the Scientific Summit. - Robert Miller, Senior Associate Dean for Research, GW - Ricardo Herranz, General Manager, Puerta de Hierro Hospital and Research Institute.
9:30 AM	10:00 AM	Educational Goals: <ul style="list-style-type: none"> - Huda Ayas, Associate Dean for International Medicine, GW - Fernando Vidal-Vanaclocha, Chief Science Officer, School of Medicine & Odontology, UCV - Robert Miller, Senior Associate Dean for Research, GW
10:00 AM	10:30 AM	Scientific Goals in Oncology: <ul style="list-style-type: none"> - Eduardo Sotomayor, Director, GW Cancer Center, GW - Mariano Provencio, Director, Puerto de Hierro Hospital and Research Institute, Chairman of the Scientific Summit Scientific Goals in Neuroscience: <ul style="list-style-type: none"> - Robert Miller, Senior Associate Dean for Research, GW - Ricardo Martinez, Scientific Director, Cajal Institute, CSIC

10:30 AM	11:00 AM	Coffee Break
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11:00 AM	2:00 PM	CONCURRENT SESSION 1	
		ONCOLOGY SESSION 1 (Advances in Skin Cancers) Moderators: Carlos Camps (VGH) and Douglas Nixon (GW)	NEUROSCIENCE SESSION 1 (Neuro stem cells and brain development) Moderators: Ignacio Torres (Cajal) and Robert Miller (GW)
11:10 AM	11:30 AM	Douglas Nixon, GW - <i>HERVS & Cancer</i>	Robert Miller, GW - <i>Roles and regulation of CNS glial progenitors in development and disease</i>
11:30 AM	11:50 AM	Fernando Vidal-Vanaclocha, UCV - <i>Inflammation-dependent & independent melanoma phenotypes</i>	Deborah Burks, CIPF - <i>Insulin-mediated regulation of neuronal stem cells: Implications for neurodegenerative diseases.</i>
11:50 AM	12:10 PM	Frank Glass, GW - <i>Management of Mycosis Fungoides: Ultraviolet Light Therapy</i>	Juan Garrido, Cajal - <i>Axon Initial Segment regulatory mechanisms and their role in brain pathologies</i>
12:10 PM	12:30 PM	Margarita Sánchez-Beato, Puerta de Hierro - <i>TCR-PLCG1-NFAT and JAK-STAT pathways are potential therapeutic targets in cutaneous T-cell lymphomas</i>	Fernando de Castro, Cajal - <i>Demyelination and (re)myelination: challenges to tackle Multiple Sclerosis, the unknown weapon for brain plasticity</i>
12:30 PM	12:50 PM	Gastón Roustán, Puerta de Hierro - <i>Malignant Melanoma: New diagnostics procedures</i>	Jesus Vaquero, Puerta de Hierro - <i>Cell therapy with autologous mesenchymal stem-cells in spinal cord injury</i>

12:50 PM	1:10 PM	Onofre San Martín, UCV-IVO - <i>Non-melanoma skin</i>	Celia Bonilla Horcajo, Puerta de Hierro - <i>Brain injury and cell therapy</i>
1:10 PM	1:30 PM	Maria Jesus Vicent, CIPF — <i>Skin Cancer Polypeptide-based NanoTherapeutics</i>	
1:30 PM	1:40 PM	Q&A	Q&A
1:40 PM	2:00 PM	Group Discussion	Group Discussion

2:00 PM	3:00 PM	Lunch Break	
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3:00 PM	6:00 PM	CONCURRENT SESSION 2	
		ONCOLOGY SESSION 2 (Advances in Lymphoma) Moderators: Jeronimo Forteza (CIPF) and Eduardo Sotomayor (GW)	NEUROSCIENCE SESSION 2 (Neuro stress and neuro-degeneration) Moderators: Deborah Burks (CIPF) and Ricardo Martínez (Cajal)
3:10 PM	3:30 PM	Mitchell Smith, GW - <i>Mantle cell lymphoma as a model for translational innovation</i>	Paul Marvar, GW - <i>Brain Angiotensin II as a Mediator of Fear Memory and Cardiovascular Dysfunction</i>
3:30 PM	3:50 PM	Julia González Rincón, Puerta de Hierro - <i>Deciphering the genetic foundations of follicular lymphoma transformation to diffuse large B-cell lymphoma</i>	Henry Kaminski, GW - <i>Therapeutic Targets for Myasthenia gravis</i>
3:50 PM	4:10 PM	Igor Efimov and Tatiana Efimova, GW - <i>Human Cardiac Tissue Slices - A Novel Platform to test Cardiotoxicity of Cancer Drugs</i>	Liset Menendez de la Prida, Cajal - <i>Rhythmopathies of the epileptic hippocampus: electroencephalographic biomarkers across frequency bands</i>
4:10 PM	4:30 PM	Luis de la Cruz, Seville <i>GOTEL, Spanish Lymphoma Group</i>	Ignacio Torres, Cajal - <i>Exploiting body-to-brain signaling for early diagnosis of cognitive deterioration</i>
4:30 PM	4:50 PM	Virginia Calvo, Puerta de Hierro - <i>Analysis of long-term survival of follicular lymphoma</i>	Antonio J. Sánchez Puerta de Hierro - <i>Multiple Sclerosis and Experimental Autoimmune-Encephalomyelitis studies</i>
4:50 PM	5:10 PM	Míriam Méndez, Puerta de Hierro - <i>Follicular lymphoma transformation: clinical aspects DB GOTEL Group</i>	Gertrudis Perea, Cajal - <i>The impact of Tripartite Synapses on cortical circuits</i>
5:10 PM	5:30 PM	Natalia Gómez- Paloma Martin, Puerta de Hierro - <i>Role of the intratumour NK cells and the CD94/NKG2A-HLA-E axis as diagnostic and immunotherapeutic tool in the Epstein Barr virus-related classic Hodgkin lymphoma</i>	Vicente Felipo, CIPF - <i>Links between alterations in inflammation, neuroinflammation, neurotransmission and cognitive and motor function in hepatic encephalopathy: Mechanisms and therapeutic implications</i>
5:30 PM	5:40 PM	Q&A	Q&A
5:40 PM	6:00 PM	Group Discussion	Group Discussion

DAY 2: SATURDAY, DECEMBER 2, 2017

START	END	SESSION TITLES	
9:00 AM	11:30 AM	CONCURRENT SESSION 3	
		ONCOLOGY SESSION 3 (Lung Cancer) Moderators: Mariano Provencio (Puerta de Hierro) and Edward Seto (GW)	NEUROSCIENCE SESSION 3 (Neuro plasticity and rehabilitation) Moderators: Matthew Colonnese (GW) and Jose Luis Pons (Cajal)
9:00 AM	9:20 AM	Edward Seto, GW - <i>Targeting HDACs for Cancer Therapy</i>	Matthew Colonnese, GW - <i>What is special about the fetal brain?</i>
9:20 AM	9:40 AM	Mariano Provencio, Puerta de Hierro - <i>Liquid biopsy based biomarkers in non-small cell lung cancer for diagnosis and treatment</i>	Hui Lu, GW - <i>Neural circuit dysfunction in Mecp2 disorders</i>
9:40 AM	10:00 AM	Maria Torrente, Puerta de Hierro - <i>Current research in Lung Cancer</i>	Ricardo Martinez, Cajal - <i>The proof-of-concept of dual inhibitors of both ChEs and MAO: the effect of the hybrid drug ASS234 in Alzheimer's neurodegeneration</i>
10:00 AM	10:20 AM	Carlos Camps and Eloisa Jantus-Lewintre, VGH - <i>Characterization of Cancer Stem Cells and Immune Microenvironment Interactions in Non-Small Cell Lung Cancer.</i>	Jose Luis Pons, Cajal - <i>Pathophysiology of PD and ET: new neuroprosthetic management of tremors and early differential diagnosis</i>
10:20 AM	10:40 AM	Atocha Romero, Puerta de Hierro - <i>NGS in lung cancer</i>	
10:40 AM	11:00 AM	Alberto Cruz- Bermúdez, Puerta de Hierro - <i>Lung Cancer Metabolism Through Reverse Warburg Effect</i>	
11:00 AM	11:10 AM	Q&A	Q&A
11:10 AM	11:30 AM	Group Discussion	Group Discussion

11:30 AM	12:00 PM	Coffee Break
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12:00 PM	2:30 PM	JOINT SESSION: Neuro-Oncology	
12:00 PM	12:30 PM	Kiernon Dunleavy, GW - <i>Evolving strategies in CNS lymphomas</i>	
12:30 PM	1:00 PM	Fernando Vidal-Vanaclocha - <i>Brain Metastasis Development and Neurovascular Biomarkers</i>	
1:00 PM	1:30 PM	Eduardo Sotomayor, GW - <i>Novel immune-based treatment for brain tumors</i>	
1:30 PM	2:00 PM	Robert Miller, GW - <i>Cellular pathways of brain tumor formation</i>	
2:00 PM	2:10 PM	Q&A	
2:10 PM	2:30 PM	Group Discussion	

2:30 PM	3:30 PM	Lunch
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4:00 PM	5:00 PM	Closing Session (Joint)
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		<ul style="list-style-type: none"> • Brief report from each session • Summary and next steps (<i>Mariano Provencio, Fernando Vidal-Vanaclocha, Robert Miller, Eduardo Sotomayor</i>)
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