***These two studies provided the first definitive proof of double-opponent cells in the primate. These cells are thought to be the building blocks for color constancy calculations:***

Conway BR (2001) Spatial structure of cone inputs to color cells in alert macaque primary visual cortex (V-1). ***Journal of Neuroscience*** 21(8):2768-2783 [*cover article*].

Conway BR and Livingstone MS (2006) Spatial and temporal properties of cone signals in alert macaque primary visual cortex. ***Journal of Neuroscience*** 26:10826-46 [*cover article*].

***This study resolved the long-standing controversy on the role of V4 in color perception and uncovered a new functional organization for this region of cortex:***

Conway BR, Moeller S and Tsao DY (2007) Specialized color modules in macaque extrastriate cortex ***Neuron*** 56(3):560-573 [*cover article*].

***These two studies provided the best evidence to date for a cortical representation of perceptual color dimensions (hue and saturation), and presented the first single-unit evidence for a micro organization for color ("chromotopic maps") anywhere in the cerebral cortex:***

Conway BR and Tsao DY (2009) Color-tuned neurons are clustered according to color preference in macaque extrastriate cortex. ***Proceedings of the National Academy of Science*** 106(42):18034-18039.

Zaidi Q, Marshall J, Thoen H, Conway BR (2014) Evolution of neural computations: Mantis shrimp and human colour vision. ***iperception,*** 5:492–496

***This study provided the first evidence that macaque monkeys have virtually identical psychophysical chromatic mechanisms to humans:***

Stoughton CM, Lafer-Sousa R, Gagin G, Conway BR (2012) Psychophysical chromatic mechanisms in macaque monkey. ***Journal of Neuroscience*** 32(43):15216-26

***This study presented a novel theory for the development of color and modernism in Western painting:***

Conway BR (2012) Color consilience: color through the lens of art practice, history, philosophy, and neuroscience. ***Annals of the New York Academy of Science*** (Cognitive Science Annual Issue)1251:77-94

***This study gave the first evidence that the cerebral cortex contains an explicit representation of chromatic priors build up from natural scene statistics:***

Lafer-Sousa R, Liu YO, Lafer-Sousa **L**, Wiest MC, Conway BR (2012) Color tuning in alert macaque V1 assessed with fMRI and single-unit recording shows a bias towards daylight colors. ***Journal of the Optical Society of America*** 29(5):657-70

***These two studies presented the discovery a fundamental organizing principle in Inferior Temporal Cortex (forthcoming work in collaboration with Nancy Kanwisher extends these results to humans)*:**

Lafer-Sousa R, Conway BR (2013) Parallel, multi-stage processing of colors, faces and shapes in macaque inferior temporal cortex. ***Nature Neuroscience*** 16(12):1870-8. Advanced Publication (October 2013) 10.1038/nn.3555 (recommended by F1000)

Verhoef BE, Bohon KS, Conway BR (2015) Functional architecture for disparity in macaque inferior temporal cortex and its relationship to the architecture for faces, color, scenes, and visual field***.*** ***Journal of Neuroscience*** 35:6952-6968. (selected for a forthcoming *J. Neurosci* Journal Club)

***This is a widely-cited essay that is the cornerstone for contemporary discussions of the role of neuroscience in aesthetics:***

Conway BR, Rehding A (2013) Neuroaesthetics and the trouble with beauty. ***PLoS Biology*** 11:e1001504. (see *Nature* commentary)

***This study provided the first demonstration of multistability in color perception (see news and views by Brainard and Hurlbert; coverage in the New York Times, the LA Times, BBC, The Guardian among others):***

Lafer-Sousa R, Hermann KL, Conway BR (2015) Striking individual differences in color perception uncovered by 'the dress' photograph. ***Current Biology*** 25:R545-54