

Curriculum Vitae: Paul R. Martin

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Personal details

Name: Paul Ronald Martin
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Degrees

BSc (Hons) in Physiology (1981, University of Sydney).

PhD in Physiology (1986, University of Sydney)

Current and previous appointments

Current: Professor of Experimental Ophthalmology, Save Sight Institute, University of Sydney.
2003–2009: Director of Research, National Vision Research Institute of Australia.
2003–2009: Professorial Research Fellow, Department of Optometry and Vision Sciences, The University of Melbourne.
2000–2002: Associate Professor, Department of Physiology, The University of Sydney,
1996–2000: Senior Lecturer, Department of Physiology, The University of Sydney.
1992–1996: Lecturer, Department of Physiology, University of Sydney.
1988–1991: Postdoctoral fellow, Max Planck Institute for Brain Research, Frankfurt/M, Germany.
1986–1988: Postdoctoral fellow, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany.
1986: Research assistant, Visual Neuroscience Unit, John Curtin School of Medical Research, Canberra.
1985: Lecturer and demonstrator, Sydney Technical College, Dept of Biological Sciences.
1982–1985: Part time demonstrator, Department of Physiology, University of Sydney.

Honours and awards

2022: Verreist Medal of the International Colour Vision Society
2020: Palmer Lecture and Award of the Colour Group Great Britain
2013: Lawrie Austin Lecture and Australasian Neuroscience Society Medallion.
2011: Paxinos-Watson Prize of the Australasian Neuroscience Society.
2010: Fellow of the National Vision Research Institute of Australia.
1989–1991: Max Planck Society postdoctoral research fellow.
1986–1988: Alexander von Humboldt Foundation research fellow.
1982–1985: University of Sydney Medical Foundation research scholar.

Research Publications

Summary: 103 original research papers plus 11 reviews, in international refereed journals.
Times cited to May 2023: 5,889 (Average 54.03; h-index 45, ISI data).

Original research articles in international refereed journals.

- 103 Kim YJ, Packer O, Pollreisz A, Martin PR, Grünert U, Dacey DM (2023) Comparative connectomics reveals noncanonical wiring for color vision in human foveal retina. *Proceedings of the National Academy of Sciences of the USA*, 120: e2300545120.
- 102 Ma ICK, Nasir-Ahmad S, Lee SCS, Grünert U, Martin PR (2023) Contribution of parasol-magnocellular pathway ganglion cells to foveal retina in macaque monkey. *Vision Research*, 202: 108154.
- 101 Baldicano AK, Nasir-Ahmad S, Novelli M, Lee SCS, Do MTH, Martin PR, Grünert U (2022) Retinal ganglion cells expressing CaM kinase II in human and nonhuman primates. *Journal of Comparative Neurology*, 1-24.
- 100 Nasir-Ahmad S, Vanstone KA, Novelli M, Lee SCS, Do MTH, Martin PR, Grünert U (2022) Satb1 expression in retinal ganglion cells of marmosets, macaques, and humans. *Journal of Comparative Neurology*, 530:923-940.
- 99 Hepschke JL, Martin PR, Fraser CL (2021) Short-wave sensitive (“blue”) cone activation is an aggravating factor for Visual Snow symptoms. *Frontiers in Neurology*, 12: 697923.
- 98 Eiber CD, Huang JY, Chen SC, Zeater N, Pietersen ANJ, Protti DA, Martin PR (2021) Rapid Analysis of Visual Receptive Fields by Iterative Tomography. *eNeuro*, 8: 0046-21.2021.
- 97 Masri RA, Weltzien F, Purushothuman S, Lee SCS, Martin PR, Grünert U (2021) Composition of the inner nuclear layer in human retina. *Investigative Ophthalmology and Visual Science*, 62: 22.
- 96 Liu Y, Long X, Martin PR, Solomon SG, Gong P (2021) Lévy walk dynamics explain gamma burst patterns in primate cerebral cortex. *Nature Communications Biology*, 4: 1-10.
- 95 Nasir-Ahmad S, Lee SCS, Martin PR, Grünert U (2021) Identification of retinal ganglion cell types expressing the transcription factor Satb2 in three primate species. *Journal of Comparative Neurology*, 529: 2727-2749.
- 94 Dougherty K, Carlson BM, Cox MA, Westerberg JA, Zinke W, Schmid MC, Martin PR, Maier A (2021) Binocular suppression in the macaque lateral geniculate nucleus reveals early competitive interactions between the eyes. *eNeuro*, 8: 0364-20.2020
- 93 Masri RA, Grünert U, Martin PR (2020) Analysis of Parvocellular and Magnocellular Visual Pathways in Human Retina. *Journal of Neuroscience*, 40: 8132-8148.
- 92 Munn B, Zeater N, Pietersen AN, Solomon SG, Cheong SK, Martin PR, Gong P (2020) Fractal spike dynamics and neuronal coupling in the primate visual system. *Journal of Physiology*, 598: 1551-1571.
- 91 Belluccini E, Zeater N, Pietersen ANJ, Eiber CD, Martin PR (2019) Binocular summation in marmoset lateral geniculate nucleus. *Visual Neuroscience* 36:E012.

- 90 Lee SCS, Martin PR, Grünert U (2019) Topography of Neurons in the Rod Pathway of Human Retina. *Investigative Ophthalmology and Visual Science*, 60, 2848-2859.
- 89 Nasir-Ahmad S, Lee SC, Martin PR, Grünert U (2019) Melanopsin-expressing ganglion cells in human retina: Morphology, distribution, and synaptic connections. *Journal of Comparative Neurology*, 527, 312-327.
- 88 Masri RA, Percival KA, Koizumi A, Martin PR, Grünert U (2019) Survey of retinal ganglion cell morphology in marmoset. *Journal of Comparative Neurology*, 527, 236-258.
- 87 Zeater N, Buzás P, Dreher B, Grünert U, Martin PR (2019) Projections of three subcortical visual centres to marmoset lateral geniculate nucleus. *Journal of Comparative Neurology*, 527, 535-545.
- 86 Kwan WC, Mundinano IC, de Souza MJ, Lee SCS, Martin PR, Grünert U, Bourne JA (2019) Unravelling the subcortical and retinal circuitry of the primate inferior pulvinar. *Journal of Comparative Neurology*, 527, 558-576.
- 85 Eiber CD, Rahman AS, Pietersen ANJ, Zeater N, Dreher B, Solomon SG, Martin PR (2018) Receptive field properties of koniocellular on/off neurons in the lateral geniculate nucleus of marmoset monkeys. *Journal of Neuroscience*, 38, 10384-10398.
- 84 Eiber CD, Pietersen ANJ, Zeater N, Solomon SG, Martin PR (2018) Chromatic summation and receptive field properties of blue-on and blue-off cells in marmoset lateral geniculate nucleus. *Vision Research*, 151, 41-52.
- 83 Townsend RG, Solomon SS, Martin PR, Solomon SG, Gong P (2017) Visual motion discrimination by propagating patterns in primate cerebral cortex. *Journal of Neuroscience*, 37, 10074-10084.
- 82 Pietersen ANJ, Cheong SK, Munn B, Gong P, Martin PR, Solomon SG (2017) Relationship between cortical state and spiking activity in the lateral geniculate nucleus of marmosets. *Journal of Physiology*, 595, 4475-4492.
- 81 Kóbor P, Petykó Z, Telkes I, Martin PR, Buzás P (2017) Temporal properties of colour opponent receptive fields in the cat lateral geniculate nucleus. *European Journal of Neuroscience*, 45, 1368-1378.
- 80 Masri RA, Percival KA, Koizumi A, Martin PR, Grünert U (2016) Connectivity between the OFF bipolar type DB3a and six types of ganglion cell in the marmoset retina. *Journal of Comparative Neurology*, 524, 1839-1858.
- 79 Lee SC, Weltzien F, Madigan MC, Martin PR, Grünert U (2016) Identification of AII amacrine, displaced amacrine, and bistratified ganglion cell types in human retina with antibodies against calretinin. *Journal of Comparative Neurology*, 524, 39-53.
- 78 Zeater N, Cheong SK, Solomon SG, Dreher B, Martin PR (2015) Binocular Visual Responses in Primate Lateral Geniculate Nucleus. *Current Biology*, 25, 3190-3195
- 77 FitzGibbon T, Eriköz B, Grünert U, Martin PR (2015) Analysis of the lateral geniculate nucleus in dichromatic and trichromatic marmosets. *Journal of Comparative Neurology*, 523, 1948-1966.
- 76 Townsend RG, Solomon SS, Chen SC, Pietersen AN, Martin PR, Solomon SG, Gong P (2015) Emergence of complex wave patterns in primate cerebral cortex. *Journal of Neuroscience*, 35, 4657-4662.

- 75 Weltzien F, Percival KA, Martin PR, Grünert U (2015) Analysis of bipolar and amacrine populations in marmoset retina. *Journal of Comparative Neurology*, 523, 313-334.
- 74 Pietersen AN, Cheong SK, Solomon SG, Tailby C, Martin PR (2014) Temporal response properties of koniocellular (blue-on and blue-off) cells in marmoset lateral geniculate nucleus. *Journal of Neurophysiology*, 112, 1421-1438.
- 73 Percival KA, Koizumi A, Masri RA, Buzás P, Martin PR, Grünert U (2014) Identification of a pathway from the retina to koniocellular layer K1 in the lateral geniculate nucleus of marmoset. *Journal of Neuroscience*, 34, 3821-3825.
- 72 Weltzien F, Dimarco S, Protti DA, Daraio T, Martin PR, Grünert U (2014) Characterization of secretagogin-immunoreactive amacrine cells in marmoset retina. *Journal of Comparative Neurology*, 522, 435-455.
- 71 Percival KA, Martin PR, Grünert U (2013) Organisation of koniocellular-projecting ganglion cells and diffuse bipolar cells in the primate fovea. *European Journal of Neuroscience*, 37, 1072-1089.
- 70 Jayakumar J, Roy S, Dreher B, Martin PR, Vidyasagar TR (2013) Multiple pathways carry signals from short-wavelength-sensitive ('blue') cones to the middle temporal area of the macaque. *Journal of Physiology*, 591, 339-352.
- 69 Buzás P, Kóbor P, Petykó Z, Telkes I, Martin PR, Lénárd L (2013) Receptive field properties of color opponent neurons in the cat lateral geniculate nucleus. *Journal of Neuroscience*, 33, 1451-1461.
- 68 Cheong SK, Tailby C, Solomon SG, Martin PR (2013) Cortical-like receptive fields in the lateral geniculate nucleus of marmoset monkeys. *Journal of Neuroscience*, 33: 6864-6876.
- 67 Abbott CJ, Percival KA, Martin PR, Grünert U (2012) Amacrine and bipolar inputs to midget and parasol ganglion cells in marmoset retina. *Visual Neuroscience*, 29, 157-168.
- 66 Tailby C, Cheong SK, Pietersen AN, Solomon SG, Martin PR (2012) Colour and pattern selectivity of receptive fields in superior colliculus of marmoset monkeys. *Journal of Physiology*, 590, 4061-4077.
- 65 Cheong SK, Tailby C, Martin PR, Levitt JB, Solomon SG (2011) Slow intrinsic rhythm in the koniocellular visual pathway. *Proceedings of the National Academy of Sciences of the USA*, 108, 14659-14663.
- 64 Percival KA, Martin PR, Grünert U (2011) Synaptic inputs to two types of koniocellular pathway ganglion cells in marmoset retina. *Journal of Comparative Neurology*, 519, 2135-2153.
- 63 Martin PR, Blessing EM, Buzás P, Szmajda BA, Forte JD (2011) Transmission of colour and acuity signals by parvocellular cells in marmoset monkeys. *Journal of Physiology*, 589, 2795-2812.
- 62 Tailby C, Dobbie WJ, Hashemi-Nezhad M, Forte JD, Martin PR (2010) Receptive field asymmetries produce color-dependent direction selectivity in primate lateral geniculate nucleus. *Journal of Vision*, 10, 1-18.
- 60 Percival KA, Jusuf PR, Martin PR, Grünert U (2009) Synaptic inputs onto small bistratified (blue-ON/yellow-OFF) ganglion cells in marmoset retina. *Journal of Comparative Neurology*, 517, 655-669

- 59 Tailby C, Szmajda BA, Buzás P, Lee BB, Martin PR (2008) Transmission of blue (S) cone signals through the primate lateral geniculate nucleus. *Journal of Physiology*, 585, 5947-5967.
- 58 Buzás P, Szmajda BA, Hashemi-Nezhad M, Dreher B, Martin PR (2008) Color signals in the primary visual cortex of marmosets. *Journal of Vision*, 8, 1-16.
- 57 Hashemi-Nezhad M, Blessing EM, Dreher B, Martin PR (2008) Segregation of short-wavelength sensitive (“blue”) cone signals among neurons in the lateral geniculate nucleus and striate cortex of marmosets. *Vision Research*, 48, 2604-2614.
- 56 Szmajda BA, Grünert U, Martin PR (2008) Retinal ganglion cell inputs to the koniocellular pathway. *Journal of Comparative Neurology*, 510: 251-268.
- 55 Fitzgibbon T, Szmajda BA, Martin PR (2007) First order connections of the visual sector of the thalamic reticular nucleus in marmoset monkeys (*Callithrix jacchus*). *Visual Neuroscience*, 24: 857-874.
- 54 Victor JD, Blessing EM, Forte J, Buzás P, Martin PR (2007) Response variability of marmoset parvocellular neurons. *Journal of Physiology*, 579, 29-51.
- 53 Szmajda BA, Buzás P, FitzGibbon T, Martin PR (2006) Geniculocortical relay of blue-off signals in the primate visual system. *Proceedings of the National Academy of Sciences of the USA*, 103, 19512-19517.
- 52 Buzás P, Blessing EM, Szmajda BA, Martin PR (2006) Specificity of M and L cone inputs to receptive fields in the parvocellular pathway: random wiring with functional bias. *Journal of Neuroscience*, 26, 11148-11161.
- 51 Jusuf PR, Martin PR, Grünert U (2006) Random wiring in the midget pathway of primate retina. *Journal of Neuroscience*, 26, 3908-3917.
- 50 Forte J, Blessing EM, Buzás P, Martin PR (2006) Contribution of chromatic aberrations to color signals in the primate visual system. *Journal of Vision*, 6, 97-105.
- 49 Szmajda BA, Grünert U, Martin PR (2005) Mosaic properties of midget and parasol ganglion cells in the marmoset retina. *Visual Neuroscience*, 22, 395-404.
- 48 Jusuf PR, Martin PR, Grünert U (2005) Synaptic connectivity in the midget-parvocellular pathway of primate retina. *Journal of Comparative Neurology*, 494, 260-274.
- 47 Forte JD, Hashemi-Nezhad M, Dobbie WJ, Dreher B, Martin PR (2005) Spatial coding and response redundancy in parallel visual pathways of the marmoset *Callithrix jacchus*. *Visual Neuroscience*, 22, 479-491.
- 46 Solomon SG, Lee BB, White AJ, Rüttiger L, Martin PR (2005) Chromatic organization of ganglion cell receptive fields in the peripheral retina. *Journal of Neuroscience*, 25, 4527-4539.
- 45 Blessing EM, Solomon SG, Hashemi-Nezhad M, Morris BJ, Martin PR (2004) Chromatic and spatial properties of parvocellular cells in the lateral geniculate nucleus of the marmoset (*Callithrix jacchus*). *Journal of Physiology*, 557, 229-245.
- 44 Grünert U, Lin B, Martin PR (2003) Glutamate receptors at bipolar synapses in the inner plexiform layer of primate retina: light microscopic analysis. *Journal of Comparative Neurology*, 466, 136-47.

- 43 Clifford CWG, Solomon SG, Zaidi Q, Martin PR, Spehar B (2003) Interactions between colour and luminance in the perception of orientation. *Journal of Vision*, 2, 106-115.
- 42 Solomon SG, White AJR, Martin PR (2002) Extraclassical receptive field properties of parvocellular, magnocellular and koniocellular cells in the primate lateral geniculate nucleus. *Journal of Neuroscience*, 22, 338-349.
- 41 Solomon SG, Martin PR, White AJR, Rüttiger L, Lee BB (2002) Modulation sensitivity of ganglion cells in peripheral retina of macaque. *Vision Research*, 42, 2893-2898.
- 40 Lin B, Martin PR, Grünert U (2002) Expression and distribution of ionotropic glutamate receptor subunits on parasol ganglion cells in the primate retina. *Visual Neuroscience*, 19, 453-465.
- 39 White AJR, Solomon SG, Martin PR (2001) Spatial properties of koniocellular cells in the lateral geniculate nucleus of the marmoset *Callithrix jacchus*. *Journal of Physiology*, 533, 519-535.
- 38 Martin PR, Lee BB, White AJR, Solomon SG, Rüttiger L (2001) Chromatic sensitivity of ganglion cells in the peripheral primate retina. *Nature*, 410, 933-936.
- 37 Chan TL, Martin PR, Grünert U (2001) Immunocytochemical identification and analysis of the diffuse bipolar cell type DB6 in macaque monkey retina. *European Journal of Neuroscience*, 13, 829-832.
- 36 Chan TL, Martin PR, Clunas N, Grünert U (2001) Bipolar cell diversity in the primate retina: Morphologic and immunocytochemical analysis of a New World monkey, the marmoset *Callithrix jacchus*. *Journal of Comparative Neurology*, 437, 219-239.
- 35 Martin PR, Grünert U, Chan TL, Bumsted K (2000) Spatial order in short-wavelength-sensitive cone photoreceptors: a comparative study of the primate retina. *Journal of the Optical Society of America*, 17, 557-567.
- 34 Macri J, Martin PR, Grünert U (2000) Distribution of the $\alpha 1$ subunit of the GABA_A receptor on midget and parasol ganglion cells in the retina of the common marmoset (*Callithrix jacchus*). *Visual Neuroscience*, 17, 437-448.
- 33 Lin B, Martin PR, Solomon SG, Grünert U (2000) Distribution of glycine receptor subunits on primate retinal ganglion cells: a quantitative analysis. *European Journal of Neuroscience*, 12, 4155-4170.
- 32 Lee BB, Silveira LCL, Yamada ES, Hunt DM, Kremers J, Martin PR, Troy JB, da Silva M (2000) Visual responses of ganglion cells of a New-World primate, the capuchin monkey, *Cebus apella*. *Journal of Physiology*, 528, 573-590.
- 31 Solomon SG, White AJR, Martin PR (1999) Temporal contrast sensitivity in the lateral geniculate nucleus of a New World monkey, the marmoset *Callithrix jacchus*. *Journal of Physiology*, 517, 907-917.
- 30 Silveira LC, Lee BB, Yamada ES, Kremers J, Hunt DM, Martin PR, Gomes F (1999) Ganglion cells of a short wavelength sensitive cone pathway in New World monkeys: morphology and physiology. *Visual Neuroscience*, 16, 333-343.
- 29 Martin PR, Grünert U (1999) Analysis of the short wavelength sensitive ("blue") cone mosaic in the primate retina: a comparison of New World and Old World monkeys. *Journal of Comparative Neurology*, 406, 1-14.

- 28 Luo X, Ghosh KK, Martin PR, Grünert U (1999) Analysis of two types of cone bipolar cells in the retina of a New World monkey, the marmoset, *Callithrix jacchus*. *Visual Neuroscience*, 16, 707-719.
- 27 White AJR, Goodchild AK, Wilder HD, Sefton AE, Martin PR (1998) Segregation of receptive field properties in the lateral geniculate nucleus of a New-World monkey, the marmoset *Callithrix jacchus*. *Journal of Neurophysiology*, 80, 2063-2076.
- 26 Goodchild AK, Martin PR (1998) The distribution of calcium binding proteins in the lateral geniculate nucleus and visual cortex of a New World monkey, the marmoset *Callithrix jacchus*. *Visual Neuroscience*, 15, 625-642.
- 25 Martin PR, White AJR, Goodchild AK, Wilder HD, Sefton AE (1997) Evidence that blue-on cells are part of the third geniculocortical pathway in primates. *European Journal of Neuroscience*, 9, 1536-1541.
- 24 Ghosh KK, Martin PR, Grünert U (1997) Morphological analysis of the blue cone pathway in the retina of a New World monkey, the marmoset *Callithrix jacchus*. *Journal of Comparative Neurology*, 379, 211-225.
- 23 Chan TL, Goodchild AK, Martin PR (1997) The morphology and distribution of horizontal cells in the retina of a New World monkey, the marmoset *Callithrix jacchus*: a comparison with macaque monkey. *Visual Neuroscience*, 14, 125-140.
- 22 Wilder HD, Grünert U, Lee BB, Martin PR (1996) Topography of ganglion cells and photoreceptors in the retina of a New World monkey: the marmoset *Callithrix jacchus*. *Visual Neuroscience*, 13, 335-352.
- 21 Goodchild AK, Ghosh KK, Martin PR (1996) Comparison of photoreceptor spatial density and ganglion cell morphology in the retina of human, macaque monkey, cat, and the marmoset *Callithrix jacchus*. *Journal of Comparative Neurology*, 366, 55-75.
- 20 Ghosh KK, Goodchild AK, Sefton AE, Martin PR (1996) Morphology of retinal ganglion cells in a New World monkey, the marmoset *Callithrix jacchus*. *Journal of Comparative Neurology*, 366, 76-92.
- 19 Chun M-H, Grünert U, Martin PR, Wässle H (1996) The synaptic complex of cones in the fovea and in the periphery of the macaque monkey retina. *Vision Research*, 36, 3383-3395.
- 18 Yeh T, Lee BB, Kremers J, Cowing JA, Hunt DM, Martin PR, Troy JB (1995) Visual responses in the lateral geniculate nucleus of dichromatic and trichromatic marmosets (*Callithrix jacchus*). *Journal of Neuroscience*, 15, 7892-7904.
- 17 Wässle H, Grünert U, Martin PR, Boycott BB (1994) Immunocytochemical characterization and spatial distribution of midgen bipolar cells in the macaque monkey retina. *Vision Research*, 34, 561-579.
- 16 Grünert U, Martin PR, Wässle H (1994) Immunocytochemical analysis of bipolar cells in the macaque monkey retina. *Journal of Comparative Neurology*, 348, 607-627.
- 15 Lee BB, Martin PR, Valberg A, Kremers J (1993) Physiological mechanisms underlying psychophysical sensitivity to combined luminance and chromatic modulation. *Journal of the Optical Society of America A*, 10, 1403-1412.
- 14 Smith VC, Lee BB, Pokorny J, Martin PR, Valberg A (1992) Responses of macaque ganglion cells to the relative phase of heterochromatically modulated lights. *Journal of Physiology*, 458, 191-221.

- 13 Martin PR, Grünert U (1992) Spatial density and immunoreactivity of bipolar cells in the macaque monkey retina. *Journal of Comparative Neurology*, 323, 269-287.
- 12 Grünert U, Martin PR (1991) Rod bipolar cells in the macaque monkey retina: Immunoreactivity and connectivity. *Journal of Neuroscience*, 11, 2742-2758.
- 11 Lee BB, Pokorny J, Smith VC, Martin PR, Valberg A (1990) Luminance and chromatic modulation sensitivity of macaque ganglion cells and human observers. *Journal of the Optical Society of America A*, 7, 2223-2236.
- 10 Kaiser PK, Lee BB, Martin PR, Valberg A (1990) The physiological basis of the minimally distinct border demonstrated in the ganglion cells of the macaque retina. *Journal of Physiology*, 422, 153-183.
- 9 Lee BB, Martin PR, Valberg A (1989) Amplitude and phase of responses of macaque retinal ganglion cells to flickering stimuli. *Journal of Physiology*, 414, 245-263.
- 8 Lee BB, Martin PR, Valberg A (1989) Sensitivity of macaque retinal ganglion cells to chromatic and luminance flicker. *Journal of Physiology*, 414, 223-243.
- 7 Lee BB, Martin PR, Valberg A (1989) Nonlinear summation of M- and L-cone inputs to phasic retinal ganglion cells of the macaque. *Journal of Neuroscience*, 9, 1433-1442.
- 6 Lee BB, Martin PR, Valberg A (1988) The physiological basis of heterochromatic flicker photometry demonstrated in the ganglion cells of the macaque retina. *Journal of Physiology*, 404, 323-347.
- 5 Martin PR (1986) The projection of different retinal ganglion cell classes to the dorsal lateral geniculate nucleus in the hooded rat. *Experimental Brain Research*, 62, 77-88.
- 4 Burke W, Burne J, Martin PR (1985) Selective block of Y optic nerve fibres in the cat and the occurrence of inhibition in the lateral geniculate nucleus. *Journal of Physiology*, 364, 81-92.
- 3 Sefton AJ, Martin PR (1984) Relation of the parabigeminal nucleus to the superior colliculus and dorsal lateral geniculate nucleus in the hooded rat. *Experimental Brain Research*, 56, 144-148.
- 2 Martin PR, Sefton AJ, Dreher B (1983) The retinal location and fate of ganglion cells projecting to the superior colliculus in neonatal albino and hooded rats. *Neuroscience Letters*, 41, 219-226.
- 1 Mackay-Sim A, Sefton AJ, Martin PR (1983) Subcortical projections to lateral geniculate and thalamic reticular nuclei in the hooded rat. *Journal of Comparative Neurology*, 213, 24-35.

Refereed review articles in international journals.

- 11 Martin PR (2023) The Verriest Lecture: Pathways to color in the eye and brain (Review). *Journal of the Optical Society of America A*, 40: V1-V10.
- 10 Fritzsche B, Martin PR (2022) Vision and retina evolution: How to develop a retina (Review). *IBRO Neuroscience Reports*, 12: 240-248.
- 9 Grünert U, Martin PR (2021) Morphology, Molecular Characterization, and Connections of Ganglion Cells in Primate Retina (Review). *Annual Review of Vision Science*, 7: 73-103.

- 8 Grünert U, Martin PR (2020) Cell types and cell circuits in human and non-human primate retina (Review). *Progress in Retinal and Eye Research*, 100844: 1-33
- 7 Shevell SK, Martin PR (2017) Color opponency: Tutorial. *Journal of the Optical Society of America A, Optics and Image Science*, 34, 1099-1108.
- 6 Martin PR, Lee BB (2014) Distribution and specificity of S-cone ("blue cone") signals in subcortical visual pathways. (Review). *Visual Neuroscience*, 31, 177-187.
- 5 Lee BB, Martin PR, Grünert U (2010) Retinal connectivity and primate vision. (Review). *Progress in Retinal and Eye Research*, 29, 622-639.
- 4 Masland RH, Martin PR (2007) The unsolved mystery of vision (Essay/Review). *Current Biology*, 17, R577-582.
- 3 Martin PR (2004) Colour through the thalamus (Review). *Clinical and Experimental Optometry*, 87, 249-257.
- 2 Martin PR, Grünert U, Chan TL, Ghosh KK (2001) Retinal pathways for colour vision: Studies of short-wavelength sensitive ("blue") cones and their connections in primate retina (Review). *Color Research and Application*, 26, 112-117.
- 1 Martin PR (1998) Colour processing in the primate retina: recent progress (Review). *Journal of Physiology*, 513, 631-638.

Refereed conference proceedings and book chapters

- 16 Martin PR, Fritzsche B (2022) Vision and retina information processing: from opsins to the visual cortex. In: B Fritzsche, K Elliot (Eds.), *Evolution of Neurosensory Cells and Systems*. Baton Rouge: CRC Press. pp. 62-88.
- 15 Martin PR (2013) Explainer: What is colour blindness? (Lonsdale M et al., eds) Clayton: CSIRO Publishing. pp. 51-53
- 14 Sefton AJ, Dreher B, Harvey AR, Martin PR. (2015) Visual System. Chapter 30. In: Paxinos G, editor. *The rat nervous system*. San Diego: Elsevier Academic Press. pp. 947-983
- 13 Martin PR, Solomon SG (2013) Spike timing in the early stages of visual processing. In: *Spike Timing: Mechanisms and Function* (DiLorenzo P, Victor JD, eds), pp. 343-373. New York: Taylor & Francis.
- 12 Martin PR, Grünert U (2013) Colour signals in retina and lateral geniculate nucleus of marmoset monkeys (review). *Psychology and Neuroscience*, 6, 151-163
- 11 Martin PR, Grünert U, Lee SCS, Szmajda BA (2009) Eye and Brain Pathways for Colour Vision (review). *Proceedings of the 11th Congress of the International Colour Association (AIC 2009)*, Colour society of Australia, Sydney.
- 10 Martin PR (2008) Retinal Colour Vision in Primates. In Binder MD, Hirokawa N, Windhorst U, Hirsch MC, (eds): *Encyclopedia of Neuroscience*. Heidelberg: Springer Verlag.
- 9 Kremers J, Kaas JH, Martin PR, Solomon SG (2005) The lateral geniculate nucleus. In Kremers J, (ed): *The Primate Visual System: a Comparative Approach*. Hoboken: John Wiley and Sons Ltd, pp. 161-190.

- 8 Silveira LCL, Grünert U, Kremers J, Lee BB, Martin PR (2005) Comparative anatomy and physiology of the primate retina. In Kremers J, (ed): *The Primate Visual System: a Comparative Approach*. Hoboken: John Wiley and Sons Ltd, pp. 127-160.
- 7 Martin PR, Grünert U (2003) Chapter 26. Ganglion cells in mammalian retina. In Chalupa LM, Werner JS (eds): *The Visual Neurosciences*. Cambridge, MA.: The MIT press, pp. 410-421.
- 6 Martin PR (1997) Parallel Pathways for Colour Vision: Anatomy and Physiology. *Curr Tr Neurosci (Seoul)*, 5, 189-199.
- 5 Liu N, Yan H, Martin PR (1996) Segmentation of map image using opponent color dimensions. *Color Research and Application*, 21, 115-120.
- 4 Wässle H, Grünert U, Martin PR, Boycott BB (1994) Color coding in the primate retina: predictions and constraints from anatomy. In Albowitz, B., K. Albus, U. Kuhnt, H.C. Nothdurft, and P. Wahle (eds): *Structural and Functional Organization of the Neocortex. A Symposium in the Memory of Otto D. Creutzfeldt*. Berlin, Heidelberg, New York: Springer, pp. 94-104.
- 3 Martin PR, Grünert U (1991) Density of bipolar cells in the macaque monkey retina. In Valberg, A., and Lee BB (eds): *From Pigments to Perception: Advances in Understanding Visual Processes*, NATO Advanced Science Institute Series A. New York: Plenum, pp. 73-78.
- 2 Lee BB, Martin PR (1987) Chromatic and luminance channels in the primate visual pathway. In Kulikowski, JJ, CM Dickinson, and IJ Murray (eds): *Seeing Contour and Colour, Proceedings of the Third International Symposium of the Northern Eye Institute*. Oxford: Pergamon, pp. 54-56.
- 1 Lee BB, Martin PR (1987) The physiological basis of the luminosity function. *Die Farbe*, 34, 109-115.

Edited Book

Fritsch B, Martin PR (2020) *The Senses: A Comprehensive Reference (Second Edition)*, Volume 1. Vision. Oxford: Elsevier.

Editorial and other outputs

- 13 Martin PR (2023) Neurons share an intense load. *Science*, 379: 335-336.
- 12 Martin PR (2020). Overview of Volume 1, Vision. In: Fritsch B, Martin PR (2020) *The Senses: A Comprehensive Reference (Second Edition)*. Oxford: Elsevier. 1-3.
- 11 Martin PR, Solomon SG (2019) The koniocellular whiteboard (Commentary) *Journal of Comparative Neurology*, 527, 505-507
- 10 Conway BR, Eskew RT, Martin PR, Stockman A (2018) A tour of contemporary color vision research. *Vision Research* 151, 2-6.
- 9 Conway BR, Eskew RT, Martin PR, Stockman A (2018) Editorial: Vision Research Special Issue, "Color: Cone Opponency and Beyond". *Vision Research* 151:1.
- 8 Martin PR (2018) Curious kids: why are people colour blind? <https://theconversation.com/curious-kids-why-are-people-colour-blind-107599>
- 7 Martin PR (2014) Neuroscience: Who needs a parasol at night? (Dispatch) *Current Biology*, 24, R1164-1166

- 6 Marshak DW, Martin PR (2014) Short wavelength-sensitive cones and the processing of their signals (Introduction). *Visual Neuroscience*, 31, 111-113.
- 5 Martin PR. (2012) Explainer: what is colour blindness?
<http://theconversation.edu.au>
- 4 Shevell SK, Hood DC, Martin PR, Morrone MC, Levi DM (2011) 50th Anniversary special issue of Vision Research (second of two volumes). *Vision Research*, 51(13), 1377-1378.
- 3 Martin PR, Forsythe ID (2011) The Journal of Physiology Century Citation Club. *Journal of Physiology*, 589(9), 2105.
- 2 Shevell SK, Hood DC, Martin PR, Morrone MC, Levi DM (2011) 50th Anniversary special issue of Vision Research (first of two volumes). *Vision Research*, 51(7), 601-602.
- 1 Martin PR, Solomon SG (2011) Information processing in the primate visual system. *Journal of Physiology*, 589, 229-31

Mentoring and Supervision

Postdoctoral trainees

- 1 Ann K Goodchild (now Associate Professor and academic research group leader, The Australian School of Advanced Medicine, Macquarie University)
- 2 Samuel G Solomon (now Professor and Head of Department, University College London)
- 3 Jason Forte (now level C tenured academic, Department of Psychology, University of Melbourne)
- 4 Péter Buzás (now level D tenured academic, University of Pécs, Hungary)
- 5 Chris Tailby (now clinical level C academic / clinical neuropsychologist, Florey Institute, University of Melbourne)
- 6 Patricia R Jusuf (now level C tenured academic, University of Melbourne)
- 7 Alexander NJ Pietersen (now Senior Developer at the Voice Project, Sydney)
- 8 Spencer C Chen (now postdoctoral fellow, Rutgers University, USA)
- 9 Selina S Solomon (now data scientist at Growth Intelligence, Melbourne)
- 10 Calvin D Eiber (now Senior Engineer at Synchron Advanced Technologies, Melbourne)
- 11 Natalie Zeater (current postdoctoral trainee)

Honours / PhD trainees

- 1) Martin Cullen (now specialist physician and intensive care specialist)
BSc (Hons) student, 1992. Result: 2nd Class, first division
- 2) Krishna K. Ghosh (now physician in general practice)
BSc (Hons), 1993. Result: 1st Class, Colin Dunlop prize
Ph. D. 1994-1998, ANS student presentation prize, 1996.
Degree awarded: Dec 1998.
- 3) Heath D. Wilder (now pursuing a successful acting and entertainment career)

- BSc (Hons) student, 1993. Result: second Class, first division.
MSc candidate 1994-1996.
- 4) Tricia L. Chan (now specialist Ophthalmologist in private practice)
BSc (Hons) student, 1994. Result: second Class, first division
Ph. D. (F/T 1995-1997; 2000; P/T 2001) (co-supervised with U. Grünert).
Degree awarded Mar 2002.
- 5) Andrew J.R. White (now specialist Ophthalmologist / clinical Associate Professor at University of Sydney, Westmead)
BMedSci (Hons) student, 1995. Result: first Class, Colin Dunlop prize, MBBS/PhD candidate (1997-2003). Degree awarded 2003.
- 6) Nathan Clunas. (now global medical affairs director at Novartis)
BAppSci Orthoptic (Hons) student, 1997. Result: first Class, Orthoptic society of NSW student prize.
- 7) Samuel G. Solomon (now Professor of Experimental Psychology and Head of Department, University College London)
PhD (1997-2001). Bercovici Prize 2000.
Degree awarded November 2001.
- 8) Joseph Macri (now an Optometrist in private practice)
(co-supervised with U. Grünert)
BSc (Hons) student, 1998. Result: second Class, first division.
- 9) Bin Lin (now Associate Professor, research and teaching academic at Hong Kong Polytechnic University)
Ph. D. (June 1998-July 2001). Degree awarded Mar 2002
OPRS/OPA (1998-2001)
- 10) Maziar Hashemi-Nezhad (formally a senior postdoctoral researcher at University of California, Irvine).
(co-supervised with B. Dreher)
PhD candidate, 2001–2006. Degree awarded 2006
- 11) Esther Blessing (now Assistant professor in department of Psychiatry, New York University)
(co-supervised with B. Morris)
BSc (Hons) student, 2001. Result: first Class.
PhD (2002–2006) Degree awarded Dec 2006
APA 2002–2005
Kialoa Neuroscience Colloquium student presentation prize (2002)
- 12) Patricia Jusuf (now Senior Lecturer in department of Genetics, University of Melbourne)
(co-supervised with U. Grünert)
BSc (Hons) student, 2001. Result: first Class, University Medal, Colin Dunlop Prize.
Ph. D. (2002–2005) Degree awarded Dec 2005.
APA 2002–2005
ANS student presentation prize, 2002.
CJ Martin Fellowship, 2007.
- 13) Will Dobbie (now a software engineer at Apple Inc).
BSc (Hons) student, 2002. Result: First Class.
- 14) Sammy Lee (formerly a senior postdoctoral research fellow at Save Sight Institute)
(co-supervised with U. Grünert)
BSc (Hons) student, 2002. Result: First Class.
PhD (2003-2007) Degree awarded Jul 2007.

- 15) Brett Szmadja (now research support manager at Faculty of Medicine, University of New South Wales, Sydney).
(co-supervised with U. Grünert)
BSc (Hons) student, 2002. Result: First Class.
PhD (2003 – 2007) Degree awarded Mar. 2007
- 16) Bahar Eriköz (now Optometrist in private practice)
(co-supervised with U. Grünert)
BSc (Hons) student, 2005. Result: Second Class, First Division.
Master of Science (2006-2009) Degree awarded Aug. 2009
- 17) Sujata Roy (now Optometrist in private practice)
(co-supervised with T. Vidyasagar)
PhD (2005-2009). Degree awarded Dec. 2009
- 18) Kumiko Percival (formerly Project Manager with Novartis, Portland OR, USA)
(co-supervised with U. Grünert)
BSc (Hons) student, 2006. Result: First Class
PhD (2007–2010). Degree awarded July 2010
- 19) Kenny Cheong (formerly postdoctoral research fellow, Department of Ophthalmology, Stanford University)
(co-supervised with S.G. Solomon)
BSc (Hons) student, 2007. Result: First Class, Deans Merit List.
Ph. D. (2008–2012) Degree awarded Dec 2012
APA (2008–2011)
- 20) Selina Solomon (formerly postdoctoral research fellow, Albert Einstein College of Medicine, New York)
(co-supervised with S.G. Solomon [no relation])
Ph. D. (2011–2014) Degree awarded Jul 2015
- 21) Natalie Zeater (formerly postdoctoral research fellow at Save Sight Institute)
(co-supervised with B. Dreher)
PhD (2012-2015). Degree awarded September 2016
APA (2012-2015)
- 22) Rania Masri (formerly postdoctoral research fellow at Save Sight Institute)
(co-supervised with U Grünert)
BSc (Hons) student, 2016. Result: First Class, Thesis commendation award.
Ph. D. (2016–2019) Degree awarded Dec 2019
APA (2016-2018)
- 23) Abrar Rahman
BSc (Hons) student, 2015. Result: First Class.
- 24) Angus Begg
BSc (Hons) student, 2016. Result: First Class
- 25) Elissa Belluccini
BSc (Hons) student, 2018. Result: First Class
- 26) Mohammad Nasir Uddin (now postdoctoral fellow at University of Canberra)
(co-supervised with T Chan-Ling)
PhD (2020–2022). Degree awarded March 2022

Scientific profile

National presentations : 1994–

Jan 1994	Visual processing symposium, ANS meeting, Sydney.
Apr 1994	University of Newcastle.
Oct 1994	Anderson Stuart Seminar series, University of Sydney.
Mar 1995	Garvan Institute, Sydney.
Jan 1997	Boden Conference, Thredbo.
Mar 1997	School of Chemistry, University of Sydney.
Jun 1997	Institute for Biomedical Research Symposium, Sydney
Jul 1998	Australian National University, Canberra.
Aug 1998	University of Newcastle, Newcastle.
Oct 1998	Sensory symposium, FAOPS/FAONS, Brisbane.
Jan 1999	John Curtin School of Medical Research, Canberra.
May 2000	Department of Optometry, University of Melbourne.
Apr 2002	Prince of Wales Medical Research Institute.
Sep 2002	Anderson Stuart Seminar series, University of Sydney
Mar 2003	Vision, Touch and Hearing Research Centre, University of Queensland, Brisbane.
Apr 2003	Department of Anatomy and Cell Biology, University of Melbourne
May 2003	Howard Florey Institute, Melbourne
Jun 2003	Institute for Biomedical Research 2003 Symposium, The University of Sydney, Sydney.
Jul 2003	Victorian College of Optometry Technical Meeting, Melbourne.
Aug 2003	Inaugural Scientific Symposium of the Monash Centre for Neuroscience and Behaviour, Melbourne.
Nov 2003	Australian Optometry and Vision Sciences Meeting Symposium, The University of Melbourne, Melbourne.
Jun 2004	Department of Physiology, The University of Adelaide, Adelaide.
Nov 2004	Lions Eye Institute & Department of Zoology, The University of West Australia, Perth.
Apr 2005	Australasian Course in Advanced Neuroscience, Stradbroke Island.
Apr 2006	Australasian Course in Advanced Neuroscience, Stradbroke Island.
Jul 2006	Department of Physiology, Monash University.
Nov 2006	Queensland Brain Institute, Brisbane.
Dec 2006	Australian Optometry and Vision Sciences Meeting Symposium, The Australian National University, Canberra.
Jul 2007	International Brain Research Organization (IBRO) World Congress of Neuroscience. Symposium Presentation.
Jul 2007	Department of Physiology, University of Melbourne.
Oct 2007	Third Frank and Bobbie Fenner Conference, Australian National University, Canberra.
Nov 2007	School of Biomedical Sciences, University of Newcastle, Newcastle.
Dec 2007	ARC Centre of Excellence in Vision Science Plenary Lecture, Australian Optometry and Vision Sciences Meeting Symposium, The Australian National University, Canberra.
May 2008	Australasian Course in Advanced Neuroscience, Stradbroke Island.
Jul 2008	Invited symposium presentation, Asia Pacific Conference on Vision, Brisbane.

Jan 2009	Invited symposium presentation, Australian Neuroscience Society satellite meeting "Vision: From Photoreceptors to Behaviour", Australian National University, Canberra.
Jun 2009	Howard Florey Institute, Melbourne
Jul 2009	Signals and Systems Colloquium, Department of Electronic Engineering, University of Melbourne
Oct 2009	John Curtin School of Medical Research, Canberra.
April 2011	Australian Course in Advanced Neuroscience, Stradbroke Island, Queensland.
Feb 2012	Centre for integrated research and understanding of sleep (CIRUS), Sydney
April 2012	Australian Course in Advanced Neuroscience, Stradbroke Island, Queensland
April 2012	Department of Physiology and Pharmacology, University of New South Wales.
Jan 2013	Lawrie Austin Plenary Lecture, Australian Neuroscience Society Meeting, Melbourne.
Feb 2013	Australian Neuroscience Society Satellite Meeting, University of Melbourne
May 2013	Australian Course in Advanced Neuroscience, Stradbroke Island, Queensland.
Mar 2014	Anderson Stuart Series Lecture, University of Sydney.
Apr 2014	Australian Course in Advanced Neuroscience, Stradbroke Island, Queensland.
Mar 2015	Eccles Neuroscience Institute, Australian National University, Canberra
Apr 2015	Australian Course in Advanced Neuroscience, Stradbroke Island, Queensland.
Dec 2015	Plenary Lecture, Sensory Neuroscience Symposium, University of Western Sydney.
Jun 2016	Vaegan Lecture, Department of Optometry and Vision Science, University of New South Wales
Jan 2019	Australian Color Society, Sydney.

International symposia and invited lectures: 1994–

- 1) Jun 1994 Invited symposium presentation, Federation of American societies for Experimental Biology, Vermont, USA.
- 2) May 1995 Invited lecture, University of Tübingen, Germany
- 3) May 1995 Invited lecture, Institute of Ophthalmology, London, England.
- 4) Sep 1995 Invited symposium presentation, American Optical Society (AOS), Portland, USA.
- 5) Sep 1995 Invited lecture, University of Washington, Seattle, USA
- 6) Sep 1995 Invited lecture, University of California, San Diego, USA
- 7) May 1996 Invited lecture, University of California, Santa Barbara, USA
- 8) Jun 1997 Invited lecture, Catholic University of Seoul, Seoul, Korea
- 9) Jun 1997 Invited symposium presentation, Korean Neuroscience Society, Seoul, Korea
- 10) Oct 1997 Invited lecture, Federal University of Pará, Belem, Brazil
- 11) Apr 1998 Invited symposium presentation, "Neurology of Vision" Meeting, Tübingen, Germany.

- 12) Jun 1999 Invited lecture, Department of Neurobiology, Ruhr University, Bochum, Germany
- 13) Jul 1999 Invited keynote lecture, International Colour Vision Society Meeting, Göttingen, Germany
- 14) Nov 1999 Invited lecture, Centre for Visual Science, New York University, New York USA
- 15) Nov 1999 Invited lecture, City College of New York, New York, USA.
- 16) Nov 1999 Invited lecture, Vanderbilt University, Nashville, USA.
- 17) Apr 2001 Invited lecture, Max-Planck-Institute for Brain Research, Frankfurt, Germany.
- 18) May 2001 Invited lecture, SUNY college of Optometry, New York, USA.
- 19) Jun 2002 Invited symposium presentation, Federation of American societies for Experimental Biology, Vermont, USA.
- 20) Jun 2002 Invited lecture, SUNY college of Optometry, New York, USA.
- 21) Nov 2002 Invited symposium presentation, American Neuroscience Society Meeting, Orlando, USA.
- 22) Nov 2002 Invited lecture, Salk Institute, San Diego, USA.
- 23) Jun 2003 Invited lecture, Department of Neurobiology, Ruhr University, Bochum, Germany.
- 24) Jul 2003 Invited symposium presentation, "Primavision" Meeting, Tübingen, Germany.
- 25) May 2004 University of Auckland Colour Vision Symposium, Auckland, New Zealand.
- 26) Nov 2004 Invited lecture, Institute of Ophthalmology, University College London, England
- 27) Nov 2004 Invited lecture, Department of Psychology & Craik Club, Cambridge University
- 28) Nov 2004 Invited symposium presentation, "Dynamics and Plasticity of Sensory Systems Function" meeting, Bochum, Germany.
- 29) Oct 2005 Invited lecture, Department of Biological Structure, University of Washington, Seattle, USA
- 30) Oct 2005 Invited lecture, Department of Cell Biology, Neurobiology and Anatomy, Medical College of Wisconsin, Milwaukee, USA
- 31) Oct 2005 Invited symposium presentation, "Fall Vision" Meeting of the Optical Society of America, Tucson, USA
- 32) Oct 2005 Invited lecture, Neurological Sciences Institute, Oregon Health & Science University, Portland, USA
- 33) Oct 2006 Invited lecture, Department of Ophthalmology, University of Erlangen, Germany.
- 34) Sep 2007 Invited lecture, Department of Neurobiology, Harvard Medical School, Boston, USA
- 35) Sep 2007 Invited lecture, Department of Ophthalmology, Northwestern University, Chicago, USA
- 36) Sep 2007 Invited Symposium Presentation, "Receptors, Retina and Color" meeting, Chicago, USA
- 37) Oct 2008 Invited lecture, Department of Psychology and Neuroscience Institute, University of California at Santa Barbara, USA.
- 38) Oct 2008 Invited oral presentation, OSA Vision meeting ("Fall vision"), Rochester, USA

- 39) Oct 2008 Invited lecture, Weill Medical College of Cornell University, New York, USA
- 40) Oct 2008 Invited lecture, Department of Biology, City University of New York, New York, USA
- 41) May 2009 Invited lecture, Department of Psychology, Giessen University, Germany
- 42) May 2009 Invited symposium presentation, Vision Science Society meeting, Naples, USA
- 43) Sep 2009 Invited symposium presentation, International Colour Society meeting, Sydney, Australia
- 44) May 2010 Invited lecture, Institute of Ophthalmology, University College London, UK.
- 45) Oct 2012 Invited symposium presentation, Asian Retina Meeting, Hsinchu, Taiwan.
- 46) May 2013 Invited symposium presentation, Association for Research in Vision and Ophthalmology, Seattle, USA
- 47) July 2013 Invited Lecture, Department of Neurophysiology, University of Pécs, Hungary
- 48) July 2013 Invited Lecture, Hungarian Academy of Neuroscience, Budapest, Hungary.
- 49) July 2013 Invited symposium presentation, International Colour Vision Society Meeting, Winchester, UK
- 50) July 2013 Invited lecture, Institute of Ophthalmology, University College London, UK.
- 51) Oct 2013 Invited symposium presentation, European Retina Meeting, Alicante, Spain.
- 52) Sep 2014 Invited symposium presentation, Asian Retina Meeting, Sendai, Japan
- 53) Sep 2014 Invited lecture, Neuroscience Research Institute, University of California Santa Barbara, Santa Barbara, USA
- 54) Oct 2014 Invited oral presentation, OSA Vision meeting ("Fall vision"), Philadelphia, USA
- 55) Oct 2014 Invited lecture, Department of Cell & Developmental Biology, Vanderbilt University, Nashville, USA
- 56) Oct 2014 Invited lecture, Centre for Perceptual Systems, University of Texas Austin, Austin, USA.
- 57) Jan 2015 Invited Lecture, Ernst Strüngmann Institute (ESI) for Neuroscience, Frankfurt, Germany.
- 58) May 2015 Invited Lecture, University of Pisa, Pisa, Italy
- 59) July 2015 Presidential Invited Lecture, National Institute for Physiological Sciences, Okazaki, Japan.
- 60) July 2016 Invited Lecture, International Colour Vision Society Summer School, Oxford, UK.
- 60) Aug 2016 Invited symposium presentation, European Conference on Visual Perception (ECVP), Barcelona, Spain.
- 61) Jan 2018 Invited symposium presentation, IIT Madras Winter Course on Machine Intelligence and Brain Research, Chennai, India.
- 62) May 2018 Invited symposium presentation, Association for Research in Vision and Ophthalmology, Honolulu, USA
- 63) Sep 2018 Invited Lecture, Department of Psychology, Vanderbilt University, Nashville, USA
- 64) Sep 2018 Invited Lecture, Department of Neuroscience, University of Texas Austin, Austin, USA

- 65) Sep 2018 Invited Lecture, Department of Neurobiology, University of Texas Davis, Davis, USA
- 66) Jul 2019 Invited Plenary Lecture, International Colour Vision Society meeting, Riga, Latvia
- 67) Jan 2020 Turner Plenary Lecture and Award, Colour Group Great Britain, London, England
- 68) July 2022 Verriest Medal and Lecture, International Colour Vision Society, Heraklion, Crete

Scientific meeting organisation

Convener / co-organiser of 18 national scientific meetings since 1994 including the IUPS Satellite symposium "Visual Processing in health and disease" (2001), the International Brain Research Organization (IBRO) World Congress of Neuroscience (2007), and "Vision Down Under" (2007, 2012).

- 1994: Joint Local Secretary for the Australian Neuroscience Society (ANS) Meeting, Sydney.
- 1994: Co-organiser, ANS Symposium, "Parallel pathways: reading the signs".
- 1996: Local coordinator, Neuroscience colloquium, Kialoa, 1996
- 1999: Co-organiser, ANS Symposium "GABA and Glycine receptors". Co-editor of proceedings for "Clinical and Experimental. Physiology and Pharmacology".
- 2001: Co-organiser, IUPS Satellite symposium "Visual Processing in health and disease", Sydney.
- 2004: Deputy chair and scientific program committee, "Vision Down Under", ISER Satellite Symposium, Fraser Island.
- 2007 Organiser, "Summer colour conference", National Vision Research Institute of Australia, Melbourne.
- 2007: Local organising committee and joint editor, International Brain Research Organization (IBRO) World Congress of Neuroscience, Melbourne.
- 2007 Deputy chair /Dreher Festschrift and scientific program committee, IBRO satellite meeting "Vision Down Under 2007", Palm Cove.
- 2008: Symposium organiser / Chair, "Color vision" symposium, Internationals Society for Eye Research Meeting, Beijing.
- 2009: Organiser, "NVRI conference on Visual Processing", National Vision Research Institute of Australia, Melbourne.
- 2010: Co-organiser, "Vision 2010: from Photoreceptors to Behaviour", ANS Satellite / ARC Centre of Excellence in Vision Science Symposium, Sydney.
- 2011: Program committee, ACEVS satellite meeting of the Australian Neuroscience Society meeting, Auckland, New Zealand.
- 2012: Convenor and chair: "Vision Down Under 2012" O'Reilly's, Lamington National Park, QLD Australia.
- 2013: Co-organiser, "Visual Neuroscience: Modern Challenges and Australian Pioneers", Bosch Institute Scientific Meeting, Sydney.
- 2016: Convenor and chair, ARC Centre for Integrative Brain Function annual scientific meeting, Hobart
- 2017: Convenor and chair, ARC Centre for Integrative Brain Function annual scientific meeting, Sydney

- 2018: Scientific advisor, ARC Centre for Integrative Brain Function annual scientific meeting, Brisbane
- 2019: Scientific advisor, ARC Centre for Integrative Brain Function annual scientific meeting, Adelaide

Peer Reviewed Research Grant Funding : 1993–

Source: NHMRC
 Title: The visual system in dichromatic and trichromatic marmoset monkeys.
 Investigators: Martin PR, Sefton AJ.
 Funding: 1993: \$73,862; 1994: \$61334; 1995: \$61334.

Source: Ramaciotti foundation
 Title: Anatomical substrates of colour vision in primates.
 Investigators: Martin, PR, Sefton, AJ.
 Funding: 1994: \$26373.

Source: ARC
 Title: Color information processing in the primate retina.
 Investigators: Martin PR, Grünert, U.
 Funding: 1995: \$50,000; 1996: \$50,000; 1997: \$50,000.

Source: NHMRC equipment
 Title: PR650 Spectrophotometer
 Investigators: Freeman, A., Martin PR, Morley, J.
 Funding: 1996: \$15,000

Source: NHMRC
 Title: Color vision pathways in marmoset monkeys.
 Investigators: Martin PR, Sefton, AE, Goodchild AK, Grünert, U.
 Funding: 1996: \$61,200; 1997: \$60,107; 1998: \$60,107.

Source: ARC institutional grant scheme
 Title: Structure and function of primate retinal neurones.
 Investigators: Martin PR
 Funding: 1997: \$15,000; 1998: \$10,000; 1999: \$7,200

Source: Ramaciotti foundation
 Title: Structure and function of primate retinal neurones.
 Investigators: Goodchild A.K., Martin PR
 Funding: 1997: \$15,000

Source: NHMRC
 Title: Neurotransmitter receptor specificity and synaptic circuitry in the primate retina.
 Investigators: Grünert U, Martin PR
 Funding: 1998: \$78,156; 1999: \$79,140; 2000: \$80,114

Source: Lions NSW-ACT Save sight and public health care foundation
 Title: Brain pathways for vision

Investigators: Martin PR.
Funding: 1999: \$19,675; 2000: \$8,511; 2001: \$8,511

Source: NHMRC
Title: Structure and function of the third geniculocortical pathway in primates
Investigators: Martin PR, Sefton AE, Grünert U
Funding: 2000: \$71,416; 2001: \$107,027; 2002: \$110,462

Source: NHMRC
Title: Distribution of neurotransmitter receptors on identified cell populations in the primate retina
Investigators: Grünert U, Martin PR
Funding: 2001: \$150,000; 2002: \$135,000; 2003: \$135,000

Source: ARC large grant scheme
Title: Colour information processing in the primate visual system
Investigators: Martin PR, Dreher B
Funding: 2001: \$87,350; 2002: \$60,100; 2003: \$58,250

Source: Ramaciotti foundation
Title: Multielectrode recording system.
Investigators: Martin PR, Dreher B.
Funding: 2001: \$15,000

Source: NHMRC Project grants
Title: Origin and specificity of neuronal signals for colour vision in primates.
Investigators: Martin PR, Grünert U.
Funding: 2003: \$167,000; 2004: \$152,000; 2005: \$152,000.

Source: NHMRC Project grants
Title: Synaptic connectivity of colour pathways in the retina.
Investigators: Grünert U., Martin PR.
Funding: 2004: \$120,750; 2005: \$120,750; 2006: \$120,750.

Source: ARC Discovery Project
Title: Chromatic inputs to cortical receptive fields in the primate visual system
Investigators: Martin PR, Dreher B, Lee BB.
Funding: 2004: \$75,000; 2005: \$75,000; 2006: \$75,000.

Source: NHMRC Project grant #400066
Title: Network properties of colour pathways in primates
Investigators: Martin PR, Buzás, P, Grünert U., Lee, BB.
Funding: 2006: \$193,750; 2007: \$193,750; 2008: \$193,750.

Source: NHMRC Project grant #454460
Title: Neural network properties of the primate retina
Investigators: Grünert U., Martin PR.
Funding: 2007: \$134,000; 2008: \$134,000; 2009: \$134,000.

Source: NHMRC Project grant #454658

Title: Cortical interactions between afferents channels in macaque visual system
Investigators: Vidyasagar TR, Dreher B, Martin PR
Funding: 2008: \$125, 000; 2009: \$120,000; 2010: \$120,000.

Source: NHMRC Project grant #566558
Title: Non-standard inputs to the primate visual system
Investigators: Martin PR, Grünert, U, Solomon SG
Funding: 2009: \$124, 750; 2010: \$109,750; 2011: \$109,750.

Source: ARC Discovery Project DP0984649
Title: Functional imaging of colour pathways in the living eye
Investigators: Metha AB, Martin PR, Grünert, U, Bedggood PA.
Funding: 2009: \$220,000; 2010: \$135,000; 2011: \$135,000.

Source: ARC Centre of Excellence CE0561903
Title: Centre extension: ARC Centre of Excellence in Vision Science
Investigators: Lamb TD, Ibbotson MR, James AC, Maddess TL, Provis JM, Zeil J, Yu D, Cringle SJ, Srinivasan MV, Martin, PR, Grünert UH, Clifford CWG, Solomon SG, Stone J
Funding share: 2010: \$260,000; 2011: \$260,000; 2012: \$130,000.

Source: NHMRC Project grant #1027913
Title: Interaction of thalamic and cortical activity in the primate visual system
Investigators: Martin PR, Solomon SG, Grünert U, Dreher B
Funding: 2012: \$163,745; 2013: \$153,745; 2014: \$153,745.

Source: NHMRC Project grant #1042609
Title: The cellular organisation of interneurons in human retina
Investigators: Grünert U, Martin PR
Funding: 2013: \$169,428; 2014: \$169,428; 2015: \$169,428.

Source: ARC Centre of Excellence CE140100007
Title: Centre of Excellence for Integrative Brain Function
Investigators: Egan GF, Rosa MG, Mattingley JB, Robinson PA, Sah P, Stuart GJ, Ibbotson MR, Lowery AJ, Arabzadeh E, Paxinos G, Martin PR, Petrou S, Grünert U, Skafidas ES, Garrido M
Funding share: \$250,000 p.a. (2014–2022)

Source: NHMRC Project grant #1081441
Title: Brain pathways serving conscious and sub-conscious vision
Investigators: Martin PR, Solomon SG, Grünert U, Dreher B, Rosa M
Funding: 2015: \$184,518; 2016: \$184,518; 2017: \$184,518.

Source: ARC Discovery Project DP160104316
Title: Propagating Neural Waves: Combined Experimental and Modelling Study
Investigators: Gong P; Martin PR, Solomon SG
Funding: 2016: \$122, 313; 2017: \$122,313; 2018: \$122,313.

Source: NHMRC Project grant #1123418
Title: Mapping the human retina: a foundation study
Investigators: Grünert U, Martin PR
Funding: 2017: \$137,185; 2018: \$137,185; 2019: \$137,185.

Service to The University of Sydney : 1992-2001

Department of Physiology.

1992 : Anderson Stuart Seminar series organiser.
1993 : Assistant course organiser, Advanced neuroscience
(integrative and molecular) BMedSci and BSc.
1994 : Staff liaison officer, electronics workshop.
1995- Course coordinator, Neuroscience BMedSci and BSc.
1995-1997: Department representative, Faculty of Dentistry

Faculty of Science

1998 : Member, Bachelor of Medical Science interdepartmental committee.
1999- : Member, Interdepartmental Neuroscience working party.
2002- : Level D Promotion Core Committee.

Faculty of Medicine and College of Health Sciences (CHS).

1994 : Graduate medical program: Neuroscience planning team.
1995 : Preclinical case coordinator, Neuroscience block.
1996 : Chair, Combined Degree Program committee.
1996 : Member, Admissions committee.
1998 : Member, Faculty Postgraduate Awards committee.
2000 : Member, Board of Graduate Studies.
2001 : Chair, CHS Postgraduate Awards committee.

University of Sydney.

2001 : Member, University Postgraduate Awards Committee.

Service to The Victorian College of Optometry : 2003-2010

2003– 2007 Chair, Animal Care and Ethics Committee.
2009– 2010 Senior Management Group

Visiting Fellowship

1992-1994 Visiting fellow at the John Curtin School of Medical Research, Australian
National University, Canberra, 1992-1994

Service to the NSW institute of Psychiatry

1992-1994: Lecturer for Psychiatrists-in-training course.

Service to the Save Sight Institute

1992-2001: Lecturer for Ophthalmology basic science course.
2010–: Member, Save Sight Institute Management Committee.
2010– : Lectures / online materials for Master of Medicine (Ophthalmic Science).
2012– : Lectures for Practical Ophthalmic Science.

Service to the Australian Neuroscience Society

- 1994: Local Secretary for Sydney meeting.
1997-1998: Council member, NSW state representative.
2002- 2008: Editor and executive member.

Service to the International Colour Vision Society

- 2014-2018: Board of Directors
2016: ICVS Summer School Faculty
2020– Board of Directors

Service to the Australian National Health and Medical Research Council

- 2003: Grant review panel (Chair)
2004: Grant review panel (Chair)
2005: Grant review panel (Deputy Chair)
2007: Grant review panel (Chair)
2011: Grant review panel (Member)
2012: Grant review panel (Member)
2014: Grant review panel (Member)
2015: Grant review panel (Member)
2017: Assigners academy
2019: Grant review panel (Member)

Service to the Australian Research Council

- 2002–2007: ARC IntReader.
2006-2008: Advisory Board, ARC Centre of Excellence in Vision Science
2008– ARC OzReader

Editorial Board Duties

- 2006– Associate editor, "Visual Neuroscience"
2007– Editorial Board, "Vision Research"
2009–2013 Editorial Board, "Journal of Physiology"
2022– Editor-in-Chief, "Visual Neuroscience"

Service to Public Understanding of Science

- 2007: Principal scientific consultant and participant, "Cracking the Colour Code" [International documentary series co-produced by ARTE and SBS Australia, first aired June 2009.] Note: The series has been broadcast (in French and English versions) in France, Germany, Italy, Bulgaria, Spain, Canada, Mexico, Greece, Switzerland, sold on VOD platforms in African and Arab countries, for inflight entertainment on airlines worldwide, and to various institutions in France and Canada. The SBS has sold over 5000 DVDs of the Australian version and it is widely distributed for use in secondary school teaching through Enhance TV and screenrights.
2009: Scientific consultant and participant, "Scope" [Network 10 production, aired 23 Feb 2009] .
2009: Radio interview, "Late night live" [Australian Broadcasting Corporation Sydney, aired 28 Sep 2009].

- 2011: Radio interview, "Afternoon Show" [Australian Broadcasting Corporation Darwin, aired 25 August 2011].
- 2011: Internet media / news release "New 'window' into the brain found" [<http://www.sciencealert.com.au/news/20111608-22504.html> released 16 Aug 2011]
- 2011: Video interview, "Working with the media", Australian Science Media Centre, 9 Dec.
- 2012: Internet media / news release "Vision cells to blame for colour blindness" [<https://www.sciencealert.com/vision-cells-not-brain-to-blame-for-colour-blindness> released 20 Sep 2012]
- 2012: Radio interview "Afternoons with Kelly Higgins-Devine", [Australian Broadcasting Corporation Brisbane, aired 25 July 2012]
- 2012: Radio interview "StateDrive with John Morrison", [Australian Broadcasting corporation Regional NSW, aired 25 July 2012]
- 2012: Radio interview "666 Drive with Pete Williams", [Australian Broadcasting corporation Canberra, aired 10 Aug 2012]
- 2012: Radio interview "Just not Cricket, with Glynn Greensmith", [Australian Broadcasting Corporation Perth, aired 17 May 2014]
- 2013: Internet media / news release "'Primitive' brain recognises edges" [<https://www.sciencealert.com/primitive-brain-recognises-edges> released 28 Oct 2013]
- 2013: Internet media / news release "Slow blue road" [<https://www.cibf.edu.au/slow-blue-road> released 06 Jan 2015]
- 2015: Radio interview "Dressgate: Radio National Drive with Patricia Karvelas". [Australian Broadcasting Corporation, aired 27 Feb 2015]
- 2013: Internet media / news release "Dangerous vision" [<https://www.cibf.edu.au/dangerous-vision> released 20 Nov 2015]
- 2017: Internet media / news release "Light-sensitive cells in the retina play a role in subconscious and conscious vision" [<https://www.cibf.edu.au/light-sensitive-cells> released 26 Jul 2017]
- 2017: Radio interview "Breakfast with John Stanley and Garry Linnell", [Macquarie / Talking Lifestyle, aired 10 August 2017]
- 2018: Internet media / news release " Could K-cells save your life?" [<https://www.cibf.edu.au/could-k-cells-save-your-life> released 29 Nov 2018]
- 2018: Radio interview "Breakfast with Josh Szeps" [Australian Broadcasting Corporation Sydney, aired 21 December 2018]
- 2021: Radio interview "Focus with Cassie McCullach" [Australian Broadcasting Corporation Sydney, aired 19 May 2021]
- 2023: Radio interview "Breakfast with Stan Shaw" [Australian Broadcasting Corporation Perth, aired 20 March 2023]

Research Higher Degree Thesis Examination

Honours/Masters: Australian National University, University of Sydney.
PhD: Australian National University, Monash University, University of Melbourne, University of New South Wales, University of Queensland, University of Sydney.

Scientific Refereeing

Manuscripts: Brain Research, Documenta Ophthalmologica, European Journal of Neuroscience, Investigative Ophthalmology, Journal of Comparative

Neurology, Journal of Neurophysiology, Journal of Neuroscience, Journal of the Optical Society of America, Journal of Vision, Neuron, Science, Vision Research, Visual Neuroscience.

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