

## **Curriculum vitae**

### **Personal information**

Name: Kabanova Anna  
Date of birth: 21 November 1984  
Nationality: Russian / Italian  
Email: a.kabanova@toscanalifesciences.org  
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### **Current position**

From 07/2019-now Principal Investigator, Tumour Immunology Unit, Toscana Life Sciences Foundation, Siena

### **Previous positions**

2017 – 2019 Junior PI, lab Prof. Cosima Baldari, University of Siena, Italy  
2013 – 2019 AIRC (Italian Association for Cancer Research) postdoctoral fellow, lab Baldari, University of Siena, Italy  
2010 – 2013 Postdoctoral fellow at the laboratory of Prof. Antonio Lanzavecchia, Institute for Research in Biomedicine, Bellinzona, Switzerland  
2007 – 2010 PhD student, Vaccine Chemistry Research group, head Dr. Paolo Costantino, Novartis Vaccines Research Center, Siena, Italy

### **Education**

04/2010 Ph.D. Degree in Cellular, Molecular and Industrial Biology, University of Bologna, Italy  
06/2006 Diploma in Molecular Biology *cum laude*, State University of Novosibirsk, Russia

### **Training**

05-06/2011 Visiting scientist, Dunn School of Medicine, Oxford University  
09-12/2009 Visiting PhD student, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany

### **Funding and fellowships (individual)**

2019-2024 PI of the My First AIRC grant, € 500.000 (Italian Association for Cancer Research) Success rate 7% (18 applications funded out of 267)  
2015-2017 PI of the AIRC grant “Transforming Ideas in Oncological research”, € 100.000 Success rate 5%  
2013-2015 Triennial AIRC postdoctoral fellowship, € 65.000

### **Awards**

2018 Prize of Foundation “Carlo Chianello” (University of Palermo, Italy) for research in clinical and experimental oncology

### **Commission of Trust**

2019 Vice-chair, Young EHA committee (European Hematology Association), a panel of researchers and clinicians advocating for young hematologists in Europe (<https://ehaweb.org/youngeha/about-us/>)  
2021 Founding member, EHA taskforce of Diversity, Equity and Inclusion (<https://ehaweb.org/organization/eha-taskforce-on-diversity-equity-and-inclusion/>)

### **Organization of scientific meetings**

2020, 2021 EHA congress, organization of the Young EHA sessions and Young EHA research meeting (as a member of the Young EHA committee)

### **Supervision record**

2019 - now As PI, Federica Nardi and Anthea Di Rita (postdocs)  
2016 – 2018 As a Junior PI, Vanessa Zurli (postdoc) and Giuliana Wimmer (research assistant)  
2016 – now 8 Master students, University of Siena, University of Parma

## Reviewing

Editorial Board, *Frontiers in Immunology* (T cell biology section)  
Reviewer for *Science Immunology*, *Cancer Research*, *Nature Cellular and Molecular Immunology*, *Journal of Leukocyte Biology*, *Journal of Immunological Methods*, *Immunology Letters*, *Journal of Extracellular Vesicles*

## Invited seminars (concerning the projects lead by the applicant independently)

2018 Seminar at the Venetian Institute of Molecular Medicine, Padova, Italy  
2017 Seminar at the Department of Biomedical Sciences, University of Padova, Italy  
2016 Seminar at the German Cancer Research Center (DKFZ), Heidelberg, Germany

## Travel/congress awards

2017 Travel award for selected presentation (EMBO conference To-B or not to-B: B-cells in health and disease, Girona, Spain)  
2015 Travel award from the Italian Society in Biophysics and Molecular Biology to short-term research visit at the laboratory of Prof. Facundo Batista, the Crick Institute, London, UK  
2015 Travel award from the European Federation of Immunological Societies for selected presentation (European Immunology Congress, Wien, Austria)  
2014 Best abstract award at the "European Seminars in Virology: Intrinsic, Innate and Adaptive Immunity", Bertinoro, Italy

## Membership of scientific societies

2018 – now European Hematology Society  
2015 – now Corresponding Member, Italian Society for Immunology, Clinical Immunology and Allergy (EFIS)  
2014 – now Associate Faculty Member for Immunology, *Faculty of 1000*  
2012 – now Associate Member, Italian Society for Molecular and Cellular Biosciences (FEBS)

## Full list of peer-reviewed publications

1. Andreano E, Nicastri E, Paciello I, Pileri P, Manganaro N, Piccini G, Manenti A, Pantano E, **Kabanova A**, et al. Extremely potent human monoclonal antibodies from COVID-19 convalescent patients. *Cell*. 184(7):1821-1835.e16. doi: 10.1016/j.cell.2021.02.035 (2021)
2. Zurli V, Montecchi T, Heilig R, Poschke I, Volkmar M, Wimmer G, Boncompagni G, Turacchio G, D'Elios MM, Campoccia G, Resta N, Offringa R, Fischer R, Acuto O, Baldari CT, **Kabanova A**. "Phosphoproteomics of CD2 signaling reveals an AMPK-dependent regulation of lytic granule polarization in cytotoxic T cells"; *Science Signaling* doi: 10.1126/scisignal.aaz1965 (2020).
3. Troisi M, Andreano E, Sala C, Kabanova A, Rappuoli R. Vaccines as remedy for antimicrobial resistance and emerging infections. *Curr Opin Immunol*. 65:102-106. doi: 10.1016/j.coi.2020.09.003. Epub 2020 Oct 23 (2020).
4. Gerna G, **Kabanova A**, Lilleri D. Human Cytomegalovirus Cell Tropism and Host Cell Receptors. *Vaccines* (Basel), 7(3). doi: 10.3390/vaccines7030070 (2019) Review.
5. Finetti F, Cassioli C, Cianfanelli V, Onnis A, Paccagnini E, **Kabanova A**, Baldari CT. The intraflagellar transport protein IFT20 controls lysosome biogenesis by regulating the post-Golgi transport of acid hydrolases. *Cell Death Differ* doi: 10.1038/s41418-019-0357-y (2019).
6. Patrussi L, Capitani N, Ulivieri C, Manganaro N, Granai M, Cattaneo F, **Kabanova A**, Mundo L, Gobessi S, Frezzato F, Visentin A, Finetti F, Pelicci PG, D'Elios MM, Trentin L, Semenzato G, Leoncini L, Efremov DG, Baldari CT. p66Shc deficiency in the Eμ-TCL1 mouse model of chronic lymphocytic leukemia enhances leukemogenesis by altering the chemokine receptor landscape. *Haematologica* doi: 10.3324/haematol.2018.209981 (2019).
7. Zurli V, Wimmer G, Cattaneo F, Candi V, Cencini E, Gozzetti A, Raspadori D, Campoccia G, Sanseviero F, Bocchia M, Baldari CT, **Kabanova A**. Ectopic ILT3 controls BCR-driven activation of Akt in B-cell chronic lymphocytic leukemia. *Blood* 130(18):2006-2017 (2017).

8. **Kabanova A\***, Zurli V, Baldari CT. Signals Controlling Lytic Granule Polarization at the Cytotoxic Immune Synapse. *Front Immunol.* 20;9:307 (2018). Review. \* corresponding author.
9. **Kabanova A\***, Sanseviero F, Candi V, Gamberucci A, Gozzetti A, Campoccia G, Bocchia M, Baldari CT. Human cytotoxic T lymphocytes form dysfunctional immune synapses with B cells characterized by non-polarized lytic granule release. *Cell Reports* 15, 1-10 (2016).  
Commented in JCB Spotlight article: Ritter AT, Mellman I *J Cell Biol.* 215(6): 765–767 (2016).
10. **Kabanova A\***, Lilleri D. Analytic vaccinology: Antibody-driven design of a human cytomegalovirus subunit vaccine. *Methods Mol Biol.* 1403:167-86 (2016).
11. **Kabanova A**, Marcandalli J, Zhou T, Bianchi S, Baxa U, Tsybovsky Y, Lilleri D, Silacci-Fregni C, Foglierini M, Fernandez-Rodriguez BM, Druz A, Zhang B, Geiger R, Pagani M, Sallusto F, Kwong PD, Corti D, Lanzavecchia A, Perez L. Platelet-derived growth factor- $\alpha$  receptor is the cellular receptor for human cytomegalovirus gHgLgO trimer. *Nature Microbiology* pii: 16082. Epub 2016 Jun 6.
12. **Kabanova A**, Perez L, Lilleri D, Marcandalli J, Agatic G, Becattini S, Preite S, Fuschillo D, Percivalle E, Sallusto F, Gerna G, Corti D, Lanzavecchia A. Antibody-driven design of a human cytomegalovirus gHgLpUL128L subunit vaccine that selectively elicits potent neutralizing antibodies. *Proc Natl Acad Sci U S A.* 16;111(50):17965-70 (2014).
13. Lilleri D, **Kabanova A**, Revello MG, Percivalle E, Sarasini A, Genini E, Sallusto F, Lanzavecchia A, Corti D & Gerna G. Fetal human cytomegalovirus transmission correlates with delayed maternal antibodies to gH/gL/pUL128-130-131 complex during primary infection. *PLoS ONE* 8, e59863, (2013).
14. Lilleri D, **Kabanova A**, Lanzavecchia A & Gerna G. Antibodies against neutralization epitopes of human cytomegalovirus gH/gL/pUL128-130-131 complex and virus spreading may correlate with virus control in vivo. *J Clin Immunol* 32, 1324-1331, (2012).
15. Grossi PA, Costa AN, Fehily D, Blumberg EA, Kuehnert MJ, Fishman JA, Ison MG, Lattes R, Kotton CN, Lilleri D, **Kabanova A**, Lanzavecchia A, Gerna G, et al. Infections and organ transplantation: new challenges for prevention and treatment--a colloquium. *Transplantation* 93, S4-S39, (2012).
16. **Kabanova A**, Margarit I, Berti F, Romano MR, Grandi G, Bensi G, Chiarot E, Proietti D, Swennen E, Cappelletti E, Fontani P, Casini D, Adamo R, Pinto V, Skibinski D, Capo S, Buffi G, Gallotta M, Christ WJ, Campbell AS, Pena J, Seeberger PH, Rappuoli R & Costantino P. Evaluation of a Group A Streptococcus synthetic oligosaccharide as vaccine candidate. *Vaccine* 29, 104-114, (2010).
17. **Kabanova A**, Adamo R, Proietti D, Berti F, Tontini M, Rappuoli R & Costantino P. Preparation, characterization and immunogenicity of HIV-1 related high-mannose oligosaccharides-CRM197 glycoconjugates. *Glycoconj J* 27, 501-513, (2010).

#### Editorials/Letters

1. **Kabanova A**, Gavriilaki E, Pelzer BW, Brunetti L, Maiques-Diaz A. Effect of the COVID-19 Pandemic on Laboratory and Clinical Research: A Testimony and a Call to Action From Researchers. *Hemasphere.* 2020 Nov 24;4(6):e499. doi: 10.1097/HS9.0000000000000499.
2. Borges NM, **Kabanova A**, Scherer F. Change is Coming: Plan S From the Early Career Scientist Perspective. *Hemasphere.* 2020 Nov 17;4(6):e500. doi: 10.1097/HS9.0000000000000500.

#### Book chapters

- Kabanova A**, Rappuoli R. Diphtheria. In: Guerrant, R.L., Walker, D.H., and Weller, P. F. *Tropical Infectious Diseases: Principles, Pathogens and Practice*, 3rd edition, Elsevier Health Sciences, London (2011), p. 223-227.