

## Diego Fernandez-Duque

Associate Professor  
Psychology Department  
Villanova University

email: [diego.fernandezduque@villanova.edu](mailto:diego.fernandezduque@villanova.edu)  
phone: (610) 519-6207

<http://www18.homepage.villanova.edu/diego.fernandezduque/>

### EMPLOYMENT

Postdoctoral Fellow, Sunnybrook Hospital, University of Toronto	2000-2004
Assistant Professor, Department of Psychology, Villanova University	2004-2010
Associate Professor, Department of Psychology, Villanova University	2010-present

### EDUCATION

<b>M.D. (Medical Doctor)</b> , Universidad del Salvador, Buenos Aires, Argentina.	1993
<b>M.S. in Psychology</b> , University of Oregon. <i>Thesis:</i> Visual field homogeneity of the alerting effect. <i>Advisor:</i> Dr. Richard Marrocco	1994
<b>Ph.D. in Psychology with certificate in Cognitive Neuroscience</b> University of Oregon <i>Dissertation:</i> Automatic processing of object identity, location, and valence. <i>Advisor:</i> Dr. Michael I. Posner	1999

### FELLOWSHIPS, HONORS, AND AWARDS

- **Pre-Doctoral Fellowship.** School of Medicine 1986 - 1992  
Universidad del Salvador, Buenos Aires, Argentina.
- **Graduated with Honors, M.D.** School of Medicine 1993  
Universidad del Salvador, Buenos Aires, Argentina.
- **Pre-Doctoral Fellowship.** 1993 - 1998  
McDonnell Foundation and Pew Memorial Trust through the support of the Center for Cognitive Neuroscience of Attention, University of Oregon.
- **Pre-Doctoral Training Award.** 1994  
Organization of American States *Declined due to having other sources of support.*
- **Post-Doctoral Fellowships**  
Rotman Research Institute, Toronto, Canada. 2000 - 2002  
Heart & Stroke Foundation of Ontario. Research Fellowship Award 2001 - 2004
- **Research Grant** 2000 - 2002  
Fernandez-Duque, D., Grossi, G., Thornton, I. M., Neville, H., & McIntosh, A. R. "Representing change with and without awareness: Imaging studies" (Grant # 91-737104901 from the Center for Consciousness Studies at the University of Arizona; USD 20,000)
- **Summer Research Fellowship**, Villanova University 2006  
Fernandez-Duque, D "Conflict Resolution and Hemispheric Specialization"

## TEACHING AND ADVISING EXPERIENCE

### *Universidad del Salvador, Department of Anatomy, Medical School*

- **Teaching Assistant.** Workshop in Human Anatomy and Surgery. 1988
- **Teaching Assistant.** Human Anatomy. 1988 - 1991

### *University of Oregon, Psychology Department*

- **Teaching Assistant.** Biopsychology 1995
- **Instructor.** Biopsychology 1996, 1998, 1999
- **Instructor.** Psychoactive Drugs 1997
- **Instructor.** Advanced Cognitive Science Seminar 1999
- **Instructor.** Cognitive Psychology 1999

### *Villanova University, Psychology Department*

- **Instructor.** Biopsychology; Cognitive Psychology 2004 – present
- **Instructor.** General Psychology 2009 – 2010
- **Instructor** Patient-based Approaches to Cognitive Neuroscience (grad seminar) 2010
- **Instructor** Social Neuroscience (grad seminar) 2012
- **Instructor** Judgment & Decision Making (forthcoming) 2013

### *INECO (Institute of Cognitive Neurology) Buenos Aires, Argentina*

- **Organizer & Instructor.** Course in Experimental Psychology 2007

### *National University of Quilmes, Buenos Aires, Argentina*

- **Organizer & Instructor.** Course in Cognitive Science 2009.

### **Master Thesis Director (chairperson)** (I also served as a committee member in other 11 theses)

1. Knight, Mary Elizabeth (2006) Contrasting "Rich" and "Minimal" Models of Metacognition: Exploring the Possible Role of Reversal Learning in Strategy Selection
2. Wifall, Timothy C. (2007) The effect of punishment on the actor/observer asymmetry in risky decision making.
3. Landers, Jessica (2008) The effects of imagined and experienced regret on risk avoidance in a gambling task.
4. Corser, Ryan J. (2009) Cursed by knowledge in a gambling task: A perspective taking test.
5. Hughes, Matthew (2011) The social category effect in the Ebbinghaus illusion: An attentional account.
6. Leman, Joseph (in progress) The role of strength of opinion and domain type in the False Consensus Effect.
7. Strobrer, David (in progress) Characterizing the Side-effect effect: Do personality judgments influence judgments of intentionality?
8. Versella, Mark (in progress) Mental inflexibility in patients with behavioral variant frontotemporal dementia

### **External Examiner**

1. Honor Program, Swarthmore College (2009)

### RESEARCH EXPERIENCE

- **Research Assistant.** Latin American Medical Research Institute, 1988  
 Universidad del Salvador, Argentina (Dr. C. Falasca, P.I.)  
*Subject:* Physiology of the immune system.
- **Research Assistant.** Laboratory of Neuroscience, Physiology Department, 1990 - 1991  
 Universidad de Buenos Aires, Argentina (Dr. D. P. Cardinali, P.I.)  
*Subject:* Time-dependent pharmacological effects of melatonin in hamsters.
- **Graduate Research Assistant.** Department of Psychology, 1994 - 1998  
 University of Oregon (Dr. M. I. Posner, P.I.)  
*Subject:* Cognitive neuroscience of attention.
- **Participant.** McDonnell Summer Institute in Cognitive Neuroscience, UC Davis. 1995

### PROFESSIONAL EXPERIENCE

- **Consulting Editor** *Attention, Perception & Psychophysics* 2008 – 2011
- **Ad-Hoc Reviewer** 49 manuscripts in the last 5 years<sup>1</sup> 2004 – present

---

<sup>1</sup> Acta Psychologica; Attention, Perception & Psychophysics; Brain & Cognition; Brain & Language; Brain Research; British Journal of Psychology; Cerebral Cortex; Cognition; Cognitive Processing; Consciousness & Cognition; Cortex; Experimental Aging Research; Experimental Psychology; Human Brain Mapping; Journal of Cognitive Neuroscience; Journal of Abnormal Psychology; Journal of Experimental Psychology: Learning Memory and Cognition; Neuropsychologia; Neuroscience Letters; Proceedings of National Academy of Sciences; Psychological Science; Psychonomic Bulletin & Review; Psychophysiology; Quarterly Journal of Experimental Psychology; Revista Mexicana de Psicología; Scientific World; Synthese; Visual Cognition.

## PUBLICATIONS

- Golombek, D., **Fernandez Duque, D.**, Burin, L., & Cardinali, D. P. (1992). Time-dependent anticonvulsant activity of melatonin in hamsters. *European Journal of Pharmacology*, 210, 253-258.
- Golombek, D., Escolar, E., Burin, L., De Brito Sanchez, M., **Fernandez Duque, D.**, & Cardinali, D. P. (1992). Chronopharmacology of melatonin: Inhibition by benzodiazepine antagonism. *Chronobiology International*, 9(2), 124-131.
- Fernandez-Duque, D.**, & Posner, M. I. (1997). Relating the mechanisms of orienting and alerting. *Neuropsychologia*, 35(4), 477-486.
- Posner, M. I., DiGirolamo, G. J., & **Fernandez-Duque, D.** (1997). Brain mechanisms of cognitive skills. *Consciousness and Cognition*, 6, 267-290.
- Posner, M. I., & **Fernandez-Duque, D.** (1999). Attention in the human brain. In R. A. Wilson & F. C. Keil (Eds), *The MIT encyclopedia of the cognitive sciences*. Cambridge, MA: MIT Press.
- Fernandez-Duque, D.**, & Johnson, M. L. (1999). Attention metaphors: How metaphors guide the cognitive psychology of attention. *Cognitive Science*, 23,(1) 83-116.
- Fernandez-Duque, D.**, Baird, J. A., & Posner, M. I. (2000). Executive attention and metacognitive regulation. *Consciousness & Cognition*, 9, 288-307.
- Fernandez-Duque, D.**, Baird, J. A., & Posner, M. I. (2000). Attention and awareness in self regulation. *Consciousness & Cognition*, 9, 324-326.
- Fernandez-Duque, D.**, & Thornton, I. M. (2000). Change detection without awareness: Do explicit reports underestimate the representation of change in the visual system? *Visual Cognition*, 7, 324-344.
- Thornton, I. M., & **Fernandez-Duque, D.**(2000). An implicit measure of undetected change. *Spatial Vision*, 14, 21 – 44.
- Fernandez-Duque, D.**, & Posner, M. I. (2001). Brain imaging of attentional networks in normal and pathological states. *Journal of Clinical and Experimental Neuropsychology*, 23(1), 477-486.
- Fernandez-Duque, D.**, & Johnson, M. L. (2002). Cause and effect theories of attention: The role of conceptual metaphors. *Review of General Psychology*, 6(2), 153-165.
- Thornton, I. M., & **Fernandez-Duque, D.** (2002). Converging evidence for the detection of change without awareness. In Hyönä, J. et al. (Eds.), *The brain's eyes: Neurobiological and clinical aspects of oculomotor research* (pp. 99-118). Amsterdam: Elsevier Science.
- Fernandez-Duque, D.**, & Black, S. E. (2003). [Abstract] Impaired recognition of negative facial emotions in patients with Fronto-Temporal Dementia. *Brain & Cognition*, 51, 172-173
- Fernandez-Duque, D.**, Grossi, G., Thornton, I. M., & Neville, H. J. (2003). Representation of change: Separate electrophysiological markers of attention, awareness, and implicit processing. *Journal of Cognitive Neuroscience*, 15(4), 1-17.
- Fernandez-Duque, D.**, & Thornton, I. M. (2003). Explicit mechanisms do not account for implicit localization and identification of change: An empirical reply to Mitroff et al. (2002) *Journal of Experimental Psychology: Human Perception and Performance*, 29(5), 846–858.
- Fernandez-Duque, D.**, & Black, S. E. (2005). Impaired recognition of negative facial emotions in patients with Fronto-Temporal Dementia. *Neuropsychologia* 43, 1673-1687

- Fernandez-Duque, D.** & Baird, J. A. (2005) *Is there a social brain? Lessons from eye-gaze, joint attention, and autism.* In B. F. Malle & S. D. Hodges (Eds.), *Other Minds*, Guilford Press, NY, pp. 75-90.
- Fernandez-Duque, D.,** & Black, S.E. (2006). Attentional networks in normal aging and Alzheimer's Disease. *Neuropsychology*, 20 (2), 133-143.
- Fernandez-Duque, D.** & Wifall, T. (2007). Actor/observer asymmetry in risky decision making. *Judgment and Decision Making*, 2(1), 1-8.
- Fernandez-Duque, D.,** & Black, S. E. (2007). Metacognitive judgment and denial of deficit: Evidence from frontotemporal dementia. *Judgment and Decision Making*, 2(6), 359-370.
- Fernandez-Duque, D.** (2008). Anatomía-funcional de la atención. In A. Slachevsky, F. Manes, P. Fuentes, & E. Labos (Eds.) *Neuropsicología: bases conceptuales, técnicas de evaluación y clínica.* [Functional anatomy of attention. In Neuropsychology: concepts, techniques and clinical assessment].
- Fernandez-Duque, D.** (2008) Bases cerebrales de la empatía, de la sociabilización y teoría de mente. In A. Slachevsky, F. Manes, P. Fuentes, & E. Labos (Eds.) *Neuropsicología: bases conceptuales, técnicas de evaluación y clínica.* [Neural bases of empathy, theory of mind, and social behavior. In Neuropsychology: concepts, techniques and clinical assessment]
- Fernandez Duque, D.,** & Black, S. (2008). Selective attention in early dementia of Alzheimer type. *Brain & Cognition*, 66 (3) 221-231.
- Fernandez-Duque, D.,** & Knight, M. B. (2008). Cognitive control: Dynamic, sustained, and voluntary influences. *Journal of Experimental Psychology. Human Perception and Performance*, 34 (2), 340-355.
- Fernandez-Duque, D.,** & Landers, J. (2008). "Feeling more regret than I would have imagined": Self-report and behavioral evidence. *Judgment and Decision Making*, 3(6), 449-456
- Fernandez-Duque, D.,** Baird, J. A, & Black, S.E. (2009). False-belief understanding in fronto-temporal dementia and Alzheimer's disease. *Journal of Clinical and Experimental Neuropsychology* 31(4) 489-497.
- Fernandez-Duque, D.** (2009). Cognitive and neural underpinnings of syntactic complexity. In T. Givon & M. Shibatani (Eds). *The genesis of syntactic complexity*, J. Benjamin Publisher, 434-460.
- Fernandez-Duque, D.,** Hodges, S. D., Baird, J. A., & Black, S. E. (2010). Empathy in Frontotemporal Dementia and Alzheimer's Disease. *Journal of Clinical and Experimental Neuropsychology*. 32(3), 289-298

## PROFESSIONAL PRESENTATIONS

### Invited Addresses

- Fernandez-Duque, D. (1997). *Forty years of attentional research: The impact of metaphors in psychologists' understanding of attention.* Invited address to the Philosophy-Neuroscience-Psychology Program at Washington University, St. Louis, Missouri.
- Fernandez-Duque, D., & Thornton, I. M. (1999). *Change blindness and implicit processing: Past research and future directions.* Invited address to Cambridge Basic Research, Nissan Inc., Boston, Massachusetts.
- Fernandez-Duque, D. (2003). *Physiology and pathophysiology of attention.* Invited address to the Third International Conference on Hepatic Encephalopathy, Bremen, Germany.

- Fernandez-Duque, D. (2003). *Attention and perceptual awareness: Lessons from neuropsychology*. Invited address to the Psychology Department, University of Wales, Bangor.
- Fernandez-Duque, D. (2003). *What makes us smart? On the relation between working memory and executive functions*. Invited address to the Psychology Department, Vanderbilt University, Nashville, Tennessee.
- Fernandez-Duque, D. (2005). *Visuo-perceptual abilities in patients with atypical Alzheimer's disease*. Invited address to the Vision Center of University of Pennsylvania.
- Fernandez-Duque, D. (2005). *Knowing 'where' without knowing 'what': Orienting and spatial localization in the split brain*. Invited address to the Psychology Department, Lehigh University.
- Fernandez-Duque, D. (2006). *Neuropsychology of perceptual awareness*. Invited address to the Cognitive Science Group (David Rosenthal, director), Graduate Center, City University New York.
- Fernandez-Duque, D. (2007). *Actor/observer asymmetry in risky decision making*. Invited address to the University of Buenos Aires Medical School, Cognitive Neuroscience Group (Valeria Della Maggiore, director).
- Fernandez-Duque, D. (2007). *Empathy in frontotemporal dementia*. Invited address to the the University of Buenos Aires Medical School, Institute for Medical Research Alfredo Lanari.
- Fernandez-Duque, D. (2008). *Conflict resolution in Stroop-like tasks: Studies in young adults and in stroke patients*. Invited address to the Psychology Department, Rice University, Houston, TX, March 26.
- Fernandez-Duque, D. (2009). *Decision making: Cognitive and affective processes*. Invited address to the Psychology Department, Inter-American Open University, Buenos Aires, Argentina.
- Fernandez-Duque, D. (2010). *Frontotemporal dementia: Emotion Recognition and denial of deficit*. Invited address to the Neuropsychology Seminar of the Psychiatry Department, University of Pennsylvania, Philadelphia, October 1<sup>st</sup>.

### Talks

- Fernandez-Duque, D., & Grossi, G., Thornton, I. M., & Neville, H., (2000). *Change blindness: An event-related brain potential study*. Talk presented at the annual convention of the Association for the Scientific Study of Consciousness, Brussels, Belgium.
- Fernandez-Duque, D., & Black, S. E. (2002). *Knowing 'where' without knowing 'what': Orienting and spatial localization in the split brain*. Talk presented at the annual convention of the Association for the Scientific Study of Consciousness, Barcelona, Spain.
- Fernandez-Duque, D. (2003). *What should a cognitive neuroscience of mindreading look like?* Talk presented at 'Other Minds: An Interdisciplinary Conference', Institute of Cognitive and Decision Sciences, University of Oregon, Eugene.
- Fernandez-Duque, D. (2005). *Impaired recognition of negative facial emotions in patients with Fronto-Temporal Dementia*. Talk presented at the biennial retreat of the Center for Cognitive Neuroscience of University of Pennsylvania, January 2005.
- Baird, J. A., Davis, S., Williams, J., & Fernandez-Duque, D. (2007). *Why do people open their mouths when feeding babies?: The interplay of communicative and executive functions*. Talk presented at the annual meeting of the Jean Piaget Society, Amsterdam.

Fernandez-Duque, D. (2008). *Cognitive underpinnings of syntactic complexity*. Talk presented at the 12<sup>th</sup> Rice Biennial Symposia on Linguistics, Houston, TX.

## Posters

Fernandez-Duque, D., & Posner, M. I. (1996). *Relating the mechanisms of orienting and alerting*. Poster presented at the Cognitive Neuroscience Society annual convention, San Francisco, California.

Thornton, I. M., & Fernandez-Duque, D. (1998). *Change detection without awareness*. Poster presented at the Psychonomic Society annual convention, Dallas, Texas.

Fernandez-Duque, D., & Thornton, I. M. (1999). *Detecting change in the absence of awareness*. Poster presented at the annual convention of the Association for Research in Vision and Ophthalmology, Ft. Lauderdale, Florida.

Fernandez-Duque, D. (1999). *Automatic processing of valence*. Poster presented at the Psychonomic Society annual convention, Los Angeles, California.

Thornton, I. M., & Fernandez-Duque, D. (1999). *Representing the 'what' and the 'where' of undetected change*. Poster presented at the Psychonomic Society annual convention, Los Angeles, California.

Fernandez-Duque, D., Evans, M., & Black, S. E. (2001). *Attention and set maintenance in normal aging and Alzheimer's Disease*. Poster presented at the annual convention of the Cognitive Science Association for Interdisciplinary Learning, Hood River, Oregon.

Fernandez-Duque, D., Evans, M., & Black, S. E. (2001). *Attentional networks in normal aging and Alzheimer's Disease*. Poster presented at the Psychonomic Society annual convention, Orlando, Florida.

Fernandez-Duque, D., & Black, S. E. (2002). *Impaired recognition of negative facial emotions in patients with Fronto-Temporal Dementia*. Poster presented at the annual conference of the Rotman Research Institute (Emotion and the Brain), Toronto, Canada.

Fernandez-Duque, D., & Black, S. E. (2002). *Object localization without object recognition in the split brain*. Poster presented at the Visual Science Society annual convention, Sarasota, Florida.

Fernandez-Duque, D., & Black, S. E. (2002). *Metacognitive knowledge and error detection in fronto-temporal dementia*. Poster presented at the Psychonomic Society annual convention, Kansas City, Missouri.

Thornton, I. M. & Fernandez-Duque, D. (2002). *Explicit mechanisms do not account for implicit localization and identification of change*. Poster presented at the Psychonomic Society annual convention, Kansas City, Missouri.

Fernandez-Duque, D., & Black, S. E. (2003). *The Simon effect in stroke patients*. Poster presented at the Cognitive Neuroscience Society annual convention, New York City.

Fernandez-Duque, D., & Black, S. E. (2003). *Visuo-perceptual abilities in patients with atypical Alzheimer's disease*. Poster presented at the Visual Science Society annual convention, Sarasota, Florida.

Fernandez-Duque, D. (2003). *On the relation among working memory, conflict resolution, and set switching*. Poster presented at the Psychonomic Society annual convention, Vancouver, Canada.

Fernandez-Duque, D., & Black, S.E. (2004). *Empathy in fronto-temporal dementia*. Poster presented at the Frontotemporal Dementia Meeting, Philadelphia, PA.

- Knight, M.B., & Fernandez-Duque, D. (2005). *Task-specificity in cognitive control*. Poster presented at the annual convention of the Cognitive Science Association for Interdisciplinary Learning, Hood River, Oregon.
- Fernandez-Duque, D. & Knight, M.B. (2005). *Repetition priming and cognitive control in Stroop-like tasks*. Poster presented at the Psychonomic Society annual convention, Toronto, Canada.
- Fernandez-Duque, D., Diaz, M., & Benjamin, A. S. (2006) *On the relation between Judgment of Learning and Study Time: Evidence from a proactive interference task* Poster presented at the Psychonomic Society annual convention, Houston, TX.
- Wifall, T. & Fernandez-Duque, D. (2006). *Actor/observer asymmetry in risky decision making*. Poster presented at the Judgment and Decision Making Society annual convention, Houston, TX.
- Fernandez-Duque, D., Hodges, S. D., Baird, J. A., & Black, S. E. (2008). *"I don't know how you feel": Empathy in frontotemporal dementia and Alzheimer's disease*. Poster presented at the International Neuropsychological Society mid-year meeting, Buenos Aires, Argentina.
- Fernandez-Duque, D., Del Rio, V., Kurti, A., Hughes, M., & Todd, A., (2009). The side-effect effect, intentionality judgment, and motivated cognition. Poster presented at the Judgment and Decision Making Society annual convention, Boston, MA.