CURRICULUM VITAE

Name: Natalia Vsevolodovna Vasilyeva
Education: higher education − Leningrad Chemical and Pharmaceutical Institute (1982), postgraduate study in the specialty "Microbiology" − Leningrad Chemical and Pharmaceutical Institute (1987)
Academic degree: Doctor of Biological Sciences (2006)
Academic rank: Professor (2011)
Honorary title: Honored Scientist of the Russian Federation (2019)
Degree: Philsophiae Degree (PhD) (2003 y.)
Field of study: microbiology, mycology
Work experience in the specialty: 32 years
Knowledge of languages: English (intermediate)
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H-index (Scopus) – 7
H-index (Web of Science) – 7
H-index (Russian Science Citation Index) – 18
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Education/Training:
1987-1990 – Senior Laboratory Assistant at the Department of Microbiology of the Leningrad Chemical and Pharmaceutical Institute
1990-1993 – Junior researcher at the Laboratory of Experimental Mycology of the All-Union Scientific Research Technological Institute of Antibiotics and Enzymes
1993 – Researcher at the Laboratory of Immunology of the Research Department of Deep Mycoses of the St. Petersburg Medical Academy of Postgraduate Education
1994 – Senior researcher of the Laboratory of Chemotherapy and Pathomorphology of the Research Department of Deep Mycoses of the St. Petersburg Medical Academy of Postgraduate Education
Place of work from 1998 to the present:
Federal State Budgetary Educational Institution of Higher Professional Education "North-Western State Medical University named after I. I. Mechnikov" of the Ministry of Health of the Russian Federation

Post:
- director of the Kashkin Research Institute of Medical Mycology (since 1998);
- head of the Department of medical microbiology (since 2007);
- chief freelance specialist of the Ministry of health of the Russian Federation on clinical microbiology and antimicrobial resistance in the North-Western Federal district;
- member of the specialized Commission of the Ministry of health of the Russian Federation on clinical microbiology and antimicrobial resistance;

- head of the working group on Microbiology of the Federal educational and methodological Association in the field of higher education for an enlarged group of professions, specialties and training areas 32.00.00 health Sciences and preventive medicine;
- member of the Board of the Department of the all-Russian scientific and practical society of epidemiologists, microbiologists and parasitologists in Saint Petersburg and the Leningrad region;
- chairman of the problem commission "Epidemiology, prevention, diagnosis and treatment of infectious (bacterial, viral, mycotic, parasitic and related to medical care) and some non-communicable diseases";
- chief editor of the journal " Problems of medical Mycology»;
- chairman of the scientific council of the Kashkin Research Institute of Medical Mycology;
- member of the academic council of the University;
- member of the academic council of the medical and preventive faculty of the University;
- director of the Chinese-Russian Institute of infections and immunity of Harbin medical University;
- responsible for the direction of activity of the I.I. Mechnikov NWSMU associated with participation in the work of the Russian-Chinese Association of medical universities;
- organizer of annual scientific and practical conferences (including international ones) on medical microbiology, epidemiology, clinical mycology and immunology (Kashkin readings).

Management of dissertation research in the specialties "Mycology", "Microbiology":
- number of defended dissertations - 16,
- number of dissertations currently being carried out - 7

Participation in scientific research:

- International society of clinical and veterinary mycologists (international Society of Human and Animal Mycology – ISHAM);
- European Society of Clinical Microbiology and Infectious Diseases (ESCMID);
- all-Russian Scientific and Practical Society of Epidemiologists, Microbiologists and Parasitologists;
- Interregional Association for Clinical Microbiology and Antimicrobial Chemotherapy.

Publications: more than 650 works, including in the SCOPUS database (28) and RSCI (269); 5 monographs, 3 chapters in national manuals on mycology, pulmonology and allergology, 17 textbooks, methodological (2) and clinical recommendations (2), including national (1), 5 patents and 2 diplomas for discovery.

Key publications in the journal topics:

1. Ivan M Pchelin, Daniil V Azarov, Maria A Churina, Sergey G Scherbak, Svetlana V Apalko, **Natalya V Vasilyeva**, Anastasia E Taraskina. Species boundaries in the Trichophyton mentagrophytes / T. interdigitale species complex. Med Mycol. 2019 Aug 1; 57 (6): 781-789. doi: 10.1093/mmy/myy115.
2. Kosgey JC, Jia L, Fang Y, Yang J, Gao L, Wang J, Nyamao R, Cheteu M, Tong D5, Wekesa V, **Vasilyeva N,** Zhang F. Probiotics as antifungal agents: Experimental confirmation and future prospects. Journal of Microbiological Methods. 2019, 162, 28-37 doi.org/10.1016/j.mimet.2019.05.001
3. Ivan M Pchelin, Daniil V Azarov, Maria A Churina, Igor A Ryabinin, Irina V Vibornova, Svetlana V Apalko, Alexander N Kruglov, Andrey M Sarana, Anastasia E Taraskina, **Natalya V Vasilyeva**. Whole genome sequence of first *Candida auris* strain, isolated in Russia. Medical Mycology. 2020; 58 (3): 414-416. doi.org/10.1093/mmy/myz078

4. Amaliya Stepanova, G Sybren de Hoog, **Nataliya Vasilyeva**, Konstantin Raznatovskiy, Galina Chilina. Ultrastructure of hyphal cells of Trichophyton tonzurans. Current Medical Mycology. 2020; 6 (1): 42-46 doi.org/10.18502/cmm.6.1.2508.
5. Yana Kozlova Ekaterina Frolova Aleksandra Uchevatkina Larisa Filippova Oleg Aak Ekaterina Burygina Anastasiya Taraskina **Natalia Vasilyeva**, Nikolay Klimko. Diagnostic markers of allergic bronchopulmonary aspergillosis in patients with severe asthma. Mycoses. 2020, 63(6), 596-603. doi.org/10.1111/myc.13083
6. Ivan M. Pchelin Yuri V. Mochalov Daniil V. Azarov Sofya A. Romanyuk Galina A. Chilina Irina V. Vybornova Tatiyana V. Bogdanova Vasily V. Zlatogursky Svetlana V. Apalko **Natalia V. Vasilyeva,** Anastasia E. Taraskina. Genotyping of Russian isolates of fungal pathogens Trichophyton rubrum, based on simple sequence repeat and single nucleotide polymorphism. Mycoses, 2020, 63(11), 1244-1254. DOI: 10.1111/myc.13162
7. Lina Jia, Janet Cheruiyot Kosgey, Jielin Wang, Jianxun Yang, Rose Magoma Nyamao, Yi Zhao, Xue Teng , Lei Gao, MartinTherese, Cheteu Wabo, **Natalia V. Vasilyeva**, Yong Fang, Fengmin Zhang. Antimicrobial and mechanism of antagonistic activity of Bacillus sp. A2 against pathogenic fungus and bacteria: The implication on Honey's regulatory mechanism on host's regulatory mechanism on host's microbiota. Food Science & Nutrition. 2020, 8(9), 4857-4867. DOI: 10.1002/fsn3.1770
8. Stepanova A.A., Sybren de Hoog G.B.C., **Vasilyeva N.V.,** Raznatovskiy, K.I., Chilina G.A. Ultrastructure of hyphal cells of *Trichophyton tonsurans* // Current Medical Mycology. – March 2020. – Vol. 6, Issue 1. – Pages 42-46
9. Ryabinin I.A., **Vasilyeva N.V.,** Bogdanova T.V. *Penicillium chrysogenum* proteins detected by Madi-Tof-mass-spectrometry of cellular extract // Mikologiya I Fitopatologiya. – 2020. – Vol. 54, Issue 6. – P. 436-445
10. Stepanova A.A., **Vasilyeva N.V.,** Kornisheva V.G., Raznatovsky K.I., Kotrekhova L.P., Avdeenko Y.L., Chilina G.A., Tomasheva A.O., Kaisi Z.A. Monitoring the treatment of onychomycosis with naftifine hydrochloride solution 1% using light and scanning electron microscopy // Klinicheskaya Dermatologiya i Venerologiya. – 2020. – Vol. 19, Issue 4. – P. 496-504

Patents and discoveries:

1. A method for diagnosing of immunodeficiency in HIV-infection. Patent № 2134879 of 20.08.99. publ. 20.08.1999, bulletin №28
2. Strain of microscopic fungus *Aspergillus fumigatus* Frezenius 157/32 − producent of protein antigens for the diagnosis of mycogenic sensitization and allergies. Patent № 2172342 of 2001, publ. 20.08.2001, bulletin № 23
3. Method of growing of *Penecillium notatum* selected strain № 1043/2 for obtaining an allergen. Patent № 2213772 of 2003, application № 27.05.2003, Byul № 15; publ. 10.10.2003, bulletin № 28
4. Intracellular virus of the fungus *Fusarium javanicum* var. *radicicola* pathogenic to humans (discovery). Diploma for discovery № 326 "Intracellular virus", with priority from July 01, 1999 Moscow, registration № 406, February 05, 2007
5. The phenomenon of intensification of strains of the micromycete *Fusarium javanicum* var. *radicicola*. Diploma for discovery № 479 "The phenomenon of intensification of strains of the micromycete *Fusarium javanicum* var. *radicicola*" (Russian Federation), with priority from October 26, 1995, St. Petersburg, registration № 613. Application. 21.05.2014; Publ. 26.01.15
6. Method of mycosis diagnosis. Patent № 2584035 Russian Federation, IPC G 01 N 33/50. – №. 2015104841/15; application № 12.02.15; Publ. 20.05.16, bulletin № 14.
7. 3,5-Substituted derivatives of thiazolidine-2,4-dione with antimicrobial activity. Patent № 2690161 Russian Federation, IPC C07D 277/20, C07D 417/12, C07D 277/24, C07D 277/34, A61K 31/427, A61P 31/10. − №. 2018123535/18; application № 28.06.18; Publ. 31.05.19, bulletin № 16.

Rewards:
- Certificate of honor of the Ministry of health of the Russian Federation (2000);
- Medal for the 300th anniversary of Saint Petersburg (2003);
- Medal of the order "For merits before Fatherland" II degree (2006);
- Badge "Excellent health" (2010);
- Laureate of St. Petersburg Government for outstanding achievements in the field of higher and secondary vocational education in the nomination "Educational-methodical support of educational process, aimed at improving the quality of training" for 2018;
- Laureate of the all-Russian professional award in the field of laboratory medicine named after V.V. Menshikov in the category "Professional activity" for 2018.

Participation in research works:
Topics of the state task
- "Morpho-biological features of pathogenic mucoromycetes - mycoses pathogens in patients with immunodeficiency" (2019-2021). Head of the work. Registration card № AAAA-A19-119053190038-8 of 31.05.2019
- "Development of rapid methods for the diagnosis of mycoses and molecular markers of clinically significant micromycetes resistance to antifungal drugs" (2018-2020). Registration card № AAAA-A18-118052990083-4 dated 29.05.2018
- "Molecular predictors of the development of mycoses and mycoallergoses of various origins based on immunopathogenesis" (2016-2018). Head of the work. Registration card № AAAA-A16-116042010012-0 dated 20.04.2016
- "Study of molecular markers of mycosis risk and resistance of micromycetes to antifungal drugs at the genome and proteome level" (2015-2017). Head of the work. Registration card № 115041710034 of 17.04.2015
- "Study of morphological and biological features of micromycetes - pathogens of extra-hospital and in-hospital mycoses" (2012-2015). Performer. Registration card № 115041710037 dated 17.04.2015
- "Study of the features of the course of invasive aspergillosis in immunocompromised patients" (2012-2015). Performer. Registration card № 115041710038 dated 17.04.2015
- "Study of epidemiology, microbiological monitoring of nosocomial fungal infections, current hospital strains of pathogens of nosocomial infections. Development of new approaches to diagnosis and treatment" (2012-2015). Chief Executive. Registration card № 115041710041 dated 17.04.2015

Initiative of the integrated research topics of the:
-"Epidemiological, immunopathogenetic and clinical-laboratory features of the new coronavirus infection COVID-19" (2020-2022). Head of the work. Registration card № AAAA-A20-120061690058-2 from 16.06.2020
- "Molecular and biological features of fungal pathogens and molecular mechanisms of mycosis immunopathogenesis as a basis for the development of new methods for the diagnosis, prevention and treatment of mycotic diseases" (2019). Order of the Rector of the I. I. Mechnikov NWSMU of the Ministry of Health of the Russian Federation № 263 of 21.02.2019.
- "Molecular and biological features of fungal pathogens and molecular mechanisms of mycotic immunopathogenesis as a basis for the development of new methods for the diagnosis, prevention and treatment of mycotic diseases" (2016-2018). Registration card № AAAA-A16-116062810086-1 dated 28.06.2016
- "Microscopic fungi-biodestructors, allergoproducts, pathogens of extra-hospital and in-hospital mycoses: from traditional approaches to innovative technologies" (2011-2015). Head of the work. Registration card № 01201160840 dated 19.05.2011

Grant name, contract number:
- Grant of the joint competition of international initiative research projects of the RFBR and the State Foundation of Natural Sciences of China to support initiative research projects in 2016-2017: "Intraspecific typing of pathogenic microorganisms (genotyping and proteomic characteristics)". Project manager. Contract № 16-54-53109 / 16 dated 05.02.2016, Contract № 16-54-53109 / 17 dated 29.05.2017
- Agreement of 04.07.2015 between the Norman Bethune Faculty of Medical Sciences of Jilin University (China) and the Kashkin Research Institute of Medical Mycology of the I.I. Mechnikov NWSMU of the Ministry of Health of Russia (Russia) (2015-2017) on joint research in the field of mechanisms and diagnostics of microorganisms in the framework of joint work under the grant of the competition of international initiative research projects of the RFBR and the State Fund of Natural Sciences of China. Responsible executor.