### **Curriculum Vitae: RICHARD A. BLOCK**

Last updated 2015-02-18

Address: Department of Psychology, P.O. Box 173440, Montana State University,

Bozeman, MT 59717-3440 USA

Telephone: 1-406-994-5173; Fax: 1-406-994-3804

E-mail: block@montana.edu; Homepage: www.montana.edu/wwwpy/block.html

#### **Education**

University of Oregon (Ph.D., 1973, Psychology) University of Oregon (M.A., 1970, Psychology) University of Michigan (B.A., 1968, Psychology)

### **Professional Experience**

Professor (Montana State University, 1985–present)

Chair, Department of Psychology (Montana State University, 1986–1993, 2005–2009)

Associate Professor (Montana State University, 1979–1985)

Assistant Professor (Montana State University, 1974–1979)

Assistant Professor (State University of New York, Plattsburgh, 1973–1974)

U.S.P.H.S. Predoctoral Fellow (University of Oregon, 1970–1972)

Graduate Research Assistant (University of Oregon, 1969–1973)

Graduate Teaching Assistant (University of Oregon, 1968–1969)

Undergraduate Research Assistant (University of Michigan, 1966–1967)

#### **Honors**

Charles and Nora L. Wiley Faculty Award for Meritorious Research from Montana State University, 2012

Association for Psychological Science, Fellow, 2011

Associate member of the Division of Perception & Psychophysics, Department of Psychology, Stockholm University, Sweden (1996–present)

Certificate of Recognition for Outstanding Service in the Field of Education (Pi Sigma Alpha Chapter of Mortar Board, Montana State University, 1987)

Faculty Teaching Award (University Honors Program, Montana State University, 1986–1987)

United States Public Health Service Predoctoral Fellowship (University of Oregon, 1970–1972)

## **Memberships**

Association for Psychological Science (formerly: American Psychological Society; Charter Member, 1989–2010; Fellow 2011–present)

Psychonomic Society (Member, 1977–present)

International Society for the Study of Time (Member, 1981–2005; Treasurer and Council Member, 1989–1995; Local Conference Organizer, 1988–1989)

Western Psychological Association (Member, 1982–2006)

#### RESEARCH

## Areas of specialization

Memory and cognition, focusing on human memory, temporal information processing, face encoding processes, and human judgment and decision processes.

#### **Publications**

- Block, R. A., & Hancock, P. A. (2015). Psychology of time: Basic and applied issues. In R. R. Hoffman, P. A. Hancock, R. Parasuraman, & J. L. Szalma (Eds.), *The Cambridge Handbook of Applied Perception Research* (Vol. 1, pp. 284–295). New York: Cambridge University Press.
- Gruber, R. P., Bach, M., & Block, R. A. (2015). Perceiving two levels of the flow of time. Manuscript accepted, *Journal of Consciousness Studies*.
- Gruber, R. P., Bach, M., & Block, R. A. (2015). Happening: *Evidence on a new multimodal percept*. Manuscript submitted for publication.
- Block, R. A., Hancock, P. A., & Zakay, D. (2014). *Physical load affects duration judgments: A meta-analytic review*. Manuscript submitted for publication.
- Manley, K. D., & Block, R. A. (2014). *Intent to remember and isolation effects reveal attentional processes*. Manuscript submitted for publication.
- Block, R. A., & Gruber, R. P. (2014). Time perception, attention, and memory: A selective review. *Acta Psychologica, 149,* 129–133. doi: 10.1016/j.actpsy.2013.11.003 [special issue on "Timing and Time Perception"]
- Block, R. A., & Grondin, S. (2014). Psychology of time: A selective commentary on recent reviews. *Frontiers in Psychology: Perception Science*, *5*, 1–3. [general commentary]
- Block, R. A., & Hancock, P. A. (2013). Time perception. *Oxford Bibliographies*. http://www.oxfordbibliographies.com/view/document/obo-9780199828340/obo-9780199828340-0123.xml [annotated bibliography]
- Gruber, R., & Block, R. A. (2013). The flow of time as a perceptual illusion. *The Journal of Mind and Behavior*, 34, 91–100.
- Block, R. A., & Crawford, K. C. (2013). Gender stereotypes of leadership behaviors: Social metacognitive evidence. *Psychology and Social Behavior Research*, 1, 9-17.
- Hancock. P. A., & Block, R. A. (2012). The psychology of time: A view backward and forward. *American Journal of Psychology*, 125, 267-274.
- Block, R. A., Hancock, P. A., & Zakay, D. (2010). How cognitive load affects duration judgments: A meta-analytic review. *Acta Psychologica*, 134, 330–343. doi:10.1016/j.actpsy.2010.03.006
- Block, R. A. (2009). Intent to remember briefly presented human faces and other pictorial stimuli enhances recognition memory. *Memory & Cognition*, *37*, 667–678. doi:10.3758/MC.37.5.667

- Block, R. A., & Zakay, D. (2008). Timing and remembering the past, the present, and the future. In S. Grondin (Ed.), *Psychology of time* (pp. 367–394). Bingley, England: Emerald.
- Block, R. A., & Zakay, D. (2006). Prospective remembering involves time estimation and memory processes. In J. Glicksohn & M. S. Myslobodsky (Eds.), *Timing the future: The case for a time-based prospective memory* (pp. 25–49). London: World Scientific.
- Polewan, R. J., Vigorito, C. M., Nason, C. D., Block, R. A., & Moore, J. W. (2006). A Cartesian reflex assessment of face processing. *Behavioral and Cognitive Neuroscience Reviews*, *5*, 3–23. doi:10.1177/1534582306289130
- Gruber, R. P., & Block, R. A. (2005). Effect of caffeine on prospective duration judgments of various intervals depends on task difficulty. *Human Psychopharmacology*, *20*, 275–285. doi:10.1002/hup.687
- Pierce, C. A., Block, R. A., & Aguinis, H. (2004). Cautionary note on reporting eta-squared values from multifactor ANOVA designs. *Educational and Psychological Measurement*, 64, 916–924. doi:10.1177/0013164404264848
- Zakay, D., & Block, R. A. (2004). Prospective and retrospective duration judgments: An executive-control process. *Acta Neurobiologiae Experimentalis*, 64, 319–328.
- Gruber, R. P., Wagner, L. F., & Block, R. A. (2004). Relationships between subjective time and information processed (reduction of uncertainty). In P. Harris & M. Crawford (Eds.), *Time and uncertainty: The study of time XI* (pp. 188–203). Leiden: Netherlands: Brill.
- Block, R. A. (2003). Psychological timing without a timer: The roles of attention and memory. In H. Helfrich (Ed.), *Time and mind II: Information processing perspectives* (pp. 41–59). Göttingen, Germany: Hogrefe & Huber.
- Gruber, R. P., & Block, R. A. (2003). Effects of caffeine on prospective and retrospective duration judgments. *Human Psychopharmacology: Clinical and Experimental*, 18, 351–359.
- Block, R. A., & Zakay, D. (2001). Retrospective and prospective timing: Memory, attention, and consciousness. In C. Hoerl & T. McCormack (Eds.), *Time and memory: Issues in philosophy and psychology* (pp. 59–76). Oxford, England: Oxford University Press.
- Block, R. A., & Zakay, D. (2001). Psychological time at the millennium: Some past, present, future, and interdisciplinary issues. In M. P. Soulsby & J. T. Fraser (Eds.), *Time: Perspectives at the millennium (The study of time X,* pp. 157–173). Westport, CT: Bergin & Garvey.
- Block, R. A., Hancock, P. A., & Zakay, D. (2000). Sex differences in duration judgments: A meta-analytic review. *Memory & Cognition*, 28, 1333–1346.
- Block, R. A., & Zakay, D. (2000). Psychological time: Memory, attention, and consciousness. In R. Buccheri, V. di Gesù, & M. Saniga (Eds.), *Studies on the Structure of Time: From Physics to Psycho(patho)logy* (pp. 1–17). Dordrecht, Netherlands: Kluwer Academic.

- Gruber, R. P., Wagner, L. F., & Block, R. A. (2000). Subjective time versus proper (clock) time. In R. Buccheri, V. Di Gesù, & M. Saniga (Eds.), *Studies on the structure of time:* From physics to psycho(patho)logy (pp. 49–63). New York: Kluwer Academic/Plenum.
- Zakay, D., Block, R. A., & Tsal, Y. (1999). Prospective duration estimation and performance. In D. Gopher & A. Koriat (Eds.), *Attention and Performance XVII: Cognitive regulation of performance: Interaction of theory and application* (pp. 557–580). Cambridge, MA: MIT Press.
- Zakay, D., & Block, R. A. (1999). The negative asynchrony phenomenon: A prospective timing perspective: Commentary on Müller *et al.* In G. Aschersleben, T. Bachmann, & J. Müsseler (Eds.), *Cognitive contributions to the perception of spatial and temporal events* (pp. 251–257). Amsterdam: Elsevier.
- Block, R. A., Zakay, D., & Hancock, P. A. (1999). Developmental changes in human duration judgments: A meta-analytic review. *Developmental Review, 19,* 183–211. doi:10.1006/drev.1998.0475
- Block, R. A., Hancock, P. A., & Zakay, D. (1998). Human aging and duration judgments: A meta-analytic review. *Psychology and Aging, 13,* 584–596. doi:10.1037/0882-7974.13.4.584
- Gasde, I., & Block, R. A. (1998). Cult experience: Psychological abuse, distress, personality characteristics, and changes in personal relationships reported by former members of Church Universal and Triumphant. *Cultic Studies Journal*, 15, 192–221.
- Zakay, D., & Block, R. A. (1998). New perspective on prospective time estimation. In V. De Keyser, G. d'Ydewalle, & A. Vandierendonck (Eds.) *Time and the dynamic control of behavior* (pp. 129–141). Seattle, WA: Hogrefe & Huber.
- Block, R. A. (1998). Psychological time and the processing of spatial information. In M. J. Egenhofer & R. G. Golledge (Eds.), *Spatial and temporal reasoning in geographic information systems* (pp. 119–130). New York: Oxford University Press.
- Block, R. A. (1998, January). [Review of the book *A Geography of Time*]. *Time's News, 28,* 18–19.
- Block, R. A. (1998, January). [Review of the book *Searching for memory: The brain, the mind, and the past*]. *Time's News, 28, 21*.
- Block, R. A., & Zakay, D. (1997). Prospective and retrospective duration judgments: A meta-analytic review. *Psychonomic Bulletin & Review*, *4*, 184–197.
- Zakay, D., & Block, R. A. (1997). Temporal cognition. *Current Directions in Psychological Science*, 6, 12–16. doi:10.1111/1467-8721.ep11512604
- Binkofski, F., & Block, R. A. (1996). Accelerated time experience after left frontal cortex lesion. *Neurocase*, *2*, 485–493.
- Block, R. A., & Zakay, D. (1996). Models of psychological time revisited. In H. Helfrich (Ed.), *Time and mind* (pp. 171–195). Kirkland, WA: Hogrefe & Huber.
- Zakay, D., & Block, R. A. (1996). The role of attention in time estimation processes. In M. A. Pastor & J. Artieda (Eds.), *Time, internal clocks and movement* (pp. 143–164). Amsterdam: Elsevier Science.

- Block, R. A. (1996). Psychological time and memory systems of the brain. In J. T. Fraser & M. P. Soulsby (Eds.), *Dimensions of time and life: The study of time, Vol. 8* (pp. 61–76). Madison, CT: International Universities Press.
- Block, R. A., Buggie, S. E., & Matsui, F. (1996). Beliefs about time: Cross-cultural comparisons. *Journal of Psychology*, *130*, 5–22.
- Zakay, D., & Block, R. A. (1995). An attentional-gate model of prospective time-estimation. In M. Richelle, V. D. Keyser, G. d'Ydewalle, & A. Vandierendonck (Eds.), *Time and the dynamic control of behavior* (167–178). Liège, Belgium: Universite de Liege.
- Block, R. A., & Kasser, T. (1995, December). [Review of the book *Psychology of future orientation*]. *Time's News, 26,* 19–20. doi:10.1037/003794
- Block, R. A. (1995). Time, the wisest of all counselors? [Review of the book *Time pressure and stress in human judgment and decision making*]. *Contemporary Psychology*, 40, 777–779.
- Block, R. A., & Kasser, T. (1995). Approaches to the future: The essential 12 percent of thoughts [Review of the book *Psychology of future orientation*]. *Contemporary Psychology*, 40, 650–651.
- Block, R. A. (1995). [Review of the book *Einstein's dreams*]. *Contemporary Psychology*, 40, 600–601.
- Block, R. A. (1994, October). [Review of the book *Einstein's dreams*]. *Time's News, 24,* 14.
- Block, R. A. (1994, January). [Review of the book *Time, action and cognition: Towards bridging the gap*]. *Time's News, 22,* 10.
- Block, R. A. (1994). Cognition. In S. L. Macey (Ed.), *Encyclopedia of time* (pp. 134–136). New York: Garland.
- Block, R. A. (1994). Hypnosis and psychological time. In S. L. Macey (Ed.), *Encyclopedia of time* (pp. 286–287). New York: Garland.
- Block, R. A. (1994). James, William (as psychologist) (1842–1910). In S. L. Macey (Ed.), Encyclopedia of time (pp. 320–321). New York: Garland.
- Block, R. A. (1994). Prospective and retrospective time. In S. L. Macey (Ed.), *Encyclopedia of time* (pp. 499–500). New York: Garland.
- Block, R. A. (1994). Psychoactive drugs. In S. L. Macey (Ed.), *Encyclopedia of time* (pp. 501–502). New York: Garland.
- Block, R. A. (1994). Temperature and psychological time. In S. L. Macey (Ed.), Encyclopedia of time (pp. 594–595). New York: Garland.
- Block, R. A. (1994). Time-order errors. In S. L. Macey (Ed.), *Encyclopedia of time* (pp. 632). New York: Garland.
- Block, R. A., & Patterson, R. (1994). Simultaneity, successiveness, and temporal-order judgments. In S. L. Macey (Ed.), *Encyclopedia of time* (pp. 555–557). New York: Garland.
- Block, R. A. (1993). Factor structure of beliefs about time: Comment on Hill and Stuckey (1992). *Perceptual and Motor Skills*, *76*, 1009–1010.

- Block, R. A. (1992). Prospective and retrospective duration judgment: The role of information processing and memory. In F. Macar, V. Pouthas, & W. J. Friedman (Eds.), *Time, action and cognition: Towards bridging the gap* (pp. 141–152). Dordrecht, Netherlands: Kluwer Academic.
- Block, R. A., & Harper, D. R. (1991). Overconfidence in estimation: Testing the anchoring-and-adjustment hypothesis. *Organizational Behavior and Human Decision Processes*, 49, 188–207. doi:10.1016/0749-5978(91)90048-X
- Block, R. A. (1990, October). [Review of the book *Guyau and the idea of time*]. *Time's News, 18,* 13–14.
- Block, R. A. (Ed.). (1990). *Cognitive models of psychological time*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Block, R. A. (1990). Models of psychological time. In R. A. Block (Ed.), *Cognitive models of psychological time* (pp. 1–35). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Block, R. A. (1990). Introduction. In R. A. Block (Ed.), *Cognitive models of psychological time* (pp. xiiixix). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Block, R. A. (1989). A contextualistic view of time and mind. In J. T. Fraser (Ed.), *Time and mind: Interdisciplinary issues* (pp. 61–79). Madison, CT: International Universities Press.
- Block, R. A. (1989). Experiencing and remembering time: Affordances, context, and cognition. In I. Levin & D. Zakay (Eds.), *Time and human cognition: A life-span perspective* (pp. 333–363). Amsterdam: North-Holland.
- Block, R. A., Arnott, D. P., Quigley, B., & Lynch, W. C. (1989). Unilateral nostril breathing influences lateralized cognitive performance. *Brain and Cognition*, *9*, 181–190. doi:10.1016/0278-2626(89)90028-6
- Block, R. A. (1986). Remembered duration: Imagery processes and contextual encoding. *Acta Psychologica*, *62*, 103–122. doi:10.1016/0001-6918(86)90063-6
- Block, R. A. (1986). The upper end of cognition [Review of *Thinking, Problem Solving, Cognition*]. *Contemporary Psychology*, *31*, 193-194. doi:10.1037/024581
- Block, R. A. (1985). Contextual coding in memory: Studies of remembered duration. In J. A. Michon & J. L. Jackson (Eds.), *Time, mind, and behavior* (pp. 169–178). Heidelberg, Germany: Springer Verlag.
- Block, R. A. (1985). World models for the psychology of time. *Teorie & Modelli*, 2 (Suppl. 1), 89–111.
- Block, R. A. (1985). Education and thinking skills reconsidered [Comment]. *American Psychologist*, 40, 574–575. doi:10.1037/0003-066X.40.5.574
- Warner, D. J., & Block, R. A. (1984). Type A behavior and temporal judgment. *Bulletin of the Psychonomic Society*, 22, 163–166.
- Block, R. A., Saggau, J. L., & Nickol, L. H. (1983-84). Temporal Inventory on Meaning and Experience: A structure of time. *Imagination, Cognition and Personality*, 3, 203–225.
- Block, R. A. (1982). Temporal judgments and contextual change. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 8, 530–544. doi:10.1037/0278-7393.8.6.530

- Block, R. A., George, E. J., & Reed, M. A. (1980). A watched pot sometimes boils: A study of duration experience. *Acta Psychologica*, 46, 81–94. doi:10.1016/0001-6918(80)90001-3
- Brown, S. W., & Block, R. A. (1980). Context facilitation and disruption in word identification. *Bulletin of the Psychonomic Society*, *15*, 242–244.
- Block, R. A. (1979). Time and consciousness. In G. Underwood & R. Stevens (Eds.), Aspects of consciousness: Vol. 1. Psychological issues (pp. 179–217). London: Academic Press.
- Block, R. A., & Reed, M. A. (1978). Remembered duration: Evidence for a contextual-change hypothesis. *Journal of Experimental Psychology: Human Learning and Memory*, 4, 656–665. doi:10.1037/0278-7393.4.6.656
- Block, R. A. (1978). Remembered duration: Effects of event and sequence complexity. *Memory & Cognition*, *6*, 320–326.
- Block, R. A. (1978). Time in memory: The chase is on! [Review of the book *Temporal Codes for Memories: Issues and Problems*]. *Contemporary Psychology*, 23, 11–12. doi:10.1037/016855
- Hintzman, D. L., Summers, J. J., & Block, R. A. (1975). What causes the spacing effect? Some effects of repetition, duration, and spacing on memory for pictures. *Memory & Cognition*, *3*, 287–294. doi:10.1037/0278-7393.1.1.31
- Hintzman, D. L., Summers, J. J., & Block, R. A. (1975). Spacing judgments as an index of study-phase retrieval. *Journal of Experimental Psychology: Human Learning and Memory*, 1, 31–40. doi:10.1037/0278-7393.1.1.31
- Block, R. A. (1974). Memory and the experience of duration in retrospect. *Memory & Cognition*, *2*, 153–160.
- Hintzman, D. L., Block, R. A., & Summers, J. J. (1973). Modality tags and memory for repetition: Locus of the spacing effect. *Journal of Verbal Learning and Verbal Behavior*, 12, 229–238. doi:10.1016/S0022-5371(73)80013-1
- Hintzman, D. L., & Block, R. A. (1973). Memory for the spacing of repetitions. *Journal of Experimental Psychology*, 99, 70–74. doi:10.1037/h0034761
- Hintzman, D. L., Block, R. A., & Summers, J. J. (1973). Contextual associations and memory for serial position. *Journal of Experimental Psychology*, *97*, 220–229. doi:10.1037/h0033884
- Hintzman, D. L., Block, R. A., & Inskeep, N. R. (1972). Memory for mode of input. *Journal of Verbal Learning and Verbal Behavior*, 11, 741–749. doi:10.1016/S0022-5371(72)80008-2
- Block, R. A. (1971). Effects of instructions to forget in short-term memory. *Journal of Experimental Psychology*, 89, 1–9. doi:10.1037/h0031190
- Hintzman, D. L., & Block, R. A. (1971). Repetition and memory: Evidence for a multiple-trace hypothesis. *Journal of Experimental Psychology*, 88, 297–306. doi:10.1037/h0030907

- Hintzman, D. L., & Block, R. A. (1970). Memory judgments and the effects of spacing. *Journal of Verbal Learning and Verbal Behavior*, 9, 561–566. doi:10.1016/S0022-5371(70)80102-5
- Block, R. A., & McConnell, J. V. (1967). Classically conditioned discrimination in the planarian, *Dugesia dorotocephala*. *Nature*, *215*, 1465–1466. doi:10.1038/2151465a0

## **Presentations at professional conferences**

- Zakay, D., Hancock, P.A., and Block, R.A. (2015, July). Physical load affects duration judgments: A meta-analytic review. Paper to be presented at the 14th meeting of the European Congress of Psychology, Milan, Italy.
- Buggie, S. E., Block, R. A., & Richmond, A. S. (2014, October). *Affective meanings of three cultures: Comparisons of American Indians and White Americans*. Paper presented at the meeting of the Association for Third World Studies, Denver, CO.
- Block, R. A., & Gruber, R. P. (2014, May). *Happening is a distinct and unrecognized percept*. Paper presented at the meeting of the Association for Psychological Science, San Francisco, CA.
- Gruber, R. P., & Block, R. A. (2014, April). "Happening" is a distinct percept and a perceptual illusion in the flow of time. Paper presented at the meeting Toward a Science of Consciousness, Tucson, AZ.
- Block, R. A. (2012, October). *Time perception, attention, and memory: A view of evidence*. Paper presented at the TIMELY workshop on Temporal Processing Within and Across Senses, Tübingen, Germany.
- Gruber, R. P., & Block, R. A. (2012, April). *Experimental evidence that the flow of time is a cognitive illusion*. Paper presented at the meeting of Toward a Science of Consciousness, Tucson, AZ.
- Block, R. A., & Manley, K. D. (2011, November). *Intent to remember and Von Restorff* (isolation) effects reveal attentional processes. Paper presented at the meeting of the Psychonomic Society, Seattle. [Abstract in Abstracts of the Psychonomic Society, 16, 122.]
- Block, R. A. (2008, November). Intentional memory: Theories and evidence. Paper presented at the meeting of the Psychonomic Society, Chicago. [Abstract in *Abstracts of the Psychonomic Society, 13,* 44–45.]
- Block, R. A. (2007, June). Cognitive workload affects duration judgments: Meta-analytic evidence. In S. Grondin (Chair), *Perspectives on the ubiquity/tyranny of time*. Symposium conducted at the meeting of the Canadian Society for Brain, Behaviour and Cognitive Science, Victoria, BC, Canada.
- Block, R. A. (2007, June). *Intending to remember: Rapid mobilization of attention enhances memory*. Paper presented at the meeting of the Canadian Society for Brain, Behaviour and Cognitive Science, Victoria, BC, Canada.
- Block, R. A. (2006, August). *Intending to remember information: The effectiveness and speed of attentional allocation*. Paper presented at the meeting of the Cognitive Science Association for Interdisciplinary Learning, Hood River, OR.

- Block, R. A., Bosco, F. A., & Schanz, T. S. (2006, April). *The spacing effect: Evidence from duration productions and recognition memory*. Poster presented at the meeting of the Western Psychological Association, Palm Springs, CA.
- Bosco, F. A., Block, R. A., & Hutchison, K. A. (2005, April). *Dual-task interference during incidental- and intentional-memory encoding*. Poster presented at the meeting of the Western Psychological Association, Portland, OR.
- Pierce, C. A., Block, R. A., & Aguinis, H. (2004, August). Cautionary note on reporting etasquared values from multifactor ANOVA designs. In M. L. Williams (Chair), *Issues in* structural equation modeling and multifactor ANOVA. Symposium conducted at the meeting of the Academy of Management, New Orleans, LA.
- Zhang, Z., & Block, R. A. (2004, August). Factor structure of beliefs about time in Chinese college students. Poster presented at the meeting of the International Congress of Psychology, Beijing, China. [Abstract in International Journal of Psychology, 39, Suppl. S., 317.]
- Block, R. A., & Zakay, D. (2004, July). *Remembering time*. Paper presented at the meeting of the International Society for the Study of Time, Cambridge, England.
- Block, R. A., Zakay, D., & Richmond, A. S. (2003, November). *Automatic and intentional processes in face encoding*. Poster presented at the meeting of the Psychonomic Society, Vancouver, Canada. [Abstract in *Abstracts of the Psychonomic Society, 8,* 65.]
- Zakay, D., & Block, R. A. (2003, July). *Prospective duration judgment as a mechanism for the dynamic control of behavior*. Paper presented at the Time, Cognition, Thinking symposium, Strzekecino, Poland.
- Buggie, S. E., Block, R. A., & Richmond, A. S. (2003, March). *Affective meanings of three cultures: Comparisons of American Indians and White Americans*. Paper presented at the meeting of Research in Indian Education, Albuquerque, NM.
- Johnson, A. S., Lynch, W. C., Block, R. A., & Schwartz, E. A. (2002, November). Associative morphine tolerance in the rat: A meta-analytic review. Poster presented at the meeting of the Society for Neuroscience, Orlando, FL.
- Block, R. A. (2002, September). *Psychological timing without a timer: The roles of attention and memory*. Paper presented at the Time and Mind 02 symposium, Hildesheim, Germany.
- Gruber, R.P., Block, R.A., Wagner, L., & Matthews, S. (2002, April). *Subjective versus proper time*. Paper presented at the Temporology Seminar, Moscow State University, Moscow, Russia.
- Gruber, R. P., Wagner, L. F., & Block, R. A. (2001, July). *Relationships between subjective time and information processed (level of uncertainty)*. Paper presented at the meeting of the International Society for the Study of Time, Arezzo, Italy.
- Block, R. A., Zakay, D., & Cloninger, M. A. (2000, November). Face and time: Evidence for encoding interference. Poster presented at the meeting of the Psychonomic Society, New Orleans, LA. [Abstract in Abstracts of the Psychonomic Society, 5, 100.]

- Block, R. A. (2000, April). *Psychological time and consciousness: Temporal experience and brain processes*. Paper presented at the meeting of Toward a Science of Consciousness, Tucson, AZ.
- Zakay, D., & Block, R. A. (1999, December). *Human timing as adaptive behaviour*. Paper presented at the meeting of the British Psychological Association, London.
- Zakay, D., & Block, R. A. (1999, December). *Cognitive models of human timing*. Paper presented at the meeting of the British Psychological Association, London.
- Block, R. A. (1999, November). *Psychological time: Memory, attention, and consciousness*. Paper presented at the symposium on Studies on the Structure of Time: From Physics to Psycho(patho)logy, Palermo, Italy.
- Buggie, S. E., Gjeltema, B., & Block, R. (1998, August). *American Indians and the third world metaphor*. Paper presented at the meeting of the International Association for Cross-Cultural Psychology, Bellingham, WA.
- Buggie, S., Hill, O., & Block, R. (1998, August). *Beliefs about time: Comparisons of white Americans, black Americans, and black Africans.* Paper presented at the meeting of the International Association for Cross-Cultural Psychology, Bellingham, WA.
- Block, R. A., & Zakay, D. (1998, July). *Psychology of time: Its historical and future connections to other disciplines.* Paper presented at the meeting of the International Society for the Study of Time, Tutzing, Germany.
- Hill, O. W., Block, R. A., & Buggie, S. E. (1998, May). *Cross-cultural comparisons reveal some differences in reported beliefs about time*. Poster presented at the meeting of the American Psychological Society, Washington, DC.
- Block, R. A., Conti, D. E., Duncan, A. M., & Zakay, D. (1997, November). *Workload influences on duration judgments: Meta-analytic findings*. Poster presented at the meeting of the Psychonomic Society, Philadelphia.
- Zakay, D., Yaaron, M., & Block, R. A. (1997, November). *Expertise and accuracy of duration judgments*. Poster presented at the meeting of the Psychonomic Society, Philadelphia.
- Block, R. A., & Zakay, D. (1996, October). *Duration judgments reveal attention and memory processes*. Poster presented at the meeting of the Psychonomic Society, Chicago, IL.
- Zakay, D., Block, R. A., & Tsal, Y. (1996, July). *Time production as a workload measure*. Paper presented at the meeting on Attention and Performance XVII: Cognitive regulation of performance: Interaction of theory and application, Beit Oren, Israel.
- Block, R. A., Hancock, P. A., & Zakay, D. (1995, July). *Human duration judgment: Age-and sex-related differences*. Poster presented at the meeting of the International Society for the Study of Time, Sainte-Adèle, Québec, Canada.
- Block, R. A., & Zakay, D. (1994, December). *Cognitive models of time revisited*. Paper presented at the conference on Time and Mind, Regensburg, Germany.
- Block, R. A., & Zakay, D. (1994, November). *Age-related differences in duration judgment: A meta-analysis*. Poster presented at the meeting of the Psychonomic Society, St. Louis, MO.

- Zakay, D., & Block, R. A., (1994, November). *A functional model of the cognitive timer*. Paper presented at the conference on Time and the Dynamic Control of Behavior, Liège, Belgium.
- Block, R. A. (1994, April). Time and culture: Important variables and interrelationships. In R. Levine (Chair), *Time and culture*. Symposium conducted at the meeting of the Western Psychological Association, Kailua-Kona, HI.
- Block, R. A., & Zakay, D. (1994, April). *Prospective and retrospective duration judgment: A meta-analysis*. Poster session presented at the meeting of the Western Psychological Association, Kailua-Kona, HI.
- Block, R. A. (1993, September). *Psychological time: Memory systems and brain processes*. Paper presented at the conference on Neural Mechanisms Involved in Psychological and Biological Time Measurement, San Feliu de Guixols, Spain.
- Block, R. A. (1993, May). *Psychological time and the processing of spatial information*. Paper presented at the NCGIA specialist meeting on Time in Geographic Space, Lake Arrowhead, CA.
- Block, R. A. (1993, January). *Memory, brain, and time*. Paper presented at the Eighteenth Annual Interdisciplinary Conference, Jackson, WY.
- Block, R. A. (1992, July). *Psychological time: Brain and cognitive processes.* Paper presented at the meeting of the International Society for the Study of Time, Cerisy-la-Salle, France.
- Block, R. A. (1992, January). *Prospective and retrospective duration judgments*. Paper presented at the Seventeenth Annual Interdisciplinary Conference, Jackson, WY.
- Block, R. A. (1991, October). *Prospective and retrospective duration judgment: The role of information processing and memory*. Paper presented at the conference on Time, Action and Cognition, Saint-Malo, France.
- Block, R. A. (1991, October). *Creativity strategies*. Paper presented at the meeting of the Montana Inventors Association, Bozeman, MT.
- Block, R. A. (1989, January). *Overconfidence in estimating uncertain quantities*. Paper presented at the Fourteenth Annual Interdisciplinary Conference, Jackson, WY.
- Block, R. A., & Harper, D. R. (1987, November). *Explicit anchoring reduces overconfidence in estimation*. Paper presented at the meeting of the Psychonomic Society, Seattle, WA. [Abstract in *Bulletin of the Psychonomic Society*, 1987, 25, 353.]
- Block, R. A. (1987, July). *Enhancing cognitive skills*. Paper presented at the Institute on Adult Cognition, Montana State University, Bozeman, MT.
- Block, R. A., & Harper, D. R. (1987, November). *The limits of overconfidence in estimation*. Paper presented at the meeting of the Psychonomic Society, New Orleans, LA. [Abstract in *Bulletin of the Psychonomic Society*, 1986, 24, 351.]
- Block, R. A. (1986, July). *Time in mind: The vicissitudes of change*. Paper presented at the meeting of the International Society for the Study of Time, Totnes, England.
- Block, R. A. (1985, November). *Varieties of symbolic reasoning*. Paper presented at the meeting of the Psychonomic Society, Boston, MA. [Abstract in *Bulletin of the Psychonomic Society*, 1985, 23, 277.]

- Block, R. A. (1985, January). *Time and context in memory*. Paper presented at the Tenth Annual Interdisciplinary Conference, Jackson, WY.
- Block, R. A. (1984, September). *Contextual coding in memory: Studies of remembered duration*. Paper presented at the conference on Time, Mind, and Behavior, Groningen, The Netherlands.
- Block, R. A., & Taylor, S. V. (1984, August). Cognitive skills: Enhancement and assessment issues. In D. F. Halpern (Chair), *A Psychological Perspective on Teaching Thinking Skills to College Students*. Symposium conducted at the meeting of the American Psychological Association, Toronto, ON. [Report No. HE-018-213. Bozeman, MT: Montana State University. ERIC Document Reproduction Service No. ED 255 157.]
- Taylor, S. V., & Block, R. A. (1984, March). The effect of statistical, decision science, and cognitive pedagogic procedures on the generic thinking ability of college students. Paper presented at the meeting of American Institute for Decision Sciences–Western Regional Conference, Honolulu, HI. [Abstract in Proceedings and Abstracts of the Thirteenth Annual Meeting of the American Institute for Decision Sciences–Western Regional Conference. Honolulu, HI: American Institute for Decision Sciences.]
- Block, R. A., Nickol, L. H., & Brown, J. A. (1983, November). *Serial-position judgments: Accuracy and confidence*. Paper presented at the meeting of the Psychonomic Society, San Diego, CA. [Abstract in *Bulletin of the Psychonomic Society*, 1983, *21*, 346.]
- Block, R. A. (1983, April). Toward a structure of beliefs about time. In R. A. Block (Chair), New Directions in the Psychology of Time. Symposium conducted at the meeting of the Western Psychological Association, San Francisco, CA.
- Block, R. A., Saggau, J. L., & Martin, J. D. (1981, November). Chronopsychology of imagery tasks and memory. Paper presented at the meeting of the Psychonomic Society, Philadelphia, PA. [Abstract in Bulletin of the Psychonomic Society, 1981, 18, 63.]
- Block, R. A. (1981, April). *Remembered duration: Effects of environmental- and process-context changes*. Paper presented at the meeting of the Rocky Mountain Psychological Association, Denver, CO.
- Block, R. A. (1980, November). *Environmental context and temporal memory judgments*. Paper presented at the meeting of the Psychonomic Society, St. Louis, MO. [Abstract in *Bulletin of the Psychonomic Society*, 1980, 16, 161.]
- Block, R. A., George, E. J., & Reed, M. A. (1979, September). *A watched pot sometimes boils: A study of duration experience*. Paper presented at the meeting of the American Psychological Association, New York.
- Block, R. A., & Reed, M. A. (1978, April). *Remembered duration: A contextualist approach*. Paper presented at the meeting of the Rocky Mountain Psychological Association, Denver, CO.

## **Grant Proposals Funded**

Vitakis, A., et al. (2010-2014). Time-In-MEntaL-activitY: Theoretical, behavioral, bioimaging, and clinical perspectives. Grant funded by an approx. € 12 million European Union COST initiative.

- Zakay, D., & Block, R. A. (1995, August). *Understanding temporal cognition*. Progress report and proposal for continued funding submitted to the United States-Israel Binational Science Foundation. Funded: September 1, 1995–December 31, 1996, \$23,200.
- Zakay, D., & Block, R. A. (1994, August). *Understanding temporal cognition*. Progress report and proposal for continued funding submitted to the United States-Israel Binational Science Foundation. Funded: September 1, 1994–August 31, 1995, \$23,200.
- Block, R. A. (1993, October). *Human duration judgment: A meta-analytic review of research*. Proposal submitted to the MONTS Program. Funded: June 1, 1994–July 31, 1995 (subsequently extended through December 31, 1996), \$25,000.
- Zakay, D., & Block, R. A. (1992, November). *Understanding temporal cognition: Cognitive processes of duration judgment*. Proposal submitted to the United States-Israel Binational Science Foundation. Funded: September 1, 1993–August 31, 1994, \$28,575.
- Block, R. A. (1987, December). *Cognitive models of psychological time*. Proposal submitted to the Montana State University (College of Letters and Science) Research/Creativity Program. Funded: Summer, 1988, \$3,600.
- Block, R. A. (1984, October). *Assessing symbolic reasoning skills*. Montana State University Research/Creativity Program. Funded: Summer, 1985, \$2,500.
- Taylor, S. V., & Block, R. A. (1984, May). *Thinking skills*. Proposal submitted to the Montana State University Teaching/Learning Committee. Funded: Summer, 1984, \$2,000.
- Block, R. A. (1979, September). *Memory processes and duration experiences*. Proposal submitted to the National Science Foundation, EPSCoR Program. Funded October, 1980-May, 1984, \$54,000.

#### **TEACHING**

## **Courses Taught**

Psychology of Time (2013-2015)

Consciousness (1973–2015)

Memory & Cognition (1975–2013)

Senior Thesis Capstone (1994–2012)

Advanced Research Design & Analysis (1995–2008)

Field Practicum in Applied Psychology (2005–2009)

Thinking Skills (1983–1997); Applied Critical Thinking (1998–2004)

Memory & Cognition Lab (1977–1997)

Applied Psychology Seminar (1996–1997)

Introduction to Human Learning (1994–1996)

General/Introductory Psychology (1975–1995)

Cognitive Processes (1974–1994)

Judgment and Decision Making (Honors Program, 1990)

Human Learning (1973–1990)

Psychology of Sex Differences (1987)

Contemporary Issues (1978–1985)
Perspectives of Time (Honors Program, 1983)
Human Information Processing (1974–1975)
Human Factors (1974–1975)
Perception (1973–1974)
Research Methods (1973–1974)

Journal of Neurophysiology (2001)

#### PROFESSIONAL SERVICE

Reviewer of manuscripts submitted to the following journals:

Acta Psychologica (2004, 2006, 2009–2015) Attention, Perception, & Psychophysics (2010–2015) Consciousness and Cognition (1999, 2000, 2004, 2014) Frontiers in Psychology: Perception Science (2014) Journal of Applied Research in Memory and Cognition (2014) Journal of Experimental Psychology: Applied (1994–1998, 2012, 2014) Journal of Experimental Psychology: Human Perception and Performance (1975–2002, 2006, 2014) Journal of the International Neuropsychological Society (2014) Psychological Science (2001, 2006, 2008–2009, 2012, 2014) Psychology and Aging (1999, 2005, 2007–2008, 2014) Applied Cognitive Psychology (2012) Journal of Experimental Psychology: Learning, Memory, and Cognition (1982-2008, 2012)American Journal of Psychology (1989–1996, 2009–2012) Pakistani Journal of Statistics (2012) Perceptual and Motor Skills (2004, 2006, 2010–2012) Memory & Cognition (1981–2011; Consulting Editor, 1994–1996) Child Development Research (2011) Journal of Experimental Psychology: General (2002, 2009–2011) Motivation and Emotion (2011) Quarterly Journal of Experimental Psychology (1999, 2010–2011) Social Cognition (2007, 2010–2011) Canadian Journal of Behavioral Science (2008, 2010) European Journal of Cognitive Psychology (2010) Journal of Individual Differences (2010) Canadian Journal of Experimental Psychology (2005–2008) Psychological Research (2001, 2008) Psychonomic Bulletin & Review (2000, 2005, 2007) Perception & Psychophysics (1989–1999, 2005–2007) Psychological Bulletin (1983–1999, 2004–2007) International Journal of Aging and Human Development (2005) Cognition & Emotion (2002) Journal of Personality and Social Psychology (2002) Synthese (2002) Aging, Neuropsychology, and Cognition (2001) IEEE Transactions on Systems, Man, and Cybernetics (2001)

Developmental Psychology (1998–2000)

Personality and Individual Differences (2000)

Current Psychology of Cognition (1999)

International Journal of Clinical and Experimental Hypnosis (1999)

Journal of Child Psychology and Psychiatry (1999)

NeuroImage (1999)

European Journal of Personality (1998)

Behavioural Processes (1998)

Psychonomic Bulletin & Review (1996–1997)

Cahiers de Psychologie Cognitive / Current Psychology of Cognition (1994–1995)

Journal of Applied Psychology (1993)

International Journal of Psychophysiology (1993)

Journal of Experimental Child Psychology (1991–1992)

Canadian Journal of Psychology (1991)

Time and Society (1991)

Cognitive Psychology (1988)

Journal of Scientific Exploration (1988)

British Journal of Psychology (1984, 1994)

Science (1979)

Journal of Verbal Learning and Verbal Behavior (1978)

Reviewer of proposals submitted to the following granting agencies:

Israel Science Foundation (2001, 2006)

NSF Behavioral Neuroscience Program (2000)

NSF Human Perception & Cognition Program (1990, 1995)

Natural Sciences and Engineering Research Council of Canada (1994)

NSF Animal Behavior Program (1991)

NATO Collaborative Research Grants Program (1991)

Reviewer of manuscripts submitted for publication in the following edited books:

The Psychology of Time (2007)

Time and Mind II: Information-Processing Perspectives (2003)

Time, Action and Cognition (1991–1992)

The Study of Time VI (1986)

The Study of Time V (1984)

Reviewer of manuscripts and computer software on general psychology, memory, cognition, psycholinguistics, thinking skills, and reference management for the following publishers:

John Wiley & Sons (2004)

Sage Publishers (1997, 2003–2004)

Niles, Inc. (EndNote, 1995–2003)

Harcourt Brace Jovanovich (1987); Harcourt Brace (1997)

Wadsworth (1990)

Lawrence Erlbaum Associates (1988)

Brooks/Cole (1979–1984)

Holt, Rinehart and Winston (1978–1979)

Writer of test units on psychology for the American College Testing Program (1981-1982)

Author of *Test Item File Booklet III* (1978) to accompany J. V. McConnell, *Understanding human behavior* (2nd ed.). New York: Holt, Rinehart and Winston.

# **University Service Activities**

Faculty Council (1997)

University Core Curriculum Subcommittee on Social Sciences (1984–1987)

Letters & Science Dean's Advisory Council (1984–1985, 1996)

Letters & Science Research/Creativity Program Committee (1994)

University Core Curriculum Subcommittee on Critical Thinking and Communication Skills (1983–1984)

Letters & Science College Council (1975–1976)

Letters & Science Policy Advisory Committee (1974–1975)