

Marc Tatar, Ph.D.
Professor
Department of Ecology and Evolutionary Biology
Box G-W, Brown University
Providence, Rhode Island 02912
(401) 863-3455, 863-2166 (fax), email: Marc_Tatar@Brown.edu

Education

- B.A. 1980: Earlham College, Richmond, Indiana (Biology)
- M.A. 1986: University of California, Davis (Zoology)
- Ph.D. 1994: University of California, Davis (Ecology)

Appointments and Honors

1994	Merton Love Award for Outstanding Dissertation in Ecology, UC Davis
1994	Graduate Award for Excellence in Gerontology, UC Davis
1994-1997	Postdoctoral Associate, University of Minnesota
1997-2003	Assistant Professor of Biology, Brown University
2001-2003	Manning Assistant Professor, Brown University
2003-2007	Associate Professor of Biology, Brown University
2007-	Professor of Biology, Brown University
2002, 2004	National Academy of Sciences/Beckman Frontiers of Science
2001-2005	<i>Aging Cell</i> , Founding Joint Editor-in-Chief
2006-2007	<i>Science</i> , Board of Reviewing Editors
2010	Inno-Project Advisory Committee (KRIBB, Korea)
2011-2017	NIA-B Study Section Permanent
2011-2021	MERIT Award, NIA/NIH

Research Support

Ongoing (with total award)

R01 AG024360-06 Tatar (PI) (MERIT)	8/04 – 3/21
“Genetic and Molecular Basis of Longevity”	\$1,909,244

P01 AG033561, Tatar (project leader) and Core B	4/11– 3/16
Total program direct costs for full budget period:	\$5,044,119
Title: Genetic Analysis of Drosophila Functional Aging	

Completed (with total award)

R01 AG031152, Tatar (PI)	9/08 – 7/14
“Mechanisms of Aging Regulation by Drosophila Germline”	\$1,533,857

American Parkinson Disease Association, Tatar (PI)	9/08 – 8/12
Dr. Roger Duvoisin Grant	\$160,000
Investigates the genetic interactions between the <i>foxo</i> transcription factor and <i>parkin</i> in <i>Drosophila</i>	

R01 AG030329, Tatar (PI) “The Genetics of Reproductive Senescence”	9/06 – 8/12 \$2,592,220
NASA Cooperative Agreement NNX08AZ52A, Tatar (PI) With Lynn Rothschild of NASA Ames “Assessing the potential for life on an asteroid”	8/08 – 8/11 \$201,403
Glenn Foundation Award	9/07 – 8/09 \$50,000
Senior Scholar Award in Aging, Ellison Medical Foundation, Tatar (PI) “Metabolomic Analysis of Aging by Stable Isotope Spectrometry”	11/04 – 10/08 \$911,300
Pfizer Collaborative Research, Tatar (PI) “Characterization of Drosophila CG6770, a homolog of the human P8 protein, as a nutrient-sensitive cell growth regulator tied to glucose metabolism”	1/08 – 12/08 \$101,869
R01 AG021953, NIH, Tatar (PI) “Regulatory Systems of Drosophila Aging”	4/03 - 3/08 \$1,671,078
New Scholars Program, Ellison Medical Foundation, Tatar (PI) "Neuroendocrine Regulation of Aging in Drosophila"	7/00 - 6/04 \$200,000
Pfizer Collaborative Research, Tatar (PI) “Genetic and functional analysis of the PGC-1 pathway in Drosophila”	1/06 – 12/07 \$201,869
Pfizer Collaborative Research, Tatar (PI) “Nutrient Regulation of the Insulin Signaling Pathway in Drosophila’	5/02 - 5/04 \$20,000
R01 AG16632, NIH, Tatar (PI) "Longevity Candidate Gene Polymorphisms in Drosophila"	4/99 - 3/04 \$1,505,510
R03 AG14450, NIH, Tatar (PI) “Demography of Genes in Nature and the Laboratory”	1997 - 1999 \$72,200
P01 AG0876, NIH, J. Vaupel (PI) “Demographic analysis of the Oldest-old from a Natural Population”	1999 - 2001 \$168,934
A96151 Young Investigator Award, AFAR, Tatar (PI) “Mapping Genes for Mortality with Transposable Elements in Drosophila”	1996 - 1998 \$40,000

Teaching

Brown University:

- 1997-2003: General Genetics

- 1997-present: Undergraduate Honors Research Thesis Primary Mentor
- 1999, 2004 - present: Darwinian Medicine
- 2000, 2002: Evolutionary Ecology
- 2002, 2003, 2004, 2008: Graduate Seminars (EEB)
- 2007 - present: Biology of Aging
- Mentoring: 4 Doctoral Students, 13 Postdoctoral Fellows
-

Extramural:

- German American Academic Council Summer Institute, UCD, 1997
- NIA Summer Course in Experimental Aging Research, 2002 – 2005, 2015
- Molecular Biology of Aging Course, MBL, Woods Hole 2002-2013

Service

Brown University:

- Co-organized Brown colloquium “Biology of Human Aging” (1998- present)
- Undergraduate Diversity in Science Working Group (2004-5)
- School of Medicine, Curriculum Redesign Working Group (2006)
- Center for Genetics, Genomics, Proteomics faculty search committee (2004 – 2006)
- NIH T32 Biology of Aging Graduate Training Grant, Assistant Director (2012-2017)
- Academic Priorities Committee (2013)
- Committee for Faculty Equity and Diversity, Officer (2015-2018)

Extramural:

- Board of Reviewing Editors, *Science* (2006-2007)
- Founding, Joint Editor-in-Chief, *Aging Cell* (2001 – 2005)
- Editorial Review Board: *Demographic Research* (1998- 2013), *Mechanisms of Aging and Development* (1999-2007), *Aging Cell* (2006-present)
- NIA, Longevity Gene Consortium, Observational Study Monitoring Board
- NIA-B Study Section (2011-2017)

Selected Invited Talks and Symposia

2015	Boehringer Ingelheim Pharmaceuticals, CT
2015	GRC Biology of Aging, ME
2015	Masaryk University, Brno, Czech Republic
2015	GRC, IGF & Insulin Systems, Ventura
2015	Sanford-Burnham Inst., San Diego
2014	University of Calgary, Alberta
2014	International GRS/IGF Congress Plenary, Singapore
2014	Tokyo University, Japan
2014	Einstein School of Medicine, NY
2013	Mayo Clinic, Kogod Center, Rochester, MN
2013	KRIBB, Daejon, Korea
2013	Plenary, Asian/Pacific DRC, Seoul, Korea
2013	FOXO3 in Aging Symposium, USCF

2013 GRC, IGF Factors in Pathology and Disease, Ventura
2012 CSHL Molecular Biology of Aging Symposium
2012 Leigh Distinguished Alumni Seminar, UC Davis
2012 NIA New Investigator Symposium Keynote
2012 Burnham Institute Symposium, San Diego
2012 Barshop Institute for Aging Research, San Antonio
2011 Lifespan Research Celebration, Keynote
2011 NIA Comparative Physiology Symposium, Bethesda
2011 Leiden University Medical Center, Netherlands
2011 Cell Symposium, Metabolism and Aging, Hyannis, MA
2011 GRC, Ventura
2010 KRIBB, Daejeon, Korea
2010 KSMCB Conference, Seoul, Korea
2010 NIA LAG Symposium, Bethesda
2010 UCSD, Neurobiology
2010 Keystone Symposium, Tahoe
2010 LIMES Institute, University of Bonn
2009 Veterinärmedizinische Universität, Vienna
2009 McGill University, Montreal
2009 Stanford University, California
2009 Georgetown University, Washington, DC
2008 University of Fribourg, Switzerland
2008 Keystone Symposium, Colorado
2008 Ellison Medical Foundation Symposium, MBL
2008 Molecular Genetics of Aging Conference, CSHL
2007 Arizona State University
2007 Leiden University, The Netherlands
2007 Hagedorn Institute, Denmark
2007 ETH, Zurich, Switzerland
2007 Endocrine Society Annual Meeting Symposium, Toronto
2007 GRC IGF Signaling, Ventura
2006 Cancer Research Institute, Toronto
2006 ICREA/IRB Barcelona Joint Conference, Spain
2006 Radcliffe Institute for Advanced Studies
2006 Institute for Advanced Studies, Princeton
2006 Univ. Washington, Nathan Shock Center, Seattle
2006 Drosophila Research Conf, (Platform), Houston
2006 Conference on Neural Control of Behavior, UCLA
2005 Scripps Research Institute, La Jolla
2005 The Brookings Institute, Washington, DC
2005 Baylor College of Medicine, Houston
2005 University of Pennsylvania School of Medicine
2005 Washington University School of Medicine, St. Louis
2004 National Academy of Sciences, Beckman Frontiers, Irvine
2004 7th International Symposium Neurobiology of Aging, Bregenz
2004 Drosophila Research Conference, Platform Presentation, Washington

- 2004 Biologie du Développement et Cancer, Nice
- 2004 University of Lausanne, Switzerland
- 2003 Fred Hutchison Cancer Research Center
- 2003 European Union Workshop on Development and Aging
- 2003 Cohen Lecture, Institute of Gerontology, Univ. Michigan
- 2003 Drosophila Research Conference, Platform Presentation, Chicago
- 2003 Gordon Research Conference on Aging, Ventura
- 2002 Molecular Genetics of Aging, CSHL
- 2002 Buck Institute Symposium, Navato
- 2002 Frontiers of Aging Research, Univ. Washington, Seattle
- 2002 Endocrine Society Annual Meeting, San Francisco
- 2002 NIA Workshop on Comparative Biology of Aging, Washington

Publications

- Bai H, Post S, Kang P, Tatar M. 2015. Drosophila longevity assurance conferred by reduced Insulin Receptor Substrate *chico* partially requires 4E-BP. *PLoS ONE*.10(8): e0134415.
- Hiang M, Yen J, Bai H, Wang H, Wang P. 2015. Tequila regulates insulin-like signaling and extends life span in *Drosophila melanogaster*. *J Gerontology Biological Sciences*. 70:1461-9.
- Whitaker R, Gil MP, Ding F, Tatar M, Helfand SL, Neretti N. 2014. Dietary switch reveals fast coordinated gene expression changes in *Drosophila melanogaster*. *Aging (Albany NY)* 6(5):355-68. PMID: 24864304
- Ding F, Gil MP, Franklin M, Ferreira J, Tatar M, Helfand SL, Neretti N. 2014. Transcriptional response to dietary restriction in *Drosophila melanogaster*. *J Insect Physiol*. 69:101-6.
- Tatar M, Post S, Yu K. 2014 Nutrient control of *Drosophila* longevity. *Trends Endocrinol Metab*. 25:509-17.
- Bai H, Kang P, Tatar M. 2013 The regulation of *Drosophila* aging by insulin/IGF signaling via FOXO mediated by TGF-b/Activin control of autophagy. *PLoS Genetics* 9(11):e1003941. doi: 10.1371/journal.pgen.1003941
- Yamamoto R, Bai H, Dolezal A, Amdam G, Tatar M. 2013. Juvenile hormone regulation of *Drosophila* aging. *BMC Biology* 11:85. doi:10.1186/1741-7007-11-85
- Rus F, Flatt T, Aggarwal K, Caffrey D, Tatar M, and Silverman N. 2013 Crosstalk between the ecdysone signaling pathway and the *Drosophila* innate immune response. *EMBO Journal*. 32L1626-38. doi: 10.1038/emboj.2013.100
- Paik D, Jang YG, Lee YE, Lee YN, Yamamoto R, Gee HY, Yoo S, Bae E, Min K, Tatar M, Park J-J. 2012. Misexpression screen delineates novel genes controlling *Drosophila* lifespan. *Mech Aging Devel*. 133: 234-245
- Hong SY, Lee K-S, Kwak S-J, Kim A-K, Bai H, Jung M-S, Kwon O-Y, Song W-J, Tatar M, and Yu K. 2012. Minibrain/Dyrk1a regulates food intake through the Sir2-FOXO-sNPF/NPY pathway. *PLoS Genetics*. 8(8)e1002857.
- Bai H, Kang P, Tatar M. 2012. *Drosophila* insulin-like peptide-6 (*dilp6*) expression from fat body extends lifespan and represses secretion of *Drosophila* insulin-like peptide-2 from the brain. *Aging Cell* 11(6):978-85.
- Bergland AO, Chae H-S, Kim Y-J, Tatar, M. 2012. Fine scale mapping of natural variation in fly fecundity identifies neuronal domain of expression and function of an aquaporin. *PLoS Genetics* 8(4): e1002631. doi: :10.1371/journal.pgen.1002631.

- Villa-Cuesta E, Boylan JM, Tatar M, Gruppuso PA. 2011. Resveratrol inhibits protein translation in H4-II-E hepatic cells. *PLoS One* 6(12):e29513.
- O'Connor KA, Brindle E, Shofer J, Trumble BC, Aranda JD, Rice K, Tatar M. 2011. The effects of a long-term psychosocial stress on reproductive indicators in the baboon. *American Journal of Physical Anthropology* 145:629-638.
- Yamamoto R, Tatar M. 2011. Insulin receptor substrate *chico* acts with and without the transcription factor FOXO to extend *Drosophila* lifespan. *Aging Cell* 10: 729-32.
- Tatar, M. 2011. The plate half-full: Status of research on the mechanisms of dietary restriction in *Drosophila melanogaster*. *Exp. Gerontol.* 286: 363-8.
- Sajid, W., Kulahin, N., Schluckebier, G., Ribel, U., Henderson, H., Tatar, M., Hansen, B.F., Svendsen, A.M, Kiselyov, V.V., Nørgaard, P., Wahlund, P.-O., Brandt, J., Kohanski, R.A., Andersen A.S., De Meyts, P. 2011. High-resolution structure and biological properties of *Drosophila* insulin-like peptide 5 (DILP5) show evolutionary conservation of receptor binding properties but not of dimerization mechanism. *J Biol Chem.* 286(1):661-73. Epub 2010 Oct 25.
- Hodkova, M., Tatar, M. 2011. Parallels in understanding the endocrine control of life span with *Pyrrhocoris apterus* and *Drosophila melanogaster*. In "Mechanisms of Life History Evolution" T. Flatt and A. Heyland (eds). Oxford University Press. 171-179.
- Villa-Cuesta, E., Sage, B., Tatar, M. 2010. A role for *Drosophila* dFoxO and dFoxO 5'UTR internal ribosomal entry sites during fasting. *PLoS ONE.* 9;5(7):e11521
- Garbuzov, A., Tatar, M. 2010. Hormonal regulation of *Drosophila* microRNA *let-7* and *miR-125* that target innate immunity. *FLY.* 4:306-11.
- Tatar, M. 2010. Reproductive aging in invertebrate genetic models. *Ann. New York Acad. Sci.* 1204:149-55.
- Tatar, M. 2009. Metabolism by remote control. *Cell Metabolism* 10(3):164-6.
- Flatt, T., Heyland, A., Rus, F., Porpiglia, E., Sherlock, C., Yamamoto, R., Garbuzov, A., Palli, S.R., Tatar, M., Silverman, N. 2008 Hormonal regulation of the humoral innate immune response in *Drosophila melanogaster*. *J Exp Biol.* 211:2712-24.
- Bergland, A.O., Genissel, A., Nuzhdin, S.V., Tatar, M. 2008 Quantitative trait loci affecting phenotypic plasticity and the allometric relationship of ovariole number and thorax length in *Drosophila melanogaster*. *Genetics.* 180:567-82.
- Flatt, T. Min, K.J., D'Alterio, C., Villa-Cuesta, E., Cumbers, J., Lehmann, R., Jones, D.L., and Tatar, M. 2008. *Drosophila* germ-line modulation of insulin signaling and lifespan. *Proc. Natl. Acad. Sci. USA.* 105: 6368-6373.
- Min, K.J, Yamamoto, R., Buch, S. Pankratz, M., Tatar, M. 2008. *Drosophila* lifespan control by dietary restriction independent of insulin-like signaling. *Aging Cell.* 7: 199-206.
- O'Brien, D., Min, K.J., Tatar, M. 2008. Use of stable isotopes to examine how dietary restriction extends *Drosophila* lifespan. *Current Biology.* 18: R155-156.
- Lee, K-S., Kwon, O-Y., H. Lee, J.H. Kwon, K., Min, K-J. Jung, S-A., Kim, A-K., You, K-H., Tatar, M. and Yu, K. 2008. *Drosophila* short neuropeptide F signaling regulates growth by ERK mediated insulin signaling. *Nature Cell Biology.* 10: 468-475.
- Neretti, N., Remondini, D., Tatar, M., Sedivy, J.M., Pierini, M., Mazzatti, D., Powell, J., Franceschi, C., and Castellani, G.C. 2007. Correlation analysis reveals the emergence of coherence in the gene expression dynamics following system perturbation. *BMC Bioinformatics* 8 Suppl 1: S16.
- Tatar, M. 2007. A smell to die for. *Dev Cell* 12(3): 322-324.

- Tatar, M. 2007. Diet restriction in *Drosophila melanogaster*. Design and analysis. *Interdiscip Top Gerontol.* 2007;35:115-36.
- Gershman, B., Puig, O., Hang, L., Peitzsh, R., Tatar, M. Garofalo, R. 2007. High resolution dynamics of the transcriptional response to nutrition in *Drosophila*: a key role for dFOXO. *Physiological Genomics.* 29(1): 24-34.
- Min, K.J., Tatar, M. 2007. Counting calories in *Drosophila* diet restriction. *Experimental Gerontology.* 42(3): 247-251
- Min, K.J., Hogan, M.F., Tatar, M., O'Brien, D.M 2006. Resource allocation to reproduction and soma in *Drosophila*: stable isotope analysis of carbon from dietary sugar. *Journal of Insect Physiology.* 52(7):763-70
- Min, K.J., Tatar, M. 2006. Restriction of amino acids extends lifespan in *Drosophila melanogaster*. *Mechanisms of Aging and Development.* 127, 643-646
- Min, K.J., Tatar, M. 2006. *Drosophila* diet restriction in practice: Do flies consume fewer nutrients? *Mechanisms of Aging and Development* 127: 93-96.
- Flatt, T., M.P. Tu, and M. Tatar, 2005. Hormonal pleiotropy and the juvenile hormone regulation of *Drosophila* development and life history. *Bioessays*, 2005. 27: 999-1010.
- Tatar, M. 2005. SIR2 calls upon the ER. *Cell Metabolism*, 2: 281-2.
- Zerofsky, M., Heral, H., Silverman, N., Tatar, M. 2005. Aging of the innate immune response in *Drosophila melanogaster*. *Aging Cell.* 4:103-108.
- Tu, M.-P., Yin, C.-M., Tatar, M. 2005. Insulin signal regulation of juvenile hormone synthesis in *Drosophila melanogaster*. *General and Comparative Endocrinology.* 142: 347-356.
- Leroi, A.M., et al., 2005. What evidence is there for the existence of individual genes with antagonistic pleiotropic effects? *Mech Ageing Dev*, 126: 421-9.
- Hwangbo, D.S, Gershman, B., Tu, M-P., Palmer, M. Tatar, M. 2004. *Drosophila* dFOXO controls lifespan and regulates insulin signaling in brain and fat body. *Nature* 420:562-566.
- Wessels, R.J., Fitzgerald, E., Cypser, J.R. Tatar, M., Bodmer, R. 2004. Insulin regulation of heart function in aging *Drosophila*. *Nature Genetics*, 36:1275-1281.
- Wood, J.G., Rogina, B., Lavu, S., Howitz, K., Helfand, S.L., Tatar, M., Sinclair, D. 2004. Sirtuin activators mimic calorie restriction and delay aging in metazoans. *Nature.* 429:562-566.
- Tatar, M. 2004. The Neuroendocrine Regulation of *Drosophila* Aging. *Experimental Medicine* (Japanese). 22: 823-830. Reprinted in *Experimental Gerontology* (2004). 39: 1745-1750.
- Tu, M.-P., Tatar, M. 2003. Juvenile diet restriction and the aging and reproduction of adult *Drosophila melanogaster*. *Aging Cell*, 2:327-333.
- Kingan, S.B., Tatar, M. Rand, D.M. 2003. Reduced polymorphism in the Chimpanzee semen coagulating protein, Semenogelin I. *Journal Molecular Evolution* 57:159-169.
- Tatar, M., Bartke, A., Antebi, A. 2003. The endocrine regulation of aging by insulin-like signals. *Science*, 299: 1346-1351.
- Tu, M.-P., Yin, C.-M., Tatar, M. 2002. Impaired ovarian ecdysone synthesis of *Drosophila melanogaster* insulin receptor mutants. *Aging Cell*, 2: 158-160.
- Bronikowski, A.M., Alberts, S.C., Altman, J., Packer, C., Carey, K.D., Tatar, M. 2002. The aging baboon: Comparative demography in a nonhuman primate. *PNAS*, 99: 9591-9595.
- Tu, M.-P., Epstein, D., Tatar, M. 2002. The demography of slow aging in male and female *Drosophila* mutant for the insulin-receptor substrate homolog chico. *Aging Cell*, 1: 75-80.

- Tatar, M. 2002. Germline stem cells call the shots. *Trends in Ecology and Evolutionary Biology*, 17: 297-298.
- Tatar, M., Rand, D. 2002. Dietary advice on Q. *Science*. 295: 54-55.
- Good, T.P., Tatar, M. 2001. Age-specific mortality and reproduction respond to adult dietary restriction in *Drosophila melanogaster*. *Journal of Insect Physiology* 47: 1467-1473.
- Herman, W.S., Tatar, M. 2001. Juvenile hormone regulates longevity during reproductive diapause in the migratory monarch butterfly. *Proceeding Royal Society, B. London*. 268: 2509-2514.
- Linnen, C., Tatar, M., Promislow, D. 2001. Cultural artifacts: a comparison of senescence in natural, laboratory-adapted and artificially selected lines of *Drosophila melanogaster*. *Evolutionary Ecology Research*. 3: 877-888.
- Tatar, M., Kopelman, A., Epstein, D., Tu, M.-P., Yin, C.-M., Garofalo, R.S. 2001. A mutant *Drosophila* insulin receptor homolog that extends lifespan and impairs neuroendocrine function. *Science*. 292: 107-110.
- Tatar, M., Chien, S., Preist, N. 2001. Negligible senescence during reproductive diapause in *Drosophila melanogaster*. *American Naturalist*. 158: 248-258.
- Tatar, M., Yin, C.-M. 2001. Slow aging during insect reproductive diapause: Why butterflies, grasshoppers and flies are like worms. *Experimental Gerontology*. 36: 723-738.
- Tatar, M. 2001. Senescence in C. W. Fox, D. A. Roff and D. J. Fairbain, eds. *Evolutionary Ecology: Concepts and Case Studies*. Oxford University Press, Oxford. Pp 128-141.
- Silbermann, R., Tatar, M. 2000. Reproductive costs of transgenic hsp70 overexpression in *Drosophila*. *Evolution*. 54: 2038-2045.
- Tatar, M. 2000. Transgenic organisms in evolutionary ecology. *Trends in Evolution and Ecology*. 15: 207-211.
- Tatar, M. 1999. Evolution of senescence: Longevity and the expression of heat shock proteins. *American Zoologist*. 38: 72-81.
- Shaw, F., Promislow, D.E.L., Tatar, M., Hughes, K., Geyer, C. 1999. Towards reconciling inferences concerning genetic variation in senescence. *Genetics* 152: 553-566.
- Tatar, M. 1999. Transgenes in the analysis of lifespan and fitness. *American Naturalist*. 154: S67-81.
- Promislow, D.E.L., Tatar, M., Pletcher, S.D., Carey, J.R. 1999. Below-threshold mortality and its impact on studies in evolutionary ecology. *Journal of Evolutionary Biology*. 12: 312-328.
- Packer, C., Tatar, M., Collins, A. 1998. Reproductive cessation in female mammals. *Nature*. 392: 807-811
- Promislow, D.E.L., Tatar, M. 1998. Mutation and senescence: Where genetics and demography meet. *Genetica*. 102/103: 299-314.
- Resler A.S, Kelly K., Kantor G., Khazaeli A.A., Tatar M., Curtsinger J.W. 1998. Genetic analysis of extended life span in *Drosophila melanogaster* - II. Replication of the backcross test and molecular characterization of the N14 Locus. *Genetica*. 104: 33-39.
- Tatar, M., Khazaeli, A.A., Curtsinger, J.W. 1997. Chaperoning extended life. *Nature*. 390:30.
- Tatar, M., Gray, D.W., Carey, J.R. 1997. Altitudinal variation for senescence in *Melanoplus* grasshoppers. *Oecologia*. 111:357-364.
- Tatar, M., Promislow, D.E.L. 1997. Fitness costs of reproduction. *Evolution*. 51:1323-1326.

- Khazaeli, A.A., Tatar, M., Pletcher, S.D., Curtsinger, J.W. 1997. Heat-induced longevity extension in *Drosophila*. I. Heat treatment, mortality and thermotolerance. *Journal of Gerontology*. 52A: B48-B52.
- Tatar, M., Promislow, D.E.L., Khazaeli, A., Curtsinger, J.W. 1996. Age-specific patterns of genetic variance in *Drosophila melanogaster*. II. Fecundity and its relation to mortality. *Genetics*. 143: 849-858.
- Promislow, D.E.L., Tatar, M., Khazaeli, A., Curtsinger, J.W. 1996. Age-specific patterns of genetic variance in *Drosophila melanogaster*. I. Mortality. *Genetics*. 143: 839-848.
- Tatar, M., Carey, J.R. 1995. Nutrition mediates reproductive costs in the beetle *Callosobruchus maculatus*. *Ecology*. 76: 2066-2073.
- Curtsinger, J.W., Fukui, H.H., Khazaeli, A., Kirscher, J., Pletcher, S., Promislow, D., Tatar, M. 1995. Genetic variation and aging. *Annual Review of Genetics*. 29: 553-575.
- Tatar, M., Carey, J.R. 1994. Sex mortality differentials in the bean beetle: reframing the question. *The American Naturalist*. 144:165-175.
- Tatar, M., Carey, J.R. 1994. The genetics of mortality in the bean beetle *Callosobruchus maculatus*. *Evolution*. 48:1371-1376.
- Carey, J.R., Liedo, P., Orozco, D., Tatar, M., Vaupel, J.W. 1994. A male-female longevity paradox in medfly cohorts. *Journal of Animal Ecology*. 64: 107-116.
- Promislow, D., Tatar, M. 1994. Comparative Approaches to the Study of Senescence: Bridging Genetics and Phylogenetics. In *The Genetics and Evolution of Aging* (eds. C.E. Finch and M.R. Rose). pp. 45-54.
- Fox, C.W., Tatar, M. 1994. Oviposition substrate affects adult mortality, independent of reproduction, in the seed beetle *Callosobruchus maculatus*. *Ecological Entomology*. 19:108-110.
- Tatar, M., Carey, J.R., Vaupel, J.W. 1993. Long term cost of reproduction with and without accelerated senescence in *Callosobruchus maculatus*: analysis of age-specific mortality. *Evolution*. 47:1302-1312.
- Minkenbergh, O.P.J.M., Tatar, M., Rosenheim, J.A. 1992. Egg load as a major source of variability in insect foraging and oviposition behavior. *Oikos*. 65:134-142.
- Tatar, M. 1991. Clutch size in the swallowtail butterfly, *Battus philenor*: the role of host quality and egg load within and among seasonal flights in California. *Behavioral Ecology and Sociobiology*. 28: 337-344.
- Tatar, M. 1989. Swallowtail clutch size reconsidered. *Oikos*. 55: 135.
- Tatar, M. 1984. Protandry in physiological time. *Oikos*. 43: 413.