

## Mahesh R Joshi; PhD, MPhil, BOptom, FHEA

Lecturer in Optometry  
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<b>Research Interest</b>	Motion Processing, Shape Processing, Noise, Perceptual Learning, Peripheral Vision, Amblyopia, Clinical Optometry	
<b>Education</b>	<b>Postgraduate Certificate in Academic Practice</b> University of Plymouth	<b>2018 - 2020</b>
	<b>Doctor of Philosophy (Visual Neuroscience)</b> Glasgow Caledonian University, Glasgow, UK <i>Thesis:</i> The Psychophysical Characterization of Dorsal and Ventral Stream Functions with Equivalent Noise Paradigm in Normal and Clinical Populations <i>Supervisors:</i> Seong T Jeon, Anita J Simmers	<b>2012 - 2016</b>
	<b>Master of Philosophy (Optometry)</b> Buskerud University College, Kongsberg, Norway <i>Thesis:</i> Development and Maturation of Global Motion Sensitivity in School aged Children <i>Supervisor:</i> Helle K Falkenberg	<b>2010 - 2011</b>
	<b>Bachelor of Optometry</b> Institute of Medicine, Nepal <i>Project:</i> Refractive Changes in Patients Undergoing Phacoemulsification Surgery	<b>1999 - 2003</b>
<b>Academic and Clinical Appointments</b>	<b>Lecturer (Optometry)</b> University of Plymouth, UK	<b>09/2018 – Present</b>
	<b>Lecturer (Optometry)</b> The University of the West Indies, Trinidad & Tobago	<b>03/2017 – 08/2018</b>
	<b>Research Associate</b> <i>Project:</i> Perceptual Learning in Enhanced Amblyopia Treatment (PLEAT) Study Glasgow Caledonian University, UK	<b>06/2016 – 01/2017</b>
	<b>Clinical Optometrist</b> <ul style="list-style-type: none"><li>Institute of Medicine, Nepal</li><li>Om Hospital and Research Center, Nepal</li><li>Eye Care Clinic, Republic of Maldives</li></ul>	<b>01/2012 – 10/2012</b> <b>05/2005 – 12/2009</b> <b>08/2004 – 04/2005</b>

## Journal Publications

1. **Joshi, M. R.**, Persad V., Farnon N. (2020) “A retrospective study of causes of visual impairment and use of low vision devices in the low vision clinic in Trinidad and Tobago.” *Journal of Optometry*, In Press. [DOI]
2. **Joshi, M. R.**, Simmers A. J., Jeon S. T. (2020) “Implied motion from form shows motion aids the perception of global form in amblyopia.” *Investigative Ophthalmology and Visual Science*, 61(5):58. [DOI]
3. **Joshi, M. R.**, Simmers A. J., Jeon S. T. (2016) “Concurrent investigation of global motion and form processing in amblyopia: an equivalent noise approach.” *Investigative Ophthalmology and Visual Science*, 57(11), 5015-5022. [DOI]
4. **Joshi, M. R.**, Falkenberg, H. K. (2015). “Development of radial optic flow pattern sensitivity at different speeds.” *Vision Research*, 110, 68-75. [DOI]
5. Sah, R.P., Gautam, P., Shrestha J. B., **Joshi, M. R.** (2015). “Usher syndrome: case reports of two siblings.” *Optometry and Visual Performance*, 3(3),7-10. [Link]
6. Khanal, S., Thapa, M., Racette, L., Johnson, R., Davey, P. G., **Joshi, M. R.**, Shrestha, G. S. (2014). “Retinal nerve fiber layer thickness in glaucomatous Nepalese eyes and its relation with visual field sensitivity.” *Journal of Optometry*, 7(4), 217–224. [DOI]
7. Shrestha, R. K., **Joshi, M. R.**, Ghising, R., & Rizyal, A. (2011). “Ocular morbidity among children attending government and private schools of Kathmandu valley.” *Journal of Nepal Medical Association*, 51(184), 182-188. [DOI]
8. Shrestha, R. K., **Joshi, M. R.**, Shakya, S., & Ghising, R. (2010). “Color vision defects in school going children.” *Journal of Nepal Medical Association*, 50(180), 264-266. [DOI]
9. **Joshi, M. R.**, & Shakya, S. (2009). “Change in refractive status of the patients undergoing phacoemulsification surgery.” *Nepal Medical College Journal*, 11(1), 19-22. [Link]
10. **Joshi, M. R.**, Yamagata, Y., Akura, J., & Shakya, S. (2008). “The efficacy of low vision devices for students in specialized schools for students who are blind in Kathmandu valley, Nepal.” *Journal of Visual Impairment & Blindness*, 102(7), 430-435. [DOI]
11. Shrestha, R. K., **Joshi, M. R.**, Ghising, R., Pradhan, P., Shakya, S., & Rizyal, A. (2006). “Ocular morbidity among children studying in private schools of Kathmandu valley: A prospective cross sectional study.” *Nepal Medical College Journal*, 8(1), 43-46. [Link]

## Preprints

1. Barhoom, H., **Joshi, M. R.**, & Schimdtmann, G. (2020). “The effect of response biases on resolution thresholds of Sloan letters in central and paracentral vision.” *BioRxiv*, 283119. [DOI] .

## Selected Conference Proceedings

1. **Joshi, M. R.**, Simmers A. J., Jeon S. T. (2019). “Sensitivity to global form in presence of noise is stimuli dependent.” *Perception*, 49 (6), 700 -26. Applied Vision Association Meeting, Cardiff, UK. [Poster] [DOI]
2. Voison, K. J., **Joshi, M. R.**, Farnon, N., Coleman, M., Bex, P. (2019). “Quantitative Measurement of Perceptual Distortion in Keratoconus.” American Academy of Optometry Meeting, Florida, USA. [Talk] [Link]
3. **Joshi, M. R.**, Simmers A. J., Jeon S. T. (2018). “Motion cues aids perception of implied motion in amblyopia.” *Journal of Vision*, 18(10):544. at 18th Annual Vision Sciences Society Meeting, Florida, USA. [Talk] [DOI]

4. Jeon S. T., **Joshi, M. R.**, Simmers A. J. (2015). “Noise reveals abnormal global integration of motion and form in strabismic amblyopia.” *Perception*, 44 (S1), 338. 38th European Congress of Visual Perception, Liverpool, UK. [Poster] [DOI]
5. **Joshi, M. R.**, Simmers A. J., Jeon S. T. (2015). “Deficits in integration of global motion and form in noise is associated with the severity and type of amblyopia.” *Journal of Vision*, 15, 193. 15th Annual Vision Sciences Society Meeting, Florida, USA. [Talk] [DOI]
6. **Joshi, M. R.**, Simmers A. J., Jeon S. T. (2014). “Limiting factors in form and motion perception: shared locally, differentiated globally.” *Journal of Vision*, 14, 1418. 14th Annual Vision Sciences Society Meeting, Florida, USA. [Poster] [DOI]
7. **Joshi, M. R.**, Simmers A. J., Jeon S. T. (2013). “Concurrent characterization of dorsal & ventral pathway with equivalent noise paradigm.” *Perception*, 42 (S1), 210. 36th European Congress of Visual Perception, Bremen, Germany. [Poster] [DOI]
8. **Joshi, M. R.**, & Falkenberg, H. K. (2012) “Development of optic flow sensitivity in school-aged children of Kathmandu.” *Perception*, 41 (S1), 119. 35th European Congress of Visual Perception, Italy. [Poster] [DOI]
9. **Joshi, M. R.**, Yamagata, Y., Akura, J., & Shakya, S. (2009). “The efficacy of low vision devices for students in specialized schools for students who are blind in Kathmandu valley, Nepal.” 17th Asia Pacific Optometry Congress, Hong Kong. [Poster]

**Research  
Supervision**

- Hatem H Barhoom, PhD, Second Supervisor (2019 - )

**Teaching  
Experience**

**University of Plymouth, Undergraduate Optometry (09/2018 – Present)**

- Advanced Optometry Practice (OPT 602, CL, BV, LV) - **Module lead**
- Specialist Optometry Skills (OPT 502 CL,LV), - **Teacher**
- Paediatric and Binocular Vision (OPT 503) – **Teacher**
- Project Studies (SOHP 501 & 601) – **Teacher**

**The University of the West Indies, Undergraduate Optometry (03/2017 – 08/2018)**

- Visual Perception (OPTM 1051, OPTM 1052, OPTM 2051) - **Module lead**
- Binocular Vision (OPTM 2061, OPTM 3051, OPTM 4022), - **Module lead**
- Clinical Supervisor

**Glasgow Caledonian University, Undergraduate Optometry (2012 - 2016)  
Teaching Assistant**

- Refraction & Binocular Vision 1 - Tutorials and Labs
- Foundations of Optics - Tutorials and Labs
- Diagnostic Techniques - Clinical Labs
- Refraction & Binocular Vision 2 - Tutorials and Labs
- Clinical Research Methods - Tutorials and Labs

- Journal Reviewer**
- Vision Research
  - Investigative Ophthalmology & Vision Science (IOVS)
  - Perception
  - Vision
  - Royal Society Open Science
- Competitive Grant Reviewer**
- Biotechnology and Biological Sciences Research Council (BBSRC)
- Awards**
- Publication Grant - IOVS Journal (2019)
  - PhD studentship by Glasgow Caledonian University (2012)
  - Travel grant for 35th European Congress of Visual Perception, Italy, 2012
  - The Quota scholarship by Norwegian State Education Loan Fund (Lånkassen) for Master of Philosophy (2010- 2011)
  - Travel grant for 17th Asia Pacific Optometry Congress, Hong Kong, 2009
  - Gold Medal for highest overall marks in Bachelor of Optometry stream, Nepalese Association of Optometrists, 2003
- Membership**
- Fellow of Higher Education Academy (FHEA): 2020 - present
  - International Association of Contact Lens Educators: 2018 - present
  - British & Irish University Contact Lens Educators: 2018 - present
  - Trinidad and Tobago Opticians Registration Council: 2018 - present
  - Vision Sciences Society: 2014 - present
  - Norwegian Directorate for Health (Optometrist): 2012 - 2013
  - Nepal Health Professions Council: 2006 - present
- References**
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