#### **CURRICULUM VITAE**

Associate Professor
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### **EDUCATION**

- Graduate Certificate in Cognitive Science, Rutgers University, New Brunswick, NJ, February 2008
- Ph.D., Cognitive Psychology, Rutgers University, New Brunswick, NJ, October 2007
- M.S., Cognitive Psychology, Rutgers University, New Brunswick, NJ, October 2004
- B.A., Psychology, Koç University, Istanbul, Turkey, June 2002

### PROFESSIONAL AND RESEARCH EXPERIENCE

- Associate Dean, College of Social Science and Humanities, Koç University, Istanbul (7/2015-present)
- Associate Professor, Department of Psychology, Koç University, Istanbul (10/2014present)
- Associate Professor academic title granted by the Inter-University Council of the Republic of Turkey (6/2013)
- Assistant Professor, Department of Psychology, Koç University, Istanbul (2011-2014)
- Postdoctoral Research Fellow, Neuroscience Institute, Princeton University, NJ (2008-2010)
- Research Scientist at R&D/Head of Experimental Models, PsychoGenics Inc, Tarrytown, NY (2007-2008)
- Graduate Teaching Assistant, Department of Psychology Rutgers University, NJ (2004-2006)

#### **PUBLICATIONS**

### **Refereed Journal Research Articles:** \* Student Authors

- 1. Karşılar, H.\* & **Balcı**, **F.** (in press). Asymmetrical Modulation of Time Perception by Increase vs. Decrease in Coherence of Motion. *Attention*, *Perception & Psychophysics* (SCIE, SSCI)
- 2. Akdogan, B.\* & **Balci**, **F.** (2016). The Effects of Payoff Manipulations on Temporal Bisection Performance. *Acta Psychologica*, 170, 74-83. (SSCI)
- 3. Tosun, T.\*, Gür, E.\*, & **Balcı**, **F.** (2016). Mice plan decision strategies based on previously learned time intervals, locations, and probabilities. *Proceedings of the National Academy of Sciences*, 113, 787-792 (SCI, SCIE)

Fuat Balcı 2/12

4. Erhan, C.\* & **Balci**, F. (in press). Obsessive compulsive features predict cautious decision strategies. *Quarterly Journal of Experimental Psychology* (SCI, SSCI)

- 5. Brunner, D., **Balci, F.**, Curtin, P.C.P., Farrar, A., Oakeshott, S., Sutphen, J., Berger, J., Howland, D. (2015). Temporal Control Deficits in Murine Models of Huntington's Disease. *International Journal of Comparative Psychology*. 28, 1-18.
- 6. Berkay, D.\*, Cavdaroglu, B.\* & **Balcı, F.** (in press). Probabilistic Numerical Discrimination in Mice. *Animal Cognition* 19, 251-265 (SCIE)
- 7. Çoşkun, F.\*, Berkay, D.\*, Sayalı, C. & **Balcı, F.** (in press). Sequential Temporal Discrimination in Humans and Mice. *International Journal of Comparative Psychology*, 28, 1-14.
- 8. Çavdaroğlu, B.\* & **Balcı**, **F.** (in press). Mice can count and optimize count-based decisions. *Psychonomic Bulletin & Review*. (SSCI)
- 9. Akdoğan, B.\* & Balcı, F. (2016). Stimulus probability effects on temporal bisection performance of mice (Mus musculus). *Animal Cognition*, 19, 15-30 (SCIE)
- 10. Çarkoğlu, C.\*, Yılmaz, M.\*, **Balcı, F.** (in press). Continuous Spontaneous Alternation and Turn Alternation in Artemia sp. *International Journal of Comparative Psychology*, 28, 1-7.
- 11. Demirtas Sahin, T., Karson, A., **Balcı, F.**, Yazır, Y., Bayramgürler, D., Utkan, T. (2015). TNF-alpha inhibition prevents cognitive decline and maintains hippocampal BDNF levels in the unpredictable chronic mild stress rat model of depression. *Behavioural Brain Research*, 292, 233-240 (SCI, SCIE)
- 12. Freestone, D., **Balcı, F.**, Simen, P., Church, R.M. (2015). Optimal Response Rates in Humans and Rats. *Journal of Experimental Psychology: Animal Learning & Cognition*, 41, 39-51 (SCI, SSCI)
- 13. Çoşkun, F.\*, Sayalı, C.\*, Gürbüz, E.\*, **Balcı, F.** (2015). Optimal time discrimination. *Quarterly Journal of Experimental Psychology*, 68(2), 381-401 (SCI, SSCI)
- 14. Karşılar, H.\*, Simen, P., Papadakis, S., **Balcı, F.** (2014). Speed Accuracy Trade-off Under Response Deadlines. *Frontiers in Neuroscience*, 8:248. doi3: 10.3389/fnins.2014.00248
- 15. **Balci, F.**, Simen, P. (2014). Decision processes in temporal discrimination. *Acta Psychologica*. 149, 157-168. (SSCI)
- 16. Maggi, D., Garbugino, L., Heise, I., Nieus, T., **Balcı, F.**, Wells, S., Tocchini-Valentini, G.P., Mandillo, S., Nolan, P.M., Tucci, V. (2014). A cross-laboratory investigation of timing endophenotypes in mouse behavior. *Timing and Time Perception*, 2(1), 35-40.
- 17. Çavdaroğlu, B.\*, Zeki, M., **Balcı, F.** (2014). Time-based reward maximization. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *369*(1637), 20120461 doi: 10.1098/rstb.2012.0461 (SCI, SCIE)
- 18. Gallistel, C.R., **Balci, F.**, Freestone, D., Kheifets, A., King, A. (2013, in press). Automated, Quantitative Cognitive/Behavioral Screening of Mice: For Genetics, Pharmacology, Animal Cognition and Undergraduate Instruction. *Journal of Visualized Experiments*, 84, e51047, doi:10.3791/51047
- 19. **Balci, F.**, Oakeshott, S., Shamy, J., El Khodor, B., Filippov, I., Mushlin, R. et al. (2013). High-Throughput Automated Phenotyping of Two Genetic Mouse Models of Huntington's Disease. *PLOS Currents in Huntington Disease*, 1/doi: 10.1371/currents.hd.124aa0d16753f88215776fba102ceb29

Fuat Balcı 3/12

20. **Balci, F.**, Ramey-Balci, P., Ruamps, P. (2014). Spontaneous alternation and locomotor activity in three species of marine crabs: Green crab (*Carcinus maenas*), blue crab (*Callinectes sapidus*) and fiddler crab (*Uca pugnax*). *Journal of Comparative Psychology*, 128(1), 65-73. (SCI, SCIE, SSCI)

- 21. Karson, A. Demirtaş, T., Bayramgürler, D., **Balcı, F.**, Utkan, T. (2013). Chronic administration of Infliximab (TNF-alpha inhibitor) decreases depression and anxiety-like behavior in rat model of unpredictable chronic mild stress. *Basic & Clinical Pharmacology & Toxicology*, 112(5), 335-40. (SCI, SCIE)
- 22. **Balci, F.**, Wiener, M., Çavdaroğlu, B.\*, Coslett, B.H. (2013). Epistasis Effects of Dopamine Genes on Interval Timing and Reward Magnitude in Humans. *Neuropsychologia*, *51*(2), 293-308. (SCI, SCIE, SSCI)
- 23. Karson, A., Utkan, T., **Balcı, F.**, Arıcıoğlu, F., Ateş, N. (2012). Age–related decline in learning and memory performances of male WAG/Rij rats. *Behavioral and Brain Functions*, 8/51. (SCIE)
- 24. **Balci, F.**, Freestone, D., Simen, P., deSouza, L., Cohen, J. D., Holmes, P. (2011). Optimal Temporal Risk Assessment. *Frontiers in Integrative Neuroscience*, 5, 1-15.
- 25. Simen, P., **Balci, F.**, deSouza, L., Cohen, J. D., Holmes, P. (2011). Interval timing by long-range temporal integration. *Frontiers in Integrative Neuroscience*, 5, 1-2.
- 26. Simen, P., **Balci, F.**, deSouza, L., Holmes, P., Cohen, J. D. (2011). A model of interval timing by neural integration. *Journal of Neuroscience*, *31*(25), 9238-9253. (SCI, SCIE)
- 27. Oakeshott, S., **Balcı, F.**, Flippov, I., Murphy, C., Port, R., Connor, D., Paintdakhi, A., LeSauter, J., Menalled, L., Ramboz, S., Kwak, S., Howland, D., Silver, R., Brunner, D. (2011). Circadian abnormalities in motor activity in a BAC transgenic mouse model of Huntington's Disease. *PLoS Currents: Huntington Disease*, 25/3:RRN1225
- 28. Ludvig, E. A., **Balci, F.**, Spetch, M. L. (2011). Reward magnitude and timing in pigeons. *Behavioural Processes*, 86(3), 359-363. (SCI, SCIE, SSCI)
- 29. **Balci, F.**, Simen, P., Niyogi, R., Saxe, A., Hughes, J., Holmes, P., & Cohen, J. D. (2011). Acquisition of decision-making criteria: Reward rate ultimately beats accuracy. *Attention, Perception, & Psychophysics*, 73(2), 640-657. (SCIE, SSCI)
- 30. Paterson, N.E., **Balcı**, **F.**, Campbell, U., Olivier, B., Hanania, T. (2011). The triple reuptake inhibitor DOV216,303 exhibits limited antidepressant-like properties in the differential reinforcement of low-rate 72-sec responding assay, likely due to dopamine reuptake inhibition. *Journal of Psychopharmacology*, 25(10), 1357-1364. (SCI, SCIE)
- 31. **Balci, F.**, Ludvig, E.A., Brunner, D. (2010). Within-session modulation of timed anticipatory responding: When to start responding. *Behavioural Processes*, 85(2), 204-206. (SCI, SCIE, SSCI)
- 32. **Balci, F.**, Ludvig, E.A., Abner, R., Zhuang, X., Poon, P., B., Brunner, D. (2010). Motivational Effects on Interval Timing in Dopamine Transporter (DAT) Knockdown Mice. *Brain Research*, *1325*, 89-99. (SCI, SCIE)
- 33. Gallistel, C.R., King, A.P., Daniel, A.M., Freestone, D., Papachristos, E.B., **Balcı, F.**, Kheifets, A., Zhang, J., Su, X., Schiff G., Kourtev, H. (2010). Screening for Learning and Memory Mutations: A New Approach. *Acta Psychologica Sinica*, 42(1), 138-158.
- 34. **Balci, F.**, Day, M., Rooney, A., Brunner, D. (2009). Disrupted Temporal Control in the R6/2 Mouse Model of Huntington's Disease. *Behavioral Neuroscience*,

Fuat Balcı 4/12

- 123(6).1353-1358. (SCI. SCIE)
- 35. **Balci, F.**, Freestone, D., Gallistel, C.R. (2009). Risk assessment in man and mouse. *Proceedings of the National Academy of Sciences*, 106(7), 2459-2463. (SCI, SCIE)
- 36. **Balci, F.**, Gallistel, C.R., Allen, B.D., Frank, K., Gibson, J., Brunner, D. (2009). Acquisition of peak responding: What is learned? *Behavioural Processes*, 80(1), 67-75. (SCI, SCIE, SSCI)
- 37. Ramey, P.A., Teichman, E., Oleksiak, J., & **Balcı, F.** (2009). Spontaneous alternation in marine crabs: invasive versus native species. *Behavioural Processes*, 82(1), 51-55. (SCI, SCIE, SSCI)
- 38. **Balci, F.**, Ludvig, E.A., Gibson, J.M., Allen, B.D., Frank, K.M., Kapustinski, B.J., Fedolak, E.T., Brunner, D. (2008). Pharmacological manipulations of interval timing using the peak procedure in male C3H mice. *Psychopharmacology*, 201(1), 67-80. (SCI, SCIE)
- 39. **Balci, F.**, Papachristos, E. B., Gallistel, C.R., Brunner, D., Gibson, J., Shumyatsky, G.P. (2008). Interval-Timing in the Genetically Modified Mouse: A Simple Paradigm. *Genes, Brain, and Behavior*, 7(3), 373-384. (SCIE)
- 40. Ludvig, E.A., **Balci, F.**, & Longpre, K.M. (2008). Timescale dependence in a conditional temporal discrimination procedure. *Behavioural Processes*, 77(3), 357-363. (SCI, SCIE, SSCI)
- 41. Karson, A., Onat, F., **Balci, F.**, Ates, N (2008). Locotomor Activity, Learning and Memory in WAG/Rij Rats with Absense Epilepsy. *Epilepsi*, *14*(3), 167-175.
- 42. Gallistel, C.R., King, A.P., Gottlieb, D., **Balci, F.**, Papachristos, E.B., Szalecki, M., & Carbone, K.S. (2007). Is Matching Innate? *Journal of the Experimental Analysis of Behavior*, 87(2), 161-199. (SCI, SCIE, SSCI)
- 43. Montemayor, C., & Balci, F. (2007). Compositionality in Language and Arithmetic. *Journal of Theoretical & Philosophical Psychology*, 27(1), 53-72.
- 44. **Balci, F.**, & Gallistel, C.R. (2006). Cross-Domain Transfer of Quantitative Discriminations: Is it All a Matter of Proportion? *Psychonomic Bulletin & Review*, 13(4), 636-642. (SSCI)

## **Refereed Journal Review & Theoretical Articles:**

- 1. **Balci, F.** & Simen, P. (2016). A decision model of timing. *Current Opinion in Behavioral Sciences*. 8:94–101
- 2. Akdogan, B.\* & **Balcı, F.** (in press, 2016). Aralık Zamanlama: Kuramsal ve Deneysel Yaklaşımlar (Interval Timing: Theoretical and Experimental Approaches). Turk Psikoloji Yazilari/Turkish Psychological Articles.
- 3. **Balci, F. (2014).** Interval Timing, Dopamine, & Motivation, *Timing & Time Perception*, 2(3), 379 410.
- 4. Simen, P., Rivest, F., Ludvig, E.A., **Balcı, F.**, Killeen, P. (2013). Timescale invariance in the pacemaker-accumulator family of timing models. *Timing & Time Perception*, 1/2, 159-188.
- 5. Brunner, D., **Balci, F.**, Ludvig, E.A. (2012). Comparative Psychology and the Grand Challenge of Drug Discovery in Psychiatry and Neurodegeneration, *Behavioural Processes*, 89, 187-95 (selected and evaluated in Faculty 1000 placing this work in the top 2 percent of published articles in biology and medicine). (SCI, SCIE, SSCI)
- 6. Day, M., Balcı, F., Wan, H.I., Fox, G.B., Kling, M.A., Rutkowski, J.L., Feuerstein,

Fuat Balcı 5/12

G. (2008). Cognitive Endpoints in Attention, Impulsivity and Recent and Remote Memory as Disease Biomarkers: Optimizing the Congruency of Preclinical Models to the Clinic. *Current Opinion in Investigational Drugs*, *9*, 696-706.

### **Refereed Conference Publications:**

- 1. Genç, C.\*, Soomro, S., Duyan, Y.\*, **Balcı, F.**, Ürey, H., & Özcan, O. (2016). Head Mounted Projection Display & Visual Attention: Visual attentional processing of head referenced static and dynamic displays while in motion and standing. *CHI* '16
- 2. Simen, P., Van Vugt, M., **Balcı, F.**, Freestone, D. and Polk, T. (2010). Toward an analog neural substrate for production systems. *Proceedings of the International Conference on Cognitive Modeling*.
- 3. Gallistel, C.R., King, A.P., Daniel, A.M., Papachristos, E.B., & **Balcı**, **F.** (August 2008). Fully automated 24/7 behavioral screening for mutations in targeted cognitive mechanisms in the mouse. Measuring Behavior 2008, 55.

# **Book Chapters:**

- 1. Freestone, D. & **Balci**, **F.** (in press). The biology of economic choice in mammals. In V. Tucci *Handbook of Neurobehavioral Genetics and Phenotyping*. Publisher: Wiley-Blackwell
- 2. **Balci, F.**, Meck, W., Moore, H., & Brunner, D. (2009). *Timing Deficits in Aging and Neuropathology*. In Jennifer L. Bizon & Alisa G. Woods (Eds.), Animal Models of Human Cognitive Aging (pp. 161-201). Totowa, NJ: Humana Press.
- 3. **Balcı, F.** & Karson, A. (2012). Sinir Sisteminin Yapısı ve İşlevleri (Structure and Functions of the Nervous System). In Zeynep Cemalcılar, Psikolojiye Giriş (pp. 56-95) (Introduction to Psychology). Eskişehir: Anadolu Üniveritesi Açıköğretim Fakültesi Yayınları.

#### Other Publications:

- 1. Balcı, F. (2013). Öznel zaman (Subjective time). Cogito, 75
- 2. Balci. F. (2012). Decision optimization based on brain's clock. Frontier, 7, 11-13.
- 3. **Balci, F.** (2015). Introduction to Timing and Time Perception: Interval Timing Behavior: Comparative and Integrative Approaches. *International Journal of Comparative Psychology*, 28, 1-6.

Articles in review and preparation process are not listed.

# **GRANTS**

- Interdisciplinary Perspectives on Time (2013-2015)
- Marie Curie International Reintegration Grant (2011-2015)
- TÜBİTAK 1001 Grant: The support programme for scientific and technological research projects (2012-2015)
- TÜBİTAK 2515 Grant (2015-2018)
- Koç University Teaching Innovation Grant (2012-2013)
- TÜBİTAK 3501 Grant: Modeling and analysis of persistent and irregular behavior in excitatory and inhibitory neural networks (2011-2015) Advisor

Fuat Balcı 6/12

## HONORS, FELLOWSHIPS & AWARDS

 TÜBA-GEBİP Award (Turkish Academy of Sciences – The Young Scientists Award Programme) 2015

- Outstanding Faculty Award (2013-2014), Koç University
- TÜBİTAK Teşvik Ödülü (TÜBİTAK Incentive Award) 2014
- World Economic Forum Young Scientist 2013
- Science Academy Young Scientist Award (BAGEP, 2013)
- The Global Network of Science Academies (IAP) Partial Travel Support (2013)
- Best Poster Awards: International Conference on Timing & Time Perception (2014);
   18<sup>th</sup> National Psychology Congress (2014)
- TÜBİTAK FP7 Participation Incentive Award (2011)
- Rutgers University, Graduate School Fellowship (2002-2004, 2006-2007)
- Rutgers University Center for Cognitive Science Fellowship (2002-2003)
- Undergraduate Scholarship from Koç University (1999-2002)
- Koç University Vehbi Koç Honor Awards (1998-2002)
- Koç University Student Activity Award for the Organization of VI. National Psychology Student Congress (2001)

## **ABSTRACTS & CONFERENCE PRESENTATIONS**

- 1. Balcı, F. (May, 2016). Zaman Algısı ve Karar Verme: Ortak Kuramsal Yaklaşım (Time Perception and Decision Making: An overarching theoretical approach). 14. National Neuroscience Congress.
- **2.** Tosun, T., Berkay, D., Sack, A.Y., Çakmak, Y. & Balcı, F. (May, 2016). Pre-SMA aktivitesinin algısal kararlardaki hız-doğruluk ödünleşimine etkisi: Bir rTMS çalışması (Effect of pre-SMA activity on speed-accuracy tradeoff in perceptual decision making: An rTMS study). 14. National Neuroscience Congress.
- **3.** Akdoğan, B., Balcı, F. & van Rijn, H. (May, 2016). Zamansal Beklentinin Göz Bebeği Aktivitesi Üzerindeki Etkisi (Effect of temporal expectations on pupillary responses). 14. National Neuroscience Congress.
- **4.** Mızrak, E., Erhan, C., **Balcı, F.**, Öztekin, I. (November, 2015). Trait Anxiety Effects on the Control of Proactive Interference in Working Memory. Psychonomic Society's 57th Annual Meeting, Chicago, USA.
- **5.** Akdoğan, B. & **Balcı**, **F.** (May, 2015). The Effects of Exogenous Probability on Retrospective Temporal Discrimination Performance of Mice. Association for Psychological Science, 27<sup>th</sup> Annual Convention, NYC, USA.
- **6.** Berkay, D. & **Balcı, F.** (May, 2015). Optimal Numerical Discrimination in Mice. Association for Psychological Science, 27<sup>th</sup> Annual Convention, NYC, USA.
- 7. Tosun, T. & Balcı, F. (May, 2015). Mice plan their timed decisions based on previously acquired probabilistic and temporal information. Association for Psychological Science, 27th Annual Convention, NYC, USA.
- **8.** Erhan, C. & **Balci**, **F.** (March 2015). Obsessive Compulsive Features Predict Cautious Decision Strategies. International Convention of Psychological Science, Amsterdam, The Netherlands.
- 9. Akdoğan, B. & Balcı, F. (July 2014). Temporal Expectancy Indexed by Pupillary

Fuat Balcı 7/12

- Response. Poster presented at 9th FENS Forum of Neuroscience, Milan, Italy.
- **10.** Karşılar, H., Simen, P., Papadakis, **Balcı, F**. (April, 2014). Tepki süresi sınırlandırması altında hız-doğruluk ödünleşimi. (Speed Accuracy Trade-off under Response Deadlines). 18<sup>th</sup> National Psychology Congress, Bursa, Turkey (best poster award, first rank)
- **11.** Karşılar, H., Simen, P., Papadakis, S. **Balcı, F** (April, 2014). Speed Accuracy Tradeoff under Response Deadlines. International Conference on Timing & Time Perception, Corfu, Greece (best poster award)
- **12.** Oakeshott, S, **Balci, F.**, Port R, Sutphen J, Berger J, Watson-Johnson J, Farrar AM, Ramboz S, Park L, Howland D, Brunner D. (November, 2013). Evaluation of deficits in response inhibition in the peak interval task in three mouse models of Huntington's disease. Poster presented at the 43<sup>rd</sup> Annual Meeting of Society for Neuroscience, San Diego, CA, USA.
- **13.** Zeki, M, **Balcı**, **F.** (October, 2013). The balance between excitation and inhibition in a timing network. Paper presented at the 2<sup>nd</sup> International Workshop on Complex Dynamical Systems and Their Applications. (2. Uluslararası Karmaşık Dinamik Sistemler ve Uygulamaları Çalıştayı), Işık Üniversitesi, Istanbul, Turkey.
- **14.** Demirtaş, T., Karson, A., Yazır, Y., Utkan, T., **Balcı, F.**, Bayramgürler, D. (October, 2013). İnfliksimabın öngörülemeyen kronik hafif stres uygulanmış sıçanlarda bozulmuş bilişsel fonksiyonlar üzerindeki etkisinin araştırılması. Poster presented at the 22. National Pharmacology Congress, Antalya, Turkey.
- **15. Balci, F.** (September, 2013). Time-based reward maximization. Paper presented at ESCOP 2013, Budapest, Hungary.
- **16.** Oakeshott S, **Balci F**, Port R, Sutphen J, Berger J, Watson-Johnson J, Farrar AM, Ramboz S, Park L, Howland D, Brunner D. (2013) Evaluation of deficits in response inhibition in the peak interval task in three mouse models of Huntington's disease. CHDI Foundation 8th Annual HD Therapeutics Conference, Venice, Italy.
- **17.** Simen, P. **Balci**, F. (October, 2012). Subdivide and conquer: A model of both precise and imprecise timing. Paper presented at the 42<sup>nd</sup> Annual Meeting of Society for Neuroscience, New Orleans, LA, USA.
- **18.** Simen, P. **Balcı, F.** (July, 2012). A drift-diffusion account of temporal discrimination. Paper presented at the 45th annual meeting of the Society for Mathematical Psychology, Columbus, Ohio, USA.
- **19.** Maggi, S., Lassi, G., Nieus, T., **Balci, F.**, Nolan, P.M., Tucci, V. (July, 2012). Abnormal temporal decision making in a novel circadian mouse model, the Afterhours mice. Poster presented at the 8<sup>th</sup> FENS, Forum of Neuroscience, Barcelona, Spain.
- **20. Balci, F.,** Simen, P., deSouza, L. (November, 2011). A drift-diffusion account of response times in temporal bisection. Poster presented at the 41<sup>st</sup> Annual Meeting of Society for Neuroscience, Washington DC, USA.
- **21. Balci, F.,** Simen, P., deSouza, L. (November, 2011). A drift-diffusion account of response time in retrospective temporal decision-making. Poster presented at the 52<sup>nd</sup> Annual Meeting of the Psychonomic Society, Seattle, USA.
- **22.** Freestone, D., **Balci, F.**, Simen, P. (November, 2010). Time is money and we loose it wisely. Poster presented at the 40<sup>th</sup> Annual Meeting of Society for Neuroscience, San Diego, USA.

Fuat Balcı 8/12

**23.** Simen, P. **Balci, F.**, Freestone, D. (August, 2010). Reward maximization, drift-diffusion and inter-response times in instrumental conditioning. Paper presented at 43th annual meeting of the Society for Mathematical Psychology, Oregon, USA.

- **24.** Simen, P., Van Vugt, M. K., **Balci, F.,** Freestone, D., & Polk, T. (2010, August). Toward an analog neural substrate for production systems. Paper presented at the 10th International Conference on Cognitive Modeling, Philadelphia, USA.
- **25.** Ramey, P.A., **Balci, F.**, Ruamps, P., Oleksiak, J., Teichman, E. (March, 2010). An experimental model to assess the exploratory activity and efficiency in invasive versus native species of marine crabs. Paper presented at the Benthic Ecology Meeting, Wilmington, USA.
- **26. Balci, F.**, Rooney, A., Oakeshott, S.M., Day, M., & Brunner, D. (October, 2009) Disrupted Temporal Control in the R6/2 Mouse Model of Huntington's Disease. Poster presented at the 39<sup>th</sup> Annual Meeting of Society for Neuroscience, Chicago, USA.
- **27.** Brunner, D., Ludvig, E.A., Abner, R., Zhuang, X., Poon, P., B., & **Balci, F.** (October, 2009). Interval timing in dopamine transporter (DAT) knockdown mice. Poster presented at the 39<sup>th</sup> Annual Meeting of Society for Neuroscience, Chicago, USA.
- **28.** Simen, P., Nystrom, L., Van Vugt, M., Sederberg, P., **Balci, F.**, & Cohen, J. D. (October, 2009). Event-related fMRI during slow decision making can reveal temporal structure in neural activity. Poster presented at the 39<sup>th</sup> Annual Meeting of Society for Neuroscience, Chicago, USA.
- **29. Balci, F.**, Freestone, D., & Gallistel, C.R. (November, 2008). Optimal decision making by man and mouse in an interval timing task. Paper presented at the 38<sup>th</sup> Annual Meeting of Society for Neuroscience, Washington DC, USA. (selected for and published in the *Society for Neuroscience media book*)
- **30.** Brunner, D., Gallistel, C.R., Allen, B.D., Frank, K.M., Malberg, J.E., Gibson, J.M., Kapustinski, B., & **Balci, F.** (November, 2008). Acquisition of timed responses on the peak procedure. Poster presented at the 38<sup>th</sup> Annual Meeting of Society for Neuroscience, Washington DC, USA.
- **31.** Papachristos, E.B., **Balci, F.**, Shumyatsky, G.P., & Gallistel, C.R. (June, 2008). Screening for interval timing abnormalities in memory mutants. Poster presented at the Endo-Neuro-Psycho Meeting, Doorwerth, The Netherlands.
- **32. Balcı, F.**, Papachristos, E.B., & Gallistel, C.R., Allen, B.D., Gibson, J., Kapustinski, B. J., & Brunner, D. (November, 2007). Assessing cognitive disruption with interval timing: A simple paradigm and its pharmacological validation with amphetamine. Poster presented at the 37<sup>th</sup> Annual Meeting of Society for Neuroscience, San Diego, USA.
- **33. Balci, F.**, Papachristos, E.B., & Gallistel, C.R. (May, 2007). Interval-timing in the genetically modified mice. Paper presented at the 33<sup>rd</sup> Annual Convention of Association for Behavior Analysis, San Diego, USA.
- **34. Balci, F.**, Papachristos, E.B., Gallistel, C.R., Allen, B., Gibson, J.M., Kapustinski, B., & Brunner, D. (May, 2007). Effects of d-amphetamine and methamphetamine on interval timing tested with temporal discriminations of concurrent fixed-interval schedules. Poster presented at the SQAB 2007, San Diego, USA.
- **35.** Papachristos, E.B., **Balcı, F.**, Gallistel, C.R., Schachner, M., & Shumyatsky, G.P. (May, 2007). Screening for memory mutants with matching and timing tasks. Poster

Fuat Balcı 9/12

- presented at the SQAB 2007, San Diego, USA.
- **36.** Gallistel, C.R., King, A., Gottlieb, D., **Balcı, F.**, Papachristos, E.B., Szalecki, M. & Carbone, K. (May, 2007). Matching in the mouse: Is it innate? Paper presented at the 33<sup>rd</sup> Annual Convention of Association for Behavior Analysis, San Diego, USA.
- **37. Balci, F.**, & Gallistel, C.R. (October, 2004). Mouse adds them up. Poster presented at the 34<sup>th</sup> Annual Meeting of Society for Neuroscience, San Diego, USA.
- **38.** Gallistel, C.R., Szalecki, M., **Balcı, F.**, Papachristos, S., & King, A. (October, 2004). The emergence of matching in experimentally naïve mouse. Poster presented at the 34<sup>th</sup> Annual Meeting of Society for Neuroscience, San Diego, USA.
- **39. Balci, F.**, & Gallistel, C.R. (November, 2004). Is it all a matter of proportion? Poster presented at the 12<sup>th</sup> Annual Meeting of OPAM, Minneapolis, USA.
- **40.** Gulgoz, S., Kuntay, A., Tekcan, A. I., Kesebir, P., & **Balci, F.** (September, 2002). Retrieval of Emotional Autobiographical Memories and Personality. Paper presented at the 12<sup>th</sup> National Congress of Psychology, Ankara, Turkey.

## **INVITED TALKS**

- 1. Subjective Time and Decision Making: It is time for integration, Department of Psychology, University of Toronto Scarborough (11/Nov/2015).
- **2.** Subjective Time & Decision Making: An integrative approach to reward maximization and generative processes, Psychology and Neuroscience Lecture Series, Dalhousie University (23/Oct/2015).
- **3.** Time, Decisions, and Rewards, 3<sup>rd</sup> Brazilian Meeting on Brain & Cognition, Sao Paolo, Brazil (1/Oct/2015)
- **4.** Interval Timing and Temporal Decision Making with Particular Focus on the Behavioral and Modeling Aspects. Neuroscience: From Structure to Function and Back. 2<sup>nd</sup> German-Turkish Science Dialogue, Ruhr-Universität Bochum, Germany (June, 2015) invited by German Academy of Sciences "Leopoldina".
- **5.** Psychological Time and Decisions: An Overarching Approach. Cognitive Science Talk Series, Yeditepe University, Istanbul (May, 2014)
- **6.** Reward, Dopamine, & Interval Timing, Subjective Duration: Insights from Arts, Humanities and Neuroscience, New York University, NYC, USA (November, 2013)
- 7. Time, Decisions, & Reward, School of Medicine, Zirve University, Gaziantep, Turkey (June, 2013)
- **8.** Reward Maximization: The Role of Time and Its Psychophysics. Neurology, Philosophy of Biology, Artificial Intelligence Conference, Istanbul, Turkey (May, 2013)
- **9.** Peak Procedure & Differential Reinforcement of Low Rates of Responding, TIMELY School on "Timing and Time Perception: Procedures, Measures, & Applications", Corfu, Greece (February, 2013)
- 10. Time, Decisions & Reward Maximization: Bridging the Gap, Cognition Seminar, Cognitive, Linguistic & Psychological Sciences, Brown University, Providence, RI, USA (September, 2012)
- 11. Epistasis Effects of Dopamine Genes on Interval Timing and Reward Magnitude in Humans, David Badre & Michael Frank Labs, Brown University, Providence, RI, USA (September, 2012)
- 12. Interval timing and decision-making, Human Memory & Cognition Lab, American

Fuat Balcı 10/12

- University, Washington DC, USA (November, 2011)
- **13.** Optimal temporal risk assessment: Timing, Decision-Making, and Reward Maximization in humans, rats, and mice, Fifth Psychology Graduate Students Congress, Istanbul, Turkey (September, 2011).
- **14.** Optimal temporal risk assessment in humans and rodents. TIMELY workshop on the "Psychophysical, Computational, and Neuroscience Models of Time Perception", Groningen, Netherlands (April, 2011).
- **15.** Optimal temporal risk assessment in humans and rodents. PhenoScale Annual Meeting, Plenary Lecture, Frankfurt, Germany (February, 2011).
- **16.** Interval timing and temporal decision making. Italian Institute of Technology, PhenoScale Annual Meeting, Genova, Italy (February, 2010).
- **17.** Optimal decision-making: When time pays off. Koç University, Istanbul, Turkey (December, 2009).
- **18.** Optimal decision-making: When time pays off. Boğaziçi University, Istanbul, Turkey (December, 2009).
- **19.** Temporal decision-making under uncertainty. Princeton University, P6, NJ, USA (June, 2008).
- **20.** Quantitative Risk Assessment in Man and Mouse. NYU, Department of Psychology, Departmental Colloquium, NYC, NY, USA (Balcı, F., & Gallistel, C.R., December, 2007).
- **21.** Risk Assessment in Mice and Men. Presented at RuCCS "What is Cognitive Science?" Talk Series, Piscataway, NJ, USA (September, 2007).
- **22.** Cross-Domain Transfer of Quantitative Discriminations: Is it all a matter of proportion? Presented at RuCCS "What is Cognitive Science?" Talk Series, Piscataway, NJ, USA. (November, 2005).
- **23.** Is it all a matter of proportion? Presented at RuCCS Cognitive Forum, Piscataway, NJ, USA. (September, 2004).

## ATTENDED WORKSHOPS

- **1.** TIMELY workshop on the "Psychophysical, Computational, and Neuroscience Models of Time Perception", Groningen, Netherlands, April 4-8, 2011
- **2.** Goal-Directed Decision Making Workshop: Behavior, Neuroscience and Computation, Princeton U, Princeton, NJ, Oct 23-24 2009
- **3.** Behavioral Neurogenetics Workshop, Rutgers U, New Brunswick NJ, Nov 20-21 2008

### PROFESSIONAL ASSOCIATIONS

Member of Global Young Academy (2016-)

Society for Neuroscience (2004-)

Society for Quantitative Analysis of Behavior (2007-2008)

European Society for Cognitive Psychology (2013-)

Association for Psychological Science (2013)

## **EDITORIAL ACTIVITIES**

Co-Editor in Chief of International Journal of Comparative Psychology (2015-) Associate Editor of International Journal of Comparative Psychology (2014-2015) Fuat Balcı 11/12

Editorial Board: Timing & Time Perception (Consulting Editor), Frontiers in Comparative Psychology (Review Editor), Frontiers in Behavioral Neuroscience (Review Editor), Timing & Time Perception Reviews (Review Editor)

## OTHER PROFESSIONAL ACTIVITIES

- Director of Animal Behavioral Research Lab, Co-director of the Timing, Memory & Decision-making Lab, Co-founder and Director of the Brain Stimulation Lab
- Attendance to the Annual Meeting of the New Champions 2013, World Economic Forum (Young Scientist 2013), Dalian, China, September 11-13, 2013 (sponsored by IAP)
- Co-organizer of TIMELY School on "Timing and Time Perception: Procedures, Measures, & Applications", Corfu, Greece (4-8 February, 2013)
- Co-organizer of the Object Group: a discussion group devoted to object based attention and object individuation, NYC, NY, USA (2007-2010)
- Organization of VI. National Psychology Student Congress, Istanbul, Turkey (2001)
- Ad hoc reviewer: PNAS, Nature Communications, Neuropyschology, PloS ONE, Acta Psychologica, Behavioural Processes, Genes, Brain & Behavior, Frontiers in Integrative Neuroscience, Frontiers in Behavioral Neuroscience, Frontiers in Human Neuroscience, Biological Cybernetics, European Journal of Neuroscience, Journal of Experimental Analysis of Behavior, International Journal of Comparative Psychology, Emotion, Cognition, Cognitive Computation, Psychological Review, Cognitive Psychology, Animal Cognition, Quarterly Journal of Experiment Psychology, Learning & Memory, JEP: Human Perception and Performance, JEP: Animal Cognition, Physiology & Behavior, Cognitive Science, Studies in Natural Products Chemistry, Turkish Psychological Articles (Türk Psikoloji Yazıları), Wiley Publishers (Book Proposal, Book Chapter)
- Conference Reviewer: Measuring Behavior 2012, 18<sup>th</sup> National Psychology Congress (Turkey)
- Grant Reviewer: The Scientific and Technological Research Council of Turkey
  (TÜBİTAK 1001; 1002; 2221; Bilateral Grants), Marie Curie Fellowships
  (European Commission vice chair, rapporteur, expert for review panels), European
  Commission Future & Emerging Technologies (FET) Grant (expert, invited to serve
  as a vice-chair for review panels), European Cooperation in Science and Technology
  (COST) Trans-Domain Actions (expert, rapporteur), Netherlands Organisation for
  Scientific Research (NWO)
- Visiting Faculty, Cognitive, Linguistic & Psychological Sciences, Brown University, Providence, USA, September, 2012

### **SERVICE**

- Institutional Animal Care and Use Committee, Koc University, 2013-present
- Program Coordinator, GSSH, Koç University, June 2012-present
- Dean search committee College of Social Sciences and Humanities, Spring 2014
- Social Science Seminars Organization Committee, Koc University, 2011-2012

### **TEACHING EXPERIENCE**

Fuat Balcı 12/12

Fall, 2014	Physiological Psychology, Conditioning & Learning (Grad),
	Research Practicum (Grad)
Spring, 2014	Issues in Psychology, Independent Study (added on March
	2014)
Fall, 2013	Conditioning & Learning (Grad), Physiological Psychology
	(Grad) ( $Koc\ U$ ) – both courses were evaluated as within top 8%
	of the courses taught in Fall 2013
Spring, 2013	Research Practicum (Grad), Issues in Psychology (Koç U)
Fall, 2012	Conditioning & Learning (Grad), Physiological Psychology
	(Grad)(Koc U)
Fall, 2011	Introduction to Psychology, Psyc. Health & Stress (Koç U)
Spring, 2011	Physiology of Behavior, Issues in Psychology (Koç U)
December, 2009	Guest Lecturer, Brain and Behavior (Boğaziçi U)
Summer, 2005	Instructor, Cognition (Rutgers U)
Fall, 2004;	Instructor, Cognition Lab (Rutgers U)
Spring 2005 & 2006	Instructor, Cognition Lab (Rutgers U)
Fall, 2005	Teaching Assistant, General Psychology & Cognition (Rutgers
	U)
Spring, 2004	Guest Lecturer, Honors Conditioning & Learning (Rutgers U)

# **Graduate Student Supervision:**

## Alumni:

Bilgehan Çavdaroğlu, MA student (currently a Ph.D. student at University of Toronto, received GSSSH excellence award 2014 and Connaught international student award) Başak Akdoğan, MA student (prospective Ph.D. student, Columbia University) Filiz Çoşkun, MA student Tuğçe Tosun, MA student

## **Current:**

Hakan Karşılar, doctoral student Ceyla Erhan, doctoral student Ezgi Gür, doctoral student Yalçın Duyan, doctoral student Dilara Berkay, MA student (prospective Ph.D. student, University of Pennsylvania) Ezgi Uslu, MA student