Curriculum Vitae

ОСОБИСТА ІНФОРМАЦІЯ

Viktoriya Petlovana

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Educational and Scientific Center "Institute of Biology and Medicine" of Taras Shevchenko National University of Kyiv
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Account (profile) in academic databases

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Sex F | Date of birth 06 Aug 1973 | Citizenship Ukraine

Academic degree (degree, speciality)	Doctor of Philosophy, 03.00.05 – Botany
Academic rank	Docent
Position	Associate professor
Chair	Plant Biology
Department/institute	Educational and Scientific Center «Institute of Biology and Medicine»

EDUCATIONAL DISCIPLINES IN WHICH WAS INVOLVED:

Current Year	1. **Botany**, bachelor, 1st year, lectures, laboratory works 2. **Soil Science and Soil Microbiology** , bachelor, 2nd year, lectures, laboratory works 3. **Plant Biology**, bachelor, 1nd year, lectures, laboratory works 4. **Landscape Architecture**, bachelor, 3d year, lectures 5. **Plant molecular taxonomy**, bachelor, 3d year, lectures 6. **Laboratory practice**, bachelor, 3d year, lectures, laboratory works 7. **Park and Garden composition**, bachelor, 4d year, lectures
Previous Years	1. **Plant Cell Culture and Microcloning**, master's degree, 1st year of studies, lectures, laboratory works 2. **Microresources and mushroom growing,** master's degree, 2d year of studies, lectures, laboratory works 3. **Plant Pathology** master's degree, 1st year of studies, lectures, laboratory works 4. **Soil Science,** master's degree, 2d year of studies, lectures, laboratory works 5. **Applied Botany of Lower Plants,** master's degree, 2d year of studies, lectures, laboratory works 6. **Phycotechnology and industrial mushroom cultivation,** master's degree, 2d year of studies, lectures, laboratory works 7. **Medical biology**, master's degree, 1st year of studies, practical works

SCIENTIFIC AND PEDACOGICAL EXPERIENCE

Period (starting from last)	Description

Since 2016	Position: Associate professor, Department of Plant Biology, Taras Shevchenko National University of Kyiv Main activities and job responsibilities: giving lectures, laboratory and practical works, writing textbooks, manuals, scientific articles and theses, advising master's and bachelor's works Area of activity: Education / Science
Since 212 to 2016	Position: Associate professor, Department of Botany, Taras Shevchenko National University of Kyiv Main activities and job responsibilities: giving lectures, laboratory and practical works, writing textbooks, manuals, scientific articles and theses, advising master's and bachelor's works Area of activity: Education / Science
Since 2010 to 2011	Partner project «Taxonomy of critical groups of microalgae with a high potential for applied research of both culture collections ACKU (Kyiv, Ukraine) and SAG (Göttingen, Germany)» (project UKR 08/038, funded by the Internationales Büro des Bundesministeriums für Bildung und Forschung (BMBF) under the framework Internationale Zusammenarbeit in Bildung und Forschung mit der Ukraine) Area of activity: Science
Since 2008 to 2010	Project supervisor «Development of biosensor methods for express diagnostics of intact viruses and their antigens» (Grant by Ministry of Science and Educaton of Ukraine). Area of activity: Science
Since 2001 to 2011	Position: Assistante professor, Department of Botany Taras Shevchenko National University of Kyiv Main activities and job responsibilities: giving lectures, laboratory and practical works, writing textbooks, manuals, scientific articles and theses, advising master's and bachelor's works Area of activity: Education / Science
Since 1997 to 1999	Position: Assistante professor, Department of Agromicrobiology and virology, National Agricultural University Main activities and job responsibilities: giving lectures, laboratory and practical works, writing textbooks, manuals, scientific articles and theses, advising master's and bachelor's works Area of activity: Education / Science

EDUCATION AND TRAINING

Period (starting from last)	Description
Nov 2022- May 2023	Traineeship in the Research Institute for Limnology Mondsee at the University Innsbruck (Austria). Research theme: « Characterization of Chloroviruses of endosymbiotic green algae isolated from various ciliates».
2014 (Jan-Jul)	Traineeship in University of California, San Diego within the framework of the educational program No.2201250 «Education, Training of students, PhD students, scientific and pedagogical staff abroad» launched by the Ministry of Education and Science of Ukraine. Research theme: «Expression human therapeutic proteins, and industrial enzymes, using the green algae Chlamydomonas reinhardii as the production platform and biotechnological approaches to the cultivation of microalgae for production of biofuels». (Research supervisor: Stephen Mayfield).
2008	Degree – Ph.D. in biological sciences, (PhD thesis «The soil algae in interactions with higher-plant viruses: cultures reaction and cells structure functional alterations»)
2005	NATO Fellowship for young scientist, (Host institute – Centre de Research Public Gabriel Lippmann, Luxembourg; Supervisor –Dr. Lucien Hoffmann), Investigation of Soil algae-Tobacco Mosaic Virus interaction.
2002	Traineeship in laboratory of electron microscopy in Institute of Biology, Kielce, Poland. Supervisor – Dr. Andrzej Massalski.

Since 1999 to 2001	PhD student Taras Shevchenko National University of Kyiv, Botany Dept. Supervisor – prof. I.Yu.Kostikov
Since 1992 to 1997	Student Taras Shevchenko National University of Kyiv Obtained qualification Biologist – Virologist, Lecturer of Biology
Since 1990 to 1992	Student Secondary medical school of Kyiv No 2. Obtained qualification General duty nurse

PERSONAL SKILLS

Name	Level (description)
Native language	Ukrainian
Foreign language 1	English, B2, Cetrificate № 3485 "English for professional purposes. Taras Shevchenko National University of Kyiv. Foreign Language Center"
Foreign language 2	French
Communicative competence	Communication skills obtained while working as a lecturer at Taras Shevchenko National University of Kyiv, at scientific conferences and seminars, during qualifying internships.
Organizational /managment competence	Guidance of educational and professional practices at ESC«Institute of biology and medicine», guidance of student's scientific coursework and diploma work. Approximately 20 students were trained to defend their under-graduate and graduate-level thesis. Project supervisor «Development of biosensor methods for express diagnostics of intact viruses and their antigens» (Grant by Ministry of Science and Educaton of Ukraine 2008-2010).
Computer skills	Use software for analysis of nucleotide sequences and construction of phylogenetic trees, methods of statistical analysis and various types of presentation of data of educational and scientific work
Other computer skills	Standart set of PC user (MS Word, Excel, Access, Power Point, Photoshope and other software - for scientific and educational publications, illustrations, presentations, photo-video editing, communication).
Professional skills (not mentioned above)	All steps of laboratory treatment and identification of algae (terrestrial, soil, freshwater algae): microscopic studies, carrying cultures, getting of pure cultures (strains), investigation of morphological characters and their variability in culture, life cycles of algae, documentation of results of microscopic investigation. Experience in molecular investigation of algae: DNA isolation, amplification, sequencing and sequence alignment, phylogenetic analysis. Experience in molecular investigation of phytoviruses: RNA isolation, amplification, sequencing and sequence alignment. All steps of Transmission Electron Microscopy preparation and analysis of algae and viruses.Cryopreservation of algae. ELISA. Immunosorbent electron microscopy.
Fields of professional interests	Phycology, Phytovirology, Algal biotechnology. Interaction between soil algae and plant viruses. Molecular taxonomy of algae. Influence of metal nanoparticles on the growth of microalgae in culture. Transformation of the genome of microalgae in order to obtain industrially important substances.

ADDITIONAL INFORMATION

Item	Titles of publications, projects, conferences, awards and prizes, memberships in academies and societies etc
Publications	Author of about 40 articles. Selected Works: Dzhagan V., **Petlovana V.** Perspectives of using mycorrhizal fungi for increasing the resistance of green plantings in urbanized areas. // Theory and practice of design. Garden and park art. 1(27). P. 198-203. **Petlovana V.R.,** Kravchenko S.O., Boltovets P.M. The influence of of ZnO nanoparticles solution on the growththe *Chlamydomonas monadina* in culture // Nanosistemi, Nanomateriali, Nanotehnologii. – 2021. – 3 (19). **Петльована В.,** Чен Мін Лей. Purification of microalgae crops of ACKU collection from fungal contaminants // Bulletin of Taras Shevchenko National University of Kyiv – 2020. – Vol. 4 (82). – P. 29-32.

	Boltovets P., Radutny R., **Petlyovana V.** Interaction between phages and bacteria as a tool for the obtaining of images // Bulletin of Taras Shevchenko National University of Kyiv. – 2016. – Vol. 2 (72). – P. 69-71 Boltovets P.M., **Boyko V.R.,** Snopok B.A. Surface capturing of virion-antibody complexes: Kinetic study // Materialwissenschaft und Werkstofftechnik (Materials Science and Engineering Technology) – 2013 – Vol.44, No. 2–3 – p. 112-118. Tarieiev A. S., **Bojko V.R**., Moysiyenko I.I.,Kostikov I. Yu. 2013. Similarity of Betula borysthenica Klokov with intraspecific taxa of Betula pubescens Ehrh.. // Chornomors'k bot. z. 9 (2) – P.158-169. Kostikov I. Yu., Demchenko E. N., Boiko V. R., Goncharov A. A. Chlorochytrium hypanicus sp. nov. (Chlorophyceae) and its Position in the System of Protosiphonales // International Journal on Algae – 2012 – Vol.14, No. 3 – p. 201-222. Kostikov I., Demchenko E., **Boyko V.,** Gontcharov A. 2012. *Chlorochytrium hypanicus* sp. nov. (Chlorophyceae) and its position within Protosiphonales // Algologia. No 3. – P. 227-249. Boltovets P., **Boyko V**., Snopok B. 2010. Analysis of the kinetics of virus-specific interactions by SPR method // Visnik Lvivskogo Universitetu. Seriya Fizichna (Bulletin of Lviv University, Series Phisic). No 45. – P. 15-23. Kostikov I., Dzhagan V., Demchenko E., **Boyko V**., Boyko O., Romanenko P. 2007. Botany (Algae and Fungi). Kyiv, Aristey: 476 p. Boltovets P.M., Snopok B.A., **Boyko V.R.,** Shevchenko T.P., Dyachenko N.S., Shirshov Yu.M. Detection of plant viruses using a surface plasmon resonance via complexing with specific antibodies // Journal of Virological Methods. – 2004. –121. – P. 101-106. **Boyko V.R.,** Kostikov I.Yu., Senchugova N.A., Polischuk V.P., Shevchenko T.P., Boltovets P.M., Hoffmann L. 2004. Toward the possibility of artificial infection of soil algae Bracteacoccus minor (Chodat) Petrova (Chlorophyta) by Tobacco Mosaic Virus // Visnyk Zaporizhskogo universytetu (Bulletin of University of Zaporizhya) –No 1. – P.33-39. Boltovets P.M., **Boyko V.R.,** Ive M., Snopok B.A., Shirshov Yu.M., Dyachenko N.S. 2003.Investigation of interaction of immunoglobulins and detection of viral antigens in cell homogenates by the surface plasmon resonance method// Mikrobiologichny Zhurnal. – Vol. 65, No 4. – P.51-61. Boltovets P.M., **Boyko V.R.,** Kostikov I.Yu., Dyachenko N.S., Snopok B.A., Shirshov Yu.M. Simple method for plant virus detection: effect of antibody immobilization technique // Journal of Virological Methods. – 2002. – 105. – P. 141-146.
Projects	Project supervisor «**Development of biosensor methods for express diagnostics of intact viruses and their antigens**» (Grant by Ministry of Science and Educaton of Ukraine). Partner project «**Taxonomy of critical groups of microalgae with a high potential for applied research of both culture collections ACKU (Kyiv, Ukraine) and SAG (Göttingen, Germany)»** (project UKR 08/038, funded by the Internationales Büro des Bundesministeriums für Bildung und Forschung (BMBF) under the framework Internationale Zusammenarbeit in Bildung und Forschung mit der Ukraine)
Conferences	Zavadska D., Yang R., **Petlovana V.,** Kostikov I. Evolution and function of meiotic genes in certain Chlorophyta // Programme & Abstracts ISOP online meeting 26 – 30 July 2021. – 2021 – P.88. Zavadska D., Yang R., **Petlovana V.,** Kostikov I. Evolution and function of meiotic genes in certain Chlorophyta // Programme & Abstracts ISOP online meeting 26 – 30 July 2021. – 2021 – P.88. **Boyko V.R**., Kostikov I.Yu., Boubriak I.I., Hoffmann L. Detection of tobacco mosaic virus in green soil algae // Programme and Abstracts of First International congress "Viruses of Microbes" (Paris, France, 21-25 June, 2010) – 2010. – P.88. **Boyko V.R.,** Kostikov I.Yu., Hoffmann L. Detection of tobacco mosaic virus in green soil algae // Programme and Abstracts of International symposium "Biology and taxonomy of green algae V" (Smolenice, Slovakia, 25-29 June, 2007) – 2007. – P.16. **Boyko V.,** Senchugova N., Polishjuk V., Shevchenko T., Boltovets P., Hoffmann L., Kostikov I. Artificial infection of the soil alga Bracteacoccus minor by Tobacco Mosaic Virus // Programme and Abstracts of International symposium "Biology and taxonomy of green algae IV" (Smolenice, Slovakia, 24-28 June,

	2002) – 2002. – P.20. Polischuk V.P., Kostikov I.Yu., Romanenko P.A., **Boyko V.R.** 1996. Probably viral etiology of disease of soil alga Chlorococcum elkhartiense Arch.et Bold // 1-st European Phycological Congress (Cologne (EPC1), August 11-18, 1996). – Kohln, 1996. – Late Abstracs 2.
Seminars	II International Seminar «Ecologically safe cultivation of vegetable and ornamental crops indoors». Odessa, October 19-21, 2005
Participation in organizations	Member of the Ukrainian Botanical Society
Quotes	*90, h-3*