

Analyzing the Visual Capability of the Siberian Husky Breed of the Common Dog (*Canis lupus familiaris*) to Detect Terminally-Ill Patients Undergoing Palliative Care

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Abstract : The aim is to evaluate the capability of the 'Siberian Husky' (FCI-Standard N° 270) breed of the common dog (*Canis lupus familiaris*) to detect terminally-ill human patients undergoing palliative care. A total of 49 such patients that fulfill the 'National Scientific and Technical Research Council-Ethical Principles for the Behavior of the Scientific and Technical Investigator' policy, (mainly affected with Stage IV Hodgkin lymphoma or Stage IV Carcinoma, though various other terminal diseases were present) and 49 controls were enrolled. A total of 13 specimens of Siberian Huskies (*Canis lupus familiaris* FCI - Standard N° 270) were selected. After a conditioning training regime in which the canines were rewarded when identifying terminally ill patients and excluding the control subjects, a double-blind experiment was conducted in which the canines were presented with a previously unknown patient through an olfactory-proof plexiglass window for 2-minute intervals. The test subjects correctly identified 89.80% of the humans as either 'ill' or 'healthy'. It is important to note that both groups of humans were selected considering and preventing confounding and self-identifying factors such as age, ethnicity, clothing, posture, skin color, alopecia (chemotherapy-induced or otherwise), etc. The olfactory-proofing of the test area rules out the use of the sense of smell to detect distinctive drugs or bodily odors that may be associated with terminal diseases. Thus, the Siberian Husky breed of the common dog shows the visual capability to detect and identify terminally ill patients undergoing palliative care regardless of age, posture, and quantity of hair. Though the capability of the breed of dog to detect terminally-ill patients was observed thoroughly during the course of the experiments, the exact process by which the canines identify the test subjects remains unknown and further research is encouraged.

Keywords : *Canis lupus familiaris*, Siberian Husky, visual identification of terminal illness, FCI-Standard N°270

Conference Title : ICBESE 2019 : International Conference on Biological, Ecological and Environmental Sciences, and Engineering

Conference Location : Buenos Aires, Argentina

Conference Dates : February 27-28, 2019