

Locals In Hull, Against B&K Universal

7th October 2013

HISTORICAL PERSPECTIVE

Experiments on animals, claimed as able to 'predict' human responses for human medicine, first became institutionalised in 1847 through a French physician Claude Bernard. This quickly grew to become the mainstay for twentieth century biomedical research, despite its 130 year old, comparatively antiquated origin.

WHERE WAS SCIENCE DURING THIS TIME, IN THE 19th CENTURY?

To gain an insight into where science was during this period in the 19th century, when Bernard first institutionalized animal experiments, an excerpt from the following paper sheds clear light:

[Animal Experimentation: the legacy of Claude Bernard Drs LaFollette PhD and Shanks PhD](#)

'Claude Bernard, the father of scientific physiology, believed that if medicine was to become truly scientific, it would have to be based on rigorous and controlled animal experiments. Bernard instituted a paradigm which has shaped physiological practice for most of the twentieth century. In this paper we examine how Bernard's commitment to hypothetico-deductivism and determinism led to a) his **rejection of the theory of evolution**; b) his **minimalization of the role of clinical medicine and epidemiological studies**; and c) his **conclusion that experiments on non-human animals were "entirely conclusive for the toxicology and hygiene of man"**. We examine some negative consequences of Bernardianism for twentieth century medicine, and argue that physiology's continued adherence to Bernardianism has caused it to **diverge from the other biological sciences which have become increasingly infused with evolutionary theory**'. (Emphasis added). Please visit [this link](#) for the full paper.

WHEN DID ANIMAL EXPERIMENTS FIRST BECOME A REQUIREMENT BY LAW?

In 1938, the US Federal Food, Drug and Cosmetic Act first required some animal testing by law, and this became yet further enshrined in the 1946 Nuremberg Code, when scientific understanding was still, comparatively speaking, in its infancy. An important legal and scientific [paper](#) expounds relevant international scientific evidence to date, and places this within a legal and historical perspective. This impressive report is ideal for witness testimony at any public hearing or legal challenge: [The Nuremberg Code subverts human health and safety by requiring animal modeling.](#)

WHERE WAS SCIENCE DURING THIS TIME, WHEN ANIMAL EXPERIMENTS FIRST BECAME A LEGAL REQUIREMENT?

To understand where science was when this Nuremberg Code was established, and animal testing first became a requirement by law, the following excerpt from the above paper sheds a clear light (all references are at the bottom of this page):

"At the time of the Nuremberg trials, medical science was very different than it is now. The structure of DNA had not been elucidated, scientists thought the poliovirus entered via the nose (it enters through the gut) [27], the notion of a magic bullet (that for every disease, or at least every infectious disease, a chemical existed that could interact with the single site causing the malady and thus cure the disease without harming the rest of the body) via Ehrlich and Salvarsan [28] was foremost in the minds of drug developers, the modern synthesis in evolution was brand new [29], and animals and humans seemed to be more or less the same except for humans

having a soul [2,30,31]. There were no organ transplants, infectious diseases were still a major killer in the developed world, the fields of cognitive ethology and animal cognition were unheard of, and differences between ethnic groups [32-38] and sexes [39-43] in terms of disease and drug reactions had not yet been discovered. Physics was just beginning to cast off the shackles of determinism and reductionism but chaos and complexity theory was still on the horizon. It was a different world. People in the 1940s are to be excused for thinking that animals and humans would react more or less the same to drugs and disease. We will now bring the reader into the current scientific environment as it relates to our topic [30,44-49].” For the full article please click [here](#)

WHERE IS SCIENCE NOW, in 2013?

History shows that science often progresses through the enlightened work of individuals, such as Darwin who brought us the Theory of Evolution, Einstein who gave us the Theory of Relativity and Jenner, Lister and Semmelweis who all contributed to the Germ Theory of Disease.

Up-to-date scientific understanding in 2013 **unequivocally opposes** the use of veterinary principles – obtained from animal experiments – claimed as ‘helpful’ to human medicine, and is led by the expert medical board at AFMA/EFMA who illustrate this scientific evidence for the Locals in Hull Against B&K Universal, through the Parliamentary campaign [For Life On Earth \(FLOE\)](#).

[FLOE](#) draws attention to the seminal work [Animal Models in Light of Evolution](#) (2009) Shanks PhD and Greek MD for which there is a layman’s version, specially written for the non-scientist, titled [FAQs about the Use of Animals in Science](#). These two books highlight decades of practical evidence demonstrating that animal experiments clearly fail human medicine, and place this within the context of current understanding of evolutionary biology and complexity to explain why.

[FLOE’s](#) presentation of scientific knowledge is supported by a cross-party group of MPs and Parliamentary Early Day Motion 263, which calls for scientists who claim that experiments on Beagles can predict human responses to agree to properly moderated, public scientific debates with leading scientists who oppose experiments on animals - claimed as helpful to human medicine - purely on human, medical and scientific grounds. This public scientific debate is something the locals in Hull against B&K Universal are campaigning for.

SCIENCE HAS A NEW THEORY, TO TAKE ITS PLACE ALONGSIDE DARWIN’S THEORY OF EVOLUTION!

Science has recently named a new Trans-Species Modeling Theory, (TSMT) which is the theory that explains the many decades of practical evidence against using animal experiments to ‘predict’ human responses [50]. This new TSM Theory takes its place alongside other great scientific theories, such as Darwin’s Theory of Evolution and Einstein’s Theory of Relativity, which likewise enrich our life on earth by explaining many years of observed, practical evidence.

PHARMACEUTICAL COMPANIES OPENLY ACKNOWLEDGE THE FAILURE OF ANIMAL MODELS!

Hull’s local campaign’s scientific representatives [FLOE](#) highlight the fact that pharmaceutical companies acknowledge the failure of animal models in their drug development process and write about this openly and often in the scientific literature. Please visit [this link](#) for extensive examples.

For further information please visit the Hull Local’s against B&K Universal’s science-based representatives [For Life On Earth](#) where you can listen to the founder and director of their Patient and Families group, 24 year old multiple sclerosis patient Rebecca Groves, [narrate their introductory video slideshow](#), highlighting the **human cost** of experiments on animals.

Excerpt's References

27. Paul JR: A History of Poliomyelitis. New Haven: Yale University Press; 1971.
28. Ehrlich P, Hata S: Die experimentelle Chemotherapie der Spirillosen. Berlin: Springer; 1910.
29. Mayr E: What evolution is. Basic Books 2002.
2. Elliot P: Vivisection in Historical Perspective. edn. In Vivisection and the Emergence of Experimental Medicine in Nineteenth Century France. Edited by Rupke N. New York: Croom Helm; 1987:48–77.
30. LaFollette H, Shanks N: Animal Experimentation: The Legacy of Claude Bernard. *Int Stud Philos Sci* 1994, 8(3):195–210.
31. Bernard C: An Introduction to the Study of Experimental Medicine. New York: Dover; 1957 (1865).
32. Cheung DS, Warman ML, Mulliken JB: Hemangioma in twins. *Ann Plast Surg* 1997, 38(3):269–274.
33. Couzin J: Cancer research. Probing the roots of race and cancer. *Science* 2007, 315(5812):592–594.
34. Gregor Z, Joffe L: Senile macular changes in the black African. *Br J Ophthalmol* 1978, 62(8):547–550.
35. Haiman CA, Stram DO, Wilkens LR, Pike MC, Kolonel LN, Henderson BE, Le Marchand L: Ethnic and racial differences in the smoking-related risk of lung cancer. *N Engl J Med* 2006, 354(4):333–342.
36. Spielman RS, Bastone LA, Burdick JT, Morley M, Ewens WJ, Cheung VG: Common genetic variants account for differences in gene expression among ethnic groups. *Nat Genet* 2007, 39(2):226–231.
37. Stamer UM, Stuber F: The pharmacogenetics of analgesia. *Expert Opin Pharmacother* 2007, 8(14):2235–2245.
38. Wilke RA, Dolan ME: Genetics and Variable Drug Response. *JAMA: The Journal of the American Medical Association* 2011, 306(3):306–307.
39. Holden C: Sex and the suffering brain. *Science* 2005, 308(5728):1574.
40. Kaiser J: Gender in the pharmacy: does it matter? *Science* 2005, 308(5728):1572.
41. Simon V: Wanted: women in clinical trials. *Science* 2005, 308(5728):1517.
42. Wald C, Wu C: Of Mice and Women: The Bias in Animal Models. *Science* 2010, 327(5973):1571–1572.
43. Willyard C: HIV gender clues emerge. *Nat Med* 2009, 15(8):830.
44. LaFollette H, Shanks N: Animal models in biomedical research: some epistemological worries. *Public Aff Q* 1993, 7(2):113–130.
45. LaFollette H, Shanks N: *Brute Science: Dilemmas of animal experimentation*. London and New York: Routledge; 1996.
46. Shanks N, Greek R: *Animal Models in Light of Evolution*. Boca Raton: Brown Walker; 2009.
47. Shanks N, Greek R, Greek J: Are animal models predictive for humans? *Philos Ethics Humanit Med* 2009, 4(1):2.
48. Greek R, Greek J: Is the use of sentient animals in basic research justifiable? *Philos Ethics Humanit Med* 2010, 5:14.
49. Greek R, Shanks N, Rice MJ: The History and Implications of Testing Thalidomide on Animals. *The Journal of Philosophy, Science & Law* 2011, 11.
50. Greek, R. and L.A. Hansen, *Questions regarding the predictive value of one evolved complex adaptive system for a second: exemplified by the SOD1 mouse* *Progress in Biophysics and Molecular Biology*, 2013: p. <http://dx.doi.org/10.1016/j.pbiomolbio.2013.06.002>.
<http://www.sciencedirect.com/science/article/pii/S0079610713000539>