

December 10, 2007

CURRICULUM VITAE (Abridged)

Name: Stephen James O'Brien

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Date and Place of Birth: September 30, 1944; Rochester, New York

Citizenship: United States

Marital Status: Married, 1968; two children

Education:

- 1962- Graduated from Good Counsel High School, Wheaton, MD
- 1965- Summer School, Georgetown University, Washington, D.C.
- 1966- B.S.; St. Francis College, Loretto, PA; major: Biology; minor: Chemistry
- 1971- Ph.D.; Cornell University, Major Field: Genetics

Brief Chronology of Employment:

- 1997 – Date Sylvio Conte Senior Biomedical Research Service Fellow-NIH
- 1986 – Date Chief, Laboratory of Genomic Diversity, National Cancer Institute, NIH, Frederick, MD
- 1983 – 1985 Acting Chief, Laboratory of Viral Carcinogenesis, National Cancer Institute, NIH, Frederick, MD
- 1980 - Date Chief, Section of Genetics, Laboratory of Viral Carcinogenesis, National Cancer Institute, NIH, Frederick, MD
- 1978 - 1980 Research Geneticist, Laboratory of Viral Carcinogenesis, National Cancer Institute, NIH, Frederick, MD. Chief - G.J. Todaro
- 1973 - 1978 Staff Fellow, Laboratory of Viral Carcinogenesis, National Cancer Institute, NIH, Bethesda, MD. Research area - cell genetics, oncogenetics, tumor virology and immunology
- 1972 - 1973 NIH Postdoctoral Fellow, National Cancer Institute, NIH, Bethesda, MD. ; research area - somatic cell genetics and development
- 1971 - 1972 Postdoctoral Fellow, genetics-biochemistry, Gerontology Research Center, Baltimore; Supervisor, Bertram Sacktor; research area - genetic control of bioenergetics

Adjunct University Appointments

1974 - Date	Adjunct Professor of Genetics, George Washington University
1979 - Date	Adjunct Graduate Advisor, Dept. of Biology, American University
1982 - Date	Adjunct Professor, Dept. of Zoology, University of Maryland
1982 - Date	Adjunct Professor, Dept. of Biology, Johns Hopkins University
1982 - Date	Adjunct Graduate Advisor, Dept. of Biology, Hood College
1994 - Date	Adjunct Professor, Dept. of Pathology, Colorado State University
1994 - Date	Adjunct Professor,, Dept. of Biology, George Mason University
1996 - Date	Adjunct Professor, Dept. of Biology, Peking University
2004 - Date	Adjunct Professor, Harvard School of Public Health
1996 - Date	Director, AGA/ Smithsonian NOAHS Center Short Course: Recent Advances in Conservation Genetics, CRC - Front Royal, VA

Graduate Students Supervised:

M.S. Degrees

M. Catherine Rice

M.S. George Washington University, 1979

Thesis: An examination of the extent of genetic variation in laboratory outbred mice and wild mouse populations.

Cheryl A. Winkler

M.S. University of Maryland, 1981

Thesis: Preliminary characterization of the major histocompatibility complex in *Felis catus*.

Andrea Newman

M.S. Hood College, 1983

Thesis: Estimating the extent of biochemical genetic variation in eight species of the Felidae.

Eric J. Berman

M.S. George Washington University, 1984

Thesis: Assignment of four new genes in the domestic cat by somatic cell hybridization.

Dianne N. Janczewski

M.S. George Mason University, 1989

Thesis: Estimate of genetic distance of orangutan (*Pongo pygmaeus*) subspecies based on isozyme and two-dimensional electrophoresis.

Valerie Beason

M.S. Hood College, 2004

Thesis: Genetic variation, subspecies identification and conservation of the clouded leopard (*Neofelis nebulosa*)

Ph.D. Degrees Completed

Roger H. Reeves

Ph.D. University of Maryland, 1983

Thesis: Characterization of a family of endogenous feline retroviral sequences

Cheryl A. Winkler

Ph.D. University of Maryland, 1986

Thesis: The serological definition of the feline major histocompatibility complex, *FLA*, in the domestic cat, *Felis catus*.

Dennis A. Gilbert

Ph.D. The Johns Hopkins University, 1990

Thesis: Application of DNA fingerprinting to measure the genetic structure of populations.

Dianne N. Janczewski

University of Maryland, 1992

Subject: Phylogenetic radiation of the great cats, *Panthera*, as estimated by DNA sequence analysis of mitochondrial genes.

Sriyanie Miththapala

University of Florida, 1993

Subject: Molecular definition of subspecies differentiation in the Old World leopard, *Panthera pardus*.

Jose Lopez

George Mason University, 1995

Subject: Molecular organization of an historic transposition and amplification of mitochondrial DNA segments to nuclear genes in the Felidae.

Melanie Culver

University of Maryland, 1998

Subject: Molecular genetic variation, population structure and natural history of free ranging pumas, *Puma concolor*.

Olga Uphyrkina

University of Novosibirsk, 2002

Subject: Molecular genetic population structure of the leopard, *Panthera pardus*.

Eduardo Eizirik

University of Maryland, 2002

Subject: Molecular evolution of melanism in the Felidae (Mammalia, Carnivora)

Shu Jin Luo

University of Minnesota, 2006

Subject: Comparative Phylogeography of sympatric wild cats: Implications for biogeography and conservation in Asian biodiversity hotspots\

Ann Schmidt-Kuntzel

George Washington University, 2007

Subject Genetic origins of coat color in *Felis silvestris catus*.

Meredith Brown
Michigan State University, 2007
Subject: Molecular genetic characterization of emerging viral infections and determinants of pathogenicity in free-ranging felid populations

Ph.D. Degrees Pending

Carlos Driscoll
Oxford University
Subject: On the origins of cat domestication in the Wildcat, *Felis silvestris*

Societies:

1966 - Date	American Association for the Advancement of Science
1966 - Date	Genetics Society of America
1970 - Date	American Society of Naturalists
1976 - Date	Tissue Culture Association
1976 - Date	American Genetics Association
1979 - Date	New York Academy of Science
1984 - Date	American Association of Zoological Parks and Aquariums

Research Interests:

Human genetics, Comparative Genomics, Genetic Epidemiology, Molecular Evolution, HIV, FIV, AIDS, Virology, Bio-informatics, Forensic genetics, Conservation.

Editorial Appointments:

1975-1978	Editor, ISOZYME BULLETIN
1980-Date	Editor, GENETIC MAPS, Cold Spring Harbor Publications
1987-1991	Associate Editor - Chief Subject Editor - comparative gene mapping, GENOMICS, Academic Press.
1987-Date	Chief Editor, Journal of Heredity, American Genetics Association
1990-Date	Associate Editor, MAMMALIAN GENOME
	Associate Editor, MOLECULAR PHYLOGENETICS AND EVOLUTION
1993	Guest Editor, CURRENT BIOLOGY, Molecular Evolution Issue
1994	COSMOS Journal Advisory Board
1995	Guest Editor, CURRENT BIOLOGY, Genomes and Evolution Issue

Boards of Trustees:

American Type Culture Collection
Cheetah Conservation Fund
American Genetic Association
Bioethics - Johns Hopkins University
Family Investigation of Nephropathy and Diabetes (FIND) study
NOAHS Center, Smithsonian Institution

Honors, Administrative Appointments and Other Special Recognitions:

1966-1971	NIH genetics traineeship
1971-1973	NIH postdoctoral fellowship
1972-1978	Co-Chairman and founder, Mid-Atlantic Drosophila Society
1975-1976	Elected council representative, NCI Assembly of Scientists
1977-1978	President, NCI Assembly of Scientists
1979-Date	Elected New York Academy of Science
1979-Date	Member, International Committee on Comparative Gene Mapping
1982-Date	Appointed Research Fellow of Smithsonian Institution , Washington, D.C.
1983-Date	Elected Board of Trustees, American Type Culture Association, Rockville, MD
1984-Date	Appointed, Executive Board, American Type Culture Collection, Rockville, MD
1984-Date	Elected Board of Directors, American Genetics Association (AGA)
1985	National Geographic Society Research Award (for study of genetics and reproduction of East African cheetah)
1985-Date	Appointed, Chairman, Long Range Planning Committee, AGA
1985-Date	Founder and Co-Director, NOAHS (New Opportunities in Animal Health Sciences) Center for Wildlife Sciences , Smithsonian Institution
1985-Date	Member, Cat Specialist Group , International Union for Conservation of Nature, I.U.C.N., Geneva
1986	Recipient World Wildlife Fund Research Award (for study of genetic structure of relict populations of giant pandas)
1986-Date	Member, Captive Breeding Specialist Group , Species Survival Commission, I.U.C.N., Geneva
1986-Date	Advisor, Special Survival Plan-Cheetah, American Zoological Association
1987-Date	Secretary-Treasurer, Board of Trustees, American Type Culture Collection
1987-Date	Chairman, International Committee on Comparative Gene Mapping
1987-Date	Elected member Cosmos Club , Washington, D.C.
1988	Explorer's Club Annual Dinner Principal Lecture Award in Commemoration of the 100th Anniversary of the National Geographic Society .
1988-Date	Elected Fellow Explorer's Club , New York, N.Y.
1994-Date	Elected Fellow of the American Academy of Arts and Sciences .
1994	Distinguished Alumnus in Natural Sciences, St. Francis College, Loretto, PA
1997	Visiting Fellow, Merton College , Oxford University, Oxford
1998-Date	Elected Fellow, American Association for the Advancement of Science
1998	Nominated Andrew Dixon White Professor-at-Large , Cornell University
2006	Chairman Board of Trustees Cheetah Conservation Fund
2006	Institution of the Stephen J.O'Brien Award for Outstanding Paper Published by American Genetic Association

BOOKS

O'Brien, S.J.: **Tears of the Cheetah and Other Tales from the Genetic Frontier**, St. Martin's Press, New York, 2003, pp 273.

EDITED VOLUMES

1. O'Brien, S.J. (Ed.): Isozyme Bulletin, 1976, Vol. 9, pp. 1-79.
2. O'Brien, S.J. (Ed.): Isozyme Bulletin, 1977, Vol. 10, pp. 1-90.
3. O'Brien, S.J. (Ed.): Isozyme Bulletin, 1978, Vol. 11, pp. 1-68.
4. O'Brien, S.J. (Ed.): Genetic Maps, 1980, Vol. 1, pp. 1-28
5. O'Brien, S.J. (Ed.): Genetic Maps, 1982, Vol. 2, pp. 1-406.
6. O'Brien, S.J. (Ed.): Genetic Maps, 1984. Cold Spring Harbor Laboratory Press, New York, Vol. 3, 1984, 584 pp.
7. O'Brien, S.J. (Ed.): Genetic Maps, 1987. Cold Spring Harbor Laboratory Press, New York, Vol. 4, 842 pp.
8. Clegg, M. T., and O'Brien, S.J. (Eds.): Molecular Evolution, 1990, Vol. 122, Proceedings of a UCLA Colloquium, UCLA Symposia on Molecular and Cellular Biology, Lake Tahoe, CA, Wiley-Liss, New York, N.Y., pp. 1-322.
9. O'Brien, S.J. (Ed.): Genetic Maps: Locus Maps of Complex Genomes. Fifth Edition. 1990. Cold Spring Harbor Laboratory Press, New York, Unabridged 1104 pp.
10. O'Brien, S.J. (Ed.): Genetic Maps: Locus Maps of Complex Genomes. Fifth Edition. 1990. Cold Spring Harbor Laboratory Press, New York. Published in six volumes:

Book 1	Viruses	186 pp
Book 2	Bacteria, Protozoa, and Algae	138 pp
Book 3	Lower Eukaryotes	206 pp
Book 4	Nonhuman Vertebrates	180 pp
Book 5	Human Maps	262 pp
Book 6	Plant	152 pp
11. O'Brien, S.J. (Ed.): Genetic Maps: Locus Maps of Complex Genomes. Sixth Edition. 1993. Cold Spring Harbor Laboratory Press, New York. Unabridged 1617 pp.

12. O'Brien, S.J. (Ed.): Genetic Maps: Locus Maps of Complex Genomes. Sixth Edition. 1993. Cold Harbor Laboratory Press, New York. Published in six volumes:
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| Book 1 | Viruses | 205 pp |
| Book 2 | Bacteria, Protozoa, and Algae | 181 pp |
| Book 3 | Lower Eukaryotes | 318 pp |
| Book 4 | Nonhuman Vertebrates | 342 pp |
| Book 5 | Human Maps | 310 pp |
| Book 6 | Plants | 261 pp |
13. O'Brien, S.J. and Clegg, M. T. (Eds.): Genes and Genomes. *Curr. Opin. Genet. Devel.* 3: 835-998, 1993.
14. Hartl, D. L., Kafatos, F., and O'Brien, S.J. (Eds.): Genomes and Evolution. *Curr. Opin. Genet. Devel.* 5: 705-847, 1995.
15. O'Brien, S.J. and Fraser, C. M. Genomes and Evolution. *Curr. Opin. Genet. Devel.* 15: 569-665, 2005
16. O'Brien, S.J., Menninger, J. C and Nash, W. G.: **An Atlas of Mammalian Genomes.** John Wiley & Sons Publishers, New York, NY, 2006.

SCIENTIFIC ARTICLES (High impact journals only from 1970-2004)
 (Selected articles from over 650 published papers)

1970-1980

O'Brien, S. J. and MacIntyre, R. J.: Empirical demonstration of a transient linkage disequilibrium in *Drosophila*. *Nature* 230: 335-336, 1971.

O'Brien, S. J.: On estimating functional gene number in eukaryotes. *Nature New Biol.* 242: 52-54, 1973.

O'Brien, S. J., Kleiner, G., Olson, R., and Shannon, J.: Enzyme polymorphisms as genetic signatures in human cell cultures. *Science* 195: 1345-1348, 1977.

Lemons, R. S., O'Brien, S. J., and Sherr, C.: A new genetic locus, *Bevi*, on human chromosome 6 which controls the replication of baboon type C virus in human cells. *Cell* 12: 251-262, 1977.

Lemons, R. S., Nash, W. G., O'Brien, S. J., Benveniste, R. E., and Sherr, C. J.: A gene (*Bevi*) on human chromosome 6 is an integration site for baboon type C DNA provirus in human cells. *Cell* 14: 995-1005, 1978.

Rice, M. C. and O'Brien, S. J.: Genetic variance of laboratory outbred Swiss mice. *Nature* 283: 157-161, 1980.

O'Brien, S. J., Gail, M. H., and Levin, D. L.: Correlative genetic variation in natural populations of cats, mice and men. *Nature* 288: 580-583, 1980.

1981-1990

Harris, N. L., Gang, D. L., Quay, S. C., Poppema, S., Nelson-Rees, W. A., and O'Brien, S. J.: Contamination of Hodgkin's disease cell cultures. Nature 289: 354-356, 1981.

O'Brien, S. J. and Nash, W. G.: Genetic mapping in mammals: Chromosome map of the domestic cat. Science 216: 257-265, 1982.

O'Brien, S. J., Wildt, D. E., Goldman, D., Merril, C. R., and Bush, M.: The cheetah is depauperate in genetic variation. Science 221: 459-462, 1983.

O'Brien, S. J., Bonner, T. I., Cohen, M., O'Connell, C., and Nash, W. G.: Mapping of an endogenous retroviral sequence to human chromosome 18. Nature 303: 74-77, 1983.

O'Brien, S. J., Nash, W. G., Goodwin, J. L., Lowy, D. R., and Chang, E. H.: Dispersion of the *ras* family of transforming genes to four different chromosomes in man. Nature 302: 839-842, 1983.

O'Brien, S. J., Goldman, D., Knight, J., Moore, H. D., Wildt, D. E., Bush, M., Montali, R. J., and Kleiman, D.: Giant panda paternity. Science 223: 1127-1129, 1984.

O'Brien, S. J., Roelke, M. E., Marker, L., Newman, A., Winkler, C. A., Meltzer, D., Colly, L., Evermann, J. F., Bush, M., and Wildt, D. E.: Genetic basis for species vulnerability in the cheetah. Science 227: 1428-1434, 1985.

Longo, D. L., Gelmann, E. P., Cossman, J., Young, R. A., Gallo, R. C., O'Brien, S. J., and Matis, L. A.: Isolation of HTLV-transformed B-lymphocyte clone from a patient with HTLV-associated adult T-cell leukaemia. Nature 310: 505-506, 1984.

O'Brien, S. J., Nash, W. G., Wildt, D. E., Bush, M. E., and Benveniste, R. E.: A molecular solution to the riddle of the giant panda's phylogeny. Nature 317: 140-144, 1985.

Nienhuis, A. W., Bunn, H. F., Turner, P. H., Gopal, T. V., Nash, W. G., O'Brien, S. J., and Sherr, C. J.: Expression of the human c-fms proto-oncogene in hematopoietic cells and its deletion in the 5q- syndrome. Cell 42: 421-428, 1985.

O'Brien, S. J., Wildt, D. E., and Bush, M.: The cheetah in genetic peril. Sci. Am. 254: 84-92, 1986.

Park, M., Dean, M., Cooper, C. S., Schmidt, M., O'Brien, S. J., Blair, D. G., and Vande Woude, G. F.: Mechanism of *met* oncogene activation. Cell 45: 895-904, 1986.

O'Brien, S. J., Nash, W. G., Benveniste, R. E., Wildt, D. E., and Bush, M. E.: Palaeontological and molecular views of panda phylogeny. Nature 319: 428, 1986.

Jaye, M., Howk, R., Burgess, W., Ricca, G. A., Chiu, I.-M., Ravera, M. W., O'Brien, S. J., Modi, W. S., Maciag, T., and Drohan, W. N.: Human endothelial cell growth factor: Cloning, nucleotide sequence, and chromosome localization. Science 233: 541-545, 1986.

Kinzler, K. W., Bigner, S. H., Bigner, D. D., Trent, J. M., Law, M. L., O'Brien, S. J., Wong, A. J., and Vogelstein, B.: Identification of an amplified highly expressed gene in a human glioma. Science 236: 70-73, 1987.

Wildt, D. E., Bush, M., Goodrowe, K. L., Packer, C., Pusey, A. E., Brown, J. L., Joslin, P., and O'Brien, S. J.: Reproductive and genetic consequences of founding isolated lion populations. Nature 329: 328-331, 1987.

O'Brien, S. J. and Knight, J. A.: The future of the giant panda. Nature 325: 758-759, 1987.

O'Brien, S. J.: The ancestry of the giant panda. Sci. Am. 257: 102-107, 1987.

Baker, C. S., Palumbi, S. R., Lambertsen, R. H., Weinrich, M. T., Calambokidis, J., and O'Brien, S. J.: The influence of seasonal migration on geographic distribution of mitochondrial DNA haplotypes in humpback whales. Nature 344: 238-240, 1990.

Gilbert, D. A., Lehman, N., O'Brien, S. J., and Wayne, R. K.: Genetic fingerprinting reflects population differentiation in the California Channel Island fox. Nature 344: 764-767, 1990.

1991-1995

Packer, C., Gilbert, D. A., Pusey, A. E., and O'Brien, S. J.: Kinship, cooperation and inbreeding in African lions: A molecular genetic analysis. Nature 351: 562-565, 1991.

O'Brien, S. J. and Mayr, E.: Bureaucratic mischief: Recognizing endangered species and subspecies. Science 251: 1187-1188, 1991.

O'Brien, S. J.: Genetic erosion: A global dilemma. National Geographic Mag. 181: 136, 1992.

O'Brien, S. J., Womack, J. E., Lyons, L. A., Moore, K. J., Jenkins, N. A., and Copeland, N. G.: Anchored reference loci for comparative genome mapping in mammals. Nature Genet. 3: 103-112, 1993.

O'Brien, S. J. and Mayr, E.: Species hybridization and protection of endangered animals. Science 253: 251-253, 1991.

O'Brien, S. J., Pan, W., and Lu, Z.: Pandas, people and policy. Nature 369: 179-180, 1994.

O'Brien, S. J.: Genomic prospecting. Nature Med. 1: 742-744, 1995.

1996-2000

Kaslow, R. A., Carrington, M., Apple, R., Park, L., Munoz, A., Saah, A. J., Goedert, J. J., Winkler, C., O'Brien, S. J., Rinaldo, C., Detels, R., Blattner, W., Phair, J., Erlich, H., and Mann, D. L.: Influence of combinations of human major histocompatibility complex genes on the course of HIV-1 infection. Nature Med. 2: 405-411, 1996.

Roelke-Parker, M. E., Munson, L., Packer, C., Kock, R., Cleveland, S., Carpenter, M., O'Brien, S. J., Pospichil, A., Hofmann-Lehmann, R., Lutz, H., Mwamengele, G. L. M., Mgasa, M. N., Machange, G. A., Summers, B. A., Appel, M. J. G.: A canine distemper virus epidemic in Serengeti lions (*Panthera leo*). Nature 379: 441-445, 1996.

Lyons, L. A., Laughlin, T. F., Copeland, N. G., Jenkins, N. A., Womack, J. E., and O'Brien, S. J.: Comparative anchored tagged sequences (CATS) for integrative mapping of mammal genomes. Nature Genetics 15: 47-56, 1997.

Dean, M., Carrington, M., Winkler, C., Huttley, G.A., Smith, M.W., Allikmets, R., Goedert, J.J., Buchbinder, S.P., Vittinghoff, E., Gomperts, E., Donfield, S., Vlahov, D., Kaslow, R., Saah, A., Rinaldo, C., Detels, R., HGDS, MACS, MHCS, SF City Cohort, ALIVE Study and O'Brien, S.J.: Genetic restriction of HIV-1 infection and progression to AIDS by a deletion allele of the *CCR5* structural gene. Science 273: 1856-1862, 1996.

Menotti-Raymond, M.A., David, V.A., and O'Brien, S.J.: Pet cat hair implicates murder suspect. Nature 386: 774, 1997.

O'Brien, S. J. and Dean, M.: In search of AIDS-resistance genes. Sci. Amer. 277: 44-51, Sept. 1997.

Smith, M. W., Dean, M., Carrington, M., Winkler, C., Huttley, G. A., Lomb, D. A., Goedert, J. J., O'Brien, T. R., Jacobson, L. P., Kaslow, R., Buchbinder, S., Vittinghoff, E., Vlahov, D., Hoots, K., Hilgartner, M. W., Hemophilia Growth and Development Study, Multicenter AIDS Cohort Study, Multicenter Hemophilia Cohort Study, San Francisco City Cohort, ALIVE Study, and O'Brien, S. J.: Contrasting genetic influence of *CCR2* and *CCR5* receptor gene variants on HIV-1 infection and disease progression. Science 277: 959-965, 1997.

O'Brien, S.J.: The family line: The human-cat connection. National Geographic Magazine 191: 77-85, 1997.

O'Brien, T. R., Winkler, C., Dean, M., Nelson, J. A. E., Carrington, M., Michael, N. L., and White, G. C. and S.J. O'Brien : HIV-1 infection in a man homozygous for *CCR5Δ32*. Lancet 349: 1218, 1997.

Winkler, C., Modi, W., Smith, M. W., Nelson, G. W., Wu, X., Carrington, M., Dean, M., Honjo, T., Tashiro, K., Yabe, D., Buchbinder, S., Vittinghoff, E., Goedert, J. J., O'Brien, T. R., Jacobson, L. P., Detels, R., Donfield, S., Willoughby, A., Gomperts, E., Vlahov, D., Phair, J., ALIVE Study, Hemophilia Growth and Development Study (HGDS), Multicenter AIDS Cohort Study (MACS), Multicenter Hemophilia Cohort Study (MHCS), San Francisco City Cohort (SFCC), and O'Brien, S. J.: Genetic restriction of AIDS pathogenesis by an SDF-1 chemokine gene variant. Science 279: 389-393, 1998.

Smith, M. W., Carrington, M., Winkler, C., Lomb, D., Dean, M., Huttley, G., and O'Brien, S. J.: *CCR2* chemokine receptor and AIDS progression. Nature Med. 3: 1052-1053, 1997.

Smith, M., Dean, M., Carrington, M., Huttley, G. A., and O'Brien, S. J.: *CCR5Δ32* gene deletion in HIV-1 infected patients. Lancet 350: 741, 1997.

Martin, M. P., Dean, M., Smith, M. W., Gerrard, B., Michael, N. L., Lee, B., Doms, R. W., Margolick, J., Buchbinder, S., Goedert, J. J., O'Brien, T. R., Hilgartner, M. W., Vlahov, D., O'Brien, S. J., and Carrington, M.: Genetic acceleration of AIDS progression by a promoter variant of *CCR5*. Science 282: 1907-1911, 1998.

Smith, M., Dean, M., Carrington, M., Winkler, C., and O'Brien, S. J.: Progression to AIDS. Science. 280: 1819-1820, 1998.

Anzala, A.O., Ball, T. B., Rostron, T., O'Brien, S. J., Plummer, F. A., and Rowland-Jones, S. L.: *CCR2-64I* allele and genotype association with delayed AIDS progression in African women. University of Nairobi Collaboration for HIV Research. Lancet. 351: 1632-1633, 1998.

Carrington, M., Nelson, G., Martin, M. P., Kissner, T., Vlahov, D., Goedert, J. J., Kaslow, R., Buchbinder, S., Hoots, K., and O'Brien, S. J.: *HLA* and HIV-1: Heterozygote advantage and *B*35-Cw*04* disadvantage. *Science* 283: 1748-1752, 1999.

Bream, J. H., Young, H. A., Rice, N., Martin, M. P., Carrington, M., and O'Brien, S. J.: *CCR5* promoter alleles distinguished by specific DNA binding factors. *Science*. 284: 223a, 1999.

O'Brien, S. J., Menotti-Raymond, M., Murphy, W. J., Nash, W. G., Wienberg, J., Stanyon, R., Copeland, N. G., Jenkins, N. A., Womack, J. E., and Marshall Graves, J. A.: The promise of comparative genomics in mammals. *Science* 286: 458-481, 1999.

O'Brien, S. J. and Stanyon, R.: Phylogenomics: Ancestral primate viewed. *Nature*. 402: 365-366, 1999.

2001-2004

Gao, X., Nelson, G. W., Karacki, P., Martin, M. P., Phair, J., Kaslow, R., Goedert, J. J., Buchbinder, S., Koots, K., Vlahov, D., O'Brien, S. J., and Carrington, M.: Effect of a single amino acid change in MHC class I molecules on the rate of progression to AIDS. *New Engl. J. Med.* 344:1668-1675, 2001.

Roca, A. L., Georgiadis, N., Pecon-Slattery, J., and O'Brien, S. J.: Genetic evidence for two species of elephant in Africa. *Science* 293: 1473-1477, 2001.

Murphy, W. J., Eizirik, E., Johnson, W. E., Zhang, Y. P., Ryder, O. A., and O'Brien, S.J.: Molecular phylogenetics and the origins of placental mammals. *Nature*. 409: 614-618, 2001.

O'Brien, S. J., Eizirik, E., and Murphy, W. J.: Perspective: On choosing mammalian genomes for sequencing. *Science*. 292: 2264-2266, 2001.

Murphy, W. J., Eizirik, E., O'Brien, S. J., Madsen, O., Scally, M., Douady, C., Teeling, E., Ryder, O.A., Stanhope, M., de Jong, W. W., and Springer, M. S.: Resolution of the early placental mammal phylogeny using Bayesian phylogenetics. *Science* 294: 2348-2351. 2001.

Carrington, M., Gao, X., O'Brien, S.J.: HLA and AIDS progression. , *New England Journal of Medicine* 345:924-925, 2001.

Martin, M.P., Gao, X., Lee, H. -L, Nelson, G., Wilson, M., Detels, R., Goedert, J.J., Buchbinder, S., Hoots, K., Vlahov, D., Trowsdale, J., O'Brien, S.J. and Carrington, M.: Epistatic interaction between KIR3DS1 and HLA-B delays the progression to AIDS. *Nature Genet.* 31: 429-434, 2002.

Copeland, N., Jenkins, N., O'Brien, S.J. Mmu 16- Comparative Genomic Highlights. *Science* 296: 1617-1618, 2002.

O'Brien S.J and W J Murphy: A dog's breakfast? *Science* 301:1854-1855. 2003

Luo, S.-J., Kim, J.-H., Johnson, W.E., van der Walt, J., Martenson, J., Yuhki, N., Miquelle, D.G., Uphyrkina, O., Goodrich, J.M., Quigley, H.B., Tilson, R., Brady, G., Martelli, P., Subramaniam, V., McDougal, C., Hean, S., Huang, S.-Q., Pan, W., Karanth, U.K., Sunquist, M., Smith, J.L.D., and O'Brien, S.J.: Phylogeography and conservation genetics of tigers (*Panthera tigris*). *PLoS Biology* 2:2277-2293, 2004.

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