

## *Curriculum Vitae*

### **Margaret E. Beier**

#### **Work Address:**

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#### **Education:**

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|-------------|-------|---|
| 1984 – 1988 | B.A.  | Colby College, Waterville, ME<br>Major: French<br>Honors: Graduated Cum Laude   |
| 1998 – 1999 | M.S.  | Georgia Institute of Technology, Atlanta, GA<br>Major: Engineering Psychology<br>Thesis: <i>Knowledge Structures and Current Events: The Assessment of Non-Academic Knowledge.</i> (Chair: Phillip L. Ackerman)   |
| 1999 – 2003 | Ph.D. | Georgia Institute of Technology, Atlanta, GA<br>Major: Industrial/Organizational Psychology<br>Minor: Quantitative Methods<br>Thesis: <i>Ability, Personality, Interests, and Experience Determinants of Domain Knowledge Acquisition.</i> (Chair: Phillip L. Ackerman; Committee members; Richard Catrambone, Gilad Chen, Ruth Kanfer, Garnett Stokes) |

#### **Professional History:**

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| July, 2004 – present       | <i>Assistant Professor, Rice University, Houston, TX</i>  |
| October, 2003 – June, 2004 | <i>Postdoctoral Research Associate, Knowledge and Skill Lab, Georgia Institute of Technology, Atlanta, GA</i><br><br>Designed and implemented studies investigating predictors of knowledge and skill acquisition. Analyzed data and wrote-up results. Managed daily activities and staff in the Knowledge and Skill lab. |

- 1998 – October, 2003      *Graduate Research Assistant, Knowledge and Skill Lab, Georgia Institute of Technology, Atlanta, GA*
- Participated in design, preparation, implementation, analysis, and write-up of at least sixteen large-scale studies investigating knowledge and skill acquisition. Supervisory responsibilities for selection, training, and coordination of undergraduate lab staff.
- 1998 – 2000      *NSF Fellowship, Graphics, Visualization, and Usability Center and School of Psychology, Georgia Institute of Technology, Atlanta, GA*
- 1997 – 1998      *Undergraduate Research Assistant, Skill Acquisition Lab, University of Minnesota, Minneapolis, MN*
- 1996 – 1998      *President, Clearlogic, Inc. (independent market research company), Minneapolis, MN*
- 1989 – 1996      *Market research analyst and manager of the usability laboratory. American Express Financial Advisors, Minneapolis, MN*

**Teaching Experience:**

- Graduate Personnel Selection*  
*Graduate Seminar in Special Topics: Training*  
*Undergraduate Industrial and Organizational Psychology*  
*Undergraduate Personality Theory and Research*  
*Undergraduate Research Methods*

**Professional Societies:**

- Adult Development and Aging (APA, Division 20)
- American Psychological Association
- American Educational Research Association
- Academy of Management
- American Psychological Society
- International Association of Applied Psychology
- International Society for the Study of Individual Differences
- Society for Industrial and Organizational Psychology (APA, Division 14)
- Houston Area Industrial Organizational Psychologists (HAIOP)

**Awards**

- Mike York Outstanding Graduate Student Award, School of Psychology, Georgia Institute of Technology, 2002.*

**Grants:**

- Rice University School of Social Science Internal Grant      \$1,500

**Professional Activities**

Ad Hoc reviewer: *Journal of Experimental Psychology: Applied*

Ad Hoc reviewer: *Memory & Cognition*

Ad Hoc reviewer: *Journal of Memory and Language*

Reviewer: NIMH Special Emphasis Panel for review of the Minority Research Infrastructure Program (M-RISP)

**Publications:**

Ackerman, P. L., Beier, M. E., & Bowen, K. R. (2000). Explorations of crystallized intelligence: Completion tests, cloze tests, and knowledge. *Learning and Individual Differences: A Multidisciplinary Journal*, *12*, 105-121.

Beier, M. E. & Ackerman, P. L. (2001). Current-events knowledge in adults: An investigation of age, intelligence and non-ability determinants. *Psychology and Aging*, *16*, 615-628.

Ackerman, P. L., Bowen, K. R., Beier, M. E., & Kanfer, R. (2001). Determinants of individual differences and gender differences in knowledge. *Journal of Educational Psychology*, *93*, 797-825.

Ackerman, P. L., Beier, M. E., & Bowen, K. R. (2002). What we really know about our abilities and our knowledge. *Personality and Individual Differences*, *33*, 587-605.

Ackerman, P. L., & Beier, M. E. (2003). Trait complexes, cognitive investment, & domain knowledge. In R. J. Sternberg & E. L. Grigorenko (Eds.), *Perspectives on the psychology of abilities, competencies, and expertise*. NY: Cambridge University Press.

Ackerman, P. L., & Beier, M. E. (2003). Intelligence, personality, and interests in the career choice process. *Journal of Career Assessment*, *11*, 205-218.

Ackerman, P. L., Beier, M. E., & Boyle, M. O. (2002). Individual differences in working memory within a nomological network. *Journal of Experimental Psychology: General*, *131*, 567-589.

Beier, M. E., & Ackerman, P. L. (2003). Determinants of health knowledge: An investigation of age, gender, abilities, personality, and interests. *Journal of Personality and Social Psychology*, *84*, 439-448.

Beier, M. E., & Ackerman, P. L. (2004). A reappraisal of the relationship between span memory and intelligence via "best evidence synthesis." *Intelligence*, *32*, 607-619.

Ackerman, P. L., & Beier, M. E. (2004). Knowledge and intelligence. In O. Wilhelm & R. Engle (Eds.), *Handbook of understanding and measuring intelligence* (pp. 125-139). Thousand Oaks: Sage.

Ackerman, P. L., Beier, M. E., & Boyle, M. O. (2005). Working memory and intelligence: The same or different constructs? *Psychological Bulletin*, *131*, 30-60.

Beier, M. E., & Ackerman, P. L. (2005). Working memory and intelligence: Different constructs. Reply to Kane et al. (2005) and Oberauer et al. (2005). *Psychological Bulletin*, *131*, 72-75.

Beier, M. E., & Ackerman, P. L. (2005). Age, Ability, and the Role of Prior Knowledge on the Acquisition of New Domain Knowledge: Promising findings in a real world learning environment. *Psychology & Aging*, *20*, 341-355.

Ackerman, P. L., & Beier, M. E. (in press). Methods for studying the structure of expertise: Psychometric approaches. To appear in A. Ericsson, P. Feltovich, N. Charness, & R. R. Hoffman, (Eds.), *Cambridge Handbook on Expertise and Expert Performance*. NY: Cambridge University Press.

Ackerman, P. L., & Beier, M. E. (in press). Determinants of domain knowledge and independent study learning in an adult sample. *Journal of Educational Psychology*.

#### Under Review/Revision:

Beier, M. E., & Ackerman, P. L. (2005). Cognitive abilities in personnel selection and testing. To appear in F. Durso (Ed.), *Handbook of applied cognition, second edition*. Chichester, West Sussex: Wiley.

Campbell, M., & Beier, M. E. (2006). Examining knowledge structure development and predictors of performance. Manuscript submitted for publication.

#### **Presentations:**

Beier, M. E., & Ackerman, P. L. (2000, April). Cognitive ability determinants of current-events knowledge in adults. Poster session presented at the Eighth Cognitive Aging Conference, Atlanta, GA.

Beier, M. E., Bowen, K. R., & Ackerman P. L. (2000, June). Determinants of self-reported knowledge and actual knowledge. Poster session presented at the annual conference of the American Psychological Society, Miami, FL.

Bowen, K. R., Beier, M. E., & Ackerman, P. L. (2000, June). Gender differences in knowledge: Picking up where ability testing leaves off. Poster session presented at the annual conference of the American Psychological Society, Miami, FL.

Ackerman, P. L., Beier, M. E., & Kanfer, R. (2000, July). Personality, self-concept, motivational traits, and adult intellect. Paper presented at the 10<sup>th</sup> European Conference on Personality, Cracow, Poland.

Beier, M. E., & Ackerman, P. L. (2001, April). Reexamining cloze and completion methods. Roundtable session presented at the 82<sup>nd</sup> American Educational Research Association Conference, Seattle, WA.

Beier, M. E., Bowen, K. R., & Ackerman, P. L. (2001, April). Gender differences in ability and self-estimates of ability. Poster session presented at the 16<sup>th</sup> Society for Industrial and Organizational Psychology Conference, San Diego, CA.

- Ackerman, P. L., Beier, M. E., Bowen, K. R., & Kanfer, R. (2001, July). Determinants of Individual Differences and Gender Differences in Knowledge. Poster presented at the 10<sup>th</sup> Biennial Meeting of the International Society for the Study of Individual Differences, Edinburgh, Scotland.
- Beier, M. E., & Ackerman, P. L. (2002, April). Age, gender, and health knowledge: Investment, experience, and trait determinants of knowledge. Poster session presented at the Ninth Cognitive Aging Conference, Atlanta, GA.
- Beier, M. E., Perdue, M. B., & Ackerman, P. L. (2002, June). Working memory is highly related to perceptual speed and general intelligence. Poster session presented at the annual conference of the American Psychological Society, New Orleans, LA.
- Beier, M. E. (2003, May). Working memory in context: Disconfirming the working memory as *g* theory. In P. L. Ackerman's (Chair), *Working memory and intelligence: Controversy or consensus?* Symposium conducted at the 15<sup>th</sup> Annual Convention of the American Psychological Society, Atlanta, GA.
- Beier, M. E., Boyle, M. O., & Ackerman, P. L. (2003, July). New taxonomies and assessment developments for perceptual speed abilities. In O. Willhelm's (Chair), *Mental speed: Scoring, structure, and validity*. Symposium conducted at the 11<sup>th</sup> Biennial Meeting of the International Society for the Study of Individual Differences, Graz, Austria.
- Ackerman, P. L., Beier, M. E., & Boyle, M. O. (2003, July). Working memory within a nomological network of cognitive and perceptual speed abilities. In P. C. Kyllonen (Chair), *New developments concerning the relations between working memory and intelligence*. Symposium conducted at the 11<sup>th</sup> Biennial Meeting of the International Society for the Study of Individual Differences, Graz, Austria.
- Ackerman, P. L., & Beier, M. E. (2004, November). *Convergent and discriminant characteristics of working memory and intelligence*. Paper presented at the 45<sup>th</sup> annual meeting of the Psychonomic Society, Minneapolis, MN.
- Beier, M. E., & Ackerman, P. L. (2005, April). Age, prior knowledge, ability, and learning: Implications for training design. Poster session presented at 20<sup>th</sup> Society for Industrial and Organizational Psychology Conference, Los Angeles, CA.