

CURRICULUM VITAE

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Education

1984 Ph.D. Case Western Reserve University, Cleveland, OH.
1978 M.S. University of Wisconsin, Madison, WI.
1977 B.S. University of Wisconsin, Madison, WI.

Professional Appointments

Feb 2011-Present	Deputy Director, NIEHS
Aug 2002- Jan 2011	President and Chief Executive Officer, The Jackson Laboratory, Bar Harbor, ME
Jan 2001 – Aug. 2002	Chief Scientific Officer, Lynx Therapeutics, Hayward, CA.
Dec 1998 – Dec 2000	Senior Director, Parke-Davis Laboratory of Molecular Genetics, Alameda, CA.
Dec 1998 – 2002	Adjunct Professor, Dept. of Pediatrics, Case Western Reserve University, Cleveland, OH.
Dec 1998 – 2003	Adjunct Professor, Dept. of Pharmacology, Case Western Reserve University, Cleveland, OH.
Aug 1997 – Nov 1998	Professor and Vice Chairman for Research, Dept. of Pediatrics, Case Western Reserve University, Cleveland, OH.
Oct 1997 – Nov 1998	Professor, Dept. of Genetics, Case Western Reserve University, Cleveland, OH.
Oct 1997 – Nov 1998	Professor, Dept. of Pharmacology, Case Western Reserve University, Cleveland, OH.

- 1992 – 2002 Adjunct Professor, Dept. of Pathology, College of Veterinary Medicine, University of Tennessee, Knoxville, TN.
- 1996 - July 1997 Director, Office of Functional Genomics, Oak Ridge National Laboratory, Oak Ridge, TN
- 1996 - 1997 Research Professor, College of Arts and Sciences, Dept. of Biology, University of Tennessee, Knoxville, TN.
- 1995 - 1996 Head, Mammalian Genetics Section, Oak Ridge National Laboratory, Oak Ridge, TN
- 1989 - 1997 Adjunct Associate Professor, School of Biomedical Sciences at the Oak Ridge National Laboratory, University of Tennessee, Knoxville, TN.
- 1987 - 1997 Senior Research Scientist, Mammalian Genetics Section, Life Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN.
- 1984 - 1987 Postdoctoral Fellow, Department of Genetics, Harvard Medical School, Boston, Massachusetts. Preceptor: Dr. Philip Leder.
- 1983 - 1984 Postdoctoral Researcher, Department of Molecular Biology and Microbiology, Case Western Reserve University, Cleveland, Ohio. Preceptor: Dr. Fritz Rottman

Military Service

United States Naval Reserve, 1972-1978.

Honors and Awards

Postdoctoral Fellowship, The Jane Coffin Childs Memorial Fund, 1984-1985,

Postdoctoral Fellowship, Howard Hughes Medical Institute, 1986.

Significant Event Award, 1989, Oak Ridge National Laboratory,

Significant Event Award, 1992, Oak Ridge National Laboratory,

Oak Ridge National Laboratory, Publication Award, 1994.

Professional Service

Editorial Boards

Mutation Research – Reviews, 2008-2014.
Mutation Research, 1996-2003.
Technology Transfer Tactics, 5/2007-2009.
Principal Investigator Advisor, 2009-2011.

Professional Societies

American Association for the Advancement of Science

International Mammalian Genome Society

Society of Toxicology

Environmental Mutagenesis and Genomics Society

Publications

Revzin, A. and R.P. Woychik. Quantitation of the interaction of Escherichia coli RNA polymerase holoenzyme with double-helical DNA using a thermodynamically rigorous centrifugation method. *Biochemistry* **20**:250-256, 1981.

McCorquodale, D.J., C.W. Chen, M.K. Joseph, and R.P. Woychik. Modification of RNA polymerase from Escherichia coli by pre-early gene products of bacteriophage T5. *J. Virol.* **40**:958-962, 1981.

Sasavage, N.L., M. Smith, S. Gillam, R.P. Woychik, and F.M. Rottman. Variation in the polyadenylation site of bovine prolactin mRNA. *Proc. Natl. Acad. Sci.* **79**:223-227, 1982.

Woychik, R.P., S.A. Camper, R.L. Lyons, S. Horowitz, E.C. Goodwin, and F.M. Rottman. Cloning and nucleotide sequencing of the bovine growth hormone gene. *Nucleic. Acids Res.* **10**:7197-7210, 1982.

Nilson, J.H., A.R. Thomason, M.T. Cserbak, C.L. Moncam, and R.P. Woychik. Nucleotide sequence of a cDNA for the common a subunit of the bovine pituitary glycoprotein hormones. *J. Biol. Chem.* **258**:4679-4682, 1982.

Rottman, F.M., S.A. Camper, and R.P. Woychik. Role of posttranscriptional mRNA modification in the maintenance of eucaryotic mRNA levels. Proceedings Alfred Benzon Symposium 19 Gene Expression, Munksgaard, Copenhagen.

Camper, S.A., D.N. Luck, Y. Yao, R.P. Woychik, R.G. Goodwin, R.H. Lyons, and F.M. Rottman. Characterization of the bovine prolactin gene. *DNA* **3**:237-249, 1984.

Woychik, R.P., R.H. Lyons, L. Post, and F.M. Rottman. Requirement for the 3' flanking region of the bovine growth hormone gene for accurate polyadenylation. *Proc. Natl. Acad. Sci.* **81**:3944-3948, 1984.

Desrosiers, R.C., J. Kamine, A. Bakker, D. Silva, R.P. Woychik, D.D. Sakai, and F.M. Rottman. Synthesis of bovine growth hormone in primates by using a Herpes virus vector. *Mol. Cell. Biol.* **5**:2796-2803, 1985.

Woychik, R.P., T.A. Stewart, L.G. Davis, P. D'Eustachio, and P. Leder. An inherited limb deformity created by insertional mutagenesis in a transgenic mouse. *Nature* **318**:36-40, 1985.

Pfarr, D., L. Rieser, R.P. Woychik, F. Rottman, M. Rosenberg, and M. Reff. Differential effects of polyadenylation regions on gene expression in mammalian cells. *DNA* **5**:115-122, 1986.

Woychik, R. P., B. R. Beatty, and W. L. McKinney, Jr. Insertional mutagenesis in transgenic mice. In: *Multilevel Health Effects Research: From Molecules to Man*, ed. by J.F. Park and R. A. Pelroy. Battelle Press, Columbus, Ohio, pp. 87-90, 1989.

Woychik, R. P., W. M. Generoso, L. B. Russell, K. T. Cain, N. L. A. Cacheiro, S. J. Bultman, P. B. Selby, M. E. Dickinson, B. L. M. Hogan and J. C. Rutledge. Molecular and genetic characterization of a radiation-induced structural rearrangement in mouse chromosome 2 causing new mutations at the limb deformity and agouti loci. *Proc. Natl. Acad. Sci.* **87**:2588-2592, 1990.

Woychik, R. P., B. R. Beatty, W. L. McKinney, D. K. Andreadis, A. J. Chang and P. E. Barker. Insertional mutagenesis in transgenic mice. In: *Banbury Report 34: Biology of Mammalian Germ Cell Mutagenesis*, Cold Spring Harbor Laboratory press, pp. 377-381, 1990.

Van der Meer-de Jong, R., M. E. Dickinson, R. P. Woychik, L. Stubbs, C. Hetherington & B. L. M. Hogan. Location of the gene involving the small eye mutation on mouse chromosome 2 suggests homology with human aniridia 2 (AN2). *Genomics* **7**:270-275, 1990.

Maas, R. L., R. Zeller, R. P. Woychik, T. F. Vogt and P. Leder. Formin encoding transcripts are disrupted in two mutant limb deformity alleles. *Nature* **346**:853-855, 1990.

Woychik, R. P., D. Maas, R. Zeller, T. F. Vogt, and P. Leder. The formins: a novel class of proteins deduced from the variable transcripts of the limb deformity gene. *Nature* **346**:850-853, 1990.

Jacobson, K.B., H. F. Arlinghaus, H. W. Schmitt, R. A. Sachleben, G. M. Brown, N. Thonnard, F. V. Sloop, R. S. Foote, F. W. Larimer, R. P. Woychik, M. W. England, K. L. Burchett, and D. A. Jacobson. The use of stable isotopes for DNA sequencing. *Genomics* **9**:51-59, 1991.

Arlinghaus, H.F, N. Thonnard, M.T. Sparr, R. A. Sachleben, F.W. Larimer, R. S. Foote, R. P. Woychik, G. M. Brown, F. V. Sloop, and K. B. Jacobson. Potential Application of Sputter-Initiated Resonance Ionization spectroscopy for DNA sequencing. *Anal. Biochem.* **63**:402-407, 1991.

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- Allison, D.A., L.A. Bottomley, T. Thundat, G.M. Brown, R.P. Woychik, J.J. Schrick, K.B. Jacobson, and R.J. Warmack. Immobilization of deoxyribonucleic acid for scanning probe microscopy. *Proc. Natl. Acad. Sci.* **89**:10129-10133, 1992.
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Michaud, E.J., M.J. van Vugt, S.J. Bultman, H.O. Sweet, M.T. Davisson, and R.P. Woychik. Differential expression of a new dominant agouti allele (*A^{iapy}*) is correlated with methylation state and is influenced by parental lineage. *Genes & Dev.* **8**:1463-1472, 1994. PubMed PMID: 7926745.

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Woychik, R.P., J.E. Wilkinson, J.H. Moyer, M.J. Lee-Tischler, H.Y. Kwon, J.J. Schrick, B. Yoder, E.D. Avner, W.E. Sweeney, and V.L. Godfrey. Insertional Mutagenesis and PKD. *Kid. International* **47**(3):732, 1995.

Schrick, J.J., M.E. Dickinson, B.L.M. Hogan, P.B. Selby, and R.P. Woychik. Molecular and phenotypic characterization of a new mouse insertional mutation that causes a defect in the distal vertebrae of the spine. *Genetics* **140**:1061-1067, 1995.

Schrick, J.J., L. Onuchic, S.T. Reeders, J.R. Korenberg, X.N. Chen, J.H. Moyer, J.E. Wilkinson, and R.P. Woychik. Characterization of the human homologue of the mouse Tg737 candidate polycystic kidney disease gene. *Human Mol. Genet.* **4**:559-567, 1995.

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Klebig, M. L., J.E. Wilkinson, J.G. Geisler, and R.P. Woychik. Ectopic expression of the agouti gene in transgenic mice causes obesity, features of Type II diabetes, and yellow fur. *Proc. Natl. Acad. Sci.* **92**:4728-4732, 1995.

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insulin resistance of (A^{vy}) viable yellow mice. *Proc. Natl. Acad. Sci.* **92**:4733-4737, 1995.

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Culiat, C.T., L.J. Stubbs, R.P. Woychik, L.B. Russell, D.K. Johnson, and E.M. Rinchik. Deficiency of the $\beta 3$ subunit of the type A γ -aminobutyric acid receptor causes cleft palate in mice. *Nature Genetics* **11**:344-346, 1995.

Doktycz, M.J., G.B. Hurst, S. Habibi-Goudarzi, S.A. McLuckey, K. Tang, C.H. Chen, M. Uziel, K.B. Jacobson, R.P. Woychik and M.V. Buchanan. Analysis of polymerase chain reaction-amplified DNA products by mass spectrometry using matrix-assisted laser desorption and electrospray: current status. *Anal. Biochem.* **230**:205-214, 1995.

Klebig, M. L., J.E. Wilkinson, and R.P. Woychik. Molecular analysis of the mouse agouti gene and the role of dominant agouti-locus mutations in obesity and insulin resistance. In: *Molecular and Genetic Aspects of Obesity - Pennington Nutrition Series, Vol. 5*, ed. by G. Bray and D. York, Louisiana State University Press, Baton Rouge, Louisiana, 1996.

Jones, B.H., J.H. Kim, M.B. Zemel, R.P. Woychik, E.J. Michaud, W.O. Wilkison, and N. Moustaid. The agouti gene product upregulates expression of adipose fatty acid synthetase and stearoyl-CoA desaturase genes. A possible role for $[Ca^{2+}]_i$ in agouti signaling. *Am. J. Physiol.* **270**:E192-E196, 1996.

Yoder, B.K., W.G. Richards, C. Sommardahl, W.E. Sweeney, E.J. Michaud, J.E. Wilkinson, E.D. Avner, and R.P. Woychik. 1996. Functional correction of the renal defects in a mouse model for ARPKD through expression of the cloned wild-type Tg737 gene. *Kidney International*, **50**:1240-1248, 1996.

Richards, W.G., B.K. Yoder, R.J. Isfort, P.G. Detilleux, C. Foster, N. Neilsen, R.P. Woychik, and J.E. Wilkinson. Oval cell proliferation associated with the murine insertional mutation TgN737Rpw. *Am. J. Path.* **149**: 1919-1930, 1996.

Kim, J.H., R. Mynatt, J.W. Moore, R.P. Woychik, N. Moustaid, and M.B. Zemel. The effects of calcium channel blockade on agouti-induced obesity. *FASEB J.* **10**: 1646-1652, 1996.

Mynatt, R.L., R.J. Miltenberger, M.L. Klebig, L.L. Keifer, J-H Kim, M.B. Zemel, J.E. Wilkinson, W.O. Wilkison, and R.P. Woychik. Analysis of the function of the agouti gene in obesity and diabetes. In: *Proceedings International Business Communications 2nd Annual International Symposium: Obesity, Advances in Understanding and Treatment*. Ed. by L.A. Weston. International Business Communications, Southborough, Massachusetts, 1996.

Mynatt, R.L., R.J. Miltenberger, M.L. Klebig, M.B. Zemel, J.E. Wilkinson, W.O. Wilkison, and R.P. Woychik. Combined effects of insulin treatment and adipose tissue-specific agouti expression on the development of obesity. *Proc. Natl. Acad. Sci.* **94**:919-922, 1997.

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- Yoder, B.K., W.G. Richards, C. Sommardahl, W.E. Sweeney, E.J. Michaud, J.E. Wilkinson, E.D. Avner, and R.P. Woychik. Differential rescue of the renal and hepatic disease in an ARPKD mouse mutant: A new model to study the liver lesion. *Am J. Pathol.* **150**:2231-2241, 1997.
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