

ANNE (ANYA) CHRISTINE HURLBERT

Newcastle University
anya.hurlbert@ncl.ac.uk

Education/Qualifications:

- 1990 MD, Harvard Medical School - MIT Health Sciences and Technology Program, Boston, MA.
- 1989 PhD, Brain and Cognitive Sciences, MIT, Cambridge, MA.
- 1982 MA, Physiology, University of Cambridge, UK.
- 1981 Certificate of Advanced Study in Mathematics, University of Cambridge, UK.
- 1980 BA, Physics, *magna cum laude*, Princeton University, Princeton NJ.

Appointments held:

- 2016 - Dean of Advancement, Newcastle University.
- 2014 - Director, Centre for Translational Systems Neuroscience, Newcastle University.
- 2005 - Professor of Visual Neuroscience, Newcastle University.
- 2003 - 2014 Director, Institute of Neuroscience, Newcastle University.
- 2006 - 2008 Head of School, Psychology (Interim).
- 2003 - 2004 Acting Head of Division of Psychology, Brain and Behaviour.
- 1991 - 2005 Lecturer, then Reader, Physiological Sciences, Newcastle University.
- 1990 - 1991 Wellcome Trust Vision Research Fellow, University of Oxford.
- 1989 - 1990 Post-doctoral Fellow, MIT, Cambridge, MA, USA.
- 1986 Teaching Assistant, Neuroscience and Psychology, MIT.
- 1984 - 1990 Lowell House, Harvard University, Cambridge, MA. Tutor in Neuroscience and Medicine.

External appointments:

- 2020- Editorial Board, *Journal of Vision*.
- 2020- Rank Prize Funds Optoelectronics Committee Member.
- 2018- Scientific Consultative Group, National Gallery, London.
- 2018- Advisory Council, Institute of Advanced Studies, Durham University
- 2018- Advisory Board, GestaltReVision, Methusalem Programme, KU Leuven, Belgium.
- 2014 - Programme advisory board, Rethinking the Senses (Institute of Philosophy, London).
- 2014 - 2017 Programme advisory board, EU Consortium on Material Perception.
- 2010 - 2018 Scientist Trustee, National Gallery, London.
- 2010 - 2018 Chair, Scientific Consultative Group, National Gallery, London.
- 2010 - 2018 Chair, Educational Trust, Royal Grammar School, Newcastle upon Tyne.
- 2005 - 2017 Board of Governors, Royal Grammar School, Newcastle upon Tyne.
Vice-chair 2010-2017.
- 2002 - 2013 MIT Corporation Visiting Committee for the Department of Brain and Cognitive Sciences, Cambridge, MA, USA.
- 1993 - Editorial Board, *Current Biology*.
- 1998 - 2009 Editorial Board, *Perception*.
- 1999 - 2001 Chairman, *Colour Group* (GB).

Awards:

- 2017 The Edridge-Green Lecturer, the Royal College of Ophthalmologists.
- 2015 Palmer Lecturer (The Colour Group GB).
- 1992 C James Bartleson Award in colour science (The Colour Group GB).
- 1990-1991 Wellcome Trust Vision Research Fellowship.
- 1980-1982 Marshall Scholarship for study at Cambridge University, UK.

Other professional roles:

- 2019 Topic Editor, Special Issue on Colour Vision, Journal of the Optical Society of America.
- 2018-2019 Scientific Committee, International Colour Vision Society.
- 2018 Guest Editor, Special Issue on Museum Lighting, Leukos.
- 2017 Chair, Scientific Committee, International Museum Lighting Symposium and Workshops, London, September 2017.
- 2009 - 2013 Local chair, International Association of Colour quadrennial meeting, AIC2013 Newcastle Gateshead.
- 2010 - 2020 Abstract review committee, Vision Sciences Society.
- 2011 - 2012 Chair, Young Scientist Award Committee, Vision Sciences Society.
- 2008 KU Leuven Methusalem Programme international review panel.

2003 - EPSRC College, Member. (Occasional chair, People & Interactivity panels.)
 2000, 1997 Panel Member, EPSRC IT and Computer Science Programme
 Human Factors Project Grants.
 2001-2002 Expert reviewer, EC IST.

Faculty and University committees, Newcastle University.

2020 - present Transformative Neuroscience NUCoRE steering committee.
 2018 - present Public Lectures Committee.
 2018 - present Newcastle University Pride Awards judging panel.
 2016 - present Farrell Centre Steering Group.
 2004 - present Cultural Quarter Steering Group (formerly Hatton Gallery sub-Committee).
 2004 - present Henry Miller Concert Committee.
 2007 - present Magnetic Resonance Centre Executive Committee.
 2012 - present Centre for In Vivo Imaging Executive Committee.
 2012 – 2018 Coherent Campus Art and Performance Working Group.
 2014 – 2018 Institute of Neuroscience Executive Board.
 2012 - 2016 Faculty of Medical Sciences Fund-raising committee.
 1996 - 2009 Public Lectures Committee.

Selected invited presentations:

2021 “Sensing changes in Illumination Spectra over Time.” Colour Group January Vision meeting.
 2020 “Colour Vision and the Workplace.” Workplace Health 2020. Invited Speaker. Virtual Event. Supported by the Colt Foundation.
 2020 “Colour constancy for device displays.” Huawei Online Future Device Summit. Invited speaker. September 2020.
 2020 “Colour constancy?” ICVS Summer School 2020. Invited Speaker. Online.
 2019 “Spectrally Tuneable Lighting for the Real World”. Keynote Speaker. SSLCHINA, Shenzhen, China.
 2019 “Seeing Paintings in the Right Light: Museum Studies”. Invited Speaker. SSLCHINA, Shenzhen, China.
 2019 “The Effects of Varying Light Spectra on Human Health.” Invited speaker. SSLCHINA, Shenzhen, China.
 2019 “Challenges to color constancy from contemporary lighting.” Keynote Speaker. International Colour and Lighting Technology Symposium. Zhejiang University, Hangzhou, China.
 2019 “The Effects of Varying Light Spectra on Human Health.” Invited speaker. International Colour and Lighting Technology Symposium. Zhejiang University, Hangzhou, China.
 2019 “Seeing Colour and Light.” Invited speaker. Artificial and Biological Cognition. 7th Cambridge Neuroscience Symposium. Cambridge, UK.
 2019 “Colour Vision and Art.” Newcastle University Graduates Society. Newcastle upon Tyne, UK.
 2019 “Colour, Light and Time in Paintings”. Keynote speaker. The Visual Science of Art Conference 2019 (VSAC 2019). Leuven, Belgium.
 2019 “Colour and Vision”. Darwin College Lecture Series. Cambridge, UK. Invited speaker.
 2018 “Vision Science and Art: Creative Complementarities”. Invited speaker. Clinical Neurosciences. The Royal Society of Medicine.
 2018 “The Significance of Colour in Paintings: Does it Tell the Time?” Invited speaker. The Skin of Things: The Art of Material Perception, Rijksmuseum Atelier.
 2018 “How illumination colour in and on paintings influences their interpretation.” Invited speaker / co-organiser. AIC Workshop on “Seeing Colors in Paintings”, Lisbon.
 2018 “Does blue light wake you up or make you down? Visual and non-visual effects of varying light spectra.” Invited speaker, symposium on “Strange Blues: Melanopsin-mediated perception of space, colour and brightness”. ECVP, Trieste.
 2018 “Changing lights on changing scenes: Dynamic articulation disturbs illumination estimation.” Invited speaker, symposium on “The role of articulation in perception of surface lightness.” ECVP, Trieste.
 2018 “Colour Constancy: Psychophysics and Algorithms”. Invited Speaker. ICVS Summer School, Oxford, UK.
 2018 “Colour Vision Standards for the UK Police Force: Time for a Change?” Invited Speaker. Colour in Employment, Colour Group GB, London, UK.
 2018 “Understanding interactions between object colour, context, and light in human vision.” Invited Speaker. Royal Society Discussion Meeting: Understanding images in biological and computer vision. London.
 2017 “Light and Colour in Life and Art.” St Cuthbert’s Society Annual Fellows’ Lecture. Durham University.
 2017 “Into the blue: The effects of varying light spectra on the visual and non-visual pathways.” UT Houston McGovern Medical School, Houston, Texas.
 2017 “Twenty-five Years of Color Constancy.” Keynote Talk. Color and Imaging Conference, Society for Imaging Science and Technology, Lillehammer, Norway.

- 2017 “Light and colour: Assessing the effects of illumination on perceptual constancy and preference for paintings.” International Museum Lighting Symposium and Workshops, London.
- 2017 “Individual Differences in Colour Perception: Constancy and Variance across the Spectrum.” The Edridge-Green Lecture. Royal College of Ophthalmologists Annual Meeting, Liverpool, UK.
- 2017 Light in the Eye of the Beholder. TU Delft, The Netherlands. Invited speaker.
- 2017 “New Light on Old Masters”. Mauritshuis, RijksMuseum, Expert Symposium. Amsterdam. Invited speaker.
- 2017 “Seeing Colours, Feeling the Light: Probing the Visual and Non-visual Systems with Spectrally Tuneable Light.” Paris Descartes Universite. Invited Speaker.
- 2017 Colour Group GB Vision Meeting, London. “Sculpting the spectrum of light to influence mood, alertness and performance: the visual/non-visual trade-off.” Invited speaker.
- 2016 EU PRISM Network Final Conference, Rauschholzhausen, Germany. “Seeing Colours and (Feeling) the Light.” Invited speaker.
- 2016 Centre for Life, Newcastle. “Seeing Colour in a Contemporary Light.” Invited public lecture.
- 2016 Centre for Life, Newcastle. “Seeing (and feeling) the Light.” Invited U3A lecturer.
- 2016 Farbe im Kopf/Colour in Mind International Conference. Tuebingen, Germany. “The Colour of Paintings in a Contemporary Light.” Invited keynote speaker.
- 2016 Workshop on Spectrally-Tuneable LED and OLED Lighting, International LED Professional Symposium, Bregenz, Austria. “Sculpting the Spectrum of Light to Influence Human Visual and Non-visual Behaviour.” Invited speaker.
- 2016 Seeing Colors: International Symposium on Color Vision. Regensburg, Germany. “Seeing (and Feeling) the Light.” Invited speaker.
- 2016 International Colour Vision Society, Summer School, Oxford. “Colour Constancy.” Invited lecturer.
- 2016 Ledbury Poetry Festival. “Slicing the Brain: Poetry of Pathology and Neuroscience”. Joint talk and reading with Valerie Laws, poet.
- 2016 University of Nevada, Reno. “Seeing Colour Constancy in a Contemporary Light.” Invited seminar speaker.
- 2016 Special Symposium, Vision Sciences Society Annual Meeting, Florida. “Is that really #thedress?” Invited speaker.
- 2016 UK Neuro-Ophthalmology Special Interest Group (UKNOSIG) Annual Meeting. “Colour Perception in Typical Development and Neurodevelopmental Disorders.” Invited speaker.
- 2016 CIE 2016, Lighting Quality and Energy Efficiency, Melbourne. “Tuning light to see and feel better: the human visual and non-visual responses to spectral variations in light.” Invited keynote speaker. 3-7 March 2016.
- 2016 Psychology Postgraduate Conference, Durham University. “Reflections on a Colourful Career.” Keynote Speaker.
- 2015 The Richard Gregory Memorial Lecture, Bristol Vision Institute, University of Bristol. “Seeing Colour in a Contemporary Light; from Daylight to LED light via Old Masters and a Dress.” <http://www.bristol.ac.uk/news/2015/october/richard-gregory-memorial-lecture.html>
- 2015 Northeast Postgraduate Conference, Newcastle upon Tyne. “The people’s perception: Taking vision science out of the lab.” Keynote speaker.
- 2015 Rethinking the Senses Perception and Cognition Workshop, Glasgow University. “Colouring-in Objects from Memory: Does prior experience influence immediate perception of object colour?” Invited seminar speaker.
- 2015 Symposium on Colour Constancy, European Conference on Visual Perception, Liverpool, UK. “The Limits of Colour Constancy: All Illuminations are not Created Equal.” Invited speaker.
- 2015 Psychology Colloquium, Giessen University, Germany. “The Limits of Colour Constancy.” Invited seminar speaker.
- 2015 Seeing Color: Art, Vision and the Brain. Symposium at the Duke University Nasher Museum of Art, USA. “New Light on Old Masters: Experiments at the National Gallery.” Invited speaker.
- 2015 The Palmer Lecture, Colour Group GB Vision Meeting, London.
- 2014 LUXLIVE 2014, London. “New Light on Old Masters: Experimenting with Colour Perception at the National Gallery.” Invited speaker.
- 2014 PRISM 4: EU Marie Curie Training Network Workshop on ‘Perceptual Representation of Illumination, Shape and Materials’, Ankara, Turkey, October 2014. “The Colour of Light and Surfaces.” Invited speaker.
- 2014 Presidential Scholars 50th Anniversary Summit, Washington, DC. Plenary talk: *The Brain: The Last Frontier*.
- 2013 HWK-ECVP2013 Symposium on Art of Perception, Bremen, Germany. *The meaning of colour in art and vision science*.
- 2013 Royal Society of Medicine, The Brain Series: Visual Arts and the Brain. London.
- 2013 Institute of Philosophy, London. Invited seminar speaker.
- 2013 International Colour Vision Society, Winchester, UK. Invited symposium speaker.
- 2012 Retinal Light Toxicity meeting, Paris, France. Invited speaker.
- 2011 International Colour Vision Society, Kongsberg, Norway. Invited keynote speaker.
- 2011 Material Perception Workshop, Rauschholzhausen, Germany. Invited participant.
- 2010 Symposium on cognition, computation and consciousness, Royal Society. Session chair.

- 2009 ESF Exploratory Workshop, Qualities in Perception, Rovereto. Invited participant.
- 2009 European Training Network Workshop in Computational Vision, Rauschholzhausen, Germany. Invited lecturer.
- 2008 Material Appearance, International Workshop, University of Pennsylvania. Co-organiser and speaker.
- 2008 International Congress of Psychology, Berlin, Germany, July. Invited symposium speaker.
- 2007 Applied Vision Association Christmas meeting, Birmingham. Invited speaker.
- 2007 CREATE conference. Bristol. Invited speaker. *Colour constancy and colour preference*.
- 2007 A Journey through Computation, International Workshop. Genoa, Italy.
- 2006 CIE Expert Symposium on Appearance, Paris, France. Invited speaker.
- 2006 European Conference on Visual Perception, St Petersburg. Invited speaker, symposium on *Visual Art*.
- 2004 European Conference on Visual Perception, Budapest. Invited speaker, symposium on *Colour Constancy*.
- 2004 Geoffrey Burton Memorial Lecture, Applied Vision Association (UK), Bristol.
- 2004 ONR-sponsored Workshop on *New Perspectives on Visual Cortex*, Mull. Invited participant,
- 2003 NSF Workshop on *Integrated Cognitive Neuroscience*, Arlington, VA, USA. Invited speaker.
- 2001 Cowey Festschrift, Oxford University. Invited speaker.
- 2001 EC Information Society Technologies Conference, Duesseldorf (IST2001). Plenary speaker.
- 2000 Applied Vision Association Annual Meeting on *Natural Images*, Bristol. Keynote Speaker.
- 1999 Rank Prize Fund Meeting. *Colour Vision and its Variation*, Cumbria, England.
- 1998 Autumn School on Cognitive Neuroscience, Oxford University.
- 1997 Center for Visual Science Symposium on *Environmental structure, statistical learning and visual perception*. University of Rochester, New York.
- 1997 Special Symposium, *Colour and the Brain*, European Brain and Behaviour Society, Tutzing, Germany.
- 1997 Workshop on *Principles of Behaving Systems*, Gatsby Charitable Foundation, Cambridge University.
- 1996 Workshop on *Colour Vision*, Tuebingen, Germany.
- 1995 ATR Symposium on Face and Object Recognition. Advanced Telecommunications Research Institute, Japan.
- 1995 Optical Society of Spain. Invited Lecturer on Colour Science, Universities of Valencia and Granada.
- 1995 International School for Advanced Studies Meeting on *Illuminations on Object-Oriented Vision*. Trieste, Italy.
- 1992 Idyllwild ONR Workshop on *Large-Scale Neuronal Theories of the Brain*.

Public understanding of science:

- 2020 *The Life Scientific*. BBC Radio 4. Featured scientist.
- 2020 *Colour on the Brain*. The Naked Scientists: Naked Neuroscience podcast.
- 2019 *Living Colour*. The Nature of Things, CBC (Canada). October 2019. Featured segment.
- 2019 *Polaroid Perceptions*. The Art of Innovation. BBC (UK). October 2019. Featured interview.
- 2019 *Our visual experience: perception of colour and eye contact*. All in the Mind. BBC Radio 4.
- 2015 *Colour: The Spectrum of Science* (episode 3). BBC Four TV programme.
<https://www.youtube.com/watch?v=MUbraNFEHkA>
- 2015 *Some Like Dark: A Light Demonstration*, as part of **On Light**, Wellcome Collection.
- 2014 *Colour and Perception*. Friday Late: Evening Lecture, the National Gallery, London. Invited speaker.
- 2014 *Making Colour*. National Gallery, London. Summer exhibition: Interactive experiment, film installation, and public lecture.
- 2013 *Brain Science and Science Brains*. St Paul's Girls' School, London. Invited speaker.
- 2013 *More than meets the eye: Colour*. British Science Festival, Newcastle.
- 2013 *Technicolour*. BBC Radio 3.
- 2013 *Touching Colour*. Hatton Gallery exhibition. Co-curator and exhibition notes author.
- 2012 *Reassembling the Self*. Hatton Gallery and Vane exhibition, curated by Susan Aldworth. Fund-raiser and collaborator.
- 2011 *Do you see what I see?* BBC Horizon TV programme.
- 2010 *The Science of Seeing and Painting in Colour*. Lunchtime lecture, National Gallery, London.
- 2009 *A Window onto the Brain*. Central Newcastle High School Science Festival.
- 2009 *Life in Colour*. Science Museum Dana Centre, London. Invited speaker.
- 2009 *Plants in Mind*: Public symposium. Organiser. Brain Awareness Week, Institute of Neuroscience and the Culture Lab, Newcastle University.
- 2009 *My Brain and I*. Holmes Lectures, Newcastle University. Director and speaker.
- 2008 *Cracking the Colour Code*. TV film. Gedeon Programmes.
- 2008 *Turner and the Meaning of Colour*. BA Festival of Science, Liverpool. Invited speaker.
- 2008 *Turner's Translation of Colour into Black and White*. Art/Neuroscience Lecture Series, Oxford University.
- 2008 *Eat With Your Eyes*. Public Debate in the Dark. EAT! Newcastle-Gateshead Festival, Northern Stage, Newcastle.

- 2008 *Drawing on Consciousness*. Public symposium. Organiser and speaker. Brain Awareness Week, Institute of Neuroscience and the Culture Lab, Newcastle University.
- 2006 *The Meaning of Colour*. International Centre for Life Science Festival.
- 2006 *Seeing Heads*. Exhibition of fMRI-based art. Hatton Gallery and Centre for Life. Curator.
- 2005 *What's in My Head?* Brain Awareness Week art-based schools outreach project. Co-director.
- 2004 *Seeing Red and Feeling Blue*. Holmes Lectures, Newcastle University. Public lecture.
- 2003 *Memory and Forgetting*. Sci-art collaboration with artist Dan Sturgis; exhibit and public lectures at the Hatton Gallery (Newcastle), Angel Row Gallery (Nottingham).
- 2002 *Neuroecology and the Visual Brain*. Inaugural symposium and exhibit, Henry Wellcome Building for Neuroecology. Organiser and curator.
- 1997 *Date with an Artist*. BBC2 Television. Collaboration with artist Brad Lochore. Exhibition at Northern Centre for Contemporary Art, Sunderland.
- 1996 *Eyecatchers: The Great Art Mystery*, with Paul Collard, Border Television programme, produced by Derek Smith.
- 1995 *Art and Science of Vision*, public symposium for British Association Annual Festival of Science, Newcastle, with art exhibition at Hatton Gallery. Organised jointly with Paul Collard, Visual Arts UK.
- 1991 *The Mind's Eye*. Symposium held in honour of Sackler Gallery opening at the Royal Academy. Invited speaker: *Specular Highlights as Cues to Three-Dimensional Shape*.

Current Research Grants and other Funding:

- 2020-2022 NIHR AI Award: OCTAHEDRON. Optical Coherence Tomography Automated Heuristics for Early Diagnosis via Retina in Ophthalmology and Neurology. PI.
- 2020-2021 Huawei Device Co. Collaborative Research Grant. Robust Colour Constancy. PI.
- 2017-2021 EU H2020 Innovative Training Network. Dynamics in Vision and Touch - the look and feel of stuff. (DyViTo).

Previous Research Grants and other Funding:

- 2014-2019 Wellcome Trust MHE Capital Award. International Centre for Life. Co-I.
- 2017-2018 Huawei Device Co. Collaborative Research Grant. Co-I.
- 2008-2017 Wellcome Trust 4-year PhD programme. Systems Neuroscience: from Networks to Behaviour. Co-I.
- 2013-2017 EU FP7 ICT STREP Award. Human-centric Intelligent LED Engines for the Take-up of SSL in Europe (HI-LED).
- 2014-2015 NIRES Sustainability Research Responsive Mode Award. DRYING: Development of a low cost solution for non-intrusive online moisture content measurement and control in drying of sensitive food products. Co-I.
- 2010-2014 EPSRC Project Grant. "Illuminating Colour Constancy: from Physics to Photography."
- 2013-2014 Wellcome Trust Capital Award. Centre for Translational Systems Neuroscience. Coordinating Applicant.
- 2013-2014 Wellcome Trust People Award. National Gallery. "New Light on Old Masters." Collaborator.
- 2012 EPSRC SIREN grant. Small equipment grant.
- 2012 Federation of European Neuroscience Societies. Brain Awareness Week 2012 at Newcastle.
- 2010 The Dana Foundation. Brain Awareness Week 2010 at Newcastle.
- 2006-2009 EPSRC Project Grant. "Colour, Texture and 3D Shape Interactions in Real-World Surface Perception."
- 2007-2008 Nissan Motor Corporation Research Grant. "Dementia and Driving" Project Leader and co-I (with I. McKeith).
- 2007-2009 The Daiwa Anglo-Japanese Foundation. "Exchange Programme for Early Stage Researchers in Neuroscience."
- 2006 Nuffield Summer Vacation Studentship. "The effect of mood and attentional state on visuo-cognitive abilities in the elderly."
- 2005-2006 Nissan Motor Corporation Research Grant. "Visuo-Cognitive Abilities in the Elderly Driver." (Project Leader and co-I (with Y. Tadmor)).
- 2005 Unilever Project Grant (including studentship). "Colour Appearance of Real Objects."
- 1999-2004 Wellcome Trust Programme Grant. "Visual systems neuroscience: segmentation, integration & lability." Co-I (with Prof M.P. Young, Dr. M.J. Tovee).
- 1998-2002 Wellcome Trust Project Grant. "The post-retinal processing of colour in the visual system of the New World Primate, the common marmoset." Co-I (with Dr. Martin Tovee).
- 1998-2001 MRC Departmental Quota Studentship. "Neural responses to combined auditory and visual motion: EEG and psychophysics."
- 1997-2000 Wellcome Trust Project Grant. "Neural imaging of auditory and visual motion perception in humans." Co-I (with G. Green).

- 1997-2000 Wellcome Trust Project Grant. “Interactions between colour and 3D shape perception by the human visual system.”
- 1996-1999 Royal National Institute for the Blind Studentship. “Characterisation of binocular function in patients with unilateral cataract.”
- 1994-1998 Wellcome Trust Project Grant. “Cue integration in image segmentation by the human visual system.”
- 1997 Wellcome Trust Summer Studentship. “Neural Responses to Combined Auditory and Visual Motion: EEG and Psychophysics.”
- 1996 Wellcome Trust Symposium Grant. “Colour in Context” – Two-day Colour Group (GB) conference on colour vision in the context of an integrated visual system.
- 1993-1997 EU Human Capital and Mobility Training Program. “The integrated study of colour and motion perception.” Co-I (of 10) and co-ordinator.
- 1994-1995 EU Human Capital and Mobility Postdoctoral Fellowships. Co-I (of 5).
- 1992-1994 SERC (now EPSRC) Project Grant. “Integration of visual cues in the detection and perceptual use of specular and mutual reflections.”
- 1992 Royal Society Research Grant.
- 1991-1994 SERC/MRC HCI Joint Initiative. “Learning to discriminate and classify color and shape.” Co-I (with Dr. A. J. Parker, Oxford).
- 1991-1993 NATO. International collaboration travel grant. Co-I (with Prof T. Poggio, MIT).

PUBLICATIONS:

Preprints:

Gupta, G., Gross, N., Pastilha, R. Hurlbert, A. (2020) The time course of color constancy by achromatic adjustment in immersive illumination: What looks white under coloured lights? bioRxiv. <https://doi.org/10.1101/2020.03.10.984567>.

Refereed papers:

- Pastilha, R., Gupta, G, Gross, N. and Hurlbert, A. (2020) Temporal dynamics of daylight perception: Detection thresholds. *Journal of Vision*, 20(13):18, 1-18. doi: <https://doi.org/10.1167/jov.20.13.18>.
- Wedge-Roberts, R., Aston, S., Beierholm, U., Kentridge, R. Hurlbert, A., Nardini, M., Olkkonen, M. (2020) Specular highlights improve colour constancy when other cues are weakened. *Journal of Vision*, 20(12):4, 1–22, <https://doi.org/10.1167/jov.20.12.4>.
- Aston, S., Denisova, K., Hurlbert, A., Olkkonen, M., Pearce, B., Rudd, M., Werner, A., Xiao, B. (2020). Exploring the determinants of color perception using #thedress and its variants: the role of spatio-chromatic context, chromatic illumination, and material-light interaction. *Perception*, 49(11):1235-1251. DOI: 10.1177/0301006620963808
- Hurlbert, A. and Cuttle, C. (2020). New Museum Lighting for People and Paintings. *Leukos*, 16(1), 1-5. doi:10.1080/15502724.2019.1676019
- Hurlbert, A. (2019). Challenges to color constancy in a contemporary light. *Current Opinion in Behavioral Sciences*, 30, 186-193. doi:<https://doi.org/10.1016/j.cobeha.2019.10.004>
- Llenas A, Hurlbert A, Lam F, Manudhane R, Gupta G, Giddings J, Carreras J. (2019) Testing the use of spectrally tunable lighting systems to improve comfort, alertness and sleep quality in indoor working environment. In Proceedings of the 29th CIE Washington D.C., USA. DOI:10.25039/x46.2019
- Aston, S., Radonjic´, A., Brainard, D. & Hurlbert, A.C. (2019) Illumination discrimination for chromatically biased illuminations: implications for colour constancy. *Journal of Vision*, 19:15. <https://doi.org/10.1167/19.3.15>.
- Radonjic´, A., Ding, X., B., Krieger, A., Aston, S., Hurlbert, A. C. & Brainard, D. H. (2018) Illumination discrimination in the absence of a fixed surface-reflectance layout. *Journal of Vision*, 18(5):11.
- Carle, T., Horiwaki R., Hurlbert, A. and Yamawaki, Y. (2018) Aversive learning in the praying mantis (*Tenodera aridifolia*), a sit and wait predator. *Journal of Insect Behavior*, 31(2):158-175.
- Martin, DS, Hurlbert AC, Cousins D. (2018) Sleep disturbance and the change from white to red lighting at night on Old Age Psychiatry wards: a quality improvement project. *Archives of Psychiatric Nursing*, 32:3, pp. 379-383.
- Schloss, K.B., Lessard, L., Racey, C. and Hurlbert, A.C. (2018) Modeling color preference using color space metrics. *Vision Research*. Vol. 151, pp. 99-116. <https://doi.org/10.1016/j.visres.2017.07.001>
- Crichton, S., Shreshtha L., Hurlbert, A. and Sturm, B. (2018) Use of hyperspectral imaging for the prediction of moisture content and chromaticity of raw and pre-treated apple slices during convection drying. *Drying Technology*. 36(7):804-816. DOI: 10.1080/07373937.2017.1356847
- Aston, Stacey and Hurlbert, Anya. (2017) What #theDress reveals about the role of illumination priors in color perception and color constancy. *Journal of Vision* 2017;17(9):4. doi: 10.1167/17.9.4.
- Hurlbert, A. C. (2017). The Chromatic Mach Card. In the Oxford Compendium of Visual Illusions. Eds: A. Shapiro and D. Todorovic. Oxford University Press, Oxford, UK. ISBN: 9780199794607.
- Radonjic´, A., Pearce, B., Aston, S., Krieger, A., Dubin, H., Cottaris, N. P., Brainard, D. H., & Hurlbert, A. C. (2016). Illumination discrimination in real and simulated scenes. *Journal of Vision*, 16(11):2, 1–18, doi:10.1167/16.11.2.

- Hurlbert, A.C., Pearce, B.M., Aston, S. (2016). Tuning light to see and feel better: the human visual and non-visual responses to spectral variations in light. *Proceedings of CIE 2016 Lighting Quality & Energy Efficiency*, Melbourne, Australia. CIE x042:2016. Pp 11-16. ISBN 978-3-902842-65-7
- Padfield, J., Aston, S., Kergourlay, F., Luo, M.R., Hurlbert, A.C. (2016) Optimisation of artwork illumination spectra by museum professionals. *Proceedings of CIE 2016 Lighting Quality & Energy Efficiency*, Melbourne, Australia. CIE x042:2016. Pp 17-21. ISBN 978-3-902842-65-7
- Crichton, S., Sturm, B. and Hurlbert, A. (2015). Moisture content measurement in dried apple produce through visible wavelength hyperspectral imaging. ASABE Annual International Meeting.
- Cranwell, M. B., Loveridge, C., Pearce, B.M. and Hurlbert, A.C. (2015). Performance on the Farnsworth-Munsell 100-Hue Test is significantly related to non-verbal IQ. *Investigative Ophthalmology and Visual Science*. **56**(5): 3171-3178.
- Mackiewicz, M., Finlayson, G.D. and Hurlbert, A.C. (2015). Color Correction using Root-Polynomial Regression. *IEEE Transactions on Image Processing*. **24**(5): 1460-70.
- Finlayson, G.C., Mackiewicz, M., Hurlbert, A.C., Pearce, B., and Crichton, S. (2014) On calculating metamer sets for spectrally tuneable LED illuminators. *J. Optical Society America A*. **31**(7):1577-1587.
- Pearce B, Crichton S, Mackiewicz M, Finlayson GD, Hurlbert A (2014) Chromatic illumination discrimination ability reveals that human colour constancy is optimised for blue daylight illuminations. *PLoS ONE* 9(2): e87989. doi:10.1371/journal.pone.0087989
- Vurro, M., Ling, Y., & Hurlbert, A. C. (2013). Memory color of natural familiar objects: Effects of surface texture and 3-D shape. *Journal of Vision*, 13(7):20, 1–20, <http://www.journalofvision.org/content/13/7/20>, doi:10.1167/13.7.20
- Crichton, S. O. J., Pichat, J., Mackiewicz, M., Tian, G.Y., and Hurlbert, A.C. (2012) Skin chromaticity gamuts for illumination recovery. *Proc. 6th European Conference on Colour in Graphics, Imaging and Vision (CGIV)*, The Society for Imaging Science and Technology, Springfield, VA, ISBN 978-0-89208-299-5, pp 266-271.
- Mackiewicz, M., Crichton, S. O. J., Newsome, S., Gazerro, R., Finlayson, G.D. and Hurlbert, A.C. (2012) Spectrally tunable LED illuminator for vision research. *Proc. 6th European Conference on Colour in Graphics, Imaging and Vision (CGIV)*, The Society for Imaging Science and Technology, Springfield, VA, ISBN 978-0-89208-299-5, pp 372-377.
- Ling, Y and Hurlbert, A. C. (2011) Age-dependence of colour preference in the UK population. In *New Directions in Colour Studies*, Edited by Carole P. Biggam, Carole A. Hough, Christian J. Kay and David R. Simmons, John Benjamins Publishing Company, Amsterdam. pp 347-360.
- Franklin, A., Bevis, L., Ling, Y. and Hurlbert, A.C. (2010) Biological Components of Colour Preference in Infancy. *Developmental Science*, 13(2), 346-354.
- Ling, Y. and Hurlbert, A.C. (2008) The role of color memory in successive color constancy. *Journal of the Optical Society of America A -- Optics Image science and Vision* , **25**(6), 1215-1226.
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Conference organising

- 2017 **1st International Museum Lighting Symposium and Workshops**, London, September. Chair, Scientific Committee, and support to Organising Committee.
- 2013 **AIC2013 (International Association of Colour)** quadrennial meeting, NewcastleGateshead 2013. Chair of local events committee. Over 600 delegates from 30+ countries.
- 2008 **Workshop on Perception of Material Properties** in 3D Scenes, University of Pennsylvania. Co-organiser (with D.H.Brainard and L.T.Maloney).
- 2002 **ECVP Symposium on Visual Awareness**. Co-organiser, with Jochen Braun (Plymouth). 1-day event within the European Conference on Visual Perception, Glasgow, August 2002.
- 2002 **Inaugural Symposium for Neuroecology and the Visual Brain**, the Henry Wellcome Building (27-29 June 2002). Chairman of organising committee for 3-day symposium. 14 invited speakers from USA, Germany, UK and Australia. Sponsored by the Wellcome Trust, the Northern Rock Foundation, and the Sir James Knott Trust.
- 2000 **Colour Vision: Variance and Constancy**. Co-organiser with Dr G Jordan of a two-day conference on behalf of the UK Colour Group, with ten invited speakers from USA, Germany, UK, held in Newcastle upon Tyne in September, 2000. Sponsored by the Wellcome Trust.
- 1996 **Colour in Context**. Organiser of 2-day conference, through the UK Colour Group, with eight invited speakers from US, England and Germany, held at Durham/Newcastle in April, 1996. Sponsored in part by Wellcome Trust and the Sir James Knott Trust.
- 1995 **Art and Science of Vision**. The British Association Annual Festival of Science, September, 1995. Organiser of two-day symposium, featuring an art exhibition at the Hatton Gallery, artists' talk and series of talks by internationally known vision scientists. Press coverage: *The Times*, *Financial Times*, *the Guardian*, *the New Scientist*, BBC World TV, Radio 4.