Matthew W. Prull, Ph.D.

Curriculum Vitae

Department of Psychology Whitman College 345 Boyer Avenue Walla Walla, WA 99362 Tel: (509) 527-5890 Fax: (509) 527-5026 prullmw@whitman.edu https://tinyurl.com/2expfjpa

Professional Appointments

1999-present Professor (2015-present; department chair 2017, 2022-present)

Associate Professor (2005-2015; department chair 2005-2008)

Assistant Professor (1999-2005)

Department of Psychology, Whitman College

1996-1999 Postdoctoral Research Scholar, Department of Psychology, Stanford University

Sponsor: John D. E. Gabrieli

1993-1995 Instructor, Department of Psychology, California State University, San Bernardino

Education

1997 Ph.D., Claremont Graduate University

Dissertation: Illusions of Recognition in Young and Older Adults

Advisor: Leah L. Light

1993 M.A., Psychology, Claremont Graduate University

Advisor: Kathy Pezdek

1991 B.A., Psychology, with Great Distinction, San Jose State University

Research Interests

Memory, attention, and aging, particularly differentiations between conscious (explicit) and nonconscious (implicit) expressions of memory in young and healthy older adults; divided attention and its impact on memory encoding and retrieval processes; false memory and memory illusions, including memory distortion through misinformation.

Awards, Grants, and Honors

- Robert Y. Fluno Award for Distinguished Teaching in the Social Sciences, 2013
- Whitman College Summer Faculty-Student Research Award, 2001; 2002; 2005; 2008; 2011; 2019; 2022
- Whitman College Sally Ann Abshire Research Scholar Award, 2000; 2010; 2015
- National Research Service Award (NRSA), National Institute of Aging (NIA), 1996-1999
- Haynes Social Science Dissertation Award, 1995-1996
- Sigma Xi, 1992
- Phi Kappa Phi, 1991

Professional Memberships

- Psychonomic Society, Fellow
- Western Psychological Association, Member

Teaching Experience

- Cognitive Aging
- Cognitive Psychology
- Introductory Psychology
- Psychological Statistics
- Psychology of Aging
- Psychology of Food

- Research Methods in Psychology
- Seminar in Human Memory
- Seminar in Life-Span Development
- Senior Thesis
- What is Music?

Editorial Activities

2022: Co-editor (with Pietro Spataro, Danielle Saraulli, and Clelia Rossi-Arnaud), of special issue of *Frontiers in Psychology: Cognition:* "The attentional boost effect and related phenomena: New insights into the relation between attention and memory"

2017: Co-editor (with Pietro Spataro), of special issue of *Frontiers in Psychology: Cognition*: "The role of the distinctions between identification/production and perceptual/conceptual processes in implicit memory: Findings from cognitive psychology, neuroscience and neuropsychology"

Workshops and Training

Cross-Disciplinary Learning and Teaching Initiative (CDLTI) workshop, Whitman College: *Did you hear what I heard?: A multi-divisional conversation about the production and perception of sounds* (led by Kurt Hoffman, spring 2011)

Cross-Disciplinary Learning and Teaching Initiative (CDLTI) workshop, Whitman College: *Cross-disciplinary analysis of brain, behavior and mind* (led by Chris Wallace, summer 2011)

Ad Hoc Reviewer

Journals:

- Acta Psychologica
- Aging, Neuropsychology, and Cognition
- Anxiety, Stress, and Coping
- Consciousness and Cognition
- Cognition
- Cognition and Emotion
- Cognitive Processing
- Experimental Aging Research
- Experimental Brain Research
- Frontiers in Psychology
- International Psychogeriatrics
- Journal of Alzheimer's Disease
- Journal of Cognitive Neuroscience
- Journal of Experimental Psychology: Human Perception and Performance
- Journal of Experimental Psychology: Learning, Memory, and Cognition

- Journal of Memory and Language
- Journal of Traumatic Stress Disorders and Treatment
- Memory
- Memory and Cognition
- Oxford Bibliographies in Psychology
- Psychological Bulletin
- Psychological Science
- Psychology and Aging
- Psychonomic Bulletin and Review
- Quarterly Journal of Experimental Psychology
- Social Cognition
- Studies in Second Language Acquisition

Academic Promotion:

- American University of Kuwait
- Claremont McKenna College
- Mills College

Publishers:

Worth Publishers (reviewed R. Revlin's textbook Cognition: Theory and Practice, 2013)

Service to the College

- Curriculum Committee, member, 2016, 2021-present
- Aid to Faculty Scholarship and Instructional Development (ASID) Committee, member, 2018-2021
- Institutional Review Board (IRB), member and chair, 2013-2018
- Tenure-Track Faculty Search Committee, Department of Chemistry, member, 2017
- Search committee member, Systems and Applications Librarian, Penrose Library, 2014
- Admission and Financial Aid Committee, member, 2013
- Off-Campus Studies Committee, member, 2011-2012
- Web Page Evolution Group, member, 2011
- Beinecke Fellowship Committee, member and acting chair, 2007-2016
- Maxey Hall Renovation Committee, member, 2006-2009
- College Accreditation Steering Committee, member, Division I representative, 2005-2007
- Board of Review & Academic Council, member, 2003-2004
- Student Life Committee, member and chair, 2002-2003
- Academic Information Technology Advisory Group (AITAG), member or chair, 2002-2005; 2008-2011; 2013
- Tenure-Track Faculty Search Committee, Department of English, member, 2002-2003
- Whitman Undergraduate Conference Committee, member, 2002-2003
- Pre-Medical Advisory Committee, member, 2000-2001
- Tenure-Track Faculty Search Committee, Department of Biology, member, 2000-2001
- Tenure-Track Faculty Search Committee Department of Psychology, member (multiple years since 1999 for seven positions; chair for 2005-06, 2013-14, and 2018-19 searches)

Advising

- Undergraduate Thesis Advising
 - Senior thesis advisor for over 100 psychology majors at Whitman College since 1999
- Graduate Thesis (Ph.D.) Advising
 - o Outside examiner for Matt O'Brien, Ph.D., Psychology, Claremont Graduate University, March 2016

Publications (undergraduate students in boldface)

- Prull, M. W., Liu, Y., Adhikari, N., Higdon, S. A., Stewart, K. S., & Calo, Z. R. (in press). Can divided attention at retrieval improve memory? Effects of target detection during recognition. *Memory*.
- Prull, M. W. (2019). The attentional boost effect for words in young and older adults. *Psychology and Aging, 34,* 405-417. doi: 10.1037/pag0000337
- Prull, M. W., & Spataro, P. (2017). Editorial: The role of the distinctions between identification/production and perceptual/conceptual processes in implicit memory: Findings from cognitive psychology, neuroscience, and neuropsychology. *Frontiers in Psychology, Cognition*, 8, article 1129. doi: 10.3389/fpsyg.2017.01129

Prull, M. W., Lawless, C., Marshall, H. M., & Sherman, A. T. K. (2016). Effects of divided attention at retrieval on conceptual implicit memory. *Frontiers in Psychology, Cognition*, 7, doi: 10.3389/fpsyg.2016.00005

- Prull, M. W. (2015). Adult age differences in memory for schema-consistent and schema-inconsistent objects in a real world setting. *Aging, Neuropsychology, and Cognition, 22,* 731-754.
- Prull, M. W., & **Yockelson, M. B.** (2013). Adult age-related differences in the misinformation effect for context-consistent and context-inconsistent objects. *Applied Cognitive Psychology*, *27*, 384-395.
- Prull, M. W. (2013). Attention and repetition priming in the verb generation task. *Acta Psychologica*, 143, 218-226.
- Prull, M. W. (2010). Age-related influences on repetition priming in the verb generation task: Examining the role of response competition. *Aging, Neuropsychology, and Cognition, 17,* 439-461.
- Prull, M. W., **Crandell Dawes, L. L., Martin, A. M., III, Rosenberg, H. F.,** & Light, L. L. (2006). Recollection and familiarity in recognition memory: Adult age differences and neuropsychological test correlates. *Psychology and Aging, 21,* 107-118.
- Prull, M. W., & Banks, W. P. (2005). Seeing the light: A pinhole camera classroom demonstration for teaching vision. *Teaching of Psychology*, *32*, 103-106.
- Rosen, A. C., Gabrieli, J. D. E., Stoub, T., Prull, M. W., O'Hara, R., Yesavage, J., & deToledo-Morrell, L. (2005). Relating medial temporal lobe volume to frontal fMRI activation for memory encoding in older adults. *Cortex*, *41*, 595-602.
- Prull, M. W. (2004). Exploring the identification-production hypothesis of repetition priming in young and older adults. *Psychology and Aging, 19,* 108-124.
- Rosen, A. C., Prull, M. W., Gabrieli, J. D. E., Stoub, T., O'Hara, R., Friedman, L., Yesavage, J. A., & deToledo-Morrell, L. (2003). Differential associations between entorhinal and hippocampal volumes and memory performance in older adults. *Behavioral Neuroscience*, *117*, 1150-1160.
- Rosen, A. C., Prull, M. W., O'Hara, R., Race, E. A., Desmond, J. E., Glover, G. H., Yesavage, J. A., & Gabrieli, J. D. E. (2002). Variable effects of aging on frontal-lobe contributions to memory. *NeuroReport*, *13*, 2425-2428.
- Light, L. L., Prull, M. W., & Kennison, R. F. (2000). Divided attention, aging, and priming in exemplar generation and category verification. *Memory and Cognition*, *28*, 856-872.
- Light, L. L., Prull, M. W., La Voie, D. J., & Healy, M. R. (2000). Dual process theories of memory in old age. In T. J. Perfect & E. A. Maylor (Eds.), *Models of cognitive aging* (pp. 238-300). Oxford (UK): Oxford University Press.
- Prull, M. W., Gabrieli, J. D. E., & Bunge, S. A. (2000). Age-related changes in memory: A cognitive neuroscience perspective. In F. I. M. Craik & T. A. Salthouse (Eds.), *Handbook of aging and cognition* (2nd ed., pp. 91-153). Mahwah, NJ: Lawrence Erlbaum Associates.
- Banks, W. P., Chen, Y.-P., & Prull, M. W. (1999). Awareness and memory: Is memory information stratified into conscious and unconscious components? In B. H. Challis & B. M. Velichkovsky (Eds.), *Stratification of consciousness and cognition* (pp. 129-172). Amsterdam: John Benjamins Publishing.

Poldrack, R. A., Wagner, A. D., Prull, M. W., Desmond, J. E., Glover, G. H., & Gabrieli, J. D. E. (1999). Functional specialization for semantic and phonological processing in the left inferior prefrontal cortex. *NeuroImage*, 10, 15-35.

- Prull, M. W. (1998). Memory loss and aging. *McGraw-Hill yearbook of science and technology 1999* (pp. 228-230). New York: McGraw-Hill.
- Prull, M. W., Light, L. L., **Collett, M. E.,** & Kennison, R. F. (1998). Age-related differences in memory illusions: Revelation effect. *Aging, Neuropsychology, and Cognition*, *5*, 147-165.
- Light, L. L., Kennison, R., Prull, M. W., LaVoie, D., & **Zuellig, A.** (1996). One-trial associative priming of nonwords in young and older adults. *Psychology and Aging, 11,* 417-430.
- Light, L. L., & Prull, M. W. (1995). Aging, divided attention, and repetition priming. *Swiss Journal of Psychology,* 54, 87-101.
- Pezdek, K., & Prull, M. (1993). Fallacies in memory for conversations: Reflections on Clarence Thomas, Anita Hill, and the like. *Applied Cognitive Psychology*, 7, 299-310.

Conference Presentations & Abstracts (undergraduate students in boldface)

- Prull, M. W., **Dickey, K., Jaramillo, B.,** & **Kronemeyer, K.** (2021, November). The attentional boost effect increases inaccurate responses to general knowledge questions. Poster presented at the 62nd annual meeting of the Psychonomics Society, online.
- Prull, M. W., **Liu, Y., Higdon, S. A.,** & **Calo, Z. R.** (2019, November). *The attentional boost effect at retrieval creates false memories.* Poster presented at the 60th annual meeting of the Psychonomics Society, Montreal, Canada.
- Rossi-Arnaud, C., Prull, M. W., & Spataro, P. (2019, September). *On the vulnerability of the attentional boost effect in older adults*. Poster presented at the 21st meeting of the European Society for Cognitive Psychology (ESCoP), Tenerife, Spain.
- Prull, M. W. (2019, April). *Divided attention can enhance memory for young and older adults*. Paper presented at the annual meeting of the Western Psychological Association, Pasadena, CA.
- Prull, M. W. (2016). *The attentional boost effect for words in young and older adults*. Poster presented at the the biennial meeting of the Cognitive Aging Conference, Atlanta, GA.
- Prull, M. W. (2014). Adult age differences in memory for schema-consistent and schema-inconsistent objects in a naturalistic setting. Paper presented at the annual meeting of the Western Psychological Association, Portland, OR.
- Prull, M. W. (2013). Attention and repetition priming in the verb generation task. Poster presented at the 54th annual meeting of the Psychonomics Society, Toronto, Canada.
- Prull, M. W., & **Yockelson, M. B.** (2012). Aging and the misinformation effect for context-consistent and context-inconsistent objects. Poster presented at the biennial meeting of the Cognitive Aging Conference, Atlanta, GA.
- Prull, M. W., & **Yockelson, M. B.** (2011). Adult age-related differences in the misinformation effect for schema-consistent and schema-inconsistent objects. Poster presented at the 5th International Conference on Memory (ICOM5), York, England.

Thapar, A., Zaring, J., Dautrich, D., & Prull, M. W. (2010). Signal detection analysis of age differences in the revelation effect. Poster presented at the 51st annual meeting of the Psychonomics Society, St. Louis, MO.

- **Johnson, R. F.,** & Prull, M. W. (2008). *The effect of Brain Age 2 on mental agility in the elderly*. Poster presented at the annual meeting of the Western Psychological Association, Irvine, CA.
- Prull, M. W., & Banks, W. P. (2004). *Seeing the light: A pinhole camera demonstration for teaching vision*. Poster presented at the 28th International Congress of Psychology, Beijing, China.
- Prull, M. W., & **Godard-Gross, C.** (2004). How verb generation repetition priming in adulthood is influenced by age and response competition. Poster presented at the 10th biennial Cognitive Aging Conference, Atlanta, GA.
- Prull, M. W. (2003). Age differences in recollection and familiarity depend on which process dissociation method is used. Poster presented at the annual meeting of the Western Psychological Association, Vancouver, BC, Canada.
- Prull, M. W., **Crandell, L. L., Martin, A. M., III, Backus, H. F.**, & Light, L. L. (2003). Adult age differences in familiarity depend on which process estimation method is used. *Psychonomic Society Abstracts, 8,* 62.
- Rosen, A. C., Prull, M. W., Gabrieli, J. D. E., Staub, T., O'Hara, R., Friedman, L., Yesavage, J. A., & deToledo-Morrell, L. (2002). *Entorhinal volume correlates with mildly impaired verbal memory in older adults*. Poster presented at the 30th annual meeting of the International Neuropsychological Society, Toronto, Canada.
- **Hodgson, O. R.**, & Prull, M. W. (2001). *On the generality of the revelation effect in young and older adults*. Poster presented at the annual meeting of the Western Psychological Association, Maui, HI.
- Prull, M. W. (2001). A test of the identification/production hypothesis of repetition priming in young and older adults. *Psychonomic Society Abstracts, 6,* 15.
- Prull, M. W., **Heugel, J. R.,** & **Wall, J. J.** 2001). Are some forms of repetition priming impaired in old age? A test of the identification/production hypothesis. Paper presented at the annual meeting of the Western Psychological Association, Maui, HI.
- Prull, M. W., LaVoie, D. J., **Morgan, M. T., & Malmstrom, T. K.** (2000). Word stem completion priming in young and older adults: Effects of response competition and divided attention. *Psychonomic Society Abstracts,* 5, 50.
- Banks, W. P., & Prull, M. W. (1999). Recognition memory as a multidimensional decision process. *Psychonomic Society Abstracts*, *4*, 76.
- Rosen, A. C., Prull, M. W., O'Hara, R., **Van De Water, M.,** Gabrieli, J. D. E., Desmond, J. E., Glover, G. H., Yesavage, J. A. (1999). FMRI analysis of memory encoding and retrieval in young and older adults: Role of high-versus low-functioning elderly. *Society for Neuroscience Abstracts*, *25*, 649.
- Banks, W. P., Chen, Y.-P., & Prull, M. W. (1998). Signal detection analysis of unconscious and inhibitory influences in memory and perception. Paper presented at the 2nd annual conference of the Association for the Scientific Study of Consciousness, Bremen, Germany.
- Banks, W. P., Chen, Y.-P., & Prull, M. W. (1998). Source memory, recognition, and exclusion in a single detection-theoretic representation. *Psychonomic Society Abstracts, 3,* 40.

Gabrieli, J. D. E., Stebbins, G. T., Carillo, M. C., Rypma, B., Prull, M. W., Desmond, J. E. (1998). Functional magnetic resonance imaging (fMRI) of the influence of aging on working, semantic, and episodic memory. Paper presented at the 7th biennial Cognitive Aging Conference, Atlanta, GA.

- Prull, M. W., Stebbins, G. T., Gabrieli, J. D. E., Carrillo M. C., Dorfman, J., Desmond, J. E., & Glover, G. H. (1998).

 Normal age-related changes in semantic and episodic memory: Evidence from functional magnetic resonance imaging. *Society for Neuroscience Abstracts*, *24*, 760.
- Prull, M. W. (1997). Illusions of recognition in young and older adults. *Dissertation Abstracts International,* 57(11-B), 7246.
- Prull, M. W., Poldrack, R. A., Wagner, A. D., Desmond J. E., Glover, G. H., & Gabrieli, J. D. E. (1997). Semantic and phonological processing in prefrontal cortex: An fMRI study. *Society for Neuroscience Abstracts*, *23*, 493.
- Prull, M. W., Wagner, A. D., & Gabrieli, J. D. E. (1997). Familiarity in speeded recognition is not form specific. *Psychonomic Society Abstracts*, 2, 6.
- Prull, M. W., & Light, L. L. (1997). *Age differences in memory illusions: Revelation effect*. Poster presented at the 9th annual convention of the American Psychological Society, Washington, DC.
- Rypma, B., Gabrieli, J. D. E., Prabhakaran, V., Prull, M. W., Desmond, J. E., Glover, G. H., & Beeman, M. (1997). Age-related changes in cerebral activity during a working memory task. *Society for Neuroscience Abstracts*, *23*, 1678.
- Light, L. L., Kennison, R., Prull, M. W., LaVoie, D., & **Zuellig, A.** (1996). *One-trial associative priming of nonwords in young and older adults*. Poster presented at the 6th biennial Cognitive Aging Conference, Atlanta, GA.
- Light, L. L., & Prull, M. W. (1995). *Repetition priming, divided attention, and aging*. Poster presented at the 36th annual meeting of the Psychonomics Society, Los Angeles, CA.
- Light, L. L., & Prull, M. W. (1995). *Aging, divided attention, and repetition priming*. Paper presented at the annual convention of the American Psychological Association, New York City, NY.
- Banks, W. P., & Prull, M. W. (1994). *Process dissociation and list discrimination*. Poster presented at the 35th annual meeting of the Psychonomics Society, St. Louis, MO.