

Igor MOKROUSOV, Ph.D., D.Sc.



Permanent affiliation and position:

Head, Laboratory of Molecular Epidemiology and Evolutionary Genetics (former Laboratory of Molecular Microbiology), St. Petersburg Pasteur Institute
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Birthday: May 1, 1967

Nationality: Russian

Foreign Languages: speak, read, write: English, French, Bulgarian; read: Polish, Swedish.

EDUCATION AND DEGREES

2009, Dec.	D.Sc. in Biology/Microbiology (~Docteur d'etat es sciences/HDR or Doctor Habilitatus) (D.Sc. Thesis: "Genetic diversity and evolution of <i>Mycobacterium tuberculosis</i> ", defended at Institute of Experimental Medicine, Russian Academy of Medical Sciences)
2004, Sept.	10 th International Workshop on virus evolution and molecular epidemiology (Drs A. Vandamme, M. Salemi, M. Salminen), Advanced module, KTL, Helsinki, Finland
2002, Sept.	Cours "Molecular tools and epidemiology of tuberculosis" (Director Dr V. Vincent). Institut Pasteur, Paris, France
2000, Jan-Jul.	Postdoc fellowship, Unite de Tuberculose (Dr. Nalin Rastogi), Institut Pasteur of Guadeloupe
1998, May	Workshop "PFGE typing and lysotyping of <i>C. diphtheriae</i> ", Institute Cantacuzino, Bucharest, Romania
1997, Dec.	Course "Modern methods in mycobacteriology", National Reference Mycobacterial Laboratory (Dr. Matti Viljanen), Turku, Finland.
1994	Fellowship (3 months) "Molecular typing of corynebacteria", Unite des Enterobacteries (Prof. P.A.D. Grimont), Institut Pasteur, Paris, France.
1993, June	Ph.D. in Biology/Microbiology (Ph.D. Thesis "Genetical differentiation of <i>Aureobasidium pullulans</i> fungus by PCR" (supervisors: Prof N.P. Elinov, Dr. S.A. Bulat), defended in St.Petersburg Chemical Pharmaceutical University).
1990-1993	Postgraduate Course, Laboratory of Eucaryotes' Genetics, Nuclear Physics Institute and Dept. of Microbiology, Chemical Pharmaceutical University, St.Petersburg, Russia.
1989, June	M.S. in Biotechnology, cum laude (Biotechnology Faculty, St.Petersburg Chemical Pharmaceutical University)

EMPLOYMENT:

2015-present:	Laboratory of Molecular Epidemiology and Evolutionary Genetics (former Laboratory of Molecular Microbiology, until Sept. 2016), St.Petersburg Pasteur Institute, Russia: Head of laboratory (since Dec. 1, 2015)
2010-2015:	Principal Investigator (Leading Researcher)
1994 – 2010:	Senior Researcher
1993 - 1994:	Researcher
2013, Feb; 2014, Nov	Invited Professor, Universite de Toulouse III (Paul Sabatier), AMIS laboratory
2005, 2006, 2010, 2012, 2013, 2016 (12 months)	Visiting Researcher/Professor, Beijing's Children Hospital, Capital University of Medical Sciences, Beijing, P.R. China
2007, 2008, 2009 (16 months)	Visiting Scientist/Marie Curie Fellow, Unite de la Tuberculose et des Mycobacteries, Institut Pasteur de Guadeloupe
2008 (2 months)	Visiting Scientist, Unite de Pathogenomique Mycobacterienne Integree, IP-Paris

2005, 2011 (5 months): FEMS Visiting Researcher, The Stephan Angeloff Institute of Microbiology, Bulgarian Academy of Sciences, Sofia, Bulgaria

OTHER ACTIVITIES.

Member of Steering Committee of European Society of Mycobacteriology (2018-2021)

Member of Scientific Council of St. Petersburg Pasteur Institute (2010-)

Member of High level group of Russian Ministry of Health on development of new standard of molecular epidemiological control of tuberculosis in Russia (2010-2012).

Member of International Scientific Council of The Stephan Angeloff Institute of Microbiology, Sofia, Bulgaria (2011-2013, 2017-2020).

EDITOR: PLoS ONE (Academic Editor since Dec. 2008: 262 articles); BMC Microbiology (Associate Editor since Dec. 2009 to Jan. 2014: 58 articles; Section Editor since Jan. 2014: 306 articles); Infection, Genetics and Evolution (Editor since Aug. 2010: 273 articles – as of Jan. 2018).

Guest Editor of “Special Issue on Molecular evolution, epidemiology and pathogenesis of *Mycobacterium tuberculosis* and other mycobacteria” published by Infection Genetics and Evolution (issue #4/June, 2012):

<http://www.sciencedirect.com/science/journal/15671348/12/4>

International Journal of Mycobacteriology (Elsevier): Editorial Board member – since 2015.

Biomedical and Biotechnology Research Journal (Wolters Kluwer): Editorial Board member – since 2016.

Acta Microbiologica Bulgarica (Union of Scientists in Bulgaria): Editorial Board member – since 2015

Pediatric Investigations (Wiley): Editorial Board member – since 2016

Russian Journal of Infection and Immunity: Deputy Editor in Chief (since 2015)

REVIEWER: PNAS, Lancet Infectious Diseases, Clinical Microbiology Reviews, Journal of Bacteriology, Journal of Clinical Microbiology, Emerging Infectious Diseases, Molecular Ecology, Antimicrobial Agents and Chemotherapy, Journal of Antimicrobial Chemotherapy, Journal of Infectious Diseases, Microbiology, Journal of Theoretical Biology, Clinical Microbiology and Infection, FEMS Microbiology Letters, Tuberculosis, Infection Genetics and Evolution, Clinical Infectious Diseases, Journal of Medical Microbiology, International Journal of Tuberculosis and Lung Diseases, Clinical Chemistry, International Journal of Infectious Diseases, BMC Microbiology/ Evolutionary Biology/Infectious Diseases/Pulmonary Medicine/ Pediatrics, PLOS.

EXPERT: Russian Academy of Sciences, Russian Science Foundation, Wellcome Trust (UK), Medical Research Council England, European Respiratory Society, ANR-France, PTR program of Institut Pasteur Paris, AFSSA-France, Medical Research Scotland, Medical Research Council South Africa, National Research Foundation South Africa, FONDECYT Chile (National Fund for Scientific and Technological Development); Czech Science Foundation (GAČR), National Science Center (Poland), Fonds National de la Recherche (Luxembourg), National Centre of Science and Technology evaluation (Kazakhstan). The Joint Programming Initiative on Antimicrobial Resistance (JPIAMR)

AWARDS

1997, 1999, 2002 ESCMID Travel grants to attend ECCMID Congresses

2004, Annual Scientific Prize of the International Union Against Tuberculosis and Lung Disease

2005, 2009, 2013, Honor Awards from Russian Ministry of Health

2008-2009, Marie Curie Fellow (Institut Pasteur de Guadeloupe)

2012, Honor Award from Russian Federal Sanitary and Epidemiological Service

PROJECTS (since 2006)

–NATO Science for Peace program, project SFP-982319 «Detect Drug-Resistant TB», 2006-2010 (with Institut Pasteur of Guadeloupe/France and Institute of Microbiology, Bulgaria);

- Marie Curie International Fellowship to Igor Mokrousov from European Commission MIF1-CT-2007-039389 "Multidrug-resistant and hypervirulent tuberculosis: integral approach to rapid detection and evolution", 12-months research project done in Pasteur Institute of Guadeloupe in 2008-2009.

– Joint Russian Foundation for Basic Research and National Science Foundation of China project №11-04-91172 «Interaction and co-adaptation of human and *Mycobacterium tuberculosis* populations at genetic level», 2011-2012. (with Beijing Children's Hospital);

– European Union FP7 program FP7-HEALTH-2010-single-stage, project #261378 «Open Collaborative Model for Tuberculosis Lead Optimisation», 2011-2015. (consortium of 12 partners, coordinated by GSK-Spain);

– Project supported by Russian Ministry of Science “Development of express method to detect major Russian M. tuberculosis MDR/XDR genotypes”, 2012-2013. (consortium coordinated by Institute of Physico-Chemical Medicine, Moscow);

– Russian Foundation for Basic Research project 13-04-91445 «Driving forces of HIV/MDR-TB epidemics: role of *Mycobacterium tuberculosis* genotypes and changes in the pharmacokinetics of antiretroviral and anti-tuberculosis drugs in patients of East Siberia», 2013-2014. (coordinated by Scientific Centre for Family Health and Human Reproduction Problems (Irkutsk, Russia), project PI - Dr Ogarkov)

- Russian Science Foundation Project 14-15-00689 «Specific features of proteins expressed by *Mycobacterium tuberculosis* Beijing B0 cluster in vitro and in vivo» (coordinated by Institute of Physico-Chemical Medicine, Moscow), 2014-2016.
- Russian Foundation for Basic Research project №17-54-30020 «A personalized approach to fight the HIV and drug resistant TB epidemic in Irkutsk, Siberia» (coordinated by Scientific Centre for Family Health and Human Reproduction Problems, Irkutsk, Russia; project PI - Dr Ogarkov). 2017-2019.
- Russian Science Foundation Project #14-14-00292 «Evolution of pathogenetic potential of phylogenetic lineages of *Mycobacterium tuberculosis*», 2014-2015 (PI – Dr Mokrousov). New grant received for extention in 2017-2018.
- Russian Foundation for Basic Research project 17-04-00367 "Population of *Mycobacterium tuberculosis* in the Western Siberia region: current molecular epidemiology in the context of macroevolutionary reconstruction" (PI – Dr Mokrousov) 2017-2018.
- Russian Foundation for Basic Research project 18-04-01035 "Investigation of the role of the repeat element IS6110 in the micro- and macroevolution of *Mycobacterium tuberculosis* phylogenetic lineage 2" (PI - E. Shitikov, Center of Physico-Chemical Medicine, Moscow), 2018-2019

Projects before 2006: International projects: Leading scientist in the projects funded by:

ACIP (1996-98), French Academy of Sciences (2000-2001), INTAS, IAEA (1999-2002).

TEACHING. International Workshop ‘Methods for DNA fingerprinting and genotypic detection of drug resistance of *Mycobacterium tuberculosis*’. The Stephan Angeloff Institute of Microbiology, Sofia, 25-31/10/2004

MEMBERSHIP in scientific societies: Russian Society of Epidemiologists and Microbiologists, Russian Association for Clinical Microbiology and Antimicrobial Chemotherapy (FEMS associated member), European Society of Mycobacteriology, International Union Against Tuberculosis and Lung Disease (member CU-0643622), American Society for Microbiology.

PATENTS.

1. Patent RU 2287586 (Mokrousov I, Otten T, Narvskaia O, Vishnevsky B. Method of genotypic detection of rifampin resistant *Mycobacterium tuberculosis*). Priority: 27.05.2003, registered in State Register of Inventions of Russian Federation: 20.11.2006.
2. Patent RU 2339040 (Mokrousov I, Otten T, Narvskaia O, Vishnevsky B. Method of genotypic detection of isoniazid resistant *Mycobacterium tuberculosis*). Priority: 08.02.2006, registered in State Register of Inventions of Russian Federation: 20.11.2008.
3. Patent RU 2405836 (Mokrousov I, Narvskaia O, Vyazovaya A., Otten T, Vishnevsky B. Method of genotypic detection of *Mycobacterium tuberculosis* Beijing genotype strain). Priority 12.05.2008, registered in State Register of Inventions of Russian Federation: 10.12.2010.
4. Patent RU 2528866 (Mokrousov I., Vyazovaya A., Otten T., Vishnevsky B., Rastogi N., Narvskaia O., Method of detection of *Mycobacterium tuberculosis* Beijing genotype by real-time PCR). Priority 15.07.2011, registered in State Register of Inventions of Russian Federation: 25.07.2014.
5. Patent pending (Mokrousov I., Vyazovaya A., Zhuravlev V., Solovieva N., Vishnevsky B., Narvskaia O., Method of detection of *Mycobacterium tuberculosis* Beijing genotype B0-cluster by real-time PCR). Priority: №2017123302 of 30.06.2017..
6. Patent pending (Mokrousov I., Vyazovaya A., Chernyaeva E., Solovieva N., Narvskaia O., Zhuravlev V., Method of detection of *Mycobacterium tuberculosis* Beijing genotype 94-32-cluster by real-time PCR). Priority: №2017142885 of 11.12.2017.
7. Patent pending (Mokrousov I., Vyazovaya A., Solovieva N., Mushkin A.Y., Vishnevsky B.I., Narvskaia O., Zhuravlev V., Method of detection of *Mycobacterium bovis* BCG strains by real-time PCR). Priority: №2018120630 of 06.06.2018.

RESEARCH INTERESTS

- *In silico* and experimental analysis of bacterial genomes, search for location and function of tandem and interspersed repeats; insertion sequences; development of molecular methods for subtyping bacterial species (*Mycobacterium tuberculosis*, *Corynebacterium diphtheriae*).
- Molecular basis of drug resistance and development of genotypic tools for its detection (*Mycobacterium tuberculosis*).
- Molecular epidemiology and diagnostics of bacterial infections.
- Molecular phylogenetics and evolution of microorganisms
- Human phylogeography, co-evolution of *H. sapiens* and *M. tuberculosis*
- Genetic basis of human susceptibility to tuberculosis

PUBLICATIONS (July 12, 2018)

137 articles in Pubmed/ISI indexed journals (103, English [67 – first and/or corresponding author]; and 34, Russian); 10 chapters in 8 books (English).

Hirsch index = 34 (WoS, Scopus)

Number of citations: : 3592 (Web of Science core collection), 3977 (Scopus, (25.0.5.2018)

Recent and main publications (*-corresponding author).

Mokrousov I. On sunspots, click science and molecular iconography. *Tuberculosis (Edinb.)* **2018**; 110: 91-95

Vyazovaya A., Levina K., Zhuravlev V., Viiklepp P., Kütt M., Mokrousov I.*. **2018**. Emerging resistant clones of *Mycobacterium tuberculosis* in spatiotemporal context. *Journal of Antimicrobial Chemotherapy*. 2018; 73(2):325-331. IF 5.1

Mokrousov I.*, Chernyaeva E., Vyazovaya A., Skiba Y., Solovieva N., Valcheva V., Levina K., Malakhova N., Jiao W.W., Gomes L.L., Suffys P.N., Kütt M., Aitkhozhina N., Shen A.D., Narvskaya O., Zhuravlev V. **2018**. A rapid assay for detection of the epidemiologically important Central Asian/Russian strain of the *Mycobacterium tuberculosis* Beijing genotype. *Journal of Clinical Microbiology*. 2018; 56(2). pii: e01551-17.

Pasechnik O., Vyazovaya A., Vitriv S., Tatarintseva M., Blokh A., Stasenko V., Mokrousov I.*. **2018**. Major genotype families and epidemic clones of *Mycobacterium tuberculosis* in Omsk region, Western Siberia, Russia, marked by a high burden of tuberculosis-HIV coinfection. *Tuberculosis (Edinb.)*. 108: 163–168.

Mokrousov I.*, Shitikov E., Skiba Y., Kolchenko S., Chernyaeva E., Vyazovaya A. **2017**. Emerging peak on the phylogeographic landscape of *Mycobacterium tuberculosis* in West Asia: Definitely smoke, likely fire. *Molecular Phylogenetics and Evolution* 2017. 116:202-212 IF 4.4

Ioannidis P., van Soolingen D., Mokrousov I.*, Papaventis D., Karabela S., Konstantinidou E., Marinou I., Nikolaou S., Kanavaki S., Mantadakis E., Samonis G., Anthony R., Vogiatzakis E. **2017**. MDR/XDR tuberculosis in Greece: predominance of *Mycobacterium tuberculosis* genotypes endemic in the Former Soviet Union countries. *Clinical Microbiology and Infection*. 23(12): 1002-1004. IF 5.3

Mokrousov I. Revisiting the Hunter Gaston discriminatory index: Note of caution and courses of change. **2017**. *Tuberculosis (Edinb.)* 104: 20-23.

Li QJ, Jiao WW, Yin QQ, Li YJ, Li JQ, Xu F, Sun L, Xiao J, Qi H, Wang T, Mokrousov I*, Huang HR, Shen AD. **2017**. Positive epistasis of major low-cost drug resistance mutations rpoB531-TTG and katG315-ACC depends on phylogenetic background of *M. tuberculosis* strain. *International Journal of Antimicrobial Agents*. 49:757-762. IF 4.1

Mokrousov I. **2016**. Emerging resistant clone of *Mycobacterium tuberculosis* in West Asia. *Lancet Infect Dis*. 16 (12): 1326-1327. IF 21.37

Yin QQ, Liu HC, Jiao WW, Li QJ, Han R, Tian JL, Liu ZG, Zhao XQ, Li YJ, Wan KL*, Shen AD*, Mokrousov I.*. **2016**. Evolutionary History and Ongoing Transmission of Phylogenetic Sublineages of *Mycobacterium tuberculosis* Beijing Genotype in China. *Sci Rep*. 6:34353. IF 5.22

Mokrousov I.*, E. Chernyaeva, A. Vyazovaya, V. Sinkov, V. Zhuravlev , O. Narvskaya. **2016**. Next generation sequencing of *Mycobacterium tuberculosis*. *Emerg Infect Dis*. 22(6):1127-9. IF 6.99.

Mokrousov I*, Vyazovaya A., Iwamoto T., Skiba Y., Pole I., Zhdanova S., Arikawa K., Sinkov V., Umpeleva T., Valcheva V., Alvarez Figueroa M., Ranka R., Jansone I., Ogarkov O., Zhuravlev V., Narvskaya O. **2016**. Latin-American-Mediterranean lineage of *Mycobacterium tuberculosis*: Human traces across pathogen's phylogeography. *Mol Phylogenet Evol*. 99:133-143. IF 3.92

Mokrousov I.*, Vyazovaya I., Solovieva N., Sunchalina T., Markelov Y., Chernyaeva E., Melnikova N., Dogonadze M., Starkova D., Vasilieva N., Gerasimova A., Kononenko Y., Zhuravlev V., Narvskaya O. **2015**. Trends in molecular epidemiology of drug-resistant tuberculosis in Republic of Karelia, Russian Federation. *BMC Microbiology*. 15:279. doi: 10.1186/s12866-015-0613-3.

Mokrousov I*, Rastogi N. **2015**. Spacer-Based Macroarrays for CRISPR Genotyping. Chapter in "CRISPR: Methods and Protocols" (Eds. Lundgren M. et al.) Springer/Humana Press. *Methods Mol Biol*. 1311:111-131.

Skiba Y.*, Mokrousov I.*, Ismagulova G., Maltseva E., Yurkevich N., Bismilda V., Chingissova L., Abildaev T., Aitkhozhina N. **2015**. Molecular snapshot of *Mycobacterium tuberculosis* population in Kazakhstan: a country-wide study. *Tuberculosis*. 95(5):538-46doi:10.1016/j.tube.2015.04.012.

Mokrousov I.*. **2015**. *Mycobacterium tuberculosis* phylogeography in the context of human migration and pathogen's pathobiology: insights from Beijing and Ural families. *Tuberculosis (Edinb.)*. 95 Suppl 1:S167-76.

Vyazovaya A*, Mokrousov I*, Solovieva N., Mushkin A., Manicheva O., Vishnevsky B., Zhuravlev V., Narvskaya O. **2015**. Tuberculous spondylitis in Russia and prominent role of multidrug-resistant clone *Mycobacterium tuberculosis* Beijing B0/W148. *Antimicrob. Agents Chemother*. 59(4):2349-2357. IF 4.5

Merker M., Blin C., Mona S., Duforet-Frebourg N., Lecher S., Willery E., Blum M., Rüsch-Gerdes S., Mokrousov I, Beijing genotype study group, Supply P., Niemann S., Wirth T. **2015**. Evolutionary history and global spread of the *Mycobacterium tuberculosis* Beijing lineage. *Nat Genet*. 47(3):242-9. IF 29.6

Mokrousov I. **2014**. Resolution threshold of current molecular epidemiology of diphtheria. *Emerg Infect Dis*. 20: 1937-1938. IF 7.3.

Mokrousov I*, Jiao WW, Wan K, Shen A. **2014**. Stranger in a strange land: Ibero-American strain of *Mycobacterium tuberculosis* in Tibet, China. *Infect. Genet. Evol*. 26: 323-326.

Mokrousov I. 2014. Widely-used laboratory and clinical *Mycobacterium tuberculosis* strains: to what extent they are representative of their phylogenetic lineages? *Tuberculosis (Edinb.)* 94: 355-356.

- Mokrousov I.*¹, Vyazovaya A., Narvskaya O. **2014**. Mycobacterium tuberculosis Latin-American Mediterranean family and its sublineages: in the light of evolutionary robust markers. *J. Bacteriol.* 196(10):1833-1841.
- Mokrousov I.*¹, Vyazovaya A., Zhuravlev V., Otten T., Millet J., Jiao WW., Shen AD., Rastogi N., Vishnevsky B., Narvskaya O. **2014**. Real-time PCR assay for rapid detection of epidemiologically and clinically significant Mycobacterium tuberculosis Beijing genotype. *J Clin Microbiol.* 52(5):1691-1693.
- Dabernat H., Thèves C., Bouakaze C., Nikolaeva D., Keyser C., Mokrousov I., Géraut A., Duchesne S., Gérard P., Alexeev A.N., Crubézy E., Ludes B. **2014**. Tuberculosis epidemiology and selection in an autochthonous Siberian population from the 16th-19th century. *PLoS One.* 9(2):e89877.
- Allix-Béguec C., Wahl C., Hanekom M., Nikolayevskyy V., Drobniowski F., Maeda S., Campos-Herrero I., Mokrousov I., Niemann S., Kontsevaya I., Rastogi N., Samper S., Sng L.H., Warren RM., Supply P. **2014**. Proposal of a consensus set of hypervariable mycobacterial interspersed repetitive-unit-variable-number tandem-repeat loci for subtyping of Mycobacterium tuberculosis Beijing isolates. *J. Clin. Microbiol.* 52(1):164-72.
- Mokrousov I.*¹, Isakova J., Valcheva V., Aldashev A., Rastogi N. **2013**. Molecular snapshot of *M. tuberculosis* population structure and drug-resistance in Kyrgyzstan. *Tuberculosis (Edinb.)* 93: 501-507.
- Mokrousov I. **2013**. Insights into the origin, emergence, and current spread of a successful Russian clone of *Mycobacterium tuberculosis*. *Clin Microbiol Rev.* 26(2):342-360. IF 17.3
- Mokrousov I. **2013**. *Corynebacterium diphtheriae*. In: *Molecular Typing of Bacterial Infections* (Eds. M. McKee and I. de Fillipis). Springer/Humana Press. DOI 10.1007/978-1-62703-185-1_17. pp. 283-300.
- Mokrousov I.*¹, Narvskaya O., Vyazovaya A., Otten T., Jiao WW., Gomes LL., Suffys PN., Shen AD., Vishnevsky B. **2012**. Russian ‘successful’ clone B0/W148 of *Mycobacterium tuberculosis* Beijing genotype: multiplex PCR assay for rapid detection and global screening. *J Clin Microbiol.* 50(11):3757-9.
- Mokrousov I.*¹, Vyazovaya A., Otten T., Zhuravlev V., Pavlova E., Tarashkevich L., Krishevich V., Vishnevsky B., Narvskaya O. **2012**. *Mycobacterium tuberculosis* population in northwestern Russia: an update from Russian-EU/Latvian border region. *PLoS One.* 7(7): e41318. doi:10.1371/journal.pone.0041318.
- Mokrousov I. **2012**. Human migratory history: Through the looking-glass of genetic geography of *Mycobacterium tuberculosis*. In: *Causes and Consequences of Human Migration* (Eds. M.H. Crawford and B. Campbell). Cambridge University Press. pp. 317-341.
- Mokrousov I.*¹, Niemann S., Rastogi N. **2012**. Editorial: Special Issue on Molecular evolution, epidemiology and pathogenesis of *Mycobacterium tuberculosis* and other mycobacteria. *Infect. Genet. Evol.* 12: 601.
- Ogarkov O., Mokrousov I., Sinkov V., Zhdanova S., Antipina S., Savilov E. **2012**. 'Lethal' combination of *Mycobacterium tuberculosis* Beijing genotype and human CD209 -336G allele in Russian male population. *Infect. Genet. Evol.* 12: 732-736.
- Mokrousov I. **2012**. The quiet and controversial: Ural family of *Mycobacterium tuberculosis*. *Infect. Genet. Evol.* 12: 619-629.
- Mokrousov I. **2012**. Designation of subtypes of *Mycobacterium tuberculosis* Beijing family: an issue of priority. *APMIS.* 120: 167-168.
- Mokrousov I.*¹, Wu X.R., Vyazovaya A., Feng WX., Sun L., Xiao J., Miao Q., Jiao WW., Shen A. **2011**. Polymorphism of 3'UTR region of TNFR2 coding gene and its role in clinical tuberculosis in Han Chinese pediatric population. *Infect Genet Evol.* 11: 1312-1318.
- Garcia de Viedma D., Mokrousov I., Rastogi N. **2011**. Innovations in the molecular epidemiology of tuberculosis. *Enferm Infec Microbiol Clin.* 29 (Suppl 1): 8-13.
- Feng WX., Mokrousov I.*¹, Wang B., Nelson H., Jiao WW., Wang J., Sun L., Zhou S., Xiao J., Gu Y., Wu XR., Ma X., Shen A. **2011**. Tag SNP polymorphism of *CCL2* and its role in clinical tuberculosis in Han Chinese pediatric population. *PLoS One.* 6(2): e14652.
- Mokrousov I.*¹, Vyazovaya A., Potapova Y., Vishnevsky B., Otten T., Narvskaya O. **2010**. *Mycobacterium bovis* BCG-Russia clinical isolate with non-canonical spoligotyping profile. *J Clin Microbiol.* 48: 4686-4687.
- Lasunskaja E., Ribeiro SC., Manicheva O., Gomes LL., Suffys PN., Mokrousov I., Ferrazoli L., Andrade MR., Kritski A., Otten T., Kipnis TL., da Silva WD., Vishnevsky B., Gomes HM., Baptista IF., Narvskaya O. **2010**. Emerging multi-drug resistant *Mycobacterium tuberculosis* strains of the Beijing genotype circulating in Russia express a pattern of biological properties associated with enhanced virulence. *Microbes Infect.* 12: 467-475.
- Valcheva V., Mokrousov I.*¹, Panaiotov S., Bachisika E., Zozio T., Sola C., Markova N., Rastogi N. **2010**. Bulgarian specificity and controversial phylogeography of *Mycobacterium tuberculosis* spoligotype ST125_BGR. *FEMS Immunol Clin Microbiol.* 59: 90-99.
- Mokrousov I.*¹, Valcheva V., Sovhozova N., Aldashev A., Rastogi N., Isakova J*. **2009**. Penitentiary population of *Mycobacterium tuberculosis* in Kyrgyzstan: Exceptionally high prevalence of the Beijing genotype and its Russia-specific subtype. *Infect. Genet. Evol.* 9: 1400-1405.
- Mokrousov I.*¹, Vyazovaya A., Kolodkina V., Limeschenko E., Titov L., Narvskaya O. **2009**. Novel macroarray-based method of *Corynebacterium diphtheriae* genotyping: evaluation in a field study in Belarus. *Eur J Clin Microbiol Infect Dis.* 28: 701-703.
- Mokrousov I.*¹, Otten T., Zozio T., Turkin E., Nazemtseva V., Sheremet A., Vishnevsky B., Narvskaya O., Rastogi N. **2009**. At Baltic crossroads: a molecular snapshot of *Mycobacterium tuberculosis* population diversity in Kaliningrad, Russia. *FEMS Immunol Med Microbiol.* 55: 13-22.
- Mokrousov I., **2009**. *Corynebacterium diphtheriae*: Genome diversity, population structure and genotyping perspectives (review). *Infect Genet Evol.* 9: 1-15.

- Mokrousov I.*, Narvskaia O., Vyazovaya A., Millet J., Otten T., Vishnevsky B., Rastogi N.* **2008.** *Mycobacterium tuberculosis* Beijing genotype in Russia: in search of informative VNTR loci. *J Clin Microbiol.* 46: 3576-3584.
- Mokrousov I. **2008.** Genetic geography of *Mycobacterium tuberculosis* Beijing genotype: A multifacet mirror of human history? *Infect Genet Evol.* 8: 777-785.
- Mokrousov, I., **2008.** CRISPR loci in *Corynebacterium diphtheriae*: *in silico* analysis and insights into their origin, evolution and function. In: DNA Transposable Elements Research (eds. Yoshida K., Aoki M.). Nova Science Publishers, Inc. New York. pp. 167-179.
- Mokrousov I.*, Otten T., Manicheva O., Potapova Y., Vishnevsky B., Narvskaia O., Rastogi N.* **2008.** Molecular characterization of ofloxacin-resistant *Mycobacterium tuberculosis* strains from Russia. *Antimicrob Agents Chemother.* 52: 2937-2939.
- Mokrousov I.*, N. Sapozhnikova and O. Narvskaia. **2008.** *Mycobacterium tuberculosis* co-existence with humans: making an imprint on the macrophage P2X7 receptor gene? *J Med Microbiol.* 57: 581-584
- Mokrousov I.*, Narvskaia O. **2007.** Designation of major MIRU types within *Mycobacterium tuberculosis* Beijing genotype, an important point [letter]. *J Clin Microbiol.* 45:4092
- Mokrousov I. **2007.** Towards a quantitative perception of human-microbial co-evolution. *Front Biosci.* 12: 4818-4825.
- Mokrousov I.*, Limeschenko E., Vyazvaya A., Narvskaia O. **2007.** *Corynebacterium diphtheriae* spoligotyping based on combined use of two CRISPR loci. *Biotechnol J.* 2: 901-906.
- Mokrousov I*, Jiao WW, Sun GZ, Liu JW, Valcheva V, Li M, Narvskaia O, Shen AD*. **2006.** Evolution of drug resistance in different sub-lineages within *Mycobacterium tuberculosis* Beijing genotype. *Antimicrob Agents Chemother* 50: 2820-2823.
- Mokrousov I*, Jiao WW, Sun GZ, Liu JW, Li M, Narvskaia O, Shen AD*. **2006.** Evaluation of the *rpoB* macroarray assay to detect rifampin resistance in *Mycobacterium tuberculosis* in Beijing, China. *Eur J Clin Microbiol Infect Dis.* 25:703-710.
- Mokrousov I*, Jiao WW, Valcheva V, Vyazovaya A, Otten T, Ly HM, Lan NN, Limeschenko E, Markova N, Vyshnevskiy B, Shen AD, Narvskaia O. **2006.** Rapid detection of the *Mycobacterium tuberculosis* Beijing genotype and its ancient and modern sub-lineages by IS6110-based inverse PCR. *J Clin Microbiol.* 44:2851-2856.
- Mokrousov I. **2006.** *Mycobacterium tuberculosis* Beijing genotype and MIRU typing. *J Clin Microbiol.* 44: 1614.
- Mokrousov I.*, H.M. Ly, T. Otten, N.N. Lan, B. Vyshnevskiy, S. Hoffner, O. Narvskaia. **2005.** Origin and primary dispersal of the *Mycobacterium tuberculosis* Beijing genotype: clues from human phylogeography. *Genome Res.* 15: 1357-1364. IF 10.2
- Mokrousov I.*, T. Otten, B. Vishnevsky, O. Narvskaia. **2005.** Molecular basis of anti-tuberculosis drug resistance and its genotypic detection in Russia. In: *Trends in DNA fingerprinting research* (ed. M.M. Read). Nova Science Publishers, Inc. New York. pp. 83-109.
- Mokrousov I.*, O. Narvskaia*, E. Limeschenko, A. Vyazovaya. **2005.** Efficient discrimination within *Corynebacterium diphtheriae* epidemic clone by the novel macroarray-based method. *J. Clin Microbiol.* 43: 1662-1668.
- Mokrousov I. **2004.** Multiple *rpoB* mutants of *Mycobacterium tuberculosis* and second-order selection of hypermutable alleles. *Emerg. Infect. Dis.* 10: 1337-1338.
- Mokrousov I.*, O. Narvskaia, E. Limeschenko, A. Vyazovaya, T. Otten, B. Vyshnevskiy. **2004.** Analysis of the allelic diversity of the mycobacterial interspersed repetitive units in *Mycobacterium tuberculosis* strains of the Beijing family: practical implications and evolutionary considerations. *J. Clin. Microbiol.* 42: 2438-2444.
- Mokrousov I.* N.V. Bhanu, P. N. Suffys, G. V. Kadival, S.-F. Yap, S.-N. Cho, A. M. Jordaan, O. Narvskaia, U. B. Singh, H. M. Gomes, H. Lee, S. P. Kulkarni, K.-C. Lim, B. K. Khan, D. van Soolingen, T. C. Victor, L. M. Schouls. **2004.** Multicenter evaluation of reverse line blot assay for detection of drug resistance in *Mycobacterium tuberculosis* clinical isolates. *J Microbiol Meth.* 57: 323-335.
- Mokrousov I.*, T. Otten, B. Vishnevsky, O. Narvskaia. **2003.** Allele-specific *rpoB*-PCR assay to detect rifampin resistant *Mycobacterium tuberculosis* in sputum smears. *Antimicrob. Agents Chemother.* 47: 2231-2235.
- Mokrousov I.*, T. Otten, A. Vyazovaya, E. Limeschenko, M. Filipenko, C. Sola, N. Rastogi, L. Steklova, B. Vishnevskiy, O. Narvskaia. **2003.** PCR based methodology for detecting multi-drug resistant strains of *Mycobacterium tuberculosis* Beijing family circulating in Russia. *Eur. J. Clin. Microbiol. Infect. Dis.* 22: 342-348.
- Mokrousov I.*, Narvskaia O., Otten T., Vyazovaya A., Limeschenko E., Steklova L., Vyshnevskiy B. **2002.** Phylogenetic reconstruction within *M. tuberculosis* Beijing genotype in northwest Russia. *Res. Microbiol.* 153: 629-637.
- Mokrousov I.*, Otten T., Vyshnevskiy B., Narvskaia O. **2002.** Detection of *embB306* Mutations in ethambutol-susceptible *Mycobacterium tuberculosis* clinical isolates from northwestern Russia: implications for genotypic resistance testing. *J. Clin. Microbiol.* 40: 3810-3813.
- Mokrousov I.*, Otten T., Filipenko M., Vyazovaya A., Chrapov E., Limeschenko E., Steklova L., Vyshnevskiy B., Narvskaia O. **2002.** Detection of isoniazid-resistant *M. tuberculosis* strains by multiplex allele-specific PCR assay targeting *katG* codon 315 variation. *J. Clin. Microbiol.* 40: 2509-2512.
- Mokrousov I.*, Narvskaia O., Limeschenko E., Otten T., Vyshnevskiy B. **2002.** Detection of ethambutol resistant *Mycobacterium tuberculosis* strains by multiplex allele-specific PCR assay targeting *embB306* mutations. *J. Clin. Microbiol.* 40: 1617-1620.
- Mokrousov I.*, Narvskaia O., Otten T., Limeschenko E., Steklova L., Vyshnevskiy B. **2002.** High prevalence of KatG Ser315Thr substitution among isoniazid-resistant *Mycobacterium tuberculosis* clinical isolates from northwestern Russia, 1996-2001. *Antimicrob. Agents Chemother.* 46: 1417-1424

- Mokrousov I.*, Narvkaya O., Limeschenko E., Otten T., Vyshnevskyi B. **2002**. Novel IS6110 insertion sites in the direct repeat locus of *Mycobacterium tuberculosis* clinical strains from the St. Petersburg area of Russia, and evolutionary and epidemiological considerations. *J. Clin. Microbiol.* 40: 1504-1507
- Mokrousov I., Filliol I., Legrand E., Sola C., Otten T., Vyshnevskaya E., Limeschenko E., Vyshnevskiy B., Narvkaya O., Rastogi N.* **2002**. Molecular characterization of multiple-drug-resistant *M. tuberculosis* isolates from North-Western Russia and analysis of rifampin resistance using RNA/RNA mismatch analysis as compared to the Line Probe Assay and sequencing of the *rpoB* gene. *Res. Microbiol.* 153: 213-219.
- Narvkaya O.*, Mokrousov I., Otten T. F., Vyshnevskiy B. I. **1999**. Genetic marking of polyresistant *M. tuberculosis* strains isolated in the North-West of Russia. *Probl Tuberk.* (3): 39-41. [in Russian]
- Bulat S., Mokrousov I., Podlipaev S.* **1999**. Classification of *Trypanosomatids* from insects and plants by the Universally primed PCR (UP-PCR) technique and cross dot blot hybridization of PCR products. *Eur. J. Protistol.* 35: 319-326.
- Pischik V.*, Mokrousov I., Lazarev A., et al. **1998**. Biological properties of some nitrogen-fixing associative enterobacteria. *Plant Soil.* 202: 49-59.
- Mokrousov I.*, Narvkaya O., Tseneva G., Mihailov N., Popel I. **1996**. Genetic typing of *C. diphtheriae* strains by PCR with universal primers. *Zhurnal Mikrobiol. Epidemiol Immunobiol.* (5): 73-76. [in Russian]
- Yurlova N.A.*, Mokrousov I., De Hoog G.S. **1995**. Intraspecific variabilty and exopolysaccharide production in *Aureobasidium pullulans*. *Antonie van Leeuwenhoek.* 68: 57-63.
- Mokrousov I. **1995**. Phylogenetic analysis and species differentiation of *Aureobasidium pullulans* fungus. *Genetika* . 31: 780-785. [in Russian]
- Mokrousov I.*, Bulat S. **1992**. Differentiation of biological species of *Aureobasidium pullulans* fungi by universally primed PCR. *Genetika*. 28: 31-38. [in Russian]

Participation in international scientific meetings: 50 oral presentations, 14 session co-chair, 2 symposium co-chair.

- 39th Annual Congress of European Society of Mycobacteriology, Dresden, Germany, July 1-4, 2018, oral presentation
- All-Russian scientific and practical conference of phthisiatrists with international participation "Topical issues of TB care in the Russian Federation: consolidation of efforts in the fight against tuberculosis". 31.05.2018, Moscow. Oral presentation.
- Invited lecture at School for Life Science at Nazarbaev University, Astana, Kazakhstan, 3rd May 2018
- International Conference "New Approaches to the Elimination of the Epidemic of Tuberculosis", dedicated to the 85th anniversary of the National Research Center for Phthisiopulmonology of the Ministry of Health of the Republic of Kazakhstan, Almaty, 26-27.04.2018. Oral talk.
- 10th Balkan Congress of Microbiology / Microbiologia Balkanica'2017, София, Болгария, 16-18.11.2017. Plenary talk.
- 2nd International conference of human migration "What can Genomic Diversity studies tell us about migration?" Mexico-City, Mexico, 17-21.10.2017. Plenary talk.
- 7th Congress of European Microbiologists (FEMS 2017), Valencia, Spain, 9-13.07.2017. Poster.
- 27th ECCMID, 22-25 April 2017, Vienna, Austria. Symposium co-chair.
- IX Congress on molecular diagnostics, Moscow, 18-20.04.2017 Co-chair; oral talk
- Scientific Session dedicated to the 70th Anniversary of the Institute of Microbiology, Bulgarian Academy of Sciences. Sofia, Bulgaria, 14-15.03.2017. Plenary talk.
- 2nd Asian African Congress of Mycobacteriology, Isfahan, Iran 25-28.02.2017; invited talk, session co-chair.
- 21st European meeting of Paleopathology association. Moscow, 15-19.08.2016. Plenary lecture.
- 37th Annual Congress of European Society of Mycobacteriology, Catania, Italy, 3-6.07.2016 Oral presentation
- MEEGID XIII, Antwerpen, Belgium, 10-12/05/2016. Oral talk, 2 sessions co-chair.
- 89th Congress of Japan Society of Bacteriology, Osaka, Japan, 23-28/03/2016. Invited speaker.
- 36th Annual Congress of European Society of Mycobacteriology Riga, Latvia 2015 oral talk, session co-chair
- Russian-Chinese Conference (Kashkin Readings) St. Petersburg 2015 invited talk
- 1st Asian-African Congress of Mycobacteriology - Isfahan, Iran 2015 invited talk
- Seminar «Santé Environnement Carrefour des Sciences» at Pasteur Institute of Guadeloupe, 04.12.2014 Invited lecture
- 3rd Congress of National Association of Phthisiatrists, St Petersburg, Russia, 27-29.11.2014: section co-chair, oral talk
- Meeting on ongoing global initiative "Whole genome sequencing and data sharing" Organized/supported by FIND, NDWG and BMGF. Barcelona, Spain. 28.10.2014. Oral talk.
- Invited lecture at T. Dobzhansky Center of Genome Bioinformatics (St. Petersburg University), St. Petersburg, Russia, 20.10.2014: invited lecture.
- 13th Congress of Microbiologists in Bulgaria, Tryavna, Bulgaria. 7-10.10.2014: invited speaker
- 3rd St. Petersburg Ecological Forum/ Tuberculosis and Mycobacteriosis International Symposium, St. Petersburg, Russia. 23.09.2014: symposium co-chair, oral talk.
- Scientific Symposium of Pasteur Institutes, Paris, 10-13.09.2014. Oral talk.
- 35th Annual Congress of European Society of Mycobacteriology, Vienna, Austria, 29.06-2.07.2014. oral talk, session co-chair
- VIII Congress on molecular diagnostics, Moscow, 18-20/03/2014: oral presentation, section co-chair.
- 1st International Congress on Pediatric Development, Beijing, China, 8-10.11.2013: invited lecture.

2nd meeting of the European Laboratory Initiative on Tuberculosis, European regional office of WHO, Copenhagen, Denmark, 7-8.10.**2013**: invited speaker

34th Annual Congress of European Society of Mycobacteriology, Florence, Italy, 30.06-03.07.**2013**: oral presentation
Invited lecture, University of Toulouse, 15.03.**2013**. Toulouse, France (lecture)

1st Congress of National Association of Phthisiatrists, St Petersburg, Russia, 18-20.10.**2012**: oral talk
Scientific Conference with International participation on occasion of 100th anniversary of Institute of Epidemiology and Microbiology. Irkutsk, Russia, 27-28.09.**2012**. Plenary talk.

All-Russian Conference on Medical Microbiology and Mycology, Saint-Petersburg, 28.06.**2012**: lecture, session co-chair.
Seminar on environmental microbiology, Osaka, Japan: co-presentation 19 March **2012**

Tuberculosis Evolution conference, Szeged, Hungary, 03'2012: oral lecture and session co-chair 25 March **2012**
Invited lecture, Seminar at Institute of Physico-Chemical Medicine, Moscow, Dec. 2011.

International Workshop “Global phylogeny and host-pathogen compatibility in *Mycobacterium tuberculosis*”, within Eumednet (European Mediterranean network against tuberculosis) FP7 project, Sofia, Bulgaria, 18-20.09.2011: invited speaker.

4th Congress of European Microbiologists (FEMS), Geneva, 27-30.06.**2011**. invited speaker and workshop co-chair.

VII Congress on molecular diagnostics, Moscow, 24-26/11/**2010**: oral presentation.

30th Congress of European Society of Mycobacteriology (Porto, Portugal, 5-8.07.**2009**), oral presentation

VI Congress on molecular diagnostics, Moscow, 28-30/11/**2007**: oral presentation.

Annual Scientific Symposium of the International Network of Pasteur Institutes, Teheran, Iran, 17-19.11.**2004** 1 oral presentation, 1 poster

10th International Workshop on virus evolution and molecular epidemiology, Helsinki, Finland, 30.08.-05.09.**2004** 1 oral presentation

25th Congress of European Society of Mycobacteriology Alghero-Sardinia, Italy, 26-30.06.**2004** 1 oral presentation

Meeting of Mycobacteria and Tuberculosis Study Group of Pasteur Institutes, Paris, France, 16-18.02.**2004** 1 oral presentation

4th International Conference ‘Infectious diseases in the Barents region’. Petrozavodsk, Russia, **2003**: co-chair, 1 oral presentation

24th Congress of European Society of Mycobacteriology, Tartu, Estonia, 07.**2003**, 2 oral presentations

International Conference “Tuberculosis: old problem in new millennium”, Novosibirsk, Russia, 07.**2002** 1 oral presentation

4th Nordic Baltic Congress on Infectious Diseases, St. Petersburg, Russia, 05.**2002**: 1 oral presentation

12th European Congress on Clinical Microbiology and Infectious Diseases, Milan, Italy, 04.**2002**: co-chair of session, 1 oral presentation, 1 poster

3rd International Conference ‘Infectious diseases in the Barents region’. Arkhangelsk, Russia, 09.**2001**: co-chair, 1 oral presentation

Meeting of IAEA Multicenter Project, Delhi, India, 03.**2001**: 1 oral presentation

Meeting of Mycobacteria and Tuberculosis Study Group of Pasteur Institutes, Alger, 02.**2001**: 1 oral presentation

Scientific Symposium of the International Network of Pasteur Institutes, XXV Council of Directors of Pasteur Institutes, Bucharest, Romania, 18-21.09.**1996**: 1 oral presentation, 1 poster

8th International Congress “Molecular Plant-Microbe Interactions” Knoxville TN, USA, 14-19.07.1996: 2 posters

International Symposium of the Year Louis Pasteur “Epidemiology and Public Health”, Hanoi, Vietnam, **1995**: 1 poster

International Meeting on Diphtheria Epidemic in Europe, St. Petersburg 06/**1993**: 1 oral presentation

International Symposium on Yeasts, Riga, Latvia, 10/**1991**: 1 poster