



# Curriculum Vitae

Mariia Kovalenko

## PERSONAL INFORMATION



### Mariia Kovalenko

2, Akademika Hlushkova avenue (bilding 12), Kyiv, Ukraine  
ESC "Institute of biology and medicine", room 455

+38(044) 431 04 18

[mariia.s.kovalenko@gmail.com](mailto:mariia.s.kovalenko@gmail.com) | [mariia\\_kovalenko@knu.ua](mailto:mariia_kovalenko@knu.ua)

Profiles in scientific databases and networks:

ORCID: 0000-0003-3861-3796

Scopus Author ID: 56165262300

ResearcherID: AAE-3317-2020

ResearchGate: [https://www.researchgate.net/profile/Mariia\\_Kovalenko](https://www.researchgate.net/profile/Mariia_Kovalenko)

Google Scholar: [https://scholar.google.com/citations?user=z7\\_jPiMAAAAJ&hl=uk&authuser=1](https://scholar.google.com/citations?user=z7_jPiMAAAAJ&hl=uk&authuser=1)

Sex F | Date of birth 03/10/1988 | Citizenship Ukraine

Scientific degree (degree, specialty)	Candidate of Biological Sciences (PhD), specialty 03.00.12 – Plant Physiology
Academic rank	--
Position	Assistant Professor
Department	Plant Biology
Faculty / Institute	Educational and Scientific Center "Institute of Biology and Medicine"
Part-time position	–

## Educational disciplines in which was involved:

Current year	<ol style="list-style-type: none"><li>«Plant Physiology», 2<sup>nd</sup> and 3<sup>rd</sup> years of Bachelor's degree (Educational program "Biology"), laboratory classes.</li><li>«Plant Physiology», 2<sup>nd</sup> year of Bachelor's degree (Educational program "Landscape design and decorative gardening"), laboratory classes.</li><li>«Botany», 1<sup>st</sup> year of Bachelor's degree (Educational program "Biology"), laboratory classes.</li></ol>
Previous years	<ol style="list-style-type: none"><li>Laboratory workshop on plant physiology, 4<sup>th</sup> year of Bachelor's degree (Educational program "Biology"), laboratory classes.</li><li>«Medical Biology» (eng.), 1<sup>st</sup> year of Master's degree (Educational program "Medicine" (eng.)) practical classes.</li><li>«Medical Biology», 1<sup>st</sup> year of Master's degree (Educational program "Medicine") practical classes.</li><li>«Plant Physiology» (rus.), 2<sup>nd</sup> and 3<sup>rd</sup> years of Bachelor's degree (Educational program "Biology" (rus.)), laboratory classes.</li><li>«Plant Anatomy and Physiology», 2<sup>nd</sup> year of Bachelor's degree (Educational program "Biotechnology and bioengineering"), laboratory classes.</li><li>Educational practice in botany and zoology, 1<sup>st</sup> year of Bachelor's degree (Educational program "Biology").</li><li>Educational practice in biology, 2<sup>nd</sup> year of Bachelor's degree (Educational program "Biology").</li></ol>

## SCIENTIFIC AND PEDAGOGICAL EXPERIENCE

Period (starting from last)	Description
November 2019 – till now	<b>Assistant Professor of Plant Biology Department</b> Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . Field of activity: Education / Science
2019	<b>Biologist</b>

	Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> .
	Field of activity: Science
2011 - 2015	<a href="#">Biologist</a>
	Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> .
	Field of activity: Science

## EDUCATION AND TRAINING

Period (starting from last)	Description
2022	<a href="#">Digital Development Academy LLC</a> "Google Digital Tools for Education" training course: Advanced level - a certificate №GDTfE -01-П-01360 from 22.08.2022, 0,5 credits. Intermediate level – a certificate №GDTfE -01-C-03524 from 15.08.2022, 0,5 credits. Basic level – a certificate №GDTfE -01-10093 from 08.08.2022, 1 credit.
2022	<a href="#">Taras Shevchenko National University of Kyiv</a> KNU Educator`s week by Genesis for teachers of the Taras Shevchenko National University of Kyiv, a certificate №95knuewbg from 05.08.2022, 1 credit.
2022	<a href="#">Digital Development Academy LLC</a> "Google Digital Tools for Higher Education", a certificate №QIBO-1558 from 23.06.2022 from 0,07 credits.
2022	<a href="#">Digital Development Academy LLC</a> «Updating and supplementing Google's digital tools to optimize the online educational process», a certificate №OДЛІ-0247 from 26.04.2022, 0,07 credits.
2022	<a href="#">Taras Shevchenko National University of Kyiv</a> Advanced training and development of pedagogical competencies «KNU Teach Week 3», a certificate №109-22 from 07.02.2022, 0,5 credits.
2021	<a href="#">Taras Shevchenko National University of Kyiv</a> Training course on mastering modern tools and programs of interactive data visualization, a certificate from 09.02.2021
2021	<a href="#">Taras Shevchenko National University of Kyiv</a> Advanced training and development of pedagogical competencies "KNU Teach Week", a certificate from 25.01.2021
2020	<a href="#">Tel Aviv University</a> An online non-credit course authorized by Tel Aviv University and offered through Coursera "Understanding Plants - Part II: Fundamentals of Plant Biology", 11.06.2020, course certificate PLDVZRNJHGBR.
2020	<a href="#">Tel Aviv University</a> An online non-credit course authorized by Tel Aviv University and offered through Coursera "Understanding Plants - Part I: What a Plant Knows", 31.05.2020, course certificate 6QB8QZBKXEJW
2019	<a href="#">Taras Shevchenko National University of Kyiv</a> Received qualification - Candidate of Biological Sciences (PhD) in specialty 03.00.12 - Plant Physiology: "Drought stress tolerance of <i>Triticum</i> L. plants by the parameters of biochemical phenotyping"
February – May 2018	<a href="#">University of ss. Cyril and Methodius in Trnava, Slovak Republic</a> Research internship, funded by the National Scholarship Program of the Slovak Republic for the support of mobility of students, PhD students, university teachers, researchers and artists
September 2017	<a href="#">Vlaams Instituut voor Biotechnologie, Ghent, Belgium</a> Attending a series of practical seminars within the International Symposium for PhD students in Life Sciences "VIBes in Biosciences"
July 2017	<a href="#">Washington State University, USA</a> Research internship, supported by the Civilian Research & Development Foundation (CRDF Global) to implement joint US-Ukraine project "Development of High Throughput ROS-stress Phenotyping Method for Breeding Drought-Tolerant Wheat (№ OISE-16-62764-0)"
2015 - 2018	<a href="#">Taras Shevchenko National University of Kyiv</a>

	PhD student
2011	Taras Shevchenko National University of Kyiv Master's degree, received qualification - Physiologist, Researcher (Biology), Lecturer (honors diploma).
2009	Taras Shevchenko National University of Kyiv Bachelor's degree, received qualification - Biology Laboratory Technician.

## PERSONAL SKILLS

Name	Level (description)
Native language	Ukrainian
Foreign language 1	English (B2)
Foreign language 2	Russian (C2)
Organizational / management competence	Supervisor of educational practices, course and qualification works of students. Curator. Responsible for collecting information on the publication activity of employees of Plant biology department. Responsible for information provision of educational activities at the ESC "Institute of Biology and Medicine" website. Operator of the system for plagiarism detection and prevention at the Taras Shevchenko National University of Kyiv.
Other computer skills	Using software to create presentations and posters, statistical processing of scientific research results, editing of pictures, photos, video.
Fields of professional interests	Physiological and biochemical reactions of plants under stress conditions, mechanisms of plant adaptation, phenotyping. Influence of nanosized metal particles on plants.

## ADDITIONAL INFORMATION

Item	Titles of publications, projects, conferences, awards and prizes, memberships in academies and societies etc.
Publications	<p>Co-author of more than 50 scientific publications, 10 of which are in journals indexed in the Scopus database (<b>h-index 5</b>), in particular:</p> <ol style="list-style-type: none"> <li>1. Dzhagan V, Smirnov O, <b>Kovalenko M</b>, Mazur N, Hreshchuk O, Taran N, Plokhovska S, Yemets A, Yukhymchuk V, Zahn DRT. Spectroscopic study of phytosynthesised Ag nanoparticles and their activity as SERS substrate. <i>Chemosensors</i>, 2022, 10(4): 129. <a href="https://doi.org/10.3390/chemosensors10040129">https://doi.org/10.3390/chemosensors10040129</a></li> <li>2. Smirnov O, Kalynovskyi V, Yumyna Y, Zelena P, Levenets T, <b>Kovalenko M</b>, Dzhagan V, Skoryk M. Potency of phytosynthesized silver nanoparticles from <i>Lathraea squamaria</i> as anticandidal agent and wheat seeds germination enhancer. <i>Biologia</i>, 2022. <a href="https://doi.org/10.1007/s11756-022-01117-4">https://doi.org/10.1007/s11756-022-01117-4</a></li> <li>3. Smirnov O, <b>Kovalenko M</b>, Karpets LA, Dzhagan V, Kapush O, Dzhagan V, Konotop Y, Taran N. Phytotoxic effects of CdTe quantum dots on root meristems of <i>Allium cepa</i> L. <i>Nova Biotechnologica et Chimica</i>. 2021; 20(1): e890. <a href="https://doi.org/10.36547/nbc.890">https://doi.org/10.36547/nbc.890</a></li> <li>4. Smirnov O, Karpets LA, Zinchenko A, <b>Kovalenko M</b>, Belava V, Taran N. Changes of morphofunctional traits of <i>Triticum aestivum</i> and <i>Triticum dicoccum</i> seedlings caused by polyethylene glycol-modeling drought. <i>Journal of Central European Agriculture</i>. 2020; 21(2): 268-274. <a href="https://doi.org/10.5513/JCEA01/21.2.2341">https://doi.org/10.5513/JCEA01/21.2.2341</a></li> <li>5. Smirnov O, Zinchenko Z, Karpets LA, <b>Kovalenko M</b>, Taran N. Changes of compatible solutes content in <i>Triticum aestivum</i> and <i>Triticum dicoccum</i> seedlings in response to drought stress. <i>Agraarteadus (Journal of Agricultural Science)</i>. 2020; 31(2): 208-211. <a href="https://doi.org/10.15159/jas.20.19">https://doi.org/10.15159/jas.20.19</a></li> <li>6. Konotop Y, Stepanchenko K, Karpets LA, Zinchenko A, <b>Kovalenko M</b>, Smirnov O, Batsmanova L, Taran N. Phytotoxicity of colloidal solutions of stabilized and non-stabilized nanoparticles of essential metals and their oxides. <i>Nova Biotechnologica et Chimica</i>. 2019; 18: 1-9. <a href="https://doi.org/10.2478/nbec-2019-0001">https://doi.org/10.2478/nbec-2019-0001</a></li> <li>7. Konotop Y, <b>Kovalenko M</b>, Batsmanova L, Taran N, Matushiková I. Proline application triggers temporal redox imbalance, but alleviates cadmium stress in wheat seedlings. <i>Pakistan Journal of Botany</i>. 2017; 49(6): 2145-2151.</li> <li>8. Taran N, Storozhenko V, Svetlova N, Batsmanova L, Shvartau V., <b>Kovalenko M</b>. Effect of Zinc and Copper Nanoparticles on Drought Resistance of Wheat Seedlings. <i>Nanoscale Research Letters</i>. 2017; 12(1): 60. <a href="https://doi.org/10.1186/s11671-017-1839-9">https://doi.org/10.1186/s11671-017-1839-9</a></li> <li>9. Olkhovich O, Taran N, Svetlova N, Batsmanova L, Aleksiyenko M, <b>Kovalenko M</b>. Assessment of the influence of the invasive species <i>Pistia stratiotes</i> (Araceae) on some species of submerged macrophytes of natural water bodies of Ukraine. <i>Hydrobiological Journal</i>. 2017; 53(5): 75-84. <a href="https://doi.org/10.1615/HydrobJ.v53.i5.80">https://doi.org/10.1615/HydrobJ.v53.i5.80</a></li> </ol>
Conferences	<p>Participant in many international conferences in Ukraine and abroad, in particular:</p> <ul style="list-style-type: none"> <li>- Plant Functioning Under Environmental Stress; 2018; Cracow, Poland</li> <li>- Plant Biology 2018; Montreal, Québec</li> <li>- VIBes in Biosciences; 2017; Ghent, Belgium</li> </ul>
Scientific projects	<p>President's of Ukraine grant for competitive projects of the State Fund for Fundamental Research "Cereal crops and legumes adaptive potential and its correction with nano-sized nutrients" (contract no. Ф75/170–2018 from 20.09.2018), 2018.</p> <p>Joint US-Ukraine project "Development of High Throughput ROS-stress Phenotyping Method for Breeding Drought-Tolerant Wheat" supported by the Civilian Research &amp; Development Foundation (CRDF Global), (№ OISE-16-62764-0, 2017-2019).</p> <p>"Revealing the role of dehydrins in plant defense responses to environmental stresses", research stay supported National Scholarship Programme of the Slovak Republic for the support of mobility of students, PhD students, university teachers, researchers and artists (2018).</p> <p>"Assessment of the impact of phytoinvasive species on the reservoirs of Ukraine in the context of global climate change and their remediation potential", State Fund for Fundamental Research (№ д/р 0115U001983, 2015).</p> <p>"Research of terrestrial ecosystems of the Argentine archipelago on the example of invertebrates and vascular plants", National Antarctic Scientific Center of Ukraine (№ д/р 0113U005691, 2013 p.)</p>

Prizes and awards	<ul style="list-style-type: none"><li>- President's of Ukraine grant for competitive projects of the State Fund for Fundamental Research (no. Ф75/170–2018, 2018.).</li><li>- Taras Shevchenko Award of the Taras Shevchenko National University of Kyiv (2018).</li><li>- Scholarship holder of the National Scholarship Programme of the Slovak Republic for the support of mobility of students, PhD students, university teachers, researchers and artists (2017).</li><li>- A grant recipient to attend the International Symposium for Ph.D. students in Life Sciences "VIBes in Biosciences", that took place in Ghent, Belgium (2017).</li></ul>
-------------------	--