

Rigmor C. Baraas

Department of Optometry and Visual Science
Buskerud University College
3611 KONGSBERG, NORWAY

Phone: +47 32 86 97 87
Fax: +47 32 86 96 71
Email: rigmor.baraas@hibu.no
Web: <http://cvri.hibu.no>

Education / Training

2009 - 2010 Diagnostic Drugs Diploma, Buskerud University College, Kongsberg, Norway.
2002 - 2005 Research Associate, Computational Neuroscience 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.
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 Appointment

2005 - Present Associate Professor and Head of the Colour Vision and Retinal Imaging Laboratory, Department of Optometry and Visual Science, Buskerud University College. Norway

Joint Appointments

2009 - Present Postgraduate Coordinator, Department of Optometry and Visual Science, Buskerud University College. Norway

Grants

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.
2007 - 2009 The Research Council of Norway, "Design and construction of Adaptive Optics Ophthalmoscope for Visual Science." Principal Investigator.
2006 - 2009 The Research Council of Norway, "Rod-cone interaction in human colour-vision deficiency." Co-investigator.

Professional Activities and Associations

- Editor-in-chief, Scandinavian Journal of Optometry and Visual Science
- 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.
- 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).
- Member of 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.

Publications in Refereed Journals (2005-2011)

- [1] 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
- [2] 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.
- [3] Burner T., **Baraas R. C.** and Falkenberg H. K. (2011) Studentaktive vurderingsformer i norsk lærer- og optometriutdanning. *Uniped* 34, 43-56
- [4] **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
- [5] **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
- [6] 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
- [7] Sun, H., Lee, B B., **Baraas R. C.** (2008) Systematic misestimation in a vernier task arising from contrast mismatch. *Visual Neuroscience* 25, 365-370
- [8] **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
- [9] **Baraas R. C.**, Carroll J., Gunther K. L., Chung M., Williams D. R., Foster D. H., Neitz M. (2007) Adaptive-optics retinal imaging reveals S-cone dystrophy in tritan color-vision deficiency. *Journal of Optical Society of America A* 24(5), 1438-1447.
- [10] **Baraas R. C.**, Foster D. H., Amano K., and Nascimento S. M. C. (2006) Anomalous trichromats' judgments of surface color in natural scenes under different daylights. *Visual Neuroscience* 23, 629-635.
- [11] **Baraas R. C.** (2005) Perception of chromatic motion requires luminance interaction. *Perception* 34, 1025-1028.

Contributed Presentations at Professional Meetings (2005-2011)

- [1] Søyland, T., Aakre B. M., **Baraas, R. C.**, Pedersen O. Ø. 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
- [2] Dees, E. W., **Baraas R. C.** Chromatic discrimination in young carriers of red-green color-vision deficiency. ARVO May 2010. *Investigative Ophthalmology and Vision Science* 51: E-Abstract 6289
- [3] 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
- [4] **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
- [5] **Baraas R. C.**, and Sun, H. (2008) Comparison of local versus lateral S-cone modulation on rod thresholds. *Journal of Vision* 8 (17), 11a
- [6] 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

- [7] Sun, H., and **Baraas R. C.** (2008) The influence of local versus lateral cone modulation on rod thresholds. *Perception* 37 (Supplement), 146
- [8] **Baraas R. C.**, Sun, H., and Hagen, L. A. (2008) The influence of temporal S-cone modulation on rod thresholds. *Perception* 37 (Supplement), 63
- [9] 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
- [10] **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
- [11] 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
- [12] **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
- [13] **Baraas R. C.**, Foster D. H., Amano K., and Nascimento S. M. C. (2005) Dichromatic judgments of surface color under different illuminants on natural scenes. *Journal of Vision* 5 (8), Abstract 1022, Page 1022a
- [14] **Baraas R. C.**, Foster D. H., Amano K., and Nascimento S. M. C. (2005) Ability of anomalous trichromats to judge natural and Munsell surface colors under different illuminants. ARVO May 2005. *Investigative Ophthalmology and Vision Science* 46: E-Abstract 4682

Invited Presentations (2008-2011)

- [1] *Adaptive optics imaging of photoreceptors*. Symposium on OCT and imaging of the Retina. Glostrup Hospital, Copenhagen. March 2011
- [2] *When pink is the new yellow: a modern approach to color-vision deficiencies*. Colour Group UK, London, England. January 2011.
- [3] *Inherited tritan color-vision deficiencies and its association with S-cone dystrophy*. International Congress of Eye Research in Beijing, China. September 2008

Teaching Experience

- | | |
|----------------|--|
| 2008 - present | Supervision of research assistants, PhD, MPhil students at Buskerud University College, Norway. |
| 2005 - present | Supervision of BSc project students, undergraduate teaching of optometry students Buskerud University College, Norway. |
| 1994 - 1998 | Undergraduate teaching of optometry students, Buskerud University College, Norway. |