

Dmitri A. Petrov

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Academic Position.

Professor, Department of Biology, Stanford University (2009 - present)

Date and Place of Birth.

February 8, 1969 in Moscow, Russia

Citizenship.

USA

Education.

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| Harvard University Society of Fellows | Junior Fellow (1997-2000) |
| Harvard University, Department of Organismic and Evolutionary Biology | Ph.D. in Biology (1997) |
| Moscow Institute of Physics and Technology | M.Sc. in Physics and Molecular Biology (1989) |

Research Experience.

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| 2009-now | Professor, Department of Biology, Stanford University, Stanford, USA |
| 2005-2009 | Associate Professor, Department of Biology, Stanford University, Stanford, USA |
| 2000-2005 | Assistant Professor, Department of Biology, Stanford University, Stanford, USA |
| 1998-2000 | Research Fellow, Department of Genetics, Harvard Medical School, Cambridge, Massachusetts, USA |
| 1992-1997 | Graduate Student, Harvard University, Department of Organismic and Evolutionary Biology, Cambridge, Massachusetts, USA |
| 1990-1992 | Research Assistant, Washington University School of Medicine, Department of Genetics, St. Louis, Missouri, USA |
| 1989-1990 | Research Assistant, Institute of Molecular Genetics, Moscow, Russia |
| 1987-1989 | M.S. Student, Institute of Molecular Genetics, Moscow, Russia |

Awards.

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| 2008 | Chambers Fellow |
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| 2005 | Hellman Faculty Award |
| 1995-1997 | Teaching excellence awards Genetics (1995 and 1997) and Introductory Molecular Biology (1995), Harvard University, Cambridge, Massachusetts |
| 1996 | Walter Fitch Prize for Best Student Paper The Society for Molecular Biology and Evolution, Tucson, Arizona |

Fellowships and Grants

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| 2007-2011 | National Institutes of Health, Center For Excellence in Genomic Science Grant, co-Principal Investigator (together with David Kingsley (PI), Richard Myers (co-PI), William Talbot (co-PI), Katherine Peichel (co-PI)) |
| 2006-2011 | National Institutes of Health, "Patterns of Background Nucleotide Substitution in the Human Lineage", Principal Investigator |
| 2003-2006 | National Science Foundation, "Population Analysis of All Transposable Elements in the Sequenced Drosophila Genome", Principal Investigator |
| 2003-2004 | National Science Foundation, "Genomic Analysis of the Sporophyte to Gametophyte Transition in Maize", co-Principal Investigator (PI Prof. Virginia Walbot, Stanford University) |
| 2003-2006 | Terman Award, Stanford University |
| 2003-2004 | Alfred P. Sloan Foundation Research Fellowship in Computational Molecular Biology |
| 2003 | Stanford University VPUE award |
| 2002 | Stanford University VPUE award |
| 2001 | Stanford University OTL award |
| 1998 | Harvard University William F. Milton Fund Award |
| 1997-2000 | Junior Fellowship, Harvard University Society of Fellows |

Invited Presentations.

- 2009
- International symposium "From sparse entities to crowded environments: numbers in living systems" (European interdisciplinary graduate school "Frontiers in Life Sciences", graduate student invitation) (upcoming)
 - Stanford Workshop in Biodemography, Stanford, CA (upcoming)
 - University of Washington, Dept. of Genome Sciences, Departmental Seminar
 - University of Toronto, Dept. of Ecology and Evolution, Departmental Seminar
 - Institute of Molecular Genetics of the Russian Academy of Sciences, Moscow, Russia
 - Moscow Conference on Computational Molecular Biology (MCCMB'09), Moscow, Russia
 - International Congress of SBE, Iowa City, Iowa
 - USC, Dept. of Molecular and Cellular Biology
 - UCLA, Dept. of Ecology and Evolution, Departmental Seminar
 - Cold Spring Harbor, Biology of Genomes Meeting, (contributed presentation)
 - Buck Institute Seminar

- 2008
- Cornell University, Dept. of Molecular Biology and Genetics Seminar Series
 - Wright State, Dept. of Biology "Darwin Bicentennial" Seminar Series
 - University of Santa Barbara, KITP, Workshop "Population Genetics and Genomics"
 - International Congress of SMBE, Barcelona, Spain
 - International Congress on Transposable Elements, Saint Malo, France
 - University of Georgia, Athens, Georgia
 - University of Auckland, New Zealand
- 2007
- Statistical Approaches to Inference of Selection Workshop, Vienna, Austria
 - National Center for Biological Sciences, Bangalore, India
 - UC Irvine, Ecology and Evolution Seminar Series
 - BioX "Talks in English"
 - Max Plank Institute for Molecular Genetics, Berlin, Germany
- 2006
- Beckman Symposium on Evolution, Stanford University
 - University of Chicago, Dept. of Ecol. and Evol., Departmental Seminar
 - 1st International Conference, "Genomic Impact of Eukaryotic Transposable Elements", Asilomar, CA
 - "Mobile DNA" ASM Meeting, Banff, Canada
- 2005
- UC Davis, Ecology and Evolution Seminar Series
 - ESEB Annual Meeting, Krakow, Poland
 - Universitat Autònoma de Barcelona, Barcelona, Spain, Departmental Seminar
 - Institut Jacques Monod, Departmental Seminar, Paris, France
 - 7th International SocBIN conference "Bioinformatics 2005", Tartu, Estonia
 - UC Riverside, Dept. of Biology, Departmental Seminar
 - University of Idaho, Dept. of Biol. Sciences., Departmental Seminar
 - NYU, Dept. of Biology, Departmental Seminar
- 2004
- UC San Diego, Ecology, Behavior, and Evolution Section Seminar
 - UC Berkeley, Computational and Genomic Biology Seminars Series
 - University of Arizona, Dept. of Ecology and Evolution, Departmental Seminar
- 2003
- The Iowa State University, Dept. of Ecol, Evol. & Org. Biology, Departmental Seminar
 - The Angiosperm Genome Size Workshop and Discussion meeting, RBG, Kew, London, UK
 - Human Genome Conference sponsored by DOE and JGI, Santa Fe, New Mexico
- 2002
- The University of Chicago, Dept. of Human Genetics, Departmental Seminar
 - University of Montpellier, France, Departmental Seminar
 - CNRS, Gif-sur-Yvette, France, Departmental Seminar.
 - Harvard University, Dept. of Org. and Evol. Biol., Departmental Seminar.
 - Intraclonal Genetic Variation Meeting, The Linnean Society of London, London, UK
- 2001
- Stanford University, Hopkins Marine Station, Departmental Seminar
 - University of Santa Barbara, Institute of Theoretical Physics, Workshop "Statistical Physics and Biological Information" (2 lectures)
- 1999
- University of Chicago, EEB Departmental Seminar
 - University of Massachusetts, Departmental Seminar
- 1998

- Evolutionary Genetics Meeting in honor of Richard Lewontin, Harvard University, Cambridge, MA
- 1994
- New England Molecular Evolutionary Biology Conference, Harvard University, Cambridge, MA

Teaching.

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| 2006 | Second International Postgraduate Course in Genomics, Barcelona, Spain |
| Annually | Fundamentals of Molecular Evolution (Winter Quarter) (Bio113/244) |
| Annually | Evolution (in the Biological Core sequence) (Spring Quarter) (Bio43) |
| 2002-2007 | Ecology, Evolution, and Natural History of Baja California (2 week-long Summer class with 12 students in Baja California taught jointly with 3 other instructors) (Bio 100) |

Professional activities.

Editorial responsibilities.

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| 2009-present | Associate Editor, Mobile DNA |
| 2007-present | Associate Editor, PLoS Genetics |
| 2003-present | Associate Editor, Journal of Molecular Evolution |

Other professional responsibilities.

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| 2006-present | Member, NSF Evolutionary Genetics Panel |
| 2006-present | Member, NIH Kirschstein-NRSA Individual Fellowship Panel |
| 2003-present | Outside reviewer, Population Biology panel at the NSF |
| 2003-present | Outside reviewer, Science Foundation Ireland |
| 2003-present | Outside reviewer, Israel Science Foundation |
| 2000-2002 | Edited a special issue of the journal <i>Genetica</i> on "Evolution of Genome size" (volume 115) |
| 2001 | Organized a workshop (together with Paul Sniegowski, University of Pennsylvania) "Role of mutation in evolution" at the 2001 Conference of the Society for Molecular Biology and Evolution |

Publications from the Petrov Laboratory.

79. Singh, N.D., Benssason, D. and **Petrov, D.A.** Evolution of genome size in grasshoppers. *Mol. Biol. Evol.*, (in preparation).
78. Aminetzach, Y.T., Macpherson, J.M., and **D. A. Petrov.** Parallel evolution at the pesticide resistance locus *CHKov1* in *Drosophila*. *Mol. Biol. Evol.*, (in preparation).
77. Messer, P., and **Petrov, D.A.** Population genetics of parallel bottlenecks. *Genetics*, (in preparation).

76. Roux, J., Davis, J.C, and **Petrov, D.A.** Codon usage bias and gene expression through *Drosophila melanogaster* development. *Mol. Biol. Evol.*, (in preparation).
75. Lawrie, D., **Petrov, D.A.**, and P., Messer. Faster than neutral evolution at constrained sites. *Trends in Genetics*, (in preparation).
74. **Petrov, D.A.**, Fiston-Lavier, A.-S, Lenkov, K., Lipatov, M., and González, J. Population genomics of transposable elements in *D. melanogaster*. *Genome Research*, (in preparation).
73. González, J., Karasov, T., Messer, P.W., and **D. A. Petrov**. Genome-wide patterns of adaptation to temperate environments associated with transposable elements in *Drosophila*. *Mol. Biol. and Evol.*, (in preparation).
72. Cai, J., Borenstein, E. and **D.A. Petrov**. Consistent network properties of genes involved in human disease. *Genome Research*, (in preparation).
71. Markova, P. and **Petrov, D.A.** High sensitivity to aligner and high rate of false positives in the estimates of positive selection in the 12 *Drosophila* genomes. *Genome Research*, (submitted).
70. Aminetzach, Y.T.*, Karasov, T.L.*, and **D. A. Petrov**. Pesticide resistance by exaptation: adaptive evolution at *CHKov1* predates the use of pesticides. *Mol. Biol. Evol.*, (in preparation). (*these authors contributed equally).
69. Cai, J. and **D.A. Petrov**. Stronger purifying selection and lower rates of adaptation in evolutionary persistent genes. *Gen. Biol. and Evol.*, (in preparation).
68. Karasov, T., Messer, P., and **D.A. Petrov**. Recent strong adaptation in *Drosophila* is not limited by mutation at single sites. *Science*, (in preparation).
67. Hershberg, R. and **D.A. Petrov**. Evidence that mutation is universally biased towards AT in bacteria. *PLoS Biology*, (in preparation).
66. Chan, Y.F., Marks, M.E., Jones F.C., Villarreal, G., Shapiro, M.D., Fisher S., Southwick, A.M., Absher D.M., Grimwood, J., Schmutz, J., Myers R., **Petrov D.A.**, Jónsson, B., Schluter, D., Bell, M.B., and D. M. Kingsley. Adaptive evolution of pelvic reduction in sticklebacks by recurrent deletion of a *Pitx1* enhancer. *Science*, (submitted).
65. Hershberg, R. and **D.A. Petrov**. (2009). General rules for the choice of optimal codons. *PLoS Genetics*, **5**: e1000556. doi:10.1371/journal.pgen.1000556
64. González, J. and **D.A. Petrov**. (2009). Transposable elements and adaptation. *Gene*, doi:10.1016/j.gene.2009.06.008.
63. Messer, P. (2009). Measuring rates and patterns of spontaneous mutation from deep and large-scale polymorphism data. *Genetics*, **182**, 1219-1232; doi:10.1534/genetics.109.105692
62. Sella, G., **Petrov, D.A.**, Przeworski, M., and P. Andolfatto. (2009). Pervasive natural selection in the *Drosophila* genome? *PLoS Genetics*, **5**, e1000495; doi:10.1371/journal.pgen.1000495

61. Cai, J., Borenstein, E., Chen, R., and **D. A. Petrov**. (2009). Similarly strong purifying selection acts on disease genes of all ages. *Gen. Biol. Evol.*, **2009**, 131; doi: 10.1093/gbe/evp013.
60. González, J., Macpherson, J.M., and **D.A. Petrov**. (2009). A recent adaptive transposable element insertion near highly conserved developmental loci in *Drosophila melanogaster*. *Mol. Biol. Evol.*, **26**, 513-526; doi: 10.1093/molbev/msp107.
59. Li, V.C, Davis, J.C., Lenkov, K., Bolival, B., Fuller, M.T., and **D. A. Petrov**. (2009). Rapid and correlated evolution of the testis TAFs in *Drosophila* due to low constraint and high rates of positive selection. *Mol. Biol. Evol.*, **26**, 1103-1116.
58. González, J.* , Macpherson, J.M.* , Messer, P.* , and **D. A. Petrov**. (2009). Inferring the strength of natural selection in *Drosophila* under complex demographic scenarios. *Mol. Biol. Evol.*, **26**, 513-526. (*these authors contributed equally and are listed alphabetically).
57. Cai, J., Macpherson, J.M., Sella, G.* and **D.A. Petrov***. (2009). Pervasive hitchhiking at coding and regulatory sites in humans. *PLoS Genetics*, **5**, e1000336. (*co-senior authors).
56. Hershberg, R.* , Lipatov, M.* , Small, P.M., Sheffer, H., Niemann, S., Homolka, S., Roach, J.C., Kremer, K., **Petrov, D.A.**, Feldman, M.W., and Gagneux, S. (2008). High functional diversity in *M. tuberculosis* driven by genetic drift and human demography. *PLoS Biology*, 6(12), e311. (*these authors contributed equally).
55. Hershberg, R. and **D.A., Petrov**. Selection on codon bias. (2008). *Annu. Rev. Genet.*, **42**, 14.1-14.13.
54. González, J., Lenkov, K., Lipatov, M., Macpherson, J.M., and **D.A. Petrov**. (2008). High rate of recent transposable element-induced adaptations in *Drosophila melanogaster*. *PLoS Biology*, **6**, e251.
53. Dean, J., Davis, J.C., Davis, R.W., and **D.A. Petrov**. (2008). Pervasive redundancy and little new functionality among duplicated genes in yeast. *PLOS Genetics*, **4**, e1000113.
52. Macpherson, J.M., González, J., Witten, D., Davis, J.C., Rosenberg, N., Hirsh, A.E., and **D. A. Petrov**. (2008). Nonadaptive explanations for signatures of partial selective sweeps in *Drosophila*. *Mol. Biol. Evol.*, **25**, 1025-1042.
51. Macpherson, J.M. * , Sella, G. * , Davis, J.C., and **D. A. Petrov**. (2007). Genomewide spatial correspondence between nonsynonymous divergence and neutral polymorphism reveals extensive adaptation in *Drosophila*. *Genetics*, **177**, 2083-2099. (*these authors contributed equally).
50. Singh, N.D., Macpherson, M.J., Jensen, J., and **D.A. Petrov**. (2007). Similar levels of X-linked and autosomal nucleotide variation in African and non-African populations of *Drosophila melanogaster*. *BMC Evol. Biol.*, 2007, **7**, 202.
49. Hershberg, R., Tang, H., and **D.A. Petrov**. (2007). Reduced selection leads to accelerated gene loss in *Shigella*. *Genome Biology*, **8**, R164.

48. Oliver, M.J., **Petrov, D.A.**, Ackerly, D., Falkowski, P.G., and O.M. Schofield. (2007). The mode and tempo of genome size evolution in eukaryotes. *Genome Research*, **17**, 594-601.
47. Singh, N.D. and **D. A. Petrov**. (2007). Evolution of sex chromosomes. Genome Dynamics issue "Gene and Protein Evolution", ed. J.N., Volff. (in press).
46. Singh, N.D., Arndt, P.F., and **D. A. Petrov**. (2006). Minor shift in background substitutional patterns in the *Drosophila saltans* and *willistoni* lineages is insufficient to explain GC content of coding sequences. *BMC Biology*, **4**, 37.
45. Boissinot, S. *, Davis, J.C*, Entezam, A.* , **Petrov, D.A** and Furano, A.V. (2006). Fitness cost of LINE-1 (L1) activity in humans. *Proc. Natl. Acad. Sci.*, **103**, 9590-9594. (*these authors contributed equally).
44. **Petrov, D.A.** and J. F. Wendel. (2006). Evolution of eukaryotic genome structure. In "Evolutionary Genetics: Concepts and Case Studies", Oxford University Press, edited by C.W. Fox and J. B. Wolf.
43. Lipatov, M., Arndt, P.F., Hwa, T., and **D.A. Petrov**. (2006). A novel method distinguishes between mutation rates and fixation biases in patterns of single-nucleotide substitution. *J. Mol. Evol.*, **62**, 168-175.
42. Lipatov, M., Lenkov, K., **D.A. Petrov**, and C.Bergman. (2005) Gene-transposable element chimeras in *Drosophila*: bioinformatic and population genetic analyses. *BMC Biology*, **3**: 24.
41. Davis, J.C. and **D.A. Petrov**. (2005). Do disparate mechanisms of duplication contribute similar types of genes to the *Saccharomyces cerevisiae* genome? *Trends in Genetics*, **21**, 548-555.
40. Singh, N.D., Davis, J.C., and **D.A. Petrov**. (2005). Increase in codon bias on the X chromosome in eukaryotes. *Genetics*, **171**, 145-155.
39. Singh, N.D. Davis, J.C., and **D.A. Petrov**. (2005). Codon bias and GC content on the X chromosome in *Drosophila* correlate negatively with recombination rate. *J. Mol. Evol.*, **61**, 315-324.
38. Aminetzach, Y.T., M. J., Macpherson, and **D.A. Petrov**. (2005). Pesticide resistance via transposition-mediated adaptive gene truncation in *Drosophila*. *Science*, **309**, 764-767.
37. Arndt, P.F., Hwa, T., and **D. A. Petrov**. (2005). Substantial regional variation in substitution rates in the human genome: importance of GC content, gene density and telomere-specific effects. *J. Mol. Evol.*, **60**, 748-763.
36. Davis, J.C*., Brandman, O.* , and **D. A. Petrov**. (2005). Protein evolution in the context of *Drosophila* development. *J. Mol. Evol.*, **60**, 774-785.(*these authors contributed equally).

35. Gu, Z., David, L., **Petrov, D.A.**, Jones, T., Davis, R.W., Steinmetz, L.W. (2005). Elevated evolutionary rates in the laboratory strain of *Saccharomyces cerevisiae*. *Proc. Natl. Acad. Sci.*, **102**, 1092-1097.
34. Singh, N.D., Arndt, P.F., and **D.A. Petrov**. (2005). Effect of recombination on patterns of substitution in *Drosophila*. *Genetics*, 169, 709-722.
33. Knight, C. A., Molinari, N., and **D.A. Petrov**. (2005). The large genome constraint hypothesis: evolution, ecology, and phenotype. *Annals of Botany*, **95**, 177-190.
32. Morris, J.R., **Petrov, D.A.**, Lee, A. M., and C.-T. Wu. (2004). Enhancer choice *in cis* and *in trans* in *Drosophila melanogaster*: role of the promoters. *Genetics*, **167**, 1739-1747.
31. Singh, N.D. and **D. A. Petrov**. (2004). Dramatic sequence turnover at an intergenic locus in *Drosophila*. *Mol. Biol. Evol.*, **21**, 670-680.
30. Davis, J. C. and **D.A. Petrov**. (2004). Preferential duplication of slowly evolving proteins in eukaryotic genomes. *PLOS Biology*, **2**, E55.
29. Arndt, P.F., **Petrov, D.A.**, and Hwa, T. (2003). A distinct shift in the genomic pattern of substitution at the time of mammalian radiation. *Mol. Biol. Evol.*, **20**, 1887-1896.
28. Bensasson, D., Feldman, M. W., and **D. A. Petrov**. (2003). High rates of DNA duplication and mitochondrial DNA insertion in the human genome. *J. Mol. Evol.*, **57**, 343-354.
27. **Petrov, D.A.**, Aminetzach, Y.T., Davis, J.C., Bensasson, D., & Hirsh, A.E.. (2003). Size matters: non-LTR retrotransposable elements and ectopic recombination in *Drosophila*. *Mol. Biol. Evol.*, **20**, 880-892.
26. Nuzhdin, S.V. and **D. A. Petrov**. (2003) Transposable elements in clonal lineages: lethal hangover from sex. *Biol. J. Linn. Soc.*, **79**, 33-41.
25. Ptak, S. and **D. A. Petrov**. (2002). How intron splicing affects the deletion and insertion profile in *D. melanogaster*. *Genetics*, **162**, 1233-1244.
24. **D. A. Petrov**. (2002). Mutational equilibrium model of genome size evolution. *Theor. Pop. Biol.*, **61**, 531-543.
23. Sakharkar, M.K., Kanguane P., **Petrov, D.A.**, Kolaskar, A.S., & Subbiah, S. A. (2002) Database on "Intron-less/single exonic" genes from eukaryotes (SEGE). *Bioinformatics*, **18**, 1266-1267.
22. **D. A. Petrov**. (2002). Evolution of genome size. *Encyclopedia of Evolution*. Ed. Mark Pagel, Oxford University Press.
21. **D.A. Petrov**. (2002). DNA loss and evolution of genome size in *Drosophila*. *Genetica*, **115**, 81-91.
20. Walbot, V. and **D.A. Petrov**. (2001). Gene galaxies in the maize genome. *Proc. Natl. Acad. Sci. USA*, **98**, 8163-8164.

19. **D. A. Petrov.** (2001). Evolution of genome size: new approaches to an old problem. *Trends in Genetics*, **17**, 23-28.
18. Bensasson, D., **Petrov, D.A.**, Zhang, D.-X., Hartl, D.L., Hewitt, G. (2001). Genomic Gigantism: DNA loss is slow in mountain grasshoppers. *Mol. Biol. Evol.*, **18**, 246-253.
17. **Petrov, D.A.**, Sangster, T.A., Johnston, J. S., Hartl, D.L., & Shaw, K.L. (2000). Evidence for DNA loss as a determinant of genome size. *Science*, **287**, 1060-1062 (see comments *Science* **287**, 985-986).
16. **Petrov, D.A.** & Hartl, D. L. (2000). Pseudogene evolution and natural selection for a compact genome. *J. of Heredity*, **91**, 221-227.
15. Lozovskaya, E.R., Nurminsky, D.I., **Petrov, D.A.**, & Hartl, D.L. (1999). Genome size as a mutation-selection-drift process. *Genes and Genet. Syst.*, **74**, 201-207.
14. **Petrov, D.A.** & Hartl, D. L. (1999). Patterns of nucleotide substitution in *Drosophila* and mammalian genomes. *Proc. Natl. Acad. Sci. USA*, **96**, 1475-1479.
13. **Petrov, D.A.**, Chao, Y.-C., Stephenson, E.C., & Hartl, D. L. (1998). Pseudogene evolution in *Drosophila* suggests a high rate of DNA loss. *Mol. Biol. Evol.*, **15**, 1562-1567.
12. Moriyama, E.N., **Petrov, D.A.**, & Hartl, D.L. (1998). Genome size and intron size in *Drosophila*. *Mol. Biol. Evol.*, **15**, 770-773.
11. **Petrov, D.A.** & Hartl, D. L. (1998). High rate of DNA loss in the *D. melanogaster* and *D. virilis* species groups. *Mol. Biol. Evol.*, **15**, 293-302.
10. **Petrov, D.A.** & Hartl, D. L. (1997). Trash DNA is what gets thrown away: High rate of DNA loss in *Drosophila*. *Gene*, **205**, 279-289.
9. **Petrov, D.A.** (1997). Slow but steady: genome reduction through spontaneous mutation. *The Plant Cell*, **9**, 1900-1901.
8. **Petrov, D.A.**, Lozovskaya, E. R., & Hartl, D. L. (1996). High intrinsic rate of DNA loss in *Drosophila*. *Nature*, **384**, 346-349.
7. Siegal, M. L., **Petrov, D. A.**, & Deaguier, D. (1996). Triple-ligation strategy with advantages over directional cloning. *Biotechniques*, **21**, 614-619.
6. Lozovskaya, E. R., Hartl, D. L., & **Petrov, D. A.** (1995). Genomic regulation of transposable elements in *Drosophila*. *Cur. Opin. in Gen. and Dev.*, **5**, 768-773.
5. **Petrov, D. A.**, Schutzman, J. L., Hartl, D. L., & Lozovskaya, E. R. (1995). Diverse transposable elements are mobilized in hybrid dysgenesis in *Drosophila virilis*. *Proc. Natl. Acad. Sci. USA*, **92**, 8050-8054.
4. Lozovskaya, E. R., **Petrov, D. A.**, & Hartl, D. L. (1993). A combined molecular and cytogenetic approach to genome evolution in *Drosophila* using large-fragment DNA cloning. *Chromosoma*, **102**, 253-266.

3. Krane, D. E., Allen, R. W., Sawyer, S. A., **Petrov, D. A.**, & Hartl, D. L. (1992). Genetic differences at four DNA typing loci in Finnish, Italian, and mixed Caucasian populations. *Proc. Natl. Acad. Sci. USA*, **89**, 10583-10587.
2. Danilevskaya, O. N., **Petrov, D. A.**, Pavlova, M. N., Koga, A., Kurenova, E. V., & Hartl, D. L. (1992). A repetitive DNA element, associated with telomeric sequences in *Drosophila melanogaster*, contains open reading frames. *Chromosoma*, **102**, 32-40.
1. Smoller, D. A., **Petrov, D.A.**, & Hartl, D. L. (1991). Characterization of bacteriophage P1 library containing inserts of *Drosophila* DNA of 75-100 kilobase pairs. *Chromosoma*, **100**, 487-494.