

Curriculum Vitae

Name: Rafael de Cabo
Address: Laboratory of Experimental Gerontology, NIA, NIH
Gerontology Research Center, Box 10
5600 Nathan Shock Dr., Baltimore, MD 21224-6825

Date and Place of Birth: January 23, 1968; Córdoba, Spain
Citizenship: Spanish, US, Permanent Resident
Marital Status: Married
Languages: Fluent in Spanish and English

Education:

Sept 1988 – Sept 1993 BS- and MS equivalent in Cellular and Molecular Biology (“Licenciado en Ciencias Biológicas”) Córdoba University, Córdoba, Spain
Aug 1994 –Mar 2000 Ph.D., Nutrition, Purdue University, West Lafayette, IN

Scientific Training:

Sept 1988 – Sept 1993 *Proctor and Research Assistant, Department of Cell Biology and Histology, Córdoba University, SPAIN*
Oct 1993 – Aug 1994 *Visiting Research Scholar, Department of Medicinal Chemistry and Pharmacognosy, Purdue University, West Lafayette, IN*
Aug 1994 – Mar 2000 *Graduate Student, Department of Foods and Nutrition, Purdue University, West Lafayette, IN*
Apr 2000 – Sept 2004 *Postdoctoral Fellow, Intramural Research Training Award, Laboratory of Neurosciences, NIA, NIH, Baltimore, MD*
Oct 2004 – Present *Tenure Track Investigator, Laboratory of Experimental Gerontology, NIA, NIH, Baltimore, MD*

Honors and Awards:

2006 Elected Member of the Board of Directors, American Aging Association (4 year term)
2006 Nathan Shock New Investigator Award of the Gerontological Society of America
2005 CERA (The Centre for Education and Research on Ageing) Visiting professor, University of Sydney and Concord Hospital, Sydney, Australia, 2006
2004-present Awards for Research Excellence and travel awards to conferences to laboratory members each year by different organizations (American Aging Association, FASEB and *Fellows Award for Research Excellence (NIH)*)
2004 Young Scientist Award presented at the 26th conference of the Shock Society.
2003 Paul E. Glenn Runner-Up Award for Meritorious Research from The American Aging Association
2001 Paul E. Glenn Award for Meritorious Research from The American Aging Association

Grant panels

Sept 2005 Genesis Oncology Trust, New Zealand

Jan 2007 – Present Spanish Ministry of Science and Education. Fisiología y Farmacología en la Agencia Nacional de Evaluación y Prospectiva (“ANEP”)

Jan 2008 – Present American Federation for Aging Research and Ellison Medical Foundation
Apr 2008 Nathan Shock Pilot Award. Nathan Shock Center at University of Texas, Health Science Center at San Antonio (“UTHSCSA”)

July 2008 National Science Foundation, USA

July 2008 Biotechnology and Biological Sciences Research Council, UK

Grants and Research Support:

National Institute on Aging, NIH Intramural Research Program, 2004 - Present

Regulación de la biosíntesis del coenzima Q en eucariontes. Universidad Pablo de Olavide (BMC2002-01602). PI: Plácido Navas Lloret, 2003 - 2005

Role of quinone reductase activity in the control of proliferation and senescence in animal cells. Universidad de Córdoba. PI: José Manuel Villalba, 2006 – 2010

Exercise and Calorie Restriction Mimetics on Biomarkers of Health and Longevity, NIA Intramural funding for Interlaboratory Collaboration, PI, 2006-2007

Resveratrol’s Effect on Diet-Induced Obesity in Rhesus Macaques, NIA Intramural funding for Interlaboratory Collaboration, co-PI, 2006-2008

Modulation of Aging Processes by the Plasma Membrane Redox System (PMRS) , NIA Intramural funding for Interlaboratory Collaboration, PI, 2006-2008

Influence of HuR and HuR-Regulated SIRT1 on Melanoma, NIA Intramural funding for Interlaboratory Collaboration, co-PI, 2005-2006

Consequences of Modulating SIRT1 Activity and Expression Levels in a Melanoma Cancer Model”, NIA Intramural funding for Interlaboratory Collaboration, co-PI, 2006 - 2007

Sirtuins and the molecular epidemiology of frailty in older men. University of Sydney and Centre for Education and Research on Ageing (NHMRC). PI: Robert Cumming, 2007 - 2011

Dietary restriction, aging and the proteasome. NIH RO1. University of Kentucky. PI: Jeffrey Keller, 2005 - 2009

Caloric restriction, ageing and the liver sinusoidal endothelium. University of Sydney and Centre for Education and Research on Ageing (NHMRC 464833). PI: David LeCouteur, 2006 - 2010

The effect of maternal diet supplementation with blueberries on outcomes from hypoxic-ischemic injury in rat pups. High Bush Blueberry Council. NIA and Johns Hopkins University. PI: Rafael de Cabo, Anne Burke and Cynthia Holcroft, 2005 - 2006

Editorial Boards:

Nov 2007 – Present Aging Cell

Journal Reviewer:

Ageing Research Reviews, Aging Cell, Bioscience Reports, BMC Neuroscience, Brain Research, Experimental Aging Research, Experimental Biology and Medicine, Experimental Gerontology, Free Radicals in Biology and Medicine, Gerontology, Journal of Anti-Aging Medicine, Journal of Biological Chemistry, Journal of Cell Science, Journal of Gerontology, Journal of Cellular and Molecular Medicine, Journal of Neurochemistry, Journal of Neuroscience Methods, Journal of the American Aging Association,

Mechanisms of Ageing and Development, Neurobiology of Aging, PLoS Biology, PLoS Medicine, Proceedings of the National Academy of Science, Science, Nutrition

Meeting Organization

Organizer of the First International Meeting on Aging June 2008, at Araras University, University of Sao Paulo at Araras, Brazil

Vice-Chair of the 2009 Gordon Conference on the Biology of Aging

Co-Chair of the 2011 Gordon Conference on the Biology of Aging

Teaching Experience:

Aug 1994 – April 2000	Teaching Assistant, Department of Foods and Nutrition Purdue University, West Lafayette, IN
Aug 2000 – May 2004	Invited Lecturer, Physiology of Aging Graduate Course College of Notre Dame of Maryland, Baltimore, MD
Jan 2001 – Oct 2003	Invited Lecturer to Graduate Course, “Análisis Experimental en Biología” Universidad Pablo de Olavide, Sevilla, Spain
Oct 2003 – Present	Lecturer, Department of Environmental Sciences, Area of Cell Biology, Graduate course “Subcellular fractionation and characterization methods”. Universidad Pablo de Olavide, Sevilla, Spain

Mentorship:

Michelle Rios, Student IRTA (2000-02) NMPU, Laboratory of Neurosciences.

CURRENT POSITION: Microbiologist. Infection Control Devices Branch. FDA

Maria Jimenez, Student (2001-02) NMPU, Laboratory of Neurosciences.

CURRENT POSITION: Postdoctoral Fellow, Universidad de Sevilla

Demetrio Sierra, Student IRTA (2004-05) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Graduate School, U Puerto Rico

Bruce Jones, Student IRTA (2004-05) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Graduate School, Cambridge, UK

Kara Duffy, Student/technical IRTA (2001-05) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Graduate School, U. of Maryland

Sarah Hilmer, M.D. Ph.D. Visiting Fellow (2004-05) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Assistant Profesor, U. Sydney, Australia

Hamish Jamieson, M.D. Visiting Fellow (2006) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Geriatrics Med. Resident, U. Sydney

Marta Montori Grau, Student (2006) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Graduate Student, U. Barcelona

Stuart Músala, Student IRTA (2005) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Medical School, Drexler U.

Nathan Price, Student IRTA (2005-06) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Graduate School, Harvard U.

Avash Kalra, Student IRTA (2005-06) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Boonshoft School of Medicine, Wright State University, Dayton, OH

Scott Emerson, Student IRTA (2005) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Medical School. Baylor University.

Joe Hernandez, Student IRTA (2005) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Medical School, University of California San Francisco

Nicole Hunt, Postdoctoral IRTA (2005-2007) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Applying for faculty positions in Alabama/Louisiana
Dong-Hoon Hyun, Postdoctoral IRTA (2004-2007) AMNU, Laboratory of Experimental Gerontology and Laboratory of Neurosciences

CURRENT POSITION: Assistant Professor, Ewha Womans University, Seoul, Korea
Caroline Smith, Contractor (2006-2007) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Program assistant at NIDA
Arellys Ramos, Student IRTA (2006-2007) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Medical School University of Puerto Rico
Davida Kamara, Student IRTA (2006-2007) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Research Assistant at Dupont
Cristina Fernandez, Visiting Student (2007) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Graduate Student, University of Cordoba
Maria Cascajo Almenara, Visiting Student (2007) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Graduate Student, Universidad Pablo de Olavide
Lijuan Liu, Contractor (2004-2007) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Biologist, Johns Hopkins University
Joe Baur, Visiting fellow (2005-08) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Assistant Professor at University of Pennsylvania
Silvia Mata, Visiting Student (2008) AMNU, Laboratory of Experimental Gerontology

CURRENT POSITION: Graduate Student, University of Barcelona

Professional and Academic Activities:

President, Department of Foods and Nutrition Graduate Students Committee (1996 – 2000)

Senator, Purdue University Student Government (1997 – 1998)

Student Chapter Committee of the American Aging Association

Organizer of the Calorie Restriction Interest Group at NIA

Organizer of the Eos and Tithonus (aging research interest group)

NIA Tenure Track Representative at NIH

CRADA:

SIRTRIS pharmaceuticals. Effects on health and longevity of C57BL/6J mice of novel sirtuin activators 2007-2011.

Societies:

American Society for Cell Biology

American Aging Association

Gerontological Society of America

American Association for the Advancement of Science

Invited Lectures:

1. **de Cabo, R.** Gonzalez-Reyes, J.A. and Navas, P. Ascorbate free radical facilitates $G_0 \rightarrow G_1$ transition in onion roots quiescent cells. Biochemical Mechanism Involved in Growth Regulation (BMGR), International Symposium. 1991, Milan, Italy.
2. Navas, P., **de Cabo, R.**, Navarro, F., Rodriguez-Aguilera, J.C., Gonzalez-Reyes, J.A. and Buron, I. Ascorbate facilitates the transit from quiescent to division in eukaryotic cells. Texas Society for Electron Microscopy. 1991, Clear Lake, TX.

3. **de Cabo, R.** An in vitro model of enhanced stress responsiveness by caloric restriction: A novel method for evaluation of possible mechanisms and candidate caloric restriction mimetics. American Aging Association, 2001. Madison, WI.
4. **de Cabo, R.** An in vitro model to study caloric restriction. Universidad Pablo de Olavide, Sevilla. October, 2001, Sevilla, Spain.
5. **de Cabo, R.** Age and calorie restriction effects on C57BL/6 liver plasma membrane antioxidant redox system. Universidad Pablo de Olavide, Sevilla. February, 2002, Sevilla, Spain.
6. **de Cabo, R.,** 2002 Plasma Membrane Redox System During Aging and Caloric Restriction. American Aging Association. 2002, San Diego, CA.
7. **de Cabo, R.** Plasma membrane redox system: possible role on the underlying mechanisms of calorie restriction. Current Perspectives on the Mechanisms of Caloric Restriction, 2002, Bandera TX.
8. **de Cabo, R.** Aging and calorie restriction: effects on intraperitoneal macrophages, 2002, Department of Pediatrics, Johns Hopkins University School of Medicine, Baltimore, MD.
9. **de Cabo, R.** The plasma membrane redox system during aging and calorie restriction. Workshop on Molecular Biology and Function of Plasma Membrane Redox, UCLA, USA, March, 2004, Los Angeles, CA.
10. **de Cabo, R.** Development and characterization of a novel in vitro model to study caloric restriction. Universidad Nacional de Colombia. September, 2003, Bogotá, Colombia.
11. **de Cabo, R.** Is the messenger for the cytoprotective effects of calorie restriction in the blood? Gerontology Society of America, San Diego, CA. November, 2004, San Diego, CA.
12. **de Cabo, R.** Eat less, live longer. Department of Pediatrics, University of Maryland, School of Medicine, March, 2004, Baltimore, MD.
13. **de Cabo, R.** New insights on mechanisms of calorie restriction: An in vitro model and the plasma membrane redox system. Department of Animal and Avian Sciences. University of Maryland. October 2004, College Park, MD.
14. **de Cabo, R.** Eat less, live longer: Caloric restriction and aging. Depts. of Biol. Sciences and Chemistry. Goucher College. November, 2004, Baltimore, MD.
15. **de Cabo, R.** Calorie restriction and aging alter rat liver plasma membrane antioxidant system. Marion Bessin Liver Research Center. Albert Einstein College of Medicine. November, 2004, New York, NY.
16. **de Cabo, R.** Biology of Aging Lecture. Dept. of Biological Sciences. Johns Hopkins University. April, 2005, Baltimore, MD.
17. **de Cabo, R.** Calorie restriction and aging alter rat liver plasma membrane antioxidant system. University of Kentucky Sanders Brown Center on Aging. May, 2005, Lexington, KY.
18. **de Cabo, R.** New insights on mechanisms of calorie restriction: An in vitro model and the plasma membrane redox system. University of Washington. May, 2005, Seattle, WA.
19. **de Cabo, R.** Biology of Aging Lecture. ANZAC center. November, 2005, Sidney, Australia.
20. **de Cabo, R.** Calorie restriction and aging alter rat liver plasma membrane antioxidant system. CERA. November, 2005, Sidney, Australia.
21. **de Cabo, R.** New insights on mechanisms of calorie restriction: An in vitro model and the plasma membrane redox system. Concord Hospital. November, 2005, Concord, Sydney, Australia.
22. **de Cabo, R.** Biology of aging and calorie restriction lecture. Oxford Hospital. November, 2005, Oxford, Sidney, Australia.

23. **de Cabo, R.** More and better mitochondria: A key anti-aging mechanism of caloric restriction. Department of Biotechnology. University of Natural Resources and Applied Life Sciences. November, 2005, Vienna, Austria.
24. **de Cabo, R.** Mechanisms of calorie restriction: an in vitro model and the plasma membrane redox system. Institute for Biomedical Aging Research of the Austrian Academy of Sciences. November, 2005, Innsbruck, Austria.
25. **de Cabo, R.** Biology of aging and calorie restriction lecture. The Johns Hopkins University Department of Psychological and Brain Sciences. May, 2006, Baltimore, MD.
26. **de Cabo, R.** Effects of Resveratrol in mice on a high calorie diet. The Johns Hopkins University Department of Biology. June, 2006, Baltimore, MD.
27. **de Cabo, R.** New insights into mechanisms of Calorie restriction. Gerontological Society of America. Nathan Shock New Investigator Award Lecture. 2006, Dallas, TX.
28. **de Cabo, R.** Early Effects of Resveratrol in mice on a high calorie diet. Novartis. January, 2007, Boston, MA.
29. **de Cabo, R.** Lifespan extension by Resveratrol. January, 2007, Verbier, Switzerland.
30. **de Cabo, R.** In Vino Veritas; Manipulando el Envejecimiento y la Longevidad. Universidad de Cordoba. March, 2007, Córdoba, Spain.
31. **de Cabo, R.** Lifespan extension by Resveratrol. AGE meeting. June, 2007, San Antonio, TX.
32. **de Cabo, R.** Aging and calorie restriction: effects on intraperitoneal macrophages. FASEB Summer conference. July, 2007, Tucson, AZ.
33. **de Cabo, R.** Lifespan extension by Resveratrol. Gordon Conference on the Biology of Aging. September, 2007, Les Diablerets, Switzerland.
34. **de Cabo, R.** Calorie restriction and exercise. FEMEDE. October, 2007, Sevilla, Spain.
35. **de Cabo, R.** Lifespan Extension by Resveratrol; a Toast to Longevity? University of Maryland School of Medicine. February, 2008, Baltimore, MD.
36. **de Cabo, R.** Lifespan Extension by Resveratrol; a Toast to Longevity? Oregon National Primate Research Center. Oregon Health Science University. April, 2008, Portland, OR.

Reviews and Book Chapters:

1. Lane, M. A., **de Cabo, R.**, Mattison, J., Anson, R. M., Roth, G. S. and Ingram, D. K. The Roy Walford legacy: Diet restriction from molecules to mice to monkeys to man and onto mimetics. *Exp Gerontol.* 2004, 39(6):897-902.
2. Ingram, D.K., Anson, R.M., **de Cabo, R.**, Mattison, J., Mamczarz, J., Zhu, M., Lane, M. A. and Roth, G. S. Development of calorie restriction mimetics as a prolongevity strategy. *Ann N Y Acad Sci.* 2004, 1019:412-423.
3. Anson, R.M., Jones, B. and **de Cabo, R.** The diet restriction paradigm: A brief review of the effects of every- other- day feeding. *AGE.* 2005, 27(1): 17-25.
4. Navas, P., and **de Cabo R.** Plasma membrane and aging. Guest editorial. *AGE.* 2005; 27 (2): 127
5. Ingram, D.K., Zhu, M., Mamczarz, J., Zou, S., Lane, M.A., Roth, G.S. and **de Cabo, R.** Calorie restriction mimetics: an emerging research field. *Aging Cell.* 2006, 5(2):97-108.
6. Hyun, D.H., Hernandez, J.O., Mattson, M.P. and **de Cabo, R.** The plasma membrane redox system in aging. *Aging Research Rev.* 2006, 5: 209-220.

7. Hunt, N., Hyun, D.H., Allard, J., Minor, R., Ingram, D.K. and **de Cabo, R.** Bioenergetics of aging and caloric restriction. *Aging Research Rev.* 2006, 5:125-143.
8. Ingram, D. K., Roth, G.S., Lane, M. A., Ottinger, M.A., Zuo, S., **de Cabo, R.**, and Mattison, J. The potential for diet restriction to increase longevity in humans: extrapolation from monkey studies. *Biogerontology*, 2006; 7(3):143-8.
9. Minor, R.K., Smith, C.I., **de Cabo, R.**, Ingram, D.K. Food for life: Maximizing lifespan through the diet *Agro Food Industry Hi-Tech.* 2007, 18 (1): 36-39.
10. Le Couteur, D.G., Warren, A., Cogger, V.C., Smedsrød, B., Sorensen, K.K., **de Cabo, R.**, Fraser, R. and McCuskey, R.S. Old age and the hepatic sinusoid. *Anat Rec (Hoboken)*. 2008;291(6):672-83..
11. Navas, P., Villalba, J.M., and **de Cabo, R.** The importance of plasma membrane coenzyme Q in aging and stress responses. *Mitochondrion*. 2007 Suppl 1:S34-40.
12. Gorospe, M., and de Cabo, R. AsSIRting the DNA damage response. *Trends Cell Biol.* 2008;18(2):77-83.
13. Ungvari, Z., Fernandez-Parrado, C., Csiszar, A., and **de Cabo, R.** Mechanisms underlying caloric restriction and life span regulation: implications for vascular aging. *Circ Res.* 2008 ;102:519-28.

Publications:

1. **de Cabo, R.** González-Reyes, J.A. and Navas, P. The onset of cell proliferation is stimulated by ascorbate free radical in onion root primordia. *Biol. Cell* 1993, 77: 232-233.
2. Morré, D.J., Navas, P., Rodríguez-Aguilera, J.C., Morré, D.M., Villalba, J.M., **de Cabo, R.** and Lawrence, J. Cyclic AMP plus ATP-dependent modulation of the NADH oxidase activity of porcine liver plasma membranes. *Biochim. Biophys. Acta* 1994, 1224: 566-574.
3. Morré, D.J., **de Cabo, R.**, Jacobs, E. and Morré, D.M. Auxin stimulate protein disulfide isomerase from soybean plasma membranes. *Plant Physiol.* 1995, 109: 573-578.
4. Morré, D.J., **de Cabo, R.**, Farley, C., Oberlies, N.H. and McLaughlin, J.L. Mode of action of bullatacin, a potent antitumor acetogenin: Inhibition of NADH oxidase of HeLa and HL-60, but not liver, plasma membranes. *Life Sci.* 1995, 56(5): 343-348.
5. Jacobs, E., Morré, D.J., **de Cabo, R.**, Sweeting, M. and Morré, D.M. Response of a protein disulfide isomerase-like activity of transitional endoplasmic reticulum to all-*trans* retinol. *Life Sci.* 1996, 59(4): 273-284.
6. **de Cabo, R.** González-Reyes, J.A. and Navas, P. Root sprouting is synchronized in onions by ascorbate free radical. *J. Plant Growth Regulation*, 1996v, 15(2):53-56.
7. Morré, D.J., Sun, E., Geilen, C., Wu, L-Y., **de Cabo, R.**, Krasagakis, K., Orfanos, C. and Morré, D.M. Capsaicin inhibits plasma membrane NADH oxidase and growth of human and mouse melanoma lines. *Eur. J. Cancer*, 1996, 32A:1995-2003.
8. Morré, D.J., Jacobs, E., Sweeting, M., **de Cabo, R.**, and Morré, D.M. A protein disulfide-thiol interchange activity of HeLa plasma membranes inhibited by the antitumor sulfonylurea N-(4-methylphenylsulfonyl)-N'-(chlorophenyl)urea (LY181984). *Biochem. Biophys. Acta.* 1997, 1325:117-125.
9. Navarro, F., Navas, P., Burgess, J.R., Bello, R.I. **de Cabo, R.**, Arroyo, A. and Villalba, J. M. Vitamin E and selenium deficiency induces expression of the ubiquinone-dependent antioxidant system at the plasma membrane. *FASEB J.* 1998, 12:1665-1673.

10. Navarro, F. Arroyo, A., Martín, S.F., Bello, R.I. **de Cabo, R.**, Burgess, J.R., Navas, P and Villalba, J. M. Protective role of ubiquinone against oxidative stress caused by vitamin E and selenium deficiency. *Biofactors*, 1999, 9(2-4) 171-177.
11. Mattes, R.D., Westby, E., **de Cabo, R.** and Falkner, B. Dietary compliance among salt-sensitive and salt-insensitive normotensive adults. *Am. J. Med. Sci*, 1999, 315(5): 287-294.
12. Arroyo, A., Kagan V.E., Tyurin, V.A., Burgess, J.R., **de Cabo, R.**, Navas, P. and Villalba, J.M. NADH and NADPH-dependent reduction of coenzyme Q at the plasma membrane. *Antioxid Redox Signal*. 2000, 2(2):251-262.
13. Navas, P., Fernández-Ayala, D.M., Martín, S.F., López-Lluch, G., **de Cabo, R.**, Rodríguez-Aguilera, J.C. and Villalba, J.M. Ceramide-dependent caspase 3-activation is prevented by coenzyme Q from plasma membrane in serum-deprived cells. *Free Radic Res*. 2002, 36 (4):369-374.
14. Anson, R.M., Guo, Z., **de Cabo, R.**, Lyun, T., Rios, M., Hagepanos, A., Ingram, D.K., Lane, M. A. and Mattson, M.P. Periodic fasting dissociates beneficial effects of dietary restriction from calorie intake. *Proc. Nat. Acad. Sci*. 2003, 100:6216-6120.
15. **de Cabo, R.**, Fürer-Galban, S., Anson, R.M., Gilman, C., Gorospe, M., and Lane, M.A. An in vitro model of caloric restriction. *Exp Gerontology*. 2003, 38:631-639.
 ****Article featured in Science magazine on-line SAGE-KE and Science, July 9th 2003 (B. S. Kristal, U. Paolucci, Caloric Restriction in *trans. Sci SAGE KE* 2003).
16. **de Cabo, R.**, López, G., Cabello, R., Lane, M. and Navas P. Effects of age and Calorie Restriction on the Rat Liver Antioxidant Plasma Membrane Redox System. *Exp Gerontol*. 2004, 39(3): 297-304.
17. Cohen, H. Y., Miller, C., Bitterman, K. J., Wall, N. R., Hekking, B., Kessler, B., Gorospe, M., **de Cabo, R.** and Sinclair, D. A. Calorie restriction promotes cell survival by inducing SIRT1. *Science*. 2004, 305 (5682):390-392.
18. Zhu, M., Miura, J., Lu, L., Bernier, M., **de Cabo, R.**, Lane, M. A., Roth, G. S. and Ingram, D. K. Circulating adiponectin levels increase in rats on caloric restriction: The potential for insulin sensitization. *Exp Gerontology*. 2004, 39(7):1049-1059.
19. Zhu, M., **de Cabo, R.**, Lane, M. A. and Ingram, D.K. Caloric restriction modulates early events in insulin signaling in liver and skeletal muscle of rat. *Ann N Y Acad Sci*. 2004, 1019:448-452.
20. Vega, V., **de Cabo, R.** and DeMaio, A. Age and caloric restriction diets are confounding factors that modify the response to LPS by peritoneal macrophages from C57bl/6 mice. *Shock*. 2004, 22(3):248-253.
21. Zhu, M., **de Cabo, R.**, Anson, R.M., Ingram, D.K. and Lane, M. A. Caloric restriction modulates early events in insulin signaling in liver and skeletal muscle of rat. *Nutrition*. 2005, 21(3): 378-388.
22. López-Lluch, G., Rios, M., Lane, M.A., Navas, P. and **de Cabo, R.** Mouse liver plasma membrane redox system activity is altered by aging and modulated by calorie restriction. *AGE* 2005, 27(2): 153–160.
23. López-Lluch, G., Hunt, N., Jones, B., Zhu, M., Jamieson, H., Hilmer, S., Cascajo, M. V., Allard, J., Ingram, D.K. and **de Cabo, R.** Calorie restriction induces mitochondrial biogenesis and bioenergetic efficiency. *Proc. Natl. Acad. Sci. U S A*. 2006, 103(6):1768-1773.

****Article featured in *Sci. Aging Knowl. Environ.*, Vol. 2006, Issue 5, p. nw5. [DOI: 10.1126/sageke.2006.5.nw5] Papers of Note.

24. Bernier, M., Kwon, Y.K., Pandey, S.K., Zhu, T.N., Zhao, R.J., Maciuk, A., He, H.J., **de Cabo, R.**, and Kole, S. Binding of manumycin A inhibits IKB Kinase beta activity. *J Biol Chem.* 2006; 281(5):2551-2561.
25. Liu, D., Chan, S.L., de Souza-Pinto, N.C., Slevin, J., Wersto, R.P., Zhan, M., Mustafa, K., **de Cabo, R** and Mattson, M.P. Mitochondrial UCP4 mediates an adaptive shift in energy metabolism and increases the resistance of neurons to metabolic and oxidative stress. *Neuromol. Med.* 2006, 8(3): 389-414s.
26. **de Cabo, R.**, Burgess, J.R. and Navas, P. Early events of the redox adaptations induced by vitamin E deficiency in rat liver. *J Bioenerg Biomembr.* 2006;38(5-6):309-17.
27. Hyun, D.H., Emerson, S.S., Hunt, N., Mattson, M.P. and **de Cabo, R.** Up-regulation of plasma membrane-associated redox activities in neuronal cells lacking functional mitochondria. *J Neurochem.* 2007;100(5):1364-74.
28. Qin, W., Chachich, M., Lane, M.A., Roth, G., **de Cabo, R.**, Ottinger, M.A., Mattison, J., Ingram, D.K., Gandy, M and Pasinetti, G.M. Neuropathology in squirrel monkeys (*Saimiri sciureus*). *J Alzheimers Dis.* 2006;10(4):417-22.
29. Lee, G.D., Wilson, M.A., Zhu, M., Wolkow, C.A., **de Cabo, R.**, Ingram, D.K. and Zou, S. Dietary deprivation extends lifespan in *Caenorhabditis elegans*. *Aging Cell.* 2006;5(6):515-24.
30. Jamieson, H., Hilmer, S., Cogger, V.C., Warren, A., Cheluvappa, R., Abernethy, D. R., Fraser, R., **de Cabo R.** and Le Couteur , D. G. Caloric restriction dramatically reduces age-related pseudocapillarization of the hepatic sinusoid. *Exp. Gerontol.* 2007. 42 (4), 374-378.
31. Baur, J.A., Pearson, K. J., Price, N., Jamieson, H. A., Lerin, C., Kalra, A., Prabhu, V.V., Allard, J.S., Lopez-Lluch, G., Lewis, K., Pistell, P., Poosala, S., Becker, K.G., Boss, O., Gwinn, D., Wang, M., Ramaswamy, S., Fishbein, K.W., Spencer, R.G., Lakatta, E.G., Le Couteur, D., Shaw, R.G., Navas, P., Puigserver, P., Ingram, D.K., **de Cabo, R***, and Sinclair, D.A*. Resveratrol improves health and increases survival of mice on a high-calorie diet. *Nature.* 2006; 444(7117):337-42 (***co-senior and co-corresponding authors**)
 **** Selected for the 2006 issue of the *Annual Bibliography of Significant Advances in Dietary Supplements Research*. http://ods.od.nih.gov/Research/Annual_Bibliographies.aspx
32. Hyun, D.H., Emerson, S.S., Jo, D. J., Mattson, M.P. and **de Cabo, R.** Calorie Restriction Up-Regulates the Plasma Membrane Redox System in Brain Cells and Suppresses Oxidative Stress During Aging. *Proc. Natl. Acad. Sci. U S A.* 2006;103(52):19908-12.
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(4 other manuscript submitted and 12 in preparation that will be submitted within the next year)