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| 1. 1971 Explosives detection.pdf   Historic reference on government training for explosives odor detection. |
| 1. 1987 Neoteny polymorphs.pdf   -The retention of juvenile behavior in comparing livestock guardians to herding dogs. More youthful behaviors were retained the livestock guardian (play, investigatory, and submission) versus the livestock herding dog (eye, stalk, and chase). Suggests pleiotropic effects of genetic selection on development. |
| 1. 1994 Sleep and shift work for detector dogs.pdf   -Dogs are naturally adapted to shift work by high frequency short duration sleep cycles. First day back showed the most significant change possibly due to excitement in anticipation to conducting searches. |
| 1. 1996 Terrorism and use of detection dogs.pdf   -Conclusion - dogs not work very well, but they work better than anything else. Cost, handler affects, and training maintenance being the most limiting factors. |
| 1. 1998 Heritability in hunting dogs.pdf   -Moderate heritability was discovered for nose, search, water work, and cooperation across the five breeds studied. |
| 1. 2000 dog dog,dog human play.pdf   We conclude that dog–dog and dog–human play are structurally different, supporting the idea that they are motivationally distinct. We therefore suggest there is no reason to assume that the consequences of dog–dog play can be extrapolated to play with humans. |
| 1. 2002 Dogs at play.pdf   - Social play has been touted as requiring each player to understand something about the mind of the other player. This research demonstrates that the cooperation seen in rough -and -tumble play in dogs does involve some understanding of the importance of attention in communication. |
| 1. 2002 REST mine detection.pdf   - REST (Remote Explosives Scent Tracing) is an odor detection concept in which air from suspect locations is vacuumed though a polyvinyl chloride (PVC) netting filter. The filters are transferred to dogs trained to signal specific target odors such as drugs or explosives. |
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| 1. 2003 Domestication and understanding.pdf   Highly socialized wolves, in contrast, just kept trying to solve the task and did not look round. Lacking an innate tendency to look at human faces, wolves have no chance of learning the key importance of gaze, although they can readily pick up other human methods of pointing. It seems Miklósi *et al.*’s group have found a rather simple explanation for the difference in cognitive capacity: what domestication has done for the dog is to select for the tendency to look at the human face in situationsof uncertainty. |
| 1. 2003 Forms of social cognition.pdf   - Such abilities make dogs particularly good models for investigating perspective -taking tasks, where animals are required to discriminate between apparently knowledgeable and apparently ignorant informants |
| 1. 2003 Inhibition and canine age.pdf   These separate patterns of reversal impairments in the old and senior dogs may reflect different rates of aging in subregions of the frontal cortex |
| 1. 2003 Looking to human face.pdf   The socialized wolves to perform well in the pointing trials of the choice task can be attributed to  their decreased willingness to look at the human. Preferential looking at the humans seems to be a  genetic predisposition in dogs. |
| 1. 2003 Mine Detection Dogs GICHD.pdf   This book is mostly about mine detection dogs, although it includes a first report on mine detection rats. Many of the issues discussed, particularly in Chapters 1 and 5, are about detection or training issues, and are not specific to dogs. The book has been written in part to fill a gap in the available information on the use of dogs in mine action, and in part to present the results of research that has taken place at the GICHD and its partner organisations since the start of the GICHD Mine Dog Detection Study in September 1999. This introduction provides some background to both the study and this book. |
| 1. 2003 Mine detection.pdf   - Although dogs have been used for mine detection (MDD) for many years, research on their use has been limited. The GICHD is running a broadly -based programme of research on the use of dogs and other animals for mine detection. The program encompasses other activities, such as operational support for agencies using MDDs, supporting the publication and dissemination of research, and networking. Here, we provide an overview of the programme and comment on its value for humanitarian mine clearance. |
| 1. 2003 Termite detection.pdf   -Our study has shown that dogs can be trained to reliably locate native subterranean with positive indication rates 90% and false positive rates 10%. |
| 1. 2004 Odor Landscapes (all species).pdf   -The movement and distribution of chemical signals within an environment is heavily dependent upon the physics that dominate at different size scales. In this paper, we review the physical constraints on the dispersion of chemical signals and show how those constraints are size -dependent phenomenon. |
| 1. 2005 Dominant odors explosives.pdf   -Reliable non -hazardous training aids are needed for use in areas where live explosive aids are not practical and to provide more consistency in the odor chemicals released in training and in order to improve canine detection performance |
| 1. 2005 Fox as dog model for evolution of Social Cognition.pdf   - These results suggest that socio -cognitive evolution has occurred in the experimental foxes experimental foxes, and possibly domestic dogs, as a correlated by -product of selection on systems mediating fear and aggression, and it is likely the observed social cognitive evolution did not require direct selection for improved social cognitive ability.   1. 2005 The pet dogs ability for learning from a human demonstrator   -Our results showed that the pet status of a dog has probably a stronger effect on its cognitive performance and human related behaviour than its age or breed. These results emphasize that socialization and common activities with the dog might overcome the possible breed differences, if we give the dogs common problem solving, or social learning tasks. |
| 1. 2005 Role of Context.pdf   The effect of changing context on the probability of detecting explosives was investigated in seven highly trained explosives detection dogs (EDDs). The first and most basic finding of the four experiments is that the dogs were able to learn that one specific path did not have explosives. This in itself is important and shows that even very similar areas are easily discriminated by dogs. We do not know what cues the dogs used to discriminate between the two paths but presumably it was  a combination of odor and visual cues. |
| 1. 2005 Variables in effective exp detection.pdf   Sniffing frequency and the variables in explosive detection canines. “I suggest here that sniffing is much less important than the motivational and attention variables that influence olfactory search.” |
| 1. 2006 Darwinian novelty (development).pdf   I find it remarkable that we have yet to achieve the comprehensiveness of Darwin’s original theory of novelty, and we will not match it until there is a wider appreciation of the role of the environment in the production of the selectable variation that creates novel form. |
| 1. 2006 Experience levels in dogs.pdf   -The expert -novice comparison research method was applied to dogs competing in the sport of agility.  Differences in performance characteristics between expert, advanced, intermediate and novice dogs were investigated. There were statistically significant differences between dogs of different competitive levels. Highly skilled dogs may prove useful in investigating expertise and its development. |
| 1. 2006 Quantity based judgement.pdf   -We demonstrated that domestic dogs can perform similarly to apes when required to judge relative quantities of food. Our study focused on what domestic dogs can do in general (experiment 1) and what two “high performing” dogs can do given increasingly demanding tasks (experiment 2), rather than on the potential for differences in quantification abilities among breeds. Systematic investigation of breed differences in quantity judgment tasks could reveal relationships between specific cognitive abilities and “ecological niche” (i.e., the jobs the dogs were bred for) within species, as previously demonstrated in comparisons across species (Gould -Beierle 2000; Brodin 2005). For example, some herding dogs bred to keep track of livestock might naturally be more attentive to quantity differences than breeds bred primarily for chasing game or human companionship. |
| 1. 2006 Traits and genotypes detector dogs.pdf   -We examined cutoff points for selection of dogs for drug detection training. Using this cut -off score would allow training centres to reject approximately half of the inappropriate dogs before training and raise the examination pass rate.   1. 2007 Association of polymorphisms in the dopamine D4 receptor gene   -To the best of our knowledge, this is the first report of an association between a candidate gene and a behaviour trait in dogs, and it reinforces the functional role of DRD4 exon 3 polymorphism. |
| 1. 2007 Communication and attention.pdf   -In practical terms, these findings suggest that there might be a difference in the usefulness of additional verbal information in an obedience context. These results are consistent with the experience of dog trainers and handlers. Dog handlers should be aware of how different types of verbal information and the change of context can influence their dog’s responsiveness and of the extent to which dogs need to be taught to generalize command stimuli to novel contexts. |
| 1. 2007 Development of Social cognition.pdf   -The studies presented in this dissertation address cognition, including social cognition, in the domestic dog. Complex cognitive behaviors have been documented in taxonomic groups as diverse as primates, parrots, corvids, and dolphins. In all of these species, social relationships are at the heart of group living. Selection may have favored advanced cognitive abilities for individuals living in complex social groups. These advanced abilities may have aided individuals in dealing with the demands of group living. |
| 1. 2007 Genetics of Canine Behavior.pdf   -Canine behavioral genetics is a rapidly moving area of research. In this review, breed differences in behavior are emphasized. Dog professionals’ opinions of the various breeds on many behavior traits reveal factors such as reactivity, aggression, ease of training and immaturity.   1. 2007 Novel repeat polymorphisms of the dopaminergic   -therefore, an association analysis was also carried out between the activity–impulsivity phenotype and the described VNTRs. Preliminary findings are presented that polymorphisms of the DRD4, DBH, and DAT genes can be associated with attention deficit among Belgian Tervuerens. |
| 1. 2007 Reactions to threatening cues.pdf   -In sum, these results support the view that the ‘Friendly/Threatening Stranger’ paradigm is a relevant experimental approach for studying the dogs’ responsiveness to social releasers provided by humans and the consistency of the observed behaviour traits can be associated with personality characteristics in dogs. |
| 1. 2007 Selective imitation.pdf   -To our knowledge, these data provide the first evidence that animals imitate in an inferential, selective manner. The transmission of cultural knowledge requires learners to identify what relevant information to retain and selectively imitate when observing others’ skills. |
| 1. 2007 THE BIOBEHAVIORAL EFFECTS OF STRESS RELATED TO FEAR.pdf   -The physiological and behavioral effects of fear in dogs are described in a study of dogs and their owners’ reactions to a thunderstorm recording. It is shown that dogs have significant and long -lasting adrenal stimulation, as measured by salivary cortisol, following exposure to a known stimulus. These effects are compared to their behavioral response as well as to the behavioral and physiological response of their owners. Interestingly, owners’ responses to their dogs’ stress are not related to the amount of change seen in their dogs’ biobehavioral responses. |
| 1. 2008 Behavioral problems from training method.pdf   -The training method used by owners was also related to the total number of potentially undesirable behaviors shown by the dogs. When individual categories of potentially undesirable behavior were investigated, the type of training method used was also significantly associated with attention -seeking score, fear (avoidance) score, and aggression score. |
| 1. 2008 canine locomotor analysis.pdf   -Subjective evaluation of canine gait has been used for many years. However, our ability to perceive minute details during the gait cycle can be difficult and in some respects impossible even for the most talented gait specialist. The evolution of computer technology in computer assisted gait analysis over the past 20 years has improved the ability to quantitatively define temporospatial gait characteristics. |
| 1. 2008 Detection distance.pdf   -Detection distance data were collected during experimental trials with advanced global positioning  system (GPS) technology and then analyzed using geographic information system (GIS) modeling techniques. Detection distances ranged from 0.5 m to 62.8 m for tortoises on the surface. We did not observe bias with tortoise size, age class, sex or the degree to which tortoises were handled prior to being found by the dogs. The methodology we developed to quantify olfaction -based detection distance using dogs can be applied to other targets that dogs are trained to find. |
| 1. 2008 Epigenetic Mechanisms and the Transgenerational Effects.pdf   -Traditionally, definitions of inheritance have been limited to the passing of genetic information from one generation to the next. However, it is not simply the presence of genes but rather levels of gene expression that lead to individual variations in offspring characteristics. Levels of gene expression can be regulated by genetic polymorphisms however there is also growing evidence that through epigenetic modification to gene promotor regions, environmentally mediated effects can be transmitted across generations. |
| 1. 2008 Genomics of Olfactory Receptors.pdf   -The olfactory system has evolved complex repertoires of odor receptors (ORs) to fulfill these functions. Through computational data mining, OR repertoires of multiple species were identified, revealing a surprisingly large OR gene family in rodents and evolutionary fluctuation among different organisms |
| 1. 2008 heart rate changes.pdf   -These results show that body position affected HR significantly in dogs. Further it seems that HRV could be a good indicator of the dog’s attentive state.   1. 2008 How does dominance rank status affect individual and social learning performance   -These results suggest that perceived dominance rank in its own group has a strong effect on social learning in dogs, but this effect seems to depend also on the demonstrator species. This finding reveals an intricate organization of the social structure in multi -dog households, which can contribute to individual differences existing among dogs. |
| 1. 2008 MWDs methods and performance.pdf   -The team’s performance was influenced by the training method and by the dog’s concentration: (1) low performance dogs received more aversive stimuli than high -performance dogs; (2) dog’s distraction influenced the performance: distracted dogs performed less well.  Handlers punished more and rewarded less at the second evaluation than at the first one. This suggests that handlers modified their usual behaviour at the first evaluation in view to present themselves in a positive light. During the second evaluation the dogs reacted to this higher frequency of aversive stimuli as they exhibited a lower posture after aversive stimuli. The authors cannot prove that the welfare of these dogs had been hampered, but there is an indication that it was under threat. |
| 1. 2008 Neophilia.pdf   -This study examined novel -object preference in dogs. In a free choice test 17 dogs were presented with a novel toy in a line up with two familiar toys. The unfamiliar object was chosen first in 38 out 50 tests suggesting a strong preference for novel over familiar items. Neophilia may be an adaptive trait for   1. domestic dogs that has helped their adaptation towards man. |
| 1. 2008 Olfactory receptor polymorphisms.pdf   -Homozygous individuals at 2 gene loci significantly differed in their detection skills from other genotypes. This suggests a role of specific alleles in odor detection and a linkage between single -nucleotide polymorphism and odor recognition efficiency. |
| 1. 2008 Playing styles.pdf   -These results suggest that in play situations the behaviour of well socialized family dogs is influenced more by their motivation to play and to a certain extent by the level of fear than by the familiarity of the play partner or their possible general tendencies for cooperative or competitive behaviours. |
| 1. 2008 Soft inheritance Challenging the Modern Synthesis.pdf   -Contrary to the established view, soft inheritance is common. Variations acquired during an individual’s lifetime can be passed on through epigenetic, behavioral and symbolic inheritance. |
| 1. 2008 Tail Wagging.pdf   -These findings with dogs add to mounting evidence for brain lateralization in a variety of nonhuman animals [6,7]. Such prominent behavioural asymmetries could be profitably used in dogs’ welfare and veterinary behavioural medicine as a simple, non - invasive method to estimate quantitatively positive– negative emotions elicited by a variety of stimuli. |
| 1. 2009 Animal evolution during domestication.pdf   -In the light of the results of the fox domestication experiment, the similar patterns of behavioral and morphological and physiological transformation in foxes, dogs and other domesticates are suggested to be the result of selection for tameability. This selection is thought to be the causative and universal mechanism for evolutionary transformation of domestic animals. |
| 1. 2009 conspecific and hetero -specific social learning.pdf   -We conclude that dogs are able to obtain information of varying complexity by observing either a human or dog demonstration, including cases in which the goal or the result of the action is not clear. |
| 1. 2009 Development of social cognition.pdf   -Ontogeny plays just as important a role in dogs' responding to human cues as it does when dogs to respond to dog cues (or indeed when humans to respond to human cues, e.g., Behne, Carpenter, & Tomasello 2005). Pet dogs have early experience during their critical period for socialization which enables them to accept humans as social companions, and they have ongoing exposure to humans who control access to things that are important to dogs' survival and reproduction. This relationship between humans and dogs is just as important in understanding dogs' sensitivity to humans as any considerations of phylogeny. |
| 1. 2009 Diversity of olfactory receptors.pdf   -The first step towards understanding why Labrador Retrievers and German Shepherd Dogs have a much greater potential for use as sniffer dogs than Pekingese dogs or Greyhounds.   1. 2009 Effects of selection for cooperation and attention in dogs   -The current study explored variance within dog breeds/ types or breed groups. As such, it might offer novel account for selective influences on behaviour and performance. |
| 1. 2009 Generalization in scent.pdf   -With patience and rigorous attention to detail, it is possible to uniformly train explosive detection dogs which will be able to reliably recognize and indicate target odor signatures when  these are present in either familiar or unfamiliar contexts. Cognizance of the odor image concept, careful attention to detail, systematic planning and rehearsal of the training protocol and maintaining acute and objective awareness of each animal’s responsiveness and progress can yield reliable detection dogs for public safety |
| 1. 2010 C -BARQ stranger -directed aggression.pdf   -It is therefore concluded that the subscale consisting of 10 items can be used to quantify stranger -directed aggression in these three breeds, and that scores of different dogs can be compared meaningfully regardless of the dogs’ sex, breed or neutering status. |
| 1. 2010 Consistency in procurement MWD.pdf   -Thus, future improvements to predictive models may be more substantial using independent predictors with less restrictions in range. Reports of the reliability and validity estimates of behavioral instruments currently used to select MWDs are scarce, and we discuss these results in terms of improving the efficiency by which working dog programs may select dogs for patrol and odor -detection duties using behavioral pre -screening instruments. |
| 1. 2010 Deferred Response and Clear Signals (MWD).pdf   -CST is directed at preventing fear and confusion by first teaching the dog exactly what to do on command to get a reward (teaching), then teaching it how to use this action to turn off a correction (training), and finally showing it that sometimes it has no choice but do what its handler commands (proofing).In order to become proficient in substance detection, the dog must acquire two main conditioned lessons. First, the dog must learn to recognize the target odor, meaning that it must begin to expect reward when it smells that odor. Second, the dog must learn that, in order to receive the reward, it has to sit. This sit is, of course, called the “final response” in DoD terminology. |
| 1. 2010 Habituation revisited (all species).pdf   -We believe that the results of future research in this area will extend the hypothesis that there are a large number of cellular mechanisms that underlie the deceptively simple forms of learning termed “habituation” by identifying novel mechanisms that can mediate this process. The challenge for neuroscientists now is to continue to identify the mediatory mechanisms for habituation and to determine when, where and how these mechanisms are activated. |
| 1. 2010 sensitivity to human behaviour.pdf   -We propose that the flexible utilization of various conflict -resolving behaviours depending on the actual partners represent fundamental elements of dogs’ social competence. These skills help dogs to manoeuvre efficiently in the course of dog–human interactions in various social contexts. |
| 1. 2010 Socio -communicative ability.pdf   -In conclusion, this study shows that dogs possess partially intentional non -verbal deictic abilities: they exhibit successive visual orienting between a partner and objects, apparent attention -getting behaviours, no sensitivity to the visual status of humans for communication, and persistence in (but no elaboration of) communicative behaviours when apparent attempts to ‘‘manipulate’’ the human partner fail. |
| 1. 2010 SWGDOG.pdf   -Establishing consensus based best practices for the use of detection teams is expected to provide a variety of benefits to local law enforcement and homeland security. Benefits include improved interdiction efforts as well as courtroom acceptance by improving the consistency and performance of deployed teams and optimizing their combination with electronic detection devices |
| 1. 2011 basic emotional circuits of mammalian brains.pdf   -A cross -species Affective Neuroscience (Panksepp, 1982, 1998, 2005a) has chosen to develop the theme that we can scientifically understand the foundations of the human mind by studying the  basic subcortical emotional systems that can be well studied in animals. |
| 1. 2011 Cross -Species Affective Neuroscience.pdf   -The issue of whether other animals have internally felt experiences has vexed animal behavioral  science since its inception. Although most investigators remain agnostic on such contentious issues, there is now abundant experimental evidence indicating that all mammals have negatively and positively -valenced emotional networks concentrated in homologous brain regions that mediate affective experiences when animals are emotionally aroused. That is what the neuroscientific evidence indicates.   1. 2011 Do children understand man’s best friend   -This shows that the ability of understanding basic inner states of dogs on the basis of acoustic signals is present in humans from a very young age. These results are in sharp contrast with other reports in the literature which showed that young children tend to misinterpret canine visual signals.   1. 2011 Evolutionary approach to communication   -This paper provides a short overview of the possible explanations behind the dogs’ exceptional communicational abilities towards humans from an evolutionary perspective, concluding that the different and seemingly contradictory hypotheses are not exclusive but they might have a synergic effect. |
| 1. 2011 Evolution of animal cognition.pdf   -In this article, we explain how a synthesis between comparative psychology and evolutionary biology allows for unprecedented opportunities to investigate cognitive evolution. |
| 1. 2011 Handler beliefs affect scent detection.pdf   -Handlers’ beliefs that scent was present potentiated handler identification of detection dog alerts. Human more than dog influences affected alert locations. This confirms that handler beliefs affect outcomes of scent detection dog deployments. |
| 1. 2011 History of dog research.pdf   -We trace the history of dogs as experimental psychological subjects: The work of Darwin and Pavlov sets the stage for our focus on research emanating from North American laboratories. We end our review with the advent of the modern renaissance of dog research. This account tracks the history of psychology as a science, providing insight into psychological processes and theoretical corollaries of these processes generally, and shedding light on the behavior of dogs specifically.   1. 2011 Human -directed gazing behaviour in puppies and adult dogs   -These results suggest that, although the domestication process may have shaped the dog’s human -directed communicative abilities, the later selection for specific types of work might also have had a significant impact on their emergence. |
| 1. 2011 Lateralization of sniffing.pdf   -Results suggest initial involvement of the right hemisphere in processing of novel stimuli followed by the left hemisphere taking charge of control of routine behaviour. Sustained right nostril response to arousal stimuli appears to be consistent with the idea that the sympathetic hypothalamic—pituitary - -adrenal axis is mainly under the control of the right hemisphere. |
| 1. 2011 NCSU Olfaction and Stress Studies.pdf   -The research described in this report represents an important multidisciplinary effort to better characterize stress responses, cognition, and olfaction in Labrador Retrievers, drawing on the expertise of North Carolina State University (NCSU) College of Veterinary Medicine (CVM) scientists with research and clinical backgrounds in veterinary behavior, nasal toxicology, laboratory animal medicine, olfaction, and behavioral sciences. K2 Solution’s role as a prime contractor for the procurement and training of candidate IDDs brought additional expertise to the project. Research was performed in two broad domains (controlled laboratory experiments conducted at NCSU and field studies performed at K2) and consisted of ten distinct research phases:  Phase I. Emotional Reactivity Test  Phase II. Development of an Open Field Anxiety Test  Phase III. Object Discrimination  Phase IV. Delayed Non Match to Position (DNMP)  Phase V. Olfactory Discrimination  Phase VI. Cognitive Bias  Phase VII. Application of Remote Telemetry to a Novel Open Field Test of Olfaction  Phase VIII. The Role of Olfactory Priming on the Detection of C4  Phase IX. Soil Depth and its Impact on Odor Detection in Dogs  Phase X. Pilot Studies Examining Proton Pump Inhibitor Effects on Canine Olfaction   1. 2011 owner–dog dyads   -All the conventional and genetic groups had representatives in at least three of these clusters. Thus, the behavioural breed clusters showed poor correspondence to both the functional and genetic categorisation, which may reflect the effect of recent selective processes. Behavioural breed clusters can provide a more reliable characterization of the breeds’ current typical behaviour. |
| 1. 2011 select empty container task.pdf   -In addition to providing further support for the importance of the social communicative signals in observational learning situations, the results of the present study raise the possibility that like in infants (Király 2009), the presence of the human demonstrator also plays some behaviour modulating and constraining role in observational learning situations when it comes to learning about causally opaque and less efficient (compared to what comes natural to the dog) action demonstrations. |
| 1. 2011 Telemetric measurement of body core.pdf   -This project evaluated the use of an ingestible temperature sensor to measure body core temperature (Tc) in exercising dogs.   1. 2011 The behavior of the domestic dog (Canis familiaris) during separation   -Thus, the aim of the present study was threefold. First, we introduced a questionnaire (separation questionnaire) to estimate the prevalence of separation related disorder in a small sample of family dogs. Second, we designed a simple behavioral test (S&G) in order to validate owner’s report on their dogs’ separation -related behavior. We assumed that owner’s indication of SRD in their dog will be associated with certain behavior pattern displayed during separation and greeting. Third, we wanted to see whether the manipulation of separation duration affects the behavior of the dogs, predicting that the duration of separation affects the dog’s separation and greeting behavior. |
| 1. 2011 Trainability and boldness traits differ between dog breed clusters.pdf   -We found that two of the behaviour traits (trainability and boldness) significantly differed both among the conventional and the genetic breed groups. Using the conventional classification, we revealed that Herding dogs were more trainable than Hounds, Working dogs, Toy dogs and Non -sporting dogs; Sporting dogs were also more trainable than Nonsporting dogs. In parallel, Terriers were bolder than Hounds and Herding dogs. |
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| 1. 2011Genetic intelligence in MWDs.pdf   -Although the overall goal of this study was not achieved due to lack of funds, this work does lay a solid foundation by generating materials, datasets, and enabling tools for the mapping of genes contributing to canine intelligence |
| 1. 2011Training methods and owner–dog interactions.pdf   -However, dogs whose owners reported using more rewards tended to perform better in a novel training task. Ability at this novel task was also higher in dogs belonging to Owners who were seen to be more playful and who employed a patient approach to training. This study shows clear links between a dog’s current behaviour and its owner’s reported training history as well as the owner’s present behaviour. High levels of punishment may thus have adverse effects upon a dog’s behaviour whilst reward based training may improve a dog’s subsequent ability to learn. |
| 1. 2012 adjective -based dog personality.pdf   -There have been few investigations aiming to reveal differences in the personality dimensions of individual dogs belonging to pure breeds and/or breed groups. In this study we implemented a novel type of questionnaire that relies on simple adjectives to characterise the behavior of individual dogs. |
| 1. 2012 Gaze and communication.pdf   -This is the first evidence to show that (1) eye -tracking techniques can be used for studying dogs’ social skills and (2) the exploitation of human gaze cues depends on the communicatively relevant pattern of ostensive and referential signals in dogs. Our findings give further support to the existence of a functionally infant -analog social competence in this species.   1. 2012 Comprehension and utilisation of pointing gestures and gazing   -The aim of the present investigation was to study the visual communication between humans and dogs in relatively complex situations. In the present research, we have modelled more lifelike situations in contrast to previous studies which often relied on using only two potential hiding locations and direct association between the communicative signal and the signalled object.   1. 2012 Dogs’ Gaze Following Is Tuned to Human Communicative Signals   -Results show a higher tendency of gaze following in dogs when the human’s head turning was preceded by the expression of communicative intent (direct gaze, addressing). This is the first evidence to show that (1) eye -tracking techniques can be used for studying dogs’ social skills and (2) the exploitation of human gaze cues depends on the communicatively relevant pattern of ostensive and referential signals in dogs. |
| 1. 2012 Glucose and behavioral control.pdf   -These results suggest that initial behavioral inhibition by dogs, like that by humans, can subsequently result in behavior that increases risk of an aggressive encounter.  -Also suggests that search accuracy is enhanced while glucose levels are relatively high, and that it declines as a function of time and glucose depletion. |
| 1. 2012 Learning and stress three training methods.pdf   -Application of aversive stimuli in training, in particular via electronic training collars, is a highly controversial issue. The aim of the present study was to evaluate stress and learning effects of 3 different training methods, i.e. electronic training collar, pinch collar and a conditioned quitting signal in dog training organized in 3 sessions. |
| 1. 2012 NCSU Habituation and Mitigation.pdf   -This report describes habituation and dishabituation phenomena as observed in the Open Field Model, and provides mitigation recommendations based on behavioral observations in the Open Field and NCSU -Adapted Emotional Reactivity Test. |
| 1. 2012 Odorant Transport and Deposition in the Canine Nasal Cavity.pdf   -These results demonstrate  that odorant deposition patterns correspond with the anatomical organization of ORNs in the olfactory recess. Specifically, ORNs that are sensitive to a particular class of odorants are located in regions where that class of odorants is deposited. The correlation of odorant deposition patterns with the anatomical organization of ORNs may partially explain macrosmia in the dog and other keen -scented species.   1. 2012 Perceived personality matching in owner–dog dyads   -Here, we tested for associations between the dog and owner personality in two countries (Austria and Hungary) and found significant positive correlations between owners and their dogs in all the five investigated personality dimensions (neuroticism, extraversion, conscientiousness, agreeableness, and openness). |
| 1. 2012 Personality Consistency in Dogs.pdf   -A thorough literature search identified 31 studies suitable for inclusion in our meta -analysis. Overall, we found evidence to suggest substantial consistency (r = 0.43). Furthermore, personality consistency was higher in older dogs, when behavioral assessment intervals were shorter, and when the measurement tool was exactly the same in both assessments. |
| 1. 2012 Prediction of behavioral rating systems.pdf   -This emphasizes the need for more explicit, quantitatively continuous definitions of ‘success’ in working dog programs – without knowing the breadth and domain of specific traits that are important for success, it may be difficult for working dog programs to make choices regarding the measurement methods that they use to capture relevant behavioral variation observed in their dogs earlier in life. |
| 1. 2012 Shelter adoption suitability.pdf   -My PhD aimed to address these concerns and comprised three parts: Part 1 involved a review of Australian shelter assessment protocols; Part 2 involved the development of a standardised protocol and evaluation of its reliability and validity, and; Part 3 investigated Australian’s beliefs about and attitudes towards shelter dogs and common shelter practices. |
| 1. 2012 -Development -of -a -novel -paradigm -for -the -measurement -of -olfactory -discrimination -in -dogs.pdf   -Using this paradigm, we found that dogs can habituate to a novel odor after 1 presentation  -The results of this pilot study also suggest that aged dogs may show reduced levels of habituation as compared with young and middle -aged dogs.   1. 2012 The owners’ assessment of “everyday dog memory   The results of our questionnaire study showed that pet dog owners experience behavioural episodes in their dogs’ everyday life that they consider as evidence for long term memory. We identified five principal components on the basis of our questionnaire. |
| 1. 2012Does the A -not -B error in adult pet dogs indicate sensitivity.pdf   -In sum, however, we can conclude that in this A -not -B task, human -given ostensive cues can influence the choice behaviour of dogs by the immediate effect of enhancing certain locations or objects as well as by transmitting generalizable information conveyed during the repeated A trials. |
| 1. 2012Polymorphism in the Tyrosine Hydroxylase ADHD in GSD.pdf   -In this study we have investigated whether there is an association of the tyrosine hydroxylase gene with activity -impulsivity and inattention trait in a pet German Shepherd Dog population, assessed by dog owners filling in a questionnaire, and by experts scoring the behaviour of dogs performing in a test battery. We have found, that the tyrosine hydroxylase intron 4 repeat polymorphism was related to both the questionnaire and the behavioural test scale. |
| 1. 2012The effect of the owner’s personality on the.pdf   -Our objective was to examine consistent relationships in the behaviours of dogs and their owners in interaction with each other or a stranger, and to discern influences of owner personality on dog behaviour by means of multivariate statistical methods.   1. 2012 When rank counts—dominant dogs learn better from   -This experiment has shown that a simple two -action device that does not require excessive pretraining, can be suitable for testing social learning in dogs. However, effects of social rank should be taken into account when social learning in dogs is being studied and tested, because dominant and subordinate dogs perform differently after observing a demonstrator. |
| 1. 2013 Behavioral Epigenetics and the Effects of Domestication.pdf   -DNA methylation and histone modifications, epigenetic marks that alter the chromatin structure and by that act like regulatory mechanism, are key factors in new research fields such as behavioral epigenetics. Their ability to not only shape individuals but also their progeny makes them hot targets when investigating the effects of environmental conditions or stimuli on an organism |
| 1. 2013 Coding versus rating.pdf   -Our findings suggest that there is a need and room for testing whether behaviour traits measured by the means of questionnaires and behaviour tests converge. |
| 1. 2013 Context and decision making.pdf   -Overall, dogs exhibited inhibitory control in all three tasks. However, individual scores were not correlated between tasks, suggesting that context has a large effect on dogs’ behavior. This result mirrors studies of humans, which have highlighted intra -individual variation in inhibitory  control as a function of the decision -making context. Lastly, we observed a correlation between a subject’s age and performance on the cylinder task, corroborating previous observations of age -related decline in dogs’ executive function. |
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| 1. 2013 Dog Cognition Review.pdf   -Specifically, we: (1) identify major trends in the literature, in terms of the characteristics of the dog populations studied and the areas of cognition researched, (2) identify the major topics of research in dog cognition, (3) summarize the previous findings within each of these topics, and (4) make suggestions for future cognition research. |
| 1. 2013 Dog Cognition.pdf   -published copy |
| 1. 2013 Dopamine in Horses.pdf   -A difference in behaviors related to frustration was related to the A–G substitution of the DRD4  gene in stabled horses. DRD4 polymorphisms should be considered when assessing the welfare of  stabled horses. |
| 1. 2013 DRD4 and TH gene polymorphisms activity.pdf   -Both dopamine receptor D4 (DRD4) exon 3 and tyrosine hydroxylase (TH) intron 4 repeat polymorphisms have been linked to activity and impulsivity in German Shepherd dogs(GSDs).  -Investigation of the joint effect of DRD4 and TH showed that dogs possessing long alleles at both sites were scored as less active–impulsive than were others. Our results are aligned with previous studies showing that DRD4 and TH polymorphisms are associated with activity–impulsivity related traits in dogs |
| 1. 2013 Neutering dogs and health.pdf   -For all five diseases analyzed in the present study, the disease rates in males and/or females were significantly increased when neutering was performed early and/or late. When a disease occurred in intact dogs, the occurrence was typically one -fourth to one -half that of early - and/or late -neutered dogs. |
| 1. 2013 Olfactory generalization.pdf   -The results of this study highlight the potential limitations of dogs trained to detect a single odor to then recognize the odor when mixed with other substances. The odor delivery device developed for this study represents an important and effective training option that may reduce the need for using a final PC explosive mixture in canine training. |
| 1. 2013 Peroxide Based Explosives and a Non -target.pdf   -This study focuses on developing a universal calibration compound for which all detection canines, regardless of detection substance, can be tested daily to ensure that they are working with acceptable parameters. Surrogate continuation aids (SCAs) were developed for peroxide based explosives along with the validation of the SCAs already developed within the International Forensic Research Institute (IFRI) prototype surrogate explosives kit. |
| 1. 2013 Tail wagging and emotion.pdf   -The dogs asymmetry in tail wagging thus fits with the hypothesis of a left hemisphere specialization for approach behavior and a right hemisphere specialization for withdrawal behavior (it is unclear to what extent an approach/withdrawal dichotomy would parallel a positive emotion/negative emotion dichotomy). |
| 1. 2013 Two training methods and stress.pdf   -The results show that dogs from the school using a negative reinforcement based method demonstrated lowered body postures and signals of stress, whereas dogs from the school using a positive reinforcement based method showed increased attentiveness toward their owner. However, neither method affected avoidance behaviors. This exploratory study reveals the differential effects of the 2 training methods on dogs’ behaviors; it suggests that training methods based on positive reinforcement are less stressful and potentially better for their welfare. |
| 1. 2013 two -choice, visual pointing task.pdf   In contrast to studies based on olfactory cues, this suggests that momentary pointing gestures from a human experimenter can be a reliable communicative cue for adult companion dogs, even when dog owners are present and provide additional voluntary or involuntary cues. We suggest that for short -term studies of visual communication, where individual dogs have little opportunity to learn their owners’ cues in the experimental context, the presence of owners may not necessarily distort results. |
| 1. 2014 Canine lateralization of human speech.pdf   -Our results provide insights into mechanisms of interspecific vocal perception in a domesticated mammal and suggest that dogs may share ancestral or convergent hemispheric specializations for processing the different functional communicative components of speech with human listeners. |
| 1. 2014 Canine olfaction.pdf   -This chapter will open with an overview of the different disciplines involved in the study of canine olfaction. Some basic anatomy and neuroscience will be reviewed, mostly with direct reference to behaviour and associated psychological processes (e.g., cognitive, motivational, and affective systems). For the behavioural aspect of olfaction, a discussion of the contrasting, yet complementary methods of ethology and experimental psychology will be examined. The importance of both field and laboratory research will be highlighted. Olfaction ‘‘in context’’ will also be discussed in reference to zoosemiotics and in order to understand the canine olfactory psychoethology in its most meaningful and functional dimension: processing ‘‘signs’’ (including symptoms as with dogs trained for biomedical applications such as symptom detection). We will conclude with a short commentary on the human -canine sensory symbiosis with sniffer dogs. |
| 1. 2014 Context specificity of inhibitory control.pdf   -The studies reported here provide evidence for inhibitory control in dogs across a range of  contexts. These cognitive skills are critical to effective problem solving (Diamond 1990) and  have been shown to vary both between and within other animal species. Our data reveal that  skills for inhibitory control may also differ between contexts within the same individual,  mirroring the results of studies of humans |
| 1. 2014 Different lines within the GSD.pdf   -Considerable genetic differences,  forming subpopulations, may also exist within a breed however. This is common in breeds with several different uses and where selective breeding is practiced with these uses in mind. The German Shepherd is a typical example of this type of breed. |
| 1. 2014 Does exaggeration or inhibition predict.pdf   -This is the first time relative success on a pointing task has been tied to a known heritable behavioral mechanism (breed specific motor patterns). However, we also demonstrate that breed specific differences can sometimes be overcome with additional experience. Thus an individual’s performance on human -guided tasks is still best predicted by a combination of genetic and lifetime factors. Broader implications for the understanding and investigation of canine social cognition are discussed. |
| 1. 2014 Domestication syndrome crest cells embryo.pdf   -Here, we propose that the domestication syndrome results predominantly from mild neural crest cell deficits during embryonic development. Most of the modified traits, both morphological and physiological, can be readily explained as direct consequences of such deficiencies, while other traits are explicable as indirect consequences. |
| 1. 2014 Eye contact.pdf   -The aims of this study were to re -examine the question whether dogs are capable of following human gaze into distant space and, if so, to investigate through age effects whether the propensity to follow gaze is affected by long -term habituation to directional gaze cues and/or training to focus their attention on human |
| 1. 2014 Field survey vs breeding selection'.pdf   -These results provide support that the TSA tests are measuring traits relevant to operational search team performance but also highlight other traits that may be profitable to assess in this and other detection -dog programs. |
| 1. 2014 Handler senses guilt.pdf   -The dogs’ behaviour as perceived by their owners was not affected by the dogs’ own action or evidence of the misdeed. Thus, our findings could be taken to suggest that these two cues do not trigger the ‘guilty look’ in dogs, at least not in situations in which they are not paired with concurrent scolding by the owners. |
| 1. 2014 Iphone cortisol.pdf   -We designed and manufactured a portable smartphone holder and cortisol LFA strip to produce a smartphone -based measurement system. Salivary cortisol concentration serves as a biomarker  of psychological stress. Because physiological cortisol is secreted in a circadian rhythmic manner, the concentration of cortisol changes throughout the day [2,3]. Consequently, cortisol measurements should be carried out in real time. |
| 1. 2014 limitations canine genetics.pdf   -This review examines the common hurdles faced by researchers of behavioural genetics and the  current state of knowledge. |
| 1. 2014 MRI and Olfactory.pdf   -Our results demonstrate the viability of the proposed method for functional imaging of the olfactory system in conscious dogs. This could potentially open up a new field of research in detector dog technology. |
| 1. 2014 response to human stress odor.pdf   -The study supports laterality effects of odour stimulation on dogs. Dogs seem able to detect how stressed humans are, based on the results found in the stress score analyses. |
| 1. 2014 Review of Puppy Testing.pdf   -In summary, we hope our review and analyses serve to alert researchers to the array of tests available to measure personality in puppies. As a practical contribution to researchers and practitioners in applied fields, we have identified assays likely to be effective in measuring personality effectively. |
| 1. 2014 Sociability and dominance when walking.pdf   -We investigated whether dominance rank and personality traits are linked to leader and follower roles during joint motion of family dogs. |
| 1. 2014 the -effects -of -exercise -and -diet -on -olfactory -capability -in -detection -dogs.pdf 2. -The present study evaluated whether olfactory performance could be influenced by forms of dietary fat and exercise. |
| 1. 2014 USM Vapor Wake report.pdf 2. -The evaluation requirements centered on the three functional areas of, Range of Detection Capabilities, Guest Experience, and Operational Performance and Efficiency. The overall composite score, 2.18, of the measured functions, as shown in section 5, reveals that this product overall performed at or above the levels considered by the evaluators to fully meet each requirement. |
| 1. 2014 Why Do Adult Dogs (Canis familiaris) Commit the A -not -B type error.pdf 2. -These experiments have revealed three main characteristics of the A -not -B error committed by adult dogs. We found that (a) subjects’ performance in this object search task is influenced to a certain extent by their motivation, (b) human communicative and noncommunicative signals have different effects in directing dogs’ attention to the A hiding place, and (c) no A trials are needed to induce A -not -B error. |
| 1. 2015 Adding ‘epi -’ to behaviour genetics domestication.pdf   -In this review, it is argued that greatly improved understanding of domestication may be gained from extending the field of behaviour genetics to also include epigenetics. Domestication offers an interesting framework of rapid evolutionary changes caused by well -defined selection pressures. |
| 1. 2015 aggressive behavior towards familiar people.pdf   -The aim of this study was to evaluate whether the origin/source of puppies (pet shop vs. breeder) was associated with later potential problematic behaviors. These findings indicate that obtaining puppies from pet stores may predispose them to potentially exhibit owner -directed aggression as adults. |
| 1. 2015 Aging effects on discrimination learning,.pdf   -The aim of the present study was to examine age effects on visual discrimination learning, inferential reasoning by exclusion and long -term memory in domestic dogs kept as pets. We found a significant effect of age on the number of trials needed to reach criterion (as age increased, discrimination learning ability decreased) and degree of perseveration (the number of correction trials) in the two visual discrimination learning tasks. |
| 1. 2015 Arousal and inhibitory control.pdf   -In conclusion, it appears that formal training and artificial selection can potentially lead to problem -solving biases that are moderated by temperament (i.e., Hare et al. 2005). These findings open the door for future research to further examine the role of learning and development in inhibitory control to help elucidate the circumstances in which animals can best exercise such control. |
| 1. 2015 Discrimination of human expression.pdf   -We demonstrate that pet dogs can discriminate emotional expressions in human faces  -We can rule out that discrimination was based on simple local cues  -This ability may depend on extensive interaction with humans and/or domestication  -Dogs probably use their memories of real emotional human faces to accomplish the task |
| 1. 2015 Dogs sensitivity to humans.pdf   -A closer look at the findings of research on canine domestication, socialization, and conditioning, brings the assumptions of this hypothesis into question. We propose the Two Stage Hypothesis, according to which the sensitivity of an individual animal to human actions depends on acceptance of humans as social companions, and conditioning to follow human limbs. This offers a more parsimonious explanation for the domestic dog’s sensitivity to human gestures, without requiring the use of additional mechanisms. |
| 1. 2015 Drive.pdf   -Drive is not something that can be measured internally and can only be interpreted subjectively externally. The term drive is simply not relevant inasmuch as there are more accurate explanations for what is happening. |
| 1. 2015 Early Experiences, Maternal Care.pdf   -The aim of this thesis is to investigate the parameters that can influence behavior and help Us understand the Complexity of the underlying temperament, or personality, of MWDs. If variables in the early environment can be identified and knowledge about how they influence later behavior can be obtained, it may also be possible to apply this knowledge and, by changing some of these variables, alter the phenotypic expression in the dogs in a favourable way.   1. 2015 Early Life Experiences and Exercise -anxiety   -Our study highlights the importance of early life experiences, especially the quality of maternal care and daily exercise for the welfare and management of the dogs, and reveals important confounding factors to be considered in the genetic characterization of canine anxiety |
| 1. 2015 Expert vs nonexpert ratings'.pdf   -Overall the results suggest that ratings made by minimally trained non -experts for most items can serve as a viable alternative to expert ratings freeing limited resources of highly trained staff.   1. 2015Fetching what the owner prefers Dogs recognize disgust and happiness in human behaviour   -Our results demonstrate that dogs are able to recognize which is the more positive among two emotions, and in a fetching task situation, they override their own interest in the ‘disgusting’ object and retrieve what the owner prefers. |
| 1. 2015 fMRI human -dog odors.pdf   -Importantly, the scent of the familiar human was not the handler, meaning that the caudate response differentiated the scent in the absence of the person being present. The caudate activation suggested that not only did the dogs discriminate that scent from the others, they had a positive association with it. This speaks to the power of the dog’s sense of smell, and it provides important clues about the importance of humans in dogs’ lives.   1. 2015 How do humans represent the emotions of dogs   Our study is the first that utilizes the dimensional approach of emotion in connection with non -human animals. One can assume that the usage of human reports on animal emotions has the risk that such insights are influenced by anthropomorphism. |
| 1. 2015 Hypoglycemina alert.pdf   Our current study supports evidence that dogs appear to have full capability to recognize and alert to Hypo samples from patients with T1D. More studies are needed to elucidate best practices  for training DADs, and ultimately to identify the chemical signature that the dogs detect   1. 2015 Influence of Owners’ Attachment Style   -Our results suggest that owners’ attachment avoidance may facilitate the development of SRD in dogs. We assume that avoidant owners are less responsive to the dog’s needs and do not provide a secure base for the dog when needed. As a result, dogs form an insecure attachment and may develop SRD. |
| 1. 2015 Inhibition in Wolf versus dog.pdf   Overall results point to the difficulty in obtaining a ‘clean’ measure of inhibitory control, with no other factors affecting results and suggest that a multi -task approach to evaluating species differences may be necessary before firm conclusions can be drawn on the potential factors affecting self control |
| 1. 2015 No reward markers.pdf   -Consequently, when teaching a dog a simple new behavior, he will likely learn faster and with fewer errors if the errors he does make are ignored. No -reward markers do not appear to be a highly effective form of negative feedback in this context. |
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| 1. 2015 Olfaction -Based Problems at Various.pdf   -Our results suggest that despite their ability to successfully collect information through olfaction, family dogs often prioritize other strategies to solve basic choice tasks. |
| 1. 2015 Olfactory discrimination and generalization of AN.pdf   - -Our results suggest that dogs do not readily generalize from AN to similar AN -based odorants at reliable levels desired for explosive detection dogs and that performance varies significantly within Labrador retrievers selected for an explosive detection program.   1. 2015 Oxytocin induces positive expectations about ambivalent stimuli (cognitive bias) in dogs   -Our study provides the first evidence for the impact of oxytocin on dogs‟ judgement bias and also shows that the social -communicative nature of the task situation modulates the effect of oxytocin. |
| 1. 2015 Rating vs coding.pdf   -The results suggest that the owner ratings and video ratings are tapping the same constructs, but behavioural variables assessed in the present study were not appropriate for mirroring the owners’ assessments. The findings suggest that if consistent individual differences in broad behavioural traits are the primary focus of analyses, then ratings seem to capture information not easily captured in coding approaches designed to assess the same constructs. |
| 1. 2015 Repetitive Searches.pdf   -We present evidence showing that dog teams that are not given the opportunity to find a target odour while repeatedly searching the same location (i.e., the zero target,“0T” group) show a rapid decline in free search vigilance and false alarm rate and a gradual decline in combined handler -dog vigilance (i.e., directed vigilance   1. 2015 A Simple but Powerful Test of Perseverative Search in dogs   The results of the present study suggest that the communicative version of a standard A not - B task can be perceived by both dogs and human children as an ambiguous situation which can be perceived not only as indicating actual information in the here -and -now about the location of the toy, but also as communicating information about some generalizable property of the situation. That is, subjects’ search behaviour may not only be guided by the actual location of the target object, but may also be influenced by their tendency to obey rules of a social game |
| 1. 2015 The effect of reward -handler dissociation.pdf   -Our results show that dogs’ responsiveness to well -established commands might depend on the distance between the dog and the handler; it decreases with increased distance. We also found that this performance difference between the different contexts (i.e. handler near or far) seems to be lessened by previous reward -handler dissociation, while the type of the command itself might affect canine obedience as well. Receiving food reward from a dispenser device proved to be equally motivating for dogs to repeatedly perform already known tasks as compared to receiving food reward from the handler. However, in general, the association that is formed between the handler and the food reward seems to be a factor that influences dogs’ obedience performance at increased distances from the handler. We used our experimental results during the elaboration of a dog training procedure that aimed to prepare dogs for carrying out independent obedience work at increased distances, sometimes even out of sight of the handler. |
| 1. 2016 A Test of Canine Olfactory Capacity.pdf   -The fact that we could successfully test the olfactory abilities of 85% of companion dogs from  many different breeds and 92% of hand raised wolves in a simple procedure without any pretraining is evidence that the Natural Detection Task has the potential to be a practical method for comparing the relative olfactory abilities of different breeds or individuals. |
| 1. 2016 Anxiety impulsivity and premature graying.pdf   -Premature graying in young dogs maybe a possible indicator of anxiety, fear or impulsivity issues in dogs under four years of age. |
| 1. 2016 Color cues versus brightness.pdf   -Our results, together with the results of the above -mentioned studies, suggest that colour  can be a fundamental characteristic of visual objects and visual scenes as perceived by dogs that may enable the discrimination and recognition processes even in those vertebrates that possess the minimal required set of cone photoreceptors, as is the case for most mammals. |
| 1. 2016 Differences in Trait Impulsivity.pdf   -Altered or relaxed artificial selection for behavioural traits when appearance rather than behaviour become the primary focus for breeders may reduce average differences in impulsivity between breeds in show lines. |
| 1. 2016 dual origins of dogs.pdf   -these results suggest that dogs may have been domesticated independently in Eastern and Western Eurasia from distinct wolf populations. East Eurasian dogs were then possibly transported to Europe with people, where they partially replaced European Paleolithic dogs. |
| 1. 2016 effects of physical activity on dog behavior.pdf   -In conclusion, these preliminary data seem to suggest a possible influence of physical activity on  dog behavior, with positive effect about some undesirable behaviors that are less expressed. Special attention should be paid to those behaviors that the selection often magnified for utilitarian purposes, because the dog was used for particular tasks. |
| 1. 2016 flipping a coin Reconsidering canine behavior.pdf   -The take -home message is that shelters have almost certainly, despite the best of intentions, placed undue faith in a diagnostic process that was not fully understood and that has not been scientifically established as being valid or suitably predictive for positive findings to make critical decisions about dogs. |
| 1. 2016 Genetic map canine fear aggression.pdf   -We have mapped many canine fear and aggression traits to single haplotypes at the GNAT3 -CD36 and IGSF1 loci. CD36 is widely expressed |
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| 1. 2016 Genetics Dogs Became ally.pdf   -In conclusion, dogs may not only be important keys to a deepened understanding of evolution and behavior genetics; they may also serve as living models of our own health and welfare. Not a bad companion for scientists, or for humanity at large. |
| 1. 2016 Hair cortisol variations.pdf   -Therefore, a promising non -invasive method to study prolonged changes in the HPA -axis activity is to measure cortisol incorporated in hair10–15. Hair cortisol has been extensively studied during the last years and correlates positively with cortisol levels in both saliva and faeces of dogs. |
| 1. 2016 Humans attribute emotions to a robot dog behavior.pdf   -The main aim of this study was to investigate whether humans attribute emotions to a robot that performs simple actions inspired by dog expressive behaviours. Participants tended to spontaneously attribute emotions (gave score 3 or 4) to both the robot (57%, depending on the emotion) and the dog. |
| 1. 2016 Inhibition versus problem solving tasks.pdf   -The main aim of this study was to test whether experiences gathered over a prolonged period during manipulation of objects can lead to improved cognitive skills in the physical domain in animals in similar ways as they do in human infants. Our results do not support this hypothesis in the case of the domestic dog. |
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| 1. 2016 inhibitory -affect -physical -problem -pet.pdf   -Lay publication version of above   1. 2017 The interrelated effect of sleep and learning in dogs   -This is the first evidence to show that dogs’ human -analogue social learning skills might be related to sleep -dependent memory consolidation. |
| 1. 2016 Lateral bias for the kong.pdf   -It is concluded that dogs, like humans, are most likely using their non -dominant  limb to stabilise the KongTM ball and their dominant side for postural support. |
| 1. 2016 Morphology and mentality assessment.PDF   -The current study demonstrates that morphology and behaviour are intricately linked in the domestic dog. Its findings support previously reported relationships between bodyweight, height, CI and behaviour. |
| 1. 2016 newly -genomic -canine -ocd -advance.pdf   The locus most strongly associated with severe CCD was found on chromosome 34 – a region containing three serotonin receptor genes. |
| 1. 2016 Protein and fat on body temp.pdf   -These data suggest that diet can affect baseline cortisol secretion and ameliorate dissipation of body heat and further study and optimization of this dietary strategy may be worthwhile for detection dogs. |
| 1. 2016 questionnaire assess dog personality.pdf   -We suggest that the use of such questionnaires may contribute to research that is based on estimation of effects from large sample sizes, for example, genomic analyses of dog personality traits. |
| 1. 2016 Reward type and behavioural.pdf   -Inhibiting an immediate behaviour in favour of an alternative but more advantageous behaviour has been linked to individual success in life, especially in humans. Dogs, which have been living in the human environment for thousands of years, are exposed to daily situations that require inhibition different in context from other non -domesticated species. |
| 2016 Rigorous training and human scent identification.PDF  -Despite dogs’ demonstrated ability to discriminate and identify human scent with the line -up  technique, the admissibility of such evidence is not systematically accepted by the forensic  community and the courts and is often challenged in some countries. The present study shows  that rigorous procedures and continuous training lead to high sensitivity and specificity on  human olfactory matching -to -sample tasks |
| 1. 2016 Sniff nostril sidedness .pdf   -The objective of this study was to investigate canine nasal airflow and the implications regarding olfaction using a combined experimental and computational approach. Time -accurate airflow measurements of canine sniffing are first presented and are used to characterize the airflow rate, tidal volume and frequency of olfactory sampling by the domestic dog |
| 1. 2016 Social Interaction with an “Unidentified Moving Object” Elicits A -Not -B Error.pdf   -The goal of this research was to investigate the experience needed for a dog to recognise aspects of an artificial agent’s behaviour as being of relevance. The A -not -B error paradigm was used to assess whether dogs would be more responsive to the ostensive cues of their partner if the partner had interacted with them in a cooperative manner |
| 1. 2016 Social rearing environment influences dog behavioral development.pdf   -Associations were identified between home rearing environment and their scores on a behavioral questionnaire. The largest associations were social in nature, which suggests that social factors may be the most important with regards to shaping dog behavior. |
| 1. 2016 Sociobiological pregnancy failure.pdf   -By providing evidence that pregnancy failure in domestic dog may derive from an evolutionary counterstrategy against infanticide, our results support the concept that a number of strategies and responses developed in its wild ancestors over evolutionary time remain present even after many generations of domestication |
| 1. 2016 Stress and new situations.pdf   -In conclusion, results show that secure dog attachment to the owner, owner dog relationship, and personality of both influence the dog’s stress coping. |
| 1. 2016 Test -retest reliability and predictive validity of a juvenile.pdf   -The test presented here represents a new behavior test for juvenile dogs from which reliable and consistent measurement items have been identified. Some of these measurements have shown considerable predictive criterion validity for guide dog suitability |
| 1. 2016 The effect of oxytocin on biological motion perception in dogs.pdf   -In summary, our study presents information about intranasal oxytocin pretreatment affecting biological motion perception in dogs and its potential connection with physiological measures as well as some aspects of the dog personality (Neuroticism and Agreeableness). |
| 1. 2016 The topography of human demonstration effects.pdf   -Performance in object search tasks is not only influenced by the subjects’ object permanence ability. For example, ostensive cues of the human manipulating the target markedly affect dogs’ choices |
| 1. 2017 Cortisol human dog dyads.pdf   -We suggest that both owner and dog social characteristics influence dyadic cortisol variability, with the human partner being more influential than the dog. |
| 1. 2017 Motivational factors underlying problem solving.pdf   -In line with our predictions wolves explored a new environment more than dogs at the age of 5 weeks and interacted longer with the novel object than dogs both at 6 and 8 weeks. Furthermore, in line with previous results with adults (Moretti et al., 2015), there was a tendency for wolves to be more likely to contact the novel objects than dogs. |
| 1. 2017 MRI predicts suitability.pdf   -The primary goal of this study was to determine the efficacy of awake dog fMRI in predicting a dog’s suitability for assistance work. Using a paradigm in which the dog passively responded to hand signals indicating incipient food reward or nothing, we found that the person giving the signals affected the dogs’ brain responses. |
| 1. 2017 Post learning activity.pdf   -The current study was designed to explore the role of an emotional and arousing event post -learning on training performance in dogs. The results show that engaging in playful activity for 30 min after successfully learning the task improved re -training performance, evidenced by fewer trials needed to meet task criteria 24 h after initial acquisition. |

1. 2017 The interrelated effect of sleep and learning in dogs (Canis familiaris); an EEG and behavioural study -These results provide the first evidence that learning new commands influences sleep EEG spectrum in dogs, and that the EEG spectrum during sleep is predictive of memory performance. This study also suggests that differential learning patterns emerged as a consequence of the different activities following the initial learning task.