

12th International Workshop

IMMUNOTHERAPY 2016:

"Mapping the road for a long lasting immune-mediated control of cancer"

October 17-21, 2016 La Habana, Cuba

http://www.immunotherapy.cim.co.cu/

Organized by:



National Institute of Oncology and Radiobiology



Latin-American Association of Immunology



Cuban Society of Immunology



Contact:

Organizing Local Committee

Center of Molecular Immunology P.O.Box. 16040, La Habana 11600, Cuba Email: <u>karina@cim.sld.cu</u> Tel: +53-7-214 3125 Fax: +53-7-272 0644

Scientific Advisory Board

Agustín Lage, MD, PhD Cuba Kalet León, PhD Cuba Rolando Pérez, PhD Cuba Thomas L. Rothstein MD, PhD, Prof USA Leopoldo Santos, PhD, President ALAI Mexico Kelvin Lee, MD, Prof USA Stephen Schoenberger, PhD, USA Federico Garrido, MD, PhD, Prof Spain Axel Hoos, MD, PhD USA Prof María E. Faxas, MD, PhD Cuba

Organizing Local Committee

Scientific Local Committee

Karina García, PhD Mayrel Labrada, PhD Alex Miranda, PhD Jesús Domínguez, Ing Jorge Fernandez de Cossio, BS Laudelina Rodríguez, Secretary Audry Fernández, PhD Belinda Sánchez, PhD Danay Saavedra, MD Maurenis Hernández, MD Tania Carmenate, PhD Tays Hernández, PhD

12th International Workshop IMMUNOTHERAPY 2016:

Mapping the road for a long lasting immune-mediated control of cancer

What is the twelfth immunotherapy workshop about?

Immunotherapy 2016 is within the second decade of a series of biannual international workshops in Havana, Cuba, organized by the Center of Molecular Immunology (CIM), the Latin-American Association of Immunology (ALAI), the Cuban Society of Immunology and the National Institute of Oncology and Radiobiology. The main goal of these meetings has been to promote intensive discussions on how to build a bridge between basic science and clinical immunotherapy. Presentations and discussions have covered different topics on immune system regulation, tumor immunology and inflammatory disorders, seen not as isolated phenomena, but integrating them into a systemic vision. Experimental and clinical cancer immunotherapy updates have also been key topic of these workshops.

What distinguishes IT-meetings from others in the same field?

All oral presentations at IT-workshops are by invitation only and therefore of very high quality. A main distinctive feature of our conference is that we always leave ample time for animated discussion. This characteristic has, in fact, become the main attractor for frequent attendees. In our tradition, participants are encouraged to send their ideas about the scientific discussion topics, and thus can actively influence on the final structure of the workshop. IT-2016 will therefore allow for an intensive exchange of ideas. There will be specialized sessions with oral presentations, followed by a discussion time. These discussions will also be strongly "future-oriented", i.e. they will be focused on future research that should and can be done. Prior to the IT-meeting, we will encourage all the participants to contribute with specific questions for these sessions (through our web site) and to actively take part in the discussions.

What will be the particular focus of IT-2016?

In the last five years we have witnessed an explosion of optimism among oncologists and the general scientific community regarding Immunotherapy as a valid strategy to treat cancer. This success has come along with the market approval of anti-CTL4 and anti-PD1 Monoclonal Antibodies (MAbs) to treat first melanoma and more recently NSCLC. These MAbs have led the

way, showing the clinical relevance of some immune regulatory circuits which control the natural immune-response to cancer. Most relevantly, the abrogation (inhibition) of these regulatory loops has resulted in long lasting complete and/or partial responses in treated patients.

However current clinical and preclinical data show that treatment with anti-CTL4 and/or anti-PD1 antibodies are effective only in a subset of cancer patients. It has been suggested that patients sensitive to these therapies have tumors with a high mutagenic load; immunogenic tumors, which accumulate many mutations and naturally expand effector CD8 T cells specific for the derived neo-self (foreign) epitopes. But, how will then immunotherapies handle less immunogenic tumors, those with fewer mutations, more similar to the normal-tissue and resistant to anti-CTL4 and anti-PD1 treatments? Shall we just look for the new relevant regulatory circuits? Shall we look for a deeper simultaneous inhibition of several regulatory loops through combinations? Shall we increase first available effector cells, with vaccines or adoptive cell transfer and only then manipulate the appropriate regulatory circuit? These and many other questions remain open. Their answers will determine the extension of the impact of immunotherapy in oncological practice.

For us, scientist by long working in the field of cancer immunotherapy, it is time to deeply analyze the later successes together with recent failures on important cancer vaccine projects. We would like to invite you to the 12th edition of our cancer immunotherapy meetings. We just hope that together, we could move forward mapping the road for a long lasting immune-mediated control of most cancer types.

MAIN TOPICS FOR PRESENTATIONS AND DISCUSSIONS

This IT2016 edition will be organized in 6 sessions around the following topics:

Session 1. Contrasting the clinical impact of different immunotherapies in cancer: Immunemodulators (checkpoint inhibitor), adoptive cell transfer and targeting therapies. (Session organizer: Maurenis Hernández, MD)

- ✓ Which are the main clinical successes of cancer immunotherapies? How much will they substitute chemo, radio and targeted therapy in oncology pipeline?
- Does checkpoint inhibitor cure some cancer patient or resistance eventually develops?
 How to treat patients further progressing or not responding?

- ✓ Which biomarkers could identify the patients sensible for successful immunotherapies?
- ✓ Which are the main mechanisms mediating the effect of checkpoint inhibitor, adoptive cell transfer and targeted therapies? How could we monitor them in patients?
- ✓ Which are the clinical and preclinical results of the second and thirds wave of cancer immune-therapies currently under development?

Session 2. Deciphering local immune-regulation of chronic inflammation in tumors and normal tissue. (Session organizer: Audry Fernández, PhD)

- ✓ How blood vessel and stroma in tumors and normal tissues regulate chronic inflammation? Would be possible to "normalize" the tumor microenvironment?
- ✓ What mechanisms tip the balance between a "bad" tumor-promoting inflammation and a "good" anti-tumor inflammation?
- ✓ Can we define a hierarchy in the complexity of immune regulatory mechanisms in the tumor micro-environment? How general are those regulatory mechanisms in cancer patients?
- ✓ How can we effectively determine the dominant immune-regulatory mechanism operating in a given tumor to guide its treatment?

Session 3. Understanding the design principles for effective immuno-therapeutic combinations. (Session organizer: Tania Carmenate, PhD)

- ✓ How could we screen for effective combination? How patient specific should be the therapeutic combinations in cancer?
- ✓ Shall combination increase available effector cells, with vaccines and/or adoptive cell transfers and then manipulate the tumor microenvironment?
- ✓ Shall combinations look for simultaneous inhibition of independent or complementary regulatory loops?
- ✓ What is the risk of inducing severe autoimmune-toxicity out of the combinations of different immunomodulators?

Session 4. Protein and cell engineering applications towards a better cancer immunotherapy. (Session organizer: Tays Hernández, PhD)

 ✓ What's the key of success for engineering multi-specific antibodies: the right format or the right target combination?

- ✓ Are semi-rational design and next generation sequencing rendering better (not just larger) protein repertoires?
- ✓ What are the challenges and opportunities of adoptive cell therapy based on tailor-made effector cells?
- ✓ Is cytokine engineering source of better immunomodulators?
- ✓ Could gene therapy be used to effectively turn the patient or its tumor into a factory of biopharmaceuticals?

Session 5. Novel strategies for Cancer Vaccines: Is there a light at the end of the tunnel? (Session organizer: Belinda Sánchez, PhD)

- ✓ What are the main causes of cancer vaccine failure?
- ✓ Could the use of mutated tumor antigens change the success of vaccines? How to overcome potential resistance due to antigen lost?
- ✓ Should we select adjuvants based in their ability to modify the tumor microenvironment?
- Should we select adjuvants not only based in their effector induction capacity but also in its ability to modify the tumor microenvironment?
- ✓ Should vaccine inducing antibodies be revisited as an effective way to transform tumors in "immunogenic antigens factories"?

Session 6. Immunological senescence: How much could it limit the impact of cancer immunotherapy? (Session organizer: Danay Saavedra, MD)

- ✓ What are the effects of aging on the acquired and innate immune system?
- ✓ Are inflammaging and chronic inflammation two sides of the same coin? Which is the role of chronic antigenic load, cytomegalovirus and IL-6?
- ✓ Is there an overlapping pathophysiology for aging, cancer and other chronic diseases?
- ✓ Could immunosenescence be therapeutically manipulated? Will such treatments be useful in cancer?

Call for presentations

If you are willing to attend the meeting, we would highly appreciate receiving a confirmation by **March 30th, 2016**. Submission of abstracts for oral presentations by email or on-line should be done before **August 31st, 2016**.

Registration, Travel and Accommodation

The registration fee for scientists interested in attending the workshop is **250 Euros** (early registration: **before September 1st, 2016**) or **350 Euros** (late registration: **after September 1st, 2016**). Registration fee includes attendance to all sessions, final program, abstract book, coffee breaks, lunches, and welcome and farewell receptions. Travel and accommodation expenses are covered by the participants.

Note: Instructions for payment, registration and accommodation will be given shortly

Passports and Visas

Participants are advised to check on their individual requirements before attending IT-2016 meeting. Visa applications should be filled at the nearest Cuban Embassy in the country in which you are resident.

Note: Special procedures apply for US citizens. Upon contact with IT-2016 organizing committee you will directly receive all the instructions regarding travel to Cuba.

Letters of Invitation

Letters of invitation to attend IT-2016 meeting will be issued upon request by the participants.

Liability and Insurance

The IT-2016 Organizing Committee will not assume any responsibility whatsoever for damage or injury to persons or property during the meeting period. Participants are advised to arrange their own personal travel and health insurance.