

Mark D. Adams, Ph.D.

WORK ADDRESS

The Jackson Laboratory for Genomic Medicine
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EDUCATION:

1990 Ph.D., Biological Chemistry, University of Michigan, Ann Arbor, MI
Thesis Advisor: Dale L. Oxender
Dissertation: Structure/Function Studies on the Leucine-Binding Proteins of *Escherichia coli*
1984 B.A., Chemistry, Warren Wilson College, Swannanoa, NC

EMPLOYMENT:

12/2016-present The Jackson Laboratory for Genomic Medicine, Farmington, CT
Director, Microbial Genomic Services

07/11-12/2016 J. Craig Venter Institute, La Jolla, CA

Professor, Scientific Director (2011-2016); Campus Director for La Jolla (from 2016)
Participating Member, Moores Cancer Center, University of California, San Diego

- Develop and apply novel approaches to assessing genetic variation in multidrug-resistance pathogens to ascertain evolutionary and epidemiological patterns
- Promote faculty development and stimulate new programs in areas of infectious diseases, synthetic biology, and environmental microbiology
- Direct all NGS activities and encourage new uses of sequencing assays
- Contribute to overall strategic directions for the Institute including faculty recruitment and intellectual property evaluation
- Oversee Environmental Health and Safety and the Institutional Biosafety Committee
- Coordinator for two major facility moves

7/03-08/11 Case Western Reserve University, Cleveland, OH

Associate Professor (tenured), Department of Genetics
Member, Center for Human Genetics
Associate Professor, Center for Proteomics and Bioinformatics
Associate Member, Case Comprehensive Cancer Center
Director, Genomics Core Facility

- Identified genes responsible for hematopoietic abnormalities in ENU-mutagenized mice
- Initiated genome-scale approaches to multidrug-resistant *Acinetobacter baumannii*
- Supported DNA sequencing and genotyping needs of >100 investigators in twelve departments
- Introduced Illumina sequencing to CWRU
- Established methods for somatic mutation detection in colon cancer using targeted exome sequencing
- Graduated two Ph.D. students; served on >30 thesis and mentoring committees

7/98-5/03: Celera Genomics, Rockville, MD

7/02-5/03 Vice President of Bioinformatics

7/98-6/02 Vice President for Genome Programs

- Established the largest DNA sequencing facility in the world at the time with 240 ABI sequencers and supporting automation
- Directed sequencing and annotation of the human, mouse, and *Drosophila* genomes
- Provided content support for Celera's subscription-based service

- Supported informatics activities related to drug and diagnostic development

8/92-7/98: The Institute for Genomic Research (TIGR), Rockville, MD

1/96-7/98: Investigator and Director, Department of Eukaryotic Genomics

8/92-1/96: Assistant Investigator

8/92-7/98: DNA Sequencing Facility Director

- Led large-scale human gene discovery program
- Contributed to sequencing of the first complete genome of a free-living organism, *Haemophilus influenzae* and other microbes
- Recipient of one of the first NHGRI human genome sequencing grants for chromosome 16.

5/90-7/92: Section of Receptor Biochemistry and Molecular Biology, NINDS/NIH, Bethesda, MD

9/91-7/92 Staff Fellow

5/90-9/91 Postdoctoral Fellow (Intramural Research Training Award)

- Developed the expressed sequence tag (EST) strategy for rapid gene discovery genes.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

1992-2003: Member, Human Genome Organization (HUGO)

2002-2006 Member, American Society of Human Genetics

2003-2008 Member, International Mammalian Genome Society

2004-2008 Member, International Society for Molecular Biology and Evolution

2008-present Member, American Society for Microbiology

HONORS & AWARDS:

1980-84 Warren Wilson College President's Honor Scholarship

1982 Samuel Robinson Scholarship (United Presbyterian Church, U.S.A.)

1984 Outstanding Scholar Award, Warren Wilson College

1984 Edward C. Jeffrey Award in Physical Sciences, Warren Wilson College

1984-88 NIH Predoctoral Genetics Training Program

1988-89 Horace Rackham Predoctoral Fellowship

1990 Dominic D. Dziewiatkowski Dissertation Award (UM Biological Chemistry)

1992 NIH Merit Award

2001 Newcomb-Cleveland Prize "For An Outstanding Contribution To Science", American Association for the Advancement of Science

2002 Distinguished Graduate Lecture, University of Michigan, Department of Biological Chemistry

2004 Distinguished Alumni Award, Warren Wilson College

2013 ICAAC Program Committee Award (Epidemiology of Infection)

PROFESSIONAL SERVICE

1993-1997: Advisory Committee, Montgomery College Biotechnology Program

1999-2001: Member, Scientific Advisory Council of Paracel, Inc.

2003-2007 Member, Department of Energy Joint Genome Institute Scientific Advisory Board

2003-2006 Member, Advisory Board of RavGen, Inc.

2003-2013 Associate Editor, *Genomics*

2004-2008 Genomics, Computational Biology, and Technology Study Section, NIH

2006-2009 Research Advisory Board, Case Research Institute

2006-2011 Advisory Committee, Great Lakes Science Center BioMedTech Exhibit

2008-2011 Member, Scientific Advisory Board, Mouse Genome Informatics

2008-2011 Editorial Board, *Mammalian Genome*

2008-present Faculty of 1000

2013-present Editorial Board, *Antimicrobial Agents and Chemotherapy*

2015-present Department of Energy Joint Genome Institute Scientific Advisory Committee

CURRENTLY ACTIVE GRANTS

- 1) NIH/NIGMS R01-GM094403-01 09/2011-08/2016 (Adams, PI)
Evolution of multidrug resistance in *Acinetobacter baumannii*
- 2) NIH/NIGMS R21 GM104694 09/01/12-08/31/16 (Adams, PI)
A Digital Microfluidic Systems for Gene Synthesis, Sequencing and Recovery
- 3) NIH-1U19AI110819-01 04/01/14-03/31/19 (Nelson/Nierman, PI)
The J. Craig Venter Institute Genome Center for Infectious Diseases
- 4) California Institute for Regenerative Medicine (CIRM) 04/01/14-03/31/19 (Adams, Subcontract PI)
Data Management Support for the CIRM Genomics Center
- 5) NIH/NIAID R21AI114508 06/25/15-05/31/17 (Adams, Subcontract PI)
Molecular Epidemiology of Carbapenem-Resistant *Klebsiella pneumoniae*

PEER REVIEWED PUBLICATIONS:

123 Peer-reviewed and 31 invited publications

From Google Scholar:

67,905 total citations

h-index: 69; h-index since 2011: 45

i10-index: 146; i10-index since 2011: 101

A full list of publications is available at:

<http://www.ncbi.nlm.nih.gov/myncbi/browse/collection/40351834/?sort=date&direction=descending>

- Adams, M.D.**, Wagner, L., Gibson, A., Graddis, T.J., Clarke, R., Antonucci, T.K., Oxender, D.L. 1990. Nucleotide sequence and genetic characterization reveal six essential genes for the LIV-I and LS transport systems of *Escherichia coli*. *J. Biol. Chem.* 265:11436-43.
- Guo, C.-W., **Adams, M.D.**, Su, T.-Z., and Oxender, D.L. 1990. The fusion of signal peptide region of leucine-specific binding protein gene to the α -galactosidase gene in *Escherichia coli*. *Acta Biochim. et Biophys. Sinica* 22(4).
- Adams, M.D.**, Maguire, D.J., and Oxender, D.L. 1991. Altering the binding activity and specificity of the leucine-binding proteins of *Escherichia coli*, *J. Biol. Chem.* 266:6209-14.
- Adams, M.D.**, Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merrill, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., and Venter, J.C. 1991. Complementary DNA sequencing: Expressed sequence tags and human genome project, *Science*, 252:1651-56.
- Adams, M.D.** and Oxender, D.L. 1991. Secretion of mutant leucine-specific binding proteins with internal deletions in *Escherichia coli*, *J. Cell. Biochem.*, 46:321-30.
- Polymeropoulos, M.H., Xiao, H., Glodek, A., Gorski, M., **Adams, M.D.**, Moreno, R.F., FitzGerald, M.G., Venter, J.C., and Merrill, C.R. 1992. Chromosomal assignment of 46 brain cDNAs, *Genomics*, 12:492-6.
- Adams, M.D.**, Dubnick, M., Kerlavage, A.R., Moreno, R., Kelley, J.M., Utterback, T.R., Nagle, J.W., Fields, C., and Venter, J.C. 1992. Sequence identification of 2,375 human brain genes. *Nature*, 355:632-4.
- McCombie, W.R., **Adams, M.D.**, Kelley, J.K., FitzGerald, M.G., Utterback, T.R., Khan, M., Dubnick, M., Kerlavage, A.R., Venter, J.C., and Fields, C. 1992. *Caenorhabditis elegans* expressed sequence tags identify gene families and potential disease gene homologues. *Nature Genetics*, 1:124-31.
- White, O., Dunning, T., Sutton, G., **Adams, M.D.**, Venter, J.C., and Fields, C. 1993. A quality control algorithm for DNA sequencing projects. *Nucl. Acids Res.*, 21:3829-3838.
- Polymeropoulos, M.H., Xiao, H., Torres, R., Sikela, J., **Adams, M.D.**, Venter, J.C., and Merrill, C.R. 1993. Chromosomal distribution of 320 genes from a brain cDNA library. *Nature Genet.*, 4:381-386.
- Adams, M.D.**, Kerlavage, A.R., Fields, C., and Venter, J.C. 1993. 3400 Expressed Sequence Tags identify diversity of transcripts from human brain. *Nature Genet.*, 4, 256-267.

- Adams, M.D.**, Soares, M.B., Kerlavage, A.R., Fields, C.F., and Venter, J.C. 1993. Rapid cDNA sequencing (expressed sequence tags) from a directionally cloned human infant brain cDNA library. *Nature Genet.*, 4:373-380.
- Fields, C., and **Adams, M.D.** 1994. Expressed sequence tags identify a human isolog of the SUI1 translation initiation factor. *BBRC*, 198:288-291.
- Papadopoulos, N., Nicolaides, N.C., Wei, Y-F., Ruben, S.R., Carter, K.C., Rosen, C.A., Haseltine, W.A., Fleischmann, R.D., Fraser, C.M., **Adams, M.D.**, Venter, J.C., Hamilton, S.R., Peterson, G.M., Watson, P., Lynch, H.T., Peltomäke, P., Mecklin, J.-P., de la Chapelle, A., Kinzler, K.W., and Vogelstein, B. 1994. Mutation of a *mutL* homolog associated with hereditary colon cancer. *Science* 263:1625-1629.
- Cavanaugh, M.M., Breiner, M., Schurmann, A., Rosenwald, A.G, Terui, T., Zhang, C.-j., Randazzo, P., **Adams, M.D.**, Joost, H.G., and Kahn, R.A. 1994. ADP-ribosylation factor (ARF)-like 3, a new member of the ARF family of GTP-binding proteins cloned from human and rat tissues. *J. Biol. Chem.*, 269:18937-18942.
- Nicolaides, N.C., Papadopoulos, N., Ruben, S.R., Carter, K.C., Rosen, C.A., Haseltine, W.A., Fleischmann, R.D., Fraser, C.M., **Adams, M.D.**, Venter, J.C., Dunlop, M., Hamilton, S.R., Peterson, G.M., de la Chapelle, A., Vogelstein, B., and Kinzler, K.W. 1994. Mutations of two PMS homologues in hereditary nonpolyposis colon cancer. *Nature*, 371:75-80.
- Franco, G.R., **Adams, M.D.**, Soares, M.B., Simpson, A.J.G., Venter, J.C., and Pena, S.D.J. 1995. Identification of new *Schistosoma mansoni* genes by the EST strategy using a directional cDNA library. *Gene*, 152:141-147.
- Fleischmann, R.D., **Adams, M.D.**, White, O., Clayton, R. A., Kirkness, E. F., Kerlavage, A. R., C. J. Bult, J.-F. Tomb, B. A. Dougherty, J. M. Merrick, K. McKenney, G. Sutton, W. FitzHugh, C. Fields, J. D. Gocayne, J. Scott, R. Shirley, L.-I. Liu, A. Glodek, J. M. Kelley, J. F. Weidman, C. A. Phillips, T. Spriggs, E. Hedblom, M. D. Cotton, T. R. Utterback, M. C. Hanna, D. T. Nguyen, D. M. Saudek, R. C. Brandon, L. D. Fine, J. L. Fritchman, J. L. Fuhrmann, N. S. M. Geoghagen, C. L. Gnehm, L. A. McDonald, K. V. Small, C. M. Fraser, H. O. Smith, J. C. Venter. Whole-genome random shotgun sequencing and assembly of *Haemophilus influenzae* Rd. 1995. *Science*, 269:496-512.
- McDonald, L.A., Kelley, J.M., Brandon, R.C., and **Adams, M.D.** 1995. Optimization of Applied Biosystems 373 Sequencer Stretch Modification. *BioTechniques*, 19:464-471.
- Sutton, G.G., White, O., **Adams, M.D.**, and Kerlavage, A.R. 1995. TIGR Assembler: A new tool for assembling large shotgun sequencing projects. *Genome Science and Technology*, 1:9-19.
- Lee, N.H., Weinstock, K.G., Kirkness, E.F., Earle-Hughes, J.A., Fuldner, R.A., Marmaros, S., Glodek, A., Gocayne, J.D., **Adams, M.D.**, Kerlavage, A.R., Fraser, C.M., and Venter, J.C. 1995. Comparative expressed-sequence-tag analysis of differential gene expression profiles in PC-12 cells before and after nerve growth factor treatment. *Proc. Natl. Acad. Sci. USA*, 92:8303-8307.
- Adams, M.D.**, Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A., Bult, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, O., Sutton, G., Blake, J.A., Brandon, R.C., Chiu, M.W., Clayton, R.A., Cline, R.T., Cotton, M.D., Earle-Hughes, J., Fine, L.D., FitzGerald, L.M., FitzHugh, W.M., Fritchman, J.L., Geoghagen, N.S.M., Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S. Jr, Kelley, J.M., Klimek, K.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Moreno-Palanques, R.F., McDonald, L.A., Nguyen, D.T, Pellegrino, S.M., Phillips, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R., Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y., Bednarik, D.P., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, E.-J., Dimke, D., Feng, P., Ferrie, A., Fischer, C., Hastings, G.A., He, W.-W., Hu, J.-S., Greene, J.M., Gruber, J., Hudson, P., Kim, A., Kozak, D.L., Kunsch, C., Ji, H., Li, H., Meissner, P.S., Olsen, H., Raymond, L., Wei, Y.-F., Wing, J., Xu, C., Yu, G.-L., Ruben, S.M., Dillon, P.J., Fannon, M.R., Rosen, C.A., Haseltine, W.A., Fields, C., Fraser, C.M. and Venter, J.C. 1995. Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence. *Nature*, 377S:3-174.
- Korenberg, J.R., Chen, X.-N., **Adams, M.D.**, and Venter, J.C. 1995. Towards a cDNA map of the human genome. *Genomics*, 29:364-370.

- Alzheimer's Disease Collaborative Group. Clark, R.F., Hutton, M., Fuldner, R.A., Froelich, S., Karran, E., Talbot, C., Crook, R., Lendon, C., Prihar, G., He, C., Korenblat, K., Martinez, A., Wragg, M., Busfield, F., Behrens, M.I., Myers, A., Norton, J., Morris, J., Nehta, N., Pearson, C., Lincoln, S., Baker, M., Duff, K., Zehr, C., Perez-Tur, J., Houlden, H., Ruiz, A., Ossa, J., Lopera, F., Arcos, M., Madrigal, L., Collinge, J., Humphreys, C., Ashworth, T., Sarnier, S., Fox, N., Harvey, R., Kennedy, A., Roques, P., Cline, R.T., Phillips, C.A., Venter, J.C., Forsell, L., Axelman, K., Lilius, L., Johnston, J., Cowburn, R., Viitanen, M., Winblad, B., Kosik, K., Haltia, M., Poyhonen, M., Dickson, D., Mann, D., Neary, D., Snowden, J., Lantos, P., Lannfelt, L., Rossor, M., Roberts, G.W., **Adams, M.D.**, Hardy, J., and Goate, A. 1995. The structure of the Presenilin 1 (S182) gene and identification of six novel mutations in early onset AD families. *Nature Genet.*, 11:219-222.
- Fraser, C.M., Gocayne, J.D., White, O., **Adams, M.D.**, Clayton, R.A., Fleischmann, R.D., Bult, C.J., Kerlavage, A.R., Sutton, G., Kelley, J.M., Fritchman, J.L., Weidman, J.F., Small, K.V., Sandusky, M., Fuhrmann, J., Nguyen, D., Utterback, T.R., Saudek, D.M., Phillips, C.A., Merrick, J.M., Tomb, J.-F., Dougherty, B.A., Bott, K.F., Hu, P.-C., Lucier, T.S., Peterson, S.N., Smith, H.O., Hutchison, C.A., and Venter, J.C. 1995. The minimal gene complement of *Mycoplasma genitalium*. *Science*, 270: 397-403.
- Feldblyum, T.V., Maglott, D.R., McPherson, J.D., **Adams, M.D.**, Apostol, B.L., Durkin, A.S., Wasmuth, J.J., and Nierman, W.C. 1995. Regional assignment and tissue patterns of twenty-one expressed sequence tags (ESTs) on human chromosome 5. *Genomics* 33:128-130.
- Perez-Tur, J., Froelich, S., Prihar, G., Crook, R., Baker, M., Duff, K., Wragg, M., Busfield, F., Lendon, C., Clark, R.F., Roques, P., Fuldner, R.A., Johnston, J., Cowburn, R., Forsell, C., Axelman, K., Lilius, L., Houlden, H., Karren, E., Roberts, G.W., Rosser, M., **Adams, M.D.**, Hardy, J., Goate, A., Lannfelt, L., and Hutton, M. 1996. A mutation in Alzheimer's disease destroying a splice acceptor site in the presenilin-1 gene. *NeuroReports*, 7:297-301.
- Clark RF, Hutton M, Talbot C, Wragg M, Lendon C, Busfield F, Han SW, Perez-Tur J, **Adams, M.D.**, Fuldner R, Roberts G, Karran E, Hardy J, Goate A. 1996. The role of presenilin 1 in the genetics of Alzheimer's Disease. *Cold Spring Harb. Symp. Quant. Biol.* 61:551-558.
- Hutton, M., Busfield, F., Wragg, M., Crook, R., Perez-Tur, J., Clark, R.F., Prihar, G., Talbot, C., Phillips, H., Wright, K., Baker, M., Lendon, C., Duff, K., Martinez, A., Houlden, H., Nichols, A., Karran, E., Roberts, G., Roques, P., Rossor, M., Venter, J.C., **Adams, M.D.**, Cline, R.T., Phillips, C.A., Fuldner, R.A., Hardy, J., and Goate, A. (1996) Complete analysis of the presenilin 1 gene in early onset Alzheimer's disease. *NeuroReport* 7:801-805.
- Earle-Hughes, J.A., Lee, N.H., Weinstock, K.G., Kirkness, E.F., Fuldner, R.A., Cline, R.T., Glodek, A., Sutton, G.G., **Adams, M.D.**, Fraser, C.M., and Venter, J.C. (1996) Differential gene expression profiles in G1 and S phase synchronized Jurkat T-cell leukemia cells: investigation using an expressed sequence tag analysis. 1996. *Genome Sci. and Technol.* 1:89-128.
- Bult, C.J., White, O., Olsen, G.J., Zhou, L., Fleischmann, R.D., Sutton, G.G., Blake, J.A., FitzGerald, L.M., Clayton, R.A., Gocayne, J.D., Kerlavage, A.R., Dougherty, B.A., Tomb, J.-F., **Adams, M.D.**, Reich, C.I., Overbeek, R., Kirkness, E.F., Weinstock, K.G., Merrick, J.M., Glodek, A., Scott, J.L., Geoghagen, N.S.M., Weidman, J.F., Fuhrman, J.L., Nguyen, D., Utterback, T.R., Kelley, J.M., Peterson, J.D., Sadow, P.W., Hanna, M.C., Cotton, M.D., Roberts, K.M., Hurst, M.A., Kaine, B.P., Borodovsky, M., Klenk, H.-P., Fraser, C.M., Smith, H.O., Woese, C.R., and Venter, J.C. (1996) Complete genome sequence of the methanogenic Archaeon, *Methanococcus jannaschii*. *Science*, 273:1058-1073.
- Prihar, G., Fuldner, R.A., Perez-Tur, J., Lincoln, S., Duff, K., Crook, R., Hardy, J., Phillips, C.A., Venter, J.C., Talbot, C., Clark, R.F., Lendon, C., Wragg, M., Busfield, F., Behrens, M.I., Myers, A., Goate, A., Li, J., Potter, H., Karran, E., Roberts, G.W., Hutton, M., and **Adams, M.D.** 1996. Structure and alternate splicing of the presenilin-2 gene. *NeuroReport*, 7:1680-1684.
- Schuler, G.D., M.S. Boguski, E.A. Stewart, L.D. Stein, G. Gyapay, K. Rice, R.E. White, P. Rodriguez-Tome, A. Aggarwal, E. Bajorek, S. Bentolila, B.B. Birren, A. Butler, A.B. Castle, N. Chiannikulchai, A. Chu, C. Clee, S. Cowles, P.J.R. Day, T. Dibling, N. Drouot, I. Dunham, S. Duprat, C. East, C. Edwards, J.-B. Fan, N. Fang, C. Fizames, C. Garrett, L. Green, D. Hadley, M. Harris, P. Harrison, S. Brady, A. Hicks, E. Holloway, L. Hui, S. Hussain, C. Louis-Dit-Sully, J. Ma, A. MacGilvery, C. Mader, A. Maratukulam, T.C. Matisse, K.B. McKusick, J. Morissette, A.

- Mungall, D. Muselet, H.C. Nusbaum, D.C. Page, A. Peck, S. Perkins, M. Piercy, F. Qin, J. Quackenbush, S. Ranby, T. Reif, S. Rozen, C. Sanders, X. She, J. Silva, D.K. Slonim, C. Soderlund, W.-L. Sun, P. Tabar, T. Thangarajah, N. Vega-Czarny, D. Vollrath, S. Voyticky, T. Wilmer, X. Wu, **Adams, M.D.**, C. Auffray, N.A.R. Walter, R. Brandon, A. Dehejia, P.N. Goodfellow, R. Houlgatte, J.R. Hudson Jr., S.E. Ide, K.R. Iorio, W.Y. Lee, N. Seki, T. Nagase, K. Ishikawa, N. Nomura, C. Phillips, M.H. Polymeropoulos, M. Sandusky, K. Schmitt, R. Berry, K. Swanson, R. Torres, J.C. Venter, J.M. Sikela, J.S. Beckmann, J. Weissenbach, R.M. Myers, D.R. Cox, M.R. James, D. Bentley, P. Deloukas, E.S. Lander, and T.J. Hudson. 1996. A gene map of the human genome. *Science* 274:540-546.
- Rounsley, S.D., Glodek, A., Sutton, G., **Adams, M.D.**, Somerville, C.R., Venter, J.C., and Kerlavage, A.R. 1996. The construction of *Arabidopsis* expressed sequence tag assemblies: a new resource to facilitate gene identification. *Plant Physiol.* 112:1177-1183.
- Tomb, J.-F., White, O., Kerlavage, A.R., Clayton, R.A., Sutton, G.G., Fleischmann, R.D., Ketchum, K.A., Klenk, H.P., Gill, S., Dougherty, B.A., Nelson, K., Quackenbush, J., Zhou, L., Kirkness, E.F., Peterson, S., Loftus, B., Richardson, D., Dodson, R., Khalak, H.G., Glodek, A., McKenney, K., FitzGerald, L.M., Lee, N., **Adams, M.D.**, Hickey, E.K., Berg, D.E., Gocayne, J.D., Utterback, T.R., Peterson, J.D., Kelley, J.M., Cotton, M.D., Weidman, J.M., Fujii, C., Bowman, C., Watthey, L., Wallin, E., Hayes, W.S., Borodovsky, M., Karp, P.D., Smith, H.O., Fraser, C.M., and Venter, J.C. 1997. The complete genome sequence of the gastric pathogen *Helicobacter pylori*. *Nature* 388:539-547.
- Huang, X., **Adams, M.D.**, Zhou, H., and Kerlavage, A.R. 1997. A tool for annotating genomic sequences. *Genomics* 46:37-45.
- Klenk, H.-P., Clayton, R.A., Tomb, J.-F., White, O., Nelson, K.E., Ketchum, K.A., Dodson, R.J., Gwinn, M., Hickey, E.K., Peterson, J.D., Richardson, D.L., Kerlavage, A.R., Graham, D.E., Kyripidis, N.C., Fleischmann, R.D., Quackenbush, J., Lee, N.H., Sutton, G.G., Gill, S., Kirkness, E.F., Dougherty, B.A., McKenney, K., **Adams, M.D.**, Loftus, B.J., Peterson, S., Reich, C.I., McNeil, L.K., Badger, J.H., Glodek, A., Zhou, L., Overbeek, R., Gocayne, J.D., Weidman, J.F., McDonald, L.A., Utterback, T., Cotton, M.D., Spriggs, T., Artiach, P., Kaine, B.P., Sykes, S.M., Sadow, P.W., D'Andrea, K.P., Bowman, C., Fujii, C., Garland, S.A., Mason, T.M., Olsen, G.J., Fraser, C.M., Smith, H.O., Woese, C.R., and Venter, J.C. 1997. The complete genome sequence of the hyperthermophilic sulfate-reducing archaeon *Archaeoglobus fulgidus*. *Nature* 390:364-369.
- Fraser, C.M., Casjens, S., Huang, W. M., Sutton, G.G., Clayton, R., Lathigra, R., White, O., Ketchum, K. A., Dodson, R., Hickey, E.K., Gwinn, M., Dougherty, B., Tomb, J.-F., Fleischmann, R.F., Richardson, D., Peterson, J., Kerlavage, A.R., Quackenbush, J., Salzberg, S., Hanson, M., van Vugt, R., Palmer, N., **Adams, M.D.**, Gocayne, J.D., Weidman, J., Utterback, T., Wathley, L., McDonald, L., Artiach, P., Bowman, C., Garland, S., Fujii, C., Cotton, M.D., Horst, K., Roberts, K., Hatch, B., Smith, H.O., and Venter, J.C. 1997. Genomic sequence of the Lyme disease spirochaete, *Borrelia burgdorferi*. *Nature* 390:580-586.
- Kramer, J.A., **Adams, M.D.**, Singh, G.B., Doggett, N.A., and Krawetz, S.A. 1998. Extended analysis of the region encompassing the PRM1→PrM2→TNP2 domain: genomic organization, evolution and gene identification, *J. Exp. Zool.* 282:245-253.
- Gardner, M.J., Tettelin, H., Carucci, D.J., Cummings, L.M., Aravind, L., Koonin, E.V., Shallom, S., Mason, T., Yu, K., Fujii, C., Pederson, J., Shen, K., Jing, J., Aston, C., Lai, Z., Schwartz, D.C., Perte, M., Salzberg, S., Zhou, L., Sutton, G.G., Clayton, R., White, O., Smith, H.O., Fraser, C.M., **Adams, M.D.**, Venter, J.C., and Hoffman, S.L. 1998. Chromosome 2 sequence of the human malaria parasite *Plasmodium falciparum*, *Science* 282:1126-1132.
- Greenham, J., **Adams, M.D.**, Doggett, N., and Mole, S. (1998). Elucidation of the exon-intron structure and size of the human protein kinase C beta gene (PRKCB). *Hum. Genet.* 103:483-487.
- Kramer, J.A., **Adams, M.D.**, Singh, G.B., Doggett, N.A., and Krawetz, S.A. 1998. A matrix associated region localizes the human SOCS-1 gene to chromosome 16p13.13, *Somatic Cell and Molecular Genetics* 24 (2):131-133.

- Clayton C, **Adams M**, Almeida R, Baltz T, Barrett M, Bastien P, Belli S, Beverley S, Biteau N, Blackwell J, Blaineau C, Boshart M, Bringaud F, Cross G, Cruz A, Degrave W, Donelson J, El-Sayed N, Fu G, Ersfeld K, Gibson W, Gull K, Ivens A, Kelly J, Vanhamme L, *et al.*, (1998) Genetic nomenclature for Trypanosoma and Leishmania, *Mol Biochem Parasitol.* 97:221-224
- Kelley, J.M., Field, C.E., Craven, M.B., Bocskai, D., Kim, U.-J., Rounsley, S.D. & **Adams, M.D.** (1999). High throughput direct end sequencing of BAC clones, *Nucleic Acids Research* 27:1539-1546.
- Cao, Y., Kang, H.L., Xu, X., Wang, M., Dho, S.H., Huh, J.R., Lee, B., Kalush, F., Bocskai, D., Ding, Y., Tesmer, J.G., L., J., Moon, E., Jurecic, V., Baldini, A., Weier, H., Dogett, N.S., Simon, M.I., **Adams, M.D.**, and Kim, U. (1999) A 12-Mb Complete Coverage BAC Contig Map in Human Chromosome 16p13.1-p11.2, *Genome Research*; 9:763-774
- Loftus, B.J., Kim, U-J, Sneddon, V.P., Kalush, F., Brandon, R., Fuhrmann, J., Mason, T. Crosby, M.L. Barnstead, M. Cronin, L., Cao, Y., Xu, R.X., Kang, H.L., Eichler, E., Harris, P., Venter, J.C. and **Adams, M.D.** (1999). Genome duplications and other features in 12 Mbp of DNA sequence from human chromosome 16p and 16q. *Genomics*, 60 (3):295-308.
- Mahairas, G.G., Wallace, J.C., Smith, K., Swartzell, S., Holzman, T., Keller, A., Shaker, R., Furlong, J., Young, J, Zhao, S., **Adams, M.D.**, and Hood, L. (1999) Sequence tagged connectors: a sequence approach to mapping and scanning the human genome. *Proc. Natl. Acad Sci USA.* 17:9739-44.
 - Lin, X., Kaul, S., Rounsley, S., Shea, T.P., Benito, M.-I., Town, C.D., Fujii, C.Y., Mason, T., Bowman, C.L., Barnstead, M., Feldblyum, T.V., Buell, C.R., Ketchum, K.A., Lee, J., Ronning, C.M., Koo, H.L., Moffat, K.S., Cronin, L.A., Shen, M., Pai, G., Van Aken, S., Umayam, L., Tallon, L.J., Gill, J.E., **Adams, M.D.**, Carrera, A.J., Creasy, T.H., Goodman, H.M., Somerville, C.R., Copenhaver, G.P., Preuss, D., Nierman, W.C., White, O., Eisen, J.A., Salzberg, S.L., Fraser, C.M., Venter, J.C. (1999) Sequence and analysis of chromosome 2 of the plant *Arabidopsis thaliana*. *Nature* 402:761-768
 - Lee, M.P., Brandenburg, S., Landes, G.M., **Adams, M.**, Miller, G., and Feinberg, A.P. (1999) Two novel genes in the center of the 11p15 imprinted domain escape genomic imprinting, *Hum. Mol. Genet.* 8:683-90.
 - Zhao, S, Malek, J., Mahairas, G.G., Fu, L., Nierman, W.C., Venter, J.C., **Adams, M.D.** (2000) Human BAC Ends quality assessment and sequence analyses. *Genomics*, 63:321-32.
- Horvath, J.E., Viggiano, L., Loftus, B.J., **Adams, M.D.**, Archidiacono N, Rocchi M., Eichler E.E. (2000) Molecular structure and evolution of an alpha satellite/non-alpha satellite junction at 16p11. *Hum Mol Genet.* 9:113-23.
- Adams, M.D.**, Celniker, S.E., Holt, R.A., Evans, C.A., Gocayne, J.D., Amanatides, P.G., Scherer, S.E., Li, P.W., Galle, R.F., George, R.A., Hoskins, R.A., Lewis, A., Richards, S., Ashburner, M., Henderson, S.N., Wortman, J.R., Yandell, M.D., Zhang, Q., Chen, L.X., Brandon, R.C., Rogers, Y-H.C., Blazej, R.G., Champe, M., Pfeiffer, B.D., Svirskas, R.R., Wan, K.H., Doyle, C., Baxter, E.G., Helt, G., Nelson, C.R., Gabor Miklos, G.L., Abril, J.F., Agbayani, A., An, H-J., Baldwin, D., Ballew, R.M., Basu, A., Baxendale, J., Bayraktaroglu, L., Beasley, E.M., Beeson, K.Y., Benos, P.V., Berman, B.P., Bhandari, D., Bolshakov, S., Borkova, D., Botchan, M.R., Bouck, J., Brokstein, P., Brottier, P., Burtis, K.C., Busam, D.A., Butler, H., Cadieu, E., Center, A., Cherry, J.M., Cawley, S., Dahlke, C., Davenport, L.B., Davies, P., de Pablos, B., Delcher, A., Deng, Z., Deslattes Mays, A., Dew, I., Dietz, S.M., Dodson, K., Doup, L.E., Downes, M., Dugan-Rocha, S., Dunkov, B.C., Dunn, P., Durbin, K.J., Evangelista, C.C., Ferraz, C., Ferreira, S., Fleischmann, W., Fosler, C., Gabrielian, A.E., Garg, N.S., Gelbart, W.M., Glasser, K., Glodek, A., Gong, F., Gorrell, J.H., Gu, Z., Guan, P., Harris, M., Harris, N.L., Harvey, D., Heiman, T.J., Hernandez, J.R., Houck, J., Hostin, D., Houston, K.A., Howland, T.J., Ibegwam, C., Jalali, M., Kalush, F., Karpen, G.H., Ke, Z., Kennison, J.A., Ketchum, K.A., Kimmel, B., Kodira, C.D., Kraft, C., Kravitz, A., Kulp, D., Lai, Z., Lasko, P., Lei, Y., Levitsky, A.A., Li, J., Li, Z., Liang, Y., Lin, X., Liu, X., Mattei, B., McIntosh, T.C., McPherson, D., Merkulov, G., Milshina, N.V., Mobarry, C., Morris, J., Moshrefi, A., Mount, S.M., Moy, M., Murphy, B., Murphy, L., Muzny, D.M., Nelson, D.L., Nelson, D.R., Nelson, K.A., Nixon, K., Nusskern, D.R., Pacleb, J.M., Palazzolo, M., Pittman, G.S., Pan, S., Pollard, J., Puri, V., Reese, M., Reinert, K., Remington, K., Saunders, R.D.C., Scheeler, F., Shen, H., Shue, C., Sidén-Kiamos, I., Simpson, M., Skupski, M.P., Smith, T., Spier, E., Spradling, A.C., Stapleton, M.,

- Strong, R., Sun, E., Sutton, G.G., Tector, C., Turner, R., Venter, E., Wang, A.H., Wang, X., Wang, Z.-Y., Wassarman, D.A., Weinstock, G.M., Weissenbach, J., Williams, S.M., Woodage, T., Worley, K.C., Wu, D., Yang, S., Yao, Q.A., Ye, J., Yeh, R-F., Zaveri, J.S., Zhan, M., Zhang, G., Zhao, Q., Zheng, L., Zheng, H.X., Zhong, F.N., Zhong, W., Zhou, X., Zhu, S., Zhu, X., Smith, H.O., Gibbs, R., Myers, E.W., Rubin, G.M., and Venter, J.C. (2000) The genome sequence of *Drosophila melanogaster*, *Science* 287:2185-95.
- Rubin, G.M., Yandell, M.D., Wortman, J.R., Gabor Miklos, G.L., Nelson, G.R., Hariharan, I.K., Fortini, M.E., Li, P.W., Apweiler, R., Fleischmann, W., Cherry, J.M., Henikoff, S., Skupski, M.P., Misra, S., Ashburner, M., Birney, E., Boguski, M.S., Brody, T., Brokstein, P., Celniker, S.E., Chervitz, S.A., Coates, D., Cravchik, A., Gabrielian, A., Galle, R.F., Gelbart, W.M., George, R.A., Goldstein, L.S.B., Harris, N.L., Hay, B., Hoskins, R.A., Hynes, R.O., Jones, S.J.M., Kuehl, P.M., Lemaitre, B., Littleton, J.T., Morrison, D.K., Mungall, C., O'Farrell, P., Pickeral, O.K., Shue, C., Vossball, L.B., Zhang, J., Gibbs, R., Venter, J.C., **Adams, M.D.**, and Lewis, S. (2000) Comparative genomics of the eukaryotes. *Science*, 287:2204-2215.
- Myers, E.W., Sutton, G.G., Delcher, A.L., Dew, I.M., Fasulo, D.P., Flanigan, M.J., Kravitz, S.A., Mobarry, C.M., Reinert, K.H.J., Remington, K.A., Anson, E.L., Bolanos, R.A., Chou, H-H., Jordan, C.M., Halpern, A.L., Lonardi, S., Beasley, E.M., Brandon, R.C., Chen, L., Dunn, P.J., Lai, Z., Liang, Y., Nusskern, D.R., Zhan, M., Zhang, Q., Zheng, X., **Adams, M.D.**, and Venter, J.C. (2000) The whole-genome assembly of *Drosophila*. *Science*, 287:2196-2204.
- Riley, M.A., Cadavid, L., Collett, M.S, Neely, M.N, **Adams, M.D.**, Phillips, C.M., Neel, J.V., and Friedman, D. (2000) The newly characterized colicin Y provides evidence of positive selection in pore-former colicin diversification, *Microbiology*, 146: 671-1677
- Cai L, Struk B, **Adams MD**, Ji W, Haaf T, Kang HL, Dho SH, Xu X, Ringpfeil F, Nancarrow J, Zach S, Schaen L, Stumm M, Niu T, Chung J, Lunze K, Verrecchia B, Goldsmith LA, Viljoen D, Figuera LE, Fuchs W, Lebwohl M, Uitto J, Richards R, Hohl D, and Ramesar R. (2000) A 500-kb region on chromosome 16p13.1 contains the pseudoxanthoma elasticum locus: high-resolution mapping and genomic structure. *J. Mol. Med.* 78:36-46.
- Dawson, E., Chen, Y., Hunt, S., Smink, L., Hunt, A., Rice, K., Livingston, S., Bumpstead, S., Bruskiwich, R., Sham, P., Ganske, R., **Adams, M.D.**, Kawasaki, K., Shimizu, N., Minoshima, S., Roe, B., Bentley, D., and Dunham, I. (2001) A SNP resource for human chromosome 22: extracting dense clusters of SNPs from the genomic sequence. *Genome Res.* 11:170-178.
- Venter, J.C., **Adams, M.D.**, Myers, E.W., Li, P., Mural, R.J., Sutton, G.G., Smith, H.O., Yandell, M., Evans, C.A., Holt, R.A., Gocayne, J.D., Amanatides, P., Ballew, R.M., Huson, D.H., Wortman, J.R., Zhang, Q., Kodira, C., Zheng, Z.H., Chen, L., Skupski, M., Subramanian, G., Thomas, P.D., Zhang, J., Miklos, G.L., Nelson, C., Broder, S., Clark, A.G., Nadeau, J., McKusick, V.A., Zinder, N., Levine, A.J., Roberts, R., Simon, M., Slayman, C., Hunkapiller, M., Bolanos, R., Delcher, A., Dew, I., Fasulo, D., Flanigan, M., Florea, L., Halpern, A., Hannenhalli, S., Kravitz, S., Levy, S., Mobarry, C., Reinert, K., Remington, K., Abu-Threideh, J., Beasley, E., Biddick, K., Bonazzi, V., Brandon, R., Cargill, M., Chandramouliswaran, I., Charlab, R., Chaturvedi, K., Deng, Z., Di Francesco, V., Dunn, P., Eilbeck, K., Evangelista, C., Gabrielian, A.E., Gan, W., Ge, W., Gong, F., Gu, A., Guan, P., Heiman, T.A., Higgins, M.E., Ji, R-R., Ke, Z., Ketchum, K.A., Lai, Z., Lei, Y., Li, Z., Li, J., Liang, Y., Lin, X., Lu, F., Merkulov, G.V., Milshina, N., Moore, H.M., Naik, A.K., Narayan, V.A., Neelam, B., Nusskern, D., Rusch, D.B., Salzberg, S., Shao, W., Shue, B., Sun, J., Wang, Z.Y., Wang, A., Wang, X., Wang, J., Wei, M-H., Wides, R., Xiao, C., Yan, C., Yao, A., Ye, J., Zhan, M., Zhang, W., Zhang, H., Zhao, Q., Zheng, L., Zhong, F., Zhong, W., Zhu, S.C., Zhao, S., Gilbert, D., Baumhueter, S., Spier, G., Carter, C., Cravchik, A., Woodage, T., Ali, F., An, H., Awe, A., Baldwin, D., Baden, H., Barnstead, M., Barrow, I., Beeson, K., Busam, D., Carver, A., Center, A., Cheng, M.L., Curry, L., Danaher, S., Davenport, L., Desilets, R., Dietz, S., Dodson, K., Doup, L., Ferriera, S., Garg, N., Gluecksmann, A., Hart, B., Haynes, J., Haynes, C., Heiner, C., Hladun, S., Hostin, D., Houck, J., Howland, T., Ibegwam, C., Johnson, J., Kalush, F., Kline, L., Koduru, S., Love, A., Mann, F., May, D., McCawley, S., McIntosh, T., McMullen, I., Moy, M., Moy, L., Murphy, B., Nelson, K., Pfannkoch, C., Pratts, E., Puri, V., Qureshi, H., Reardon, M., Rodriguez, R., Rogers, Y-H., Romblad, D., Ruhfel, B., Scott, R., Sitter, C., Smallwood, M., Stewart, E., Strong, R., Suh, E., Thomas, R., Tint, N.N., Tse, S., Vech, C., Wang,

- G., Wetter, J., Williams, S., Williams, M., Windsor, S., Winn-Deen, E., Wolfe, K., Zaveri, J., Zaveri, K., Abril, J.F., Guigó, R., Campbell, M.J., Sjolander, K.V., Karlak, B., Kejariwal, A., Mi, H., Lazareva, B., Hatton, T., Narechania, A., Diemer, K., Muruganujan, A., Guo, N., Sato, A., Bafna, V., Istrail, S., Lippert, R., Schwartz, R., Walenz, B., Yooseph, S., Allen, D., Basu, A., Baxendale, J., Blick, L., Caminha, M., Carnes-Stine, J., Caulk, P., Chiang, Y-H., Coyne, M., Dahlke, C., Deslattes Mays, A., Dombroski, M., Donnelly, M., Ely, D., Esparham, S., Fosler, C., Gire, H., Glanowski, S., Glasser, K., Glodek, A., Gorokhov, M., Graham, K., Gropman, B., Harris, M., Heil, J., Henderson, S., Hoover, J., Jennings, D., Jordan, C., Jordan, J., Kasha, J., Kagan, L., Kraft, C., Levitsky, A., Lewis, M., Liu, X., Lopez, J., Ma, D., Majoros, W., McDaniel, J., Murphy, S., Newman, M., Nguyen, T., Nguyen, N., Nodell, M., Pan, S., Peck, J., Rowe, W., Sanders, R., Scott, J., Simpson, M., Smith, T., Sprague, A., Stockwell, T., Turner, R., Venter, E., Wang, M., Wen, M., Wu, D., Wu, M., Xia, A., Zandieh, A., and Zhu, X. (2001) The sequence of the human genome, *Science*, *291*, 1304-1351.
- Sparks, A.B., Peterson S.N., Bell, C., Loftus, B.J., Hocking, L., Cahill, D.P., Frassica, F.J., Streeten, E.A., Levine, M.A., Fraser, C.M., **Adams, M.D.**, Broder, S., Venter, J.C., Kinzler, K.W., Vogelstein, B., Ralston, S.H. (2001) Mutation screening of the TNFRSF11A gene encoding receptor activator of NF kappa B (RANK) in familial and sporadic Paget's disease of bone and osteosarcoma. *Calcif. Tissue. Int.* 68:151-155.
- Mural, R.J., **Adams, M.D.**, Myers, E.W., Smith, H., Gabor Miklos, G.L., Wides, R., Halpern, A., Li, P.W., Sutton, G., Nadeau, J., Salzberg, S.L., Holt, R., Kodira, C.D., Lu, F., Evangelista, C.C., Gan, W., Heiman, T.J., Li, J., Merkulov, G.V., Naik, A.K., Qi, R., Wang, A., Wang, X., Yan, X., Yooseph, S., Zheng, L., Zhu, S.C., Biddick, K.B., Bolanos, R., Delcher, A., Dew, I., Fasulo, D., Flanigan, M., Huson, D., Kravitz, S., Miller, J.R., Mobarry, C., Reinert, K., Remington, K., Zhang, Q., Zheng, X.H., Nusskern, D., Lai, Z., Lei, Y., Zhong, W., Yao, A., Guan, P., Ji, R., Gu, Z., Wang, Z., Zhong, F., Xiao, C., Chiang, C.-C., Yandell, M., Wortman, J., Amanatides, P.G., Hladun, S., Pratts, E., Johnson, J., Dodson, K., Woodford, K., Houck, J.T., Evans, C., Gropman, B., Rusch, D., Venter, E., Wang, M., Smith, T., Houck, J.W., Tompkins, D.E., Haynes, C., Jacob, D., Chin, S.H., Allen, D., Dahlke, C., Sanders, B., Li, K., Liu, F., Levitsky, A., Majoros, W., Chen, Q., Xia, A., Lopez, J., Donnelly, M., Newman, M., Glodek, A., Kraft, C., Nodell, M., Beeson, K., Cai, A., Caulk, P., Chen, Y.H., Coyne, M., Dietz, S., Dullaghan, P., Fosler, C., Gire, C., Gocayne, J.D., Hoover, J., Howland, T., Ma, D., McIntosh, T., Murphy, B., Murphy, S., Nelson, K., Parker, K., Prudhomme, A., Puri, V., Qureshi, H., Raley, J.C., Reardon, M., Regier, M., Rogers, Y.C., Romblad, D., Scott, J., Scott, R., Sitter, C., Sprague, A., Stewart, E., Strong, R., Suh, E., Sylvester, K., Tint, N., Tsonis, C., Wang, G., Wang, G., Williams, M., Williams, S., Windsor, S., Wolfe, K., Wu, M., Zaveri, J., Zubeda, N., Subramanian, G. and Venter, J.C. (2002) A comparison of whole genome shotgun-derived mouse chromosome 16 and the human genome. *Science*, *296*:1661-1671.
- Bailey, J.A., Gu, Z., Clark, R.A., Reinert, K., Samonte, R.V., Schwartz, S.S., **Adams, M.D.**, Myers, G.W., Li, P.W., and Eichler, E.E. (2002) Recent segmental duplications in the human genome, *Science*, *297*:1003-7.
- Holt, R.A., Subramanian, G.M., Halpern, A., Sutton, G.G., Charlab, R., Nusskern, D.R., Wincker, P., Clark, A.G., Ribeiro, J.M.C., Wides, R., Salzberg, S.L., Loftus, B., Yandell, M., Majoros, W.H., Rusch, D.B., Lai, Z., Kraft, C.L., Abril, J.F., Anthouard, V., Baden, H., de Berardinis, V., Baldwin, D., Benes, V., Blass, C., Bolanos, R., Boscus, D., Barnstead, M., Cai, S., Center, A., Chatuverdi, K., Christophides, G.K., Chrystal, M.A., Clamp, M., Cravchik, A., Curwen, V., Dana, A., Delcher, A., Dew, I., Evans, C.A., Flanigan, M., Gu, Z., Guan, P., Guigo, R., Hillenmeyer, M.E., Hladun, S.L., Hogan, J.R., Hong, Y.S., Hoover, J., Jaillon, O., Ke, Z., Kodira, C., Kokoza, E., Letunic, I., Levitsky, A., Liang, Y., Lin, J.-J., Lobo, N.F., Lopez, J.R., Malek, J.A., Meister, S., Miller, J., Mobarry, C., Mongin, E., Murphy, S.D., Pfannkoch, C., Qi, R., Regier, M.A., Remington, K., Sharakov, M.V., Sitter, C.D., Shetty, J., Strong, R., Sun, J., Thomasova, D., Ton, L.Q., Unger, M.F., Walenz, B., Wang, A., Wang, J., Wang, X., Woodford, K.J., Wortman, J.R., Wu, M., Yao, A., Zdobnov, E., Zhang, H., Zhao, S., Zhu, S.C., Zhao, Q., Zhimulev, I., Coluzzi, M., della Torre, A., Louis, K., Roth, C.W., Kalush, F., Mural, R.J., Myers, E.W., **Adams, M.D.**, Smith, H.O., Broder, S., Gardner, M.J., Fraser, C.M., Birney, E., Bork, P., Brey, P.T., Venter, J.C., Weissenbach,

- J., Kafatos, F.C., Collins, F.H. and Hoffman, S.L. (2002) The genome sequence of the malaria mosquito *Anopheles gambiae*, *Science* 298:129-149.
- Gardner, M.J., Shallom, S., Carlton, J.M., Salzberg, S., Nene, V., Shoaibi, A., Ciecko, A., Lynn, J., Rizzo, M., Weaver, B., Jarrahi, B., Brenner, M., Parvizi, B., Tallon, L., Moazzez, A., Granger, D., Fujii, C., Hansen, C., Feldblyum, T., Peterson, J., Suh, B., Angiuoli, S., Pertea, M., Allen, J., Selengut, J., White, O., Cummings, L.M., Smith, H.O., **Adams, M.D.**, Venter, J.C., Carucci, D.J., Hoffman, S.L. and Fraser, C.M. (2002) Sequence of *Plasmodium falciparum* chromosomes 2, 10, 11, and 14. *Nature* 419:531-533.
- Celniker, S.E., Wheeler, D.A., Kronmiller, B., Carlson, J.W., Halpern, A., Patel, S., **Adams, M.D.**, Champe, M., Dugan, S.P., Frise, E., Hodgson, A., George, R.A., Hoskins, R.A., Lavery, T., Muzny, D.M., Nelson, C.R., Pacleb, J.M., Park, S., Pfeiffer, B.D., Richards, S., Sodergren, E.J., Svirskas, R., Taor, P.E., Wan, K., Stapleton, M., Sutton, G.G., Venter, J.C., Weinstock, G., Scherer, S.E., Myers, E.W., Gibbs, R.A., and Rubin, G.M. (2002) Finishing a whole genome shotgun: Release 3 of the *Drosophila melanogaster* euchromatic genome sequence. *Genome Biol.* 3(12):research0079.1-0079.14.
- Wiltshire, T., Pletcher, M.T., Batalov, S., Barnes, W., Tarantino, L.M., Cooke, M.P., Wu, H., Smylie, K., Santrosyan, A., Copeland, N.G., Jenkins, N.A., Kalush, F., Mural, R.J., Glynne, R.J., Kay, S.A., **Adams, M.D.**, and Fletcher, C.F. (2003) Genome-wide SNP analysis defines haplotype patterns, *Proc. Natl. Acad. Sci. USA*, 100:3380-3385.
- Bernardo Carvalho, A., Vibranovski, M.D., Carlson, J.W., Celniker, S.E., Hoskins, R.A., Rubin, G.M., Sutton, G.G., **Adams, M.D.**, Myers, E.W. and Clark, A.G. (2003) Y chromosome and other heterochromatic sequences of the *Drosophila melanogaster* genome: how far can we go? *Genetica*, 117:227-237.
- Scherer, S.W., Cheung, J., MacDonald, J.R., Nakabayashi, K., Herbrick, J.-A., Skaug, J., Khaja, R., Zhang, J., Hudek, A.K., Li, M., Haddad, M., Carson, A.K., Duggin, G.E., Fernandez, B.A., Kanematsu, E., Katiree, L., Gentles, S., Christopolous, C.C., Choufani, S., Kwasnicka, D., Zhang, H., Zeesman, S., Chitayat, D., Shuman, C., Weksberg, R., Zackai, E.H., Grebe, T.A., Cox, S.R., Kirkpatrick, S.J., Rahman, N., Friedman, J.M., Heng, H.H.Q., Pelicci, P., Lococo, F., Bellonie, E., Shaffer, L.G., Summers, A.M., Gripp, K.W., Roberts, W., Szatmari, P., Winsor, E.J.T., Teebi, A., Minassian, B.A., Kere, J., Armengol, L., Pugana, M.A., Estivill, X., Wilson, M.D., Koop, B.F., Tosi, S., Moore, G.E., Boright, A.P. Kerem, B., Kroisel, P.M., Petek, E., Oscier, DG., Mould, S.J., Döhner, H., Döhner, K., Vincent, J.B., Osborne, L.R., Rommens, J.M., Venter, J.C., Li, P.W., Mural, R.M., **Adams, M.D.**, and Tsui, L.-C. (2003) Human chromosome 7: DNA sequence and biology, *Science*, 300:767-772.
- Waters, E., Hohn, M.J., Ahel, I., Graham, D.E., **Adams, M.D.**, Barnstead, M., Beeson, K.Y, Bibbs, L., Bolanos, R., Keller, M., Kretz, K., Lin, X., Mathur, E., Ni, J., Podar, M., Richardson, T., Sutton, G.G., Simon, M., Söll, D., Stetter, K.O., Short, J.M., and Noordewier, M. (2003) The genome of *Nanoarchaeum equitans*: Insights into early archaeal evolution and derived parasitism *Proc. Natl. Acad. Sci. USA*, 100: 12984-12988.
- El-Sayed, N.M.A., Ghedin, E., Song, J., MacLeod, A., Bringaud, F., Larkin, C., Wanless, D., Peterson, J., Hou, L., Taylor, S., Tweedie, A., Biteau, N., Khalak, H.G., Lin, X., Mason, T., Hannick, L., Caler, E., Blandin, G., Bartholomeu, D., Simpson, A.J., Kaul, S., Zhao, H., Pai, G., Van Aken, S., Utterback, T., Haas, B., Koo, H.L., Umayam, L., Gerrard, C., Leech, V., Qi, R., Zhou, S., Schwartz, D., Feldblyum, T., Salzberg, S., Tait, A., Turner, C.M.R., Ullu, E., White, O., Melville, S., **Adams, M.D.**, Donelson, J.E., and Fraser, C.M. (2003) The sequence and analysis of *Trypanosoma brucei* chromosome II, *Nucl. Acids Res.* 31:4856-63.
- Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D., Lu, F., Murphy, B., Ferreira, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., **Adams, M.D.**, and Cargill, M. (2003) Inference of extensive non-neutral evolution from human-chimp-mouse orthologous gene trios. *Science* 302: 1960-1963.
- Istrail, S., Sutton, G.G., Florea, L., Halpern, A.L., Mobarry, C.M., Lippert, R., Walenz, B., Shatkay, H., Dew, I., Miller, J.R., Flanigan, M.J., Edwards, N.J., Bolanos, R., Fasulo, D., Halldorsson, B.V., Hannenhalli, S., Turner, R., Yooseph, S., Lu, F., Nusskern, D.R., Shu, B.C., Zheng, X.H., Zhong, F., Delcher, A.L., Huson, D.H., Kravitz, S.A., Mouchard, L., Reinert, K., Remington, K.A., Clark,

- A.G., Waterman, M.S., Eichler, E.E., **Adams, M.D.**, Hunkapiller, M.W., Myers, E.W., and Venter, J.C. (2004) Whole-genome shotgun assembly and comparison of human genome assemblies, *Proc. Natl. Acad. Sci. USA*, 101:1916-1921.
- Olender, T., Fuchs, T., Linhart, C., Shamir, R., **Adams, M.**, Kalush, F., Khen, M., and Lancet, D. (2004) The canine olfactory subgenome, *Genomics* 83:361-372.
- Ghedini, E., Bringaud, F., Peterson, J., Myler, P., Berriman, M., Ivens, A., Andersson, B., Bontempi, E., Eisen, J., Angiuoli, S., Wanless, D., Von Arx, A., Murphy, L., Lennard, N., Salzberg, S., **Adams, M.D.**, White, O., Hall, N., Stuart, K. Fraser, C.M., El-Sayed, N.M.A. (2004) Gene synteny and evolution of genome architecture in trypanosomatids. *Mol Biochem Parasitol.* 134:183-91.
- Rat Genome Sequencing Project Consortium. (2004) Genome sequence of the Brown Norway rat yields insights into mammalian evolution. *Nature* 428:493-521.
- Nielson, R., Bustamante, C., Clark, A.G., Glanowski, S., Sackton, T.B., Hubisz, M.J., Fledel-Alon, A., Tanenbaum, D.M., Civello, D., White, T.J., Sninsky, J.J., **Adams, M.D.**, and Cargill, M. (2005) A scan for positively selected genes in the genomes of humans and chimpanzees, *PLoS Biology*, 3(6): e170.
- Berriman M., Ghedin E., Hertz-Fowler C., Blandin G., Renauld H., Bartholomeu D.C., Lennard N.J., Caler E., Hamlin N.E., Haas B., Bohme U., Hannick L., Aslett M.A., Shallom J., Marcello L., Hou L., Wickstead B., Alsmark U.C., Arrowsmith C., Atkin R.J., Barron A.J., Bringaud F., Brooks K., Carrington M., Cherevach I., Chillingworth T.J., Churcher C., Clark L.N., Corton C.H., Cronin A., Davies R.M., Doggett J., Djikeng A., Feldblyum T., Field M.C., Fraser A., Goodhead I., Hance Z., Harper D., Harris B.R., Hauser H., Hostetler J., Ivens A., Jagels K., Johnson D., Johnson J., Jones K., Kerhornou A.X., Koo H., Larke N., Landfear S., Larkin C., Leech V., Line A., Lord A., Macleod A., Mooney P.J., Moule S., Martin D.M., Morgan G.W., Mungall K., Norbertczak H., Ormond D., Pai G., Peacock C.S., Peterson J., Quail M.A., Rabinowitsch E., Rajandream M.A., Reitter C., Salzberg S.L., Sanders M., Schobel S., Sharp S., Simmonds M., Simpson A.J., Tallon L., Turner C.M., Tait A., Tivey A.R., Van Aken S., Walker D., Wanless D., Wang S., White B., White O., Whitehead S., Woodward J., Wortman J., **Adams M.D.**, Embley TM., Gull K., Ullu E., Barry JD., Fairlamb A.H., Opperdoes F., Barrell B.G., Donelson J.E., Hall N., Fraser C.M., Melville S.E., El-Sayed N.M. (2005) The genome of the African trypanosome *Trypanosoma brucei*. *Science* 309:416-422.
- Bustamante, C.D., Nielsen, R., Fledel-Alon, A., Williamson, S., Todd Hubisz, M., Glanowski, S., Tanenbaum, D.M., White, T.J., Sninsky, J.J., **Adams, M.D.**, Cargill, M., and Clark, A.G. (2005) Natural selection on protein-coding genes in the human genome. *Nature*, 437:1153-1157.
- Kidd, J.M., Trevarthen, K.C., Tefft, D.L., Cheng, G., Mooney, M., and **Adams, M.D.** (2005) A catalog of non-synonymous polymorphism on mouse chromosome 16. *Mamm. Genome*, 16:925-933.
- Nickel, G.C., Tefft, D.L., and **Adams, M.D.** (2008) Human PAML Browser: A database of positive selection on human genes using phylogenetic methods, *Nucl. Acids Res*, 36(Database issue):D800-8. (Epub 10/25/07).
- Boyko, A.R., Williamson, S.H., Indap, A.R., Degenhardt, J.D., Hernandez, R.D., Lohmueller, K.E., **Adams, M.D.**, Schmidt, S., Sninsky, J.J., Sunyaev, S.R., White, T.J., Nielsen, R., Clark, A.G., and Bustamante, C.D. (2008) Assessing the evolutionary impact of amino acid mutations in the human genome. *PLoS Genet.*, 30:4(5):e1000083. PMC2377339
- Nickel, G.C., Tefft, D.L., Goglin, K., and **Adams, M.D.** (2008) An empirical test for branch-specific positive selection. *Genetics* 179:2183-93. PMC2516090
- Adams, M.D.**, Goglin, K., Molyneaux, N., Hujer, K.M., Lavender, H., Jamison, J.J., MacDonald, I.J., Martin, K.M., Russo, T., Campagnari, A.A., Hujer, A.M., Bonomo, R.A., and Gill, S.R. (2008) Comparative genome sequence analysis of multidrug resistant *Acinetobacter baumannii*. *J. Bacteriol.* 190:8053-64; published online October 17, 2008.
<http://www.ncbi.nlm.nih.gov/pubmed/18931120>
- Nielson, D.E., **Adams, M.D.**, Orr, C.M.D., Schelling, D.K., Eiben, R.M., Kerr, D.S., Anderson, J., Bassuk, A.G., Bye, A.M., Childs, A.-M., Clarke, A., Crow, Y.J., DeMarco, E., Dohna-Schwake, C., Dueckers, G., Gika, A.D., Giannis, D., Gorman, M., Grattan-Smith, P.J., Hackenberg, A., Kuster, A., Lentschig, M.G., Mastroyianni, S., Perrier, J., Schmitt-Mechelke, T., Skardoutsou, A., Uldall, P., van der Knapp, M., Goglin, K.C., Tefft, D.L., Aubin, C., de Jager, P., Hafler, D., and

- Warman, M.L. (2009) Infection-triggered familial or recurrent cases of acute necrotizing encephalopathy caused by mutations in a component of the nuclear pore, *RANBP2*. *Am J Human Genet.*, 84:1-8.
- Chan, E.R., Lavender, H., Li, G., Haviernik, P., Bunting, K.D., and **Adams, M.D.** (2009) An ENU-induced recessive mutation in *Mpl* leads to thrombocytopenia with overdominance. *Exp. Hematol.*, 37:276-84 (Epub 12/06/2008).
- Endimiani, A., Hujer, A.M., Perez, F., Bethel, C.R., Hujer, K.M., Kroeger, J., Oethinger, M., Paterson, D.L., **Adams, M.D.**, Jacobs, M.R., Diekema, D.J., Hall, G.S., Jenkins, S.G., Rice, L.B., Tenover, F.C., and Bonomo, R.A. (2009) Characterization of *bla*_{KPC}-containing *Klebsiella pneumoniae* isolates detected in different institutions in the Eastern United States. *J. Antimicrob. Chemother.*, 63:427-437 (Epub 1/20/2009). <http://www.ncbi.nlm.nih.gov/pubmed/19155227>
- Nielsen, R., Hubisz, M.J., Hellmann, I., Torgerson, D., Andres, A.M., Albrechtsen, A., Gutenkunst, R., **Adams, M.D.**, Cargill, M., Boyko, A., Indap, A., Bustamante, C.D., and Clark, A.G. (2009) Darwinian and demographic forces affecting human protein-coding genes. *Genome Res.*, 19:838-49 (Epub 3/11/2009).
- Hujer, K.M., Hujer, A.M., Endimiani, A., Thomson, J.M., **Adams, M.D.**, Goglin, K., Rather, P.N., Pennella, T.-T.D., Massire, C., Eshoo, M.W., Sampath, R., Blyn, L.B., Ecker, D.J., and Bonomo, R.A. (2009) Rapid determination of quinolone resistance in *Acinetobacter* spp. *J. Clin. Micro.* 47:1436-42. (Epub 3/18/09). <http://www.ncbi.nlm.nih.gov/pubmed/19297590>
- Torgerson, D.G., Boyko, A.R., Hernandez, R.D., Indap, A., Hu, X., White, T.J., Sninsky, J.J., Cargill, M., **Adams, M.D.**, Bustamante, C.D., and Clark, A.G. (2009) Evolutionary processes acting on candidate *cis* regulatory regions in humans inferred from patterns of polymorphism and divergence. *PLoS Genet.* 5(8): e1000592. PMC2714078
- Adams, M.D.**, Nickel, G.C., Bajaksouzian, S., Lavender, H., Murthy, A. R., Jacobs, M.R. and Bonomo, R.A. (2009) Resistance to colistin in *Acinetobacter baumannii* mediated by the PmrAB two-component system. *Antimicrob Agents Chemoth.* 53:3628–3634. <http://www.ncbi.nlm.nih.gov/pubmed/19528270> PMC2737849
- Perez, F., Endimiani, A., Ray, A.J., Decker, B.K., Wallace, C.J., Hujer, K.M., Ecker, D.J., **Adams, M.D.**, Toltzis, P., Dul, M.J., Windau, A., Bajakouszian, S., Jacobs, M.R., Salata, R.A., and Bonomo, R.A. (2010) Carbapenem-Resistant *Acinetobacter baumannii* and *Klebsiella pneumoniae* Across a Hospital System: Impact of Post-Acute Care Facilities on Dissemination, *J. Antimicrob. Chem.* 65(8):1807-18 (Epub 06/01/10). <http://www.ncbi.nlm.nih.gov/pubmed/20513702>
- Gray-McGuire, C., Guda, K., Adrianto, I., Lin, C.P., Natale, L., Potter, J.D., Newcomb, P., Poole, E.M., Ulrich, C.M., Lindor, N., Goode, E.L., Fridley, B.L., Jenkins, R., Le Marchand, L., Casey, G., Haile, R., Hopper, J., Gallinger, St., Baron, J.A., **Adams, M.D.**, Willis, J., Elston, R., Markowitz, S.D., and Wiesner, G.L. (2010) Confirmation of linkage to and localization of familial colon cancer risk haplotype on chromosome 9q22. *Cancer Res.* 70:5409-18 (Epub 06/15/10). PMID 20551049
- Larkin, E.K., Patel, S.R., Goodloe, R.J., Li, Y., Zhu, X., Gray-McGuire, C., **Adams, M.D.**, and Redline, S. (2010) A candidate gene study of obstructive sleep apnea in European-Americans and African Americans. *Am J Respir Crit Care Med* 182:947-53 (Epub 06/10/10). PMID: 20538960
- Adams, M.D.**, Chan, E.R., Molyneaux, N.D., and Bonomo, R.A. (2010) Genome-wide analysis of divergence of antibiotic resistance determinants in closely related isolates of *Acinetobacter baumannii*, *Antimicrob. Agents Chemoth.* 54:3569-77 (Epub 06/07/10) <http://www.ncbi.nlm.nih.gov/pubmed/20530228> PMC2934971.
- Ramirez, M.S., **Adams, M.D.**, Bonomo, R.A., Centron, D., and Tomalsky, M.E. (2011) Genomic analysis of *Acinetobacter baumannii* A118 by comparison of optical maps: identification of structures related to its susceptibility phenotype. *Antimicrob. Agents Chemoth.* 55:1520-1526 (Epub 1/31/11). <http://www.ncbi.nlm.nih.gov/pubmed/21282446>
- Zentner, G., Saihakova, A., Manaenkov, P., **Adams, M.D.**, and Scacheri, P. (2011) Integrative genomic analysis of human ribosomal DNA. *Nucl. Acids Res.* 39:4949-4960 Epub 2/25/2011. PMC3130253
- Baker, A.R., Zalwango, S., Malone, L. L., Igo, R. P., Qui, F., Nsereko, M., **Adams, M.D.**, Supelak, P., Mayanja-Kizza, H., Boom, W.H., and Stein, C.M. (2011) Genetic susceptibility to tuberculosis

- associated with Cathespin Z haplotype in Ugandan Household Contact Study. *Human Immunol.*, 72:426-30. Epub 2011 Feb 25 (PMC3078986)
- Mustafi, D., Kevany, B.M., Genoud, C., Okano, K., Cideciyan, A.V., Sumaroka, A., Roman, A.J., Jacobson, S.G., Engel, A., **Adams, M.D.**, and Palczewski, K. (2011) Defective phagocytosis in a mouse model of enhanced S-cone syndrome causes progressive degeneration. *FASEB J.*, 25:3157-76. (PMC3157681)
- Luo, G., Lin, L., Ibrahim, A.S., Baquir, B., Panapalangkoor, P., Bonomo, R.A., Doi, Y., **Adams, M.D.**, Russo, T.A., and Spellberg, B. (2012) Active and passive immunization Protects against lethal, extreme drug resistant-*Acinetobacter baumannii* infection. *PLoS ONE*, 7(1):e29446. PMC3254619
- Leidner, R.S., Ravi, L., Leahy, P., Chen, Y., Bednarchik, B., Streppel, M., Canto, M., Wang, J.S., Maitra, A., Willis, J., Markowitz, S.D., Barnholtz-Sloan, J., **Adams, M.D.**, Chak, A., and Guda, K. (2012). The microRNAs, MiR-31 and MiR-375, as candidate markers in Barrett's esophageal carcinogenesis. *Genes, Genomes, and Cancer* 51:473-9 [Epub 2/3/2012].
- Nickel, G., Barnholtz-Sloan, J., Gould, M.P., McMahon, S., Cohen, A., **Adams, M.D.**, Guda, K., Cohen, M., Sloan, A.E., and LaFramboise, T. (2012) Characterizing mutational heterogeneity in a glioblastoma patient with double recurrence. *PLoS ONE*, 7(4):e35262. PMC3335059
- Gillombardo, C., Yamauchi, M., **Adams, M.D.**, Dostal, J., Chai, S., Moore, M.W., Donovan, L., Han, F., and Strohl, K.P. (2012). Identification of Novel Mouse Genes Conferring Post-Hypoxic Pauses. *J. Appl. Physiol.*, 113:167-74. [Epub 04/26/2012]. PMC3404832
- Yu, X., Guda, K., Willis, J., Veigl, M., Wang, Z., Markowitz, S., **Adams, M.D.**, and Sun, S. (2012) How do alignment programs perform on sequencing data with varying qualities and from repetitive regions? *BioData Mining*, 5:6. PMC3414812
- Baker, A.R., Qiu, F., Randhawa, A.K., **Adams, M.D.**, Shey, M., Barnholtz-Sloan, J.S., Miyanja-Kizza, H., Kaplan, G., Hanekom, W.A., Bom, W.H., Hawn, T.R., and Stein, C.M. (2012) Genetic variation in TLR genes in Ugandan and South African populations and comparison with HapMap data. *PLoS ONE*, 7(10): e47597. doi:10.1371/journal.pone.0047597. PMC3480404
- Lin, L., Tan, B., Pantapalangkoor, P., Ho, T., Baquir, B., Tomaras, A., Montgomery, J., Reilly, U., Hujer, K., Bonomo, R., Fernandez, L., Hancock, R., **Adams, M.D.**, French, S., Buslon, V., and Spellberg, B. (2012) Inhibition of LpxC Protects Mice from Resistant *Acinetobacter baumannii* by Modulating Inflammation and Enhancing Phagocytosis. *mBio*, 3(5) pii:e00312-12. PMC3518917.
- Adams, M.D.**, Veigl, M.L., Wang, Z., Molyneaux, N., Sun, S., Guda, K., Yu, X., Markowitz, S.D., and Willis, J. (2012) Global mutational profiling of formalin-fixed human colon cancers from a pathology archive. *Mod. Pathol.* 25:1599-608 [Epub Aug 10, 2012]. PMC3697090
- Peleg, A.Y., de Briej, A., **Adams, M.D.**, Cerqueira, G.M., Mocali, S., Galardini, M., Nibbering, P.H., Earl, A.M., Ward, D.V., Paterson, D.L., Seifert, H., and Dijkshoorn, L. (2012) The success of *Acinetobacter* species: Genetic, metabolic, and virulence attributes. *PLoS ONE*, 7(10):e46984. PMC3483291
- Santos-Cortez, R.L., Lee, K., Basit, S., Pollack, L.M., **Adams, M.D.**, Khan, S., Andrade-Elizondo, P.B., Antonellis, P., Chiu, I., Azeem, Z., Smith, J.D., University of Washington Center for Mendelian Genomics, Nickerson, D.A., McDermott, B.M., Jr., Ahmad, W., and Leal, S.M. (2013) Lysyl-tRNA Synthetase (KARS) Mutations Cause Autosomal Recessive Nonsyndromic Hearing Impairment DFNB89. *Am. J. Human Genet.*, Am J Hum Genet. 2013 93(1):132-40 Epub 6/12/13. PMC3710764
- Pelletier, M.R., Casella, L.G., Jones, J.W., **Adams, M.D.**, Zurawski, D.V., Hazlett, K.R.O., Dohei, Y., and Ernst, R.K. (2013) Unique structural modifications are present in the LPS from colistin-resistant strains of *Acinetobacter baumannii*. *Antimicrob. Agents Chemoth.*, 57:4831-40; Epub 7/22/13. PMC3811424.
- Yooseph, S., Andrews-Pfannkoch, Tenney, A., McQuaid, J., Williamson, S., Thiagarajan, M., Bрами, D., Zeigler-Allen, L., Hoffman, J., Goll, J., Fadrosh, D., Glass, J., **Adams, M.D.**, Friedman, R., and Venter, J.C. (2013) A metagenomic framework for the study of airborne microbial communities. *PLoS One*, 8(12):e81862. PMC3859506

- Wright, M.S., Haft, D.H., Harkins, D.M., Perez, F., Hujer, K.M., Bajaksouzian, S., Benard, M.F., Jacobs, M.R., Bonomo, R.A., and **Adams, M.D.** (2014) New insights into dissemination and variation of the health care-associated pathogen *Acinetobacter baumannii* from genomic analysis. *mBio*, 5(1) pii: e00963-13. [PMC3903280](#)
- Jadlowsky, J.K., Wong, J., Graham, A.C., Dobrowolski, C., Devor, R.L., **Adams, M.D.**, Fujinaga, K., and Karn, J. (2014) The negative elongation factor (NELF) is required for the maintenance of proviral latency but does not induce promoter proximal pausing of RNAP II on the HIV LTR. *Mol. Cell. Biol.*, 34(11):1911-28. Epub 3/17/14. [PMC4019061](#)
- Wright, M.S., Perez, F., Brinkac, L., Jacobs, M.R., Kaye, K.S., Cober, E., van Duin, D., Marshall, S.H., Hujer, A.M., Rodin, S.D., Hujer, K., Bonomo, R.A., and **Adams, M.D.** (2014) Population Structure of KPC-producing *Klebsiella pneumoniae* from Midwestern US hospitals. *Antimicrob Agents Chemoth.*, 58(8): 4961-4965. [PMC4136011](#)
- Feng, Z., Jia, X., **Adams, M.D.**, Ghosh, S.K., Bonomo, R.A., and Weinberg, A. (2014) Epithelial immune response to *Acinetobacter baumannii* challenge. *Infect Immun.* 82(11):4458-65 Epub Aug 11, 2014. [PMC4249312](#)
- Shah, A., Miller, C.J., Nast, C.C., **Adams, M.D.**, Truitt, B., Tayek, J., Tong, L., Mehtani, P., Monteon, F., Sedor, J.R., White, K., Mehlotra, R., LaPage, J., Dickson, P., Adler, S.G., and Iyengar, S.K. (2014) Severe vascular calcification and tumoral calcinosis in a family with hyperphosphatemia and an FGF23 gene mutation identified by exome sequencing. *Nephrol. Dial. Transpl.*, 29:2235-43. Epub 11/05/14. [PMC4240183](#)
- Bruhn, K.W., Pantapalangkoor, P., Nielsen, T., Tan, B., Junus, J., Hujer, K.M., Wright, M., Bonomo, R.A., **Adams, M.D.**, Chen, W., and Spellberg, B. (2015) Host fate is rapidly determined by innate effector microbial interactions during *Acinetobacter baumannii* bacteremia. *J. Infect. Dis.*, Epub 11/05/14.
- Wright, M.S., Suzuki, Y., Jones, M.B., Marshall, S.H., Rudin, S.D., van Duin, D., Kaye, K., Jacobs, M., Bonomo, R.A., and **Adams, M.D.** (2015) Genomic and transcriptomic analysis of colistin resistant clinical isolates of *Klebsiella pneumoniae* reveals multiple pathways of resistance. *Antimicrob. Agents Chemoth.* 59:536-43. Epub 11/10/14. [PMC4291396](#)
- Guda, K., Veigl, M.L., Varadan, V., Nosrati, A., Lakshmeswari, R., Lutterbaugh, J., Willson, J.K.V., Sedwick, D.W., Wang, Z., Molyneaux, N., Miron, A., **Adams, M.D.**, Elston, R.C., Markowitz, S.D., and Willis, J. (2015) Novel recurrently mutated genes in African American colon cancers. *Proc. Natl. Acad. Sci. USA*, 112(4):1149-54. Epub 01/12/15. [PMC4313860](#)
- Stefanini, L., Paul, D.S., Robledo, R.F., Chan, E.R., Getz, T.M., Campbell, R.A., Kechele, D.Ol, Casari, C., Piatt, R., Caron, K.M., Mackman, N., Weyrich, A.S., Parrott, M.C., Boulaftali, Y., **Adams, M.D.**, Peters, L.L., and Bergmeier, W. (2015) RASA3 inhibits RAP-dependent platelet activation and thrombosis. *J. Clin Invest.*, 125(4):1419-32. [PMC4396462](#)
- Wright, M.S., Stockwell, T.B., Beck, E., Busam, D.A., Bajaksouzian, S., Jacobs, M.R., Bonomo, R.A., and **Adams, M.D.** (2015) SISPA-Seq for rapid whole genome surveys of bacterial isolates, *Infect. Genet. Evol.* 32:191-198; Epub 03/19/2015.
- Markowitz, S.D., Nock, N.L., Schmidt, S.L., Stadler, Z.K., Vijai, J., Zhang, L., Willis, J.E., Scacheri, P., Veigl, M., **Adams, M.D.**, Raskin, L., Sullivan, J., Stratton, K., Shia, J., Ellis, N., Rennert, H.S., Manschreck, C., Li, L., Offit, K., Elston, R.C., Rennert, G., and Gruber, S. (2016) A germline variant on chromosome 4q31.1 associates with susceptibility to developing colon cancer metastasis, *PLoS ONE*, 11(1): e0146435.
- Wright, M.S., Iovleva, A., Jacobs, M.R., Bonomo, R.A., and **Adams, M.D.** (2016) Genome dynamics of multidrug-resistant *Acinetobacter baumannii* during infection and treatment, *Genome Med.* 8:26, doi:10.1186/s13073-016-0279-y. [PMC4776386](#)
- Adams, M.D.**, Bishop, B., and Wright, M.W. (2016) Quantitative assessment of insertion sequence impact on bacterial genome architecture, *Microbial Genomics*, doi: [10.1099/mgen.0.000062](#) published online 4/18/16.
- Rojas, L., Wright, M., De La Cadena, E., Motoa, G., Hujer, K., Villegas, M.V., **Adams, M.D.**, and Bonomo R. (2016) Initial assessment of the molecular epidemiology of blaNDM-1 in Colombia, *Antimicrob. Agents Chemoth.*, 60:4346-50.

- Weber, B.S., Hennon, S.W., Wright, M.S., de Barardinis, V., **Adams, M.D.**, and Feldman, M.F. (2016) Genetic dissection of the type VI secretion system in *Acinetobacter* and identification of a novel peptidoglycan hydrolase TagX required for its biogenesis. *mBio*, 7(5). pii: e01253-16.
[PMC5061870](#)
- Viau, R., Kiedrowski, L., Kreiswirth, B., **Adams, M.**, Perez, F., Marchaim, D., Guerrero, D., Kaye, K., Logan, L., Villegas, M.V., and Bonomo, R. (2016) Comparison of hsp60 sequencing and rep-PCR for molecular typing of *Enterobacter cloacae*, *Pathog. and Immun.*, in press.
- Mustafi, D., Kevany, B.M., Bai, X., Golczak, M., **Adams, M.D.**, Wynshaw-Boris, A., and Palczewski, K. (2016) Transcriptome analysis reveals rod/cone photoreceptor specific signatures across mammalian retinas. *Hum. Molec. Genet.*, pii: dww268.
- Chayda, K.D., Chen, L., Fouts, D.E., Sutton, G., Brinkac, L., Jenkins, S.G., Bonomo, R.A., **Adams, M.D.**, and Kreiswirth, B.N. (2016) Comprehensive genome analysis of carbapenemase-producing *Enterobacter* spp.: New insights into phylogeny, population structure and resistance mechanisms. *mBio* 7:e02093-16.
- Wright, M.S., Jacobs, M.R., Bonomo, R.A., and **Adams, M.D.** (2016) Transcriptome remodeling of *Acinetobacter baumannii* during infection and treatment. Submitted for publication.
- Wright, M.S., Mountain, S., Beeri, K., and **Adams, M.D.** (2016) Insertion sequence mobilization as an adaptive response to oxidative stress in *Acinetobacter baumannii*. Submitted for publication.

BOOK CHAPTERS, LETTERS, INVITED ARTICLES, REVIEW ARTICLES,
 and OTHER PUBLICATIONS:

- Adams, M.D.** and Oxender, D.L. 1989. Bacterial periplasmic binding protein tertiary structures (Minireview). *J. Biol. Chem.* 264:15739-42.
- Venter, J.C., **Adams, M.D.**, Martin-Gallardo, A., McCombie, W.R., and Fields, C. 1992. Genome sequence analysis: scientific objectives and practical strategies. *Trends in Biotech.*, 10:8-11.
- Adams, M.D.**, Fields, C., and Venter, J.C. 1992. Introns in sequence tags (Scientific correspondence). *Nature* 357:367-8.
- Adams, M.D.**, Kerlavage, A.R., Dubnick, M., Moreno, R.F., Fields, C., and Venter, J.C. 1993. Analysis of expressed sequence tags from human brain cDNAs. *Proceedings of the Second International Conference on Bioinformatics, Supercomputing, and Complex Genome Analysis*, (Lim, H.A., Fickett, J.W., Cantor, C.R., and Robbins, R.J., eds). Singapore:World Scientific Press, pp 113-119.
- Kerlavage, A.R., **Adams, M.D.**, Kelley, J.C., Dubnick, M., Powell, J., Shanmugam, P., Venter, J.C., and Fields, C. 1993. Analysis and management of data from high-throughput expressed sequence tag projects. *Proceedings 26th Hawaii Int. Conf. on System Sciences*, I:585-590 (IEEE Computer Society Press, Los Alamitos).
- Adams, M.D.**, Kerlavage, A.R., Kelley, J.M., Gocayne, J.D., Fields, C., Fraser, C.M., and Venter, J.C. 1994. A model for high-throughput automated DNA sequencing and analysis core facilities. *Nature* 368:474-475.
- Adams, M.D.** 1994. Expressed sequence tags as tools for physiology and genomics. In: Automated DNA Sequencing and Analysis, M.D. Adams, C. Fields, and J.C. Venter, eds. Academic Press, London, pp. 71-76.
- Fields, C., **Adams, M.D.**, White, O., and Venter, J.C. 1994. How many genes in the human genome? *Nature Genet.* 7:345-346.
- Adams, M.D.** 1995. Progress towards a complete set of human genes. In: *Genomes, Molecular Biology, and Drug Discovery* (M.J. Browne and P.L. Thurlby, eds.) Academic Press, London, pp 15-26.
- Kerlavage, A. R., FitzHugh, W. , Glodek, A., Kelley, J., Scott, J., Shirley, R., Sutton, G., Wai-Chiu, M., White, O. and **Adams, M.D.**. 1995. Data management and analysis for high-throughput DNA sequencing projects *IEEE ENGINEERING IN MEDICINE AND BIOLOGY*, 14:710-717.
- Adams, M.D.** 1996. Serial analysis of gene expression: ESTs get smaller. *BioEssays*, 18:261-262.
- Kerlavage, A.R. and **Adams, M.D.** (1996) Progress toward a transcript map of the human genome. In Genomes of Plants and Animals: 21st Stadler Genetics Symposium (J.P. Gustafson and R.B. Flavell, Eds.), Plenum Press, New York, pp. 47-56

- Adams, M.D.** 1996. Progress toward a complete set of human genes. In Genomes, Molecular Biology, and Drug Discovery (M.J. Browne and P.L. Thurlby, Eds.), Academic Press, San Diego, CA, pp. 15-26.
- Rounsley, S.D., Glodek, A., Sutton, G., Shirley, R., **Adams, M.D.**, Venter, J.C., and Kerlavage, A.R. 1996. *Arabidopsis* ESTs at TIGR. *Weeds World* 3:26-33.
- Adams, M.D.** and Venter, J.C. 1996. Should non-peer reviewed raw DNA sequence data release be forced on the scientific community? *Science* 274:534-536.
- Jacobs, W., Brennan, P., Curlin, G., Ginsberg, A., **Adams, M.D.**, Fleischmann, R., Fraser, C., Venter, J.C., Shinnick, T., Bishai, W., Smith, H., Stover, K., Hatfull, G. 1996. Comparative sequencing (Scientific correspondence). *Science* 274:17-18.
- Bult, C.J., Blake, J., **Adams, M.**, White, O., Sutton, G., Clayton, R., Kerlavage, A., Fields, C., and Venter, J.C. 1997. The impact of rapid gene discovery technology on studies of evolution and biodiversity. In: Biodiversity II: Understanding and protecting our natural resources. E.O. Wilson, D. Wilson, and M. REaka-Kudla (eds.), Joseph Henry Press, Washington, D.C., pp. 289-299.
- Carucci D.J., Gardner M.J., Tettelin H., Cummings L.M., Smith H.O., **Adams M.D.**, Hoffman S.L., Venter J.C. (1998) The malaria genome sequencing project. *Expert Rev. Mol. Med.* 5:1-9.
- Venter, J.C., **Adams, M.D.**, Sutton, G.G., Kerlavage, A.R., Smith, H.O., Hunkapiller, M. 1998. Shotgun sequencing of the human genome. *Science* 280(5369):1540-1542.
- Subramanian, G., **Adams, M.D.**, Venter, J.C., and Broder, S. (2001) Implications of the human genome for understanding human biology and medicine. *JAMA* 286:2296-2307.
- Myers, E.W., Sutton, G.G., Smith, H.O., **Adams, M.D.**, and Venter, J.C. (2002) On the sequencing and assembly of the human genome. *Proc. Natl. Acad. Sci. USA* 99:3713.
- Adams, M.D.**, Sutton, G.G., Smith, H.O., Myers, E.W., and Venter, J.C. (2003) The independence of our genome assemblies. *Proc. Natl. Acad. Sci. USA*, 100:3025-3026.
- Adams, M.D.** (2003) ENU mutagenesis for pharma. *Drug Discovery Today*, 8:199-200.
- Mural, R.J., Myers, E.W., Smith, H., Gabor Miklos, G.L., Wides, R., Halpern, A., Li, P.W., Sutton, G., Nadeau, J.H., Salzberg, S.L., Holt, R., Evans, C.A., Lu, F., Biddick, K., Bonnazi, V., Delcher, A., Zheng, X.G., Yandell, M., Rusch, D., Majoros, W., Hoover, J., Wang, J., Venter, J.C., and **Adams, M.D.** (2003) A preliminary comparison of the mouse and human genomes. International Congress Series 1617.
- Clark, A.G., Glanowski, S., Nielsen, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D., Lu, F., Murphy, B., Ferreira, S., Wang, G., Zheng, X., White, T.J., Sninsky, J.J., **Adams, M.D.** and Cargill, M. (2003) Positive selection in the human genome inferred from human-chimp-mouse orthologous gene alignments. *Cold Spring Harbor Symp. Quant. Biol.*, 68:471-487.
- Adams, M.D.** (2005) Eukaryotic genomics. In Encyclopedia of Genetics, Genomics, Proteomics and Bioinformatics, (M.L. Dunn, L. Jorde, P. Little, and S. Subramanian, eds.), John Wiley & Sons, Ltd., West Sussex, UK.
- Adams, M.D.** (2005) Conserved sequences and the evolution of gene regulatory signals. *Curr. Opin. Genet. Dev.*, 15:628-633.
- Liu, G. and **Adams, M.D.** (2006) Genome resources and comparative analysis tools for cardiovascular research. In Methods in Molecular Medicine/Cardiovascular Disease, (Q. Wang, ed.), Humana Press, Totawa, NJ, pp. 101-124.
- Adams, M.D.** (2006) The Mouse Genome. In: Mouse in Biomedical Research, 2nd ed. Fox J, Barthold S, Davisson MT, Newcomer C, Quimby F, Smith A (eds.), Elsevier Press, Vol 1, pp 99-114.
- Guerrero, D., Perez, F., Conger, N.G., Solomkin, J.S., **Adams, M.D.**, Rather, P.N., and Bonomo, R.A. (2010) *Acinetobacter baumannii*-associated Skin and Soft Tissue Infections: Recognizing a Broadening Spectrum of Disease. *Surg. Infec. (Larchmt)* 11:49-57 (Epub 10/29/2009).
- Perez, F., Ponce-Terashima, R., **Adams, M.D.**, and Bonomo, R.A. (2011) Are we closing in on an “elusive enemy”? The current status of our battle with *Acinetobacter baumannii*. *Virulence*, 2:86-90.
- Venter, J.C., Smith, H.O., and **Adams, M.D.** (2015) The Sequence of the Human Genome. *Clin. Chem.* 61:1207-8. (Epub 7/16/2015).