





JOINT TRANSNATIONAL CALL 2017: "Translational Research on Rare Cancers"

PARTNER REQUEST/COLLABORATION OFFER

If you would like to have your profile published on the TRANSCAN-2 website, "Looking for a research partner" webpage, please fill out this form and send it to 

If you have any questions about this form, please do not hesitate to contact us at 

Note: Fields marked with a * are mandatory

Contact Information	
First name *	Anna
Last name *	Zajakina
Position *	Head of the group
Telephone number	
E-mail address*	Anna.zajakina@gmail.com
Website address	http://bmc.biomed.lu.lv/en/research/directions-and-labs/cancer-research/cancer-research/a-zajakinas-lab/
Institution/Organisation *	Latvian Biomedical Research and Study Centre
Department*	Gene Therapy
Street	Ratsupites 1 k. 1
Postal Code / City *	LV1067, Riga
Country *	Latvia

***I agree with the publication of my contact data and of this form on the TRANSCAN-2 Website:**

YES



SEARCH FOR A COLLABORATOR

IF YOU ARE LOOKING FOR A PARTNER IN YOUR SUGGESTED PROPOSAL, PLEASE SPECIFY ALSO THE NEEDED EXPERTISE

Project proposal

Project title (draft):

Short description of the project in preparation and of the consortium; description of the areas of expertise needed (Max. 2000 words):



OFFER FOR COLLABORATION

IF YOU PROPOSE YOURSELF AS A PARTNER IN A CONSORTIUM, PLEASE DETAIL YOUR EXPERTISE

Short description of the areas of interest and expertise (Max. 2000 words):

We can strengthen the consortium focused on/or partially involved in development of anti-cancer therapeutics.

We offer viral gene therapy vectors based on alphaviral replicon for delivery of therapeutic genes (IL12, TNFalpha, IFNgamma, tumor antigens...), namely for reconstruction/modelling of tumor microenvironment, vaccine purposes, enhancement of chemotherapy/check point blockade (synergy), modelling of immunotherapy in 3D multicellular cultures, and related fields. Alphaviral vectors have tumor tropism, provide efficient transient gene expression (resembling baculovirus efficiency), possess low anti-vector immunity, can transduce dendritic cells, are safe in terms of genotoxicity (RNA vector).

Furthermore, we offer ready to use blood sample biobank of Latvian population categorized in healthy and diseased samples of more than 20 000 donors, including cancer patients, and other.

Additionally, our interests cover protein engineering, large scale medium scale mammalian protein production using alphavirus expression system, bioreactors, as well as immunotherapy, vaccines related to infectious diseases, autoimmune diseases.

Recent papers:

[Generation and Functional *In Vitro* Analysis of Semliki Forest Virus Vectors Encoding TNF- \$\alpha\$ and IFN- \$\gamma\$.](#)

Kurena B, Müller E, Christopoulos PF, Johnsen IB, Stankovic B, Øynebråten I, Corthay A, **Zajakina A**. Front Immunol. 2017 Nov 30;8:1667. doi: 10.3389/fimmu.2017.01667. eCollection 2017.

PMID: 29276511

[Application of Alphaviral Vectors for Immunomodulation in Cancer Therapy.](#)

Zajakina A, Spunde K, Lundstrom K.

Curr Pharm Des. 2017;23(32):4906-4932. doi: 10.2174/1381612823666170622094715.

PMID: 28641531

[Magnetic nanoparticles for efficient cell transduction with Semliki Forest virus.](#)

Kurena B, Vežāne A, Skrastiņa D, Trofimova O, **Zajakina A**.

J Virol Methods. 2017 Jul;245:28-34. doi: 10.1016/j.jviromet.2017.03.008. Epub 2017 Mar 15.

PMID: 28315379

[Comparative protein profiling of B16 mouse melanoma cells susceptible and non-susceptible to alphavirus infection: Effect of the tumor microenvironment.](#)

Vasilevska J, De Souza GA, Stensland M, Skrastina D, Zhulenvovs D, Paplausks R, Kurena B, Kozlovska T, **Zajakina A**. Cancer Biol Ther. 2016 Aug 11:1-16. [Epub ahead of print]

PMID: 27636533