

Obituary

Yegor Borisovich Malashichev, Editor-in-Chief of *Biological Communications*, passed away on 15 December.

Yegor was an extraordinary man. The scope of his scientific interests was extremely wide and covered vertebrate morphology, evolutionary developmental biology, behavioural asymmetry and many other fields of biological research. Any scientific project that he carried out would culminate in an important and interesting discovery.

Yegor was always attentive to students and would actively involve them in the most interesting and advanced scientific research. At the Department of Vertebrate Zoology, St. Petersburg State University, where he was an associate professor, Yegor set up several state-of-the-art laboratories, supervised a multitude of scientific projects and created his own school of thought studying behavioural asymmetry in vertebrates. Every year, Yegor participated in teaching various courses at the Faculty of Biology, such as vertebrate zoology, summer practicum, herpetology and many others. Hundreds of students will remember him as a joyful teacher with a great sense of humour. Many Bachelor, Master and PhD theses written under his supervision were successfully defended. Yegor continued to look after his students for years and years after their graduation by encouraging them to work on new research projects and topics. This resulted in a great number of former students of all ages, from high school pupils to candidates of sciences, who will, undoubtedly, follow up the research that Yegor initiated.

In recent years, Yegor's main focus was the *Biological Communications* journal. Since 2014, he had been working constantly on its improvement, expansion and promotion. With his active involvement, the journal received its modern title (previously it was known as *Vestnik of Saint Petersburg University. Series 3. Biology*) and a new modern layout meeting the criteria of top-rated scientific magazines. Thanks to Yegor's efforts, *Biological Communications* has become a genuinely international magazine, which appeals to a broad scientific audience. Yegor was sincerely delighted to see every new issue of the journal with interesting articles in print and was deeply upset when something went wrong with the journal.

Yegor was a brilliant organizer; no difficulties could lead him astray. Organizing laboratory work, supervising several research topics at a time, writing scientific articles, drafting new grant applications, keeping projects accounting records, sitting on various boards and commissions, giving lectures and preparing an upcoming issue of the journal are just some of the things that Yegor managed to do. Nevertheless, you could always ask him for advice or help, and he would never refuse or complain that he was busy. Despite his overloaded schedule, he was always able to find some time to help organize an expedition for schoolchildren, give a popular science lecture, provide his colleagues with advice, meet his friends and take care of his family.

Yegor will be remembered as a very kind person, sympathetic to everybody around him. Upbeat, full of optimism, plans for the future and life, he accomplished a great deal of things. Yegor will be greatly missed by all of us.



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Bibliography

1996

- Malashichev, Y. B. 1995. Soderzhaniye i razvedeniye zherlyanok, chast 1 [Keeping and breeding fire-bellied toads, part 1]. *Akvariumist* (Moscow) 4:18–19.
- Malashichev, Y. B. 1996. Soderzhaniye i razvedeniye zherlyanok, chast 2 [Keeping and breeding fire-bellied toads, part 2]. *Akvariumist* (Moscow) 1:18–19.
- Anonimous. 1996. Anuran vertebral morphology. *Herpetological Review* 27(2):58.
- Kovalenko, E. E., Danilevskaya, S. E., Bordukova, T. A., Danilov, I. G., Malashichev, Y. B. 1996. Collaboration call. *Russian Journal of Herpetology* 3(1):102.

1997

- Borkhvardt, V. G., Malashichev, Y. B. 1997. Position of the epicoracoids in arciferal pectoral girdles of the fire-bellies *Bombina* (Amphibia: Discoglossidae). *Russian Journal of Herpetology* 4(1):28–30.
- Malashichev, Y. B. 1997. Sacrum variability and character correlation in *Bombina*. *Journal of Morphology* 232(3):292.
- Malashichev, Y. B. 1997. Qualitative analysis of sacrum variability in some *Bombina* species; pp. 257–264 in: W. Böhme, W. Birschhoff and T. Ziegler (eds.), *Herpetologia Bonnensis*, Bonn (SEH).
- Malashichev, Y. B. 1997. Analysis of the European herring gull *Larus argentatus* diet on the islands of Kandalaksha Bay of the White Sea based on the results of the analysis of the pellets. *Russian Journal of Ornithology*, Express Issue 26:5–21.

1998

- Malashichev, Y. B. 1998. Mozhet, im podnimat' nauku iz ruin? [Maybe they should raise science from the ruins?] *Poisk* 12(462), 14–20 March.
- Anonimous. 1998. Developmental constraints. *Herpetological Review* 29(1):5.

1999

- Malashichev, Y. B. 1999. Female amplexus in a yellow-bellied toad, *Bombina variegata*. *Russian Journal of Herpetology* 6(2):143–146.
- Malashichev, Y. B. and Borkhvardt, V. G. 1999. On sacral myomeres in embryos of reptiles with fully developed and reduced limbs; pp. 305–307 in: C. Miaude and R. Guyétant (eds.), *Current Studies in Herpetology*. Le Bourget du Lac (SEH).

2000

- Borkhvardt, V. G. and Malashichev, Y. B. 2000. Correlative changes during early morphogenesis of the sacroiliac complex in squamate reptiles. *Annals of Anatomy (Anatomischer Anzeiger)* 182(5):439–444.
- Malashichev, Y. B. Retsenziya na monografiyu V. F. Sycha «Morfologiya lokomotornogo apparata ptits» [Review of the book by V. F. Sych "The morphology of the locomotory apparatus of birds"]. *Russian Journal of Ornithology*, Express Issue 121:16–22.
- Malashichev, Y. B. 2000. Kakiye pozvonki slagayut slozhnyy krestets ptits? [Which vertebrae constitute the complex sacrum of birds?]. *Russian Journal of Ornithology*, Express Issue 124:3–18.
- Malashichev, Y. B. 2000. On parasites of the yellow-bellied toad (*Bombina variegata*). *Advances in Amphibian Research in the Former Soviet Union*. 5: 289–290.

2001

- Shirokov, Yu. V. and Malashichev, Y. B. 2001. Gnezdovaniye bormotushki Hippolais caligata v okrestnostyakh posolka Zaostrov'ye (Lodeynopol'skiy rayon, Leningradskaya oblast) [Breeding of the booted warbler *Hippolais caligata* in the vicinity of the Zaostrov'ye village (Lodeinopolsky district, Leningrad region)]. *Russian Journal of Ornithology*, Express Issue 135: 201–202.
- Malashichev, Y. B. 2001. Sacrum and pelvis development in Lacertidae. *Russian Journal of Herpetology* 8(1):1–16.
- Borkhvardt V. G. and Malashichev Y. B. 2001. Epicoracoid overlap in fire-bellied toads, *Bombina bombina*, from parents of known morphology. *Amphibia-Reptilia* 22(4):480–484.
- Malashichev Y. B. 2001. Neobychnoye raspolozheniye gnezda rechnoy krachki (*Sterna hirundo* L.) [Unusual location of the common tern (*Sterna hirundo* L.) nest]. *Russian Journal of Ornithology*, Express Issue 138:270–271.
- Malashichev, Y. B. and Borkhvardt, V. G. 2001. Hypaxial muscles degeneration in the formation of the sacroiliac complex of Amniota. *Development, Growth & Differentiation* 43 (Suppl.):S46.
- Malashichev, Y. B., Borkhvardt, V. G. and Proschina, A. E. 2001. Developmental factors influencing asymmetry of amphibian shoulder girdles. *Development, Growth & Differentiation* 43 (Suppl.):S136.

2002

- Malashichev, Y. B., Nikitina, N. G. 2002. Preferential limb use in relation to epicoracoid overlap in pectoral girdles of toads. *Laterality* 7(1):1–18.
- Malashichev, Y. B. 2002. A note from the Symposium organiser. *Laterality* 7(3): a Special Issue *Behavioural and Morphological Asymmetries in Amphibians and Reptiles: Proceedings of the 4th World Congress of Herpetology Satellite Symposium*:195–196

Malashichev, Y. B. 2002. Asymmetries in amphibians: A review of morphology and behaviour. *Laterality* 7(3): a Special Issue *Behavioural and Morphological Asymmetries in Amphibians and Reptiles: Proceedings of the 4th World Congress of Herpetology Satellite Symposium*: 197–217.

2004

Voskoboinikova, O. S., Malashichev, Y. B. and Voronina, E. P. 2004. On the development of some bony elements in the ontogenesis of five species of Notothenioidea [O razvitiy nekotorykh kostnykh elementov v ontogeneze nototeniyevykh ryb (Notothenioidei)]. *Voprosy Ikhtiologii (Journal of Ichthyology)* 44(3):245–251.

Malashichev, Y. B., Wassersug, R. J. 2004. Left and right in the amphibian world: which way to develop and where to turn? *BioEssays*, 26(5):512–522.

2005

Malashichev, Y. B., Borkhardt, V. G., Christ, B. and Scaal, M. 2005. Differential regulation of avian pelvic girdle development by the limb field ectoderm. *Anatomy and Embryology* 210(3):187–197.

2006

Malashichev, Y. B. 2006. Stroyeniye i razvitiye kresttsovo-tazovogo kompleksa amniot [Structure and development of the sacro-pelvic complex in Amniota]. 127 pp. Izdatelstvo Sankt-Peterburgskogo Universiteta, Saint Petersburg (Seriya: Trudy Sankt-Peterburgskogo obshchestva yestestvoispytateley, Ser.4, V. 88).

Malashichev, Y. B. 2006. One-sided limb preference is linked to alternating-limb locomotion in anuran amphibians. *Journal of Comparative Psychology* 120(4):401–410.

Malashichev, Y. B. and Deckel, A. W. (eds.). 2006. Behavioral and morphological asymmetries in vertebrates, in Molecular biology intelligence unit; 193 pp. Landes Biosciences/Eurekah.com, Texas, USA.

Malashichev, Y. B. 2006. Is there a link between visceral and neurobehavioral asymmetries in development and evolution? Chapter 4; pp. 33–44 in Y. B. Malashichev and A. W. Deckel (eds.), behavioral and morphological asymmetries in vertebrates, in Molecular biology intelligence unit. Landes Biosciences/Eurekah.com, Texas, USA.

2007

Kostylev, M. and Malashichev, Y. B. 2007. Korrelyatsii asimmetrii plechevogo poyasa i asimmetrii kostey perednikh konechnostey u segoletok shportsevoy lyagushki, *Xenopus laevis* [Correlation of the shoulder girdle asymmetry with the limb skeleton asymmetry in *Xenopus laevis*]. *Doklady Biological Sciences*, 416: 374–376.]

2008

Malashichev, Y. B., Christ, B. and Pröls, F. 2008. Avian pelvis originates from lateral plate mesoderm and its development requires signals from both ectoderm and paraxial mesoderm. *Cell and Tissue Research* 331(3):595–604.

2009

Giljov, A. N., Karenina, K. A. and Malashichev, Y. B. 2009. An eye to a worm: lateralization of feeding in primary aquatic vertebrates. *Laterality* 14(3):273–286.

Malashichev, Y., Khattak S., Tanaka E. M. and Epperlein H.-H. 2009. 09-P046 Long-term fate mapping of neural crest and mesoderm in the shoulder girdle of the axolotl (*Ambystoma mexicanum*). *Mechanisms of Development* 126(S1):S164.

2010

Karenina, K. A., Giljov, A. N., Malashichev, Y. B., Baranov, V. S. and Bel'kovich, V. M. 2010. Zritel'naya lateralizatsiya v dikoy prirode: vospriyatiye neznakomogo ob"yekta u belukhi [Visual lateralization in the wild: perceiving of novel object in Beluga Whale (*Delphinapterus leucas*)]. *Journal of Asymmetry* 4(2):3–12.

Karenina, K., Giljov, A., Baranov, V., Osipova, L., Krasnova, V. and Malashichev, Y. 2010. Visual laterality of calf-mother interactions in wild whales. *PLoS ONE* 5(11):e13787.

2011

Giljov, A. N., Karenina, K. A. and Malashichev, Y. B. 2011. The history of studies of motor asymmetries in birds. *Russian Journal of Ornithology* 20 (Express Issue 664):1151–1165.

Lada, G. A., Mil'to K. D. and Malashichev Y. B. 2011. Zemnovodnyye i presmykayushchiyesya uchastkov «Les na Vorskle» i «Ostras'yev Yar» zapovednika «Belogor'ye» i ikh okrestnostey. [Amphibians and reptiles of the “Forest on Vorskla” and “Ostrasyev Yar” areas of the Belogorye reserve and their surroundings]. *Sovremennaya Gerpetologiya* 11(1/2):40–47.

2012

Giljov, A., Karenina, K. and Malashichev, Y. 2012. Limb preferences in a marsupial, *Macropus rufogriseus*: evidence for postural effect. *Animal Behaviour* 83(2):525–534.

Giljov, A. N., Karenina, K. A. and Malashichev, Y. B. 2012. Asimmetrichnoye ispol'zovaniye perednikh konechnostey u domovogo opossuma, *Monodelphis domestica* [Asymmetric forelimb use in grey short-tailed opossum, *Monodelphis domestica*]; pp. 63–76 in S. V. Popov (ed.), Scientific Research in Zoological Parks, vol.28. Moscow Zoo, Moscow — Triada, Tver.

Giljov, A., Karenina, K. and Malashichev, Y. 2012. Does bipedality predict the group-level manual laterality in mammals? *PLoS ONE* 7(12):e51583.

Epperlein, H. H., Khattak, S., Knapp, D., Tanaka, E. M. and Malashichev, Y. 2012. Neural crest does not contribute to the neck and shoulder in the Axolotl (*Ambystoma mexicanum*). *PLoS ONE*, 7(12):e52244.

2013

Karenina, K. A., Giljov, A. N. and Malashichev, Y. B. 2013. Eye as a key element of conspecific image eliciting lateralized response in fish. *Animal Cognition* 16(2): 287–300.

Giljov, A., Karenina, K. and Malashichev, Y. 2013. Forelimb preferences in quadrupedal marsupials and their implications for laterality evolution in mammals. *BMC Evolutionary Biology* 13:61.

Karenina, K., Giljov, A., Glazov, D. and Y. Malashichev. 2013. Social laterality in wild beluga whale infants: comparisons between locations, escort conditions, and ages. *Behavioral Ecology and Sociobiology* 67:1195–1204.

Karenina, K., Giljov, A., Ivkovich, T., Burdin, A. and Malashichev, Y. 2013. Lateralization of spatial relationships between wild mother and infant orcas, *Orcinus orca*. *Animal Behaviour* 86(6):1225–1231.

Davidian, A. and Malashichev, Y. 2013. Dual embryonic origin of the hyobranchial apparatus in the Mexican Axolotl (*Ambystoma mexicanum*). *International Journal of Developmental Biology* 57(11/12): 821–828.

2014

Izvekov, E. I., Kuternitskaya, E. A., Pankova, N. A., Malashichev, Y. B. and Nepomnyashchikh, V. A. 2014. Lateralisation of rotational swimming but not fast escape response in the juvenile sterlet sturgeon, *Acipenser ruthenus* (Chondrostei: Acipenseridae). *Laterality* 19(3):302–24.

Levchenko, A., Davtian, S., Petrova N. and Malashichev Y. 2014. Sequencing of five left-right cerebral asymmetry genes in a cohort of schizophrenia and schizotypal disorder patients from Russia. *Psychiatric Genetics* 24(2):75–80.

Malashichev, Y. B. 2014. Neobychnoye povedeniye samtsa beylo tryasoguzki (*Motacilla alba*) pered zerkalom [Unusual behavior of the white wagtail (*Motacilla alba*) male in front of mirror]. *Russian Journal of Ornithology* 23 (Express Issue 982):972–975.

Malashichev, Y. B. 2014. Nakhodka tetereva *Lyrurus tetrix* v zone zhiloy zastroyki Sankt-Peterburga. [Finding of black grouse *Lyrurus tetrix* within the residential area of St. Petersburg]. *Russian Journal of Ornithology* 23 (Express Issue 993):1298–1299.

Birina, U. A. and Malashichev, Y. B. 2014. Asimetriya v polozhenii «golova-pod-krylom» vo vremya otdykha u vodoplavayushchikh i okolovodnykh ptits [Asymmetry in the “head-under-wing” position while resting in waterfowl and waders]. *Russian Journal of Ornithology* 23 (Express Issue 1031): 2389–2393.

Zagrivnaya, M. V. and Malashichev, Y. B. 2014. [Genetika shizofrenii i asimetriya golovnogo mozga: v poiskakh molekulyarnykh markorov] The genetics of schizophrenia and brain asymmetry: in search of molecular markers. *Translyatsionnaya Meditsina* 3:44–56.

2015

Giljov, A., Karenina, K., Ingram, J. and Malashichev, Y. 2015. Parallel emergence of true handedness in the evolution of marsupials and placentals. *Current Biology* 25(14):1878–1884.

Levchenko, A., Davtian, S., Freylichman, O., Zagrivnaya, M., Kostareva, A. and Malashichev, Y. 2015. Beta-catenin in schizophrenia: Possibly deleterious novel mutation. *Psychiatry Research* 228(3):843–848.

Bolbasov, N., Lapin, I. N., Svetlichnyi, V. A., Lenitseva, Y. D., Malashicheva, A., Malashichev, Y., Golovkin, A. S., Anissimov, Y. G. and Tverdokhlebov, S. I. 2015. The formation of calcium phosphate coatings by pulse laser deposition on the surface of polymeric ferroelectric. *Applied Surface Science* 349:420–429.

Trulev, A. S., Malashichev, Y. B. and Ermakov, A. S. 2015. Artificial inversion of the left–right visceral asymmetry in vertebrates: conceptual approaches and experimental solutions. *Russian Journal of Developmental Biology* 46(6):307–325.

Birina, U. A. and Malashichev, Y. B. 2015. Lateralization of the head position during the mallard rest (*Anas platyrhynchos*) from two different northern wintering groups. *Vestnik SPbGU. Ser. 3 Biologiya* 3:46–52.

Giljov, A., Karenina, K., Hawkins, M. and Malashichev, Y. 2015. First record of forelimb preferences in monotremes (*Zaglossus spp.*). *Australian Journal of Zoology* 65(5): 320–323.

2016

Karenina, K., Giljov, A., Ivkovich, T. and Malashichev, Y. 2016. Evidence for the perceptual origin of right-sided feeding biases in cetaceans. *Animal Cognition* 19(1):239–241.

Malashichev, Y. 2016. Asymmetry of righting reflexes in sea turtles and its behavioral correlates. *Physiology & Behavior* 157:1–8.

Giljov, A. N., Karenina, K. A., Ivkovich, T. V. and Malashichev, Y. B. 2016. Asymmetry of pectoral flipper use in the orca *Orcinus orca* (Linnaeus, 1758) from the Avachinskii Bay (Eastern Kamchatka). *Russian Journal of Marine Biology* 42: 196–198.

Giljov, A. N., Karenina, K. A. and Malashichev, Y. B. 2016. Asimetriya ispol'zovaniya konechnostey u mlekopitayushchikh [Asymmetry of limb use in mammals]. Moscow: Tovarishchestvo nauchnykh izdaniy KMK.

Trulioff, A. S., Ermakov, A. S. and Malashichev, Y. B. 2016. Eksperimental'noye izucheniye vliyaniya serotoninovoi signalizatsii na povedencheskuyu asimetriyu amfibi [Experimental study of the effect of serotonin signaling on the behavioral lateralization in amphibians]. *Meditsinskiy Akademicheskij Zhurnal* 16(4):239–240.

2017

Trulioff, A., Ermakov, A. and Malashichev, Y. 2017. Primary cilia as a possible link between left-right asymmetry and neurodevelopmental diseases. *Genes* 8(2):48.

- Karenina, K., Giljov, A., Ingram, J., Rowntree V.J. and Malashichev, Y. 2017. Lateralization of mother–infant interactions in a diverse range of mammal species. *Nature Ecology and Evolution* 1(2):030.
- Giljov, A., Karenina, K., Ingram, J. and Malashichev, Y. 2017. Early expression of manual lateralization in bipedal marsupials. *Journal of Comparative Psychology* 131(3):225–230.
- Ponomartsev, S., Valasek, P., Patel, K. and Malashichev, Y. 2017. Neural crest contribution to the avian shoulder girdle and implications to girdle evolution in vertebrates. *Biological Communications* 62(1):26–37.
- Malashichev Y. 2017. From Open Access to Open Science (Editorial). *Biological Communications*, 62(1):3–5.
- Malashichev, Y. 2017. On “Growth and Form” and ASAPbio reform (Editorial). *Biological Communications*, 62(2):63–66.
- Giljov, A. N., Karenina, K. A. and Malashichev, Y. B. 2017. Manual laterality in marsupials. Moscow: KMK Scientific Press.

2018

- Giljov, A., Karenina, K. and Malashichev, Y. 2018. Facing each other: mammal mothers and infants prefer the position favouring right hemisphere processing. *Biology Letters* 14(1):20170707.
- Karenina, K., Giljov, A. and Malashichev, Y. 2018. Lateralization of mother-infant interactions in wild horses. *Behavioral Processes* 148:49–55.
- Karenina, K., Giljov, A., de Silva, S. and Malashichev, Y. 2018. Social lateralization in wild Asian elephants: visual preferences of mothers and offspring. *Behavioral Ecology and Sociobiology* 72(2): 21.
- Izvekov, E. I., Pavlova, V. V., Ognevaja, E. M., Nepomnyashchikh, V. A. and Malashichev, Y. B. 2018. Pattern of lateralized behaviors in a caudate amphibian, *Ambystoma mexicanum*. *Russian Journal of Herpetology* 25(1):31–42.
- Ognevaja, E. M., Lajus, D. L., Izvekov, E. I., Nepomnyashchikh, V. A. and Malashichev, Y. B. 2018. Mirrors inhibit growth and stimulate lateralized response to prey in growing larvae of the Mexican axolotl, *Ambystoma mexicanum*. *Biological Communications* 63(2):133–139.
- Malashichev, Y. Distinct molecular mechanisms for development of brain asymmetries? *Biological Communications* 63(2):103–105.
- Karenina, K., Giljov, A. and Malashichev, Y. Brain asymmetry and mother — young relations. St. Petersburg: “Lan Book” (in press)
- Giljov, A., Malashichev, Y. and Karenina, K. What do wild saiga antelopes tell us about the relative roles of two brain hemispheres in social interactions? *Animal Cognition* (in press)