Select Experiments on Dogs, Listed Alphabetically by Institution

Institution conducting experiment	*Paper and date of publication*	*Summary of experiment*
Level Biotechnology (Taiwan)	"Genotoxicity and subchronic toxicity studies of Taiwanofungus camphoratus extract," *Fundamental Toxicological Sciences* (2019-04-05)	Experimenters force-fed a compound to beagle puppies from this facility every day for 28 days. The puppies were kept alive for an additional 14 days and then killed so their bodies could be dissected.
Medical University of South Carolina	"Localized delivery of therapeutic doxorubicin dose across the canine blood–brain barrier with hyperthermia and temperature sensitive liposomes," *Drug Delivery* (2018-04-24)	Experimenters cut incisions into the heads of beagles from this facility, drilled holes into their skulls, and injected a chemical solution into their brains. Some dogs were killed immediately, while others were kept alive for six weeks and then killed.
National Institutes of Health's Clinical Center	"Mechanistic insights into cell-free hemoglobin-induced injury during septic shock," *American Journal of Physiology-Heart and Circulatory Physiology* (2021-06-01; published online 2021-05-14)	Fifty-one male beagles under two years old, some identified as being from Covance(the corporate name of this facility on its Animal Welfare Act license, a holdover from prior ownership), were infected with staph bacteria to induce sepsis in a 96-hour study. All animals were anesthetized, intubated, and mechanically ventilated. Femoral arterial, central venous, urinary catheters, and a tracheostomy were inserted. Dogs experienced significant elevation of heartrate, heart and lung dysfunction, multiorgan failure, sepsis, severe shock and death. After 96 hours, animals who were still alive were considered survivors and euthanized.
National Institutes of Health's Clinical Center	"Haptoglobin improves shock, lung injury, and survival in canine pneumonia," *JCI Insight* (2018-09-20)	Experimenters infected 42 beagles from "Covance" (see above) with bacterial pneumonia and induced septic shock by injecting them with a human protein. They then forced the dogs to undergo sedation, mechanical ventilation, and transfusions with old donor blood before killing all survivors after the 96 hour experiment was over.
Temple University	"Acute bladder decentralization in hound dogs: Preliminary results of	Experimenters used 36 female hound puppies, some from this facility, to monitor nerve activity after creating bladder

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	effects on hypogastric nerve electroneurograms and detrusor pressure responses to spinal room and hypogastric nerve stimulation," *PLOS One* (2019-04-10)	dysfunction in the dogs. Dogs were catheterized and connected to a pump used to fill their bladders. Balloon-tipped catheters were inserted into their rectums. Experimenters cut into their abdomens and attached electrodes to stimulate different nerves in their bladders to initiate contraction of the bladder, as well as to stimulate spinal nerve roots in the dogs' lower backs. Experimenters then cut across sensory and motor roots that emerge from the spinal cords of 15 of the dogs, impairing normal bladder function in order to monitor nerve activity with forced bladder filling. These dogs were killed after surgery.
U. S. Food and Drug Administration's Center for Drug Evaluation and Research	"MicroRNA biomarkers of pancreatic injury in a canine model," *Experimental and Toxicologic Pathology* (2017-01-01; published online 2016-11-17)	Experimenters subjected 16 male beagle puppies obtained from this facility to up to four experiments each. They collected blood up to 14 times from each puppy, with eight of these occurring within a three-hour time span. They injected the puppies with a drug to create injury to their pancreases, causing lethargy, drooling, vomiting, and diarrhea in all of the puppies within minutes of the drug being administered. Experimenters then killed the puppies by draining them of blood and performed necropsies on them.
University of Missouri	"Development of a novel in vivo corneal fibrosis model in the dog," *Experimental Eye Research* (2016-02; published online 2015-10-09)	Experimenters intentionally chemically burned both eyes of seven female beagle puppies obtained from this facility over a period of seven weeks by applying a paper disc saturated in an alkali chemical to each eye for up to 30 seconds, causing corneal ulcerations. Experimenters then killed the puppies and cut out the corneas of their eyes.