

Danylo Halytsky Lviv National Medical University

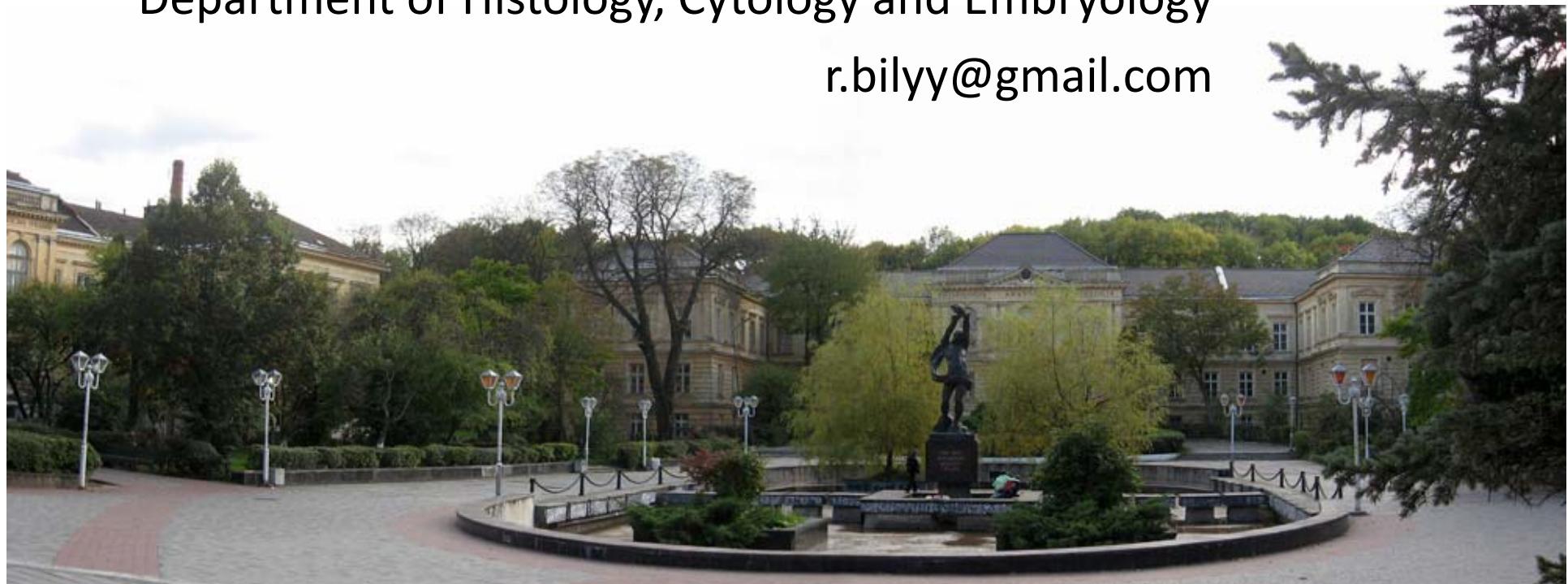


Collaboration opportunities for advanced animal research

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Danylo Halytsky Lviv National Medical University
(LNU, web site: www.meduniv.lviv.ua)

- The biggest medical university in Western Ukraine,
- ~ 19000 students, 6 Faculties, 75 departments.
- Big clinical base and research facilities.





Our expertise:

- Cell death and immune interactions
- Advanced animal research
- Micro- and nanocomposites in the immune response

Joint UA-Bavarian Projects:

1. Joint research project **“‘Smart’ amplifiers of reactive oxygen species (ROS) for treatment of inflammatory diseases and cancer”**

Friedrich-Alexander-Universität Erlangen

Prof. Dr. Andriy Mokhir

2. Volkswagenstiftung Grant 90361 **“Sugar coated killers – how immunoglobulin glycosylation modifies immunity and autoimmunity”**

Universitätsklinikum Erlangen, Medizinische Klinik 3

Klinikum der Universität München

3. Horizon 2020 project MSCA-RISE-2015, Nr. 690836 **„Pathogenes and Graphen“**

Partner -Universitätsklinikum Erlangen, Medizinische Klinik 3

Friedrich-Alexander-Universität Erlangen

Prof. Dr. Andriy Mokhir

“Smart” amplifiers of reactive oxygen species (ROS) for treatment of inflammatory diseases and cancer”

- Collaboration started in 2016 as a result of casual meeting
- No specific funding

ROS-Responsive N-Alkylaminoferrocenes for Cancer-Cell-Specific Targeting of Mitochondria.

Reshetnikov V, Daum S, Janko C, Karawacka W, Tietze R, Alexiou C, Paryzhak S, Dumych T, Bilyy R, Tripal P, Schmid B, Palmisano R, Mokhir A.

Angew Chem Int Ed Engl.

2018 Jul 23. doi: 10.1002/anie.201805955

Lysosome-Targeting Amplifiers of Reactive Oxygen Species as Anticancer Prodrugs.

Daum S, Reshetnikov MSV, Sisa M, Dumych T, Lootsik MD, Bilyy R, Bila E, Janko C, Alexiou C, Herrmann M, Sellner L, Mokhir A.

Angew Chem Int Ed Engl.

2017 Dec 4;56(49):15545-15549. doi: 10.1002/anie.201706585.



Universitätsklinikum Erlangen, Medizinische Klinik 3

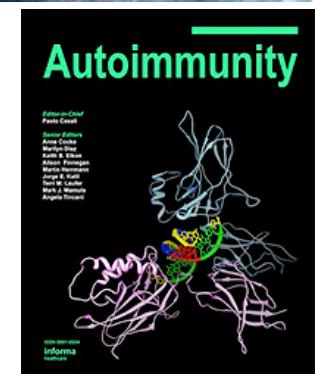
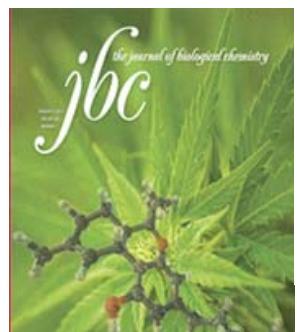
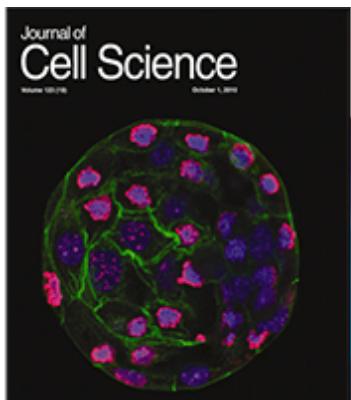
Prof. Martin Herrmann

Dr. Luis Munoz

- Acquainted in 2003 when both published the similar finding in the same journal
- Close collaboration since 2007

Joint papers in:

- Science
- Nature Medicine
- PNAS
- others



Klinikum der Universität München
Prof. Hans-Joachim Anders

- Joint VW Project
- Topic editors of special Research Topic in *Frontiers in Immunology*

[Cytotoxicity of crystals involves RIPK3-MLKL-mediated necroptosis.](#)

Mulay SR, Desai J, Kumar SV, Eberhard JN, Thomasova D, Romoli S, Grigorescu M, Kulkarni OP, Popper B, Vielhauer V, Zuchtriegel G, Reichel C, Bräsen JH, Romagnani P, Bilyy R, Munoz LE, Herrmann M, Liapis H, Krautwald S, Linkermann A, Anders HJ.

Nature Communication. 2016 Jan 28;7:10274. doi: 10.1038/ncomms10274.

[PMA and crystal-induced neutrophil extracellular trap formation involves RIPK1-RIPK3-MLKL signaling.](#)

Desai J, Kumar SV, Mulay SR, Konrad L, Romoli S, Schauer C, Herrmann M, BilyyR, Müller S, Popper B, Nakazawa D, Weidenbusch M, Thomasova D, Krautwald S, Linkermann A, Anders HJ.

Eur J Immunol. 2016 Jan;46(1):223-9. doi: 10.1002/eji.201545605. Epub 2015 Nov 30.





Nano- and Microparticle-Induced Cell Death, Inflammation and Immune Responses

f 6 10 1 1 19

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Submission closed.

Overview

18

Articles

143

Authors

Impact

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About this Research Topic

Nano- and microparticles including crystals, synthetic biomaterials, misfolded proteins or environmental particulates are involved in a wide range of biological processes and diseases. They may present as intrinsic or environmental toxins but may also be applied intentionally, e.g. as immune adjuvants, drug ...

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Recent Articles

Inert coats of magnetic nanoparticles prevent formation of occlusive intravascular co-aggregates with neutrophil extracellular traps
Rostyslav Bilyy , Harald Unterweger , Bianca Weigel , Tetiana Dumych , Solomiya Paryzhak , Volodymyr Vovk , Ziyu Liao , Christoph Alexiou , Martin Herrmann and Christina Janko

Original Research If foreign particles enter the human body, the immune system offers several mechanisms of response. Neutrophils forming the first line of the immune defense either remove pathogens by phagocytosis, inactivate them by degranulation or release of ...

Accepted on 11 September 2018
Front. Immunol. doi: 10.3389/fimmu.2018.02266

35 total views 0

Topic Editors

**Hans-Joachim Anders**

Ludwig-Maximilians-Universität München, Munich, Germany

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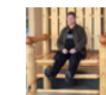
233 publications

**Shrikant R Mulay**

Ludwig-Maximilians-Universität München, Munich, Germany

[Following](#)

46 publications

**Martin Herrmann**

Universitätsklinikum Erlangen, Erlangen, Germany

[Following](#)

310 publications

**Rostyslav Bilyy**

Danylo Halytsky Lviv National Medical University, Lviv, Ukraine

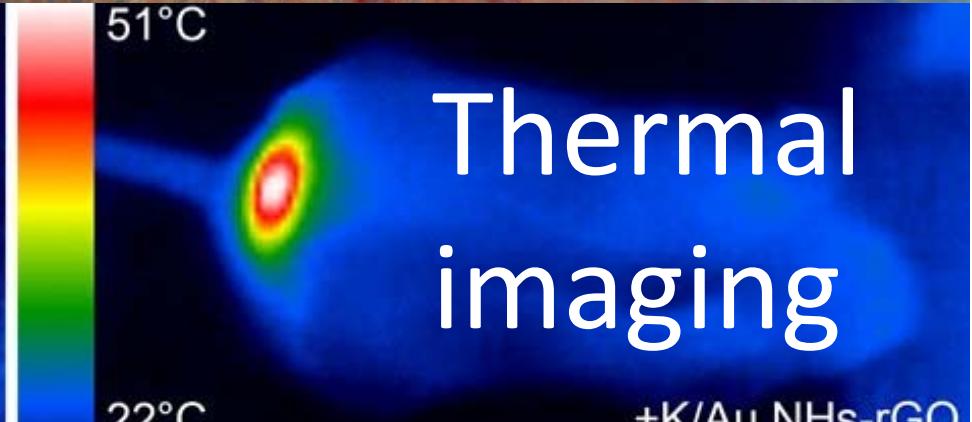
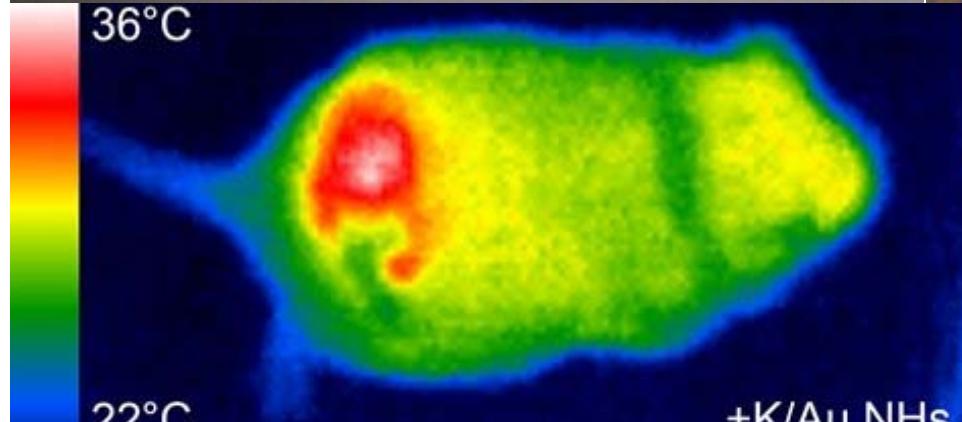
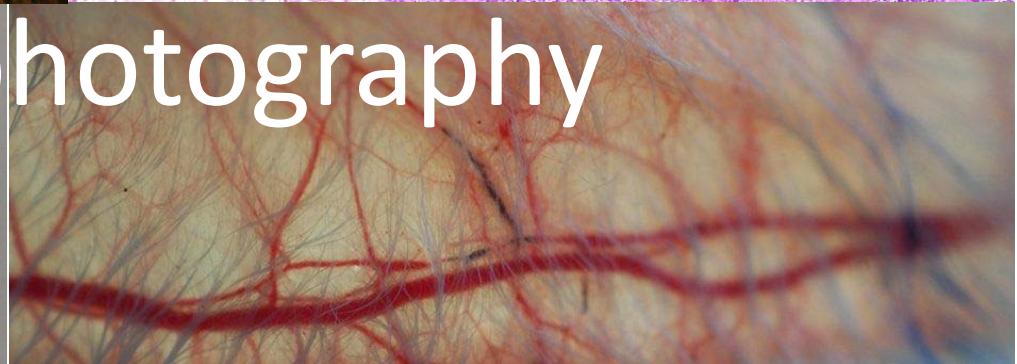
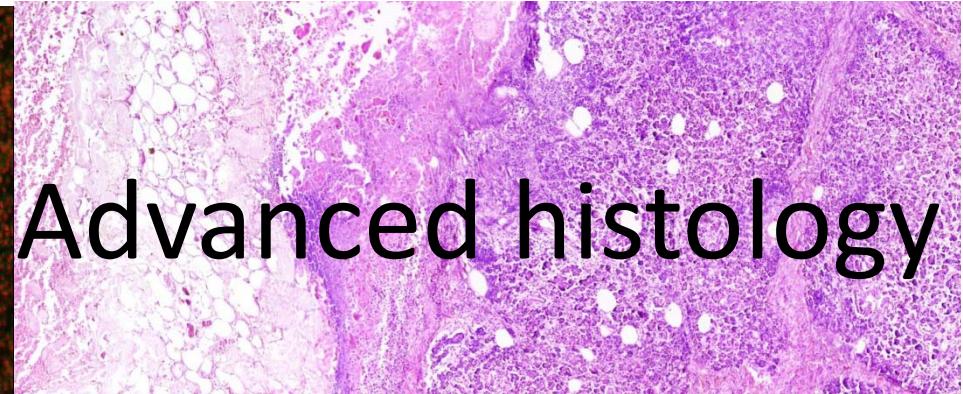
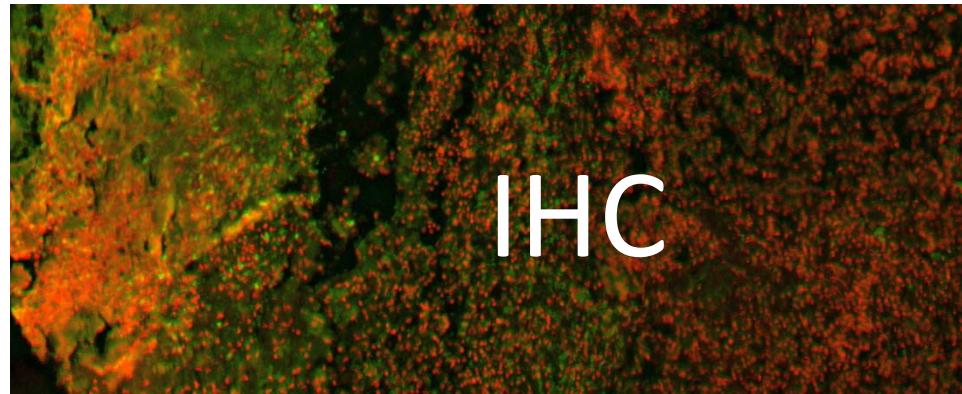
We offer collaboration opportunities for advanced animal research:

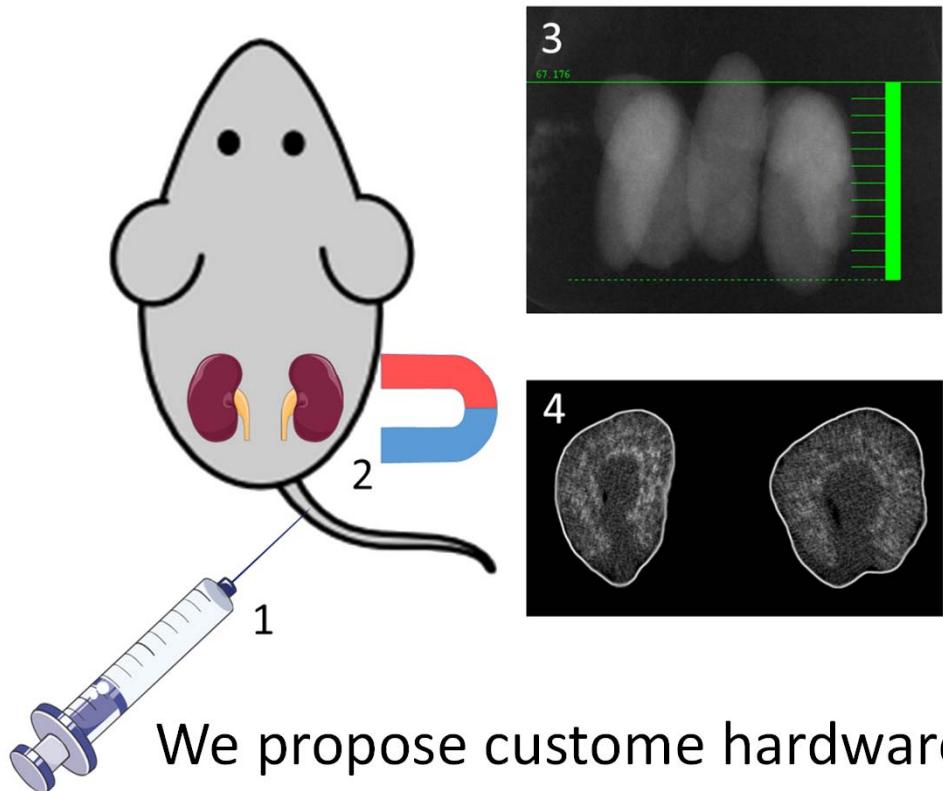
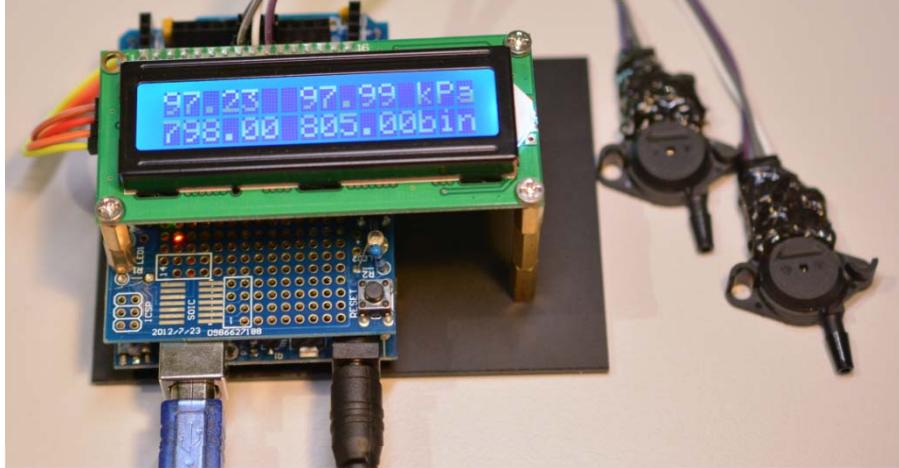
- EU Standards
- Ethical approval within 4-6 weeks
- Mice, rabbits
- Unique mice models



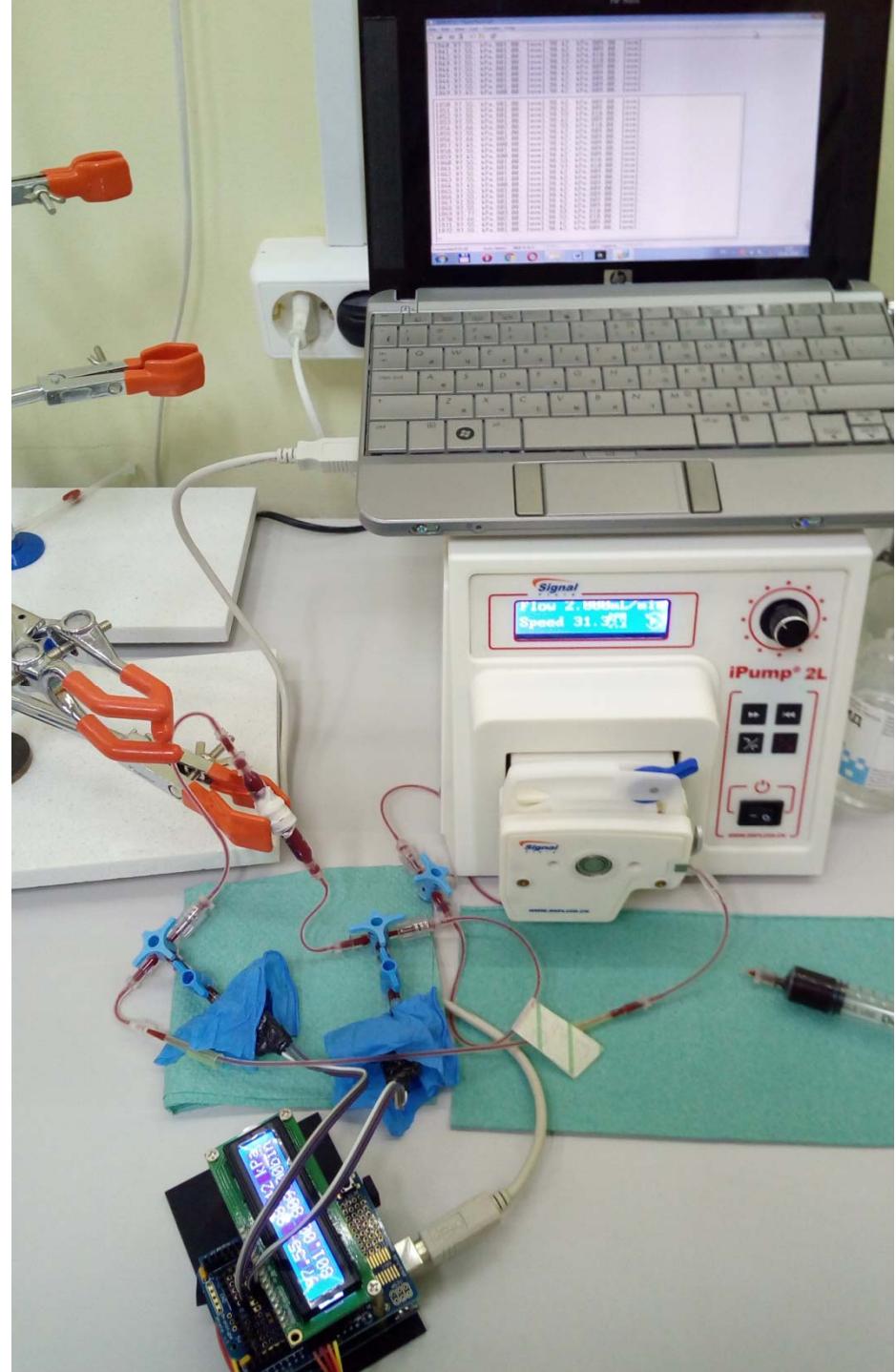
Advance mouse and rabbit models

Innate immunity: DTH, Sepsis, Skin infections,
Air pouch, others
Tumors: allogeneic and syngeneic





We propose custome hardware
solutions for most complicated
experiments!



Experience:

- **Angew Chem Int Ed Engl.** 2018 Jul 23. doi: 10.1002/anie.201805955
- **ACS Appl Mater Interfaces.** 2017;9(42).
- **Angew Chem Int Ed Engl.** 2017 Dec 4;56(49):15545-15549.
- **Proc Natl Acad Sci USA.** 2016 Oct 4;113(40):E5856-E5865.
- **Frontiers in Immunology.** 2014;5(Nov):560.
- **Scientific Reports.** 2016 Dec 5;6(1):38229.
- **RSC Advances.** 2016;6(63).
- **Cell Death Differentiation.** 2016;23(6):1016–25.
- **Eur J Immunology** 2016 Jan;46(1):223–9.
- **Nature Communications.** 2016;7:10274.
- **RSC Advances** 6 (2), 1600-1610
- **Nature Medicine.** 2014 Apr 28;20(5):511–7.
- others

We are looking for long-term collaboration in the areas of inflammation, immunity, cancer treatment and related fields.



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animal research

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r.bilyy@gmail.com