Rigmor C. Baraas

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Education / Training

2009–2010	Diagnostic Drugs Diploma, Buskerud University College, Kongsberg, Norway.
2008–2009	Practical-Pedagogical methods for University College Lecturers (15 ECTS), Østfold University
	College, Fredrikstad, Norway
2002–2005	Post Doctoral Research Associate, Computational Neruoscience Laboratory, University of
	Manchester, Manchester, UK.
1997–2002	Doctor of Philosophy, The Visual Science Laboratory, University of Manchester Institute of
	Science & Technology (UMIST), Manchester, UK
1994–1995	Contact Lens Diploma. Buskerud University College, Department of Optometry, Kongsberg,
	Norway
1992–1994	Bachelor of Science (Hons), Optometry and Visual Science, UMIST, Manchester, UK
1990–1992	Did two out of three-year Optometry degree program, Kongsberg College of Engineering,
	Norway, transferred to the second year at UMIST, Manchester, UK in September 1992.
Primary Appo	intment
2012–Present	Professor, Department of Optometry and Visual Science, Buskerud University College.
	Norway
Joint Appoint	ments
2012-Present	Director of Postgraduate Studies in Optometry and Visual Science, Department of Optometry
	and Visual Science, Buskerud University College. Norway
2007–Present	Head of Colour Vision and Retinal Imaging Research Group (<u>http://cvri.hibu.no</u>)
2012–2014	Project manager for the development of a Nordic Master in Vision Rehabilitation
Previous App	ointments
2005–2011	Associate Professor, Department of Optometry and Visual Science, Buskerud University
	College. Norway
2009–2011	Postgraduate Coordinator, Department of Optometry and Visual Science, Buskerud University
	College. Norway
2005–2007	Project manager for the application process towards NOKUT accreditation of Master of
	philosophy in Visual Science
2005–2008	Honorary Visiting Research Associate, Faculty of Life Sciences, University of Manchester, UK
2002–2005	Research Associate, Faculty of Life Sciences, University of Manchester, UK

- 1997–2002Research Scholar (PhD-studies) Department of Optometry and Vision Sciences, University of
Manchester Institute of Science & Technology, UK
- 1994–1998 Assistant professor, Department of Optometry and Visual Sciences, Buskerud University College
- 1994–1996 Optometrist and assistant in the VEP-clinic (part-time), Huseby National Resource Centre for the Visually Impaired, Oslo, Norway
- 1991–1994 Optometric assistant, later optometrist during vacations Krogh Optikk, Oslo, Norway

Teaching experience

2008-present	Teaching (MPhil) scientific methods, image processing and psychophysics. Supervision of
	MPhil and PhD students.
2005-present	Teaching (BSc) visual physiology, visual optics, visual perception and colour vision;
	Supervision (BSc) Final year student research projects.
1994–1998	Teaching (Diploma) visual physiology, visual optics, visual perception and colour vision.

Supervision (Diploma) final year student research projects

Grants and awards

2010–2011	Recipient of the Buskerud University College Research Award 2010 (NOK 30K)
2009–2010	Recipient of the Norwegian Optometric Association Innovation Award 2010
2007–2012	The Research Council of Norway, "Vision and aging: Normal aging of the living human retina:
	Studies into the structure-function relationship of vision." Principal Investigator. (NOK 6 mill)
2007–2009	The Research Council of Norway, "Design and construction of Adaptive Optics
	Ophthalmoscope for Visual Science." Principal Investigator. (NOK 1.5 mill.)
2006–2009	The Research Council of Norway, "Rod-cone interaction in human colour-vision deficiency."
	Co-investigator. (NOK 0.9 mill)
2006–2009	The Research Council of Norway, "Rod-cone interaction in human colour-vision deficiency."
	Co-investigator. (NOK 0.9 mill)
2000–2001	Hultgrens Memorial Fund. Stipend towards PhD (NOK 30K)
1997–2002	Norwegian Optometric Association, PhD stipend. (NOK 0.6 mill)
1998–2002	Buskerud University College, PhD Fellowhsip. (NOK 0.4 mill)
2000	NATO ASI Travel Grant, PhD studies (NOK 10K)

Professional Activities and Associations

- Editor-in-chief, Scandinavian Journal of Optometry and Visual Science
- Topical Editor for Journal of the Optical Society of America A feature issue on Color Vision (JOSA A Vol. 29, Iss. 2, 2012)
- Organizer of the 21st symposium of the International Colour Vision Society to be held at Buskerud University College, Kongsberg July 1-5, 2011
- Organizer of Kongsberg Vision Meeting, annual Scandinavian meeting in vision science since 2008. (<u>http://kvm.hibu.no</u>)
- Member of the International Colour Vision Society (ICVS) and the society's Directors Committee.
- Member of the Optical Society of America (OSA).
- Member of the Association for Research in Vision and Ophthalmology (ARVO).

Committee work

- Elected member of the Visual Psychophysics (VI) section of the ARVO Annual Meeting Program Committee (2012-2016).
- Member of 2011 ARVO working group with focus on the strategy surrounding the ARVO annual meeting as well as the quality of science in ARVO meetings as part of the association's long range plan.
- Member of 2011 working group for the future Oslofjord University College *Utredningsgruppe III* on the new institution's external relations.
- Member of 2011 working group for organizing the new Faculty of Health Sciences at Buskerud University College. Operative from Januray 2. 2012.

Publications in Peer-Review Journals (2007-2012)

- Baraas R. C., Hagen L. A., Dees E. W., Neitz M. (2012) Substitution of isoleucine for threonine at position 190 of S-opsin causes S-cone-function abnormalities. Vision Research 73, 1-9
- [2] Dees EW, **Baraas R. C.** (2011) Fargede filtre gir ikke rød-grønne fargesvake normal fargebedømmelse. Scandinavian Journal of Visual Science 4(2), 6-13
- [3] Dees E. W., Dubra, A., and **Baraas R. C.** (2011) Variability in parafoveal cone mosaic in normal trichromatic individuals. Biomedical Optics Express 2 (5), 1351-1358
- [4] Michaelides M., Rha J., Dees E. W., Baraas R. C., Wagner-Schuman M., Mollon J. D, Dubis A. M., Andersen M. K. G., Rosenberg T., Larsen M., Moore A. T., and Carroll J. (2011) Integrity of the Cone Photoreceptor Mosaic in Oligocone Trichromacy. Investigative Ophthalmology and Vision Science, published online Mar 24.
- [5] Burner T., Baraas R. C. and Falkenberg H. K. (2011) Studentaktive vurderingsformer i norsk lærer- og optometriutdanning. Uniped 34, 43-56
- [6] Baraas R. C., Kulikowski J. J., and Muldoon M. (2010) Elongation of chromatic stimuli enhance the contribution of the intermediate temporal filter. Journal of Optical Society of America A 27, 766-780
- [7] Baraas R. C., Foster D. H., Amano K., and Nascimento S. M. C. (2010) Red-green colour-deficient observers show nearly normal colour constancy with natural reflectance spectra. Investigative Ophthalmology and Vision Science 51, 2286-2292
- [8] Carroll J., Baraas R. C., Morgan, J. I. W., Williams D. R., Foster D. H., Neitz M. (2009) Expression of Mutant Opsin (C203R) Causes Cone Degeneration: Developmental and Functional Implications Proceedings of the National Academy of Sciences of the United States of America 106, 20948-20953
- [9] Sun, H., Lee, B B., Baraas R. C. (2008) Systematic misestimation in a vernier task arising from contrast mismatch. Visual Neuroscience 25, 365-370
- [10] Baraas R. C. (2008) Poorer color discrimination by females when tested with pseudoisochromatic plates containing vanishing designs on neutral backgrounds. Visual Neuroscience 25, 501-505
- [11] Baraas R. C., Carroll J., Gunther K. L., Chung M., Williams D. R., Foster D. H., Neitz M. (2007) Adaptiveoptics retinal imaging reveals S-cone dystrophy in tritan color-vision deficiency. Journal of Optical Society of America A 24(5), 1438-1447.

Contributed Presentations at Professional Meetings (published in Peer-review journals)

- Dees, E. W., Gilson, S. J., Baraas R. C. (2012) Spatio-chromatic properties of human trichromatic vision. ARVO Meeting Abstracts March 26, 2012. Investigative Ophthalmology and Vision Science 53:E-abstract 6391
- [2] Baraas, R. C., Dees, E. W., Rha, J., Carroll, J., Andersen, M. K., Rosenberg, T., Larsen, M. (2011) Cone Density And Color Discrimination In Oligocone Trichromacy ARVO Meeting Abstracts April 22, 2011 Investigative Ophthalmology and Vision Science 52:E-abstract 3197
- [3] Dees, E. W., Rha, J., Dubra, A., Baraas, R. C. (2011) Variability In Parafoveal Cone Density In Normal Trichromatic Females ARVO Meeting Abstracts April 22, 2011 Investigative Ophthalmology and Vision Science 52:E-abstract 3200
- [4] Lundmark, P. O., Morisbakk, T. L., Baraas, R. C. (2011) Effect of Ocular Accommodation on Thickness Measurements of the Parapapillary Retina Obtained with Spectral Domain OCT ARVO Meeting Abstracts April 22, 2011 Investigative Ophthalmology and Vision Science 52:E-abstract 5087
- [5] Morisbakk, T. L., Baraas, R. C., Lundmark, P. O. (2011) Effect of Scan Depth Settings on Measurements of the Foveal Thickness Obtained with the Heidelberg SpectralisTM OCT ARVO Meeting Abstracts April 22, 2011 Investigative Ophthalmology and Vision Science 52:E-abstract 4048

- [6] Søyland, T., Aakre B. M., Baraas, R. C., Pedersen O. Ø. (2010) Corneal flap thickness after LASIK: what is important - keratometric power or corneal thickness? ARVO May 2010. Investigative Ophthalmology and Vision Science 49: E-Abstract 4209
- [7] Dees, E. W., **Baraas, R. C.** (2010) Chromatic discrimination in young carriers of red-green color-vision deficiency. ARVO May 2010. Investigative Ophthalmology and Vision Science 51: E-Abstract 6289
- [8] Hagen, L. A., and Baraas, R. C. (2009) Visual Acuity and Contrast Sensitivity in Deuteranomalous Trichromats. ARVO May 2009. Investigative Ophthalmology and Vision Science 48: E-Abstract 2736
- [9] Baraas, R. C., and Hagen, L. A. (2009) Tritan Color-vision Deficiency Associated with Novel Mutation in the Blue-sensitive Opsin. ARVO May 2009. Investigative Ophthalmology and Vision Science 48: E-Abstract 2729
- [10] **Baraas, R. C.**, and Sun, H. (2008) Comparison of local versus lateral S-cone modulation on rod thresholds. Journal of Vision 8 (17), 11a
- [11] Sun, H., and **Baraas, R. C.** (2008) Comparison of influences of local and lateral cone modulation on rod thresholds. Journal of Vision 8 (17), 84a
- [12] Sun, H., and Baraas, R. C. (2008) The influence of local versus lateral cone modulation on rod thresholds. Perception 37 (Supplement), 146
- [13] Baraas, R. C., Sun, H., and Hagen, L. A. (2008) The influence of temporal S-cone modulation on rod thresholds. Perception 37 (Supplement), 63
- [14] Sun, H., Lee, B. B., **Baraas, R. C.** (2007) Perceived vernier phase shift due to contrast gain control. 19th symposium of The International Colour Vision Society Abstracts Book ISBN 978-85-86736-27-8, pp. 71-72
- [15] Baraas, R. C. (2007) Mass screening for color-vision deficiencies in Norwegian children. 19th symposium of the International Colour Vision Society Abstracts Book ISBN 978-85-86736-27-8, pp. 111
- [16] Carroll, J., Baraas, R. C., Morgan, J. I. W., Williams, D. R., Foster, D. H., Neitz, M. (2007) Expression of C203R mutant cone pigment results in cone degeneration. ARVO May 2007. Investigative Ophthalmology and Vision Science 48: E-Abstract 3814
- [17] Baraas, R. C., Carroll, J., Gunther, K. L., Chung, M., Williams, D. R., Foster, D. H., Neitz, M. (2007) S-cone dystrophy in tritan color-vision deficiency revealed by adaptive-optics retinal imaging. ARVO May 2007. Investigative Ophthalmology and Vision Science 48: E-Abstract 3180

Invited Presentations given by R. C. Baraas (2007-2012)

- [1] *High-resolution imaging of the cone photoreceptor mosaic.* CET approved Seminar. Department of Vision Sciences, Glasgow Caledonian University, Glasgow, Scotland. October 2011
- [2] Adaptive optics imaging of photoreceptors. Symposium on OCT and imaging of the Retina. Glostrup Hospital, Copenhagen. March 2011
- [3] When pink is the new yellow: a modern approach to color-vision deficiencies. The Cambridge Resaerch Systems Invited Speaker at the Colour Group UK, London, England. January 2011.
- [4] Inherited tritan color-vision deficiencies and its association with S-cone dystrophy. International Congress of Eye Research in Beijing, China. September 2008
- [5] Contrast sensitivity and colour vision in patients with Diabetes. Membersmeeting at Norges Diabetesforbund Hønefoss and Kongsberg, Norway, November 2008