

CURRICULUM VITAE

NAME

Leonid A. Gavrilov

CONTACT INFORMATION

Center on Demography and Economics of Aging
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EDUCATION

2005 K02 training, University of Chicago, Sociology/Biodemography
1980 Ph.D. Moscow State University, Genetics.
1976 M.S. Moscow State University, Chemistry, with specialization in mathematical modeling and chemical kinetics.

DISSERTATION TITLE

A study of life span genetics using kinetic analysis. Moscow State University, 1980.

POSITIONS HELD

1997 - current Senior Research Associate, Center on Economics and Demography of Aging, NORC at the University of Chicago
2006 – current Faculty member, University of Chicago Center for East European and Russian/Eurasian Studies (CEERES)
1991-1997 Principal Research Scientist, A. N. Belozersky Institute, Moscow State University, Moscow, Russia
1993-1997 Senior Research Scientist, Institute for Systems Analysis, Russian Academy of Sciences, Moscow, Russia
1987-1991 Senior Research Scientist, A. N. Belozersky Institute, Moscow State University, Moscow, Russia
1980-1987 Research Scientist, A. N. Belozersky Institute, Moscow State University

RESEARCH GRANTS AND PROJECTS:

2009-2014 NIH (R01 AG028620), "*Biodemography of Exceptional Longevity in the United States*" (Principal Investigator). \$1,245,525.
2008-2009 SENS Foundation "*Population projections for SENS scenarios*" (Principal Investigator). \$50,000.

- 2005-2006 NORC Academic Research Centers (P30 AG12857) "*Middle-Life Physical Markers, Socioeconomic Status, and Exceptional Longevity: An Exploratory Study of a New Data Resource (the US WWI Draft Cards)*" (Principal Investigator). \$10,000.
- 2001-2007 NIH (K02 AG00976), "*Biodemography of Human Longevity - Training Program*" (Principal Investigator). \$598,050.
- 2004-2005 Society of Actuaries (PI – Natalia Gavrilova), "*Search for predictors of exceptional human longevity.*" Co-Investigator. \$50,000.
- 1998-1999 NIH (R03 AG15698) "*Biodemographic Study of Parental Age Effects on Lifespan*" Principal Investigator. \$50,000 (direct costs).
- 1996-1997 The European Union (INTAS grant #93-1617-ext), "*The Mechanisms of Human Longevity, an Association of Parental Characteristics and Longevity of Their Children - extension*". Co-PI: Representative of the International Research Team, with Guillaume Wunsch (Belgium), Jacques Vallin (France), Michael Murphy (UK) and Natalia Gavrilova (Russia). 18,000 ECU.
- 1995-1996 The European Union (INTAS grant #93-1617), 1995-96, "*The Mechanisms of Human Longevity, an Association of Parental Characteristics and Longevity of Their Children*". Co-PI: Representative of the International Research Team, with Guillaume Wunsch (Belgium), Jacques Vallin (France), Michael Murphy (UK) and Natalia Gavrilova (Russia). 40,000 ECU.
- 1995 International Science Foundation (M7E300), "*Parental Age and Offspring Longevity*". Principal Investigator. \$5,000.
- 1994 International Science Foundation (M7E000), "*Parental Age and Offspring Longevity*". Principal Investigator. \$10,000.
- 1994 International Science Foundation (SBI000), "*Measurement and Analysis of Oldest-Old Mortality*". Principal Investigator. \$5,000.

EDITORIAL BOARD

Experimental Gerontology, Elsevier Science Inc.
Gerontology (Experimental Section), Karger
Rejuvenation Research, Mary Ann Liebert Inc. Publishers, USA
The ScientificWorldJOURNAL
Advanced Science Letters, American Scientific Publishers
Theoretical Biology and Medical Modelling, Associate Editor, BioMed Central
Advances in Aging Research
Journal of Anti-Aging Medicine (1998-2004), Mary Ann Liebert Inc. Publishers, USA
Health Care in Later Life, Arnold Publishers, UK (1996-1998)

RESEARCH PROPOSAL REVIEWER

U.S. Civilian Research & Development Foundation (CRDF)
 Natural Sciences and Engineering Research Council of Canada (2012 Network of Centres of Excellence of Canada, Expert Panel 8)

Canadian Institutes of Health Research (CIHR)
 The Austrian Science Fund (FWF)
 Mathematics of Information Technology and Complex Systems Network of Centres of Excellence
 (MITACS-NCE), Canada

BOOKS

Gavrilov L.A., Gavrilova N.S. *The Biology of Life Span: A Quantitative Approach*, NY: Harwood Academic Publisher, 1991, 385p.
 Cited by Encyclopedia Britannica as recommended reading. The book was positively reviewed by *Nature* (1991, 352: 767), *British Medical Journal* (1992, 305: 431), *Population and Development Review* (1992, 18: 555 and 1998, 24: 381), *Population Studies* (1992, 46: 366), *Am. J. Epidemiology* (1994, 139: 231), *Experimental Gerontology* (1992, 27: 251), *Gerontologist* (1991, 31: 707), *Human Biology* (1992, 64: 630), *J. Epidemiology & Community Health* (1992, 46: 630), *J. Institute of Actuaries* (1992, 119: 379), *BioEssays* (1993, 15: 359), *Age and Ageing* (1992, 21: 386), *Ageing and Society* (1991, 11: 509), *Archives of Gerontology and Geriatrics* (1992, 15: 192), *Educational Gerontology* (1993, 19: 92) and other journals.

Gavrilov, L.A., Gavrilova, N.S. *The Biology of Life Span* [Biologia prodolzhitel'nosti zhizni]. Monograph. 2nd edition. Moscow: Nauka, 1991.

Gavrilov, L. A. (1990). *Podra Prolongarse la Vida del Hombre?* (In Spanish). Moscow: Mir, 200p

Gavrilov, L.A., Gavrilova, N.S. *The Biology of Life Span*. [Biologia prodolzhitel'nosti zhizni]. Monograph. Moscow: Nauka, 1986.

Gavrilov, L.A. *Can humans live longer?* (In Russian), Moscow: Mysl, 1985.

BOOK CHAPTERS

Gavrilova N.S., Gavrilov L.A. New approaches to study historical evolution of mortality (with implications for forecasting). In: C.H.Skiadas (Ed). *Theoretical and Applied Issues in Statistics and Demography*. In press.

Gavrilov L.A., Gavrilova N.S. Predictors of Exceptional Longevity: Effects of Early-Life Childhood Conditions, Mid-Life Environment and Parental Characteristics. In: *2014 Living to 100 Monograph* [published online – August, 2014, <http://livingto100.soa.org/>]. The Society of Actuaries, 2014, 18 pages

Gavrilova N.S., Gavrilov L.A. Mortality Trajectories at Extreme Old Ages: A Comparative Study of Different Data Sources on U.S. Old-Age Mortality. In: *2014 Living to 100 Monograph* [published online – August, 2014, <http://livingto100.soa.org/>]. The Society of Actuaries, 2014, 23 pages

Gavrilova N.S., Gavrilov L.A. Aging Populations: Russia/Eastern Europe. In: P. Uhlenberg (Editor), *International Handbook of the Demography of Aging*, New York: Springer-Verlag, 2009, pp.113-131.

Gavrilova N.S., Gavrilov L.A. Genetic Influences in Later Life. In: D. Carr (Editor), *Encyclopedia of the Life Course and Human Development*, Macmillan Reference USA, 2009, vol.3, pp.165-170.

Gavrilov L.A., Gavrilova N.S. Mortality Measurement at Advanced Ages: A Study of the Social Security Administration Death Master File. *Living to 100 and Beyond: Survival at Advanced Ages* [online monograph]. The Society of Actuaries, 2008, 32 pages

Gavrilova N.S., Gavrilov L.A. Physical and Socioeconomic Characteristics at Young Age as Predictors of Survival to 100: A Study of a New Historical Data Resource (U.S. WWI Draft Cards). *Living to 100 and Beyond: Survival at Advanced Ages* [online monograph]. The Society of Actuaries, 2008, 23 pages.

Gavrilov LA, Gavrilova NS. Reliability Theory of Aging and Longevity. In: Masoro E.J. & Austad S.N.. (eds.): *Handbook of the Biology of Aging*, Sixth Edition. Academic Press. San Diego, CA, USA, 2006, 3-42.

Curtsinger JW, Gavrilova NS, Gavrilov LA. Biodemography of Aging and Age-Specific Mortality in *Drosophila melanogaster*. In: Masoro E.J. & Austad S.N.. (eds.): *Handbook of the Biology of Aging*, Sixth Edition. Academic Press. San Diego, CA, USA, 2006, 261-288.

Gavrilov LA, Gavrilova NS. Models of Systems Failure in Aging. In: P Michael Conn (Editor): *Handbook of Models for Human Aging*, Burlington, MA : Elsevier Academic Press, 2006. 45-68.

Gavrilova, N.S., Gavrilov, L.A. Human longevity and reproduction: An evolutionary perspective. In: Voland, E.; Chasiotis, A. & Schiefenhoewel, W. (eds.). *Grandmotherhood - The Evolutionary Significance of the Second Half of Female Life*. New Brunswick, NJ: Rutgers University Press, 2005, 59-80.

Gavrilova, N.S., Gavrilov, L.A., Semyonova, V.G., Evdokushkina, G.N., Ivanova, A.E. 2005. Patterns of violent crime in Russia. In: Pridemore, W.A. (ed.). *Ruling Russia: Law, Crime, and Justice in a Changing Society*. Boulder, CO: Rowman & Littlefield Publ., Inc, 117-145.

Gavrilova, N.S., Gavrilov, L.A. Search for Predictors of Exceptional Human Longevity. In: "*Living to 100 and Beyond*" Monograph. The Society of Actuaries, Schaumburg, Illinois, USA, 2005, pp. 1-49.

Gavrilov, L.A., Gavrilova, N.S. Early-life factors modulating lifespan. In: Rattan, S.I.S. (Ed.). *Modulating Aging and Longevity*. Kluwer Academic Publishers, Dordrecht, The Netherlands, 2003, 27-50.

Gavrilov L.A., Heuveline P. Aging of Population. In: Paul Demeny and Geoffrey McNicoll (Eds.) *The Encyclopedia of Population*. New York, Macmillan Reference USA, 2003, vol.1, 32-37.

Gavrilova, N.S., Gavrilov, L.A. Evolution of Aging. In: David J. Ekerdt (eds.) *Encyclopedia of Aging*, New York, Macmillan Reference USA, 2002, vol. 2, 458-467.

Gavrilova, N.S., Gavrilov, L.A. Genetics: Ethnicity. In: David J. Ekerdt et al. (eds.) *Encyclopedia of Aging*, New York, Macmillan Reference USA, 2002, vol.2, 538-539.

Gavrilov, L.A., Gavrilova, N.S. Genetics. In: David J. Ekerdt et al. (eds.) *Encyclopedia of Aging*, New York, Macmillan Reference USA, 2002, vol. 2, 536-538.

Gavrilov, L.A., Gavrilova, N.S. Human longevity and parental age at conception. In: J.-M.Robine et al. (eds.) *Sex and Longevity: Sexuality, Gender, Reproduction, Parenthood*, Berlin, Heidelberg: Springer-Verlag, 2000, 7-31.

Gavrilova N.S., Evdokushkina G.N., Ermakov, S.P., Gavrilov L.A. An analysis of the health and mortality data for the provinces of Russia. In: *International Population Conference*. Beijing, 1997. Liege: IUSSP, 1997, vol.3, 1245-1257.

Gavrilov, L.A. Analysis of mathematical models of aging, mortality and life span. In E.B.Burlakova and L.A.Gavrilov (eds.) *Population Gerontology* [Populatsionnaya Gerontologia]. vol. 26. Moscow: VINITI, 1987, 155-189.

Gavrilov, L.A., Semyonova, V.G., Gavrilova, N.S. Methods of analysis of the life tables. In: A.G. Vishnevskii (ed.) *Research Methods* [Metody issledovaniya], Moscow: Mysl', 1986, 96-110.

Gavrilov, L.A., Gavrilova, N.S., and Semyonova, V.G. The life span. A system analysis. In: *Demographic processes and their regularities*, Moscow: Mysl', 1986, 89-109.

Gavrilov, L.A., Gavrilova, N.S. Aging in cell cultures. In: *Biology of Aging* [Biologia starenia], 1982, 236-246. Leningrad: Nauka.

Gavrilov, L.A., Semyonova, V.G., Gavrilova, N.S. On the feasibility of mortality forecasting by the methods of biological kinetics. In: *Issues on population reproduction and demographic policy*, Moscow: Institute of Sociological Studies of the USSR Academy of Sciences, 1982, 108-123.

Gavrilova, N.S., Semyonova, V.G., Gavrilov, L.A. A new principle for testing the mathematical theories of aging, mortality and lifespan. In *Gerontology and Geriatrics. Life extension: forecasts, mechanisms, control*, Kiev: Institute of Gerontology, 1979, 30-34.

JOURNAL ARTICLES

Gavrilov, L.A., Gavrilova, N.S. Predictors of Exceptional Longevity: Effects of Early-Life and Midlife Conditions and Familial Longevity, *North American Actuarial Journal*, 2015, 19(3), in press.

Gavrilov, L.A., Gavrilova, N.S. New developments in biodemography of aging and longevity. *Gerontology*, 2014, Dec 20, [Epub ahead of print] doi: 10.1159/000369011. PMID: 25531147.

Gavrilova NS, Gavrilov LA. Biodemography of old-age mortality in humans and rodents. *J Gerontol A Biol Sci Med Sci* 2015, 70(1): 1-9. doi: 0.1093/gerona/glu009. PMID: 24534516.

Gavrilov, L.A., Gavrilova, N.S. Stone, Ch.A., Zissu, A. New Findings on Older People's Life Expectancies Confirm Gompertz Law: The Impact on the Value of Securitized Life Settlements. *Journal of Structured Finance*, 2014, Vol. 20, No. 2: pp. 66–73. Summer Issue. DOI: 10.3905/jsf.2014.20.2.066.

Gavrilov LA, Gavrilova NS. Determinants of exceptional human longevity: new ideas and findings. *Vienna Yearbook of Population Research* 2013;11:295-323. PMCID: PMC4165392.

Gavrilov L.A., Gavrilova N.S. Biodemography of exceptional longevity: Early-life and mid-life predictors of human longevity. *Biodemography and Social Biology*, 2012, 58(1):14-39; DOI: 10.1080/19485565.2012.666121.

Gavrilova N.S., Gavrilov L.A., Severin, F.F. and Skulachev, V.P. Testing predictions of the programmed and stochastic theories of aging: Comparison of variation in age at death, menopause, and sexual maturation. *Biochemistry (Moscow)*, 2012, 77(7), 754-760.

Gavrilova N.S., Gavrilov L.A. Comments on dietary restriction, Okinawa diet and longevity. *Gerontology*, 2012, 58(3):221-3. Epub 2011 Aug 31., doi: 10.1159/000329894.

Gavrilov L.A., Gavrilova N.S. Season of Birth and Exceptional Longevity: Comparative Study of American Centenarians, Their Siblings, and Spouses. *Journal of Aging Research*, 2011, Article ID 104616, 11 pages, doi:10.4061/2011/104616.

Gavrilov L.A., Gavrilova N.S. Mortality measurement at advanced ages: A study of the Social Security Administration Death Master File. *North American Actuarial Journal*, 2011, 15(3): 432-447.

Gavrilov L.A., Gavrilova N.S. Demographic Consequences of Defeating Aging. *Rejuvenation Research*, 2010, 13(2-3): 329-334.

Gavrilova N.S., Gavrilov L.A. Search for Mechanisms of Exceptional Human Longevity. *Rejuvenation Research*, 2010, 13(2-3): 262-264.

Gavrilov L.A., Gavrilova N.S. Personal Profile. Interview with Leonid A. Gavrilov, Ph.D. and Natalia Gavrilova, Ph.D. Interview by Vicki Glaser. *Rejuvenation Research*, 2009, 12(5): 371-374.

Gavrilova N.S., Gavrilov L.A. Can exceptional longevity be predicted? *Contingencies* [Journal of the American Academy of Actuaries], 2008, July/August issue, pp. 82-88.

Gavrilova N.S., Semyonova V.G., Dubrovina E., Evdokushkina G.N., Ivanova A.E., Gavrilov L.A. Russian Mortality Crisis and the Quality of Vital Statistics. *Population Research and Policy Review*, 2008, 27: 551-574.

Gavrilova N.S., Gavrilov L.A. Search for Predictors of Exceptional Human Longevity: Using Computerized Genealogies and Internet Resources for Human Longevity Studies. *North American Actuarial Journal*, 2007, 11(1): 49-67.

Gavrilova N.S., Gavrilov L.A. Authors' Reply in Discussion "Search for Predictors of Exceptional Human Longevity: Using Computerized Genealogies and Internet Resources for Human Longevity Studies." *North American Actuarial Journal*, 2007, 11(4): 135-138.

Semyonova V.G., Dubrovina E.V., Gavrilova N.S., Evdokushkina G.N., Gavrilov L.A. Estimates of the real levels of violent death rates in Russia. *Public Health and Disease Prevention*, 2005, 3: 14-23.

Gavrilov LA, Gavrilova NS. Why We Fall Apart. Engineering's Reliability Theory Explains Human Aging. *IEEE Spectrum*, 2004, 41(9): 30-35.

Gavrilova NS, Gavrilov LA, Semyonova VG, Evdokushkina GN. Does exceptional human longevity come with high cost of infertility? Testing the evolutionary theories of aging. *Annals of the New York Academy of Sciences*, 2004, 1019: 513-517.

- Gavrilov LA, Gavrilova NS. Early-life programming of aging and longevity: The idea of high initial damage load (the HIDL hypothesis). *Annals of the New York Academy of Sciences*, 2004, 1019: 496-501.
- Gavrilov LA, Gavrilova NS. The reliability-engineering approach to the problem of biological aging. *Annals of the New York Academy of Sciences*, 2004, 1019: 509-512.
- Ivanova A.E., Semyonova V.G., Gavrilova N.S., Evdokushkina G.N., Gavrilov L.A. Mortality trends: Role of particular age groups and causes of death in their shaping. *Public Health and Disease Prevention*, 2004, 6: 3-9.
- Semyonova V.G., Gavrilova N.S., Evdokushkina G.N., Gavrilov L.A. Data quality of medical statistics as a problem of modern Russian health care. *Public Health and Disease Prevention*, 2004, 2: 11-18.
- Ivanova A.E., Semyonova V.G., Gavrilova N.S., Evdokushkina G.N., Dubrovina E.V., Gavrilov L.A. Russian mortality in 1965-2002 -- major problems and opportunities for decrease. *Public Health and Disease Prevention*, 2004, 1: 20-30.
- Gavrilova N.S., Gavrilov L.A., Evdokushkina G.N., Semyonova V.G. Early-life predictors of human longevity: Analysis of the 19th Century birth cohorts. *Annales de Demographie Historique*, 2003, 2: 177-198.
- Gavrilov L.A., Gavrilova N.S. The quest for a general theory of aging and longevity. *Science's SAGE KE (Science of Aging Knowledge Environment)* for 16 July 2003; Vol 2003, No.28, 1-10. <http://sageke.sciencemag.org>
- Arking R, Butler R, Chiko B, Fossel M, Gavrilov LA, Morley JE, Olshansky SJ, Perls T, Walker RF. Anti-aging teleconference: What is anti-aging medicine? *Journal of Anti-Aging Medicine* [Mary Ann Liebert, Inc.]. 6(2): 91-106, 2003
- Ivanova A.E., Semyonova V.G., Gavrilova N.S., Evdokushkina G.N., Gavrilov L.A., Devichenskaya M.N. Age patterns of mortality in urban and rural population of Russia in the 1990s. *Disease Prevention and Health Promotion*, 2003, 1: 17-26.
- Semenova V.G., Ivanova A.E., Gavrilova N.S., Evdokushkina G.N., Gavrilov L.A. Regional variation of mortality as an indicator of health decline in the Russian population. *Disease Prevention and Health Promotion*, 2003, 4: 9-14.
- Gavrilov, L.A., Gavrilova, N.S. Evolutionary theories of aging and longevity. *TheScientificWorldJOURNAL*, 2002, 2: 339-356. Available: <http://www.thescientificworld.com/>
- Gavrilov L.A., Gavrilova N.S., Olshansky S.J., Carnes B.A. Genealogical data and biodemography of human longevity. *Social Biology*, 2002, 49(3-4): 160-173.
- Gavrilov L.A., Gavrilova N.S. The quest for the theory of human longevity. *The Actuary*, 2002, 36(5): 10-13.
- Glaser V., Gavrilov L.A. An interview with Leonid A. Gavrilov, Ph.D. *Journal of Anti-Aging Medicine*, 2002, 5(3): 255-263.

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Ivanova A.E., Semyonova V.G., Gavrilova N.S., Evdokushkina G.N., Gavrilov L.A., Demchenko T.A. Mortality in Russia in the 1990s and reserves of its reduction: Trends and forecasting. *Disease Prevention and Health Promotion*, 2002, 3: 9-19.

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Semyonova V.G., Ivanova A.E., Gavrilova N.S., Evdokushkina G.N., Gavrilov L.A., Devichenskaya M.N. The medico-demographic situation in urban and rural areas: similarity and differences. *Disease Prevention and Health Promotion*, 2002, 5: 8-14.

Gavrilov L.A., Gavrilova N.S. The reliability theory of aging and longevity. *Journal of Theoretical Biology*, 2001, 213(4): 527-545.

Gavrilova, N.S., Gavrilov, L.A. When does human longevity start?: Demarcation of the boundaries for human longevity. *Journal of Anti-Aging Medicine*, 2001, 4(2): 115-124.

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Carnes, B.A., Olshansky, S.J., Gavrilov, L.A., Gavrilova, N.S., Grahn, D. Human longevity: Nature vs. Nurture - fact or fiction. *Perspectives in Biology and Medicine*, 1999, 42(3): 422-441.

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Gavrilova, N.S., Gavrilov, L.A., Evdokushkina G.N., Semyonova, V.G., Gavrilova, A.L., Evdokushkina, N.N., Kushnareva, Yu.E., Kroutko, V.N., Andreyev, A.Yu. Evolution, mutations and human longevity. *Human Biology*, 1998, 70(4): 799-804.

Gavrilov L.A., Gavrilova N.S., Semyonova V.G., Evdokushkina G.N., Kroutko V.N., Gavrilova A.L., Evdokushkina N.N., Lapshin E.V. Evolutionary theory, mutations and human life span. Proc. Russian Acad. Sci. [Doklady Akademii Nauk], 1998, 359(3): 426-427. English translation published in *Doklady Biological Sciences*, 1998, 359(3): 159-160.

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Gavrilov, L.A., Gavrilova, N.S. Sex and longevity. Letter. *Nature*, 1994, 367(6463): 520. 1993

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Gavrilov, L.A., Gavrilova, N.S. Determination of species length of life. Proc. Acad. Sci. USSR [*Doklady Akademii Nauk SSSR*], 1979, 246(2): 465-469. English translation by Plenum Publ Corp: pp. 905-908.

Gavrilov, L.A., Gavrilova, N.S., Yaguzhinsky, L.S. The main regularities of animal aging and death viewed in terms of reliability theory. J. General Biology [*Zhurnal Obschey Biologii*], 1978, 39(5): 734-742.

Gavrilov, L.A. A mathematical model of the aging of animals. Proc. Acad. Sci. USSR [*Doklady Akademii Nauk SSSR*], 1978, 238(2): 490-492. English translation by Plenum Publ Corp: pp.53-55.

Gavrilov, L.A., Yaguzhinsky, L.S. The kinetics of the growth of a human fibroblast culture. *Biophysics* [Biofizika], 1978, 23(6): 1041-1045.

BOOK REVIEWS

Gavrilov LA, Gavrilova NS. The Science of Staying Young [Book Review]. *The Quarterly Review of Biology*, 2008, 83(4): 420-421.

Gavrilov L.A., Gavrilova N.S. Evolution in Health and Disease [Book Review]. *The New England Journal of Medicine*, 2008, 359(17): 1856-1857.

Gavrilov LA, Gavrilova NS. Aging: The Paradox of Life: Why We Age [Book Review]. *The Quarterly Review of Biology*, 2008, 83(3): 325-326.

Gavrilov LA, Gavrilova NS. The Biology of Human Longevity: Inflammation, Nutrition, and Aging in the Evolution of Lifespans [Book Review]. *The Quarterly Review of Biology*, 2008, 83(1): 107-107.

Gavrilov L.A., Gavrilova N.S. The Longevity Revolution: The Benefits and Challenges of Living a Long Life [Book Review]. *The New England Journal of Medicine*, 2008, 358(20): 2187-2188.

Gavrilov L.A., Gavrilova N.S. The Quest for Human Longevity: Science, Business, and Public Policy [Book Review]. *The New England Journal of Medicine*, 2006, 354(19): 2663-2664.

Gavrilov, L.A., Gavrilova, N.S. Validation of exceptional longevity. Book Review. *Population and Development Review*, 2000, 26(2): 40-41.

TEACHING EXPERIENCES:

Courses taught at the Department of Sociology, The University of Chicago (with Dr. N. Gavrilova):
 2000-2001 "Biodemography of Human Mortality and Longevity" (219/319)
 2008 "Demography of Russia and the Former Soviet Union" (SOCI 20182)
 2010 "Demography of Russia and the Former Soviet Union" (SOCI 20182)

Other courses taught:

2007 – lectures at the International Workshop on Human Longevity, Universiti Kebangsaan Malaysia (UKM), Malaysia, November 26-27, 2007
 2008 – lectures at the UNPFA Educational Seminar "Contemporary Methods of Mortality Analysis," Bishkek, Kyrgyzstan, November 3-7, 2008.
 2009 – lectures at the Seminar "Contemporary methods of mortality analysis," Charles University, Prague, Czechia, September 9-14, 2009.
 2012 – lectures at the "Quantitative methods in demography workshop and tutorial," Chania, Greece, June 5-8.
 2013 - Short Course "Contemporary Methods of Mortality Analysis", Institut Universitaire de Medecine Sociale et Preventive, Universite de Lausanne (IUMSP), Lausanne, Switzerland, June 19-21, 2013

TRAINING EXPERIENCES:

2012-2013 CITI Conflicts of Interest Curriculum completed by 08/21/2012.
 2002 NIH online course on Human Participants Protection Education (NIH Completion Certificate issued on 01/12/2002).
 2002 "Topics in Bayesian Analysis" at the University of Chicago (Statistics 316)

PROFESSIONAL SOCIETIES

Gerontological Society of America (GSA Fellow, Convener of GSA Interest Group "Societal Implications of Delayed Aging")
 Population Association of America (PAA)
 International Union for the Scientific Study of Population, IUSSP (1995-2006)
 Social Science History Association (SSHA, 2001-2003)
 European Association for Population Studies (EAPS, 1995-98)
 Moscow Society of Naturalists

AD-HOC REVIEWER

AGE (Journal of the American Aging Association)
 Ageing Research Reviews
 Annals of Human Genetics
 Biodemography and Social Biology
 Biogerontology
 Biology Letters (Royal Society)
 BioMed Central
 Demography
 Economics & Human Biology

European Journal of Population
 Evolutionary Ecology Research
 Experimental Gerontology
 FEBS Letters
 Genus
 Gerontology
 International Journal of Biometeorology
 International Journal of Epidemiology
 Journal of Anti-Aging Medicine
 Journal of Gerontology (Biological Sciences)
 Journal of Gerontology (Medical Sciences)
 Journal of the American Geriatrics Society
 Journal of the American Statistical Association
 Journal of the Royal Statistical Society, Series A (Statistics In Society)
 Journal of Theoretical Biology
 Mathematical Biosciences
 Mathematical Population Studies
 Mechanisms of Ageing and Development
 PNAS USA
 Population
 Population and Development Review
 Population Studies
 Rejuvenation Research
 Scandinavian Journal of Statistics
 Science
 Social Biology
 Social Science & Medicine
 Sociological Methodology
 TheScientificWorldJournal

BOOK REVIEWER

The New England Journal of Medicine
 Population and Development Review
 The Quarterly Review of Biology
 Age and Ageing
 Ageing and Society

OTHER PROFESSIONAL ACTIVITIES

Consultant for the National Institute on Aging: National Institutes of Health Professional Service Contract #263 SDN74858 "Inventory of data resources on familial aggregation of human longevity that can be used in secondary analysis in biodemography of aging", 35pp. Submitted to NIA on 05/29/98.

Member of the Scientific Advisory Board of the Supercentenarian Research Foundation and the Research Board of the SENS Foundation.

AWARDS AND HONORS:

- 2009 Fellow, Gerontological Society of America
- 2003 "Who'sWho in America," Marquis Who'sWho
- 2003 "Who'sWho in Medicine and Healthcare," Marquis Who'sWho
- 2003 "Who'sWho in Science and Engineering," Marquis Who'sWho
- 2002 "Who'sWho in America," Marquis Who'sWho
- 2002 "Who'sWho in Medicine and Healthcare," Marquis Who'sWho
- 2002 "Who'sWho in Science and Engineering," Marquis Who'sWho
- 1997 Gordon Research Conference on the Biology of Aging. Travel award
- 1997 REVES10 International Meeting on Health Expectancy (Tokyo, October 9-12, 1997). Travel award from the Organizing Committee.
- 1996 U.S. Civilian Research and Development Foundation (CRDF), Proposal Development Program Award (grant #PDP48), 1996.
- 1994 International Science Foundation (ISF), 1994. Emergency Grant for Russian Scientists of the Top Category.
- 1993 International Science Foundation (ISF), 1993. Emergency Grant Award.
- 1991 A. N. Belozersky Institute, 1991. Award for the best scientific research at the Institute in 1990-1991.
- 1991 Trinity College, Cambridge University, UK. (Cambridge, December 1991). Travel award.
- 1991 European Population Conference (Paris, October 1991). Travel award from the Organizing Committee.
- 1989 Moscow Society of Naturalists, 1989. Award for the best scientific research in natural science in 1986-1988.

MEDIA COVERAGE OF RESEARCH (SELECTED)

BBC News (2014), The Wall Street Journal (2012), Los Angeles Times (2012, 2006), Chicago Sun-Times (2012), The Chronicle of Higher Education (2012), New Scientist (2012, 2006), the NIH Record (2012), U.S. News & World Report (2012), Daily Herald (2012), Russian Newsweek (2008), The Sun, UK (2006), Washington Post (2007, 2006), Daily Mail (2006), Forbes (2006), Chicago Tribune (2006), The New York Times (2005)

INVITED PRESENTATIONS (SELECTED, LAST TEN YEARS)

Gavrilov, L.A. (2014, November). "Determinants of survival to very old age: Role of familial and life course factors." The Individual Finance and Insurance Decisions Centre (IFID), Toronto, Canada, 2014 Annual IFID Centre Conference "Financial and Actuarial Implications of Very Old Age."

Gavrilov, L.A. (2014, April, October). "Human Longevity and a New Vision of Aging." Center for Health and the Social Sciences (CHeSS), University of Chicago Medical Center.

Gavrilov, L.A. (2014, January). "Predictors of Exceptional Longevity: Effects of Early-life Childhood Conditions, Mid-life Environment and Parental Characteristics." International Symposium "Living to 100 and Beyond" sponsored by the Society of Actuaries, Orlando, FL

Gavrilov, L.A. (July, 2013). "Mortality Trajectories at Extreme Old Ages: A Comparative Study of Different Data Sources on Old-Age Mortality." Social Innovation on Active and Healthy Ageing for Sustainable Economic Growth (SiforAGE EU project). Basque Culinary Center, San Sebastian.

Gavrilov, L.A. (July, 2013). "New Approaches to Study Mortality and Longevity Risks." Universitat de Barcelona, Economics and Business Faculty, Spain.

Gavrilov, L.A. (June, 2013). "New Estimates of Mortality Trajectories at Extreme Old Ages." Centre d'Estudis Demografics, Universitat Autònoma de Barcelona, Spain.

Gavrilov, L.A. (June, 2013). Keynote lecture "Biodemography of mortality and longevity." Demographic Analysis and Research International Workshop (Demographics2013) June 25 - 28, 2013 Mataro (Barcelona area), Spain.

Gavrilov, L.A. (March, 2013). "Testing Evolutionary Theories of Aging and Longevity." University of Southern California Longevity Institute, Los Angeles, CA.

Gavrilov, L.A. (November, 2012). "Determinants of exceptional human longevity: new ideas and findings," Presented at the International Conference "Determinants of Unusual and Differential Longevity" opening session, Vienna, Austria.

Gavrilov, L.A. (October, 2012). Keynote lecture "Unraveling the Secrets of Human Longevity," Princeton University, Department of Molecular Biology retreat.

Gavrilov, L.A. (September, 2012). "New Estimates of Mortality Trajectories at Extreme Old Ages," Duke University Population Research Institute (DuPRI) seminar series.

Gavrilov, L.A. (June, 2012). Keynote lecture "Biodemography of Mortality and Longevity." Demographic Analysis and Research International Conference (Demographics 2012), Chania, Crete, Greece.

Gavrilov, L.A. (October 2011). "Biomedical Longevity Revolution and its Consequences." The "Global Population and the Planetary Future - 2100" workshop. Foundation For the Future office, Bellevue, WA

Gavrilov, L.A., Gavrilova, N.S. (October, 2011) "Centenarians - an experiment of Nature" Moscow's Polytechnical Museum, Russia. Series of lectures "Aging is not a destiny. Scientific opportunities of life extension"

Gavrilov, L.A., Gavrilova, N.S. (2011, June). "Reliability theory of aging and longevity," The second LEPAS workshop on the Economics of Aging, Alicante, Spain

Gavrilov, L.A., Gavrilova, N.S. (2011, June). "How Much Would Late-Onset Interventions in Aging Affect Demographics?" The American Aging Association's 40th Annual Meeting "Mechanisms of Aging: Emerging Concepts"

Gavrilov, L.A., Gavrilova, N.S. (2011, March). " Mortality Measurement Beyond Age 100" 2011 Chicago Actuarial Association Workshop, Chicago

Gavrilov, L.A. (2011, January). " Early-Life Predictors of Exceptional Longevity in the United States: Why Centenarians are Different from Their Shorter-Lived Siblings " International Symposium "Living to 100 and Beyond: Survival at Advanced Ages" sponsored by the Society of Actuaries, Orlando, FL

Gavrilov, L.A., Gavrilova, N.S. (2010, November). "How do Changes in Human Longevity Impact on our Demography?" International Congress "Our Common Future," Hannover-Essen, Germany.

Gavrilova, N.S., Gavrilov, L.A. (2010, October). "Human Longevity and a New Vision of Aging" 3rd Annual Conference of Canadian Association of Retired Persons (CARP) on Aging & Health, Toronto, Canada

Gavrilov, L.A. (2010, October). "Reliability Theory of Aging and Longevity," Immlnst International Conference on Longevity, Brussels, Belgium

Gavrilov, L.A., Gavrilova, N.S. (2010, July). "How Long Will We Live in the 21st Century?" 8th Insurance-Linked Securities Summit, Bermuda

Gavrilov, L.A., Gavrilova, N.S. (2010, July). "Biodemography of Exceptional Longevity" Hannover Life Reassurance Bermuda Limited, Bermuda

Gavrilova, N.S., Gavrilov, L.A. (2010, May). "Comparative analysis of parameters of human ontogenesis and senescence" International Conference "From Homo sapiens to Homo sapiens liberatus" Moscow State University, Moscow, Russia

Gavrilov, L.A., Gavrilova, N.S. (2010, April). "Biodemography of exceptional longevity" Population Studies Center, University of Pennsylvania, Philadelphia

Gavrilov, L.A., Gavrilova, N.S. (2010, March). "Predictors of Exceptional Longevity (New Developments and Findings)." 2010 Chicago Actuarial Association Workshop, Chicago

Gavrilov, L.A. (2010, February). " Biodemography and perspectives of human lifespan extension" International Conference "Bioenergetics: from the past till the present" Moscow State University, Moscow, Russia

Gavrilov, L.A. (2009, September). "Human mortality and longevity." Charles University in Prague, Czechia.

Gavrilov, L.A. (2009, September). "Demographic consequences of defeating aging" Forth Conference "Strategies for Engineered Negligible Senescence (SENS)," Queens' College, Cambridge, England

Gavrilov, L.A. (2008, November). " Modeling of mortality" UNPFA seminar "Contemporary Methods of Mortality Analysis," Bishkek, Kyrgyzstan

Gavrilov, L.A. (2008, January). " Mortality Measurement at Advanced Ages: A Study of the Social Administration Death Master File" International Symposium "Living to 100 and Beyond: Survival at Advanced Ages" sponsored by Society of Actuaries, Orlando, FL

Gavrilov, L.A. (2007, November). "Models of Systems Failure in [Human] Aging" keynote lecture. International Conference on Mathematical Sciences "Integrating Mathematical Sciences within Society," Bangi-Putrajaya, Malaysia

Gavrilov, L.A. (2007, November). "Reliability theory of aging and longevity" International Workshop on Human Longevity, Universiti Kebangsaan Malaysia (UKM), Malaysia

Gavrilov, L.A. (2007, December). " Biodemography of Human Longevity". 2007 National Conference on Ageing in Malaysia "Building on the Past, Looking to the Future", " Bangi-Putrajaya, Malaysia

Gavrilov, L.A. (2007, August). " Aging: Reliability theory and the concept of phenoptosis" International Conference on Aging & Longevity Studies "From Homo sapiens to Homo sapiens discatenatus," Moscow State University, Moscow, Russia

Gavrilov, L.A., Gavrilova, N.S. (2007, May). "Determinants of Exceptional Longevity" Dalhousie University, Halifax, Canada

Gavrilov, L.A., Gavrilova, N.S. (2007, April). "Biodemography of Human Longevity: New Methodological Approaches" Harvard School of Public Health, Harvard University

Gavrilov, L.A., Gavrilova, N.S. (2007, March). "Biodemography of Human Longevity: New Findings and Ideas" Center for Demography of Health and Aging (CDHA), University of Wisconsin-Madison

Gavrilov, L.A. (2006, August). " Reliability Theory of Aging and Longevity" Buck Institute for Age Research, Novato, CA

Gavrilov, L.A., Gavrilova, N.S. (2006, February). "Reliability-Theory Approach to Epidemiological Studies of Aging, Mortality and Longevity" Columbia University, Mailman School of Public Health

Gavrilov, L.A., Gavrilova, N.S. (2006, January). "Mortality Tables and Laws: Biodemographic Analysis and Reliability Theory Approach" International Conference "Longevity and Mortality Risks: Research Contributions" Paris, France

Gavrilov, L.A. (2005, October). " Reliability Theory of Aging and Longevity" The University of California, Santa Cruz

Gavrilov, L.A. (2005, May). " Reliability Theory of Aging and Longevity" The University of Chicago Department of Ecology and Evolution. The Ecology and Evolution Natural History Seminar

Gavrilova, N.S., Gavrilov, L.A. (2005, January). "Search for Predictors of Exceptional Human Longevity: Using Computerized Genealogies and Internet Resources for Human Longevity Studies" International Symposium "Living to 100 and Beyond: Survival at Advanced Ages" sponsored by Society of Actuaries, Orlando, FL

PRESENTATIONS AT PROFESSIONAL MEETINGS (LAST FIVE YEARS)

Gavrilov L.A., Gavrilova N.S. (May 2013). Predictors of Exceptional Longevity: Effects of early-life childhood conditions, mid-life environment and parental characteristics. Paper presented at the Meeting of the International Network on Health Expectancy (REVES), Austin, TX, 27-29 May, 2013.

Gavrilov L.A., Gavrilova N.S. (May 2012). "Determinants of Exceptional Longevity: Early-Life Conditions Mid-Life Environment and Parental Characteristics." Population Association of America Annual Meeting. New Orleans, LA, April 11-13, 2013.

Gavrilov L.A., Gavrilova N.S. (September 2012). "Mortality Measurements and Mortality Trajectories at Advanced Ages." European Working Group on Health, Morbidity and Mortality Tallinn workshop (Tallinn, Estonia).

Gavrilov L.A., Gavrilova N.S. (May 2012). "Month of Birth and Exceptional Longevity: A Within-Family Analysis." Population Association of America Annual Meeting (San Francisco, CA)

Gavrilov L.A., Gavrilova N.S. (November, 2011). "New Estimates of Mortality Trajectories at Extreme Old Ages." Annual meeting of the Gerontological Society of America, Boston, MA

Gavrilov L.A., Gavrilova N.S. (November, 2011). "Societal Implications of Delayed Aging," Annual meeting of the Gerontological Society of America, Boston, MA

Gavrilov L.A., Gavrilova N.S. (May, 2011). "Sex differences in familial transmission of human longevity." Meeting of the International Network on Health Expectancy (REVES), Paris, France.

Gavrilov L.A., Gavrilova N.S. (March-April 2011). "Old-Age Mortality Measurement and Modeling." Population Association of America Annual Meeting (Washington, DC)

Gavrilov L.A., Gavrilova N.S. (November 2010). "Being Born to Young Mother is Associated with Higher Chances of Living to 100." Annual meeting of the Gerontological Society of America, New Orleans, LA

Gavrilova, N.S., Ivanova, A.E., Semyonova, V.G., Gavrilov L.A. "Ethnic Differentials of Mortality in Russia and the Role of Socio-Economic Conditions." Paper presented at the Annual Meeting of the Population Association of America, Dallas, TX, April, 2010.

Gavrilov L.A., Gavrilova N.S. "Can We Measure Biological Age?" Paper presented at the Annual meeting of the Gerontological Society of America, Atlanta, GA, November 2009.

Gavrilov L.A., Gavrilova N.S. "Body Size in Midlife and Exceptional Longevity: A Study of the US WWI Draft Registration Cards." Presented at the XIXth IAGG World Congress of Gerontology and Geriatrics, Paris, France, 5-9 July, 2009

Gavrilov L.A., Gavrilova N.S. "Physical characteristics at midlife and survival to age 100: A study of American men." Paper presented at the Meeting of the International Network on Health Expectancy (REVES), Copenhagen, Denmark, 27-29 May, 2009.

Gavrilov L.A. "Mortality Measurement at Advanced Ages." Paper presented at the Annual Meeting of the Population Association of America, Detroit, April-May, 2009.

Gavrilova, N.S., Gavrilov L.A. Midlife Predictors of Exceptional Longevity: A Study of the U.S. WWI Draft Registration Cards. Presented at the Annual Meeting of the Population Association of America, Detroit, April-May, 2009.