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CURRICULUM VITAE

Name: Stephen James O'Brien

Address: Chief Scientific Officer
Theodosius Dobzhansky Center for Genome Bioinformatics
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Office of Research and Technology Transfer
Guy Harvey Oceanographic Center
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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
2017- Doctor of Science; St Petersburg State University; St Petersburg Russia

Brief Chronology of Employment:

2013-Date	Director of Research Office of Research and Technology Transfer Nova Southeastern University Oceanographic Center 8000 N. Ocean Drive, USA; Nova Southeastern University Ft Lauderdale, Florida 33004
2011 - Date	Professor and Chief Scientific Officer Theodosius Dobzhansky Center for Genome Bioinformatics St. Petersburg State University
1997 – 2011	Sylvio Conte Senior Biomedical Research Service Fellow-NIH
1986 – 2011	Chief, Laboratory of Genomic Diversity, National Cancer Institute, NIH,Frederick, MD
1983 – 1986	Chief, Laboratory of Viral Carcinogenesis, National Cancer Institute, NIH, Frederick, MD
1980 - 2011	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. Supervisor, Charles W. Boone; 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; worldwide

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.

Nuria Vazquez Salat
M.S Hood College 2004
Thesis: Molecular evolution of the CCR cluster in domestic cats and other mammal species

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

Carlos Driscoll
Oxford University 2011
Subject: On the origins of cat domestication in the Wildcat, *Felis silvestris*

Pavel Dobrinin
St Petersburg State Uiversity 2018
Subject: Genomic legacy of the African cheetah, *Acinonyx jubatus*.

Editorial Appointments:

1975-1978	Editor, **ISOZYME BULLETIN**
1980-1993	Editor**, GENETIC MAPS**, Cold Spring Harbor Publications
1987-1991	Associate Editor -Chief Subject Editor - comparative gene mapping, **GENOMICS**,
1987-2007	Editor, **Journal of Heredity, A**merican Genetic Association
2007-Date	Advisory Editor, **Journal of Heredity**
1990-Date	Associate Editor**, MAMMALIAN GENOME**
2000-Date	Associate Editor, **MOLECULAR PHYLOGENETICS AND EVOLUTION**
1993	Guest Editor, **CURRENT BIOLOGY**, Molecular Evolution Issue
1995	Guest Editor, **CURRENT BIOLOGY**, Genomes and Evolution Issue
1994-2000	**COSMOS** Journal Editorial Board
2008-2017	Associate Editor **Human Genomi**cs
2006-2009	Associate Editor **Annual Reviews of Genomics and Human Genetics**
2010-2018	Associate Editor **Annual Reviews of Animal Biosciences**

Boards of Trustees/Directors:

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
International BarCode of Life- iBOL, Chair Science Advisory Board
BGI Beijing Genomics Institute Science Advisory Board
Genome10K Project Founder and Chair 2009-2017
Genome Russia Project –Scientific Director

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
2016 - Date	Rusian Academy of Sciences
2018 – Date	US National Academy of Sciences

Research Interests:

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

Honors and Academic Recognitions-Abbridged

- **2018- Elected Member of the National Academy of Sciences USA**
- **2016- Elected Foreign Academician of the Russian Academy of Science**
- **1994- Elected Member of the American Academy of Arts and Sciences**
- **1998- Elected Fellow, American Association for the Advancement of Science**
- **2015- Scientific Director Genome Russia Project**
- **2009- Genome10K Project Founder and Chair**
- **1987- Elected Member Cosmos Club, Washington, D.**
- **1988- Elected Member Explorer's Club, New York, N.Y**

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**, Wash, D.C.
1983-Date	Elected Board of Trustees, American Type Culture Association,
1984-Date	, 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 Inst.
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 Asso.**
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 Assoc. for the Advancement of Science**
1998	**Oscar W. Schlam Lectureship** Award School of Veterinary Medicine University of California Davis
1998-2004	**Andrew Dixon White Professor-at-Large**, Cornell University
2006	**Chairman** Board of Trustees **Cheetah Conservation Fund**
2006	**Annual Citation Award for Outstanding Research in AIDS Cancer and Public Health**; University of St Petersburg, St Petersburg, Russia

2006 Institutution of the "**Stephen J.O'Brien Award"** for Outstanding Paper Published by **American Genetic Association**
https://academic.oup.com/jhered/article/105/4/583/913575/Announcements
2009-2017 **Genome10K Project Founder and Chair**
2009 **Honorary Doctarate Degree in Veterinary Medicine** conferred by the College of Veterinary Medicine, University of Zurich, Switzerland
2012 **Senior Fellow** American Humane Association USA
2015 Scientific Director **Genome Russia Project**
2016 Elected **Foreign Member of the Russian Academy of Sciences**
2018 Elected **Member of the National Academy of Sciences USA**

Veterinary Research Honors:

1988 Explorer's Club Annual Dinner Principal Lecture Award in Commemoration of the 100th Anniversary of the **National Geographic Society**.
1998 **Oscar W. Schlam Lectureship** Award School of Veterinary Medicine University of California Davis
1998-2004 **Andrew Dixon White Professor-at-Large**, College of Veterinary Medicine Cornell University, Ithaca
2009 **Honorary Doctarate Degree in Veterinary Medicine** conferred by the College of Veterinary Medicine, University of Zurich, Switzerland
2012 **Senior Fellow** American Humane Association USA

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.

O'Brien, S.J., Menninger, J. C and Nash, W. G.: **An Atlas of Mammalian Chromosomes**. John Wiley & Sons Publishers, New York, NY, 2006.

Graphodatsky A., Perelman, P and O'Brien, S.J.,.: **An Atlas of Mammalian Chromosomes**. **Edition II** John Wiley & Sons Publishers, New York, NY **Second Edition,** *2019 IN presss*.

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. 1984 -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:

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

CITATION Statistics
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SCIENTIFIC ARTICLES

1. O'Brien, S.J. and MacIntyre, R. J.: An analysis of gene enzyme variability in natural populations of Drosophila melanogaster and D. simulans. Am. Nat. 103: 97 113, 1969.

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

3. O'Brien, S.J. and MacIntyre, R. J.: A biochemical genetic map of the Drosophila genome. Drosophila Info. Serv. 46: 89 93, 1971.

4. O'Brien, S.J. , Wallace , B. and MacIntyre, R. J.: α glycerophosphate cycle in Drosophila melanogaster. I. Biochemical and developmental aspects. Biochem. Genet. 7: 141-161, 1972.

5. O'Brien, S.J. and MacIntyre, R. J.: The α glycerophosphate cycle in D. melanogaster. II. Genetic aspects. Genetics 71: 127 138, 1972.

6. O'Brien, S.J. and MacIntyre, R. J.: The α glycerophosphate cycle in D. melanogaster. III. The effect of "null" mutations at α Gphd 1 locus on viability. Am. Nat. 106: 767 771, 1972.

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

8. O'Brien, S.J.: Comparative analysis of malate dehydrogenase of Drosophila melanogaster. Biochem. Genet. 10: 191 205, 1973.

9. O'Brien, S.J. and Gethmann, R. C.: Segmental aneuploidy as a probe for structural genes in Drosophila: Mitochondrial membrane enzymes. Genetics 75: 155 167, 1973.

10. O'Brien, S.J. and Shimada, Y.: The α glycerophosphate cycle in Drosophila melanogaster. IV. Metabolic, ultrastructural, and adaptive consequences of α Gphd 1 "null" mutations. J. Cell Biol. 63: 864 882, 1974.

11. O'Brien, S.J., Boone, C. W., Simonson, J. M., and Austin, F.: The paired label assay for cell surface antigens. Tissue Cult. Assoc. Manual 2: 423 427, 1975.

12. O'Brien, S.J.: Biochemical mutants of Drosophila melanogaster. In: King, R. C. (Ed.) Handbook of Genetics, Vol. III. New York, Plenum, 1975, pp. 669 678.

13. O'Brien, S.J., Kleiner, G., Kern, J., and Reynolds, J.: Zymogram phenotypes of widely used cell lines from various animal species. Isozyme Bull. 9: 20 27, 1976.

14. O'Brien, S.J.: Bvr 1, a restriction locus of a type C RNA virus in the feline cellular genome: Identification, location, and phenotypic characterization in cat x mouse somatic cell hybrids. Proc. Natl. Acad. Sci. USA 73: 4618-4622, 1976.

15. O'Brien, S.J., Simonson, J. M., and Boone, C. W.: Expression of virus structural proteins on murine cell surfaces in association with the production of murine leukaemia virus. J. Gen. Virol. 33: 355 360, 1976.

16. O'Brien, S.J.: Isozymes and allozymes as genetic footprints of cultured cells. In Petricianni, J. (Ed.): Proceedings of the FDA Conference on Cell Substrates for Vaccine Production, 1976, pp. 46n 59n.

17. MacIntyre, R. J. and O'Brien, S.J.: Interacting gene enzyme systems in Drosophila. Ann. Rev. Genet. 10: 281 318, 1976.

18. 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.

19. O'Brien, S.J. and Boone, C. W.: Expression of feline leukemia virus antigens on cat lymphoma cells: Kinetics of biosynthesis. J. Gen. Virol. 35: 511 523, 1977.

20. Lemons, R. S., O'Brien, S.J., and Sherr, C.J.: 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.

21. O'Brien, S.J. and MacIntyre, R. J.: Genetics and biochemistry of enzymes and specific proteins of Drosophila. In Wright, T. R. F. and Ashburner, M. (Eds.): Genetics and Biology of Drosophila, Vol IIa. New York, Academic, 1977, pp. 395 551.

22. O'Brien, S.J., Simonson, J. M., and Davis, S.: Deposition of retrovirus associated antigens (p30 and gp70) on cell membranes of feline and murine leukemia virus infected cells. J. Gen. Virol. 38: 483 496, 1978.

23. O'Brien, S.J. and Simonson, J. M.: Bvr 1: A restriction locus of a type C RNA virus in the feline cellular genome: Pleiotropic restriction of endogenous BALB virus in cat X mouse somatic cell hybrids. J. Exp. Med. 147: 219-232, 1978.

24. Lemons, R. S., O'Brien, S.J., and Sherr, C. J.: The Bevi locus (chromosome 6) encodes a post-penetrational cellular function required for baboon endogenous virus replication in human cells. Cytogenet. Cell Genet. 22: 255-259, 1978.

25. 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.

26. Engel, L. W., Young, N. A., Tralka, T. S., Lippman, M. E., O'Brien, S.J., and Joyce, M. J.: Establishment and characterization of three new continuous cell lines derived from human breast carcinomas. Cancer Res. 38:3352-3364, 1978.

27. Kucera, L. S., Simonson, J. M., O'Brien, S.J., and Coon, H.: On the Lucke tumor origin of LT 1 cells. J. Natl. Cancer Inst. 60: 493-495, 1978.

28. O'Brien, S.J. and Rice, M. C.: Genetic aspects of carcinogenesis and carcinogen testing in outbred Swiss mice. J. Toxicol. Environ. Health 5:69-81, 1979.

29. Noguchi, P., Wallace, R., Johnson, J., Earley, E. M., O'Brien, S.J., Ferrone, S., Pellegrino, M. A., Milstein, J., Needy, C., Browne, W., and Petriceianni, J.: Characterization of the WIDR: A human colon carcinoma cell line. In Vitro 15: 401-408, 1979.

30. Surti, U., Szulman, A. E., and O'Brien, S.J.: Complete (classic) hydatidiform mole with 46,XY karyotype of paternal origin. Hum. Genet. 51: 153-155, 1979.

31. O'Brien, S.J. and Rice, M. C.: Specific genetic loci as targets of carcinogens and tumor promoters in mammals. J. Environ. Pathol. Toxicol. 2: 1055-1068, 1979.

32. Gail, M. H., Weiss, G. H., Mante, N., and O'Brien, S.J.: A solution to the generalized birthday problem with application to allozyme screenings for cell culture contamination. J. Appl. Prob. 16:242-251, 1979.

33. Gardner, M. B., Rasheed, S., Pal, B. K., Estes, J. D., and O'Brien, S.J.: Akvr 1, a dominant MuLV restriction gene segregates in leukemia prone wild mice. In Yohn, D. S., Lapin, B. A., and Blakeslee, J. R. (Eds.): Comparative Leukemia Research. New York, Elsevier/North Holland, 1979, pp. 149-150.

34. Pearson, P. L., Roderick, T. H., Davisson, M. T., Garver, J. J., Warburton, D., Lalley, P. A., and O'Brien, S.J.: Report of the committee on comparative gene mapping. Cytogenet. Cell Genet. 25: 82-95, 1979.

35. Rice, M. C. and O'Brien, S.J.: Genetic variance of laboratory outbred Swiss mice.

Nature 283: 157-161, 1980.

36. Gardner, M. B., Rasheed, S., Pal, B. K., Estes, J. D., and O'Brien, S.J.: Akvr 1, a dominant murine leukemia virus restriction gene is polymorphic in leukemia prone wild mice. Proc. Natl. Acad. Sci. USA 77:531-535, 1980.

37. O'Brien, S.J., Shannon, J. E., and Gail, M. H.: A molecular approach to the identification and individualization of human and animal cells in culture: Isozyme and allozyme genetic signatures. In Vitro 16: 119 135, 1980.

38. Rice, M. C., Gardner, M. B., and O'Brien, S.J.: Genetic diversity in leukemia-prone feral house mice infected with murine leukemia virus. Biochem. Genet. 8: 915 928, 1980.

39. Nelson Rees, W. A., Hunter, L., Darlington, G. J., and O'Brien, S.J.: Characteristics of HeLa strains: Permanent vs. variable features. Cytogenet. Cell Genet. 27: 216 231, 1980.

40. O'Brien, S.J.: The extent and character of biochemical genetic variation in the domestic cat (Felis catus). J. Hered. 71: 2 8, 1980.

41. 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.

42. Gardner, M. B., Rasheed, S., Pal, B. K., Estes, J. D., Berman, E., and O'Brien, S.J.: Genetic analysis of Akvr 1 relative to other murine retrovirus restriction loci. In Baltimore, D., Huang, A. S., and Fox, C. F. (Eds.): Proceedings of ICN UCLA Symposium on Animal Virology. 1980, pp. 223 232.

43. O'Brien, S.J., Nash, W. G., Simonson, J. M., and Berman, E. J.: Establishment of a biochemical genetic map of the domestic cat (Felis catus). In Hardy, W. D., Essex, M., and McClelland, A. J. (Eds.): Feline Leukemia Virus. New York, Elsevier/North Holland, 1980, pp. 401 412.

44. O'Brien, S.J. and Nash, W. G.: Somatic cell genetic analysis of enzyme structural genes of the domestic cat (Felis catus). Carnivore Genet. 4: 81 88, 1980.

45. 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: 228-230, 1981.

46. O'Brien, S.J., Simonson, J. M., Grabowski, M. W., and Barile, M. F.: Analysis of multiple isoenzyme expression among twenty two species of Mycoplasma and Acholeplasma. J. Bacteriol. 146: 222 232, 1981.

47. 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.

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

49. O'Brien, S.J.: Plausible alternatives to bottlenecks to explain reduced genetic diversity. Trends Ecol. Evol. 4: 176-178, 1989.

50. Anagnou, N. P., Antonarakis, S. E., O'Brien, S.J., and Nienhuis, A. W.: A novel form of human polymorphism involving the hDHFR-psi 1 pseudogene identifies three RFLPs. Nucleic Acids Res. 15: 5501, 1987.

51. O'Brien, S.J., Moore, J. L., Martin, M. A., and Womack, J. E.: Evidence for the horizontal acquisition of murine AKR virogenes by recent horizontal infection of the germ line. J. Exp. Med. 155: 1120 1123, 1982.

52. O'Brien, S.J. and Barile, M. F.: Isozyme resolution in mycoplasmas. In Razin, S. and Tully, J. G. (Eds.): Methods of Mycoplasmology, Vol. I. New York, Academic, 1982, pp. 391 396.

53. O'Brien, S.J., Nash, W. G., Winkler, C. A., and Reeves, R. H.: Genetic analysis in the domestic cat as an animal model for inborn errors, cancer and evolution. Prog. Clin. Biol. Res. 94: 67-90, 1982.

54. O'Brien, S.J., Simonson, J. M., and Eichelberger, M. A.: Genetic analysis of hybrid cells using isozyme markers as monitors of chromosome segregation. In Shay, J. W. (Ed.): Techniques in Somatic Cell Genetics. New York, Plenum, 1982, pp. 513 524.

55. Pearson, P. L., Roderick, T. H., Davisson, M. T., Lalley, P. A., and O'Brien, S.J.: Report of the committee on comparative mapping. Oslo Conference (1981): Sixth International Workshop on Human Gene Mapping. Cytogenet. Cell Genet. 32: 208 220, 1982.

56. Nash, W. G. and O'Brien, S.J.: Conserved regions of homologous G banded chromosomes between orders in mammalian evolution: Carnivores and primates. Proc. Natl. Acad. Sci. USA 79: 6631 6635, 1982.

57. O'Brien, S.J. and Johnson, P. A.: An abridged human gene map including oncogenes, neoplasia-related loci and biochemical loci whose homologous counterparts have been assigned in other mammalian species. In O'Brien, S.J. (Ed.): Genetic Maps, Vol. 4. New York, Cold Spring Harbor Laboratory, 1987, pp. 598-604.

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