

Project proposal title (up to 200 characters): A bioinformatics approach to dairy cattle breeding using genomic selection

Acronym (up to 20 characters): BioITGenoSelect

Name, father's/mother's name and family name: **Ljuba, Jovo, Štrbac**

Principal Investigator (PI) or Participant: **Principal Investigator**

Contact e-mail, phone and web page (if available): ljuba.strbac@stocarstvo.edu.rs, +381214853329, +38163597316

Username in the base of researches of the Ministry responsible for scientific research: ljuba.strbac@stocarstvo.edu.rs

Name and address of the Scientific institution during the implementation of the Project and Scientific institution contact person: **Faculty of Agriculture, University of Novi Sad, Trg Dositeja Obradovića 8, 21101 Novi Sad, dr Snezana Trivunovic, full professor, snezana.trivunovic@stocarstvo.edu.rs**

BIOGRAPHY

- Date and place of birth: **July 29, 1987, Bosanska Krupa, Bosnia and Herzegovina**
- Age: **32**
- Citizenship: **Serbia**

- Research field and area/areas (at most five): **Animal Breeding, Quantitative Genetics, Biostatistics**

- Education:
University of Novi Sad, Faculty of Agriculture, Novi Sad, Serbia
 - PhD** in Animal Science – Animal Breeding, 2011-2017 (grade point average 10/10 max) “Quantitative-genetic analysis for racing times of trotter horses”
 - Master** in Agricultural Extension - Animal Breeding, 2010-2011 (grade point average 9.36/10 max) “New technology in function of development of trotting sport”
 - Bachelor** in Animal Science – Animal Breeding, 2006–2010 (grade point average 8.95/10 max) “Impact of paragenetic factors on trotter horses speed”

- Name, family name and title of the Ph.D. thesis supervisor: **Snežana Trivunović, full professor, Mirjana Baban, full professor**

- Dates of appointments (researcher and scientific titles, i.e., equivalent titles in higher education)
 - Assistant professor** July 2019 – present, Department of Animal Science, Faculty of Agriculture, University of Novi Sad, Serbia
 - Teaching assistant** Jun 2016 – Jun 2019, Department of Animal Science, Faculty of Agriculture, University of Novi Sad, Serbia
 - Research assistant**, Jun 2013 – Jun. 2016, Department of Animal Science, Faculty of Agriculture, University of Novi Sad, Serbia

- Employment history (institutions and to/from dates up to the day of the proposal submission):
From July 2010, Department of Animal Science, Faculty of Agriculture, University of Novi Sad, Serbia

- List of selected publications (up to five most important publications in the research field of the Project).
 1. Trivunović S., **Štrbac Lj.**, Šaran M., Obad M., Janković D., Bunevski Gj., Radinović M. (2019): Estimation of genetic parameters for milk traits in different lactations of holstein-friesian cattle using random regression model, The International Symposium on Animal Science (ISAS) 2019. 03-08 June 2019, Herceg Novi, Montenegro, 14. ISBN 978-86-7520-467-1, M33
 2. Trivunović S., **Štrbac Lj.**, Janković D., Ivanović D., Radović I., Mirkov M., Pihler I., Bjedov S., Šaran M. (2018): Livestock production development in AP Vojvodina, Acta Agraria Debreceniensis, University of Debrecen, 501-514. ISSN 1587-1282., M31
 3. **Štrbac Lj.**, Šaran M., Jurakić Ž., Popović M., Janković D., Radinović M., Trivunović S. (2018): Heritability and repeatability estimates for milk production traits in organic and conventional dairy cattle production, The International Symposium on Animal Science (ISAS) 2018. 22-23 November 2018, Zemun, Belgrade, 129-134. ISBN: 978-86-7834-316-2., M33

4. **Štrbac Lj.**, Trivunović S., Baban M. (2015): Estimation of genetic parameters for racing time of trotter horses using individual race results, The international symposium on animal science (ISAS) 2015, Novi Sad, Serbia, 9.-11. September, 89-94. ISBN 978-86-7520-346-9, M33
5. **Štrbac Lj.**, Trivunović S. (2013): Effect of paragenetic factors on race time in small population of trotters, Turkish Journal of Veterinary and Animal Science, 37 (6): 701-705. ISSN 1300-0128, E-ISSN 1303-6181, doi: 10.3909/vet-1212-18, M23, IF 0,450

- Citation number (excluding self-citations) from citation databases: **15 SCOPUS**, **3 ISI/Web of Science**
- Hirsch index from SCOPUS: **2**

- Participant in the following national project:

Production of hard cheese with added value of milk produced in organic and self-sustaining system, No TR31095, project financed by the Ministry of Education, Science and Technological Development, Republic of Serbia, coordinator Faculty of Agriculture, Novi Sad, project period 2013-2019;

Application of genomic selection in cattle breeding, project financed by the Provincial Secretariat for Higher Education and Scientific Research, Autonomous Province of Vojvodina, Republic of Serbia, coordinator Faculty of Agriculture, Novi Sad, project period July 2019 - July 2020.

New technologies in increasing the reproductive efficiency of ruminants, project financed by the Provincial Secretariat for Higher Education and Scientific Research, Autonomous Province of Vojvodina, Republic of Serbia, coordinator Faculty of Agriculture, Novi Sad, project period: during 2015 year.

- International scientific collaboration and mobility.

CEEPUS mobility program:

01.-31.03.2018. Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje

16.-30.04.2018. Faculty of Agrobiotechnical Sciences Osijek, Josip Juraj Strossmayer University of Osijek

- Reviewing scientific journals and grants.
Reviewer for **Genetika** scientific journal (SCI)

- Skills and other facts relevant to the Project.

Training course:

Feb. 2019., four days: Application of basic molecular methods genetics - Institute of molecular genetics and genetic engineering, University of Belgrade.

Mar. 2018., three days: Biostatistics - University center for applied statistics, University of Novi Sad.

Nov. 2017., four days: Python for beginners - University center for applied statistics, University of Novi Sad.

Nov. 2014., four days: Linear models - University center for applied statistics, University of Novi Sad.

Knowledge of computer programs:

Statistica, SPSS - data analysis

WOMBAT (Meyer, 2006) - software package for quantitative genetic analyses of continuous traits, fitting a linear, mixed model; estimates of covariance components and the resulting genetic parameters are obtained by restricted maximum likelihood.

GLO-BAP (VIT) - Bull Advice Program

Membership:

Serbian Genetic Society

EAAP and EAAP young club

Language:

Serbian, English

Other:

9 years experience in implementing livestock breeding programs.

- Link to database of researchers:

<https://scholar.google.com/citations?user=jr27kmAAAAAJ&hl=en>

<https://www.scopus.com/authid/detail.uri?authorId=55749643800>

<http://knr.uns.ac.rs/imenikSvi.xhtml> Type in: Štrbac Ljuba

- **Other research and management activities:**

- From 2016. year working with students to prepare and process data for graduate and master's theses in the field animal breeding.
- Member of the organizing committee of the Seminar of Breeding Organizations of AP Vojvodina from 2012. to 2017. year.
- Member of the organizing committee of the International Symposium on Animal Science in 2017. year.
- At the Department of Animal Science, Faculty of Agriculture in Center for the breeding domestic animals in charge for estimates breeding values.
- Head of the horse breeding department in the main breeding organization for livestock production at the Department of Animal Science from 2018 year.
- Participation in the work of the horse quality assessment committee at the National Livestock Exhibition at the International Agricultural Fair in Novi Sad from 2011. to 2019. year.