

**Matthew P. Scott**  
**President Emeritus, Carnegie Institution for Science**  
**Professor of Developmental Biology, Emeritus**  
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**Education, Employment, and Administration:**

B.S., Life Sciences (February, 1975). Massachusetts Institute of Technology  
Ph.D., Biology (April, 1980). Massachusetts Institute of Technology  
Helen Hay Whitney Postdoctoral Fellow, Indiana University (1980-1983)  
Assistant Professor (1983-1987) and Associate Professor (1987-1990)  
Department of Molecular, Cellular, and Developmental Biology,  
University of Colorado at Boulder  
Associate Professor (1989-1990), Department of Biochemistry and Biophysics,  
University of Colorado Health Sciences Center, Denver  
Associate Investigator (1989-1990), Howard Hughes Medical Institute  
Visiting Professor of Genetics (1994-1995) Harvard Medical School  
Professor (1990-2014), Stanford University School of Medicine  
Investigator (1993-2010), Howard Hughes Medical Institute  
Chair, Department of Developmental Biology, 1996-8  
Associate Chair, Department of Developmental Biology, 1999-2002  
Chair, Stanford University Bio-X Program, 2001-7  
Co-director, Stanford Center for Children's Brain Tumors, 2005-8  
President, Carnegie Institution for Science, 2014-2017

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**Honors:**

Helen Hay Whitney Postdoctoral Fellowship, 1980-1983  
American Cancer Society Junior Faculty Research Award, 1983-1984  
National Institutes of Health Research Career Development Award, 1984-1989  
Searle Scholar's Award, 1985-1989  
Passano Foundation Young Investigator Award, 1990  
President, Society for Developmental Biology, 1997-8  
Searle Scholars Foundation Advisory Board, 2001-5  
Conklin Medal, Society for Developmental Biology, 2004  
Einstein Professor, Chinese Academy of Sciences, 2008  
Elected to the American Academy of Arts and Sciences, 1996  
Elected to the National Academy of Sciences, 1999  
Elected to the National Institute of Medicine, 2007  
Pasarow Award in Cancer Research, 2013

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**Service:**

Co-Chairman, Gordon Conference on Developmental Biology, 1987  
Program Co-organizer, 31<sup>st</sup> National Drosophila Conference, 1990  
Co-chair: Keystone Meeting, *Transcription in Development, Differentiation, and Disease*, 1992  
Co-chair: Santa Cruz Conference on Developmental Biology, 1994  
Kirsch Foundation Scientific Advisory Board, 2002-4  
Co-chair: Keystone Conference on *Cancer and Development*, 2005  
Scientific Advisory Board, Ara Parseghian Medical Research Foundation, 2005-13

External advisory committee, Harvard Medical School Department of Genetics, 2005  
Corporation Visiting Committee, M.I.T. Department of Biology, 2005-  
Co-chair, Conference on Hedgehog Signaling in Development and Disease, 2007  
Beckman Foundation, Grants Advisory Council, 2008-2009  
Class Membership Committee, National Academy of Sciences, 2011-2013  
Review Committee: Patan Academy of Health Sciences, Kathmandu, Nepal, 2012  
External advisory committee, Harvard Medical School Department of Genetics, 2013  
Director, Giant Magellan Telescope Board, 2014-2015  
Chair, Giant Magellan Telescope Founders, 2015-2017

### **Editorial Appointments:**

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Co-editor, *Current Opinions in Genetics and Development*, 1991-2006

Editor, *Developmental Biology*, 1995-2001

Associate Editor, *Cell*, 1988-1995

Editor, *Development*, 2007-9

**Editorial Boards:** *Current Biology*, 1991-1993, *Development*, 1987-1992, *Developmental Biology*, 1988-1992, *Genes and Development*, 1987-1992, *Molecular and Cellular Biology*, 1988-1998, *Molecular Cell*, 1999-2001, *Proceedings of the National Academy of Sciences U.S.A.*, 2001-5, *PLoS Biology*, 2003-5

### **Professional Societies:**

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Genetics Society of America,

Society for Developmental Biology

American Society for Cell Biology

American Society for Biochemistry and Molecular Biology

### **University Service:**

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Ad Hoc University Budget Advisory Sub-committee, 1991

Medical School Faculty Budget Advisory Committee, 1991-1992

Walter Berry Postdoctoral Fellowships Awards Committee, 1991-2001

Neurosciences Program Review Committee, 1992

Chair, Committee on Graduate Admissions and Policy, 1995-7

Neuroscience Research Development Committee, 1999-2000

Cancer Research Development Committee, 1999-2000

Functional Genomics, Genetics, and Biocomputation Committee, 1999-2000

Children's Health Oversight and Coordinating Committee, 1999-2000

Provost's Advisory Committee on the Status of Women Faculty, 2001

Medical School Dean Search Committee, 2000-2001

Bio-X Advisory Committee, 2001

Medical Student Curriculum Reform Committee, 2000-1

Dean's Bio-X Advisory Committee, 2001

Medical School Fundraising Committee, 2001-2

Medical School Cancer Center Committee, 2001-2

Department of Bioengineering Founding Faculty committee, 2003-4

Search committee, Department of Medicine Chair, 2005

Search committee chair, Department of Developmental Biology, 2006

Human Health Initiative Committee, 2006-7

Committee for Advanced Residency Training at Stanford (ARTS) 2007-2013

Bioengineering Department Undergraduate Curriculum Committee 2007-8

Bio-X Leadership Council, 2002-

School of Medicine Appointments and Promotions Committee, 2011-2013

Search Committee, Department of Developmental Biology, 2011

Introductory Science Courses Committee, VPUE, 2011-2012

Committee on Implicit Bias, School of Medicine, 2011-2013

Chair, Review Committee, Immunology Interdepartmental Program, 2011

Executive Committee, Child Health Research Institute, Stanford University, 2013-4

Committee on Academic Policy, Stanford Board of Trustees, 2013-2014

Advisory Board, Institute for Chemical Biology, 2014

### **U.S. Patents:**

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Patched Genes and Their Use. USA Patent number 5,837,538. Issued November 17, 1998.  
Costal2 Gene and its Uses. USA Patent number 6,218,144. Issued April 17, 2001.  
Biological Particle Sorter. USA Patent number 6,482,652. Issued November 19, 2002.  
Vertebrate Genes Related to the Drosophila Gene Patched. USA Patent 6,551,782. Issued April 22, 2003.  
Naked cuticle Genes and Their Uses. USA Patent 6,630,323. Issued October 7, 2003.  
Compositions and Methods for Treating Medulloblastoma. USA Patent 10,213,449. Issued February 26, 2019.

### **Public television programs**

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*How Babies Get Made* (1986) British Broadcasting Corporation, NOVA

*Evolution* (2001) Public Broadcasting System, WGBH

*The Shape of Life* (2001) Sea Studios Foundation

## PUBLICATIONS

1. Storti, R.V., S.J. Horovitch, M.P. Scott, A. Rich, and M.L. Pardue (1978) Myogenesis in primary cell cultures from *Drosophila melanogaster*: Protein synthesis and actin heterogeneity during development. *Cell* **13**: 589-598. PMID: 418880.
2. Berninger, M., T. Cech, J. Fostel, K. Potter, M.P. Scott, and M.L. Pardue (1979) The structure and function of mitochondrial DNA of *Drosophila melanogaster*. *Alfred Benzon Symp.* **13**: 229-241.
3. Scott, M.P., R.V. Storti, M.L. Pardue, and A. Rich (1979) Cell-free protein synthesis in lysates of *Drosophila melanogaster* cells. *Biochemistry* **18**: 1588-1594. PMID: 106888.
4. Spradling, A.C., M.E. Digan, A.P. Mahowald, M.P. Scott, and E.A. Craig (1980) Two clusters of genes for major chorion proteins of *Drosophila melanogaster*. *Cell* **19**: 905-914. PMID: 6769591.
5. Storti, R.V., M.P. Scott, A. Rich, and M.L. Pardue (1980) Translational control of protein synthesis in response to heat shock in *Drosophila melanogaster* cells. *Cell* **22**: 825-834. PMID: 6780199.
6. Scott, M.P., J.M. Fostel, and M.L. Pardue (1980) A new type of virus from cultured *Drosophila* cells: Characterization and use in studies of the heat shock response. *Cell* **22**: 929-941. PMID: 6780201.
7. Pardue, M.L., M.P. Scott, R.V. Storti, and J.A. Lengyel (1980) The heat shock response: A model system for the study of gene regulation in *Drosophila*. In: *Development and Neurobiology of Drosophila*, (O. Siddiqi, P. Babu, L.M. Hall, and J.C. Hall, eds.) Plenum Publishing Corp, New York, pp. 41-55. PMID: 6161601.
8. Scott, M.P. and M.L. Pardue (1981) Translational control in lysates of *Drosophila melanogaster* cells. *Proc. Natl. Acad. Sci. U.S.A.* **78**: 3353-3357. PMID: 6267586.
9. Pardue, M.L., D.G. Ballinger, and M.P. Scott (1981) Expression of the heat shock genes in *Drosophila melanogaster*. In: *Developmental Biology Using Purified Genes* (D.D. Brown and D.F. Fox, eds.), ICN-UCLA Symp. **23**: 415-427.
10. Scott, M.P., A.J. Weiner, T.I. Hazelrigg, B.A. Polisky, V. Pirrotta, F. Scalenghe, and T.C. Kaufman (1983) The molecular organization of the *Antennapedia* Locus of *Drosophila*. *Cell* **35**: 763-776. PMID: 6418389.
11. Weiner, A.J., M.P. Scott, and T.C. Kaufman (1984) A molecular analysis of *fushi tarazu*, a gene in *Drosophila melanogaster* that encodes a product affecting embryonic segment number and cell fate. *Cell* **37**: 843-851. PMID: 6430569.
12. Scott, M.P. and A.J. Weiner (1984) Structural relationships among genes that control development: Sequence homology between the *Antennapedia*, *Ultrabithorax*, and *fushi tarazu* loci of *Drosophila*. *Proc. Natl. Acad. Sci. USA* **81**: 4115-4119. PMID: 6330741.
13. Scott, M.P. (1984) Homoeotic gene transcripts in the neural tissue of insects. *Trends Neurosci.* **7**: 221-223.
14. Laughon, A. and M.P. Scott (1984) The sequence of a *Drosophila* segmentation gene: Protein structure homology with DNA binding proteins. *Nature* **310**: 25-31. PMID: 6330566.
15. Scott, M.P. (1985) Molecules and puzzles from the *Antennapedia* homoeotic gene complex of *Drosophila*. *Trends in Genetics* **1**: 74-80.
16. Carroll, S.B., P.D. Riley, M.W. Klymkowsky, J. van Blerkom, J. Stewart, and M.P. Scott (1985) Localization of homoeodomain-containing proteins using antibodies against a synthetic oligopeptide. *Symp. Soc. Devel. Biol.* **43**: 257-270.
17. Laughon, A., S.B. Carroll, F.A. Storfer, P.D. Riley and M.P. Scott (1985) Common properties of proteins encoded by the *Antennapedia* Complex genes of *Drosophila melanogaster*. *Cold Spring Harbor Symp. Quant. Biol.* **50**: 253-262. PMID: 3938363.
18. Carroll, S.B. and M.P. Scott (1985) Localization of the *fushi tarazu* protein during *Drosophila* embryogenesis. *Cell* **43**: 47-57. PMID: 3000605.

19. Carroll, S.B. and M.P. Scott (1986) Zygotically active genes that affect the spatial expression of the *fushi tarazu* segmentation gene during early *Drosophila* embryogenesis. *Cell* 45: 113-126. PMID: 3082519.
20. Laughon, A., A.M. Boulet, J.R. Bermingham, Jr., R.A. Laymon, and M.P. Scott (1986) Structure of transcripts from the homeotic *Antennapedia* gene of *Drosophila melanogaster*: Two promoters control the major protein-coding region. *Mol. Cell. Biol.* 6: 4676-4689. PMID: 2879223.
21. Scott, M.P. and P.H. O'Farrell (1986) Spatial programming of gene expression in early *Drosophila* embryogenesis. *Ann. Rev. Cell Biol.* 2: 49-80. PMID: 2881561.
22. Scott, M.P. (1986) More on the homeobox. *Bioessays* 5: 88-9. PMID: 2878664.
23. Carroll, S.B., G.M. Winslow, T. Schüpbach, and M.P. Scott (1986) Maternal control of *Drosophila* segmentation gene expression. *Nature* 323: 278-280. PMID: 3093889.
24. Carroll, S.B., R.A. Laymon, M.A. McCutcheon, P.D. Riley, and M.P. Scott (1986) The localization and regulation of *Antennapedia* protein expression in *Drosophila* embryos. *Cell* 47: 113-122. PMID: 3093083.
25. Scott, M.P. (1987) Complex Loci of *Drosophila*. *Annual Review of Biochem* 56: 195-227. PMID: 2887142.
26. Carroll, S.B., G.M. Winslow, V.J. Twombly, and M.P. Scott (1987) Genes that control dorsoventral polarity affect gene expression along the anteroposterior axis of the *Drosophila* embryo. *Development* 99: 327-332. PMID: 3653004.
27. Martinez-Arias, A., P.W. Ingham, M.P. Scott, and M.E. Akam (1987) The spatial and temporal deployment of *Dfd* and *Scr* transcripts throughout development of *Drosophila*. *Development* 100: 673-683. PMID: 2450726.
28. Riley, P.D., S.B. Carroll, and M.P. Scott (1987) The expression and regulation of *Sex combs reduced* protein in *Drosophila* embryos. *Genes and Development* 1: 716-730. PMID: 2892760.
29. Scott, M.P. and S.B. Carroll (1987) The segmentation and homeotic gene network in early *Drosophila* development. *Cell* 51: 689-698. PMID: 2890437.
30. Doe, C.Q. and M.P. Scott (1987) Segmentation and homeotic gene function in the developing nervous system of *Drosophila*. *Trends Neurosci.* 11: 101-106. PMID: 2465606.
31. Carroll, S.B., S.P. DiNardo, P.H. O'Farrell, R.A.H. White, and M.P. Scott (1988) Temporal and spatial relationships between segmentation and homeotic gene expression in *Drosophila* embryos: Distributions of the *fushi tarazu*, *engrailed*, *Sex combs reduced*, *Antennapedia* and *Ultrabithorax* proteins. *Genes and Development* 2: 350-360. PMID: 2897943.
32. Scott, M.P. (1988) The molecular biology of pattern formation in early *Drosophila* embryogenesis in: Developmental Biology: A Comprehensive Synthesis, v.5: The Molecular Biology of Cell Determination and Cell Differentiation. (Ed. L. Browder) Chapter 6, pp.151-185. Plenum Press, New York. PMID: 2908379.
33. Winslow, G.M., S.B. Carroll, and M.P. Scott (1988) Maternal-effect genes that alter the fate map of the *Drosophila* blastoderm embryo. *Devel. Biol.* 129: 72-83. PMID: 3410162.
34. Laughon, A., W. Howell, and M.P. Scott (1988) The interaction of proteins encoded by *Drosophila* homeotic and segmentation genes with specific DNA sequences. *Development* 104 (Supplement): 75-83. PMID: 2908297.
35. Bermingham, J.R. and M.P. Scott (1988) Developmentally regulated alternative splicing of transcripts from the *Drosophila* homeotic gene *Antennapedia* can produce four different proteins. *EMBO J.* 7: 3211-3222. PMID: 2903048.
36. Boulet, A.M. and M.P. Scott (1988) Control elements of the P2 promoter of the *Antennapedia* gene. *Genes and Devel.* 2: 1600-1614. PMID: 2905685.
37. Scott, M.P., J.W. Tamkun, and George W. Hartzell III (1989) The structure and function of the homeodomain. *BBA Reviews on Cancer* 989: 25-48. PMID: 2568852.
38. Winslow, G.M., S. Hayashi, M. Krasnow, D.S. Hogness, and M.P. Scott (1989) Transcriptional activation by the *Antennapedia* and *fushi tarazu* proteins in cultured *Drosophila* cells. *Cell* 57: 1017-1030. PMID: 2567631.
39. Hooper, J.E. and M.P. Scott (1989) The *Drosophila patched* gene encodes a putative membrane protein required for segmental patterning. *Cell* 59: 751-765. PMID: 2582494.

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41. Reuter, R. and M.P. Scott (1990) Expression and functions of the homeotic genes *Antennapedia* and *Sex combs reduced* in the embryonic midgut of *Drosophila*. *Development* 109: 289-303. PMID: 1976087.
42. Bermingham, J.R., A. Martinez-Arias, M. G. Petitt, and M.P. Scott (1990) Different patterns of transcription from the two *Antennapedia* promoters during *Drosophila* embryogenesis. *Development* 109: 553-566. PMID: 1976090.
43. Reuter, R., G.E.F. Panganiban, F.M. Hoffmann , and M.P. Scott (1990) Homeotic genes regulate the spatial expression of putative growth factors in the visceral mesoderm of *Drosophila* embryos. *Development* 110: 1031-1040. PMID: 1983113.
44. Panganiban, G.E.F., R. Reuter, M.P. Scott, and F.M. Hoffmann (1990) A *Drosophila* growth factor homolog, *decapentaplegic*, regulates homeotic gene expression within and across germ layers during midgut morphogenesis. *Development* 110: 1041-1050. PMID: 1983114.
45. Hayashi, S. and M.P. Scott (1990) What determines the specificity of action of *Drosophila* homeodomain proteins? *Cell* 63: 883-894. PMID: 1979524.
46. Tamkun, J.W., R.A. Kahn, M. Kissinger, B.J. Brizuela, C. Rulka, M.P. Scott, and J.A. Kennison (1991) The *arl* gene encodes an essential GTP-binding protein in *Drosophila*. *Proc. Nat. Acad. Sci. U.S.A.* 88: 3120-3124. PMID: 1901655.
47. Brown, J.L., S. Sonoda, H. Ueda, M.P. Scott, and C. Wu (1991) Repression of *fushi tarazu* (*ftz*) segmentation gene. *EMBO J.* 10: 665-674. PMID: 2001679.
48. Doe, C.Q., Q. Chu-LaGraff, D.M. Wright, and M.P. Scott (1991) The *prospero* gene specifies cell fates in the *Drosophila* central nervous system. *Cell* 65: 451-464. PMID: 1673362.
49. Tamkun, J.W., R. Deuring, M.P. Scott, M. Kissinger, A.M. Pattatucci, T.C. Kaufman, and J.A. Kennison (1992) *brahma*: A transregulator of *Drosophila* homeotic genes structurally related to the yeast transcriptional activator SNF2/SWI2. *Cell* 68: 561-572. PMID: 1346755.
50. Andrew, D.J. and M.P. Scott (1992) Downstream of the homeotic genes. *New Biologist* 4: 5-15. PMID: 1346973.
51. Oh, S.-K., M.P. Scott, and P. Sarnow (1992) Homeotic gene *Antennapedia* mRNA contains 5'-noncoding sequences that confer translational initiation by internal ribosome binding. *Genes and Development* 6: 1643-1653. PMID: 1355457.
52. Hooper, J.E., M. Pérez-Alonso, J.R. Bermingham, M. Prout, B.A. Rocklein, M. Wagenbach, J.-E. Edstrom, R. De Frutos, and M.P. Scott (1992) Comparative studies of *Drosophila* *Antennapedia* genes. *Genetics* 132: 453-469. PMID: 1358753.
53. Petitt, M.G. and M.P. Scott (1992) Gene control systems affecting insect development. (Eds. J.M. Crampton and P. Eggleston). in *Insect Molecular Science*, 16th Symp. Roy. Entomol. Soc., Academic Press, London.
54. Hooper, J.E. and M.P. Scott (1992) The molecular genetic basis of positional information in insect segments. In: *Early Embryonic Development of Animals*, volume 18 of "Results and Problems in Cell Differentiation", pp.1-48. W. Hennig, Ed. Springer-Verlag, Berlin. PMID: 1475532.
55. Crabtree, G.R., U. Schibler, and M.P. Scott (1992) Transcriptional regulatory mechanisms in liver and midgut morphogenesis of vertebrates and invertebrates. In: *Transcriptional Regulation* (S.L. McKnight and K. R. Yamamoto, Eds.) Cold Spring Harbor Press, Cold Spring Harbor, N.Y., pp1063-1102
56. Manak, J.R. and M.P. Scott (1993) Able assistants for homeodomain proteins. *Current Biology* 3:318-320. PMID: 15335761.
57. Scott, M.P. (1993) A rational nomenclature for vertebrate homeobox (*HOX*) genes. *Nucleic Acids Research* 21: 1687-1688. PMID: 8098522.
58. Zeng, W., D.J. Andrew, L.D. Mathies, M.A. Horner, and M.P. Scott (1993) Ectopic expression and function of the *Antp* and *Scr* homeotic genes: The N terminus of the homeodomain is critical to functional specificity. *Development* 118: 339-352. PMID: 7900989.

59. Andrew, D.J., M.A. Horner, M.G. Petitt, Sarah M. Smolik, and M.P. Scott (1994) Setting limits on homeotic gene function: Restraint of *Sex combs reduced* Activity by *teashirt* and other homeotic genes. *EMBO J.* 13: 1132-1144. PMID: 7907545.
60. Peterson, C.L., A. Dingwall, and M.P. Scott (1994) Five *SWI/SNF* gene products are components of a large multi-subunit complex required for transcriptional enhancement. *Proc. Nat. Acad. Sci. U.S.A.* 91: 2905-2908. PMID: 8159677.
61. Schuske, K., J.E. Hooper, and M.P. Scott (1994) *patched* overexpression causes loss of *wingless* expression in *Drosophila* embryos. *Dev. Biol.* 164: 300-311. PMID: 8026632.
62. Mathies, L.D., S. Kerridge, and M.P. Scott (1994) Role of the *teashirt* gene in *Drosophila* midgut morphogenesis: Secreted proteins mediate the action of homeotic genes. *Development* 120: 2799-2809. PMID: 7607071.
63. Andrew, D.J. and M.P. Scott (1994) Immunological methods to map protein distributions on polytene chromosomes. In *Drosophila melanogaster: Practical Uses in Cell and Molecular Biology*. L.S.B. Goldstein and E. Fyrberg, Eds., pp. 353-370, Academic Press.
64. Manak, J.R., L.D. Mathies, and M.P. Scott (1994) Regulation of a *decapentaplegic* midgut enhancer by homeotic proteins. *Development* 120: 3605-3619. PMID: 7821226.
65. Scott, M.P. (1994) Intimations of a creature. *Cell* 79: 1121-1124. PMID: 8001147.
66. Manak, J.R. and M.P. Scott (1994) A class act: Conservation of homeodomain protein functions. In: *The Evolution of Development Mechanisms*. *Development Suppl.* 1994, pp. 61-77. PMID: 7579525.
67. Dingwall, A.K., S.J. Beek, C.M. McCallum, J.W. Tamkun, G.V. Kalpana, S.P. Goff, and M.P. Scott (1995) The *Drosophila* snr1 and brm proteins are related to yeast SWI/SNF proteins and are components of a large protein complex. *Mol. Biol. Cell* 6: 777-791. PMID: 7579694.
68. McCormick, A., N. Coré, S. Kerridge, and M.P. Scott (1995) Homeotic response elements are tightly linked to tissue-specific elements in a transcriptional enhancer of the *teashirt* gene. *Development* 121: 2799-2812. PMID: 7555708.
69. Saenz-Robles, M.T., F. Maschat, T. Tabata, M.P. Scott, and T.B. Kornberg (1995) Selection and characterization of sequences with high affinity for the engrailed protein of *Drosophila*. *Mech. Devel.* 53: 185-195. PMID: 8562421.
70. Bilder, D. and M.P. Scott (1995) Genomic regions required for morphogenesis of the *Drosophila* embryonic midgut. *Genetics* 141: 1087-1100. PMID: 8582615.
71. Johnson, R.L., J. K. Grenier, and M.P. Scott (1995) *patched* overexpression alters wing disc size and pattern: Transcriptional and post-transcriptional effects on *hedgehog* targets. *Development* 121: 4161-4170. PMID: 8575316.
72. Goodrich, L.V., R.L. Johnson, L. Milenkovic, J.A. McMahon, and M.P. Scott (1996) Conservation of the *hedgehog/patched* signaling pathway from flies to mice: Induction of a mouse *patched* gene by hedgehog. *Genes Dev.* 10: 301-312. PMID: 8595881.
73. Marigo, V., M.P. Scott, E. Laufer, L.V. Goodrich, R.L. Johnson, and C. Tabin (1996) Conservation in hedgehog signaling: *Sonic hedgehog* controls the expression of a chicken *patched* homolog in the developing limb. *Development* 122: 1225-1233. PMID: 8620849.
74. Johnson, R.L., A.L. Rothman, J. Xie, L.V. Goodrich, J.W. Bare, J.M. Bonifas, A.G. Quinn, R.M. Myers, D.R. Cox, E.H. Epstein, Jr., and M.P. Scott (1996) Human homolog of *patched*, a candidate gene for the basal cell nevus syndrome. *Science* 272: 1668-1671. PMID: 8658145.
75. Concordet, J-P., K.E. Lewis, J.W. Moore, L. V. Goodrich, R. L. Johnson, M. P. Scott and P. W. Ingham (1996) Spatial regulation of a zebrafish *patched* homologue reflects the roles of *sonic hedgehog* and protein kinase A in neural tube and somite patterning. *Development* 122: 2835-2846. PMID: 8787757.
76. Epstein, D.J., E. Marti, M.P. Scott, and A.P. McMahon (1996) Antagonizing cAMP-dependent protein kinase A in the dorsal CNS activates a conserved Sonic hedgehog signaling pathway. *Development* 122: 2885-2894. PMID: 8787761.

77. Stone, D.M., M. Hynes, M. Armanini, T.A. Swanson, Q. Gu, R.L. Johnson, M.P. Scott, D. Pennica, A. Goddard, H. Phillips, M. Noll, J.E. Hooper, F. de Sauvage, and A. Rosenthal (1996) The tumour-suppressor gene *patched* encodes a candidate receptor for Sonic hedgehog. *Nature* 384: 129-134. PMID: 8906787.
78. Scott, M.P. (1997) Hox genes, Arms and the Man. *Nature Genetics* 15: 117-118. PMID: 9020831.
79. Sharkey, M., Y. Graba, and M.P. Scott (1997) Hox genes in evolution: Protein surfaces and paralog groups. *Trends in Genetics* 13: 145-151. PMID: 9097725.
80. Oro, A.E., K.M. Higgins, Z. Hu, J.M. Bonifas, E. H. Epstein, Jr., and M.P. Scott (1997) Basal cell carcinomas in mice overexpressing Sonic Hedgehog. *Science* 276: 817-821. PMID: 9115210.
81. Kornberg, T. and M.P. Scott (1997) Regulation of Drosophila development by transcription factors and cell-cell signaling in *Exploring Genetic Mechanisms*. P. Berg and M. Singer, Eds. University Science Books, Sausalito, California.
82. Xie, J., R.L. Johnson, X. Zhang, J.W. Bare, F.M. Waldman, P.H. Cogen, A.G. Menon, M.P. Scott, and E.H. Epstein, Jr. (1997) Mutations of the *PATCHED* gene in several types of sporadic extracutaneous tumors. *Cancer Research* 57: 2369-2372. PMID: 9192811.
83. Fan, H., A.E. Oro, M.P. Scott, and P.A. Khavari (1997) Induction of basal cell carcinoma features in transgenic human skin expressing Sonic hedgehog in vivo. *Nature Medicine* 3: 788-792. PMID: 9212109.
84. Sisson, J.C., K.S. Ho, K. Suyama, and M.P. Scott (1997) Costal2, a novel kinesin-related protein in the Hedgehog/patched signaling pathway. *Cell* 90: 235-245. PMID: 9244298.
85. Goodrich, L.V., L. Milenkovic, K.M. Higgins, and M. P. Scott (1997) Altered neural cell fates and medulloblastoma in mouse *patched* mutants. *Science* 277: 1109-1113. PMID: 9262482.
86. Johnson, R.L. and M.P. Scott (1997) Control of cell growth and fate by *patched* genes. *Cold Spring Harbor Symp. Quant. Biol.* 62: 205-215. PMID: 9598353.
87. Scott, M.P. (1997) A common language (meeting summary). *Cold Spring Harbor Symp. Quant. Biol.* 62: 555-562. PMID: 9598389.
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