

## Opis raziskovalnega dela (*Research work description*)

1. Članica UL (*UL member*):

Veterinarska Fakulteta (Veterinary Faculty)

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Breda JAKOVAC STRAJN ([breda.jakovacstrajn@vf.uni-lj.si](mailto:breda.jakovacstrajn@vf.uni-lj.si))

3. Raziskovalno področje (*Research field*):

Raziskovalno področje obsega preučevanje žuželk kot trajnostnega biološkega vira v okviru varne prehranske verige, zdravja živali in koncepta »One Health«. Poudarek je na hranilni vrednosti, presnovnih značilnostih ter varnostnih vidikih gojenih vrst žuželk, zlasti na vplivu substrata, rejske tehnologije in okoljskih dejavnikov na njihovo kemijsko sestavo in biološko vrednost.

Doktorsko delo bo usmerjeno v aktualna vprašanja trajnostne pridelave in uporabe žuželk kot alternativnega beljakovinskega vira, v optimizacijo njihove hranilne sestave ter v vrednotenje morebitnih mikrobioloških in kemijskih tveganj. Raziskave bodo povezovale področja prehrane živali, higiene in varnosti krme ter ocene tveganja z namenom razvoja znanstveno podprtih rešitev za trajnostne prehranske sisteme.

4. Opis raziskovalnega dela (*Research work description*):

Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce (*It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.*).

Slov.:

Eng.:

5. Priloge, ki jih je treba priložiti ob prijavi (*Documents required to be submitted with the application*):

### potrdilo o doseženi izobrazbi (*proof of completed education*)

- kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja) (*candidate who has completed a Master's degree (2nd Bologna level)*):
  - diplomska listina / potrdilo o zaključku študijskega programa (*diploma certificate / certificate of completion of the study programme*)
  - priloga k diplomi / potrdilo o opravljenih obveznostih (*diploma supplement / official transcript of records containing all grades obtained in the study programme*)
- kandidat, ki še ni zaključil študija na 2. stopnji (*candidate who has not yet completed a Master's degree*):
  - potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij (*official transcript of records listing all courses and grades obtained so far in the Master's degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.*)

**nagrade** – univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada (*awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award*)

**bibliografija** (*bibliography*)

**življenjepis** (*CV*)

**motivacijsko pismo** (*motivation letter*)

**opis dosedanjega sodelovanja pri raziskovalnem delu** (*description of the candidate's research work*)

**osnutek idejne zasnove raziskovalnega dela** (*preliminary research proposal*)

**priporočilno pismo** (*letter of recommendation*)

**druge priloge** (*other attachments*):

Opis raziskovalnega dela (Research work description)

1. Članica UL (UL member):

Veterinarska fakulteta, Gerbičeva 60, 1000 Ljubljana (Veterinary faculty, Gerbičeva 60, 1000 Ljubljana)

2. Ime, priimek in elektronski naslov mentorja/ice (Mentor's name, surname and email):

Valentina Kubale Dvojmoč, [valentina.kubale@vf.uni-lj.si](mailto:valentina.kubale@vf.uni-lj.si)

3. Raziskovalno področje (Research field):

4.04. Veterina, Morfologija, fiziologija in reprodukcija živali (4.04. Veterinary medicine, Morphology, physiology and reproduction of animals)

4. Opis raziskovalnega dela (Research work description):

Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce (It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.).

Slov.: Predlagano raziskovalno delo ponuja mlademu raziskovalcu priložnost za poglobljeno raziskovanje anatomije in histologije plazilcev ter izbranih molekularnih mehanizmov pri teh živalih, z osredotočenostjo na kraljevega pitona (*Python regius*) in tudi druge pogoste vrste plazilcev v veterinarski praksi. Raziskava je usmerjena v razumevanje morfološke zgradbe plazilcev in njene klinične pomembnosti, z dodatnim raziskovalnim interesom za funkcijo srčnega skeleta (*cartilago/ossa cordis*) pri različnih vrstah plazilcev ter za razkrivanje molekularnih mehanizmov, ki prispevajo k njegovi raznolikosti. Predhodne raziskave so pokazale izrazito pomanjkanje sistematičnih, vrstno specifičnih morfoloških podatkov o različnih vrstah plazilcev, kar omejuje razumevanje njihove biologije in klinične obravnave. Hkrati so poudarile potrebo po tesnejšem povezovanju temeljne (predklinične) in klinične morfolologije, ki bi omogočilo boljše razumevanje zdravja, bolezni in diagnostičnih pristopov pri teh živalih. Doslej izvedene študije so razkrile tudi zanimive značilnosti srčnega skeleta, vključno s pojavnostjo srčne kosti oziroma hrustančnih struktur (*ossa oziroma cartilago cordis*), katerih raznolikost med vrstami odpira nova vprašanja o njihovem funkcionalnem in evolucijskem pomenu.

Mladi raziskovalec bo v okviru doktorskega dela pridobil širok spekter eksperimentalnih znanj, saj bo raziskava združevala različne sodobne raziskovalne pristope, od klasičnih morfoloških in histoloških analiz do naprednih slikovnih in molekularnih metod. Posebna zanimivost raziskave je presenetljiva raznolikost tipov srčnega skeleta, ki smo jo opazili ne le pri plazilih, temveč tudi pri drugih vretenčarjih. Te razlike verjetno odražajo evolucijske in funkcionalne prilagoditve, lahko pa so povezane tudi s patološkimi procesi. Delo bo vključevalo makroskopska in mikroskopska opazovanja, morfometrične analize, pripravo in barvanje histoloških preparatov (hematoksilin-eozin, Goldner, Picro-sirius, srebrenje, von Kossa in druga barvanja), imunohistokemijske metode, 3D-rentgensko mikroskopijo (mikro-CT), delo s celičnimi kulturami, preučevanje signalnih poti nekaterih s proteini G sklopljenih receptorjev (GPCR) ter primerjalno analizo homolognih receptorjev med različnimi skupinami vretenčarjev. Opisane metode bodo dopolnjene s sodobnimi molekularnimi pristopi, kot je prostorska transkriptomika za analizo izražanja genov *in situ* (platforma Xenium, 10x Genomics), če bo mogoče pripraviti prilagojen panel genov za raziskovanje genetskega ozadja teh procesov. Morfološke metode pa se bodo nadgrajevale s kliničnimi slikovnimi metodami (ultrazvok, rentgen, CT), kar omogoča neposredno povezovanje raziskav z veterinarsko klinično prakso. Tak interdisciplinarni pristop bo omogočil boljše razumevanje evolucijskih in funkcionalnih mehanizmov, ki vodijo v raznolikost srčnega skeleta, ter prispeval k razvoju novega konceptualnega okvira za interpretacijo morfoloških posebnosti v klinični anatomiji plazilcev. Razumevanje morfolologije plazilcev ima pomembne praktične posledice, saj prispeva k izboljšanju veterinarske diagnostike, kirurških pristopov in oskrbe plazilcev v ujetništvu in naravi, hkrati pa plazilce postavlja kot zanimive modelne organizme za raziskovanje evolucije organov, tkivnega remodeliranja in razvojnih procesov.

Raziskovalno delo bo potekalo na Inštitutu za predklinične vede, Enoti za anatomijo Veterinarske fakultete Univerze v Ljubljani, v okviru interdisciplinarnega doktorskega programa Biomedicina (znanstveno področje Veterina) ter raziskovalnega programa P4-0053 »Endokrini, imunski in encimski odzivi pri zdravih in bolnih živalih«.

Mladi raziskovalec bo hkrati vključen tudi v raziskovalno in izobraževalno okolje Univerze v Nottinghamu, kjer bo imel dostop do laboratorijske infrastrukture, strokovnega mentorstva ter mednarodnega raziskovalnega sodelovanja. Del doktorskega dela bo potekal na Veterinarski fakulteti Univerze v Nottinghamu v Veliki Britaniji in po potrebi še kakšni drugi instituciji v tujini, kar omogoča pridobivanje dragocenih mednarodnih izkušenj in vključevanje v širšo raziskovalno skupnost.

Od kandidata pričakujemo radovednost, motivacijo za znanstvenoraziskovalno delo, pripravljenost za timsko sodelovanje ter interes za delo v mednarodnem raziskovalnem okolju. Aktivno znanje angleškega jezika je zaradi dela v tujini nujno. Predhodne izkušnje z delom v histološkem laboratoriju so prednost, prav tako zanimanje za pedagoško delo in prenos znanja na študente.

Eng.: The proposed research offers a young researcher the opportunity to gain in-depth knowledge of reptile anatomy and histology, as well as selected molecular mechanisms in these animals, with a particular focus on the ball python (*Python regius*) and other commonly encountered reptile species in veterinary practice. The study aims to improve the understanding of reptile morphology and its clinical relevance, with additional focus on the function of the cardiac skeleton (*cartilago/ossa cordis*) in different reptile species and on identifying molecular mechanisms that contribute to its diversity. Previous research has revealed a significant lack of systematic, species-specific morphological data on reptiles, which limits the understanding of their biology and clinical management. At the same time, these studies have highlighted the need for closer integration of basic (preclinical) and clinical morphology in order to improve the understanding of reptile health, disease processes, and diagnostic approaches. Existing studies have also revealed interesting characteristics of the cardiac skeleton, including the occurrence of cardiac bone or cartilaginous structures (*ossa* or *cartilago cordis*), whose diversity among species raises new questions about their functional and evolutionary significance.

During the doctoral project, the young researcher will acquire a broad range of experimental skills, as the research will integrate several contemporary methodological approaches, from classical morphological and histological analyses to advanced imaging and molecular techniques. A particularly intriguing aspect of the research is the remarkable diversity of cardiac skeleton types observed not only in reptiles but also in other vertebrates. These differences likely reflect evolutionary and functional adaptations, but they may also be associated with pathological processes. The work will include macroscopic and microscopic observations, morphometric analyses, preparation and staining of histological sections (hematoxylin–eosin, Goldner trichrome, Picro-sirius, silver staining, von Kossa and other stainings), immunohistochemical methods, 3D X-ray microscopy (micro-CT), work with cell cultures, as well as investigation of signalling pathways of selected G protein coupled receptors (GPCR) and comparative analyses of homologous receptors across different vertebrate groups. These approaches will be complemented by modern molecular methods such as spatial transcriptomics for *in situ* gene expression analysis (Xenium platform, 10x Genomics), if it becomes feasible to design a customized gene panel to investigate the genetic background of these processes. Morphological methods will also be integrated with clinical imaging techniques (ultrasound, X-ray, CT), enabling a direct connection between research findings and veterinary clinical practice.

Such an interdisciplinary approach will contribute to a better understanding of the evolutionary and functional mechanisms underlying the diversity of the cardiac skeleton and will help develop a new conceptual framework for interpreting morphological specializations in the clinical anatomy of reptiles. Understanding reptile morphology also has important practical implications, as it contributes to improved veterinary diagnostics, surgical approaches, and the care of reptiles both in captivity and in the wild. At the same time, reptiles represent valuable model organisms for studying organ evolution, tissue remodelling, and developmental processes.

The research will be conducted at the Institute of Preclinical Sciences, Unit of Anatomy, Faculty of Veterinary Medicine, University of Ljubljana, within the interdisciplinary doctoral programme Biomedicine (scientific field: Veterinary Medicine) and the research programme P4-0053 “Endocrine, immune and enzymatic responses in healthy and diseased animals.” The young researcher will also be integrated into the research and educational environment of the University of Nottingham, where they will have access to laboratory infrastructure, expert mentorship, and international research collaboration. Part of the doctoral research will be conducted at the School of Veterinary Medicine and Science, University of Nottingham, United Kingdom, and, if necessary, at other institutions abroad, providing valuable international experience and opportunities to engage with the broader scientific community.

We expect candidates to demonstrate curiosity, motivation for scientific research, willingness to work collaboratively, and interest in working in an international research environment. Active knowledge of English is essential due to the research stay abroad. Previous experience in a histology laboratory is considered an advantage, as is an interest in teaching and knowledge transfer to students.

5. Priloge, ki jih je treba priložiti ob prijavi (Documents required to be submitted with the application):

- potrdilo o doseženi izobrazbi (proof of completed education)
  - kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja)  
(candidate who has completed a Master's degree (2nd Bologna level)):
    - o diplomska listina / potrdilo o zaključku študijskega programa  
(diploma certificate / certificate of completion of the study programme)
    - o priloga k diplomi / potrdilo o opravljenih obveznostih  
(diploma supplement / official transcript of records containing all grades obtained in the study programme)
  - kandidat, ki še ni zaključil študija na 2. stopnji  
(candidate who has not yet completed a Master's degree):
    - o potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij  
(official transcript of records listing all courses and grades obtained so far in the Master's degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.)
- nagrade – univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada (awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award))
- bibliografija (bibliography)
- življenjepis (CV)
- motivacijsko pismo (motivation letter)
- opis dosedanjega sodelovanja pri raziskovalnem delu (description of the candidate's research work)
- osnutek idejne zasnove raziskovalnega dela (preliminary research proposal)
- priporočilno pismo (letter of recommendation)
- druge priloge (other attachments):

## Opis raziskovalnega dela (*Research work description*)

1. Članica UL (*UL member*):

Veterinarska fakulteta UL (University of Ljubljana, Veterinary Faculty)

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Urška Kuhar, [urska.kuhar@vf.uni-lj.si](mailto:urska.kuhar@vf.uni-lj.si)

3. Raziskovalno področje (*Research field*):

4.04.02 Biotehnika, Veterina, Animalna patologija in epizootologija

4. Opis raziskovalnega dela (*Research work description*):

Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce (*It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.*).

*Slov.:*

Na Enoti za virologijo na Inštitutu za mikrobiologijo in parazitologijo Veterinarske fakultete UL izvajamo različne diagnostične postopke za ugotavljanje prisotnosti virusov in prisotnosti protiteles proti virusom v živalskih vzorcih. Pri rutinski diagnostiki in raziskovalnem delu uporabljamo tako klasične virološke metode (izolacija virusa na celični kulturi), serološke metode (virus nevtralizacijski testi, ELISA) kot tudi molekularne tehnike (PCR, PCR v realnem času, sekvenciranje po Sangerju).

Metoda sekvenciranja naslednje generacije (angl. next-generation sequencing, NGS) je ena izmed najnovejših molekularnih tehnik, ki postaja vse bolj nepogrešljiva v mikrobioloških laboratorijih po vsem svetu. Pomembna prednost metode NGS je, da ni omejena s predhodno poznanim nukleotidnim zaporedjem nukleinske kisline mikroorganizmov in tako omogoča neposredno odkrivanje neznanih mikroorganizmov ter hkratno odkrivanje več mikroorganizmov v vzorcih.

Področje raziskav doktorskega študenta bo raziskovalni program P4-0092 - Zdravje živali, okolje in varna hrana. Raziskovalno delo bo predvidoma vezano na različne klasične in molekularne tehnike. Poudarek bo na metodi NGS, s katero imamo namen s metagenomskim pristopom proučevati prisotnost virusov in še posebej na bioinformatiki analizi rezultatov. V prvem letu usposabljanja se bo kandidat posvečal študijskim obveznostim, spoznavanju različnih metod in poteku dela v našem laboratoriju ter pričel z zbiranjem vzorcev za doktorsko nalogo.

Za kandidata je zaželeno, da ima:

- izobrazbo biomedicinske smeri
- dobro znanje angleškega jezika kot osnova za pisanje člankov in predstavljanje izsledkov na mednarodnih strokovnih in znanstvenih konferencah
- sposobnost samostojnega in skupinskega dela
- željo po znanstveno-raziskovalnem delu

Kandidatke in kandidate vabimo, da pošljejo kratek življenjepis in motivacijsko pismo na naslov:

[urska.kuhar@vf.uni-lj.si](mailto:urska.kuhar@vf.uni-lj.si)

*Eng.:*

In the Virology Unit, Institute of Microbiology and Parasitology of the Veterinary Faculty, University of Ljubljana, we perform various methods for detection of viruses and antibodies against viruses in animal samples. In routine diagnostics as well as in research work we use classical virological methods (cell culture isolation), serological methods (virus neutralization test, ELISA) and molecular methods (PCR, real time PCR, Sanger sequencing).

The next-generation sequencing (NGS) is one of the most recent molecular techniques. An important advantage of the NGS is that it is not limited to the previously known nucleotide sequence of the nucleic acid of a microorganism. This is the reason why NGS allows direct detection of unknown microorganisms and the simultaneous detection of several microorganisms in the sample. With the rapid advances in NGS, microbiology laboratories are increasingly adopting this technology in their workflows for their existing diagnostic cycles and research field.

The young researcher will be working within the research program P4-0092 (Animal health, environment and food safety). His work will include various classical and molecular techniques. The focus will be on the NGS method and especially on bioinformatics analysis of results, with the aim of detecting viruses with a metagenomic approach.

Desires for candidates:

- a degree in biomedical sciences
- fluency in English as a basis for writing articles and presenting results at national and international professional and scientific conferences
- an ability to work independently as well as in a team
- a desire for scientific and research work

Candidates should send their application including a letter of motivation and CV to [urska.kuhar@vf.uni-lj.s](mailto:urska.kuhar@vf.uni-lj.s)

5. Priloge, ki jih je treba priložiti ob prijavi (*Documents required to be submitted with the application*):

**potrdilo o doseženi izobrazbi (*proof of completed education*)**

- kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja) (*candidate who has completed a Master's degree (2nd Bologna level)*):
  - o diplomska listina / potrdilo o zaključku študijskega programa (*diploma certificate / certificate of completion of the study programme*)
  - o priloga k diplomi / potrdilo o opravljenih obveznostih (*diploma supplement / official transcript of records containing all grades obtained in the study programme*)
- kandidat, ki še ni zaključil študija na 2. stopnji (*candidate who has not yet completed a Master's degree*):
  - o potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij (*official transcript of records listing all courses and grades obtained so far in the Master's degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.*)

**nagrade** – univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada (*awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award*)

**bibliografija** (*bibliography*)

**življenjepis** (*CV*)

**motivacijsko pismo** (*motivation letter*)

**opis dosedanjega sodelovanja pri raziskovalnem delu** (*description of the candidate's research work*)

**osnutek idejne zasnove raziskovalnega dela** (*preliminary research proposal*)

**priporočilno pismo** (*letter of recommendation*)

**druge priloge** (*other attachments*):

## Opis raziskovalnega dela (Research work description)

1. Članica UL (UL member):

Veterinarska fakulteta, *Veterinary Faculty*

2. Ime, priimek in elektronski naslov mentorja/ice (Mentor's name, surname and email):

Darja Pavlin, darja.pavlin@vf.uni-lj.si

3. Raziskovalno področje (Research field):

Veterinarska medicina, *Veterinary medicine*

4. Opis raziskovalnega dela (Research work description):

Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce (It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.).

*Slov.: Mačja kognitivna disfunkcija je bolezen starejših mačk in je v mnogih pogledih podobna Alzheimerjevi bolezni (AB) pri ljudeh. Patofiziologija mačje kognitivne disfunkcije še ni povsem pojasnjena in razumljena. Mačke kažejo simptome kot so spremembe v obnašanju, motnje ritma spanja, dezorientacija, spremembe v stopnji aktivnosti. Tako pri ljudeh, kot pri mačkah pride do kopičenja beta-amiloida in hiperfosforilacije proteinov tau, kar vodi v izgubo sinaps in nevronov ter atrofijo možganov. Zaradi tega bi mačke lahko služile kot naravni model za proučevanje patogeneze in novih možnosti za zdravljenje AB. Osnova raziskovalnega dela mladega raziskovalca bo izvedba klinične študije na mačkah s kognitivno disfunkcijo, v kateri bomo testirali novo zdravilo, ki se je v predhodni študiji izkazalo kot zelo učinkovito na psih. Z raziskavo bomo poskušali ugotoviti, v kolikšni meri lahko zdravilo pripomore pri upočasnjevanju razvoja kognitivne disfunkcije pri mačkah. Poleg tega bomo pridobili nova vedenja o diagnostiki, poteku in zdravljenju bolezni pri mačkah, ki bodo lahko uporabljene kot translacijski most za humano medicino.*

*Od kandidata pričakujemo:*

- *Zainteresiranost za znanstvenoraziskovalno delo*
- *Aktivno znanje angleščine*
- *Komunikativnost in občutek za timsko delo*
- *Veljavno veterinarsko licenco za opravljanje veterinarske dejavnosti.*

*Zelo zaželene so izkušnje na področju kliničnega dela malih živali in znanstvenoraziskovalnega dela.*

*Eng.: Feline cognitive dysfunction is a disease of older cats and, in many respects, is similar to Alzheimer's disease (AD) in humans. The pathophysiology of feline cognitive dysfunction has not yet been fully elucidated or understood. Affected cats exhibit symptoms such as behavioral changes, sleep-wake cycle disturbances, disorientation, and alterations in activity levels.*

*In both humans and cats, there is an accumulation of beta-amyloid and hyperphosphorylation of tau proteins, leading to synaptic and neuronal loss as well as brain atrophy. For this reason, cats may serve as a natural model for studying the pathogenesis and novel therapeutic approaches for AD.*

*The core of the young researcher's work will be the implementation of a clinical study in cats with cognitive dysfunction, in which we will test a new drug that proved highly effective in dogs in a previous study. Through this research, we aim to determine to what extent the drug may help slow the progression of cognitive dysfunction in cats. In addition, we expect to gain new insights into the diagnosis, course, and treatment of the disease in cats, which may serve as a translational bridge to human medicine.*

*We expect the candidate to have:*

- *A strong interest in scientific research*
- *Active knowledge of English language*
- *Good communication skills and the ability to work effectively in a team*
- *A valid veterinary license to practice veterinary medicine*

*Experience in small animal clinical practice and scientific research is highly desirable.*

5. Priloge, ki jih je treba priložiti ob prijavi (Documents required to be submitted with the application):

**potrdilo o doseženi izobrazbi (proof of completed education)**

- kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja) (*candidate who has completed a Master's degree (2nd Bologna level)*):
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  - o priloga k diplomi / potrdilo o opravljenih obveznostih (*diploma supplement / official transcript of records containing all grades obtained in the study programme*)
- kandidat, ki še ni zaključil študija na 2. stopnji (*candidate who has not yet completed a Master's degree*):
  - o potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij (*official transcript of records listing all courses and grades obtained so far in the Master's degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.*)

**nagrade** – univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada (*awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award*)

**bibliografija** (*bibliography*)

**življenjepis** (*CV*)

**motivacijsko pismo** (*motivation letter*)

**opis dosedanjega sodelovanja pri raziskovalnem delu** (*description of the candidate's research work*)

**osnutek idejne zasnove raziskovalnega dela** (*preliminary research proposal*)

**priporočilno pismo** (*letter of recommendation*)

**druge priloge** (*other attachments*):