

CURRICULUM VITAE

Robin Jon Mockett
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University of South Alabama,
Mobile, AL 36688
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EDUCATION

Ph.D. (Biological Sciences), December, 1998
Southern Methodist University, Dallas, TX

Bachelor of Science with Honours (Biochemistry), June, 1994
Queen's University, Kingston, Ontario, Canada

EMPLOYMENT

Associate Professor, University of South Alabama: August, 2013 - present

Assistant Professor, University of South Alabama: August, 2007 - August, 2013

Research Assistant Professor, University of Southern California: July, 2001 - July, 2007

Post-Doctoral Research Associate, University of Southern California: Sept., 2000 - June, 2001

Post-Doctoral Research Associate, Southern Methodist University: Dec., 1999 - August, 2000

Post-Doctoral Fellow, Southern Methodist University: October, 1998 - November, 1999

RESEARCH

Funding

10. University of South Alabama, BMD Quick Grant (2020-2021)
Project Title: "Rapamycin supplementation and longevity of *Drosophila melanogaster*"
Amount: \$750.00
Role: Principal Investigator

9. Alva LLC, Hunt Valley, MD (2009-2013)
Donation to the University of South Alabama to support the research of Dr. Robin Mockett
Amount: \$320,000.00
Role: Principal Investigator

8. Mr. Douglas R. Arends, Ottawa, ON (2009-2012, 2016)
Donation to the University of South Alabama to support the research of Dr. Robin Mockett
Amount: \$72,800.00

Role: Principal Investigator

7. Canadian Bank Note Company, Ottawa, ON (2009)

Scientific advising/consultation

Amount: \$1590.00

6. University of South Alabama, USARC (2009-2010)

Project Title: "Development of long-lived, white-eyed, isogenic *Drosophila melanogaster* as a research tool for studies of aging"

Amount: \$2,900.00

Role: Principal Investigator

5. University of South Alabama (2007-2013)

Project Title: "Causes of aging in the fruit fly and housefly"

Amount: \$50,000.00

Role: Principal Investigator

4. NIH/NIA R01 AG7657, PI - R. S. Sohal (2007)

Project Title: "Cellular aging and oxygen free radicals"

Amount: \$1,983,250.00 (Estimated Total Cost, 2007-2012)

Role: Co-Investigator

3. Alva LLC, Hunt Valley, MD (2007)

Donation to the USC School of Pharmacy to support the research activities of Dr. Robin Mockett

Amount: \$10,000.00

Role: Principal Investigator

2. WJM, LLC, Hunt Valley, MD (2006)

Donation to the USC School of Pharmacy to support the research activities of Dr. Robin Mockett

Amount: \$10,000.00

Role: Principal Investigator

1. USC Department of Molecular Pharmacology and Toxicology Seed Funds Grant (2005)

Project Title: "Sumoylation as a prospective biomarker of DNA oxidative damage and/or infection in aging *Drosophila melanogaster*."

Amount: \$15,000.00

Role: Principal Investigator

Awards:

1. Honorable Mention, Howard Hughes Medical Institute Predoctoral Fellowships in Biological Sciences (1995)

Publications - Research Articles:

23. Villeponteau, B., Matsagas, K., Nobles, A. C., Rizza, C., Horwitz, M., Benford, G. and Mockett, R. J. Herbal supplement extends life span under some environmental conditions and boosts stress resistance. *PLoS ONE* **10(4)**: e0119068 (2015).

22. Mockett, R. J. and Matsumoto, Y. Effect of prolonged coldness on survival and fertility of *Drosophila melanogaster*. *PLoS ONE* **9(3)**: e92228 (2014).

21. Mockett, R. J. and Nobles, A. C. Lack of robustness of life extension associated with several single-gene *P* element mutations in *Drosophila melanogaster*. *J. Gerontol. A Biol. Sci. Med. Sci.* **68(10)**: 1157-1169 (2013).
20. Mockett, R. J., Cockrell, J. C., Puri, S., Nguyen, M. and Nisa, M. Long-lived genotypes for studies of life extension in *Drosophila melanogaster*. *Mech. Ageing Dev.* **133**: 359-367 (2012).
19. Mockett, R. J., Sohal, B. H. and Sohal, R. S. Expression of multiple copies of mitochondrially targeted catalase or genomic Mn superoxide dismutase transgenes does not extend the life span of *Drosophila melanogaster*. *Free Radic. Biol. Med.* **49**: 2028-2031 (2010).
18. Legan, S. K., Rebrin, I., Mockett, R. J., Radyuk, S. N., Klichko, V. I., Sohal, R. S. and Orr, W. C. Overexpression of glucose-6-phosphate dehydrogenase extends the life span of *Drosophila melanogaster*. *J. Biol. Chem.* **283**: 32492-32499 (2008).
17. Sohal, R. S., Toroser, D., Brégère, C., Mockett, R.J. and Orr, W.C. Age-related decrease in expression of mitochondrial DNA encoded subunits of cytochrome *c* oxidase in *Drosophila melanogaster*. *Mech. Ageing Dev.* **129**: 558-561 (2008).
16. Mockett, R. J. and Sohal, R. S. Temperature-dependent trade-offs between longevity and fertility in the *Drosophila* mutant, *methuselah*. *Exp. Gerontol.* **41**: 566-573 (2006).
15. Orr, W. C., Radyuk, S. N., Prabhudesai, L., Toroser, D., Benes, J. J., Luchak, J. M., Mockett, R. J., Rebrin, I., Hubbard, J. G. and Sohal, R. S. Overexpression of glutamate-cysteine ligase extends life span in *Drosophila melanogaster*. *J. Biol. Chem.* **280**: 37331-37338 (2005).
14. Bayne, A.-C. V., Mockett, R. J., Orr, W. C. and Sohal, R. S. Enhanced catabolism of mitochondrial superoxide/hydrogen peroxide and aging in transgenic *Drosophila*. *Biochem. J.* **391**: 277-284 (2005).
13. Ferguson, M., Mockett, R. J., Shen, Y., Orr, W. C. and Sohal, R. S. Age-associated decline in mitochondrial respiration and electron transport in *Drosophila melanogaster*. *Biochem. J.* **390**: 501-511 (2005).
12. Cooper, T. M., Mockett, R. J., Sohal, B. H., Sohal, R. S. and Orr, W. C. Effect of caloric restriction on life span of the housefly, *Musca domestica*. *FASEB J.* **18**: 1591-1593 (2004).
11. Rebrin, I., Bayne, A.-C., Mockett, R. J., Orr, W. C. and Sohal, R. S. Free aminothiols, glutathione redox state and protein mixed disulphides in aging *Drosophila melanogaster*. *Biochem J.* **382**: 131-136 (2004).
10. Orr, W. C., Mockett, R. J., Benes, J. J. and Sohal, R. S. Effects of overexpression of copper-zinc and manganese superoxide dismutases, catalase, and thioredoxin reductase genes on longevity in *Drosophila melanogaster*. *J. Biol. Chem.* **278**: 26418-26422 (2003).
9. Mockett, R. J., Bayne, A.-C. V., Kwong, L. K., Orr, W. C. and Sohal, R. S. Ectopic expression of catalase in *Drosophila* mitochondria increases stress resistance but not longevity. *Free Radic. Biol. Med.* **34**: 207-217 (2003).
8. Mockett, R. J., Radyuk, S. N., Benes, J. J., Orr, W. C. and Sohal, R. S. Phenotypic effects of familial amyotrophic lateral sclerosis mutant *Sod* alleles in transgenic *Drosophila*. *Proc. Natl. Acad. Sci. USA* **100**: 301-306 (2003).

7. Mockett, R. J., Orr, W. C. and Sohal, R. S. Overexpression of Cu,ZnSOD and MnSOD in transgenic *Drosophila*. *Meth. Enzymol.* **349**: 213-220 (2002).
6. Mockett, R. J., Bayne, A.-C. V., Sohal, B. H. and Sohal, R. S. Biochemical assay of superoxide dismutase activity in *Drosophila*. *Meth. Enzymol.* **349**: 287-292 (2002).
5. Mockett, R. J., Orr, W. C., Rahmandar, J. J., Sohal, B. H. and Sohal, R. S. Antioxidant status and stress resistance in long- and short-lived lines of *Drosophila melanogaster*. *Exp. Gerontol.* **36**: 441-463 (2001).
4. Kwong, L. K., Mockett, R. J., Bayne, A.-C. V., Orr, W. C. and Sohal, R. S. Decreased mitochondrial hydrogen peroxide release in transgenic *Drosophila melanogaster* expressing intramitochondrial catalase. *Arch. Biochem. Biophys.* **383**: 303-308 (2000).
3. Mockett, R. J., Orr, W. C., Rahmandar, J. J., Benes, J. J., Radyuk, S. N., Klichko, V. I. and Sohal, R. S. Overexpression of Mn-containing superoxide dismutase in transgenic *Drosophila melanogaster*. *Arch. Biochem. Biophys.* **371**: 260-269 (1999).
2. Mockett, R. J., Sohal, R. S. and Orr, W. C. Overexpression of glutathione reductase extends survival in transgenic *Drosophila melanogaster* under hyperoxia but not normoxia. *FASEB J.* **13**: 1733-1742 (1999).
1. Farinha, M. A., Mockett, R., Went, C. J., Jardine, S., Naczynski, L. M. and Kropinski, A. M. Physical mapping of several heat-shock genes in *Pseudomonas aeruginosa* and the cloning of the *mapA* (GroEL) gene. *Can. J. Microbiol.* **42**: 326-334 (1996).

Publications - Review Articles and Book Chapters:

5. Mockett, R. J., Sohal, R. S. and Orr, W. C. Roles of oxidative stress in the aging process of *Drosophila melanogaster*. In: *Oxidative Stress in Aging: From Model Systems to Human Diseases* (eds. S. Miwa, K. B. Beckman and Muller, F. L.), pp. 111-128, Humana Press, Totowa, NJ (2008).
4. Mockett, R. J., Cooper, T. M., Orr, W. C. and Sohal, R. S. Effects of caloric restriction are species-specific. *Biogerontology* **7**: 157-160 (2006).
3. Sohal, R. S., Mockett, R. J. and Orr, W. C. Mechanisms of aging: an appraisal of the oxidative stress hypothesis. *Free Radic. Biol. Med.* **33**: 575-586 (2002).
2. Sohal, R. S., Mockett, R. J. and Orr, W. C. Current issues concerning the role of oxidative stress in aging: a perspective. In: *Results and Problems in Cell Differentiation*, Vol. 29 (ed. S. Hekimi), pp. 45-66, Springer-Verlag, Berlin (2000).
1. Mockett, R. J. and Sohal, R. S. Oxidative stress may be a causal factor in senescence of animals. In: *Longevity: To The Limits and Beyond* (eds. J.-M. Robine, *et al.*), pp. 139-154, Springer-Verlag, Berlin (1997).

Seminars:

11. "Autofluorescence in Aging Adult *Drosophila melanogaster*." Research Kickstart in the Honors College, University of South Alabama (February 20, 2020).

10. "Autofluorescence in Tissues of Aging Adult *Drosophila melanogaster*." College of Allied Health Professions Brown Bag Research Session, University of South Alabama (June 7, 2019).
9. "Autofluorescence in Aging Adult *Drosophila melanogaster*." Research Kickstart in the Honors College, University of South Alabama (February 11, 2019).
8. "Prospects for Further Life Extension in Long-Lived *Drosophila*." Department of Biological Sciences, Southern Methodist University (October 15, 2009).
7. "Prospects for Further Life Extension in Long-Lived *Drosophila*." Department of Pharmacology and Neuroscience, University of North Texas Health Science Center (October 13, 2009).
6. "Studies of Aging in the Fruit Fly and the Housefly." Department of Biomedical Sciences, University of South Alabama (April 19, 2007).
5. "Studies of Aging in the Fruit Fly and the Housefly." Biology Department, SUNY Fredonia (March 7, 2007).
4. "Studies of Aging in the Fruit Fly, *Drosophila melanogaster*." Department of Biological Sciences, East Tennessee State University (January 25, 2006).
3. "Studies of Aging in the Fruit Fly, *Drosophila melanogaster*." Department of Biological Sciences, University of Wisconsin-Parkside (December 19, 2005).
2. "A Prospective *Drosophila* Model of FALS." Department of Molecular Pharmacology and Toxicology, University of Southern California (December 14, 2001).
1. Department of Biological Sciences, Southern Methodist University (February 9, 1996).

Conference Attendance - Poster Presentations:

16. Mockett, R. J., Acton, S. K., Bearden, A. A., Blalock, M. P., Cleveland, E. S., D'Arcy, B. M., Hutchison, A., Llewellyn, C. M., Perez, P. A., Phan, B. N. and Rodenberg, R. Autofluorescence in tissues of aging adult *Drosophila melanogaster*. 2019 UAB Aging Symposium, Birmingham, AL (2019).
15. Cleveland, E. S., Rodenberg, R. R. and Mockett, R. J. Autofluorescence of lipofuscin in the salivary gland of the aging fruit fly, *D. melanogaster*. 2019 UAB Aging Symposium, Birmingham, AL (2019).
14. Mockett, R. J. and Bearden, A. A. Autofluorescence in tissues of aging *Drosophila melanogaster*. American Aging Association, 44th Annual Meeting, Marina Del Rey, CA (2015).
13. Mockett, R. J., Nobles, A. C. and D'Arcy, B. M. Life extension in the fly: are the results reproducible? American Aging Association, 41st Annual Meeting, Fort Worth, TX (2012).
12. Mockett, R. J., Nobles, A. C. and D'Arcy, B. M. Life extension in the fly: are the results reproducible? University of South Alabama Faculty Development Council, 19th Annual Forum, Mobile, AL (2012).

11. Mockett, R. J., Ciza, J. L., Puri, S., Nguyen, M., Nisa, M. and Hatanaka, M. A test of artificially selected, long-lived flies as a prospective model for further life extension in *Drosophila melanogaster*. American Aging Association, 39th Annual Meeting, Portland, OR (2010).
10. Mockett, R. J., Ciza, J. L., Puri, S., Nguyen, M., Nisa, M. and Hatanaka, M. A test of artificially selected, long-lived flies as a prospective model for further life extension in *Drosophila melanogaster*. University of South Alabama Faculty Development Council, 17th Annual Forum, Mobile, AL (2010).
9. Mockett, R. J. Effects of 'anti-aging' compounds on the life span of houseflies. American Aging Association, 36th Annual Meeting, San Antonio, TX (2007).
8. Mockett, R. J. and Sohal, R. S. Trade-offs associated with the *Drosophila* longevity mutant, *methuselah*. American Aging Association, 34th Annual Meeting, Oakland, CA (2005).
7. Mockett, R. J. and Sohal, R. S. Superoxide dismutase does not govern longevity in *Drosophila*. Oxygen Club of California, Santa Barbara, CA (2004).
6. Mockett, R. J., Orr, W. C. and Sohal, R. S. Effects of human FALS mutant *Sod* alleles in *Drosophila*. Gordon Research Conference: Oxidative Stress and Disease, Ventura, CA (2003).
5. Bayne, A.-C. V., Mockett, R. J., Kwong, L. K. and Sohal, R. S. Intramitochondrial expression of catalase in *Drosophila melanogaster*: effects on aging and stress resistance. Oxygen Club of California, Santa Barbara, CA (2002).
4. Bayne, A.-C. V., Mockett, R. J., Kwong, L. K. and Sohal, R. S. Effects of targeted, intramitochondrial expression of catalase in transgenic *Drosophila melanogaster*. Oxygen Club of California, Santa Barbara, CA (2001).
3. Mockett, R. J., Orr, W. C., Rahmandar, J. J., Sohal, B. H. and Sohal, R. S. Comparison of antioxidant status and stress resistance between long- and short-lived lines of *Drosophila melanogaster*. Oxygen Club of California, Santa Barbara, CA (2000).
2. Kwong, L. K., Mockett, R. J., Bayne, A.-C. V., Orr, W. C. and Sohal, R. S. Ectopic expression of catalase in the mitochondrial compartment of *Drosophila melanogaster*. Oxygen Club of California, Santa Barbara, CA (2000).
1. Mockett, R. J., Orr, W. C. and Sohal, R. S. Overexpression of glutathione reductase extends survival in transgenic *Drosophila melanogaster* under hyperoxia but not normoxia. Oxygen Club of California, Santa Barbara, CA (1999).

Conference Attendance - Other:

8. American Aging Association Virtual Meeting, Online (2020).
7. American Aging Association, 45th Annual Meeting, Seattle, WA (2016).
6. American Aging Association, 43rd Annual Meeting, San Antonio, TX (2014).
5. Understanding Aging: Biomedical and Bioengineering Approaches, Los Angeles, CA (2008).

4. Genetics Society of America, 43rd Annual Drosophila Research Conference, San Diego, CA (2002).
3. Oxygen Society, 7th Annual Meeting, San Diego, CA (2000).
2. Oxygen Club of California, Santa Barbara, CA (1997).
1. American Aging Association, 25th Annual Meeting, San Antonio, TX (1995).

Peer Review:

Editorial Board Membership: *Mechanisms of Ageing and Development* (2010-2014)

Grant Applications: Natural Environment Research Council, UK (2020); NASA Postdoctoral Program, Oak Ridge Associated Universities (2010); Help The Aged, UK (2008); Motor Neurone Disease Association, UK (2003).

Manuscripts: *Aging Clinical and Experimental Research, American Journal of Pharmacology and Toxicology, Antioxidants & Redox Signaling, Apidologie, Biogerontology, Bioscience Reports, Experimental Gerontology, FEBS Letters, Free Radical Biology and Medicine, International Journal of Food Science, International Journal of Insect Science, Journal of Medical Entomology, Journal of Nutrition and Metabolism, Journal of Thermal Biology, Journals of Gerontology A Biological Sciences and Medical Sciences, Mechanisms of Ageing and Development, Methods in Molecular Biology, Nature Biotechnology, Neurobiology of Aging, Nutritional Neuroscience, Oxidative Medicine and Cellular Longevity, PLoS ONE* (1996-2021).

Abstracts: Society for Free Radical Biology and Medicine, 11th, 13th – 22nd, 24th Annual Meetings (2004, 2006-2015, 2017).

Book Sections: Free Radicals in Biology and Medicine (Third Edition), by B. Halliwell and J. M. C. Gutteridge (1999).

Intramural: Summer Undergraduate Research Fellowship – Abstracts (2018), Proposals (2019, 2020, 2021).

Other:

Contributed practice questions for online version of the textbook Fundamentals of Biochemistry, by D. Voet, J. G. Voet and C. W. Pratt (1999).

TEACHING

Awards:

“Top Prof”, Mortar Board National Honor Society (2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2019-2020, 2020-2021)

“Student-Athlete Academic Achievers Breakfast” invitee (2015, 2016, 2017)

Graduate faculty of the University of South Alabama, full member (2012-present)

Courses Taught / Undergraduate Students Mentored:University of South Alabama:

BMD 201 – Seminars in Biomedical Sciences	(2015-present)
BMD 334 – Human Physiology I	(2008, 2010-present)
BMD 336 – Human Physiology Laboratory-(W)	(2008-present)
BMD 430 – Neurosciences	(2019-present)
BMD 450 – Introduction to Research	(2015-present)
BMD 494 – Directed Research Studies	(2009-2011, 2013, 2016, 2017, 2020-present)
BMD 499 – Honors Research Thesis	(2008-present)
Coordinator:	(2017-present)
Mentor:	Emily Cleveland (2020-2021)
	Rachel Rodenberg (2018-2019)
	Mercy Blalock (2013-2014)
	Amber Simmons (2012-2013)
	Michael Grant (2012-2013)
	Jordan Ciza (2009-2010)
	Shruti Puri (2009-2010)
Committee member:	Aaron Haider (2020-2021)
	Ada van der Zijp-Tan (2020-2021)
	Alia Tayara (2020)
	Savannah Castrillo (2019-2020)
	Katelyn Rogers (2019-2020)
	Danyon Beitel (2018-2019)
	Monica Sai Pasala (2018-2019)
	Emily Ramsey (2018-2019)
	Katherine Anderson (2017-2018)
	Rohan Ghosh (2017-2018)
	Zohaib Ijaz (2017-2018)
	Jared Johnson (2017-2018)
	Pooja Revanna (2017-2018)
	Hannah Brooks (2016-2017)
	Savannah West (2016-2017)
	Kellie Agaloff (2016-2016)
	Alicia Carrubba (2015-2016)
	Anu Pandit (2015-2016)
	Andrea Butts (2014-2015)
	Sumair Ozair (2014-2015)
	Imran Mohiuddin (2013-2014)
	Sana Ozair (2013-2014)
	Amy Traylor (2013-2014)
	Josie Baumgarten (2012-2013)
	Jenna Hover (2012-2013)

	Jae Sung	(2012-2013)
	Kamil Arif	(2011-2012)
	Taylor Chrisman	(2011-2012)
	Jordan Spidle	(2011-2012)
	Benjamin Theobald	(2011-2012)
	Andrew Schneider	(2010-2011)
	Mohini Agarwal	(2009-2010)
	Megan Blackman	(2009-2010)
	Heather Fishel	(2008-2009)
SHS 499 – Honors Research Thesis		(2012-2013)
Committee member: Mihika Batavia		(2012-2013)
BLY 499 – Honors Research Thesis		(2017-2018)
Committee member: Alexander Coley		(2017-2018)
CH 499 – Honors Research Thesis		(2016-2017)
Committee member: Evan Li		(2016-2017)
NSF REU Mentor: Matthew Hurton		(2011)
Biol 5605, Auburn Univ., Laboratory Component:		(2009, 2010)

Southern Methodist University:

Substitute lectures - Introductory Biology for biology majors, Genetics, Cell Biology, and Graduate Seminar (1996-2000)
Teaching Assistant - Introductory Biology laboratory for biology majors (1994-1996)

Other:

Private tutor for premedical science and mathematics courses, Queen's University (1992-1994)

ADMINISTRATIVE / SERVICE ACTIVITIES

University of South Alabama:

University Committees

University Committee on Undergraduate Research	(2018-present)
University Career Services Committee	(2010-present)
University Faculty Grievance Committee pool	(2013-2017)
University Faculty Development Council	(2010-2013)

College of Allied Health Professions Committees

Graduate Grade Grievance/Academic Dismissals Committee	(2021)
Scholarship Committee	(2019-2021)
Tenure and Promotion Evaluation & Review Committee	(2019-2021)
Textbook Committee	(2019-2020)
Alcoa Fund Scholarship Committee	(2017-present)

Department of Biomedical Sciences Committees

BMD Curriculum Committee	(2019-present)
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Patsy Capps-Covey BMD Scholarship Committee (Chair)	(2014-present)
BMD Departmental Tenure and Promotion Committee	(2020-2021)
BMD Departmental Promotion Committee (Chair)	(2018-2019)
Faculty Search Committee, Asst/Assoc Professor	(2018)
BMD Departmental Tenure and Promotion Committee	(2016-2017)
Faculty Search Committee, Asst/Assoc Professor	(2016)
Faculty Search Committee, BMD Chair	(2015-2018)
Faculty Search Committee, Anatomy and Physiology (Chair)	(2013-2014)
Academic Standards Committee, Dept. Biomedical Sciences	(2008-2009)

Student Organizations

Camp Kesem Advisory Board	(2018-present)
Faculty Advisor: BMD Society (Student Organization)	(2014-present)
Faculty Advisor: Students for Disease Research (Student Org.)	(2013-2018)

Other University Service

College of Nursing Tenure Committee	(2020-2021)
Judge, National Bioethics Bowl	(2018)
Judge, First Annual Southeast Regional Bioethics Bowl	(2017)
College of Medicine Early Acceptance Program (Interviewer)	(2016, 2017)

University of Southern California:

Peer Review Committee for Research Track Faculty	(2007)
Interviewer, Pharm.D. student candidates	(2003, 2005-2007)

Southern Methodist University:

Student representative, Dedman College Graduate Council	(1996-1997)
Biological Sciences representative, Graduate Student Assembly	(1994-1998)

PROFESSIONAL MEMBERSHIPS

American Aging Association	(2005-2007, 2009-2017)
American Association of Colleges of Pharmacy: Member	(2002, 2004)
American Society for Biochemistry and Molecular Biology	(2019-2020)
Genetics Society of America: Affiliate (2002), Member	(2003-2006)
Sigma Xi: Associate Member (1995), Full Member	(2006)
University of South Alabama Gerontology Research Network	(2008-present)

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