1. Raziskovalna organizacija (*Research organisation)*:

Univerza v Ljubljani, *Veterinarska fakulteta*

2. Ime in priimek mentorja (*Name and surname of a mentor*):

Vesna Cerkvenik Flajs

3. Področje znanosti iz šifranta ARRS (*Primary research field*):

4.04 Biotehniške vede / Veterina

4. Kontaktni e-naslov mentorja (*Contact of a mentor)*:

vesna.cerkvenik.flajs@vf.uni-lj.si

5. Kratek opis programa usposabljanja (*Short description of the program)*:

Usposabljanje mladega raziskovalca bo potekalo v okviru interdisciplinarnega doktorskega študijskega programa Biomedicina, znanstveno področje veterinarska medicina. Raziskovalno delo bo izvedeno v okviru raziskovalnega programa P4-0092 "Zdravje živali, okolje in varna hrana" in bo zajemalo temeljne in aplikativne raziskave na področju varovanja okolja.

Predlagano raziskovalno delo bo ovrednotilo prisotnost do zdaj neraziskanih kemijskih povzročiteljev hormonskih motenj pri določenih živalskih vrstah in rastlinah ter bo celostni prispevek k poznavanju njihove absorpcije, distribucije, izločanja in poti skozi ekosistem. Sledili bomo toksikokinetiki, patofiziološkim in patohistološkim spremembam. Vključene živalske vrste bodo zajele tako domače kot prostoživeče živali, kot bioindikatorje onesnaženosti okolja. Predvideni rezultati bodo izpostavili tozadevno bolj ogrožena področja v Sloveniji ter potencialne vplive na zdravje živali in ljudi. V raziskavo bodo vključeni tudi potencialni viri rastlin in rastišč, na katerih se lahko odlagajo obravnavane snovi, ki jih zatem živali dobijo v sebe preko zauživanja teh rastlin. Zaradi konzumne vrednosti vključenih živalskih vrst bodo pridobljeni tudi podatki o prehranski varnosti in morebitnih tveganih učinkih na zdravje ljudi.

Za pridobitev rezultatov je predvidena izvedba poskusov na živalih in rastlinah ter uporaba interdisciplinarnih raziskovalnih metod, od analizno kemijskih do patohistoloških, z ustrezno statistično obdelavo. Tozadevno so predvidena tudi ustrezna strokovna in znanstvena izobraževanja mladega raziskovalca na tujih znanstvenih inštitucijah.

Cilj programa usposabljanja mladega raziskovalca je celostna obravnava določenega okoljskega problema, predvideni rezultati pa bodo konstruktiven prispevek k varovanju okolja in zdravja živali in ljudi. Izsledki raziskav bodo doprinesli k trajnostni rabi proizvodnih potencialov ter predstavljali naložbo v dobrobit sedanjih in prihodnjih generacij.

Educational and research training of a young researcher will take place within the framework of the interdisciplinary doctoral program of Biomedicine, scientific field of veterinary medicine. Research work will be carried out within the framework of the research program P4-0092 "Animal health, environment and food safety" and will cover basic and applied research in the field of environmental protection.

The proposed research will evaluate the presence of hitherto unexplored endocrine disrupting chemicals in certain animal species and plants as an integrated contribution to the knowledge of their absorption, distribution, excretion and paths through the ecosystem. Toxicokinetics, pathophysiological and pathohistological changes will be followed. Included species will cover both domestic and wild animals as bioindicators of environmental pollution. Expected results will highlight more vulnerable areas in Slovenia and the potential impacts on animal and human health will be evaluated. The study will also include potential sources of plants and habitats, which can be disposed by the evaluated substances, and subsequently ingested by animals. Due to the consumable value of included species, impact of obtained data on food safety and possible risk effects on human health will be studied.

A carry-out of experiments on animals and plants and the use of interdisciplinary methods from analytical chemistry to pathohistology is foreseen for data acquisition, followed by the appropriate statistical evaluation. In this connection, adequate professional and scientific training of a young researcher at foreign scientific institutions will also be provided.

A training of a young researcher is aimed for a comprehensive evaluation of a particular environmental problem. Provided results will serve as a constructive contribution to the protection of the environment and animal and human health. The research findings will contribute to a sustainable use of production potential and represent an investment for the benefit of present and future generations.