

Curriculum Vitae

Adrian W Moore PhD

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Team Leader
Laboratory for Neurodiversity
RIKEN Center for Brain Science (CBS)
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Professional Experience

2018– Team Leader, Laboratory for Neurodiversity, RIKEN Center for Brain Science, JPN
2012–2018 Team Leader, Laboratory for Genetic Control of Neuronal Architecture, RIKEN Brain Science Institute, JPN
2004–2012 Unit Leader, RIKEN Brain Science Institute, JPN
1999–2003 Postdoctoral Fellow, Laboratory of Dr Yuh Nung Jan, University of California, San Francisco, USA
1998 Postdoctoral Fellow, Laboratory of Dr Nicholas Hastie, MRC Human Genetics Unit, Edinburgh, UK
1993–1997 Graduate Student, Laboratory of Dr Nicholas Hastie, MRC Human Genetics Unit, Edinburgh, UK
1992 Research Assistant, Laboratory of Kim Nasmyth, Institute of Molecular Pathology, Vienna, AUT
1990 Research Assistant, Type II Diabetes Research Team, Glaxo Group Research, London, UK

Co-appointments

2022– Visiting Associate Professor, Institute for Frontier Life and Medical Sciences; Kyoto University, JP
2017– Visiting Professor, Institute of Translational Medicine, University of Liverpool, UK
2013–2018 Visiting Professor, School of Health Sciences, Malaysia University of Science, MYS

Education

1993–1997 PhD, Biological Sciences, University of Edinburgh
1994 MA, University of Cambridge
1990–1993 BA, Genetics, University of Cambridge, 1st class honors

Awards

2020 Naito Foundation Award
2016 Takeda Science Foundation Award
2015 Novartis Award
2014 Mochida Memorial Foundation Award
2011–2012 RIKEN Presidents Fund Award
1999–2002 Wellcome Trust International Prize Traveling Research Fellowship
1996 Promega Young Geneticist of the Year (Scotland); awarded by the Genetics Society

Selected Professional Activities

Editorial: Editorial Board, Fly. Associate Editor, Frontiers in Cellular Neuroscience, section Cellular Neurophysiology. Ad Hoc Editor PLoS Genetics

ad hoc Advisor: Medical Research Council, UK.

British Council and UK Embassy in Japan Innovation Section, JPN

Meeting Organization

Meeting Chair: 2024, Asia Pacific *Drosophila* Neurobiology, Tokyo, JPN
Chair: 2022, RIKEN CBS Summer Course 2022: Architectures of the Brain
Meeting Chair: 2014, Epigenetics in the Brain: to the Single Cell Level, London, UK.
Meeting Chair: 2103, Neural Epigenetics: From Mechanisms to Disease, Tokyo, JPN
Scientific Committee: 2019, Asia Pacific *Drosophila* Neurobiology, Taipei, TWN
Scientific Committee: 2016, Asia Pacific *Drosophila* Neurobiology, Wuhan, CHN

Symposium Organizer: 2020, 43rd annual meeting of the Molecular Biology Society of Japan, JPN (Decoding and Engineering Cell Shape)
Symposium Organizer: 2018, 17th European *Drosophila* Neurobiology Meeting, Krakow, POL (Cytoskeleton to Plasticity)

Publications

Suzuki T, Tatsukawa T, Sudo G, Delandre C, Pai YJ, Miyamoto H, Raveau M, Shimohata A, Ohmori I, Hamano S, Haginoya K, Uematsu M, Takahashi Y, Morimoto M, Fujimoto S, Osaka H, Oguni H, Osawa M, Ishii A, Hirose S, Kaneko S, Inoue Y, **Moore AW**, Yamakawa K (2022) CUX2 deficiency causes facilitation of excitatory synaptic transmission onto hippocampus and increased seizure susceptibility to kainite **Scientific Reports** 12:e6505.

Tann JY, Wilkes OR, Xu F, Yoong LF, Skibbe H, **Moore AW** (2022) Study of dendrite differentiation using *Drosophila* dendritic arborization neurons. **Drosophila Neurobiology: A Laboratory Manual** (2nd edition) *in press*.

Pai YJ, **Moore AW** (2021) Transcription factor encoding of neuron subtype: strategies that specify arbor pattern. **Curr. Opin. Neurobiol.** 69: 149-158

Yoong LF, Lim HK, Tran H, Lackner S, Zheng Z, Hong P, **Moore AW** (2020) Atypical myosin tunes dendrite arbor subdivision. **Neuron** 106:452-467

Rives-Quinto N, Komori N, Ostgaard CM, Janssens DH, Kondo S, Dai Q, **Moore AW**, Lee CY (2020) Sequential activation of transcriptional repressors promotes progenitor commitment by silencing stem cell identity genes **Elife** 9:e56187

Liang X, Kokes M, Fetter RD, Sallee MD, **Moore AW**, Feldman JL, Shen K (2020) Growth cone-localized microtubule organizing center establishes microtubule orientation in dendrites. **Elife** 9:e56547

Wilkes OR, **Moore AW** (2020) Distinct Microtubule Organizing Center Mechanisms Combine to Generate Neuron Polarity and Arbor Complexity. **Front. Cell. Neurosci.** 14:e398

Urun FR, **Moore AW** (2020) Visualizing Cell Cycle Phase Organization and Control During Neural Lineage Elaboration. **Cells** 9:e2112

Tann JY, **Moore AW** (2019) MTOC Organization and Competition During Neuron Differentiation. **Results. Probl. Cell. Differ.** 67:337-357

Yoong LF, Pai YJ, **Moore AW** (2019) Stages and transitions in dendrite arbor differentiation. **Neurosci. Res.** 138:70-78.

Pai YJ, **Moore AW** (2018) Dendritic actin delivery service. **J. Cell. Biol.** 217:3325-3326

Delandre C, Amikura R, **Moore AW** (2016) Microtubule Nucleation and Organization in Dendrites. **Cell Cycle** 15:1685-92.

Klebanow LR, Peshel EC, Schuster AT, De K, Sarvepalli K, Lemieux ME, Lenoir JJ, **Moore AW**, McDonald JA, and Longworth MS (2016) *Drosophila* Condensin II subunit, Chromosome Associated Protein-D3, regulates cell fate determination through non-cell autonomous signaling. **Development** 143:2791-802.

Yalgin C, Ebrahimi S, Delandre C, Yoong LF, Akimoto S, Tran H, Amikura R, Spokony R, Torben-Nielsen B, White KP, **Moore AW** (2015) Centrosomin represses dendrite branching by orienting microtubule nucleation. **Nat. Neurosci.** 18:1437-45.

Chen YC, Auer-Grumbach M, Matsukawa S, Zitzelsberger M, Themistocleous AC, Strom TM, Samara C, **Moore AW**, Cho LT, Young GT, Weiss C, Schabhüttl M, Stucka R, Schmid AB, Parman Y, Graul-Neumann L, Heinritz W, Passarge E, Watson RM, Hertz JM, Moog U, Baumgartner M, Valente EM, Pereira D, Restrepo CM, Katona I, Dusl M, Stendel C, Wieland T, Stafford F, Reimann F, von Au K, Finke C, Willems PJ, Nahorski MS, Shaikh SS, Carvalho OP, Nicholas AK, Karbani G, McAleer MA, Cilio MR, McHugh JC, Murphy SM, Irvine AD, Jensen UB, Windhager R, Weis J, Bergmann C, Rautenstrauss B, Baets J, De Jonghe P, Reilly MM, Kropatsch R, Kurth I, Chrast R, Michiue T, Bennett DL, Woods CG, Senderek J (2015) Transcriptional regulator PRDM12 is essential for human pain perception. **Nat. Genet.** 7:803-8.

Taniguchi H, **Moore AW** (2014) Chromatin regulators in neurodevelopment and disease: Analysis of fly neural circuits provides insights. **Bioessays** 36:872-83.

Bard-Chapeau EA, Szumska D, Jacob B, Chua BQ, Chatterjee GC, Zhang Y, Ward JM, Urun F, Kinameri E, Vincent SD, Ahmed S, Bhattacharya S, Osato M, Perkins AS, **Moore AW**, Jenkins NA, Copeland NG (2014) Mice carrying a hypomorphic Evi1 allele are embryonic viable but exhibit severe congenital heart defects. **PLoS One** 9:e89397.

Karim MR, Endo K, Moore AW, Taniguchi H (2014) Whole mount immunolabeling of olfactory receptor neurons in the *Drosophila* antenna. **J Vis Exp** (87).

Artinger EL, Mishra BP, Zaffuto KM, Li BE, Chung EKY, **Moore AW**, Chen Y, Cheng C, and Ernst P (2013) MLL-dependent network sustains hematopoiesis. **Proc. Natl. Acad. Sci. U.S.A.** 110:12000-5.

Endo K, Karim MR, Taniguchi H, Krejci A, Kinameri E, Siebert M, Ito K, Bray S, **Moore AW** (2012) Chromatin modification of Notch targets in olfactory receptor neuron diversification. **Nat. Neurosci.** 15:224-33.

Hohenauer T, **Moore AW** (2012) The Prdm family: expanding roles in stem cells and development. **Development.** 139:2267-82.

Nagel J, Delandre C, Zhang Y, Förstner F, **Moore AW**, Tavosanis G (2012) Fascin controls neuronal class-specific dendrite arbor morphology. **Development.** 139:2999-3009.

Karim MR, **Moore AW** (2011) Convergent local identity and topographic projection of sensory neurons. **J. Neurosci.** 31:17017-27.

Yalgin C, Karim MR, **Moore AW** (2011) Immunohistological labeling of microtubules in sensory neuron dendrites, tracheae, and muscles in the *Drosophila* larva body wall. **J Vis Exp.** (57) :3662

Karim MR, **Moore AW** (2011) Morphological analysis of *Drosophila* larval peripheral sensory neuron dendrites and axons using genetic mosaics. **J. Vis. Exp.** (57) e3111

Nishimura Y, Yalgin C, Akimoto S, Doumanis J, Sasajima R, Nukina N, Miyakawa H, **Moore AW**, Morimoto T (2010) Selection of behaviors and segmental coordination during larval locomotion is disrupted by nuclear polyglutamine inclusions in a new *Drosophila* Huntington's disease-like model. **J. Neurogenet.** 24:194-206.

Doumanis J, Wada K, Kino Y, **Moore AW**, Nukina N (2009) RNAi screening in *Drosophila* cells identifies new modifiers of mutant huntingtin aggregation. **PLoS One.** 4:e7275.

Kinameri E, Inoue T, Aruga J, Imayoshi I, Kageyama R, Shimogori T, **Moore AW** (2008) Prdm proto-oncogene transcription factor family expression and interaction with the Notch-Hes pathway in mouse neurogenesis. **PLoS One.** 3:e3859.

Moore AW (2008) Intrinsic mechanisms to define neuron class-specific dendrite arbor morphology. **Cell. Adh. Migr.** 2:81-82.

Jinushi-Nakao S, Arvind R, Amikura R, Kinameri E, Liu AW, **Moore AW** (2007) Knot/Collier and cut control different aspects of dendrite cytoskeleton and synergize to define final arbor shape. **Neuron.** 56:963-978.

Kuzin A, Brody T, **Moore AW**, Odenwald WF (2005) Nerfin-1 is required for early axon guidance decisions in the developing *Drosophila* CNS. **Dev. Biol.** 277:347-365.

Moore AW, Roegiers F, Jan LY, Jan YN (2004) Conversion of neurons and glia to external-cell fates in the external sensory organs of *Drosophila hamlet* mutants by a cousin-cousin cell-type respecification. **Genes. Dev.** 18:623-628.

King-Underwood L, Little S, Baker M, Clutterbuck R, Delassus S, Enver T, Lebozer C, Min T, **Moore A**, Schedl A, Pritchard-Jones K (2005) Wt1 is not essential for hematopoiesis in the mouse. **Leuk. Res.** 29:803-12.

Grueber WB, Ye B, **Moore AW**, Jan LY, Jan YN (2003) Dendrites of distinct classes of *Drosophila* sensory neurons show different capacities for homotypic repulsion. **Curr. Biol.** 13:618-626.

Moore AW, Jan LY, Jan YN (2002) hamlet, a binary genetic switch between single- and multiple-dendrite neuron morphology. **Science.** 297:1355-1358.

Moore AW, Barbel S, Jan LY, Jan YN (2000) A genomewide survey of basic helix-loop-helix factors in *Drosophila*. **Proc. Natl. Acad. Sci. U.S.A.** 97:10436-10441.

Moore AW, McInnes L, Kreidberg J, Hastie ND, Schedl A (1999) YAC complementation shows a requirement for Wt1 in the development of epicardium, adrenal gland and throughout nephrogenesis. **Development.** 126:1845-1857.

Davies R, **Moore A**, Schedl A, Bratt E, Miyahawa K, Lodomery M, Miles C, Menke A, van Heyningen V, Hastie N (1999) Multiple roles for the Wilms' tumor suppressor, WT1. **Cancer Res.** 59:1747s-1750s.

Moore AW, Schedl A, McInnes L, Doyle M, Hecksher-Sorensen J, Hastie ND (1998) YAC transgenic analysis reveals Wilms' tumour 1 gene activity in the proliferating coelomic epithelium, developing diaphragm and limb. **Mech. Dev.** 79:169-184.

Miyagawa K, Kent J, **Moore A**, Charlieu JP, Little MH, Williamson KA, Kelsey A, Brown KW, Hassam S, Briner J, Hayashi Y, Hirai H, Yazaki Y, van Heyningen V, Hastie ND (1998) Loss of WT1 function leads to ectopic myogenesis in Wilms' tumour. **Nat Genet.** 18:15-17.

Moll T, Schwob E, Koch C, **Moore A**, Auer H, Nasmyth K (1993) Transcription factors important for starting the cell cycle in yeast. **Philos. Trans. R. Soc. Lond. B Biol. Sci.** 340:351-360.

Selected Presentations (since 2016)

- 2022 Singapore Developmental Biology Club, NUS, SGP
- 2020 5th Asia Pacific *Drosophila* Research Conference, Pune, IND
- 2019 Department of Molecular Genetics and Cell Biology, University of Chicago, USA
Life Sciences Institute, University of Michigan, USA
Neuroscience, School of Medicine, Case Western University, USA
Jan and Dan Duncan Neurological Research Institute at Texas Children's Hospital, and Baylor College of Medicine, USA
Neurobiology & Anatomy, School of Medicine, University of Utah, USA
NEURO2019, Niigata, JPN
School of Medicine, Nanyang Technological University, SGP
Cell Biology, Temasek Life Sciences Laboratory, SGP
- 2018 Department of Zoology, University of Cambridge, UK
MRC Institute of Genetics & Molecular Medicine, Edinburgh, UK
CRTD Technische Universität Dresden, DEU
Mechanobiology Institute, National University of Singapore, SGP
Duke Neuroscience, National University of Singapore, SGP
Cell Biology, Temasek Life Sciences Laboratory, SGP
The Center for Advanced Biomedical Sciences TWIns, Waseda University, Tokyo, JP
17th European *Drosophila* Neurobiology Conference, Krakow, POL
EMBO Workshop - Neural Development, Taipei, TWN
- 2017 RIKEN QBIC, Osaka, JPN
National Institute of Genetics, Mishima, JPN
Single Cell Science Symposium: Technology Meets Biology, Yokohama, JPN
Department of Neuroscience, Yale School of Medicine, USA
Developmental Biology Program, Sloan Kettering Institute, USA
Department of Biology, New York University, USA
Department of Neurology, University of Massachusetts Medical School, USA
Feinberg School of Medicine, Northwestern University, USA
Department of Biosciences and Nutrition, Karolinska Institute, SWE
SciLifeLab, SWE
Faculty of Medicine and Health Sciences, University of Linköping, SWE
Cell Biology, Temasek Life Sciences Laboratory, SGP
Jan and Dan Duncan Neurological Research Institute at Texas Children's Hospital, and Baylor College of Medicine, USA
EMBO Conference on Cell Biology of the Neuron: Polarity, Plasticity and Regeneration, Heraklion, GRC
IUBMB Focused Meeting on Emerging Concepts of the Neuronal Cytoskeleton, Puerto Montt, CHL
- 2016 1st Asia Pacific *Drosophila* Neurobiology Conference, Wuhan, CHN
Neuroscience Program, University of California, San Francisco, USA
Department of Pathology, Stanford University School of Medicine, USA
Molecular, Cellular, Developmental Biology, University of California Santa Barbara, USA
Neurobiology Section, Dornsife College, Biological Sciences, University of Southern California, USA
Department of Molecular Cell and Developmental Biology, University of California Los Angeles, USA
Digital Representation of Neuronal Morphologies and Tissue, Workshop, OIST, JPN
Institute for Frontier Science Initiative, Kanazawa University, JPN