

INSTRUCTOR	TEACHING ASSISTANTS	
Prof. James R. Carey 530-752-6217 jrcarey@ucdavis.edu Tue 10a; 67 Briggs Hall	TA Emily Bick Students: A to L ebick@ucdavis.edu Wed 10a; 65 Briggs Hall	TA Miles Dakin Students: M to Z mddakin@gmx.ucdavis.edu Thur 2p; 65 Briggs Hall

September 26-30	LIFE COURSE Read: Longevity (HDE 117/ENT 117) Syllabus View: Joel Cohen—Why study demography
October 1-7	LIFE TABLES Read: (1) Life table handout; (2) Mortality dynamics of aging View: Bill Maher “Real Time”—Ageism
October 8-14	SURVIVAL AND MORTALITY Read: Biodemography of aging (Vaupel); View: (1) Write Like a Professor series; (2) Male-female paradox (Vaupel)
October 15-21 ^{a,*}	BIOLOGY OF AGING Read: Population biology of aging in the wild (Roach/Carey) View: Insect biodemography: A 21 st century guided tour (Carey)
October 22-28	GENETICS OF AGING Read: Why women live longer than men (Austad) View: (1) The long reach of history (Kuzawa); (2) Movie trailer: Still Alice
October 29 ^a -November 4	LIFE SPAN (MIDTERM WEEK) Read: Life span: A conceptual overview (Carey) View: From mice to Methuselah (Austad)
November 5-11 11/10—Vet’s Day	FAMILY Read: Good and bad marriage (NYT); Genetic screening (NYT) View: Kinship video
November 12-18	SUCCESSFUL AGING (I) Read: (1) What makes us healthy? (Taubes); (2) Grandma (NYT) View: (1) Biodemography of aging (Vaupel); (2) Status syndrome (Marmot)
November 19-25 [*] (Nov. 22-23: Thanksgiving)	SUCCESSFUL AGING (II) Read: Blue Zones View: Detecting Alzheimer’s Disease; Blue Zones
November 26-December 2 ^c	DEATH AND DYING Read: (1) To die of having lived (Rapport); (2) Death with dignity law View/Listen: (1) Britany Maynard; (2) Physician-assisted suicide
December 3-7 ^d	AGING WORLD Read: (1) Your kids live longer; (2) Aging world; (3) longevity time bomb View: I wish I was 18 again (George Burns); Africa Odyssey (bonus)

^a Midterm exam, Wed, October 31

^c Final exam: Wednesday, Dec. 12 (8-10a)

^b Term paper deadline, Sunday, December 2

COURSE DETAILS

Grading and weightings

Exams		55%
Midterm	25%	
Final exam	30	
Homework		20
Term paper		<u>25</u>
		100%

Homework

Weekly homework will involve writing short (25-35 word) essays on selected topics. With the exception of one 20-point assignment involving term papers (outlines; references; summary), homework assignments will be graded on a 10-point scale and will be due Sundays at midnight.

Term paper

1. **Purpose.** The purpose of the term paper is three-fold: i) to expand your knowledge about longevity in general and human (or animal) lifespan in particular; ii) to learn to use the library for research; and iii) to improve your writing and editing skills.
2. **Subject.** The subject for your term paper this quarter should be related to longevity and/or health. For ideas, see topics listed for Term Paper Ideas at the end of this syllabus. Use any of these topics or chose a topic of your own.
3. **Procedures.** Select a subject and write a paper in which you: i) find and review the available literature dealing with the specific subject you chose to write about; and ii) write a paper in which you describe the significance of the subject, apply appropriate techniques and concepts learned in the course and discuss the broader implications and limitations of your particular perspective or approach.
4. **Specific Requirements.** The length should be 2,500 words. The format and organization should be patterned after the Model Term Paper “*Lifespan*” posted in writing videos: i) cover page; ii) main text with numbered headings and subheadings; iii) references in style and format described on p7; and iv) at least *10 references*, 7 of which must be from the *primary (journal) literature*.
5. **Grading.** Your term paper grade will be based on: i) your organization and coverage of the topic; ii) reference base as source of information and authority; iii) your apparent understanding of the material about which you write; iv) clarity and precision of your statements; v) grammar and style; and vi) technical aspects such as spelling and punctuation.

WRITING VIDEO PLAYLIST ([CLICK HERE FOR FOLDER](#))

Table 1. Playlist of 13 mini-lectures “How to write a research term paper”. Total time for all video clips is 43 minutes and 35 seconds (Produced by James Carey, Sarah Perrault, and Shruti Dave, 2011).

Video	Title	Time	Content
1	Introduction Part I: Preparation	2:27	Purpose for and overview of playlist
2	Word processing	4:09	Best practices and tips in word processing
3	Ethical writing	1:53	Plagiarism and related concepts
4	Citations	2:30	How to cite references in text and in bibliography
5	Picking a topic	2:41	How to narrow down term paper topic
6	Types of sources	4:08	Overview of primary and other sources
7	Researching	5:37	How to search for relevant literature
8	Plan of attack Part II: Writing	4:19	Get organized and plan
9	Stage I: Launching	1:30	Skeleton stage of paper writing
10	Stage II: Thoughts on paper	3:50	Getting ideas and concepts written
11	Stage III: Growth and development	3:44	Starting to construct paper
12	Stage IV: Complete working draft	3:04	Approaching next-to-final version
13	Stage V: Finalizing	3:29	Making perfect technically and full of content
14	Finished term paper (pdf)		Model term paper

GUIDELINES FOR TERM PAPER REFERENCE FORMATTING

Journal article

Sierra, F., E. Hadley, R. Suzman, and R. Hodes. 2009. Prospects for life span extension. *Annual Review of Medicine* **60**:457-469.

Skorupa, D. A., A. Dervisefendic, J. Zwiener, and S. D. Pletcher. 2008. Dietary composition specifies consumption, obesity, and lifespan in *Drosophila melanogaster*. *Aging Cell* **7**:478-490.

Book (or Encyclopedia) section

Carey, J. R. and S. Zou. 2007. Theories of life span and aging. Pages 55-68 in P. S. Timiras, Editor. *Physiological Basis of Aging and Geriatrics* (4th Edition). CRC Press, Boca Raton.

Gerhardt, H. C. 2002. Sexual dimorphism. Pages 1045-1047 in M. Pagel, Editor. *Encyclopedia of Evolution*. Oxford University Press, Oxford.

Book

Welch, H. G. 2011. *Overdiagnosed: Making People Sick in the Pursuit of Health*. Beacon Press, Boston.

Finch, C. E. 2007. *The Biology of Human Longevity*. Amsterdam, Elsevier.

Edited book

Timiras, P. S., Editor. 2007. *Physiological Basis of Aging and Geriatrics*. 4 Edition. CRC Press, Boca Raton.

Cooper, D. N., Editor. 2003. *Encyclopedia of the Human Genome*. Nature Publishing Group, London.

Newspaper article

Buettner, D. 2012. The island where people forget to die. *New York Times*. October 24, 2012. Web. http://www.nytimes.com/2012/10/28/magazine/the-island-where-people-forget-to-die.html?_r=2&.

Stipp, D. 2013. Searching for meaningful markers of aging. *New York Times*. July 22, 2013. Web. http://www.nytimes.com/2013/07/23/health/meaningful-markers-of-aging.html?pagewanted=all&_r=0

Website

CDC. 2013, June 25. Public health genomics. *Centers for Disease Control and Prevention*. [Web log post]. Retrieved November 16, 2014 <http://www.cdc.gov/>

Mercola, J. 2013, October 28. Resveratrol in grape skins could help treat cancer [Web log post]. Retrieved November 16, 2014 from <http://articles.mercola.com/sites/articles/archive/2013/10/28/resveratrol-cancer-prevention.aspx>

Buettner, D. 2010. *Blue Zones*. [Web log post]. Retrieved November 16, 2014 from <http://www.bluezones.com/about-blue-zones/>

Grey literature

Grey literature citations are a challenge because the documents are usually not part of a series (i.e. with volume, issue, edition), do not specify an author, publisher, or city, and contain informal and/or piecemeal information on their provenance. None-the-less, they are frequently a source of important information. The first rule of thumb in citing this literature is to present information systematically and ensure that it is complete so that Readers can access the source including the URL. Check with the Help Desk at Storer Library for guidance.

Alzheimer's Disease Medication Fact Sheet. 2008. *NIH Publication* No. 08-3431. Bethesda, MD. (Updated November, 2012). <http://www.nia.nih.gov/alzheimers/publication/alzheimers-disease-medications-fact-sheet>

Census 2010. Population distribution in the United States and Puerto Rico. *U.S. Census Bureau*. Retrieved 6 September 2013. <http://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf>

Lecture notes

Carey, J. R. 2018, October 17. Mortality and life tables. Longevity (HDE/ENT 117) lecture notes, UC Davis.

Video

Kuzawa, C. and D. Eisenberg. 2014. The long reach of history: Intergenerational pathways to plasticity in human lifespan. National Academy of Sciences-sponsored workshop: "*Advances in Biodemography: Cross-Species Comparisons of Social Environments and Social Behaviors, and their Effects on Health and Longevity*". National Research Council, Keck Center, 500 Fifth St NW, Washington, DC. From UCTV Seminars URL: <http://seminars.uctv.tv/Seminar.aspx?sid=28743>

FREQUENTLY ASKED QUESTIONS

General

- 1. Is there a text for this course?**
No. There are weekly assigned readings and video viewings.
- 2. How is this course organized?**
Roughly a quarter of the class is devoted each to analytical (e.g. life tables) and biological (e.g. aging in model organisms) and the remaining half to the biology and demography of aging and longevity in humans.
- 3. Why must we learn basic life tables?**
Because it will give you a depth of understanding of actuarial concepts that would be impossible without exposure to this and related analytical concepts. These are relatively easy mathematical manipulations as you will see.
- 4. Why do you cover aging and longevity in non-human species?**
Just as rules of inheritance apply to virtually all organisms across the tree of life, many rules of aging and longevity also apply to most organisms including humans. We can learn a great deal about human aging through experimentation with non-human species that we cannot learn from humans because of experimental (ethical) constraints (among many reasons as you will learn).
- 5. How can I do well (i.e. get an A) in this class?**
No secrets here. Show up to class, pay attention, do the readings, attend office hours and ask questions when you are confused. We are here to help you succeed. There are also great resources here on campus including the learning skills center that offers writing workshops. And you may want to form and/or join a study group.
- 6. When is the weekly 'hard' deadline for homework?**
Sunday midnight (actually 11:59p) is the deadline for homework. A good strategy is to impose your own deadlines so that you never miss the midnight deadline and thus receive a zero for that component.
- 7. If I must be out of town on exam day (e.g. athletes; family issues), can I take the exam late?**
Yes. I understand that life does not always "happen" in accordance with class schedules. Work with your TA for taking late (or early) exams.
- 8. How do you grade and what is your typical grade distribution?**
I grade on the curve with slightly less than a third of students receiving A's, B's and (slightly fewer) C's with residual D's for those who made little effort and F's for students who failed to turn in major assignments like term paper or don't take the exams.
- 9. What about cheating?**
As with any course at UC Davis, cheating in this course will not be tolerated. This includes everything from the use of crib notes on exams to plagiarism in writing assignments including the term paper. The Academic Code of Conduct and consequences for cheating can be accessed at <http://sja.ucdavis.edu/files/UCDSTD.pdf>.
- 10. Will lecture notes/slides be posted prior to class?**
Yes, I will try my best to get them posted early. However, I often edit them right up to the last minute.
- 11. Will the lectures be video captured?**
Yes. I video all lectures, do light editing, upload to Kaltura and post the link usually same day.

12. Is attendance required?

No but it is strongly encouraged. Any content presented in class including information that emerges in Q & A or ad hoc comments is fair game for exams.

13. How can I minimize disruption if I need to leave lecture early?

Sit near the rear and discretely leave. It is rude to instructor and fellow students alike when a person leaves in the middle of lecture, especially picking up backpack and leaving from the middle of the lecture hall.

14. May I talk to my neighbor in class?

Please do not since it is disconcerting to me lecturing and students near you (just like in a movie theater). If you need to communicate, write on note pad like they do in court where everyone must remain quiet.

Exams

15. What material will we be responsible for knowing for the exams?

You will be responsible for virtually everything that is presented in class via slides and comments. I will try to let you know if the fine details unimportant for the examinations but are used to illustrate a larger concept. For readings and video viewings I will provide study guidelines and/or announce in class what main take-away information you should focus on while reading or viewing.

16. What are the exams like?

Multiple choice questions and possibly fill in the blank, short answer, and short essays. Some questions will be interpretive, others computational (e.g. life tables), and other basically recall. Make sure you understand all graphs—I use them a lot.

Term paper

17. Can I change topics any time?

Yes. Often students find that they are not interested in the original topic they chose or the literature is not extensive enough to provide the types or depth of sources needed for a good term paper.

18. Does my topic have to be approved?

No. However, it is always useful to solicit feedback from the instructor or one the TAs.

19. What is the writing video playlist that you describe in the syllabus?

The overarching objective of this playlist that I co-produced with Dr. Sarah Perrault in the University Writing Program was to describe best practices for technical and logistical aspects of writing a term paper (Part I) and re-construct a model term paper from skeleton to final stages (Part II). You will learn a lot from these videos (links posted in Canvas) with some content showing up on quizzes.

20. What citation style should we use?

Use the citation and bibliographic styles that I adopted from one of the scientific journals (see Term Paper Formatting Guidelines). This course-specific requirements is equivalent to a journal's "guidelines for authors" specifying its formatting criteria for different types of sources (e.g. journal article; book; edited book; etc).

21. Should I pay for access to journal articles online when off campus?

Absolutely not! The UCD library pays (using some of your tuition dollars) hundreds of thousands of dollars for subscriptions to journals. When you hit the firewall for a journal off campus means that you have not gone through the UCD library. Thus download PULSE and use your VPN to gain access to the library website and access the article there. Or wait until you are back on campus and access it. Check with library HELP is have problems here. But NEVER pay for access to an article.

22. Is the 2,500 word requirement a hard number?

No, but you need to be in the ball park (e.g. around 2,350 minimum). In principle there is no maximum per se, but anything over 3,000 words is excessive and I wouldn't go there.

23. What part(s) of the term paper do I use for this word count?

You can use the summary and main body of the term paper. The bibliography does not count.

24. Do you accept late papers?

Yes. However, you need to let your TA know that you will not make the deadline. You will lose a half grade or a full grade depending on the lateness.

TERM PAPER IDEAS

This list provides 'seed' themes for term papers, many of which are followed by a paper from the primary literature on the topic. The advantages of drawing from one of the topics listed below, particularly the ones with references, are two-fold—each is bounded and relatively specific (i.e. many students pick sweeping topics that overwhelm them and each topic has a deep literature (i.e. many students pick topics that they struggle to find good primary references for). However, any topic related to aging, survival, healthspan or longevity can be a term paper theme.

1. Evolutionary ecology of human life span. Kaplan H, Hill K, Lancaster J, Hurtado AM. 2000 A theory of human life history evolution: diet, intelligence, and longevity. *Evolutionary Anthropology* 9, 156-185.
2. Theoretical upper limits to human lifespan. Willcox DC, al e. 2008 Life at the extreme limit: Phenotypic characteristics of supercentenarians in Okinawa. *Journal of Gerontology: Medical Sciences* 63A, 1201-1208. Carnes BA, Olshansky SJ, Grahn D. 2003 Biological evidence for limits to the duration of life. *Biogerontology* 4, 31-45. Manton KG, Stallard E, Tolley HD. 1991 Limits to human life expectancy: evidence, prospects, and implications. *Population and Development Review* 17, 603-637.
3. Is menopause an evolved trait? Peccei JS. 2001 Menopause: Adaptation or epiphenomenon? *Evolutionary Anthropology* 10, 43-57.
4. Do twins die at the same age? (McGue M, Christensen K. 2007 Social activity and healthy aging: A study of aging Danish twins. *Twin Research and Human Genetics* 10, 255-265.)
5. Is morbidity compressing in the US population? Crimmins EM, Beltran-Sanchez H. 2011 Mortality and morbidity trends: Is there compression of morbidity? *Journal of Gerontology: Social Sciences* 66B, 75-86.
6. New developments in Alzheimer's research and clinical studies. Brody H. 2011 Alzheimer's disease. *Nature* 465, S1. Roberson ED, Mucke L. 2006 100 years and counting: Prospects for defeating Alzheimer's disease. *Science* 314, 781-784. McClendon MJ, Snyth KA, Neundorfer MM. 2004 Survival of persons with Alzheimer's Disease: Caregiving coping matters. *The Gerontologist* 44, 508-519.
7. Huntington's disease: Etiology, History, and progression. Ridley M. 1999 *Genome: The Autobiography of a Species in 23 Chapters*. New York, HarperCollins Publishers; 344+ p.
8. The blue zones: why do people in these areas live so long? Buettner, D. 2012. The island where people forget to die. New York Times. October 24, 2012. http://www.nytimes.com/2012/10/28/magazine/the-island-where-people-forget-to-die.html?_r=2&. Web.

9. Why do so many men live to 100 in Sardinia? Koenig, R. (2001) Sardinia's mysterious male Methuselahs. *Science*, 291, 2074-2076.
10. The gender gap in longevity and health. Newman AB, Brach JS. 2001 Gender gap in longevity and disability in older persons. *Epidemiologic Reviews* 23, 343-350.
11. Genetics of lifespan (Christensen K, Johnson TE, Vaupel JW. 2006 The quest for genetic determinants of human longevity: Challenges and insights. *Nature Reviews Genetics* 7, 436-447)
12. The life and times of Madam Calmant: The longest lived person ever. Allard M, Lebre V, Robine JM. 1994 *Jeanne Calment: From Van Gogh's Time To Ours 122 Extraordinary Years*. New York, W. H. Freeman and Company; 136 p.
13. Longevity in dog breeds. Cooley DM, al e. 2003 Exceptional longevity in pet dogs is accompanied by cancer resistance and delayed onset of major diseases. *Journal of Gerontology: Biological Sciences* 58A, 1078-1084.
14. Effects of early life experience on old age mortality. Su D. 2009 Risk exposure in early life and mortality at older ages: Evidence from Union Army veterans. *Population and Development Review* 35, 275-295.
15. The fetal origin hypothesis. Barker DJP. 1995 Fetal origins of coronary heart disease. *British Medical Journal* 311, 171-174.
16. The status syndrome: how does position in society impact health and longevity? Marmot M. 2004 *The Status Syndrome*. New York, Times Books.
17. Dietary restriction: does it extend lifespan in humans? Mattison JA, al e. 2012 Impact of caloric restriction on health and survival in rhesus monkeys from the NIA study. *Nature*
<http://www.nature.com/nature/journal/vaop/ncurrent/full/nature11432.html>.
 Minor RK, et al. 2010 Dietary interventions to extend life span and health span based on calorie restriction. *Journal of Gerontology: Biological Sciences* 65, 695-703.
18. Alcohol, health and longevity. Fuller TD. 2011 Moderate alcohol consumption and the risk of mortality. *Demography* 48, 1105-1125. Mukamal KJ, et al 2003 Roles of drinking pattern and type of alcohol consumed in coronary heart disease in men. *The New England Journal of Medicine* 348, 109-118. Ruitenberg A, et al. 2002 Alcohol consumption and risk of dementia: the Rotterdam study. *The Lancet* 359, 281-286.
19. Relationship of education in children and survival in parents. Friedman, E.M., Mare, R.D., 2014. The schooling of offspring and the survival of parents. *Demography* 51, 1271-1293.
20. The biology and ecology of the longest lived rodent: the naked mole rat.
21. Impact of marriage on health and longevity (Waite LJ, Lehrer EL. 2003 The benefits from marriage and religion in the United States: A comparative analysis. *Population and Development Review* 29, 255-275.)
22. The longevity of the British peerage
23. The Nun study: a natural experiment on longevity and Alzheimer's Disease. Butler SM, Snowdon DA. 1996 Trends in mortality in older women: findings from the nun study. *Journal of Gerontology: Social Sciences* 51B, S201-S208.
24. The Nobel Prize Lecture in Economics: Fogel, R. W. (1994) Economic growth, population theory, and physiology: the bearing of long-term processes on the making of economic policy. *American Economic Review*, 84, 369-395.
25. Rescaling the life cycle. Lee, R. and J. R. Goldstein. 2003. Rescaling the life cycle: Longevity and proportionality. Pages 183-207 in J. R. Carey and S. Tuljapurkar,

- editors. *Life Span: Evolutionary, Ecological, and Demographic Perspectives*. Supplement to *Population and Development Review* 29, New York: Population Council.
26. Survival, longevity and IQ. Whalley LJ, Deary IJ. 2001. Longitudinal cohort study of childhood IQ and survival to age 76. *British Medical Journal* 322: 1-5
 27. The case for mortality. Kass, L. R. 1983. *American Scholar*, 52, 173-191.
 28. Famine mortality. DeWaal A. 1989. Famine mortality: a case study of Darfur, Sudan 1984-5. *Population Studies* 43: 5-24; Watkins SC, Menken J. 1985. Famines in historical perspective. *Population Development and Review* 11: 647-75
 29. The mortality and morbidity of centenarians. Andersen SL, Sebastiani P, Dworkis DA, Feldman L, Perls TT. 2012 Health span approximates life span among many supercentenarians: Compression of morbidity at the approximate limit of life span. *Journal of Gerontology: Biological Sciences* 67, 395-405.
 30. Morbidity in historical plague epidemics. Benedictow, O. J. (1987) *Population Studies*, 41, 401-431.
 31. Anti-aging medicine: Real or fraud? Flatt MA, al e. 2013. Are "anti-aging medicine" and "successful aging" two sides of the same coin? Views of anti-aging practitioners. *Journal of Gerontology, Series B: Psychological Sciences and Social Sciences* 68; Olshansky SJ, Hayflick L, Perls TT. 2004. Anti-aging medicine: the hype and the reality--part I. *Journal of Gerontology: Biological Sciences* 59A: 513-14
 32. Does childhood health affect chronic disease incidence in adulthood?
 33. Biomarkers of aging; Telomeres and aging. Sahin, E. and R. A. DePinho. 2010. Linking functional decline of telomeres, mitochondria and stem cells during ageing. *Nature* 464:520-528.
 34. Education level and mortality. Brown DC, Hayward MD, Montez JK, Hummer RA, Chiu C-T, Hidajat MM. 2012 The significance of education for mortality compression in the United States. *Demography* 49, 819-840. Rogers RG, al e. 2010 Educational degrees and adult mortality risk in the United States. *Biodemography and Social Biology* 56, 80-99
 35. Long-term effects of childbearing on mortality: Dribe, M. (2004) *Population Studies*, 58, 297-310.
 36. Future societies and the life course. Lee, R. and J. R. Goldberg (2003). Rescaling the life cycle: Longevity and proportionality. In *Life Span: Evolutionary, Ecological, and Demographic Perspectives*. (JR Carey, S Tuljapurkar, eds). New York: Population Council: Supplement to *Population and Development Review* 29, pp. 183-207.
 37. Tyrannosaur life tables. (2006) *Science*, 313, 213-217.
 38. Estimating smoking-attributable mortality in the United States. *Demography*, 49, 797-818.
 39. The extreme longevity: The state of the art in Italy. (2008) *Experimental Gerontology*, 43, 45-52.
 40. Human longevity and parental age at conception
 41. The long arm of childhood: The influence of early-life social conditions on men's mortality. 2004. *Demography*, 41, 87-107.
 42. Patterns of trauma in a prehistoric population. Jurmain R. 2001 Paleoepidemiological patterns of trauma in a prehistoric population from central California. *American Journal of Physical Anthropology* 115(229-237), 13-23.

43. Healthspan and active life expectancy Andersen SL, et al. 2012 Health span approximates life span among many supercentenarians: Compression of morbidity at the approximate limit of life span. *Journal of Gerontology: Biological Sciences* 67, 395-405.
44. Bodybuilding: The bionic human. Lavine M, et al. 2002 *Science* 295, 995-1003.
45. Does having children extend life span? A genealogical study of parity and longevity in the Amish. 2006. *Journal of Gerontology: Medical Sciences*, 61A, 190-195.
46. Matriarchs as repositories of social knowledge in African elephants. 2001. *Science*, 292, 491-494.
47. Epidemiology of disaster: the Donner Party (1846-1847). 1994. *Western Journal of Medicine*, 160, 338-342.
48. Drinking and coronary heart disease. Mukamal KJ, et al. 2003 Roles of drinking pattern and type of alcohol consumed in coronary heart disease in men. *The New England Journal of Medicine* 348, 109-118.
49. Stem cells, ageing and the quest for immortality. 2006. *Nature*, 441, 1080-1086.
50. Comparative seasonal (summer, fall, winter, spring) mortality (or births) by country. Rau R, Doblhammer G. 2003 Seasonal mortality in Denmark: The role of sex and age. *Demographic Research* in press. Gavrilov LA, Gavrilova NS. 1999 Season of birth and human longevity. *Journal of Anti-aging Medicine* 2, 365-366.
51. Aging in a birds and mammals. Ricklefs RE. 2010 Insights from comparative analyses of aging in birds and mammals. *Aging Cell* 9, 273-284.
52. Hair loss among elderly men: Etiology and impact on perceived age. Rexbye H, Petersen I, Iachina M, Mortensen J, McGue M, Vaupel JW, Christensen K. 2005 Hair loss among elderly men: Etiology and impact on perceived age. *Journal of Gerontology: Medical Sciences* 60A, 1077-1082.
53. Supercentenarians (Maier H, Gampe J, Jeune B, Robine J-M, Vaupel JW. 2010 Supercentenarians. (ed. Vaupel J.W.), p. 323. Heidelberg, Springer.)
54. Is height related to longevity? Salaris L, Poulain M, Samaras TT. 2012 Height and survival at older ages among men born in an inland village in Sardinia (Italy), 1866-2006. *Biodemography and Social Biology* 58, 1-13. Samaras TT, Elrick H, Storms LH. 2003 Is height related to longevity? *Life Sciences* 72, 1781-1802.
55. Eat, Drink and Be Healthy (Willett WC. 2001 *Eat, Drink, and Be Healthy: The Harvard Medical School Guide to Healthy Eating*. New York, Free Press)
56. How does meat consumption affect longevity and health? Singh PN, Sabate J, Fraser GE. 2003 Does low meat consumption increase life expectancy in humans? *American Journal of Clinical Nutrition* 78 (suppl), 526S-532S.
57. Older bull elephants control young males. 2000 *Nature*, 408, 425-426.
58. Intake of fruits and vegetables and risk of breast cancer. Smith-Warner SA, al e. 2001 Intake of fruits and vegetables and risk of breast cancer. *Journal of the American Medical Association* 285, 769-775.
59. Is early natural menopause a biologic marker of health and aging? Snowdon DA, et al. 1989 Is early natural menopause a biologic marker of health and aging? *American Journal of Public Health* 79, 709-714.
60. Survival in academy award-winning actors and actresses. 2003. *Annals of Internal Medicine*, 138, 77-78.

61. Point-counterpoint: would doubling the human life span be a net positive or negative for us either as individuals or as a society? 2004. *Journal of Gerontology: Biological Sciences*, 59A, 554-559.
62. Neanderthal mortality patterns. Trinkaus E. 1995 Neanderthal mortality patterns. *Journal of Archaeological Science* **22**, 121-142.
63. What is a healthy body mass index for women in their seventies? Results from the Australian longitudinal study on women's health. 2010. *Journal of Gerontology: Medical Sciences*, 65, 847-853.
64. Marriage and longevity. Union formation in later life: Economic determinants of cohabitation and remarriage among older adults. 2012. *Demography*, 49, 1103-1125.
65. How long can we live? A review essay. 2001. *Population and Development Review*, 27, 791-800.
66. Famines in historical perspective. *Population Development and Review*, 1985. 11, 647-675.
67. What is a healthy body mass index for women in their seventies? Results from the Australian longitudinal study on women's health. 2010. *Journal of Gerontology: Medical Sciences*, 65, 847-853.
68. Report of the National Institute on Aging Task Force on comorbidity. 2007. *Journal of Gerontology: Medical Sciences*, 62A, 275-280.
69. Nutritional control of aging. 2003. *Experimental Gerontology*, 38, 47-52.
70. Scarring and mortality selection among Civil War POWs. 2012. *Demography* 49: 1185-1206.
71. Video game training enhances cognitive control in older adults. Anguera, J. A., et al. (2013) Video game training enhances cognitive control in older adults. *Nature*, **501**, 97-101.
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