

## **Animal Models, Model Animals? Meanings and Practices in the History of the Biomedical Sciences.**

Centre for the History of Science, Technology and Medicine (CHSTM)  
Simon Building, 2nd Floor, RM 2.57,  
Brunswick Street,  
University of Manchester (UK)  
Thursday 20th - Friday 21st September 2012

Recent years have seen increasing scholarly interest in the discursive and material analysis of 'animal models'. This workshop brings together scholars from a variety of disciplines to explore the practices and consequences of the modelling of human diseases in nonhuman animals across the biomedical sciences. Animal modelling requires human disease to be transposed to nonhuman animals, a process that is by no means linear. Furthermore, models possess dual identities: operating to describe new knowledge whilst simultaneously prescribing what knowledge can be known. These multiple roles raise many questions. How are animal models created, communicated, and institutionalised? How have animal models gained utility within experimental research whilst sustaining clinical relevance? How are do these processes inform, and how have they been informed by, communications between experimental and clinical understandings of specific diseases? To what extent has the development of an animal model, and its subsequently institutionalization as a standard model, served to open up or close down innovation within specific trajectories of disease research? Put another way, what is lost and what is gained when an animal model becomes a model animal? What labour have animal models performed outside of experimental research, for example by sustaining or focussing large scale funding about a particular approach? How have models been aligned with clinical research, therapy, and the human patient? Though the language of 'models' is broadly a mid to late twentieth century phenomenon, emerging with and catalysed by molecular biology, genetics and the human genome project, we also seek to explore continuities and discontinuities with earlier approaches to experimental animal research. By doing so we hope to develop situated studies addressing how, when, and why, experimental animals became models within the biomedical sciences.

Papers will focus exclusively on higher organisms, exploring the unique complexities and challenges such models pose to meaning making in the biomedical sciences. Participants are encouraged to explore how the invention of an 'animal model' and/or the intervention of a 'model animal' impacted upon the transmission and translation of understandings of disease and therapy from laboratory to clinic, particularly in fields relating to drug research.

## THURSDAY 20<sup>TH</sup> SEPTEMBER 2012

13.00 Buffet Lunch & Registration

### Welcome

13.50 Michael Worboys & Rob Kirk

### Session 1: Dogs as Models

Chair: Edmund Ramsden (CHSTM, University of Manchester, UK)

14.00 Ilana Löwy (CERMES3, Villejuif, France)

*Dogs, rats and sex: animals in research on local contraceptives.*

14.30 Axel C. Hüntelmann (Johannes Gutenberg University Mainz, Germany)

*A dog is a dog is a dog? Ambivalent human-animal relationships in the Institute for Experimental Therapy.*

15.00 Stephen Pemberton (New Jersey Institute of Technology & Rutgers University, Newark, USA)

*The Exemplary Career of the Canine Hemophiliac*

### 15.30 COMFORT BREAK

### Session 2: Neuroscience I

Chair: Mael Lemoine (Université de Tours, France)

15.45 Jason Scott Robert (Arizona State University, USA)

*Model animals in developmental biology and in neuroscience: Virtues of a comparative philosophy of science.*

16.15 Nicholas Stücklin (University of Lausanne, Switzerland)

*How to assemble a monogamous rodent. Paternal Care, Fidelity and other model behaviour in the biography of the *Microtus ochrogaster*.*

### 16.45 COFFEE BREAK

### Session 3: Neuroscience II

Chair: Duncan Wilson (CHSTM, University of Manchester, UK)

17.00 Lara K. Keuck & Lara Huber (Johannes Gutenberg University Mainz, Germany)

*What makes a mouse a model for Alzheimer's disease?*

17.30 Mael Lemoine (Université de Tours, France)

*Extrapolation and Validity: Standardized Criteria of Choice for Animal Models in Neurobehavioral Research.*

### 19.50: Workshop Dinner:

Panama Hatty's, 43a Brown St (off King Street), Manchester, M2 2JJ.

(directions below)

## Friday 21<sup>st</sup> SEPTEMBER 2012

### 09.00 COFFEE

#### Session 4: Choosing Disease Models.

Chair: Carsten Timmermann (CHSTM, University of Manchester, UK)

**09.30** Thibaut Serviant-Fine (University Claude Bernard, Lyon, France)

*Choosing models for early anti-cancer drug screening.*

**10.00** Michael Bresalier (Imperial College, London, UK)

*The Ferret's Sneeze: Making and Naturalising Virus Diseases in Experimental Animals in Interwar Medical Science*

**10.30** Robert Meunier (Institute for Cultural Inquiry, Berlin, Germany)

*Generalizing models of disease mechanisms from zebrafish to humans.*

### 11.00 COFFEE BREAK

#### Session 5: Molecular Medicine and Genetic Engineering

Chair: Jean-Paul Gaudillière (CERMES3, Villejuif, France)

**11.30** Dmitriy Myelnikov (University of Cambridge)

*The Children of OncoMouse: Turning transgenic mice into cancer models, 1984–1991.*

**12.00** Pierre-Luc Germain (Università degli Studi di Milano, Italy)

*From simulators to observational instruments: Revisiting the role of animal models in molecular medicine*

### 12.30 BUFFET LUNCH

#### Session 6: Ethics

Chair: Duncan Wilson (CHSTM, University of Manchester, UK)

**14.00** Lene Koch & Mette N Svendsen (University of Copenhagen, Denmark)

*The Moral Landscape of Danish Research Monkeys Placement, Displacement, Replacement.*

**14.30** Jean Harrington (University of Exeter, UK)

*How does man conceptualise models of human disease in the context of changing ethical and legal frameworks concerning animals in experimentation?*

### 15.00 COFFEE

#### Session 7: Modelling (Bad) Behaviour

Chair: Michael Bresalier (CHSTM, University of Manchester, UK)

**15.15** Lucie Gerber (CERMES3, Villejuif, France)

*How Monkeys Got the Blues. Primate Social Models of Depression at the University of Wisconsin Primate Laboratory (1950-1980)*

**15.45** Ed Ramsden (CHSTM, University of Manchester, UK)

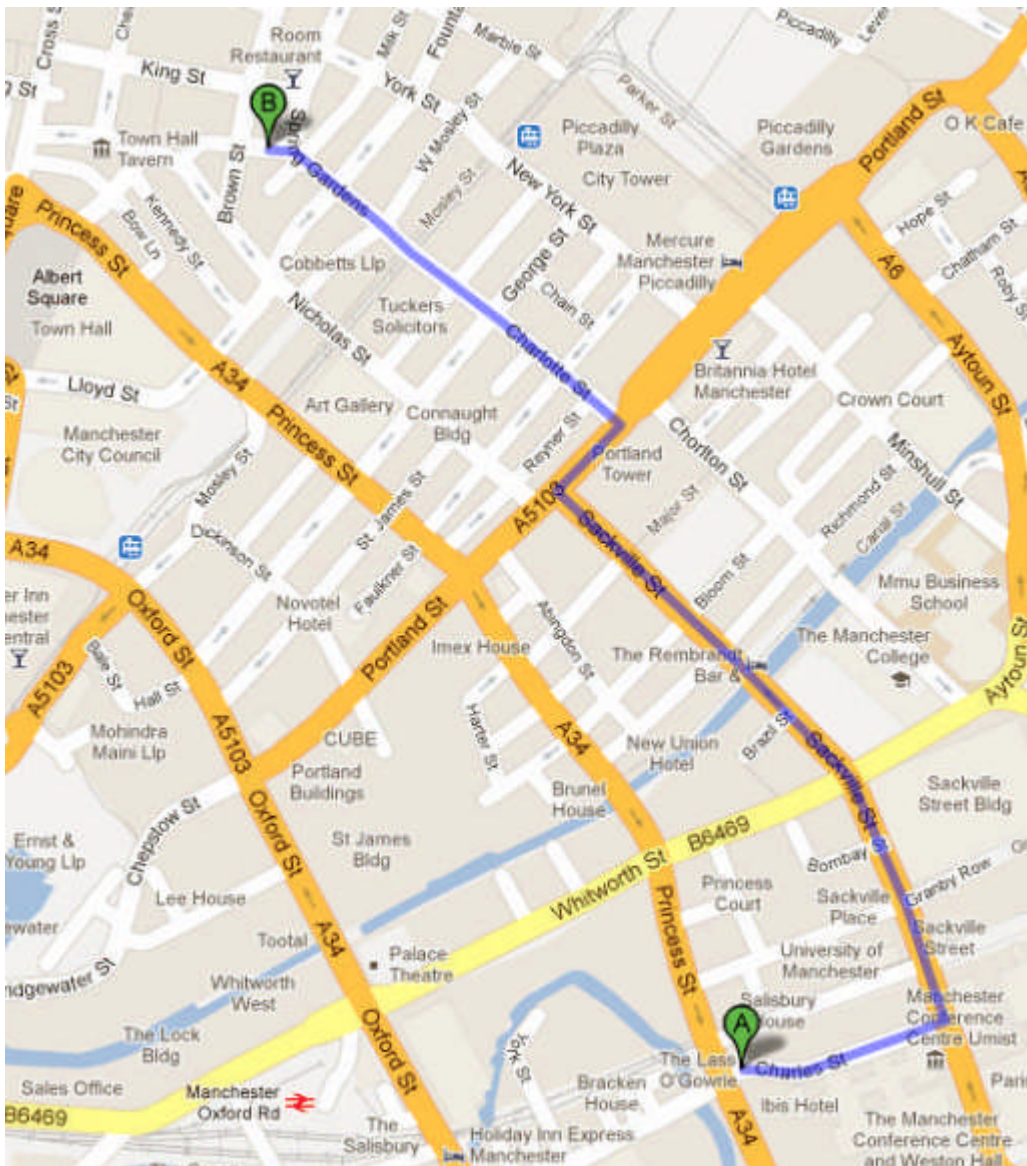
*When animals misbehave: constructing an animal model of alcoholism in the laboratory.*

#### 16.15 Response & Closing Discussion

Sabina Leonelli (University of Exeter)

### 16.45 END

## Directions from Ibis Hotel to Panama Hatty's.



**A** **IBIS HOTEL MANCHESTER Hotel**  
Charles Street, Princess Street M1 7DG, United Kingdom

1. Head **east** on **Charles St** toward **Sackville St**

go 0.1 mi
total 0.1 mi
2. Turn left onto **Sackville St**  
About 1 min

go 0.3 mi
total 0.4 mi
3. Turn right onto **Portland St/A5103**  
About 46 secs

go 226 ft
total 0.4 mi
4. Turn left onto **Charlotte St**

go 0.1 mi
total 0.6 mi
5. Continue onto **Spring Gardens**

go 289 ft
total 0.6 mi
6. **Spring Gardens** turns slightly left and becomes **Chancery Ln**  
Destination will be on the right

go 62 ft
total 0.7 mi

**B** Manchester M2 2JJ, UK