



FMS

LEFT-HANDED ANIMALS

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LEFT-HANDED ANIMALS: TASK

Some animals have a preference for using one side of their body, similar to left-handed and right-handed humans. Perform experiments to obtain statistical data and investigate paw preferences of various animals.



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DEFINITIONS:

Handedness is a tendency to use one hand rather than the other.

Webster Dictionary

Left-handed means using the left hand for writing and for most other things.

Ambidextrous means being able to use both your right and left hand equally well.

Cambridge Advanced Learner's Dictionary & Thesaurus

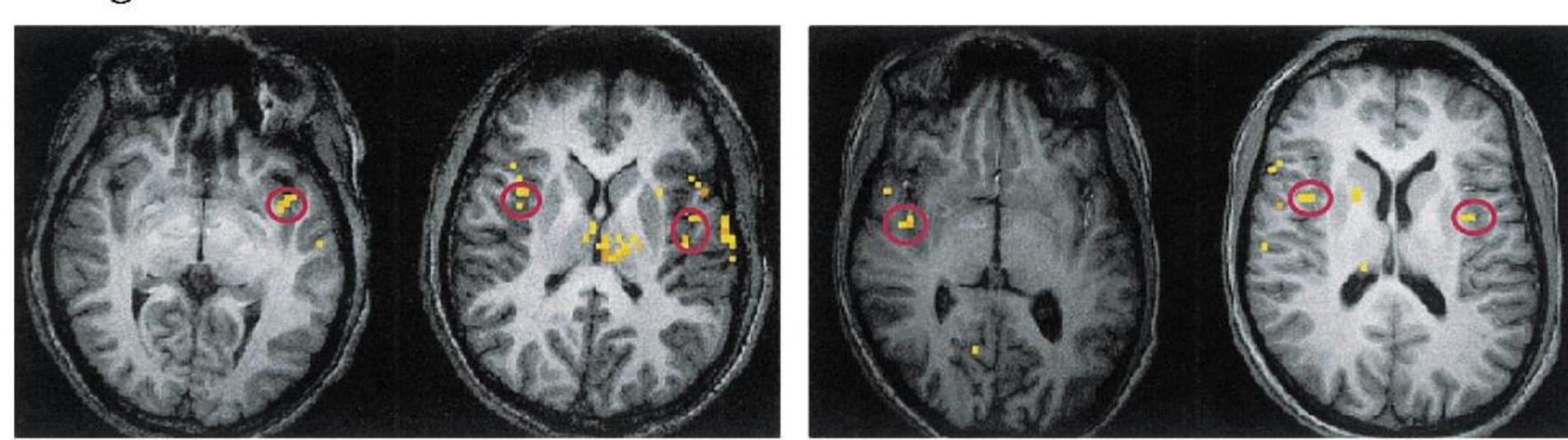


CEREBRAL LATERALIZATION

Functional and structural differences between left and right brain hemispheres can be found in the animal kingdom.

Researchers have known for decades that other animals demonstrate handedness. But only recently have they started to learn that, like Homo sapiens, other species can be characteristically handed—meaning that “a statistically significant majority of the individuals in a population prefer one hand to the other,



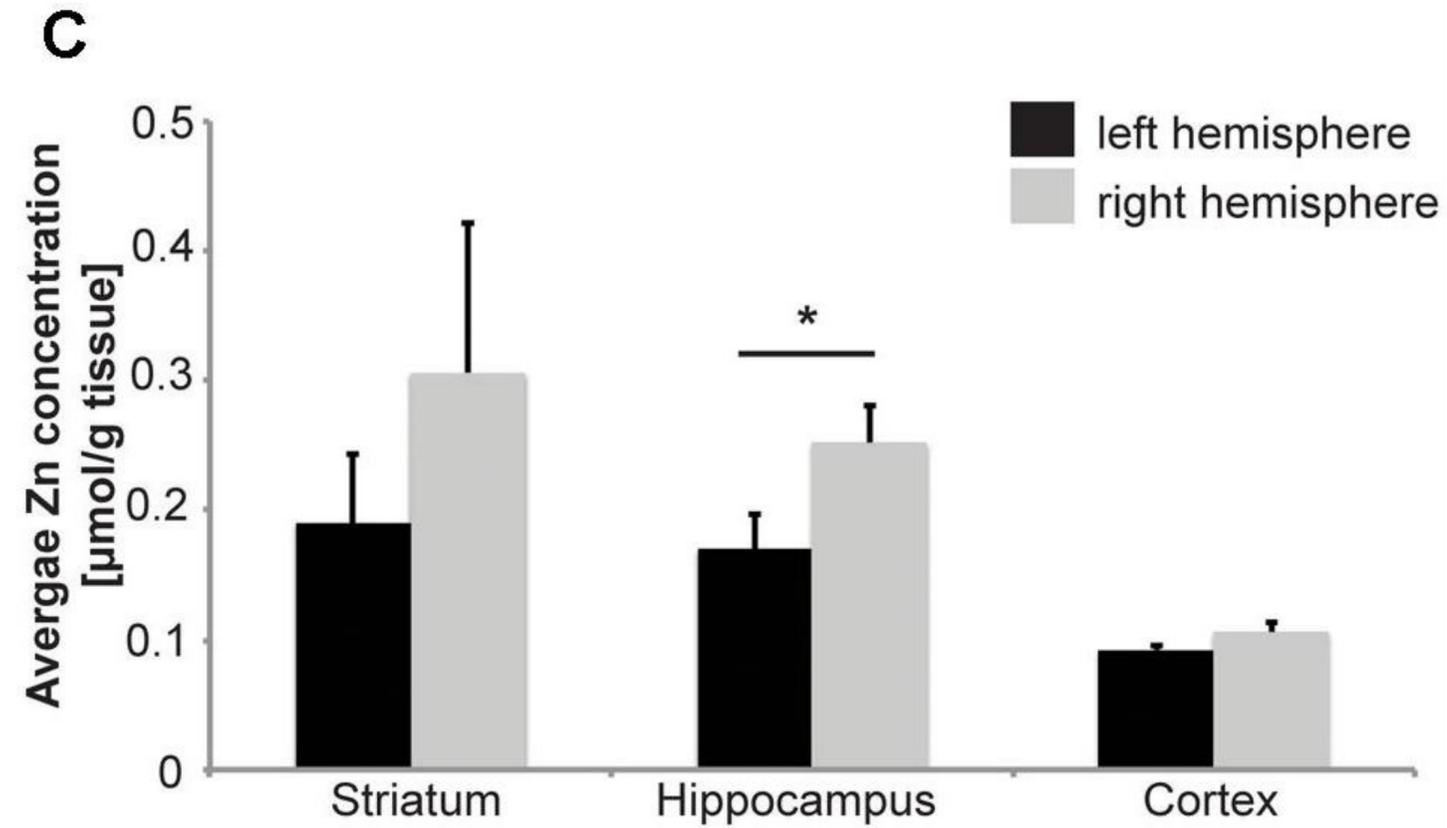
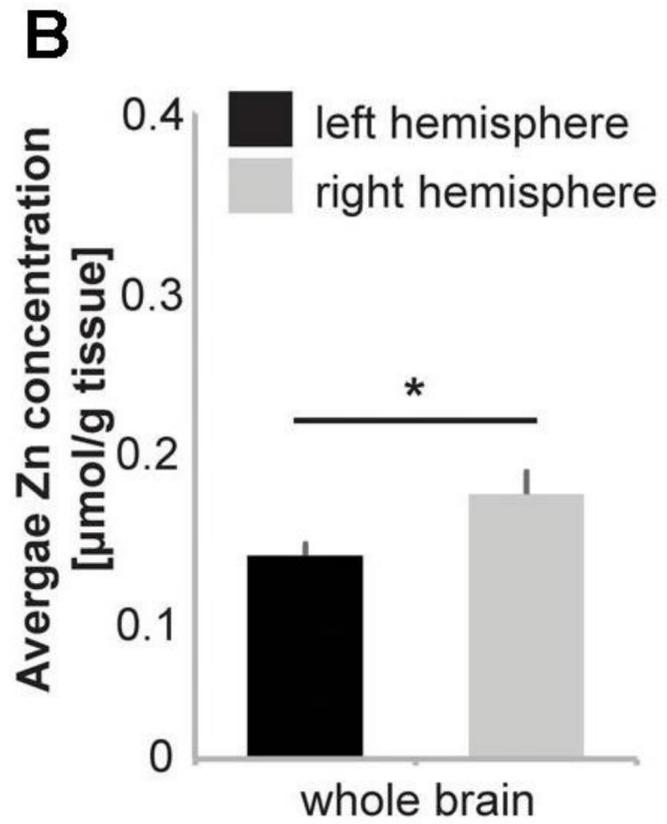


Inferior insula

Superior Insula

Inferior insula

Superior Insula



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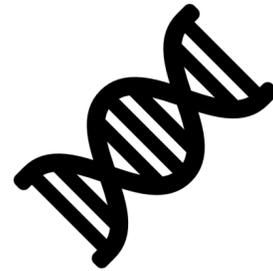
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REASONS

Phylum
& genus



Environmental
issues



Behavior
laterality



Gender



PHYLUM & GENUS

In chimpanzee populations, about 65-70 % are right-handed. Gorillas are about 75 % righty.

About 66 % of orangutans are lefties.



Wild kangaroos have a left-hand preference for everyday tasks.

Frogs have a right-ear preference for positive or neutral signals and white noise, but a left-ear preference for negative signals such as predatory attack

Parrots tend to favor one foot when grasping objects (for example fruit when feeding). Some studies indicate that most parrots are left footed.



GENDER

Scientists have discovered that many pet cats show a marked preference for the right or left front paw when it comes to walking down stairs, stepping over an object, or reaching for food. These preferences also differ by sex—males tend to prefer their left paws, whereas females were more likely to be righties.

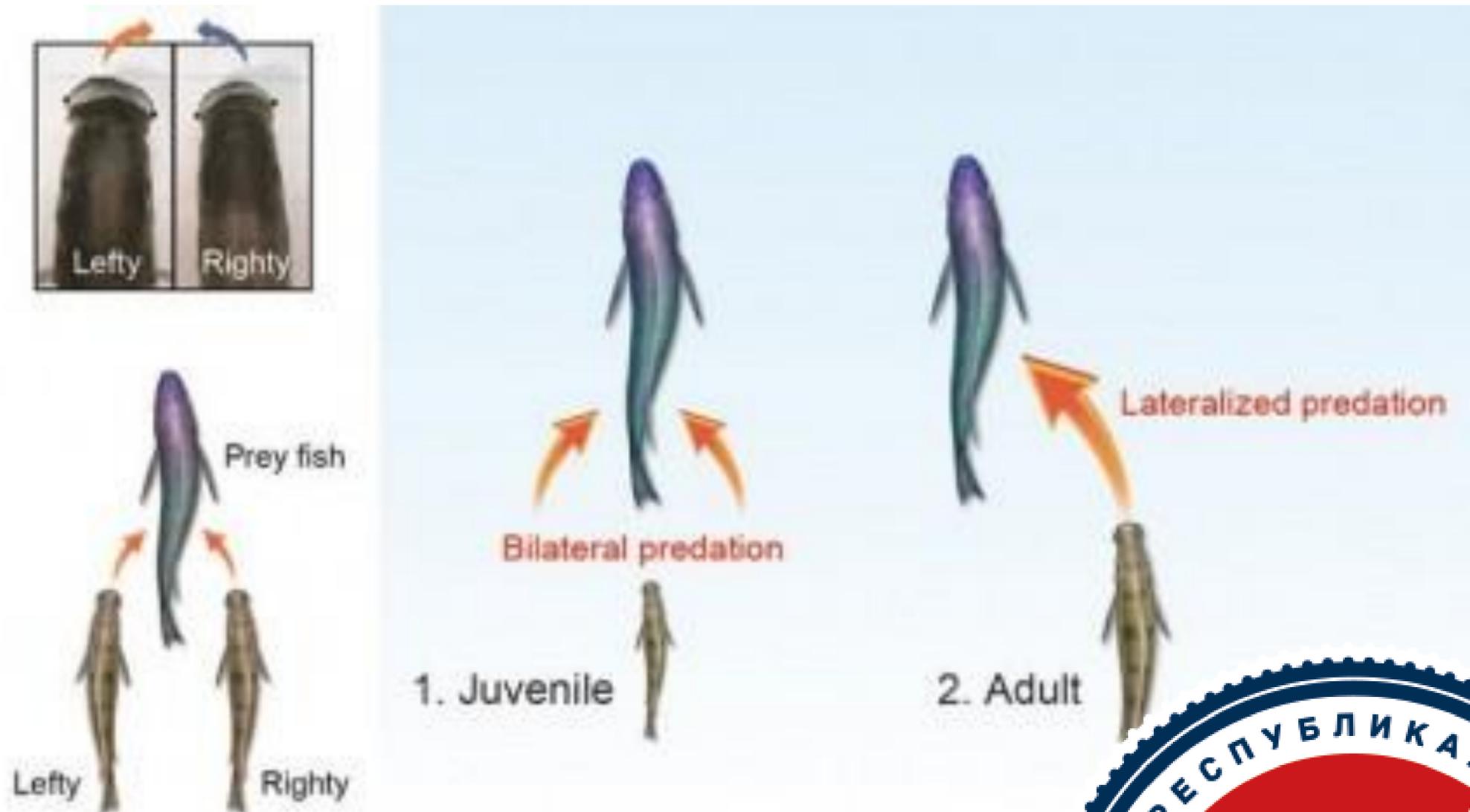


BEHAVIOR LATERALITY

As the fish grow they develop a preference for either being a "righty" or a "lefty" based on which side of their mouth is more effective at acquiring food.

It allowed us to observe mouth direction development with age and the relationship between behavioral laterality and mouth asymmetry in these fish

We observed a gradual increase in mouth asymmetry toward the preferred side of attack as the fish aged



ENVIRONMENTAL ISSUES

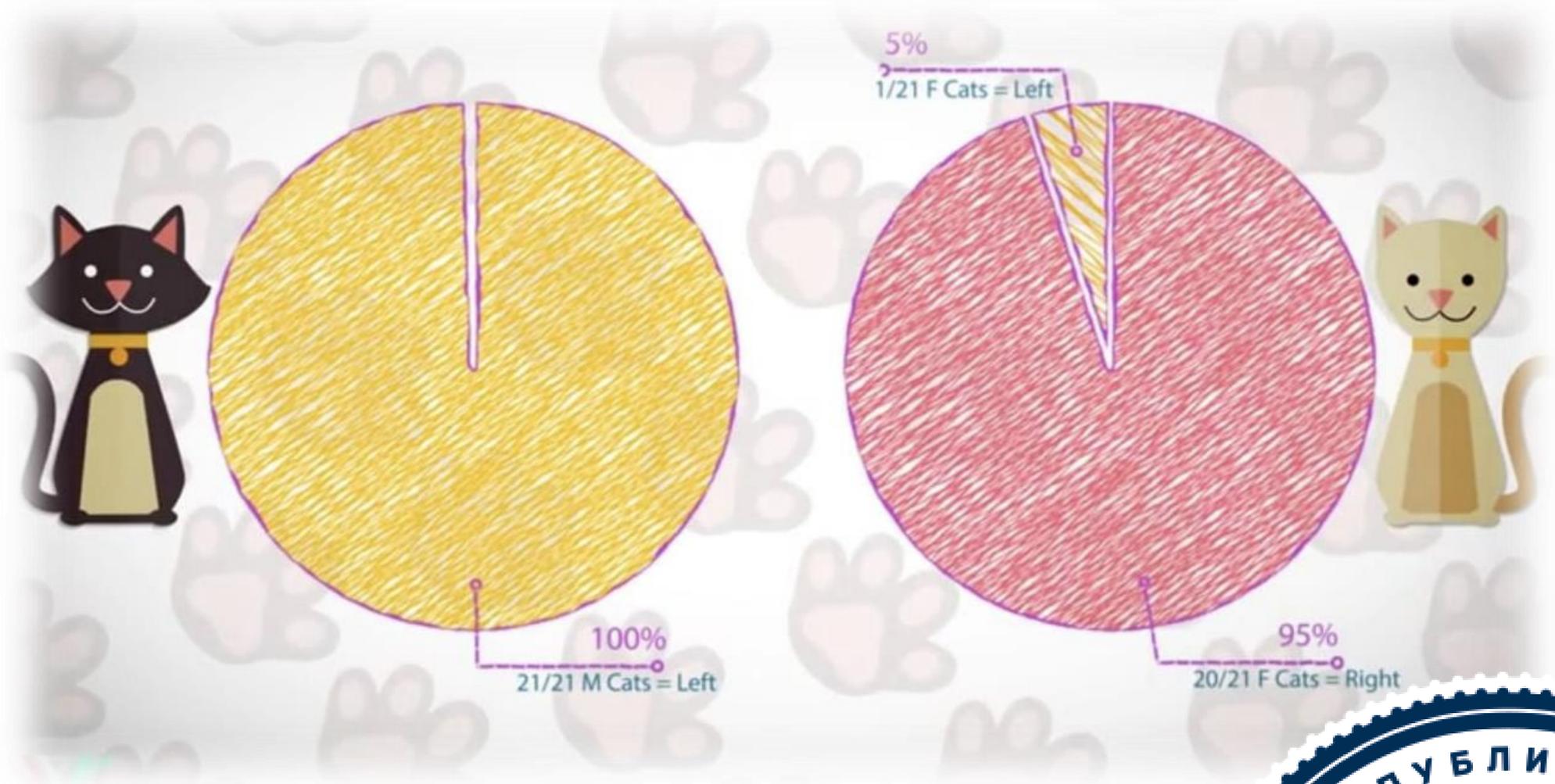
The tree-dwelling ancestors of red and gray kangaroos would have primarily relied on their right side for navigating the treetops, which meant only their left hands were free for grooming and feeding



CATS: MALES ARE LEFTIES

Scientists played with 42 pet-cats for weeks and concluded that, like us humans, house-cats can either be left or right handed depending on their gender.

During tests, all 21 males favoured their left paw for different tasks, while 20 out of the 21 females favoured their right.





experiment

What we need ?





Bruno



ManCat



Bruno



ManCat



Bruno



ManCat



Bruno



ManCat

Kimpa

Woman Cat



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CONCLUSION:

All statistical data demonstrate that that four main factors (gender, environmental issues, phylum and genus, behavioral laterality) gave start for developing handedness characteristics in animal world.



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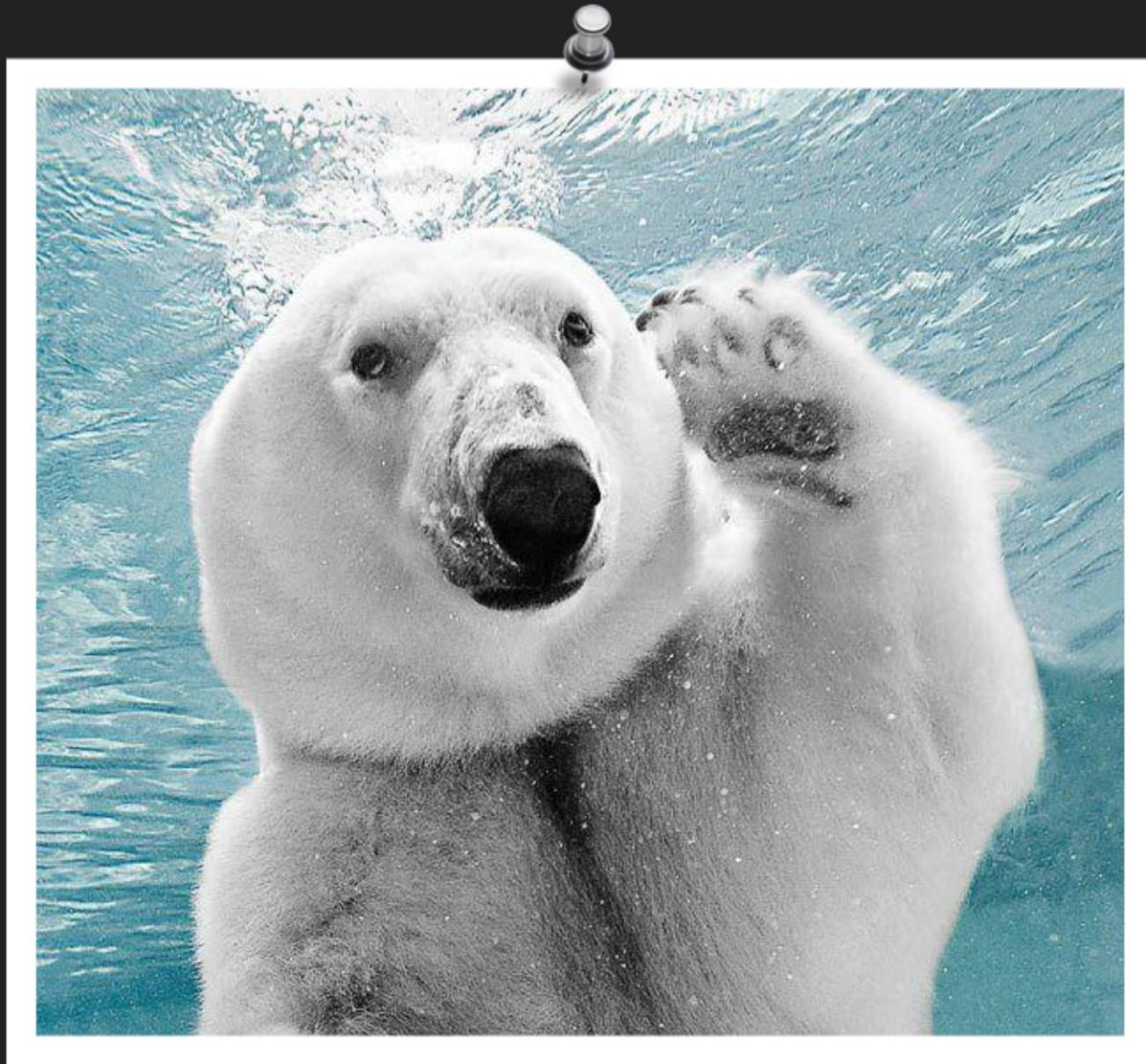
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LEFT-HANDED ANIMALS

**THANKS FOR YOUR
ATTENTION**