

Alejandro A. Schäffer
Curriculum Vitae
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Carnegie-Mellon University, 1983
M.S. Mathematics, Honors Degree Program
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National Center for Human Genome Research, Merit Award, 1996
Fannie and John Hertz Foundation Fellowship, 1986–1988
National Science Foundation Graduate Fellowship, 1983–1986
Andrew Carnegie Society Scholarship, 1982–83
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2006–present Clinical Investigator, National Center for Biotechnology Information, NIH
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1998–present Computer Scientist, National Center for Biotechnology Information, NIH
1995–1998 Computer Scientist, National Center for Human Genome Research, NIH
1988–1996 Assistant Professor, Dept. of Computer Science, Rice University
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1988–89 Postdoctoral Member of Technical Staff, AT&T Bell Laboratories,
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1986–88 Research Student Associate, IBM Almadén Research Center,
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1985 Summer Member of Technical Staff, AT&T Bell Laboratories, Murray Hill, NJ
1985 Winter, Spring Research Assistant, Stanford University
1984 Autumn Teaching Assistant, Stanford University
1984 Summer Member of Technical Staff, AT&T Bell Laboratories, Murray Hill NJ
1983–84 Research Assistant, Stanford University
1980–83 Part-time programmer, Computer Science Department,
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Areas of Interest: Computational Biology, Algorithms, Biological Sequence Analysis,
Mammalian Genetics and Genomics, Primary Immunodeficiency Diseases

Publications:

1. “LUCIFER: A Latent, UNIX-Compatible, Interfaced File Emulator and Retriever”, Alejandro A. Schäffer, Carnegie-Mellon University, SPICE Document D007, 1981.
2. “A Polynomial Time Algorithm for Finding the Prime Factors of Cartesian-Product Graphs”, Joan Feigenbaum, John Hershberger, and Alejandro A. Schäffer, *Discrete Applied Mathematics* 12(1985), pp. 123–138.
3. “Recognizing Composite Graphs is Equivalent to Testing Graph Isomorphism”, Joan Feigenbaum and Alejandro A. Schäffer, *SIAM Journal on Computing* 15(1986), pp. 619–627.
4. “A Note on the Chromatic Number of the Alternative Negation of Two Graphs”, Alejandro A. Schäffer and Ashok Subramanian, *Colloquium Mathematicum* LV(1988), pp. 367–370.
5. “Convex Hulls of Piecewise-Smooth Jordan Curves”, Alejandro A. Schäffer and Christopher J. Van Wyk, *Journal of Algorithms* 8(1987), pp. 66–94.
6. “Shortest Prefix Strings Containing All Subset Permutations”, Alejandro A. Schäffer, *Discrete Mathematics* 64(1987), pp. 239–252.
7. “On Gossiping with Faulty Telephone Lines”, Ramsey W. Haddad, Shaibal Roy, and Alejandro A. Schäffer, *SIAM Journal on Algebraic and Discrete Methods* 8(1987) pp. 439–445.
8. “A Tighter Upper Bound on the Worst Case Behavior of Conway’s Parallel Sorting Algorithm”, Alejandro A. Schäffer, *Journal of Algorithms* 9(1988) pp. 321–342.
9. “Fast Parallel Algorithms for Chordal Graphs”, Joseph Naor, Moni Naor, and Alejandro A. Schäffer, (extended abstract) Proceedings of the 19th Annual ACM Symposium on Theory of Computing, 1987, pp. 355–364; (full paper) *SIAM Journal on Computing* 18(1989) pp. 327–349; more detailed version of full paper available as IBM Research Report RJ5629.
10. “Recognizing Bellman-Ford-Orderable Graphs”, Ramsey W. Haddad and Alejandro A. Schäffer, *SIAM Journal on Discrete Mathematics* 1(1988), pp. 447–471.
11. “Computing the Bump Number with Techniques from Two-Processor Scheduling”, Alejandro A. Schäffer and Barbara B. Simons, *Order* 5(1988), pp. 131–141.
12. “Time Bounds on Fault Tolerant Broadcasting”, David Peleg and Alejandro A. Schäffer, *Networks* 19(1989), pp. 803–822.
- 13a. “Storing and Searching a Multikey Table”, Amos Fiat, Moni Naor, Alejandro A. Schäffer, Jeanette P. Schmidt, and Alan Siegel, (extended abstract) Proceedings of the 20th Annual ACM Symposium on Theory of Computing, 1988, pp. 344–353.
- 13b. “An Implicit Data Structure for Searching a Multikey Table in Logarithmic Time”, Amos Fiat, J. Ian Munro, Moni Naor, Alejandro A. Schäffer, Jeanette P. Schmidt, and Alan Siegel, *Journal of Computer and System Sciences* 43(1991), pp. 406–424 (special issue for best papers presented at the 20th ACM Symposium on Computing); this is a full version of 13a.
14. “Graph Spanners”, David Peleg and Alejandro A. Schäffer, *Journal of Graph Theory* 13(1989), pp. 99–116. (cited > 100 times)
15. “A Faster Algorithm to Recognize Undirected Path Graphs”, Alejandro A. Schäffer, *Discrete Applied Mathematics* 43(1993), pp. 261–295.
16. “Recognizing Brittle Graphs: Remarks on a Paper of Hoàng and Khouzam”, Alejandro A. Schäffer, *Discrete Applied Mathematics* 31(1991), pp. 29–35.
17. “Optimal Node Ranking of Trees in Linear Time”, Alejandro A. Schäffer, *Information Processing Letters* 33(1989), pp. 91–96.
18. “Finding the Prime Factors of Strong Direct Product Graphs in Polynomial Time”, Joan Feigenbaum and Alejandro A. Schäffer, invited paper for an International Conference on Algebraic Graph Theory, Leibnitz, Austria, June 1989; *Discrete Mathematics* 109(1992), pp. 77–102 (special volume devoted to this conference).
19. “A Note on Finding a Strict Saddlepoint”, Daniel Bienstock, Fan Chung, Michael Fredman, Alejandro A. Schäffer, Peter W. Shor, and Subhash Suri, *American Mathematical Monthly*

- 98(1991), pp. 418–419.
- 20a. “Simple Local Search Problems That Are Hard to Solve”, Alejandro A. Schäffer and Mihalis Yannakakis, *SIAM Journal on Computing* 20(1991), pp. 56–87.
 - 20b. “On the Complexity of Local Search”, Christos H. Papadimitriou, Alejandro A. Schäffer, and Mihalis Yannakakis, (extended abstract) Proceedings of the 22nd Annual ACM Symposium on Theory of Computing, 1990, pp. 438–445 (This is a combined summary of 20a. and a later paper by Papadimitriou) (20a and 20b cited a total of > 50 times).
 21. “Parallel Batch Update of Minimum Spanning Trees”, Alejandro A. Schäffer and Peter J. Varman, Rice Univ. Comp. Sci. Tech. Rept. 90–140.
 22. “Faster Isometric Embedding in Products of Complete Graphs”, Franz Aurenhammer, Michael Formann, Ramana M. Idury, Alejandro A. Schäffer, and Frank Wagner, *Discrete Applied Mathematics* 52(1994), pp. 17–28.
 23. “Markov Analysis of Multiple Disk Prefetching for External Mergesort”, Vinay Sadananda Pai, Alejandro A. Schäffer, and Peter J. Varman, (extended abstract) Proceedings of 21st International Conference on Parallel Processing, 1992, pp. III-272–279; (full paper with slightly altered title) *Theoretical Computer Science* 128(1994), pp. 211–239.
 24. “Triangulating Three-Colored Graphs in Linear Time and Linear Space”, Ramana M. Idury and Alejandro A. Schäffer, *SIAM Journal on Discrete Mathematics* 6(1993), pp. 289–293.
 25. “Dynamic Dictionary Matching with Failure Functions”, Ramana M. Idury and Alejandro A. Schäffer, (extended abstract) 3rd Combinatorial Pattern Matching Conference, 1992, Lecture Notes in Computer Science 644, pp. 276–287; (full paper) *Theoretical Computer Science* 131(1994), pp. 295–310.
 26. “Optimal Edge Ranking of Trees in Polynomial Time”, Pilar de la Torre, Raymond Greenlaw, and Alejandro A. Schäffer, (extended abstract) Proceedings of the 4th Annual ACM-SIAM Symposium on Discrete Algorithms, 1993, pp. 138–144; (full paper) *Algorithmica* 13(1995), pp. 592–618.
 27. “Improved Dynamic Dictionary Matching”, Amihoud Amir, Martin Farach, Ramana M. Idury, Johannes A. LaPoutre, and Alejandro A. Schäffer, (extended abstract) Proceedings of the 4th Annual ACM-SIAM Symposium on Discrete Algorithms, 1993, pp. 392–401; (full paper) *Information and Computation* 119(1995), pp. 258–282.
 28. “Faster Sequential Genetic Linkage Computations”, Robert W. Cottingham Jr., Ramana M. Idury, and Alejandro A. Schäffer, *American Journal of Human Genetics* 53(1993), pp. 252–263. (cited > 1,100 times)
 29. “Multiple Matching of Rectangular Patterns”, Ramana M. Idury and Alejandro A. Schäffer, (extended abstract) Proceedings of the 25th Annual ACM Symposium on Theory of Computing, 1993, pp. 81–90; (full paper) *Information and Computation* 117(1995), pp. 78–90.
 30. “Multiple Matching of Parameterized Patterns”, Ramana M. Idury and Alejandro A. Schäffer, (extended abstract) 5th Combinatorial Pattern Matching Conference, 1994, Lecture Notes in Computer Science 807, pp. 226–239; (full paper) invited to *Theoretical Computer Science* 154(1996), pp. 203–224.
 31. “Parallelization of General Linkage Analysis Problems”, Sandhya Dwarkadas, Alejandro A. Schäffer, Robert W. Cottingham Jr., Alan L. Cox, Peter Keleher, and Willy Zwaenepoel, *Human Heredity* 44(1994), pp. 127–141.
 32. “Avoiding Recomputation in Linkage Analysis”, Alejandro A. Schäffer, Sandeep K. Gupta, K. Shriram, and Robert W. Cottingham Jr., *Human Heredity* 44(1994), pp. 225–237. (cited > 500 times)
 33. “Integrating Parallelization Strategies for Linkage Analysis”, Sandeep K. Gupta, Alejandro A. Schäffer, Alan L. Cox, Sandhya Dwarkadas, and Willy Zwaenepoel, *Computers and Biomedical Research* 28(1995), pp. 116–139.

- 34a. “Making the Shortest-Paths Approach to Sum-of-Pairs Multiple Sequence Alignment More Space Efficient in Practice”, Sandeep K. Gupta, John Kececioglu, and Alejandro A. Schäffer, (extended abstract of 34b.) 6th Combinatorial Pattern Matching Conference, 1995, Lecture Notes in Computer Science 937, pp. 128–143.
- 34b. “Improving the Practical Space and Time Efficiency of the Shortest-Paths Approach to Sum-of-Pairs Multiple Sequence Alignment”, Sandeep K. Gupta, John Kececioglu, and Alejandro A. Schäffer, (full paper of 34a.) *Journal of Computational Biology* 2(1995), pp. 459–472. (cited > 50 times)
35. “Linkage Analyses in Type I Diabetes Using CASPAR, a Software and Statistical Program for Conditional Analysis of Polygenic Diseases”, Jeremy Buhler, David Owerbach, Alejandro A. Schäffer, Marek Kimmel, and Kenneth H. Gabbay, *Human Heredity* 47(1997), pp. 211–222.
36. “Faster Linkage Analysis Computations for Pedigrees with Loops or Unused Alleles”, Alejandro A. Schäffer, *Human Heredity* 46(1996), pp. 226–235. (cited > 75 times)
37. “Automated Selection of STRP Markers for Whole Genome Screening for Segmental Aneuploidy”, Leslie G. Biesecker and Alejandro A. Schäffer, *Human Heredity* 47(1997), pp. 76–85.
38. “Exclusion of Candidate Loci and Cholesterol Biosynthetic Abnormalities in Familial Pallister-Hall Syndrome”, Leslie G. Biesecker, Seongman Kang, Alejandro A. Schäffer, Margaret Abbott, Richard I. Kelley, Jeffrey C. Allen, Carol Clericuzio, Theresa Grebe, Ann Olney, and John M. Graham Jr., *Journal of Medical Genetics* 33(1996), pp. 947–951.
39. “Scanning the Genome with 1,772 Microsatellite Markers in Search for a Bipolar Disorder Susceptibility Gene”, Mihael H. Polymeropoulos and Alejandro A. Schaffer, *Molecular Psychiatry* 1(1996), pp. 404–407.
40. “Fine Mapping of the Nail-Patella Syndrome Locus at 9q34”, Iain McIntosh, Mark V. Clough, Alejandro A. Schäffer, Erik G. Puffenberger, V. Kim Horton, Kathryn Peters, Margaret H. Abbott, Carmen M. Roig, Steven Cutone, Laurie Ozelius, David J. Kwiatkowski, Reed E. Pyeritz, Laura J. Brown, Richard M. Pauli, Mary Kay McCormick, Clair A. Francomano, *American Journal of Human Genetics* 60(1997), pp. 133–142.
41. “Mapping of a Gene for Parkinson’s Disease to Chromosome 4q21-q23” Mihael H. Polymeropoulos, Joseph J. Higgins, Lawrence I. Golbe, William G. Johnson, Susan E. Ide, Giuseppe Di Iorio, Giuseppe Sanges, Edward S. Stenroos, Lana T. Pho, Alejandro A. Schaffer, Alice M. Lazzarini Robert L. Nussbaum, Roger C. Duvoisin, *Science* 274(1996), pp. 1197–1199. (cited > 300 times)
42. “Genetic Heterogeneity and Clonal Evolution Underlying Development of Asynchronous Metastasis in Human Breast Cancer”, Tuula Kuukasjärvi, Ritva Karhu, Minna Tanner, Merketta Kähkönen, Alejandro Schäffer, Nina Nupponen, Sari Pennanen, Anne Kallioniemi, Olli-P. Kallioniemi, Jorma Isola, *Cancer Research* 57(1997), pp. 1597–1604. (cited > 150 times)
43. “Localization of a Gene for an Autosomal Recessive Form of Juvenile Parkinsonism to Chromosome 6q25.2-27”, Hiroto Matsumine, Masaaki Saito, Satoe Shimoda-Matsubayashi Hajime Tanaka, Atsushi Ishikawa, Yuko Nakagawa-Hattori, Masayuki Yokochi, Tomonori Kobayashi, Shuichi Igarashi, Hiroki Takano, Kazuhiro Sanpei, Ryoko Koike, Hideo Mori, Tomoyoshi Kondo, Yoshihiko Mizutani, Alejandro A. Schäffer, Yasuhiro Yamamura, Shigenobu Nakamura, Shigeki Kuzuhara, Shoji Tsuji, and Yoshikuni Mizuno, *American Journal of Human Genetics* 60(1997), 588–596. (cited > 150 times)
44. “Linkage Mapping and Phenotypic Analysis of Autosomal Dominant Pallister-Hall Syndrome”, Seongman Kang, Jeffrey Allen, John M. Graham Jr., Theresa Grebe, Carol Clericuzio, Nicholas Patronas, Frank Ondrey, Eric Green, Alejandro Schaffer, Margaret Abbott, Leslie G. Biesecker, *Journal of Medical Genetics* 34(1997), 441–446.
45. “Approximation Algorithms for a Genetic Diagnostics Problem”, S. Rao Kosaraju, Alejandro A. Schäffer, Leslie G. Biesecker, (invited paper) Proc. 5th International Workshop on Algo-

- rithms, 1997, and Data Structures, Lecture Notes in Computer Science 1272, 69–92. (refereed paper) *Journal of Computational Biology* 5(1998), 9–26.
46. “Automatic Selection of Loop Breakers for Genetic Linkage Analysis”, Ann Becker, Dan Geiger, Alejandro A. Schäffer, *Human Heredity* 48(1998), 49–60.
 47. “Gapped BLAST and PSI-BLAST – A New Generation of Protein Database Search Programs”, Stephen F. Altschul, Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, David J. Lipman, *Nucleic Acids Research* 25(1997), 3389–3402. (cited > 22,000 times)
 48. “Genetic and Physical Mapping of the McKusick-Kaufman Syndrome”, Deborah Stone, Richa Agarwala, Alejandro A. Schäffer, James L. Weber, David Vaske, Takaya Oda, Settara C. Chandrasekharappa, Clair A. Francomano, Leslie G. Biesecker, *Human Molecular Genetics* 7(1998), 475–481.
 49. “Refinement of the Gene Locus for Autosomal Recessive Juvenile Parkinsonism (AR-JP) on Chromosome 6q25.2-27 and Identification of Markers Exhibiting Linkage Disequilibrium”, Masaaki Saito, Hiroto Matsumine, Hajime Tanaka, Atsushi Ishikawa, Satoe Shimoda-Matsubayashi, Alejandro A. Schäffer, Yoshikuni Mizuno, Shoji Tsuji, (*Japanese*) *Journal of Human Genetics* 43(1998), 22–31.
 50. “Computing Probabilities of Homozygosity by Descent” Alejandro A. Schäffer, *Genetic Epidemiology* 16(1999), 135–149.
 51. “Coping with Complexity: Lessons from the Mathematical Sciences”, Alejandro A. Schäffer, *Human Genetics* 103(1998), 5–10. (invited paper, only editorial review)
 52. “Software for Constructing and Verifying Pedigrees Within Large Genealogies and an Application to the Old Order Amish of Lancaster County”, Richa Agarwala, Leslie G. Biesecker, Katherine A. Hopkins, Clair A. Francomano, Alejandro A. Schäffer, *Genome Research* 8(1998), 211–221.
 53. “Protein Sequence Similarity Searches Using Patterns as Seeds” Zheng Zhang, Alejandro A. Schäffer, Webb Miller, Thomas L. Madden, David J. Lipman, Eugene V. Koonin, Stephen F. Altschul, *Nucleic Acids Research* 26(1998), 3986–3990. (cited > 100 times)
 54. “Inverse Inbreeding Coefficient Problems with an Application to Linkage Analysis of Recessive Diseases in Inbred Populations”, Richa Agarwala, Leslie G. Biesecker, Alejandro A. Schäffer, (extended abstract) Proceedings of the 10th Annual ACM-SIAM Symposium on Discrete Algorithms, 1999, 840–841; (full paper) *Discrete Applied Mathematics* 104(2000), 3–44 (special issue on Computational Molecular Biology).
 55. “Inferring Tree Models for Oncogenesis from Comparative Genome Hybridization Data”, Richard Desper, Feng Jiang, Olli-P. Kallioniemi, Holger Moch, Christos H. Papadimitriou, Alejandro A. Schäffer, *Journal of Computational Biology* 6(1999), 37–51. (actually published in 2000) (cited > 50 times)
 56. “Evaluation of the Clonal Relationship Between Primary and Metastatic RCC by Comparative Genomic Hybridization”, Heidi Bissig, Jan Richter, Richard Desper, Verena Meier, Peter Schraml, Alejandro A. Schäffer, Guido Sauter, Michael J. Mihatsch, Holger Moch, *American Journal of Pathology* 155(1999), 267–274.
 57. “A Genetic Map of Microsatellites in the Domestic Cat (*Felis catus*)”, Marilyn Menotti-Raymond, Victor A. David, Leslie A. Lyons, Alejandro A. Schäffer, James F. Tomlin, Michelle K. Hutton, Stephen J. O’Brien, *Genomics* 57(1999), 9–23. (cited > 100 times)
 58. “*Atm* Haploinsufficiency Results in Increased Sensitivity to Sublethal Doses of Ionizing Radiation in Mice”, Carrolee Barlow, Michael A. Eckhaus, Alejandro A. Schäffer, Anthony Wynshaw-Boris, *Nature Genetics* 21(1999), 359–360. (cited > 50 times)
 59. “Towards a Complete North American Anabaptist Genealogy: A Systematic Approach to Merging Partially Overlapping Genealogy Resources”, Richa Agarwala, Leslie G. Biesecker,

- James F. Tomlin, Alejandro A. Schäffer, *American Journal of Medical Genetics* 86(1999), 156–161.
60. “Genetic Linkage of Hyper-IgE Syndrome to Chromosome 4”, Bodo Grimbacher, Alejandro A. Schäffer, Steven M. Holland, Joie Davis, John I. Gallin, Harry L. Malech, T. Prescott Atkinson, Bernd H. Belohradsky, Rebecca H. Buckley, Fausto Cossu, Teresa Español, Ben-Zion Garty, Nuria Matamoros, Laurie A. Myers, Robert P. Nelson, Hans D. Ochs, Eleonore D. Renner, Nele Wellinghausen, Jennifer M. Puck, *American Journal of Human Genetics* 65(1999), 735–744. (cited > 75 times)
 61. “IMPALA: Matching a Protein Sequence Against a Collection of PSI-BLAST-Constructed Position-Specific Score Matrices”, Alejandro A. Schäffer, Yuri I. Wolf, Chris P. Ponting, Eugene V. Koonin, L. Aravind, Stephen F. Altschul, *Bioinformatics* 15(1999), 1000–1011. (cited > 150 times)
 62. “Chromosome Abnormalities in Ovarian Adenocarcinoma III: Using Breakpoint Data to Infer and Test Mathematical Models for Oncogenesis”, Richard Simon, Richard Desper, Christos H. Papadimitriou, Amy Peng, Raymond Taetle, David S. Alberts, Jeffrey M. Trent, Alejandro A. Schaffer, *Genes, Chromosomes & Cancer* 28(2000), 106–120.
 63. “Genetic Modifiers of the Insulin-Resistance Phenotype in Mice”, Yoshiaki Kido, Neubert Philippe, Alejandro A. Schäffer, Domenico Accili, *Diabetes* 49(2000), 589–596.
 64. “Distance-Based Reconstruction of Tree Models for Oncogenesis”, Richard Desper, Feng Jiang, Olli-P. Kallioniemi, Holger Moch, Christos H. Papadimitriou, Alejandro A. Schäffer, *Journal of Computational Biology* 7(2000), 789–803. (actually published in 2001)
 65. “A Fast and Scalable Radiation Hybrid Map Construction and Integration Strategy”, Richa Agarwala, David L. Applegate, Donna Maglott, Gregory D. Schuler, Alejandro A. Schäffer, *Genome Research* 10(2000), 350–364. (cited > 50 times)
 66. “Somatic Deletions in Hereditary Breast Cancers Implicate 13q21 as a Putative Novel Breast Cancer Susceptibility Locus”, Tommi Kainu, Suh-Hang Hank Juo, Richard Desper, Alejandro A. Schäffer Elizabeth Gillanders, Ester Rozenblum, Diana Freas-Lutz, Don Weaver, Dietrich Stephan, Joan Bailey-Wilson, Olli-P. Kallioniemi, Mika Tirkkonen, Kirsi Sryjäkoski, Tuula Kuukasjärvi, Pasi Koivisto, Ritva Karhu, Kaija Holli, Adalgeir Arason, Gudrun Johannessdottir, Jon Thor Bergthrosson, Hrefna Johannsdottir, Valgardur Egilsson, Rosa Björk Barkardottir, Oskar Johannsson, Karin Haraldsson, Therese Sandberg, Eva Holmberg, Henrik Grönberg, Håkan Olsson, Åke Borg, Paula Vehmanen, Hannaleena Eerola, Päivi Heikkilä, Seppo Pyrhönen, Heli Nevanlinna, *Proceedings of the National Academy of Sciences USA* 97(2000), 9603–9608. (cited > 100 times)
 67. “A Novel Nematine Myopathy in the Amish Caused by a Mutation in Troponin T1”, Jennifer J. Johnston, Richard I. Kelley, Thomas O. Crawford, D. Holmes Morton, Richa Agarwala, Thorsten Koch, Alejandro A. Schäffer, Clair A. Francomano, Leslie G. Biesecker, *American Journal of Human Genetics* 67(2000), 814–821. (cited > 75 times)
 68. “Construction of Evolutionary Tree Models for Renal Cell Carcinoma from Comparative Genomic Hybridization Data”, Feng Jiang, Richard Desper, Christos H. Papadimitriou, Alejandro A. Schäffer, Jan Richter, Peter Schraml, Olli-P. Kallioniemi, Michael J. Mihatsch, Holger Moch, *Cancer Research* 60(2000), 6503–6509. (cited > 50 times)
 69. “Tree Models for Dependent Copy Number Changes in Bladder Cancer”, Alejandro A. Schäffer, Ronald Simon, Richard Desper, Jan Richter, Guido Sauter, *International Journal of Oncology* 18(2001), 349–354.
 70. “Towards a Complete North American Anabaptist Genealogy II: Analysis of Inbreeding”, Richa Agarwala, Alejandro A. Schäffer, James F. Tomlin, *Human Biology* 73(2001), 533–545.
 71. “Heritability of Life Span in the Old Order Amish”, Braxton D. Mitchell, Wen-Chi Hsueh, Terri M. King, Toni I. Pollin, John Sorkin, Richa Agarwala, Alejandro A. Schäffer, Alan R.

- Shuldiner, *American Journal of Medical Genetics* 102(2001), 346–352.
72. “Improving the Accuracy of PSI-BLAST Protein Database Searches with Composition-Based Statistics and Other Refinements”, Alejandro A. Schäffer, L. Aravind, Thomas L. Madden, Sergei Shavirin, John L. Spouge, Yuri I. Wolf, Eugene V. Koonin, Stephen F. Altschul, *Nucleic Acids Research* 29(2001), 2994–3005. (cited > 300 times)
 73. “Genomic Imbalances in the Progression of Pancreatic Endocrine Tumors”, Jianming Zhao, Holger Moch, Alexander F. Scheidweiler, Angela Baer, Alejandro A. Schäffer, Guido Sauter, Ernst J. M. Speel, Jürgen Roth, Philipp U. Heitz, Paul Komminoth, *Genes, Chromosomes & Cancer* 32(2001), 364–372.
 74. “Graph Models of Oncogenesis with an Application to Melanoma, Michael D. Radmacher, Richard Simon, Richard Desper, Raymond Taetle, Alejandro A. Schäffer, Mark A. Nelson, *Journal of Theoretical Biology* 212(2001), 535–548.
 75. “Immune Defect Causing Dominant Chronic Mucocutaneous Candidiasis and Thyroid Disease Maps to Chromosome 2p in a Single Family”, T. Prescott Atkinson, Alejandro A. Schäffer, Bodo Grimbacher, Harry W. Schroeder Jr., Cristina Woellner, Christa Zerbe, Jennifer M. Puck, *American Journal of Human Genetics* 69(2001), 791–803.
 76. “Stable Karyotypes in Epithelial Cancer Cell Lines Despite High Rates of Ongoing Structural and Numerical Chromosomal Instability”, Anna V. Roschke, Kristen Stover, Giovanni Tonon, Alejandro A. Schäffer, Ilan R. Kirsch, *Neoplasia* 4(2002), 19–31.
 77. “Genetic Differences Detected by Comparative Genomic Hybridization in Head and Neck Squamous Cell Carcinomas from Different Tumor Sites: Construction of Oncogenetic Trees for Tumor Progression”, Qiang Huang, Guo Pei Yu, Steven A. McCormick, Juan Mo, Bhakti Datta, Manoj Mahimkar, Philip Lazarus, Alejandro A. Schäffer, Richard Desper, Stimson P. Schantz, *Genes, Chromosomes & Cancer* 34(2002), 224–233. (cited > 50 times)
 78. “Mutant Deoxynucleotide Carrier is Associated with Congenital Microcephaly”, Marjorie J. Rosenberg, Richa Agarwala, Gerard Bouffard, Joie Davis, Giuseppe Fiermonte, Mark S. Hilliard, Thorsten Koch, Linda M. Kalikin, Izabela Makalowska, D. Holmes Morton, Elizabeth M. Petty, James L. Weber, Ferdinando Palmieri, Richard I. Kelley, Alejandro A. Schäffer, Leslie G. Biesecker, *Nature Genetics* 32(2002), 175–179. (cited > 50 times)
 79. “Second Generation Integrated Genetic Linkage/Radiation Hybrid Maps of the Domestic Cat (*Felis Catus*)”, M. Menotti-Raymond, V. A. David, Z. Q. Chen, K. A. Menotti, S. Sun, A. A. Schäffer, R. Agarwala, J. F. Tomlin, S. J. O’Brien, W. J. Murphy, *Journal of Heredity* 94(2003), 95–106. (special issue for papers presented at a symposium on Advances in Canine and Feline Genomics)
 80. “Linkage of Autosomal Dominant Common Variable Immunodeficiency to Chromosome 5p and Evidence for Locus Heterogeneity”, D. U. Braig, A. A. Schäffer, E. Glocker, U. Salzer, K. Warnatz, H. H. Peter, B. Grimbacher, *Human Genetics* 112(2003), 369–378.
 81. “A Genome-wide Scan for Open-Angle Glaucoma (POAG): The Barbados Family Study of Open-Angle Glaucoma, Barbara Nemesure, Xiaodong Jiao, Qimei He, M. Cristina Leske, Suh-Yuh Wu, Anselm Hennis, Nancy Mendell, Joy Redman, Henri-Jean Garchon, Richa Agarwala, Alejandro A. Schäffer, Fielding Hejtmancik, for the Barbados Family Study Group, *Human Genetics* 112(2003), 600–609.
 82. “Homozygous Loss of ICOS Is Associated with Adult-Onset Common Variable Immunodeficiency”, Bodo Grimbacher, Andreas Hutloff, Michael Schlesier, Erik Glocker, Klaus Warnatz, Ruth Dräger, Hermann Eibel, Beate Fischer, Alejandro A. Schäffer, Hans W. Mages, Richard A. Kroczyk, Hans H. Peter, *Nature Immunology* 4(2003), 261–268. (cited > 150 times)
 83. “Anabaptist Genealogy Database”, Richa Agarwala, Leslie G. Biesecker, Alejandro A. Schäffer, *American Journal of Medical Genetics/Seminars in Medical Genetics* 121C(2003), 32–37. (special issue on Amish genetics)

84. “Canine Imerslund-Gräsbeck Syndrome Maps to a Region Orthologous to HSA14q”, Qianchuan He, John C. Fyfe, Alejandro A. Schäffer, Adam Kilkenney, Petra Werner, Ewen F. Kirkness, Paula S. Henthorn, *Mammalian Genome* 14(2003), 758–764.
85. “Radiation Hybrid Mapping of 304 Novel Microsatellites in the Domestic Cat Genome”, M. Menotti-Raymond, V. A. David, R. Agarwala, A. A. Schäffer, R. Stephens, S. J. O’Brien, W. J. Murphy, *Cytogenetic and Genome Research* 102(2003), 272–276. (special issue on animal genomics)
86. “Reduced Incidence of Hip Fracture in the Old Order Amish”, Elizabeth A. Streeten, Daniel J. McBride, Amy L. Lodge, Toni I. Pollin, David G. Stinchcomb, Richa Agarwala, Alejandro A. Schäffer, Alan R. Shuldiner, Jay R. Shapiro, and Braxton D. Mitchell, Reduced Incidence of Hip Fracture in the Old Order Amish *Journal of Bone and Mineral Research* 19(2004), 308–313.
87. “A Microsatellite Polymorphism in Intron 2 of Human Toll-Like Receptor 2: Functional Implications and Racial Differences, Jae-Joon Yim, Li Ding, Alejandro A. Schäffer, Gye Young Park, Young-Soo Shim, Steven M. Holland, *FEMS Immunology and Medical Microbiology* 40(2004), 163–169.
88. “Tumor Classification Using Phylogenetic Methods on Expression Data”, Richard Desper, Javed Khan, Alejandro A. Schäffer, *Journal of Theoretical Biology* 228(2004), 477–496.
89. “Construction of Tree Models for Pathogenesis of Nasopharyngeal Carcinoma”, Zhongxi Huang, Richard Desper, Alejandro A. Schäffer, Zhihua Yin, Xin Li, Kaitai Yao, *Genes, Chromosomes & Cancer* 40(2004), 307–315.
90. “Interferon- γ Receptor 1 Promoter Polymorphisms: Population Distribution and Functional Implications”, Sergio D. Rosenzweig, Alejandro A. Schäffer, Li Ding, Rachel Sullivan, Balasz Enyedi, Jae-Joon Yim, James L. Cook, James M. Musser, Steven M. Holland, *Clinical Immunology* 112(2004), 113–119.
91. “The Genetics of Hypogammaglobulinemia”, Bodo Grimbacher, Alejandro A. Schäffer, Hans-Hartmut Peter, *Current Allergy and Asthma Reports* 4(2004), 349–358. (invited review article, only editorial review)
92. “A Structure-based Method for Protein Sequence Alignment” Maricel G. Kann, Paul Thiessen, Anna R. Panchenko, Alejandro A. Schäffer, Stephen F. Altschul, Steven H. Bryant, *Bioinformatics* 21(2005), 1451–1456.
93. “Clinical and PET Evaluation of Two Families with Parkinson Disease Caused by Mutation in the Kinase Domain of Dardarin, Encoded by *LRRK2*”, Dena G. Hernandez, Coro Paisán-Ruiz, Aideen McInerney-Leo, Shushant Jain, Andreas Meyer-Lindenberg, E. Whitney Evans, Karen F. Berman, Janel Johnson, Georg Auberger, Alejandro A. Schäffer, Grisel Lopez, Robert L. Nussbaum, Andrew B. Singleton, *Annals of Neurology* 57(2005), 453–456. (cited > 50 times)
94. “Aminonless Function Is Required for Cubilin Brush-Border Expression and Intrinsic Factor-Cobalamin (Vitamin B₁₂) Absorption *in vivo*”, Qianchuan He, Mette Madsen, Adam Kilkenney, Brittany Gregory, Erik I. Christensen, Henrik Vorum, Peter Højrup, Alejandro A. Schäffer, Ewen Kirkness, Stephan M. Tanner, Albert de la Chapelle, Urs Giger, Søren K. Moestrup, John C. Fyfe, *Blood* 106(2005), 1447–1453.
95. “A High-Resolution Physical Map of Equine Homologues of HSA19 Shows Divergent Evolution Compared to Other Mammals”, Candice Brinkmeyer-Langford, Terje Raudsepp, Eun-Joon Lee, Glenda Goh, Alejandro A. Schäffer, Richa Agarwala, Michelle L. Wagner, Teruaki Tozaki, James R. Mickelson, James E. Womack, Loren C. Skow, Bhanu P. Chowdhary, *Mammalian Genome* 16(2005), 631–649.
96. “Mutations in *TNFRSF13B* Encoding TACI Are Associated with Common Variable Immunodeficiency in Humans”, U. Salzer, H. M. Chapel, A. D. B. Webster, Q. Pan-Hammarström,

- A. Schmitt-Graeff, M. Schlesier, H. H. Peter, J. K. Rockstroh, P. Schneider, A. A. Schäffer, L. Hammarström, B. Grimbacher, *Nature Genetics* 37(2005), 820–828. (cited > 100 times)
97. “A Comprehensive Continuous-Time Model for the Appearance of CGH Signal Due to Chromosomal Missegregations During Mitosis”, Richard Desper, Michael Difilipantonio, Thomas Ried, Alejandro A. Schäffer, *Mathematical Biosciences* 197(2005), 67–87.
 98. “A Rhesus Macaque Radiation Hybrid Map and Comparative Analysis with the Human Genome”, William J. Murphy, Richa Agarwala, Alejandro A. Schäffer, Robert Stephens, Clarence Smith Jr., Nicole J. Crumpler, Victor A. David, Stephen J. O’Brien, *Genomics* 86(2005), 383–395.
 99. “Protein Database Searches Using Compositionally Adjusted Substitution Matrices”, Stephen F. Altschul, John C. Wootton, E. Michael Gertz, Richa Agarwala, Aleksandr Morgulis, Alejandro A. Schäffer, Yi-Kuo Yu, *FEBS Journal* 272(2005), 5101–5109.
 100. “A 1.3-Mb Interval Map of Equine Homologs of HSA2”, Michelle L. Wagner, Terje Raudsepp, Glenda Goh, Alejandro A. Schäffer, Richa Agarwala, Patricia K. Dranchak, Candice Brinkmeyer, Loren C. Skow, Bhanu P. Chowdhary, James R. Mickelson, *Cytogenetic and Genome Research* 112(2006), 227–234.
 101. “Does Having Children Extend Lifespan? A Genealogical Study of Parity and Longevity in the Amish”, P. F. McArdle, T. I. Pollin, J. R. O’Connell, J. D. Sorkin, R. Agarwala, A. A. Schäffer, E. A. Streeten, T. M. King, A. R. Shuldiner, B. D. Mitchell, *Journal of Gerontology, Series A: Biological and Medical Sciences* 61A(2006), 190–195.
 102. “HLA B44 is Associated with Decreased Severity of Autoimmune Lymphoproliferative Syndrome in Patients with CD95 Mutations (ALPS Type Ia)”, Marla M. Vacek, Alejandro A. Schäffer, Joie Davis, Roxanne E. Fischer, Janet K. Dale, Sharon Adams, Stephen E. Straus, Jennifer M. Puck, *Clinical Immunology* 118(2006), 59–65.
 103. “Analysis of Families with Common Variable Immunodeficiency (CVID) and IgA Deficiency Suggests Linkage of CVID to Chromosome 16q”, Alejandro A. Schäffer, Jessica Pfanstiel, A. David B. Webster, Alessandro Plebani, Lennart Hammarström, Bodo Grimbacher, *Human Genetics* 118(2006), 725–729.
 104. “WindowMasker: Window-Based Masker for Sequenced Genomes”, Aleksander Morgulis, E. Michael Gertz, Alejandro A. Schäffer, Richa Agarwala, *Bioinformatics* 22(2006), 134–141.
 105. “A Fast and Symmetric DUST Implementation to Mask Low-Complexity DNA Sequences”, Aleksandr Morgulis, E. Michael Gertz, Alejandro A. Schäffer, Richa Agarwala, *Journal of Computational Biology* 13(2006), 1028–1040.
 106. “Human Genetic Linkage Analysis”, Alejandro A. Schäffer, Chapter 17 of Handbook of Computational Molecular Biology, Srinivas Aluru (ed.), Chpman & Hall/CRC:Boca Raton, FL, 2006.
 107. “Genetic Alterations in Caspase-10 May Be Causative or Protective in Autoimmune Lymphoproliferative Syndrome”, Shigui Zhu, Amy P. Hsu, Marla M. Vacek, Lixin Zheng, Alejandro A. Schäffer, Janet K. Dale, Joie Davis, Roxanne E. Fischer, Stephen E. Straus, Donna Boruchov, Frank T. Saulsbury, Michael J. Lenardo, Jennifer M. Puck, *Human Genetics* 119(2006), 284–294.
 108. “Novel Gene Acquisition on Carnivore Y Chromosomes”, William J. Murphy, Alison J. Pearks Wilkerson, Terje Raudespp, Richa Agarwala, Alejandro A. Schäffer, Roscoe Stanyon, Bhanu P. Chowdhary, *PLoS Genetics* 2(2006), 0353–0363 (also labeled as article e43)
 109. “Identification of a Genomic Deletion in the *AP3B1* Gene Causing Hermansky-Pudlak Syndrome, Type 2”, Johannes Jung, Georg Bohn, Anna Allroth, Kaan Boztug, Gudrun Brandes, Inga Sandrock, Alejandro A. Schäffer, Chozhavendan Rathiman, Inga Köllner, Carmela Berger, Reinhard Schilke, Karl Welte, Bodo Grimbacher, Christoph Klein, *Blood* 108(2006), 362–369.

110. “Linkage of Autosomal Dominant Common Variable Immunodeficiency to Chromosome 4q”, Anemone Finck, Jos W. M. van der Meer, Alejandro A. Schäffer, Jessica Pfannstiel, Claire Fieschi, Alessandro Plebani, A. David B. Webster, Lennart Hammarström, Bodo Grimbacher, *European Journal of Human Genetics* 14(2006), 867–875.
111. “An ~140kb Deletion Associated with Feline Spinal Muscular Atrophy Implies an Essential *LIX1* Function for Motor Neuron Survival”, John C. Fyfe, Marilyn Menotti-Raymond, Victor A. David, Lars Brichta, Alejandro A. Schäffer, Richa Agarwala, William J. Murphy, William J. Wedemeyer, Brittany L. Gregory, Bethany G. Buzzell, Meghan C. Drummond, Brunhilde Wirth, Stephen J. O’Brien, *Genome Research* 16(2006), 1084–1090.
112. “A Homozygous Single-base Deletion in *MLPH* Causes the *Dilute* Coat Color Phenotype in the Domestic Cat”, Yasuko Ishida, Victor A. David, Eduardo Eizirik, Alejandro A. Schäffer, Beena A. Neelam, Melody E. Roelke, Steven S. Hannah, Stephen J. O’Brien, Marilyn Menotti-Raymond, *Genomics* 88(2006), 698–705.
113. “Retrieval Accuracy, Statistical Significance and Compositional Similarity in Protein Sequence Database Searches”, Yi-Kuo Yu, E. Michael Gertz, Richa Agarwala, Alejandro A. Schäffer, Stephen F. Altschul, *Nucleic Acids Research* 34(2006), 5966–5973.
114. “High-Resolution Gene Maps of Horse Chromosomes 14 and 21: Additional Insights into Evolution and Rearrangements of HSA5 Homologues in Mammals”, Glenda Goh, Terje Raudsepp, Keith Durkin, Michelle L. Wagner, Alejandro A. Schäffer, Richa Agarwala, Teruaki Tozaki, James R. Mickelson, Bhanu P. Chowdhary, *Genomics* 89(2007), 89–112.
115. “A 1.5 Megabase Resolution Radiation Hybrid Map of the Cat Genome and Comparative Analysis with the Canine and Human Genomes”, William J. Murphy, Brian Davis, Victor A. David, Richa Agarwala, Alejandro A. Schäffer, Alison J. Pearks Wilkerson, Beena Neelam, Stephen J. O’Brien, Marilyn Menotti-Raymond, *Genomics* 89(2007), 189–196.
116. “A Novel Human Primary Immunodeficiency Syndrome Caused by Deficiency of the Endosomal Adaptor Protein p14”, Georg Bohn, Anna Allroth, Gudrun Brandes, Jens Thiel, Erik Glocker, Alejandro A. Schäffer, Chozhavendan Rathinam, Nicole Taub, David Teis, Cornelia Zeidler, Ricardo A. Dewey, Robert Geffers, Jan Buer, Lukas A. Huber, Karl Welte, Bodo Grimbacher, Christoph Klein, *Nature Medicine* 13(2007), 38–45.
117. “Deficiency of HAX1 Causes Autosomal Recessive Severe Congenital Neutropenia (Kostmann Disease)”, Christoph Klein, Magda Grudzien, Giridharan Appaswamy, Manuela Germeshausen, Inga Sandrock, Alejandro A. Schäffer, Chozhavendan Rathinam, Kaan Boztug, Cornelia Zeidler, Beate Schwinzer, Nima Rezaei, Georg Bohn, Malin Melin, Göran Carlsson, Bengt Fadeel, Niklas Dahl, Jan Palmblad, Jan-Inge Henter, Bodo Grimbacher, Karl Welte, *Nature Genetics* 39(2007), 86–92. (cited > 50 times)
118. “Composition-Based Statistics and Translated Nucleotide Searches: Improving the TBLASTN Module of BLAST”, E. Michael Gertz, Yi-Kuo Yu, Richa Agarwala, Alejandro A. Schäffer, Stephen F. Altschul, *BMC Biology* 4(2006), article 41.
119. “Construction of a River Buffalo (*Bubalus bubalis*) Whole-Genome Radiation Hybrid Panel and Preliminary RH Mapping of Chromosomes 3 and 10”, M. E. J. Amaral, K. E. Owens, J. S. Elliott, C. Fickey, A. A. Schäffer, R. Agarwala, J. E. Womack, *Animal Genetics*, 38(2007), 311–314.
120. “*rh_tsp_map* 3.0: End-to-End Radiation Hybrid Mapping with Improved Speed and Quality Control”, Alejandro A. Schäffer, Edward Stallknecht Rice, William Cook, Richa Agarwala, *Bioinformatics* 23(2007), 1156–1158.
121. “The HyperIgE Syndrome and Mutations in *Tyk2*”, Cristina Woellner, Alejandro A. Schäffer, Jennifer M. Puck, Eleonore D. Renner, Constance Knebel, Steve M. Holland, Alessandro Plebani, Bodo Grimbacher, *Immunity* 26(2007), 535. (letter to the editor)
122. “Deconstructing Common Variable Immunodeficiency by Genetic Analysis”, Alejandro A.

- Schäffer, Ulrich Salzer, Lennart Hammarström, Bodo Grimbacher, *Current Opinion in Genetics and Development* 17(2007), 201–212. (invited review article, only editorial review)
123. “Preliminary Comparative RH Mapping Between River Buffalo Chromosome 6 (BBU6) and Bovine Chromosome 3 (BTA3)”, N. B. Stafuzza, P. Ianella, M. N. Miziara, R. Agarwala, A. A. Schäffer, P. K. Riggs, J. E. Womack, M. E. J. Amaral, *Animal Genetics* 38(2007), 406–409.
 124. “Mutation in *CEP290* Discovered for Cat Model of Human Retinal Blinding Disease”, Marilyn Menotti-Raymond, Victor A. David, Alejandro A. Schäffer, Robert Stephens, David Wells, Rajendra Kumar-Singh, Stephen J. O’Brien, Kristina Narfström, *Journal of Heredity* 98(2007), 211–220.
 125. “A Radiation Hybrid Map of River Buffalo (*Bubalus bubalis*) Chromosome One (BBU1)”, Melissa Nunes Miziara, Tom Goldammer, Nedenia B. Stafuzza, Richa Agarwala, Alejandro A. Schäffer, Janice S. Elliott, Penny K. Riggs, James E. Womack, M. Elisabete J. Amaral, *Cytogenetic and Genome Research* 119(2007), 100–104.
 126. “Investigations of the Y chromosome, Male Founder Structure and YSTR Mutation Rates in the Old Order Amish”, Toni I. Pollin, Daniel J. McBride, Richa Agarwala, Alejandro A. Schäffer, Alan R. Shuldiner, Braxton D. Mitchell, Jeffrey R. O’Connell, *Human Heredity* 65(2008), 91–104. (actually published in 2007)
 127. “Initial Sequence and Comparative Analysis of the Cat Genome”, Joan U. Pontius, James C. Mullikin, Douglas Smith, Agencourt Sequencing Team, Kerstin Lindblad-Toh, Sante Gnerre, Michele Clamp, Jean Chang, Robert Stephens, Beena Neelam, Natalia Volfovsky, Alejandro A. Schäffer, Richa Agarwala, Kristina Narfström, William J. Murphy, Urs Giger, Alfred L. Roca, Agostinho Antunes, Marilyn Menotti-Raymond, Naoya Yuhki, Jill Pecon-Slattey, Warren E. Johnson, Guillaume Bourque, Glenn Tesler, NISC Comparative Sequencing Program, and Stephen J. O’Brien, *Genome Research* 17(2007), 1675–1689.
 128. “Four Separate Mutations in the Feline *Fibroblast Growth Factor 5* Gene Determine the *Long-Haired* Phenotype in Domestic Cats”, James S. Kehler, Victor A. David, Alejandro A. Schäffer, Kristina Bajema, Eduardo Eizirik, David Ryugo, Steven S. Hannah, Stephen J. O’Brien, Marilyn Menotti-Raymond, *Journal of Heredity* 98(2007), 555–566.
 129. “*STAT3* Mutations in Hyper-IgE Syndrome”, Steven M. Holland, Frank R. DeLeo, Houda Z. Elloumi, Amy P. Hsu, Gulbu Uzel, Nina Brodsky, Alexandra F. Freeman, Andrew Demidowitch, Joie Davis, Maria L. Turner, Victoria L. Anderson, Dirk N. Darnell, Pamela Welch, Douglas B. Kuhns, David M. Frucht, Harry L. Malech, John I. Gallin, Scott D. Kobayashi, Adeline R. Whitney, Jovanka M. Voyich, James M. Musser, Cristina Woellner, Alejandro A. Schäffer, Jennifer M. Puck, Bodo Grimbacher, *The New England Journal of Medicine* 357(2007), 1608–1619.
 130. “Improved BLAST Searches Using Longer Words for Protein Seeding”, Sergey A. Shiryev, Jason S. Papadopoulos, Alejandro A. Schäffer, Richa Agarwala, *Bioinformatics* 23(2007), 2949–2951.
 131. “A Radiation Hybrid Map of River Buffalo (*Bubalus bubalis*) Chromosome 7 and Comparative Mapping to the Cattle and Human Genomes”, Tom Goldammer, Rosemarie Weikard, Melissa N. Miziara, Ronald M. Brunner, Richa Agarwala, Alejandro A. Schäffer, James E. Womack, M. Elisabete J. Amaral, *Cytogenetic and Genome Research* 119(2007), 235–241. (actually published in 2008)
 132. “First Radiation Hybrid Map of the River Buffalo X Chromosome (BBUX) and Comparison with BTAX”, P. Ianella, L. P. R. Venancio, N. B. Stafuzza, M. N. Miziara, R. Agarwala, A. A. Schäffer, P. K. Riggs, J. E. Womack, M. E. J. Amaral, *Animal Genetics* 39(2008), 196–200.
 133. “Genetic Heterogeneity in Severe Congenital Neutropenia: How Many Aberrant Pathways Can Kill A Neutrophil?”, Alejandro A. Schäffer, Christoph Klein, *Current Opinion in Allergy and Clinical Immunology* 7(2007), 481–494. (invited review article, lightly reviewed)

134. "Screening of Functional and Positional Candidate Genes in Families with Common Variable Immunodeficiency", Ulrich Salzer, Carla Neumann, Jens Thiel, Christina Woellner, Qiang Pan-Hammarström, Vassilis Lougaris, Tina Hagen, Johannes Jung, Jennifer Birmelin, Likun Du, Ayse Metin, A. David B. Webster, Alessandro Plebani, Viviana Moschese, Lennart Hammarström, Alejandro A. Schäffer, Bodo Grimbacher, *BMC Immunology* 9(2008), article 3.
135. "A 4103 Marker Integrated Map of the Horse Genome", Terje Raudsepp, Ashley Gustafson-Seabury, Keith Durkin, Michelle L. Wagner, Glenda Goh, Christopher M. Seabury, Candice Brinkmeyer-Langford, Eun-Joon Lee, Richa Agarwala, Edward Stallknecht Rice, Alejandro A. Schäffer, Teruaki Tozaki, Hiroshi Yasue, M. Cecilia T. Penedo, Leslie A. Lyons, Kamal A. Khazanedhari, Tosso Leeb, Ottmar Distl, Matthew M. Binns, James N. McLeod, James R. Mickelson, Bhanu P. Chowdhary, *Cytogenetic and Genome Research* 122(2008), 28-36.
136. "Database Indexing for Production MegaBLAST Searches", Aleksandr Morgulis, George Coulouris, Yan Raytselis, Thomas L. Madden, Richa Agarwala, Alejandro A. Schäffer, *Bioinformatics* 24(2008), 1757–1764.
137. "A Novel Syndrome with Severe Congenital Neutropenia Is Caused by Mutations in *G6PC3*", Kaan Boztug, Giridharan Appaswamy, Angel Ashikov, Alejandro A. Schäffer, Ulrich Salzer, Jana Diestelhorst, Manuela Germeshausen, Gudrun Brandes, Jacqueline Lee-Gossler, Fatih Noyan, Anna-Katharina Gatzke, Milen Minkov, Johann Greil, Christian Kratz, Theoni Petropoulou, Isabelle Pellier, Christine Bellané-Chantelot, Nima Rezaei, Kirsten Mönkemöller, Noha Irani-Hakimeh, Hans Bakker, Rita Gerardy-Schahn, Cornelia Zeidler, Bodo Grimbacher, Karl Welte, Christoph Klein, *The New England Journal of Medicine*, to appear.
138. "Relevance of Biallelic Versus Monoallelic *TNFRSF13B* Mutations in Distinguishing Disease-Causing from Risk-Increasing *TNFRSF13B* variants in antibody deficiency syndromes, Ulrich Salzer, Chiara Bacchelli, Sylvie Buckridge, Qiang Pan-Hammarström, Stephanie Jennings, Vassilis Lougaris, Astrid Bergbreiter, Tina Hagen, Jennifer Birmelin, Alessandro Plebani, A. David B. Webster, Hans-Hartmut Peter, Daniel Suez, Helen Chapel, Andrew Maclean-Tooke, Gavin P. Spickett, Stephanie Anover-Sombke, Hans D. Ochs, Simon Urschel, Bernd D. Belohradsky, Sanja Ugrinovic, Dinakantha S. Kumararatne, Tatiana C. Lawrence, Are M. Holm, Jose L. Franco, Ilka Schulze, Pascal Schneider, E. Michael Gertz, Alejandro A. Schäffer, Lennart Hammarström, Adrian J. Thrasher, H. Bobby Gaspar, Bodo Grimbacher, *Blood*, to appear.
139. "A High-Resolution Cat Radiation Hybrid and Intergated FISH Mapping Resource for Phylogenetic Studies across Felidae", Brian W. Davis, Terje Raudsepp, Alison J. Pearks Wilkerson, Richa Agarwala, Alejandro A. Schäffer, Marlys Houck, Oliver A. Ryder, Bhanu P. Chowdhary, William J. Murphy, *Genomics*, to appear.
140. "Application of Dissociation Curve Analysis to Radiation Hybrid Panel Gene Mapping: Generation of a Map of River Buffalo (*B. Bubalis*) Chromosome 20", Kelli J. Kochan, M. Elisabete J. Amaral, Richa Agarwala, Alejandro A. Schäffer, Penny K. Riggs, *BMC Genomics*, to appear.