

## Curriculum Vitae

Kenneth H. Buetow, Ph.D.

NCI Associate Director for Bioinformatics and Information Technology

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### EDUCATION

University of Pittsburgh Graduate School of Public Health, Department of Biostatistics, Human Genetics Program	Ph.D.	Human Genetics	1985
University of Pittsburgh, Pittsburgh, PA Graduate School of Public Health, Department of Biostatistics, Human Genetics Program	M.S. (Honors)	Human Genetics	1983
Indiana University, Bloomington, IN College of Arts and Sciences	B.A.	Biology	1980

### PROFESSIONAL APPOINTMENTS

NCI Associate Director for Bioinformatics and Information Technology	2005-date
Director, NCI Center for Bioinformatics, Division Office of the Director National Cancer Institute, Bethesda, MD	2000-date
Chief, Laboratory of Population Genetics, Division, Center for Cancer Research National Cancer Institute, Bethesda, MD	1998-date
Special Assistant to the Director, Senior Genetics Network Chief, Division of Cancer Epidemiology and Genetics, National Cancer Institute	1997-1998
Adjunct Assistant Professor of Pediatrics, University of Pennsylvania School of Medicine, Philadelphia	1992-1996
Member, Fox Chase Cancer Center, Philadelphia, PA	1992-1998
Associate Member, Fox Chase Cancer Center	1988-1992
Research Geneticist, Fox Chase Cancer Center	1987-1988
Postdoctoral Trainee, Fox Chase Cancer Center	1986-1987
Graduate Student Assistant, Human Genetics Program, University of Pittsburgh	1981-1986

### MEMBERSHIP IN MEDICAL AND SCIENTIFIC SOCIETIES

The Human Genome Organization

American Society of Human Genetics

Genetics Society of America

American Society of Preventive Oncology

American Association for Cancer Research

Sigma Xi

## **EDITORIAL**

Associate Editor for Cancer Research, Philadelphia	2003-date
Associate Editor for Cancer Epidemiology, Biomarkers & Prevention, Philadelphia	1998-2002
Editor for chromosomes 4 and 22, Genome Data Base (GDB), Baltimore, MD	1992-1997

## **ADVISORY BOARDS/COMMITTEES**

NCI Executive Committee	2006-date
NCRI High Level Steering Committee	2004-date
Chairperson NCI Implementation and Integration Team for Bioinformatics	2004-date
Interagency Oncology Task Force Committee	2003-date
Clinical Trials Working Group	2002-date
NCRI Cancer Bioinformatics Advisory Panel	2002-date
Chairperson Clinical Research Informatics	2001-date
NCI, NIDDK, External Advisory Committee	2001-date
CCR Bioinformatic Steering Committee	2001-date
NCI, Director's Challenge Steering Committee	2000-date
NCI, Mouse Models of Human Cancers Steering Committee	2000-date
NCI, Mammalian Gene Collection Steering Committee	2000-date
NCI, Microarray Steering Committee	2000-date
Chairperson Genes and Environmental	2000-2002
NCI, Cancer Genome Anatomy Project (CGAP) Steering Committee	1998-date
NCI, Genetic Annotation Initiative (GAI) Steering Committee leader and Subcommittee leader	1998-date
University of Iowa Environmental Health Sciences Research Center (EHSRC)	1999-2002
NCI, Breast Cancer Think Tank Group	1998-1999
NCI, Laboratory Group of the Clinical Genetics Working Group-Epidemiology Subcommittee leader	1998-2002
NCI Board of Scientific Counselors, Subcommittee A – Clinical Sciences of the NCI	1997-1998
Co-Chair NCI Cancer Bioinformatics Working Group	1997-2000
Center for Inherited Disease Research (CIDR) Access Committee, NIH	1997-1998
NCI Molecular Epidemiology Coordinating Group	1997-2001
NIEHS Environmental Genome Working Group	1997-2001
SmithKline Beecham Advisory Board for Computation in Discovery	1997-1998
DOD/NCI Consortium Breast Studies Steering Committee	1997-1999
Center for Inherited Disease Research (CIDR) Board of Governors	1997-date
NCI, Division of Cancer Epidemiology and Genetics Senior Advisory Group	1997-2001
DOE Biological and Environmental Research Advisory Committee (BERAC)	1997-1998
NCI, Cancer Genetics Working Group, Committee Co-chairperson and Informatics Subcommittee leader	1996-2001
NCI, Division of Cancer Epidemiology and Genetics, Cooperative Family Registry for Breast Cancer Studies, Database Working Group member	1996-1999
American Association for Cancer Research Special Conference Committee	1996-1998
American Association for Cancer Research Program Committee	1996-1997
American Society of Human Genetics Database Committee, Chairman	1995-1998
Genome Data Base, Quarterly Review Committee	1995-1998
National Library of Medicine, Board of Scientific Counselors, National Center for Biotechnology Information (NCBI)	1995-2000
Genome Data Base, Online Mendelian Inheritance in Man Advisory Board (OMIN)	1994
NIH Human Genetic Mutant Cell Repository	1991-1994

UT M.D. Anderson Cancer Center, PO1 Program Project Advisory Board “Mutational Model for Childhood Cancer”, Chairperson	1991-date
Operation Smile International, Norfolk, VA, Volunteer Coordinator of Research	1990-1993
NIH Epidemiology and Disease Control Study Section, Bethesda, MD	1990-1994

## SCHOLARSHIPS AND AWARDS

Winner of the 2005 Federal 100 Award for developing the cancer Biomedical Informatics Grid, or caBIG	2005
NIH Award of Merit	2004
NCI Director’s Gold Star Award	2004
Finalist for the Healthcare Innovation Technology Systems (HITS) Partnership in Technology Award for the <i>Cooperative Human Linkage Center</i>	1996
Winner of the 1995 Computerworld Smithsonian Award for Information Technology in Science for the <i>Cooperative Human Linkage Center</i>	1995
American Society of Human Genetics Predoctoral Student Award Nominee	1985
University Honor Student, University of Pittsburgh	1983
Indiana University Residence Scholarship	1976-1980
Hoosier Scholar	1975-1980

## PUBLICATIONS

1. Lebo, R.V. Chakravarti, A. Buetow, K.H. Cheung, M.C., Cann, H. Cordell, B. and Goodman, H. *Recombination within and between the human insulin and-globin gene loci.* Proc. Natl. Acad. Sci. USA 80:4808-4812, 1983.
2. Chakravarti, A. Li, C.C. and Buetow, K.H. *Estimation of marker gene frequency and linkage disequilibrium from conditional marker data.* Am. J. Hum. Genet. 36:177-186, 1984.
3. Chakravarti, A.,Phillips, J.A., Mellits, K.H. Buetow, K.H. and Seeburg, P.H. *Patterns of polymorphism and linkage disequilibrium suggest independent origins of the human growth hormone cluster.* Proc. Natl. Acad. Sci. USA 81:6085-6089, 1984.
4. Chakravarti, A. Buetow, K.H. Antonarakis, S.E. Waber, P.G. Boehm, C.D. and Kazazian, H.H. *Non-uniform recombination within the human-globin gene cluster.* Am. J. Hum. Genet. 36:1239-1258, 1984.
5. Matteson, K.J. Ostrer, H. Chakravarti, A., Buetow, K.H. O'Brien, W.E. Beaudet, A.L. and Phillips, J.A. *A study of restriction fragment length polymorphisms at the alpha-1-antitrypsin locus.* Hum. Genet. 69:263-267, 1985.
6. Chakravarti, A. and Buetow, K.H. *A strategy for using multiple linked markers for genetic counseling.* Am. J. Hum. Genet. 37:984-997, 1985.
7. Chakravarti, A. Buetow, K.H. Antonarakis, S.E. Waber, P.G. Boehm, C.D. and Kazazian, H.H. *Non-uniform recombination within the human  $\beta$ -globin gene cluster: A reply to B.S. Weir and W.G. Hill.* Am. J. Hum. Genet. 38:779, 1986.
8. Murray, J.C. Buetow, K.H. and Bell, G.I. *RFLPs for transforming growth factor alpha (TGFA) gene at 2p13.* Nucleic Acids Res. 14:7136, 1986.
9. Buetow, K.H. Chakravarti, A. and Cole, S. *A genetic map of human chromosome 11p.* Genet. Epidemiol. 1:135-140, 1986.
10. Badner, J.A. Chakravarti, A. and Buetow, K.H. *Linkage analysis between Huntington Disease and the G8 marker locus.* Genet. Epidemiol. 1:211-216, 1986.
11. Tsui, L-C. Buetow, K.H. and Buchwald, M. *Genetic analysis of cystic fibrosis using linked DNA markers.* Am. J. Hum. Genet. 39:720-729, 1986.

12. Buetow, K.H. and Chakravarti, A. *Multipoint mapping using seriation: I. General methods*. Am. J. Hum. Genet. 41:180-188, 1987.
13. Buetow, K.H. and Chakravarti, A. *Multipoint mapping using seriation: II. Analysis of simulated and empirical data*. Am. J. Hum. Genet. 41:189-201, 1987.
14. Murray, J.C. Buetow, K.H. Donovan, M. Hornung, S. Motulsky, A.G. Disteché, C. Dyer, K. Swisshelm, K. Anderson, J. Giblett, E. Sadler, E. Eddy, R. and Shows, T.B. *Linkage disequilibrium of plasminogen polymorphisms and assignment of the gene to human chromosome 6q26 - 6q27*. Am. J. Hum. Genet. 40:338-350, 1987.
15. Murray, J.C. Shiang, R. Carlock, L.R. Smith, M. and Buetow, K.H. *Rapid RFLP screening procedure identifies new polymorphisms at albumin and alcohol dehydrogenase loci*. Hum. Genet. 76:278-282, 1987.
16. Ferrell, R.E. Buetow, K.H. Darby, J.K. Eichner, J.E. Murray, J.C. Smith, R. Waziri, M. Huson, S. and Riccardi, V.M. *Von Recklinghausen Neurofibromatosis: A linkage study of candidate and random marker genes*. J. Med. Genet. 24:522-524, 1987.
17. Murray, J.C. Buetow, K.H. Smith, M. Carlock, L. Chakravarti, A. Ferrell, R.F. Gedamu, L. Gilliam, C. Shiang, R. and DeHaven, C.R. *Pairwise linkage analysis of 11 loci on human chromosome 4*. Am. J. Hum. Genet. 42:490-497, 1988.
18. Berdahl, L.D. Smith, R.F. Murray, J.C. and Buetow, K.H. *A TaqI RFLP demonstrated for pIBS17 (D4S123), a single copy sequence on chromosome 4*. Nucleic Acids Res. 16:2743, 1988.
19. Nishimura, D. Buetow, K.H. Yamada, Y. and Murray, J.C. *RFLPs and linkage relationships of the human laminin B2 gene*. Genomics 3:393-395, 1988.
20. Murray, J.C. Buetow, K.H. Ferrell, R.E. Sieberg, P.D. and Fukuda, M. *An RFLP for glycophorin A (MN) is in linkage disequilibrium with MN and Ss*. Cytogenet. Cell Genet. 47:149-151, 1988.
21. London, W.T. and Buetow, K.H. *Hepatitis B virus and primary hepatocellular carcinoma*. Cancer Invest. 6:317-326, 1988.
22. Shiang, R. Murray, J.C. Morton, C.C. Buetow, K.H. Wasmuth, J.J. Olney, A.H. Sanger, W.G. and Goldberger, G. *Mapping of the human complement factor I gene to 4q25*. Genomics 4:1-5, 1989.
23. Cutting, G.R. Antonarakis, S.E. Buetow, K.H. Kasch, L.M. Rosenstein, B.J. and Kazazian, H.H. *Analysis of DNA polymorphism haplotypes linked to the Cystic Fibrosis locus in North American Black and Caucasian families support the existence of multiple mutations of the Cystic Fibrosis gene*. Am. J. Hum. Genet. 44:307-318, 1989.
24. Cox, D.R. Murray, J.C. and Buetow, K.H. *Report of the committee on the genetic constitution of chromosome 4*. Cytogenet. Cell Genet. 51:121-136, 1989.
25. Buetow, K.H.. Murray, J.C. Israel, J.L. London, W.T. Smith, M. Kew, M. Blanquet, V. Brechot, C. Redeker, A. and Govindarajan, S. *Loss of heterozygosity suggests tumor suppressor gene responsible for primary hepatocellular carcinoma*. Proc. Natl. Acad. Sci. USA 86:8852-8856, 1989.
26. Ardinger, H.H. Buetow, K.H. Bell, G.I. Bardach, J. VanDemark, D.R. and Murray, J.C. *Association of genetic variation of the transforming growth factor-alpha gene with cleft lip and palate*. Am. J. Hum. Genet. 45:348-353, 1989.
27. Theilmann, J. Kanani, S. Shiang, R. Robbins, C. Quarrell, O. Huggins, M. Hedrick, A. Weber, B. Collins, C. Buetow, K.H. Murray, J.C. and Hayden, M.R. *Non-random association between alleles detected by D4S95 and the Huntington disease gene*. J. Med. Genet. 26(11):676-81, 1989.
28. Murray, J.C. Nishimura, D.Y. Buetow, K.H. Ardinger, H.H. Spence, M.A. Sparkes, R.S. Falk, R.E. Falk, P.M. Gardner, R.J.M. Harkness, E.M. Gliniski, L.P. Pauli, R.M. Nakamura, Y. Green, P.P. and Schinzel, A. *Linkage of an autosomal dominant clefting syndrome (Van der Woude) to loci on chromosome 1q*. Am. J. Hum. Genet. 46:486-490, 1990.

29. Mathews, K.D. Ardinger, H.H. Nishimura, D.Y. Buetow, K.H. Murray, J.C. and Bartley, J.A. *Linkage localization of Börjeson-Forsman-Lehmann syndrome*. Am. J. Med. Genet. 34:470-474, 1989.
30. Mathews, K.D. Buetow, K.H. Turner, G. and Mulley, J. *Börjeson-Forsman-Lehmann syndrome localization*. Am. J. Med. Genet. 34:475, 1989.
31. Israel, J. Unger, E. Buetow, K.H. Brown, T. Blumberg, B. and London, W. T. *Correlation between liver iron content and magnetic resonance imaging in rats*. Magn. Reson. Imaging 7:629-634, 1989.
32. Stambolian, D. Lewis, R.A. Buetow, K.H. Bond, A. and Nussbaum, R. *Nance-Horan Syndrome: Localization within the region Xp21.1-Xp22.3 by linkage analysis*. Am. J. Hum. Genet. 47:13-19, 1990.
33. Buetow, K.H. Nishimura, D. Nakamura, Y. Jiang, O. and Murray, J.C. *A detailed multipoint gene map of chromosome 1q*. Genomics 8:13-21, 1990.
34. Buetow, K.H. Shiang, R. Yang, P. Nakamura, Y. Lathrop, G.M. White, R., Wasmuth, J., Wood, S., Berdahl, L., Leysens, N., Ritty, T., Wise, M. and Murray J.C. *A detailed multipoint map of human chromosome 4 provides evidence for linkage heterogeneity and position specific recombination rates*. Am. J. Hum. Genet 48:911-925, 1991.
35. Keats, B., Sherman, S., Morton, N.E., Robson, E., Buetow, K.H., Cartwright, P., Chakravarti, A., Francke, U., Green, P.P. and Ott, J. *Guidelines for human linkage maps. An international system for human linkage maps (ISLM, 1990)*. Genomics 9:557-560, 1991.
36. Dracopoli, N.C. O'Connell, P. Elsner, T.I. Lalouel, J-M. White, R.L. Buetow, K.H. Nishimura, D.Y. Murray, J.C. Helms, C. Mishra, S.K. Donis-Keller, H. Hall, J.M. Lee, M.K. King, M-C. Attwood, J. Morton, N.E. Robson, E.B. Mahtani, M. Willard, H. Royle, N. Patel, I. Jeffreys, A. Verga, V. Jenkins, T. Weber, J. Mitchell, A. and Bale, A. *The CEPH consortium linkage map of human chromosome 1*. Genomics 9:686-700, 1991.
37. Adam, S. Theilmann, J. Buetow, K. Hedrick, A. Collins, C. Weber, B. Huggins, M. and Hayden, M. *Linkage disequilibrium and modification of risk for Huntington disease*. Am. J. Hum. Genet. 48:595-603, 1991.
38. Buetow, K.H. *Influence of aberrant observations on high resolution linkage analysis outcomes*. Am. J. Hum. Genet. 49:985-994, 1991.
39. Hecht, J.T. Yang, P. Michels, V.V. and Buetow, K.H. *Complex segregation analysis of nonsyndromic cleft lip and palate*. Am. J. Hum. Genet. 49:674-681, 1991.
40. Shields, D.C. Collins, A. Buetow, K.H. Morton, N.E. *Error filtration, interference, and the human linkage map*. Proc. Natl. Acad. Sci. USA 88:6501-6505, 1991.
41. Murray, J.C. and Buetow, K.H. *The chromosome 4 workshop report*. Genomics 12:857-858, 1992.
42. Buetow, K.H. Sheffield, V. Zhu, M. Zhou, T. Shen, F-M. Hino, O. Smith, M. McMahon, B.J. Lanier, A.P. London, W.T. Redeker, A.G. Govindarajan, S. *Low frequency of p53 mutations observed in a diverse collection of primary hepatocellular carcinomas*. Proc. Natl. Acad. Sci. USA 89:9622-9626, 1992.
43. Buetow, K.H. Genetic studies of human primary hepatocellular carcinoma. In: *Comparative Molecular Carcinogenesis*, A.J.P. Klein-Szanto, M.W. Anderson, J.C. Barrett, T.J. Slaga, eds., John Wiley & Sons, Inc., New York 1992.
44. Schisselbauer, J. Hogan, M. Buetow, K.H. Tew, K. *Heterogeneity of Glutathione S-transferase enzyme and gene expression in ovarian carcinoma*. Pharmacogenet. 2:63-72, 1992.
45. Mills, K.A. Buetow, K.H. Xu, Y. Weber, J.L. Altherr, M.R. Wasmuth, J.J. Murray, J.C. *Genetic and physical maps of human chromosome 4 based on dinucleotide repeats*. Genomics 14:209-219, 1992.
46. Murray, J.C. Bennett, S.R. Kwitek, A.E. Small, K.W. Schinzel A. Alward, W.L.M. Weber, J.L. Bell, G.I. Buetow, K.H. *Linkage of Rieger syndrome to the region of the epidermal growth factor gene on chromosome 4*. Nature Genet. 2:46-49, 1992.

47. NIH/CEPH Collaborative Mapping Group. *A comprehensive genetic linkage map of the human genome*. Science 258:67-86, 1992.
48. Mills, K.A. Buetow, K.H. Xu, Y. Ritty T.M. Mathews K.D. Bodrug, S.E. Wijmenga, C. Balazs, I. Murray J.C. *Genetic and physical mapping on chromosome 4 narrows the localization of the gene for facioscapulohumeral muscular dystrophy (FSHD)*. Am. J. Hum. Genet. 51:432-439, 1992.
49. Stadler, H.S. Padanilam, B.J. Buetow, K. Murray J.C. Solursh, M. *Identification and genetic mapping of a homeobox gene to the 4p16.1 region of human chromosome 4*. Proc. Natl. Acad. Sci. USA 89:11579-1583, 1992.
50. Hino, O, Testa, J.R. Buetow, K.H. Taguchi, T. Zhou, J.Y. Bremer, M. Bruzel, A. Yeung, R. Levan, G. Levan, K. Knudson, A.G. Tartof, K.D. *Universal mapping probes and the origin of human chromosome 3*. Proc. Natl. Acad. Sci. USA 90:730-734, 1993.
51. Sassani, R. Bartlett, S.P. Feng, H. Goldner-Sauve, A. Haq, A.K. Buetow, K.H. Gasser, D.L. *Association between alleles of the transforming growth factor-alpha locus and the occurrence of cleft lip*. Am. J. Med. Genet. 45:565-569, 1993.
52. Schalling, M. Hudson, T.J. Buetow, K.H. Housman D.E. *Direct detection of novel expanded trinucleotide repeats in the human genome*. Nature Genet. 4:135-139, 1993.
53. Farrall, M. Buetow, K.H. Murray, J.C. *Resolving an apparent paradox concerning the role of TGF $\alpha$  in CL/P*. Am. J. Hum. Genet. 52:434-436, 1993.
54. Yeung, R.S. Buetow, K.H. Testa, J.R. Knudson, A.G. *Susceptibility to renal carcinoma in the Eker rat involves a tumor suppressor gene on chromosome 10*. Proc. Natl. Acad. Sci. USA 90:8032-8042, 1993.
55. Rebbeck, T.R. Dietz, F. Murray, J.C. Buetow, K.H. *A single-gene explanation for the probability of having idiopathic talipes equinovarus*. Am. J. Hum. Genet. 53:1051-1063, 1993.
56. Buetow, K.H. Duggan, D. Yang, B. Ludwigsen, S. Puck, J. Porter, J. Budarf, M. Spielman, R. Emanuel, B.S. *A microsatellite-based multipoint index map of human chromosome 22*. Genomics 18:329-339, 1993.
57. Loftus, S.K. Edwards, S.J. Scherpbier-Heddema, T. Buetow, K.H. Wasmuth, J.J. Dixon, M.J. *A combined genetic and radiation hybrid map surrounding the Treacher Collins syndrome locus on chromosome 5q*. Hum. Mol. Genet. 2:1785-1792, 1993.
58. Sherrington, R. Mankoo, B. Attwood, J. Kalsi, G. Curtis D. Buetow, K. Povey, S. Gurling, H. *Cloning of the human dopamine D5 receptor gene and identification of a highly polymorphic microsatellite for the DRD5 locus that shows tight linkage to the chromosome 4p reference marker RAF1P1*. Genomics 18:423-425, 1993.
59. Yeung, R.S. Hino, O. Vilensky, M. Buetow, K. Szpirer, C. Szpirer, J. Klinga-Levan, K., Levan, G. Knudson, A.G. *Assignment of 22 loci in the rat by somatic hybrid and linkage analysis*. Mamm. Genome 4:585-588, 1993.
60. Kwitek-Black, A. Carmi, R. Duyk, G.M. Buetow, K.H. Elbedour, K. Parvari, R. Yandava, C.N. Stone, E.M. Sheffield, V.C. *Linkage of Bardet-Biedl syndrome to chromosome 16q and evidence for non-allelic genetic heterogeneity*. Nature Genet. 5:392-396, 1993.
61. Shiang, R. Lidral, A.C. Ardinger H.H. Buetow, K.H. Rometti, P.A. Munger, R.G. Murray, J.C. *Association of transforming growth factor alpha gene polymorphisms with nonsyndromic cleft palate only (CPO)*. Am. J. Hum. Genet. 53:836-843, 1993.
62. Emanuel, B.S. Buetow, K. Nussbaum, R. Scambler, P. Lipinski, M. Overton, G.C. *Report of the third international workshop on human chromosome 22 mapping*. Cytogenet. Cell Genet. 63:206-11, 1993.

63. Gasser, D.L. Sternberg, N.L. Pierce, J.C. Goldner-Sauve, A. Feng, H. Haq, A.K. Spies, T. Hunt, C. Buetow, K.H. Chaplin, D.D. *P1 and cosmid clones define the organization of 280 kb of the mouse H-2 complex containing the Cps-1 and Hsp70 loci.* Immunogenet. 39:48-55, 1994.
64. Buetow, K.H. Weber, J.L. Ludwigsen, S. Scherpbier-Heddema, T. Duyk, G.M. Sheffield, V.S. Wang, Z. Murray, J.C. *Integrated human genome-wide maps constructed using the CEPH reference panel.* Nature Genet. 6:391-393, 1994. (Cited in more than 140 publications as of June 1996. The Scientist 10(14):14, July 8, 1996.)
65. Buetow, K.H. Construction of reference genetics maps. In: *Current Protocols in Human Genetics*, Dracopoli, N.C., Haines, J.L., Korf, B.R, Morton C.C., Seidman, C.E., Seidman J.G., Moir, D.T., Smith D., eds., Current Protocols, Pub., Brooklyn, NY, pp. 1.5.1-8, Suppl. pp. A.5.1-28, 1994.
66. Fan, J-B. DeYoung, J. Lagace, R. Lina, A. Xu, Z. Murray, J.C. Buetow, K.H. Weissenbach, J. Goold, R.D. Cox, D.R. Myers, R.M. *Isolation of yeast artificial chromosome clones from 54 polymorphic loci mapped with high odds on human chromosome 4.* Hum. Mol. Genet. 3:243-246, 1994.
67. Westbrook, C.A. LeBeau, M.M. Neuman, W.L. Keinanen, M. Yamaoka, L.H. Speer, M. Espinosa, R. Nakamura, Y. Williamson, R. Mullan, M. Buetow, K.H. *Physical and genetic map of 5q31: use of fluorescence in situ hybridization data to identify errors in the CEPH database.* Cytogenet. Cell Genet. 67:86-93, 1994.
68. Cooperative Human Linkage Center (CHLC): Murray, J.C. Buetow, K.H. Weber, J.L. Ludwigsen, S. Scherpbier-Heddema, T.S. Manion, F. Quillen, J. Sheffield, V.C. Duyk, G.M. Weissenbach, J. Lathrop, G.M. White, R. Ward, D. Dausset, J. Cohen, D. et al. *A comprehensive human linkage map with centimorgan density.* Science 265:2049-2054, 1994.
69. Rebbeck, T.R. Rosvold, E.A. Duggan D.J. Zhang, J. Buetow, K.H. *Genetics of CYP1A1: Co-amplification of specific alleles by polymerase chain reaction and association with breast cancer.* Cancer Epidemiol. Biomarkers Prev. 3:511-514, 1994.
70. Godwin, A.K. Vanderveer, L. Schultz, D.C. Lynch, H.T. Altomare, D.A. Buetow, K.H. Daly, M. Getts, L.A. Masny, A. Rosenblum, N. Hogan, M. Ozols, R.F. Hamilton, T.C. *A common region of deletion on chromosome 17q in both sporadic and familial epithelial ovarian tumors distal to BRCA1.* Am. J. Hum. Genet. 55:666-677, 1994.
71. Rebbeck, T.R. Lustbader, E.D. Buetow, K.H. *Somatic allele loss in genetic linkage analysis of cancer.* Genet. Epidemiol. 11:419-429, 1994.
72. McGlynn, K.A. Buetow, K.H. *Metabolic and H-ras polymorphisms in genetic susceptibility.* Cancer Bull. 46:220-227, 1994.
73. Feng, H. Sassani, R. Bartlett, S.P. Lee, A. Hecht, J.T. Malcolm, S. Winter, R.M. Vintiner, G.M. Buetow, K.H. Gasser, D.L. *Evidence, from family studies, for linkage disequilibrium between TGFA and a gene for nonsyndromic cleft lip with or without cleft palate.* Am. J. Hum. Genet. 55:932-936, 1994.
74. Sander A. Murray, J.C. Scherpbier-Heddema, T. Buetow, K.H. Weissenbach, J. Zingg, M. Ludwig, K. Schmelzle, R. *Microsatellite-based fine mapping of the Van der Woude syndrome locus to an interval of 4.1 cM between D1S245 and D1S414.* Am. J. Hum. Genet. 56:310-318, 1995.
75. Bell, C.J. Budarf, M.L. Nieuwenhuijsen, B.W. Barnoski, B.L. Buetow, K.H. et al. *Integration of physical, breakpoint and genetic maps of chromosome 22. Localization of 587 yeast artificial chromosomes with 238 mapped markers.* Hum. Mol. Genet. 4:59-69, 1995.
76. Buetow, K.H. *Report of the committee on the genetic constitution of chromosome 4.* In: Human Gene Mapping, 1994: A Compendium, Cuticchia, A.J., ed., Johns Hopkins Univ. Press, Baltimore, 1995.
77. McGlynn, K.A. Rosvold, E.A. Lustbader, E.D. Clapper, M.L. Zhou, T. Wild, C.P. Hu, Y. Xia, X.L. Baffoe-Bonnie, A. Ofori-Adjei, D. Shen, F.M. Chen, G.C. London, W.T. Buetow, K.H. *Susceptibility to hepatocellular*

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