

## BIBLIOGRAPHY

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1. **Anderson, D.J.** and Blobel, G. (1981) In vitro synthesis, glycosylation and membrane insertion of the four subunits of Torpedo acetylcholine receptor. *PNAS* 78:5598-5602.
2. **Anderson, D.J.**, Walter, P., and Blobel, G. (1982) Signal Recognition Protein is required for the integration of acetylcholine receptor  $\alpha$  subunit, a transmembrane glycoprotein, into the endoplasmic reticulum membrane. *J. Cell Biol.* 93:501-506.
3. Hertzberg, E.L., **Anderson, D.J.**, Friedlander, M., and Gilula, N.B. (1982) Comparative analysis of the major polypeptides from liver gap junctions and lens fiber junctions. *J. Cell Biol.* 92:53-59.
4. **Anderson, D. J.**, Walter, P. and Blobel, G. (1982) Early translational events in the synthesis of acetylcholine receptor. *Molecular Genetic Neuroscience* 373-385.
5. **Anderson, D.J.** and Blobel, G. (1983) Identification of homo-oligomers as potential intermediates in acetylcholine receptor subunit assembly. *PNAS* 80:4359-4363.
6. **Anderson, D. J.** (1983) Acetylcholine receptor biosynthesis: from kinetics to molecular mechanism. *Trends Neurosci.* 6:169-171.
7. **Anderson, D.J.**, Blobel, G., Tzartos, S.J., Gullick, W., and Lindstrom, J. (1983) Transmembrane orientation of an early biosynthetic form of acetylcholine receptor  $\delta$  subunit determined by Proteolytic dissection in conjunction with monoclonal antibodies. *J. Neurosci.* 3:1773-1784.
8. **Anderson, D.J.** and Blobel, G. (1983) In vitro biosynthesis of the subunits of acetylcholine receptor. *Molecular and Cellular Interactions Underlying Higher Brain Functions, Progress in Brain Research* 58:95-106.
9. **Anderson, D.J.** and Blobel, G. (1983) Immunoprecipitation of proteins from cell-free translations. *Methods Enzymol.* 96:111-120.
10. **Anderson, D.J.** and Blobel, G. (1983) Biosynthesis of acetylcholine receptor in vitro. *Methods Enzymol.* 96:367-378.
11. **Anderson, D.J.** and Blobel, G. (1983) Molecular events in the synthesis and assembly of a nicotinic acetylcholine receptor. *Cold Spring Harbor Symp. Quant. Biol.* XLVIII:125-134.
12. **Anderson, D.J.**, Mostov, K.E., and Blobel, G. (1983) Mechanisms of integration for de novo synthesized polypeptides into membranes: Signal recognition particle is required for the integration into microsomal membranes of calcium ATPase and of lens MP 26 but not of cytochrome b5. *PNAS* 80:7249-7253.
13. Buck, L., Stein, R., Palazzolo, M., **Anderson, D.J.**, and Axel, R. (1983) Gene expression and the diversity of identified neurons. *Cold Spring Harbor Symp. Quant. Biol.* XLVIII:485-492.
14. **Anderson, D.J.** and Axel, R. (1985) Molecular probes for the development and plasticity of neural crest derivatives. *Cell* 42:649-662.
15. **Anderson, D.J.** Stein, R. and Axel, R. (1986) Gene expression in differentiating and transdifferentiating neural crest cells. *Cold Spring Harbor Symp. Quant. Biol.* L:855-863.
16. **Anderson, D.J.** and Axel, R. (1986) A bipotential neuroendocrine precursor whose choice of cell fate is determined by NGF and glucocorticoids. *Cell* 47:1079-1090.
17. **Anderson, D.J.** (1987) Molecular biology of the acetylcholine receptor: structure and regulation of biogenesis. *The Vertebrate Neuro-muscular Junction* 285-315.
18. **Anderson, D.J.** (1988) Cell fate and gene expression in the developing neural crest. *Cellular and Molecular Aspects of Neural Development and Regeneration* 22:187-198.

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

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19. Stein, R., Orit, S., and **Anderson, D.J.** (1988) The induction of a neural-specific gene, SCG10, by Nerve Growth Factor in PC12 cells is transcriptional, protein synthesis-dependent, and glucocorticoid-inhibitable. *Dev. Biol.* 127:316-325.
20. Stein, R., Mori, N., Matthews, K.A., Lo, L.C., and **Anderson, D.J.** (1988) The NGF-inducible SCG10 mRNA encodes a novel membrane-bound protein present in growth cones and abundant in developing neurons. *Neuron* 1:463-476.
21. Stemple, D., Mahanthappa, N., and **Anderson, D.J.** (1988) Basic FGF induces neuronal differentiation, cell division, and NGF-dependence in chromaffin cells: A sequence of events in sympathetic development. *Neuron* 1:517-525.
22. **Anderson, D.J.** (1989) The neural crest cell lineage problem: Neurogenesis? *Neuron* 3:1-12.
23. **Anderson, D.J.** (1989) New roles for PDGF and CNTF in controlling the timing of glial cell differentiation in the optic nerve. *Trends Neurosci.* 12:83-85.
24. **Anderson, D.J.** (1989) Cellular "neoteny:" A possible developmental basis for chromaffin cell plasticity. *Trends Genet.* 5:174-178.
25. Vandenberg, D.J., Wuenschell, C.W., Mori, N., and **Anderson, D.J.** (1989) Chromatin structure as a molecular marker of cell lineage and developmental potential in neural crest-derived chromaffin cells. *Neuron* 3:507-518.
26. **Anderson, D.J.** (1989) Development and plasticity of a neural crest-derived neuroendocrine sublineage. *Journal of The Assembly of the Nervous System.* 17-36.
27. **Anderson, D.J.** and Michelsohn, A. (1989) Role of glucocorticoids in the chromaffin-neuron developmental decision. *Int. J. Dev. Neurosci.* 7:475-487.
28. Birren, S.J. and **Anderson, D.J.** (1990) A v-myc-immortalized sympathoadrenal progenitor cell line in which neuronal differentiation is initiated by FGF but not NGF. *Neuron* 4:189-201.
29. Mori, N., Stein, R., Sigmund, O., and **Anderson, D.J.** (1990) A cell type-preferred silencer element that controls the neural-specific expression of the SCG10 gene. *Neuron* 4:583-594.
30. Sigmund, O., Naor, Z., **Anderson, D.J.**, and Stein, R. (1990) Effect of Nerve Growth Factor and Fibroblast Growth Factor on SCG10 and c-fos Expression and Neurite Outgrowth in Protein Kinase C-depleted PC12 Cells. *J. Biol. Chem.* 265: 2257-2261.
31. Wuenschell, C.W., Mori, N., and **Anderson, D.J.** (1990) Analysis of SCG10 gene expression in transgenic mice reveals that neural specificity is achieved through selective derepression. *Neuron* 4:595-602.
32. Johnson, J.E., Birren, S.J., and **Anderson, D.J.** (1990) Two rat homologues of Drosophila achaete-scute specifically expressed in neuronal precursors. *Nature* 346:858-861.
33. Mori, N., Birren, S.J., Stein, R., Stemple, D., Vandenberg, D.J., Wuenschell, C.W. and **Anderson, D.J.** (1990) Contributions of cell-extrinsic and cell-intrinsic factors to the differentiation of a neural-crest-derived neuroendocrine progenitor cell. Cold Spring Harbor Symp. Quant. Biol. 55:255-264.
34. **Anderson, D.J.** (1990) Development and plasticity in the sympathoadrenal lineage of the neural crest. Neural Development (Discussions in Neuroscience, vol. VII, issue 1&2), eds. Wiesel, T.N., Anderson, D.J. and Katz, L.C. Elsevier; Amsterdam, The Netherlands.
35. Stemple, D.K. and **Anderson, D.J.** (1991) A Schwann cell antigen recognized by monoclonal antibody 217c is the rat low-affinity nerve growth factor receptor. *Neuroscience Letters* 124:57-60.

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 3

36. Lo, L.C., Birren, S.J., and **Anderson, D.J.** (1991) V-myc immortalization of early rat neural crest cells yields a clonal cell line which generates both glial and adrenergic progenitor cells. *Dev. Biol.* 145:139-153.
37. Lo, L.C., Johnson, J.E., Wuenschell, C.W., Saito, T., and **Anderson, D.J.** (1991) Mammalian achaete-scute homolog 1 is transiently expressed by spatially-restricted subsets of early neuroepithelial and neural crest cells. *Genes Dev.* 5:1524-1537.
38. **Anderson, D.J.**, Carnahan, J., Michelsohn, A., and Patterson, P.H. (1991) Antibody markers identify a common progenitor to sympathetic neurons and chromaffin cells in vivo and reveal the timing of commitment to neuronal differentiation in the sympathoadrenal lineage. *J. Neurosci.* 11:3507-3519.
39. Vandenberg, D.J., Mori, N., and **Anderson, D.J.** (1991) Co-expression of multiple neurotransmitter enzyme genes in normal and immortalized sympathoadrenal progenitor cells. *Dev. Biol.* 148:10-22.
40. **Anderson, D.J.** (1991) Molecular control of neural development. *An Introduction to Molecular Neurobiology* 355-387.
41. Carnahan, J.F., **Anderson, D.J.**, and Patterson, P.H. (1991) Evidence that enteric neurons may derive from the sympathoadrenal lineage. *Dev. Biol.* 148:552-561.
42. Johnson, J.E., Zimmerman, K., Saito, T., and **Anderson, D.J.** (1992) Induction and repression of mammalian achaete-scute homologue (MASH) gene expression during neuronal differentiation of P19 embryonal carcinoma cells. *Development* 114:75-87.
43. Johnson, J.E., Birren, S.J., Saito, T., and **Anderson, D.J.** (1992) DNA binding and transcriptional regulatory activity of mammalian achaete-scute homologous (MASH) proteins revealed by interaction with a muscle-specific enhancer. *PNAS* 89:3596-3600.
44. Michelsohn, A.M. and **Anderson, D.J.** (1992) Changes in competence determine the timing of two sequential glucocorticoid effects on sympathoadrenal progenitors. *Neuron* 8:589-604.
45. Mori, N., Schoenherr, C., Vandenberg, D.J., and **Anderson, D.J.** (1992) A common silencer element in the SCG10 and type II Na<sup>+</sup> channel genes binds a factor present in non-neuronal cells but not in neuronal cells. *Neuron* 9:45-54.
46. Birren, S.J., Verdi, J., and **Anderson, D.J.** (1992) Membrane depolarization induces p140trk and NGF-responsiveness, but not p75LNGFR, in MAH cells. *Science* 257:395-397.
47. Ip, N.Y., Nye, S.H., Boulton, T.G., Davis, S., Taga, T., Li, Y., Birren, S.J., Yasukawa, K., Kishimoto, T., **Anderson, D.J.**, Stahl, N., and Yancopoulos, G.D. (1992) CNTF and LIF act on neuronal cells via shared signaling pathways that involve the IL-6 signal transducing receptor component gp130. *Cell* 69:1-20.
48. **Anderson, D.J.** (1992) The highs and lows of an NGF receptor. *Curr. Biol.* 2:461-463.
49. Stemple, D.L. and **Anderson, D.J.** (1992) Isolation of a stem cell for neurons and glia from the mammalian neural crest. *Cell* 71:973-985.
50. **Anderson, D.J.** (1992) Cell fate determination in the peripheral nervous system: The sympathoadrenal progenitor. *J. Neurosci.* 12:185-198.
51. **Anderson, D.J.** (1992) The sympathoadrenal progenitor of the neural crest: Basic biology and therapeutic potential. *IPSEN Symp.* 40-58.
52. **Anderson, D.J.** (1993) Molecular control of cell fate in the neural crest: the sympathoadrenal lineage. *Ann. Rev. Neurosci.* 16:129-158.
53. **Anderson, D.J.** (1993) Cell and molecular biology of neural crest cell lineage diversification. *Curr. Opin. Neurobiol.* 3:8-13.

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 4

54. Stemple, D.L. and **Anderson, D.J.** (1993) Lineage diversification of the neural crest: in vitro investigations. *Dev. Biol.* 159:12-23.
55. Zimmerman, K., Shih, J., Bars, J., Collazo, A., **Anderson, D.J.** (1993) XASH-3, a novel *Xenopus* achaete-scute homolog, provides an early marker of planar neural induction and position along the medio-lateral axis of the neural plate. *Development* 119:221-232.
56. Guillemot, F., Lo, L.C., Auerbach, A., Johnson, J.E., **Anderson, D.J.**, and Joyner, A.L. (1993) Mammalian achaete-scute homolog-1 is required for the early development of olfactory and autonomic neurons. *Cell* 75:463-476.
57. Birren, S.J., Lo, L.C., and **Anderson, D.J.** (1993) Sympathetic neuroblasts undergo a developmental switch in trophic dependence. *Development* 119:597-610.
58. **Anderson, D.J.** (1993) MASH genes and the logic of neural crest cell lineage diversification. *C.R. Acad. Sci. Paris, Sciences de la vie/Life sciences.* 316:1090-1096.
59. Okazaki, T., Yoshida, B.N., Avraham, K.B., Wang, H., Wuenschell, C.W., Jenkins, N.A., Copeland, N.G., **Anderson, D.J.**, and Mori, N. (1993) Molecular Diversity of the SCG10/Stathmin Gene Family in the Mouse. *Genomics* 18:360-373.
60. Shah, N.M., Marchionni, M.A., Isaacs, I., Stroobant, P., and **Anderson, D.J.** (1994) Glial growth factor restricts mammalian neural crest stem cells to a glial fate. *Cell* 77:349-360.
61. Verdi, J.M., Birren, S.J., Ibañez, C.F., Persson, H., Kaplan, D.R., Benedetti, M., Chao, M.V., and **Anderson, D.J.** (1994) p75LNGFR regulates Trk signal transduction and NGF-induced neuronal differentiation in MAH cells. *Neuron* 12:733-745.
62. Verdi, J.M., Ip, N., Yancopoulos, G.D., and **Anderson, D.J.** (1994) Expression of trk in MAH cells lacking the p75 low-affinity nerve growth factor receptor is sufficient to permit nerve growth factor-induced differentiation to postmitotic neurons. *PNAS* 91:3949-3953.
63. Lo, L.C., Guillemot, F., Joyner, A.L., and **Anderson, D.J.** (1994) MASH-1: A marker and a mutation for mammalian neural crest development. *Perspect. Dev. Biol.* 2:2:191-201.
64. **Anderson, D.J.** (1994) Stem cells and transcription factors in the development of the mammalian neural crest. *FASEB J.* 8:707-713.
65. Ip, N.U., Boulton, T.G., Li, Y., Verdi, J.M., Birren, S.J., **Anderson, D.J.**, Yancopoulos, G.D. (1994) CNTF, FGF and NGF collaborate to drive the terminal differentiation of MAH cells into post-mitotic neurons. *Neuron* 13:443-455.
66. Verdi, J.M. and **Anderson, D.J.** (1994) Neurotrophins regulate sequential changes in neurotrophin receptor expression by sympathetic neuroblasts. *Neuron* 13:1359-1372.
67. Ferreiro, B., Kintner, C., Zimmerman, K., **Anderson, D.J.**, and Harris, W.A. (1994) XASH genes promote neurogenesis in *Xenopus* embryos. *Development* 120:3649-3655.
68. Groves, A.K., Georges, K.M., Tissier-Seta, J.P., Engel, J.D., Brunet, J.F., **Anderson, D.J.** (1995) Differential regulation of transcription factor gene expression and phenotypic markers in developing sympathetic neurons. *Development* 121:887-901.
69. Guillemot, F., Caspary, T., Tighlman, S.M., Copeland, N.G., Gilbert, D.J., Jenkins, N.A., **Anderson, D.J.**, Joyner, A.L., Rossant, J., and Nagy, A. (1995) Genomic imprinting of Mash2, a mouse gene required for trophoblast development. *Nat. Genet.* 9:235-242.
70. Schoenherr, C.J. and **Anderson, D.J.** (1995) The neuron-restrictive silencer factor (NRSF): a coordinate repressor of multiple neuron-specific genes. *Science* 267:1360-1363.
71. Saito, T., Greenwood, A., Sun, Q., and **Anderson, D.J.** (1995) Identification by differential RT-PCR of a novel paired homeodomain protein specifically expressed in sensory neurons and a subset of their CNS targets. *Molec. Cell Neurosci.* 6:280-292.

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 5

72. Lo, L.C. and **Anderson, D.J.** (1995) Postmigratory neural crest cells expressing c-RET display restricted developmental and proliferative capacities. *Neuron* 15:527-539.
73. Sommer, L., Shah, N.M., Rao, M., and **Anderson, D.J.** (1995) The cellular function of MASH1 in autonomic neurogenesis. *Neuron* 15:1245-1258.
74. Schoenherr, C.J. and **Anderson, D.J.** (1995) Silencing is golden: negative regulation in the control of neuronal gene transcription. *Curr. Opin. Neurobiol.* 5: 566-571.
75. **Anderson, D.J.** (1995) Spinning skin into neurons. *Curr. Biol.* 5:1235-1238.
76. **Anderson, D.J.** (1995) A molecular switch for the neuron-glia developmental decision. *Neuron* 15:1219-1222.
77. Verdi, J.M., Birren, S.J., Kaplan, D.R., and **Anderson, D.J.** (1995) The regulation and function of NGF receptors in normal and immortalized sympathoadrenal progenitor cells. *Life and Death in the Nervous System: Role of Neurotrophic Factors and their Receptors* 67:155-181.
78. Verdi, J.M., Groves, A.K., Farinas, I., Jones, K., Marchionni, M.A., Reichardt, L.F., and **Anderson, D.J.** (1996) A reciprocal cell-cell interaction mediated by NT-3 and neuregulins controls the early survival and development of sympathetic neuroblasts. *Neuron* 16:515-527.
79. Groves, A.K. and **Anderson D.J.** (1996) Role of environmental signals and transcriptional regulators in neural crest development. *Dev. Genet.* 18:64-72.
80. Shah, N.M., Groves, A.K., and **Anderson, D.J.** (1996) Alternative neural crest cell fates are instructively promoted by TGF $\beta$  superfamily members. *Cell* 85:331-343.
81. Schoenherr, C.J., Paquette, A., and **Anderson, D.J.** (1996) Identification of potential target genes for the neuron-restrictive silencer factor. *PNAS* 93:9881-9886.
82. Blaugrund, E., Pham, T.D., Tennyson, V.M., Lo, L.C., Sommer, L., **Anderson, D.J.**, and Gershon, M.D. (1996) Distinct subpopulations of enteric neuronal progenitors defined by time of development, sympathoadrenal lineage markers and Mash-1 dependence. *Development* 122:309-320.
83. Ma, Q., Kintner, C. and **Anderson, D.J.** (1996) Identification of neurogenin, a vertebrate neuronal determination gene. *Cell* 87:43-52.
84. Saito, T., Lo, L.C., **Anderson, D.J.**, and Mikoshiba, K. (1996) Identification of novel paired homeodomain protein related to *C. elegans* unc-4 as a potential downstream target of MASH1. *Dev. Biol.* 180:143-155.
85. Sommer, L., Ma, Q., and **Anderson, D.J.** (1996) Neurogenins, a novel family of atonal-related bHLH transcription factors, are putative mammalian neuronal determination genes that reveal progenitor cell heterogeneity in the developing CNS and PNS. *Molec. Cell Neurosci.* 8:221-241.
86. Tsien, J.Z., Chen, D.F., Gerber, D., Tom, C., Mercer, E., **Anderson, D.J.**, Mayford, M., Kandel, E., and Tonegawa, S. (1996) Subregion- and cell type-restricted gene knockout in mouse brain. *Cell* 87:1317-1326.
87. Bellefroid, E.J., Bourguignon, C., Hollemann, T., Ma, Q., **Anderson, D.J.**, Kintner, C., and Pieler, T. (1996) X-MyT1, a *Xenopus* C2HC- Type Zinc Finger Protein with a regulatory function in neuronal differentiation. *Cell* 87:1191-1202.
88. Lönnerberg, P., Schoenherr, C.J., **Anderson, D.J.**, and Ibañez, C.F. (1996) Cell-type specific regulation of choline acetyltransferase gene expression. *J. Biol. Chem.* 271:33358-65.
89. Morrison, S., Shah, N., and **Anderson, D.J.** (1997) Regulatory mechanisms in stem cell biology. *Cell* 88:287-298.

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 6

90. Schoenherr, C.J., and **Anderson, D.J.** (1997) NRSF: A coordinate repressor of neuron-specific genes expressed in CNS neural progenitor cells.. *Isolation, Characterization and Utilization of CNS Stem Cells* (Berlin Heidelberg: Springer-Verlag), 9-27. Eds: Gage, F. and Christen, Y.
91. Wang, H.U. and **Anderson, D.J.** (1997) Eph Family transmembrane ligands can mediate repulsive guidance of trunk neural crest migration and motor axon outgrowth. *Neuron* 18:387-396.
92. Rao, M.S. and **Anderson, D.J.** (1997) Immortalization and controlled in vitro differentiation of murine multipotent neural crest stem cells. *J. Neurobiol.* 32:722-746.
93. Ma, Q., Sommer, L., Cserjesi, P., and **Anderson, D.J.** (1997) Mash1 and neurogenin1 Expression patterns define complementary domains of neuroepithelium in the developing CNS and are correlated with regions expressing notch ligands. *J. Neurosci.* 17:3644-3652.
94. **Anderson, D.J.** (1997) Cellular and molecular biology of neural crest cell lineage determination. *Trends Genet.* 7:276-280.
95. Lo, L.C., Sommer, L., and **Anderson, D.J.** (1997) MASH1 maintains competence for BMP2-induced neuronal differentiation in post-migratory neural crest cells. *Curr. Biol.* 7(6):440-450.
96. Shah, N.M. and **Anderson, D.J.** (1997) Integration of multiple instructive cues by neural crest stem cells reveals cell-intrinsic biases in relative growth factor responsiveness. *PNAS* 94:11369-11374.
97. Sommer, L., Rao, M., and **Anderson, D.J.** (1997) RPTP $\delta$  and the novel protein tyrosine phosphatase RPTPY are expressed in restricted regions of the developing central nervous system. *Dev. Dyn.* 208:48-61.
98. **Anderson, D.J.**, Groves, A.K., Lo, L.C., Ma, Q., Rao, M., Shah, N.M., and Sommer, L. (1997) Cell lineage determination and the control of neuronal identity in the neural crest. *Cold Spring Harbor Symp. Quant. Biol.* LXII:493-504.
99. **Anderson, D.J.** and Jan, Y.N. (1997) The determination of the neuronal phenotype. *Molecular and Cellular Approaches to Neural Development* 26-63.
100. Lo, L.C., Tiveron, M.C., and **Anderson, D.J.** (1998) Mash1 activates expression of the paired homeodomain transcription factor Phox2a, and coordinates pan-neuronal and subtype-specific components of autonomic neuronal identity. *Development* 125:609-620.
101. Ma, Q., Chen, Z., Del Barco, I., De La Pompa, J.L., and **Anderson, D.J.** (1998) Neurogenin1 is essential for the determination of neuronal precursors for proximal cranial sensory ganglia. *Neuron* 20:469-482.
102. Wang, H.U., Chen, Z., and **Anderson, D.J.** (1998) Molecular distinction and angiogenic interaction between embryonic arteries and veins revealed by ephrin-B2 and its receptor Eph-B4. *Cell* 93:741-753.
103. Zinyk, D.L., Mercer, E.H., Harris, E., **Anderson, D.J.**, and Joyner, A.L. (1998) Fate mapping of the mouse midbrain-hindbrain constriction using a site-specific recombination system. *Curr. Biol.* 8:665-668.
104. Kim, J., Jones, B.W., Zock, C., Chen, Z., and **Anderson, D.J.** (1998) Isolation and characterization of mammalian homologs of the Drosophila gene glial cells missing. *PNAS* 95:12364-12369.
105. Chen, Z., Paquette, A.J., and **Anderson, D.J.** (1998) NRSF/REST is required in vivo for repression of multiple neuronal target genes during embryogenesis. *Nat. Genet.* 20:136-142.
106. Saito, T., Sawamoto, K., Okano, H., **Anderson, D.J.**, and Mikoshiba, K. (1998) Mammalian barH homologue is a potential regulator of neural bHLH Genes. *Dev. Biol.* 199:216-225.

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 7

107. Lin, J.H., Saito, T., **Anderson, D.J.**, Lance-Jones, C., Jessell, T.J., and Arber, S. (1998) Functionally related motor neuron pool and muscle sensory afferent subtypes defined by coordinate ETS gene expression. *Cell* 95:393-407.
108. Morrison, S.M., White, P.M., Zock, C., and **Anderson, D.J.** (1999) Prospective identification, isolation by flow cytometry, and in vivo self-renewal of multipotent mammalian neural crest stem cells. *Cell* 96:1-20.
109. Perez, S.E., Rebelo, S. and **Anderson, D.J.** (1999) Early specification of sensory neuron fate revealed by expression and function of neurogenins in the chick embryo. *Development* 126:1715-1728.
110. Lo, L.C., Morin, X., Goridis, C., Brunet, J.F., and **Anderson, D.J.** (1999) Specification of neurotransmitter identity by Phox2 proteins in neural crest stem cells. *Neuron* 22:693-705.
111. Ma, Q., Fode, C., Guillemot, F., and **Anderson, D.J.** (1999) Neurogenin1 and Neurogenin2 control two distinct waves of neurogenesis in developing dorsal root ganglia. *Genes Dev.* 13:1717-1728.
112. Greenwood, A., Turner, E., and **Anderson, D.J.** (1999) Identification of dividing, determined sensory neuron precursors in the mammalian neural crest. *Development* 126:3545-3559.
113. White, P.M. and **Anderson, D.J.** (1999) In vivo transplantation of mammalian neural crest cells into chick hosts reveals a new autonomic sublineage restriction. *Development* 126:4351-4363.
114. Gerety, S.S., Wang, H.U., Chen, Z., and **Anderson, D.J.** (1999) Symmetrical mutant phenotypes of the receptor EphB4 and its specific transmembrane ligand ephrin-B2 in cardiovascular development. *Mol. Cell* 4:403-414.
115. **Anderson, D.J.** (1999) Lineages and transcription factors in the specification of vertebrate primary sensory neurons. *Current Opinion in Neurobiology* 9:517-524.
116. Apelqvist, A., Li, H., Sommer, L., Beatus, P., **Anderson, D.J.**, Honjo, T., Hrabe De Angelis, M., Lendahl, U., and Edlund, H. (1999) Notch signaling controls pancreatic cell differentiation. *Nature* 400:877-881.
117. Shimojo, M., Paquette, A.J., and **Anderson, D.J.** (1999) Protein Kinase A regulates cholinergic gene expression in PC12 Cells: REST4 silences the silencing activity of Neuron-Restrictive Silencer Factor/REST. *Molec. Cell Biol.* 19:6788-6795.
118. **Anderson, D.J.** (1999) Blobel's Nobel: A vision validated. *Cell* 99:1-20.
119. Zhou, Q. and **Anderson, D.J.** (2000) Identification of a novel family of oligodendrocyte lineage-specific basic Helix-Loop-Helix transcription factors. *Neuron* 25:331-343.
120. Gunther, T., Chen, Z., Kim, J., Preiemel, M., Rueger, J.M., Amiling, M., Moseley, J.M., Martin, T.J., **Anderson, D.J.**, and Karesenty, G. (2000) Genetic ablation of parathyroid glands reveals another resource of parathyroid hormone. *Nature* 406:199-203.
121. Morrison, S.J., Perez, S.E., Qiao, Z., Verdi, J.M., Hicks, C., Weinmaster, G., and **Anderson, D.J.** (2000) Transient notch activation initiates an irreversible switch from neurogenesis to gliogenesis by neural crest stem cells. *Cell* 101:499-510.
122. **Anderson, D.J.** (2000) Genes, lineages and the neural crest: a speculative review. *Phil. Trans. R. Soc. Lond.* 355:953-964.
123. Paquette, A.J., Perez, S., and **Anderson, D.J.** (2000) Constitutive expression of the Neuron-Restrictive Silencer Factor (NRSF)/REST in differentiating neurons disrupts neuronal gene expression and causes axon pathfinding errors in vivo. *PNAS* 22:12318-12323.

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 8

124. Morrison, S.J., Csete, M., Groves, A.K., Melega, W., Wold, B., and **Anderson, D.J.** (2000) Culture in reduced levels of oxygen promotes clonogenic sympathoadrenal differentiation by isolated neural crest stem cells. *J. Neurosci.* 20:7370-7376.
125. Naoko, K., Kim, J., **Anderson, D.J.**, and Kintner, C. (2000) Hes6 acts in a positive feedback loop with the neurogenins to promote neuronal differentiation. *Development* 127:4203-4216.
126. Nadeau, H., McKinney, S., **Anderson, D.J.**, and Lester, H.A. (2000) ROMK1 (Kir1.1) Causes apoptosis and chronic silencing of hippocampal neurons. *J. Neurophysiol.* 84:1062:1075.
127. Schwitzgebel, V.M., Scheel, D.W., Conners, J.R., Kalamaras, J., Lee, J.E., **Anderson, D.J.**, Sussel, L., Johnson, J.D., and German, M.S. (2000) Expression of neurogenin3 reveals an islet cell precursor population in the pancreas. *Development* 127:3533-42.
128. Xu, F., Paquette, A.J., **Anderson, D.J.**, Charalambous, A., and Askew, D.S. (2000) Identification of a cell type-specific silencer in the first exon of the His-1 gene. *J. Cell Biochem.* 76:615-24.
129. Fode, C., Ma, Q., Casarosa, S., Ang, S.L., **Anderson, D.J.**, and Guillemot, F. (2000) A role for neural determination genes in specifying the dorsoventral identity of telencephalic neurons. *Genes Dev.* 14:67-80.
130. Shin, D., Garcia-Cardena, G., Hayashi, S.I., Gerety, S., Asahara, T., Stavrakis, G., Isner, J., Folkman, J., Gimbrone, Jr., and **Anderson, D.J.** (2001) Expression of EphrinB2 identifies a stable genetic difference between arterial and venous vascular smooth muscle as well as endothelial cells, and marks subsets of microvessels at sites of adult neovascularization. *Dev. Biol.* 230:139-150.
131. White, P.M., Morrison, S.J., Orimoto, K., Kubu, C.J., Verdi, J.M., and **Anderson, D.J.** (2001) Neural crest stem cells undergo cell-intrinsic developmental changes in sensitivity to instructive differentiation signals. *Neuron* 29:57-71.
132. **Anderson, D.J.** (2001) Stem cells and pattern formation in the nervous system: The possible versus the actual. *Neuron* 30:19-35.
133. Zirlinger, M., Kreiman, G., and **Anderson, D.J.** (2001) Amygdala-enriched genes identified by microarray technology are restricted to specific amygdaloid sub-nuclei. *PNAS* 98:5270-5275. PMC33199
134. Chen, Z.F., Rebelo, S., White, F., Malmber, A.B., Baba, H., Lima, D., Woolf, A.I.B., and **Anderson, D.J.** (2001) The paired homeodomain protein DRG11 is required for the projection of cutaneous sensory afferent fibers to the dorsal spinal cord. *Neuron* 29:1 57-71.
135. **Anderson, D.J.**, Gage, F.H., and Weissman, I.L. (2001) Can stem cells cross lineage boundaries? *Nat. Med.* 7:4 393-395.
136. Zhou, Q., Choi, G., and **Anderson, D. J.** (2001) The bHLH transcription factor Olig2 promotes oligodendrocyte differentiation in collaboration with Nkx2.2. *Neuron* 31:791-807.
137. Weissman, I.L., **Anderson, D.J.**, and Gage, F.H. (2001) Stem and progenitor cells: origins, phenotypes, lineage commitments and transdifferentiations. *Annu. Rev. Cell Dev. Biol.* 17:387-403.
138. Dong, X., Han, S., Zylka, M. J., Simon, M. I., and **Anderson, D. J.** (2001) A diverse family of GPCRs expressed on specific subsets of nociceptive sensory neurons. *Cell* 106:619-632.
139. Gerety, S.G. and **Anderson, D.J.** (2002) Cardiovascular EphrinB2 function is essential for embryonic angiogenesis. *Development* 129:1397-1410.
140. Lo, L.C., Dormand, E., Greenwood, A., and **Anderson, D.J.** (2002) Comparison of the generic neuronal differentiation and neuron subtype specification functions of mammalian achaete-scute and atonal homologs in cultured neural progenitor cells. *Development* 129:1553-1567.



## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 9

141. Zhou, Q. and **Anderson, D.J.** (2002) The BHLH transcription factors Olig2 and Olig1 couple neuronal and glial subtype specification. *Cell* 109:61-73.
142. Zirlinger, M., Lo, L.C., McMahon, J., McMahon, A.P., and **Anderson, D.J.** (2002) Transient expression of the bHLH factor Neurogenin-2 marks a subpopulation of neural crest cells biased for a sensory but not a neuronal fate. *PNAS* 99:8084-8089. PMC123024
143. Han, S.K., Dong, X., Hwang, J.I., Zylka, M.J., **Anderson, D.J.**, and Simon, M.I. (2002) Orphan G protein-coupled receptors MrgA1 and MrgC11 are distinctively activated by RF-amide-related peptides through the G $\alpha$ q/11 pathway. *PNAS* 99:14740-14745.
144. Mukouyama, Y., Shin, D., Britsch, S.T., Masahiko, T., and **Anderson, D.J.** (2002) Sensory nerve fibers determine the pattern of arterial differentiation and blood vessel branching in the skin. *Cell* 109:693-705.
145. Kubu, C.J., Orimoto, K., Morrison, S.J., Weinmaster, G., **Anderson, D.J.**, and Verdi, J.M. (2002) Developmental changes in Notch1 and numb expression mediated by local cell-cell interactions underlie progressively increasing delta sensitivity in neural crest stem cells. *Dev. Biol.* 244:199-214.
146. **Anderson, D.J.**, Choi, G. B. and Zhou, Q. (2002) Olig genes and the genetic logic of CNS neural cell fate determination. *Clin. Neurosci. Res.* 2:17-28.
147. Slimko, E.M., McKinney, S., **Anderson, D.J.**, Davidson, N., and Lester, H.A. (2002) Selective electrical silencing of mammalian neurons in vitro by the use of invertebrate ligand-gated chloride channels. *J. Neurosci.* 22:7373-7379.
148. Parras, C.M., Schuurmans, C., Scardigli, R., Kim, J., **Anderson, D.J.**, and Guillemot, F. (2002) Divergent functions of the proneural genes Mash1 and Ngn2 in the specification of neuronal subtype identity. *Genes Dev.* 16:324-38.
149. Mongeau, R., Miller, G.A., Chiang, E., and **Anderson, D.J.** (2003) Neural correlates of competing fear behaviors evoked by an innately aversive stimulus. *J. Neurosci.* 23:3855-3868.
150. Kim, J., Lo, L.C., Dormand, E., and **Anderson, D.J.** (2003) SOX10 maintains multipotency and inhibits neuronal differentiation of neural crest stem cells. *Neuron* 38:17-31.
151. Zylka, M.J., Dong, X., Southwell, A.L., and **Anderson, D.J.** (2003) Atypical expansion in mice of the sensory neuron-specific Mrg G protein-coupled receptor family. *PNAS* 100:10043-10048.
152. Han, C.J., O'Tuathaigh, C.M., Van Trigt, L., Quinn, J., Fanselow, M.S., Mongeau, R., Koch, C., and **Anderson, D.J.** (2003) Trace but not delay fear conditioning requires attention and the anterior cingulate cortex. *PNAS* 100:13087-13092.
153. Zirlinger, M. and **Anderson, D.J.** (2003) Molecular dissection of the and its relevance to autism. *Genes, Brain Behav.* 5:282-294.
154. Gabay, L., Lowell, S., Rubin, L.L., and **Anderson, D.J.** (2003) De-Regulation of dorso-ventral patterning by FGF confers tri-lineage differentiation capacity on CNS stem cells in vitro. *Neuron* 40:485-499.
155. **Anderson, D.J.**, Lo, L.C., Zirlinger, M., Choi, G., and Zhou, Q. (2004) The logic of neural cell lineage restriction: Neurogenesis revisited. *Stem Cells The Nervous System: Functional and Clinical Implication* 25-41.
156. Suh, G.S.B., Wong, A.M., Hergarden, A.C., Wang, J.W., Simon, A.F., Benzer, S., Axel, R., and **Anderson, D.J.** (2004) A single population of olfactory sensory neurons mediates an innate avoidance behavior in *Drosophila*. *Nature* 431:854-859.
157. Joseph, N.M., Mukouyama, Y., Mosher J.T., Jaegle, M., Crone, S.A., Dormand E.L., Lee K.F., Meijer D., **Anderson, D.J.**, and Morrison, S.J. (2004) Neural crest stem cells undergo

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 10

multilineage differentiation in developing peripheral nerves to generate endoneurial fibroblasts in addition to schwann cells. *Development* 131:5599-612.

158. Zylka, M.J., Rice, F.L., and **Anderson, D.J.** (2005) Topographically distinct epidermal nociceptive circuits revealed by axonal tracers targeted to Mrgprd. *Neuron* 45:17-25
159. Mukouyama, Y., Gerber, H.P., Ferrara, N., Gu, C., and **Anderson, D.J.** (2005) Peripheral nerve-derived VEGF promotes arterial differentiation via neuropilin1-mediated positive feedback. *Development* 5:941-952.
160. Shin, D., and **Anderson, D.J.** (2005) Isolation of arterial-specific genes by subtractive hybridization reveals molecular heterogeneity among arterial endothelial cells. *Dev. Dyn.* 233:1589-1604.
161. Choi, G.B., Dong, H.W., Murphy, A.J., Valenzuela, D.M., Yancopoulos, G.D., Swanson, L.W., and **Anderson, D.J.** (2005) Lhx6 delineates a pathway mediating innate reproductive behaviors from the amygdala to the hypothalamus. *Neuron* 46:647-660.
162. Lo, L.C., Dormand, E., and **Anderson, D.J.** (2005) Late-emigrating neural crest cells in the roof plate are restricted to a sensory fate by GDF7. *PNAS* 102:7192-7197.
163. Choi, G.B., and **Anderson, D.J.** (2005) A nose by any other name (should smell as sweetly). *Cell* 123:550-553.
164. Lee, J., Zylka, M.J., **Anderson D.J.**, Burdette J.E., Woodruff, T.K., and Meade T.J. (2005) A steroid-conjugated contrast agent for magnetic resonance imaging of cell signaling. *J. Am. Chem. Soc.* 127:13164-13166.
165. Mukouyama, Y., Deneen, B., Lukaszewicz, A., Novitsch, B.G., Wichertle, H., Jessell, T.J., and **Anderson, D.J.** (2006) Olig2+ neuroepithelial motoneuron progenitors are not multipotent stem cells in vivo. *PNAS* 103:1551-1556.
166. Carvalho, G.B., Kapahi, P., **Anderson, D.J.**, and Benzer, S. (2006) Allocrine modulation of feeding behavior by the sex peptide of *Drosophila*. *Curr. Biol.* 16:692-696.
167. Ligon, K.L., Kesari, S., Kitada, M., Sun, T., Arnett, H.A., Alberta, J.A., **Anderson, D.J.**, Stiles, C.D., and Rowitch, D.H. (2006) Development of NG2 neural progenitor cells requires *Olig* gene function. *PNAS* 103:20 7853-7858.
168. Rebelo, S., Chen, Z.F., **Anderson, D.J.**, and Lima, D. (2006) Involvement of DRG11 in the development of the primary afferent nociceptive system. *Molec. Cell Neurosci.* 33:236-246.
169. Deneen, B., Lukaszewicz, A., Hochstim, C.J., Ho, R., Gronostajski, R.M., and **Anderson, D.J.** (2006) The transcription factor NFIA controls the onset of gliogenesis in the developing spinal cord. *Neuron* 52:953-968. PMID:17178400
170. Zhang, C., Ng, K.L., Li, J.D., He, F., **Anderson, D.J.**, Sun, Y.D., and Zhou, Q.Y. (2007) Prokinectin 2 is a target gene of proneural basic helix-loop-helix factors for olfactory bulb neurogenesis. *J. Biol. Chem* 282:6917-6921. PMID:17259180
171. Lerchner, W., Xiao, C., Nashmi, R., Slimko, E.M., Van Trigt, L., Lester, H.A., and **Anderson, D.J.** (2007) Reversible silencing of neuronal excitability in behaving mice by a genetically targeted, ivermectin-gated CL<sup>-</sup> channel. *Neuron* 54:35-49.
172. Suh, G.S.B., Ben-Tabou de Leon, S., Tanimoto, H., Fiala, A., Benzer, S., and **Anderson, D.J.** (2007) Light activation of an innate olfactory avoidance response in *Drosophila*. *Curr. Biol.* 17:905-908. PMID:17493811
173. Liu, Q., Vrontou, S., Rice, F., Zylka, M., Dong, X., and **Anderson, D.J.** (2007) Molecular genetic visualization of a rare subset of unmyelinated sensory neurons that may detect gentle touch. *Nat. Neurosci.* 10:946-948.

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 11

174. Ligon, D.K.L., Huillard, E., Metha, S., Kesari, S., Liu, H., Alberta, J.A., Bachoo, R.M., Kane, M., Louis, D.N., DePinho, R.A., **Anderson, D.J.**, Stiles, C.D., and Rowitch, D.H. (2007) Olig2-regulated lineage-restricted pathway controls replication competence in neural stem cells and malignant glioma. *Neuron* 53:503-517.
175. Liu, Y., Yang, F., Okuda, T., Dong, X., Zylka, M.J., Chen, C., **Anderson, D.J.**, Kuner, R., and Ma, Q. (2008) Mechanisms of compartmentalized expression of Mrg class G protein-coupled sensory receptors. *J. Neurosci.* 28:125-132.
176. Hochstim, C.J., Deneen, B., Lukaszewicz, A., Zhou, Q., and **Anderson, D.J.** (2008) Identification of positionally distinct astrocyte subtypes whose identities are specified by a homeodomain code. *Cell* 133:510-522. PMC2394859
177. Wang, L., Dankert, H., Perona, P., and **Anderson, D.J.** (2008) A common genetic target for environmental and heritable influences on aggressiveness in *Drosophila*. *PNAS* 105:5657-5663. PMC2311352
178. Dussor, G., Zylka, M.J., **Anderson, D.J.**, and McCleskey, E. (2008) Cutaneous sensory neurons expressing the Mrgprd receptor sense extracellular ATP and are Putative Nociceptors. *J. Neurophysiol.* 99:1581-1589. PMC2438606
179. Ng, L., Bernard, A., Lau, C., Overly, C.C., Dong, H.W., Kuan, C., Pathak, S., Sunkin, S.M., Dang, C., Bohland, J.W., Bokil, H., Mitra, P.P., Puellas, L., Hohmann, J., **Anderson, D.J.**, Lein, S.S., Jones, A.R., and Hawrylycz, M. (2009) An anatomic gene expression atlas of the adult mouse brain. *Nat. Neurosci.* 12:356-362. PMID19219037
180. Yorozu, S., Wong, A., Fischer, B.J., Dankert, H., Kernan, M.J., Kamikouchi, A., Ito, K., and **Anderson, D.J.** (2009) Distinct sensory representations of wind and near-field sound in the *Drosophila* Brain. *Nature* 458:201-205. PMC2755041
181. Dankert, H., Wang, L., Hoopfer, E.D., **Anderson, D.J.**, and Perona, P. (2009) Automated monitoring and analysis of social behavior in *Drosophila*. *Nat. Methods* 4:297-303. PMC2679418
182. Cavanaugh, D., Lee, H., Lo, L.C., Shields, S., Zylka, M., Basbaum, A.I., and **Anderson, D.J.** (2009) Distinct subsets of unmyelinated primary sensory fibers mediate behavioral responses to noxious thermal and mechanical stimuli. *PNAS* 106:22 9075-9080. PMC2683885
183. Rau, K., McIlwrath, S., Wang, H., Lawson, J., Jankowski, M., Zylka, M., **Anderson, D.J.**, and Koerber, H.R. (2009) Mrgprd enhances excitability in specific populations of cutaneous murine polymodal nociceptors. *J. Neurosci.* 129:8612-8619. PMC2756673
184. Lebestky, T., Chang, J.S., Dankert, H., Zelnik, L., Kim, Y.C., Han, K.A., Wolf, F.W., Perona, P., and **Anderson, D.J.** (2009) Two different forms of arousal in *Drosophila* are oppositely regulated by the dopamine D1 receptor ortholog DopR via distinct neural circuits. *Neuron* 64:522-536. PMC2908595
185. Liu, Q., Tang, Z., Surdenikova, L., Kim, S., Patel, K.N., Kim, A., Ru, F., Guan, Y., Weng, H.J., Geng, Y., Udem, B.J., Kollarik, M., Chen, Z.F., **Anderson, D.J.**, and Dong, X. (2009) Sensory neuron-specific GPCR Mrgprs are itch receptors mediating chloroquine-induced pruritus. *Cell* 139:1353-1365. PMC2989405
186. Imamachi, N., Park, G.H., Lee, H., **Anderson, D.J.**, Simon, M.I., Basbaum, A.I., and Han, S.K. (2009) TRPV1-expressing primary afferents generate behavioral responses to pruritogens via multiple mechanisms. *PNAS* 106:11330-11335. PMC2708751
187. Wang, L., and **Anderson, D.J.** (2010) Identification of an aggression-promoting pheromone and its receptor neurons in *Drosophila*. *Nature* 463:227-231. PMC2999963

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 12

188. Guan, Y., Liu, G., Tang, Z., Raja, S.N., **Anderson, D.J.**, and Dong, X. (2010) Mas-related G-protein-coupled receptors inhibit pathological pain in mice. *PNAS* 107:15933–15938. PMC2936626
189. Haubensak, W., Kunwar, P.S., Cai, H., Ciocchi, S., Wall, N.R., Ponnusamy, R., Biag, J., Dong, H.W., Deisseroth, K., Callaway, E.M., Fanselow, M.S., Lüthi, A., and **Anderson, D.J.** (2010) Genetic dissection of an amygdala microcircuit that gates conditioned Fear. *Nature* 468:270-276. PMC3597095
190. Shields, S.D., Cavanaugh, D.J., Lee, H., **Anderson, D. J.**, and Basbaum, A. I. (2010). Pain behavior in the formalin test persists after ablation of the great majority of C-fiber nociceptors. *Pain* 151:422–429. doi:10.1016/j.pain.2010.08.00. PMC2955806
191. Lin, D., Boyle, M.P., Dollar, P., Lee, H.R., Perona, P., Lien, E.S., and **Anderson, D.J.** (2011) Functional identification of an aggression locus in the mouse hypothalamus. *Nature* 470:221-226. PMC3075820
192. Wang, L., Han, X., Mehren, J., Hiroi, M., Billeter, J.C., Miyamoto, T., Amrein, H., Levine, J.D., and **Anderson, D.J.** (2011) Hierarchical chemosensory regulation of male-male social interactions in *Drosophila*. *Nat. Neurosci.* 14:757-762. PMC3102769
193. Lukaszewicz, A., and **Anderson, D.J.** (2011) Cyclin D1 promotes neurogenesis in the developing spinal cord in a cell cycle-independent manner. *PNAS* 108:11632-11637. PMC3136279
194. Lo, L.C., and **Anderson, D.J.** (2011) A Cre-dependent, anterograde transsynaptic viral tracer for mapping output pathways of genetically marked neurons. *Neuron* 72:938-950. PMC3275419
195. Inagaki, H.K., Ben-Tabou De-Leon, S., Wong, A., Jagadish, S., Ishimoto, H., Barnea, G., Kitamoto, T., Axel, R., and **Anderson, D.J.** (2012) Visualizing neuromodulation in vivo: TANGO-mapping of dopamine signaling reveals appetite control of sugar sensing. *Cell* 148:583-595. PMC3295637
196. Hergarden, A.C., Tayler, T.D., and **Anderson, D.J.** (2012) Allatostatin-A neurons inhibit feeding behavior in adult *Drosophila*. *PNAS* 109:3967-3972. PMC3309792
197. **Anderson, D.J.** (2012) Optogenetics, sex, and violence in the brain: implications for psychiatry. *Biol. Psychiatry.* 7:1081-1089. PMC3380604
198. Tayler, T.D., Pacheco, D.A., Hergarden, A.C., Murthy, M., and **Anderson, D.J.** (2012) A neuropeptide circuit that coordinates sperm transfer and copulation duration in *Drosophila*. *PNAS* 109:20697–20702. PMC3528491
199. Burgos-Artizzu, X.P., Dollár, P., Lin, D., **Anderson, D. J.**, and Perona, P. (2012). Social behavior recognition in continuous video (pp. 1322–1329). Presented at the 2012 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), IEEE. doi:10.1109/CVPR.2012.6247817 <http://www.msri-waypoint.net/pubs/183824/CVPR12behavior.pdf>
200. Vrontou, S., Wong, A.M., Rau, K., Koerber, H.R., and **Anderson, D.J.** (2013) Genetic identification of C-fibers that detect massage-like stroking of hairy skin in vivo. *Nature* 493:669-6773. PMC3563425
201. Adolphs, R., and **Anderson, D.J.** (2013) Social and emotional neuroscience. *Curr. Opin. Neurobiol.* 23:291-293.
202. Inagaki, H.K., Jung, Y., Hoopfer, E., Wong, A.M., Mishra, N., Lin, J.Y., Tsien, R.Y., and **Anderson, D.J.** (2014) Optogenetic control of *Drosophila* using a red-shifted channelrhodopsin

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

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- reveals experience-dependent influences on courtship. *Nat. Methods* 3:325-32 doi: 10.1038/nmeth.2765. PMC4151318
203. Asahina, K., Watanabe, K., Duistermars, B.J., Hoopfer, E.D., Gonzales, C.R., Eyjólfssdóttir, E.A., Perona, P., and **Anderson, D.J.** (2014) Tachykinin-expressing neurons control male-specific aggressive arousal in *Drosophila*. *Cell* 156:221-235. PMC3978814
204. Anthony, T.E., Dee, N., Bernard, A., Lerchner, W., Heintz, N., and **Anderson, D.J.** (2014) Control of stress-induced persistent anxiety by an extra-amygdala septohypothalamic circuit. *Cell* 156:522-536. PMC3982923
205. Lee, H., Kim, D.W., Remedios, R., Anthony, T.E., Chang, A., Madisen, L., Zeng, H., and **Anderson, D.J.** (2014) Scalable control of mounting and attack by Esr1+ neurons in the ventromedial hypothalamus. *Nature* 509:627-32. doi:10.1038/nature13169. PMC4098836
206. **Anderson, D.J.**, and Adolphs, R. (2014) A Framework for studying emotions across species. *Cell* 157:187-200. <http://dx.doi.org/10.1016/j.cell.2014.03.003>. PMC4098837
207. Falkner, A., Dollar, P., Perona, P., **Anderson D.J.**, and Lin, D. (2014) Decoding ventromedial hypothalamic neural activity during male mouse aggression. *J. Neurosci.* 17:5971-84. doi: 10.1523/jneurosci.5109-13.2014. PMC3996217
208. Eyjólfssdóttir, E., Branson, S., Burgos-Artizzu, X.P., Hoopfer, E.D., Schor, J., **Anderson D.J.**, and Perona, P. (2014) Detecting social actions of fruit flies. In: Computer Vision – ECCV 2014. Lecture Notes in Computer Science. No.8690. Springer International Publishing, Berlin, Germany, 772-787. ISBN 978-3-319-10604-5. <http://www.vision.caltech.edu/~eeyjolfs/papers/EyjolfssdottirECCV2014.pdf>
209. Cai, H., Haubensak, W., Anthony, T.E., and **Anderson D.J.** (2014) Central amygdala PKC- $\delta$ + neurons mediate the influence of multiple anorexigenic signals. *Nat. Neurosci.* 17:1240-1248. doi:10.1038/nn.3767. PMC4146747
210. Hong, W., Kim, D.W., and **Anderson, D.J.** (2014) Antagonistic control of social versus repetitive self-grooming behaviors by separable amygdala neuronal subsets. *Cell* 158:1348-1361 doi:10.1016/j.cell.2014.07.049. PMC4167378
211. Lim, R.S., Eyjólfssdóttir, E., Shin, E., Perona, P. and **Anderson D.J.** (2014) How food controls aggression in *Drosophila*. *PLoS One* 9(8):e10562. PMC4146546
212. Inagaki, H.K., Panse, K.M., and **Anderson, D.J.** (2014) Independent, reciprocal neuromodulatory control of sweet and bitter taste sensitivity during starvation in *Drosophila*. *Neuron* 84:806-820. PMC4365050
213. **Anderson, D.J.**,\* and Perona, P.\* (2014) Towards a Science of Computational Ethology. *Neuron* 84:18-31. doi:10.1016/j.neuron.2014.09.005 \*Both authors are senior and corresponding. PMID25277452
214. Kunwar, P.S., Zelikowsky, M., Remedios, R., Cai, H., Yilmaz, M., Meister, M. and **Anderson, D.J.** (2015). Ventromedial hypothalamic neurons control a defensive emotion state. *ELife* 10.7554/eLife.06633. PMC4379496
215. Gibson W.T., Gonzalez C.R., Fernandez C.M., Ramasamy L., Tabachnik, T., Du, R.R., Felsen, P.E., Maire, M.M., Perona P., and **Anderson D.J.** (2015) Behavioral responses to a repetitive shadow stimulus express a persistent state of defensive arousal in *Drosophila*. *Curr. Biol.* 25:1401-1415. PMC4452410
216. Kennedy, A., Asahina, K., Hoopfer, E., Inagaki, H., Jung, Y., Lee, H., Remedios, R., and **Anderson, D.J.** (2015). Internal States and Behavioral Decision-Making: Toward an Integration

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

Page 14

- of Emotion and Cognition. *Cold Spring Harb. Symp. Quant. Biol.* 79:199-210. doi: 10.1101. PMID: 25948637
217. Jorgenson, LA, Newsome, W.T., **Anderson, D.J.**, Bargmann, C.I. et al. (2015) The BRAIN Initiative: developing technology to catalyse neuroscience discovery. *Phil. Trans. R. Soc. B* 370: 20140164. <http://dx.doi.org/10.1098/rstb.2014.0164>. PMC4387507
218. Hong, W., Kennedy, A., Burgos-Artizzu, X.P., Navonne, S.G., Perona, P., and **Anderson D.J.** (2015) Automated measurement of mouse social behaviors using depth sensing, video tracking, and machine learning. *Proc. Natl. Acad. Sci. USA.* 112(38):E5351-60. doi: 10.1073/pnas.1515982112. Epub 2015 Sep 9. PMC4586844
219. Hoopfer, E.D., Jung, Y., Inagaki, H.K., Rubin, G.M. and **Anderson D.J.** (2015) P1 interneurons promote a persistent internal state that enhances inter-male aggression in *Drosophila*. *ELife* 4:10.7554/eLife.11346 PMC4749567
220. **Anderson, D.J.**, (2016) Circuit Modules linking internal states and social behavior in flies and mice. *Nat. Rev. Neurosci.* 17(11):692-704. doi: 10.1038/nrn.2016.125. PMID27752072
221. Watanabe, K., Chiu, H., Pfeiffer, B.D., Wong, A., Hoopfer, E.D., Rubin, G.M., and **Anderson, D.J.**, (2017) A circuit node that integrates convergent input from neuromodulatory and social behavior promoting neurons to control aggression in *Drosophila*. *Neuron* 95(5):1112-1128. doi: 10.1016/j.neuron.2017.08.017 PMC5588916
222. Remedios, R., Kennedy, A., Zelikowsky, M., Grew, B.F., Schnitzer, M.J., and **Anderson D.J.** (2017) Social Behaviour shapes hypothalamic neural ensemble representations of conspecific sex. *Nature* 550(7676):388-392. doi: 10.1038/nature23885 PMC5674977
223. Zelikowsky, M., Hui, M., Karigo, T., Choe, A., Yang, B., Blanco, M., Beadle, K. Gradinaru, V., D.B.E., and **Anderson D.J.** (2018) The neuropeptide Tac2 controls a distributed brain state induced by chronic social isolation stress. *Cell* 173(5):1265-1279.e19. doi:10.1016/j.cell.2018.03.037. PMC5967263
224. Zelikowsky, M., Ding, K., and **Anderson D.J** (2018) Neuropeptidergic control of an internal brain state produced by prolonged social isolation stress. *Cold Spring Harb Symp Quant Biol.* 2019 Apr 4. pii: 038109 doi:10.1101/sqb.2018.83.038109. PMID:30948452
225. Duistermars, B.J., Pfeiffer, B.D., Hoopfer, E.D., and **Anderson D.J.** (2018) A brain module for scalable control of complex, multi-motor threat displays. *Neuron* 100(6):1474-1490. doi: 10.1016/j.neuron.2018.10.027 PMC6314657
226. Lo, L., Kim, D.W., Yao, S., Cetin, Al., Harris, J., Zeng, H. **Anderson, D.J.** and Weissbourd, B. (2019) Connectional architecture of a mouse hypothalamic circuit node controlling social behavior. bioRxiv 445312. . *Proc. Natl. Acad. Sci. USA* PMID: 30898882 DOI: 10.1073/pnas.1817503116 PMC6462064
227. Ding, K., Han, Y., Seid, T.W., Buser, C., Karigo, T., Zhang, S., Dickman, DK., and **Anderson D.J.** (2019) Imaging neuropeptide release at synapses with a genetically engineered reporter. *ELife* 8 Jun 26;8. pii: e46421. doi: 10.7554/eLife.46421. PMC6609332
228. Kim, D.W., Yao, Z., Graybuck, L.T., Kim, T.K., Nguyen, T.N., Smith, K.A., Fong, O., Yi, L., Koulena, N., Pierson, N., Shah, S., Lo, L., Pool, A.M., Oka, Y., Pachter, L., Cai, L., Tasic, B., Zeng H., and **Anderson, D.J.** (2019). Multimodal Analysis of Cell Types in a Hypothalamic Node Controlling Social Behavior. *Cell* Oct 17;179(3):713-728.e17. doi: 10.1016/j.cell.2019.09.020 PMC7534821
229. Jung, Y., Kennedy, A., Chiu, H., Mohammad, F., Claridge-Chang, A., and **Anderson, D.J.** (2019). Neurons that Function within an Integrator to Promote A Persistent Behavioral State

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

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- in *Drosophila*. *Neuron* Nov. 5 doi:10.1016/j.neuron.2019.10.028 [Epub ahead of print] PMC6981076
230. Kennedy, A.\*, Kunwar, P.S.\*, Li, LY.\*, Stagkourakis, S., Wagenaar, D., and **Anderson, D.J.**(2020). Stimulus-specific neural encoding of a persistent, internal defensive state in the hypothalamus. (\*equal contribution). *Nature* Oct 20; 586 (7831):730-734 PMC7606611
231. Karigo, T., Kennedy, A., Yang, B., Liu, M., Tai, D., Wahle I.,A., and **Anderson, D.J.** (2021). Distinct hypothalamic control of same- and opposite-sex mounting behaviour in mice. doi:10.1038/s41586-020-2995-0 *Nature* Jan; 589 (7841): 258-263 PMC7899581
232. Stagkourakis, S., Spigolon, G., Liu, G., and **Anderson, D.J.** (2020). Experience-dependent plasticity in an innate social behavior is mediated by hypothalamic LTP. doi: 10.1073/pnas.2011782117 *PNAS* Oct 13; 117(41):25789-25799 PMC7568289
233. Chiu, H., Hoopfer, E.D., Coughlan, M.L., and **Anderson, D.J.** (2021). A Circuit Logic for Sexually Shared and Dimorphic Aggressive Behaviors in *Drosophila*. doi:10.1016/j.cell.2020.11.048. *Cell* Feb 04;184(2):507-520 PMC7982966
234. Weissbourd, B., Momose, T., Nair, A., Kennedy, A., Hunt, B., and **Anderson, D.J.** (2021). A genetically tractable jellyfish model for systems and evolutionary neuroscience. *Cell* 184(24):5584-5868 DOI:10.1016/j.cell.2021.10.020 PMID:34822783 PMC8629132 (avail. 11/24/22)
235. Chari, T., Weissbourd, B., Gehring, J., Ferraioli, A., Leclère, L., Herl, M., Gao, F., Chevalier, S., Copley, R.R., Houliston, E., **Anderson, D.J.**, and Pachter, L. (2021). Whole Animal Multiplexed Single-Cell RNA-Seq Reveals Transcriptional Shifts Across clytia Medusa Cell Types. *Science Advances* 7(48), eabh1683. DOI:10.1126/sciadv.abh1682 PMC8626072
236. Segalin, C., Williams, J., Karigo, T., Hui, M., Zelikowsky, M., Sun, J.J., Perona, P., **Anderson, D.J.** and Kennedy, A. (2021). The Mouse Action Recognition System (MARS) software pipeline for Automated analysis of social behaviors in mice. *eLife* 2021;10:e63720 DOI: 10.7554/eLife.63720 PMC8631946
237. Liu, M., Kim, D.W., Zeng, H., and **Anderson D.J.** (2022). Make war not love: the neural substrate underlying a state-dependent switch in female social behavior. doi:10.1016/j.neuron.2021. *Neuron* Mar 02; 110(5):841-856 PMC8897222
238. Ichiki, T., Wang, T., Kennedy, A., Hermann Pool, A., Ebisu, H., **Anderson D.J.**, and Oka, Y. (2022). Sensory representation and detection mechanisms of gut osmolality change. *Nature* Jan 26 doi: 10.1038/s41586-021-04359-5. Online ahead of print. PMID35082448
239. Yang, B., Karigo T., and **Anderson D.J** (2022). Transformations of neural representations in a social behavior network. *Nature* 608:741-749. Doi:10.1038/s41586-022-5057-6. PMID: 35922505
240. Schretter, C.E., Aso, Y., Robie, A.A., Dreher, M., Dolan, M.-J., Chen, N., Ito, M., Yang, T., Parekh, R., Branson, K.M., et al. (2021). Cell types and neuronal circuitry underlying female aggression in *Drosophila*. *Elife* 9. doi:10.7554/elife.58942. PMC7787668
241. Nair, A., Karigo, T., Yang B., Linderman, S.W., **Anderson, D.J.**, and Kennedy, A. (2023). An approximate line attractor in the hypothalamus encodes an aggressive state. *Cell* Jan 5; 186(1):178-193.e15. doi:10.1016/j.cell.2022.11.027, PMC9990527

## BIBLIOGRAPHY

David J. Anderson, Ph.D.

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### Preprints

1. Sun, J.J., Kennedy, A., Zhan, Z., Yue, Y., **Anderson, D.J.**, and Perona, P. (2020). Task Programming: Learning Data Efficient Behavior Representations. arXivpreprint arXiv:2011.13917 <https://arxiv.org/abs/2011.13917> arXiv
2. Sun, J., J., Kennedy, A., Karigo, T., Chakraborty, D., Mohanty, S.P., **Anderson, D.J.**, Perona, P., Yue, Y., and Kennedy, A. (2021). The Multi-Agent Behavior Dataset: Mouse Dyadic Social Interactions. arXivpreprint arXiv:2104.02710 <https://arxiv.org/abs/2104.02710> arXiv
3. Mengyu Liu, Aditya Nair, Scott W. Linderman, **David J. Anderson** (2023) Periodic hypothalamic attractor-like dynamics during the estrus cycle. *bioRxiv*. doi: <https://doi.org/10.1101/2023.05.22.541741>
4. Kiichi Watanabe, Hui Chiu, **David J. Anderson** (2023) Hi-Fish: Whole brain in situ mapping of neuronal activation in drosophila during social behaviors and optogenetic stimulation. *bioRxiv* doi: <https://doi.org/10.1101/2023.09.28.560045>

### Books

1. Adolphs, R. and **Anderson, D.J.** (2018). The neuroscience of emotion: a new synthesis. Princeton University Press. Princeton, N.J. 376 pp.
2. **Anderson, D.J.** (2022). The Nature of the Beast: How emotions guide us. Basic Books, New York, N.Y. 304 pp.

### Essays and Lay Articles

**Anderson, D.J.** (1990) Career Choices for Developing Neurons. *California Institute of Technology. Engineering & Science/Spring* 14-23.

**Anderson, D.J.** and Walter, P. (1999) Blobel's Nobel: A Vision Validated (Essay). *Cell* 99:1-20.

**Anderson, D.J.** The Alchemy of Stem Cell Research. *The New York Times OP-ED* July 15, 2001.

**Anderson, D.J.** (2008) Seymour Benzer Obituary: Restless spirit, and pioneer in molecular genetics *Nature* 45:139.

**Anderson, D.J.** (2014) Paul Patterson Obituary, *Neuron* 83:1-3

**Anderson, D.J.** (2022) What can animals tell us about emotions?. *The Wall Street Journal*