**Curriculum Vitae**

**Richard Mott**

**Current position Date of Birth**: 3rd May 1962

Professor of Bioinformatics and Statistical Genetics, **Nationality**: British

Wellcome Trust Centre for Human Genetics, **Gender**: Male

University of Oxford. **Email:** [rmott@well.ox.ac.u](mailto:rmott@well.ox.ac.u)k

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**Previous positions and education**

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| --- | --- |
| Feb 2010-: | Professor of Bioinformatics and Statistical Genetics, Oxford |
| 2001-2010: | Head of Bioinformatics and Statistical Genetics Core, Wellcome Trust Centre for Human Genetics, Oxford. |
| 1999-2001: | Head of Bioinformatics Applications, Wellcome Trust Centre for Human Genetics, Oxford. |
| 1997-1999: | Senior Investigator, SmithKlineBeecham Pharmaceuticals, Harlow, Essex. |
| 1995-1997 | Research Fellow, Sanger Centre, Cambridge |
| 1991-1995 | Senior Executive Officer, Imperial Cancer Research Fund, London |
| 1989-1991 | Post-doc, National Institute for Medical Research, London |
| 1985-1989 | PhD student, University of Reading/National Institute for Medical Research, London |
| 1984-1985 | MSc Biometry, University of Reading |
| 1981-1983 | MA Mathematics (1st Class Honours), University of Cambridge |

**Funding (2002-2010)**

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| --- | --- | --- | --- | --- | --- |
| Funder | PI | Grant | Title | Award | Years |
| Wellcome Trust | Richard Mott | WT085906AIA | Construction of 100 recombinant inbred lines of genetically diverse mice | £541k | 2008-2012 |
| Wellcome Trust | Richard Mott | WT083573MA | Analysis of quantitative trait networks in disease models | £737k | 2008-2013 |
| Wellcome Trust | Richard Mott | GR079981MA | Large scale data storage and backup strategy for the Wellcome Trust Centre for Human Genetics | £190k | 2006-2010 |
| Wellcome Trust | Richard Mott | GR064110MA | Development of a Laboratory Information Management System (LIMS) to support high-throughput genotyping | £250k | 2001-2004 |
| Wellcome Trust | Richard Mott | GR075325MA | The construction of recombinant inbred lines from a murine heterogeneous stock | £130k | 2005-2007 |
| Wellcome Trust | Jonathan Flint | GR064078AIA | High resolution QTL mapping of multiple phenotypes in heterogeneous stock mice | £2.1 million | 2001-2005 |
| European Union | Janet Thornton | FP6 | BIOSAPIENS | Euro 360k | 2004-2008. |
| BBSRC | Richard Mott | BB/F022697/1 | Resequencing Arabidopsis thaliana | £480k | 2008-2010 |

**Selected recent publications**

Bayesian quantitative trait locus mapping using inferred haplotypes. (2010) Durrant C, Mott R. *Genetics*. 2010 Mar;184(3):839-52

A multiparent advanced generation inter-cross to fine-map quantitative traits in Arabidopsis thaliana (2009) P Kover, W Valdar, J Trakalo, N Scarcelli, I Ehrenreich, M Purugganan, C Durrant R Mott *PloS Genet* 5(7):e1000551.

Mapping in Structured Populations by Resample Model Averaging (2009) Valdar W, Holmes CC, Mott R, Flint J. *Genetics*. 182(4):1263-77

High resolution mapping of expression QTLs in heterogeneous stock mice in multiple tissues (2009) Huang GJ, Shifman S, Valdar W, Johannesson M, Yalcin B, Taylor MS, Taylor JM, Mott R, Flint J. *Genome Res*. 2009 Jun;19(6):1133-40.

The Collaborative Cross, developing a resource for mammalian systems genetics: a status report of the Wellcome Trust cohort. (2009) Iraqi FA, Churchill G, Mott R. *Mamm Genome*. 19:379-81.

The STAR Consortium (2008) SNP and haplotype mapping for genetic analysis in the rat. (2008) *Nature Genet* 2008 40(5):560-6.

A high resolution single nucleotide polymorphism genetic map of the mouse genome (2006) Shifman S , Tzenova Bell J , Copley R , Taylor M, Williams R, Mott R, Flint J. *PLoS Biol* 4(12):e395.Genetic and environmental effects on complex traits in mice (2006) Valdar W, Solberg LC, Gauguier D, Cookson WO, Rawlins NJ, Mott R, Flint J. *Genetics* 74(2):959-84..Genome-wide genetic association of complex traits in heterogenous stock mice (2006) Valdar W, Solberg Leah , Gauguier D, Burnett S, Klenerman P, Cookson WOC, Taylor MS, Rawlins N, Mott R, Flint J. *Nature Genetics* **38(8)**:879-87Mott R. (2006) Finding the molecular basis of complex genetic variation in humans and mice. *Philos Trans R Soc Lond B Biol Sci.* **361**(1467):393-401. Valdar W, Flint J, Mott R. (2006) Simulating the collaborative cross: power of QTL detection and mapping resolution in large sets of recombinant inbred strains of mice. *Genetics*. **172(3):**1783-97.Yalcin B, Flint J, Mott R. (2005) Using progenitor strain information to identify quantitative trait nucleotides in outbred mice. *Genetics*. 2005 **171(2):**673-81] Yalcin B, Willis-Owen S , Fullerton J , Meesaq A , Deacon R, Rawlins N, Copley R, Morris A, Flint J, Mott R (2004) Genetic dissection of a behavioral quantitative trait locus: RGS2 modulates anxiety in mice. *Nat Genet* **36:**1197-1202Yalcin B, Fullerton J, Miller S, Keays DA, Brady S, Bhomra A, Jefferson A, Volpi E, Copley RR, Flint J, Mott R. (2004) Unexpected complexity in the haplotypes of commonly used inbred strains of laboratory mice. *Proc Natl Acad Sci USA*.;**101(26):**9734-9. Waterston RH, *et al* (2002) Initial sequencing and comparative analysis of the mouse genome. *Nature*.**420**(6915):520-62.

Dawson E *et al* (2002) A first-generation linkage disequilibrium map of human chromosome 22. *Nature*. **418**:544-8.Mott R and Flint J (2002) Simultaneous Detection and Fine-mapping of Quantitative Trait Loci in Mice using Heterogenous Stocks *Genetics* **160**:1609-1618.Mott R, Talbot CJ Turri M, Collins AC, Flint J (2000) A method for fine-mapping quantitative trait loci in outbred animal stocks *Proc Natl Acad Sci USA,* **97(23):**12649-12654*.*