

Brief Curriculum Vitae

Usha Chakravarthy

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Personal Information

Name Usha Chakravarthy

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Queen's University of Belfast
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Date of Birth 15-03-1952

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Nationality British

Marital status Married

Spouse: Dr James Vevers Redman Barbour

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Appointments

Current **Professor**
Ophthalmology and Vision Sciences, Royal Victoria Hospital (The Belfast Trust) and Queens University of Belfast., Northern Ireland

1993-1999 Senior Lecturer / Honorary Consultant, Ophthalmic Directorate
Royal Victoria Hospital, Belfast

1990-1993 Vision Research Lecturer, Department of Ophthalmology
Royal Victoria Hospital, Belfast

1986-1989 Senior Research Fellow, Department of Ophthalmology
Royal Victoria Hospital, Belfast

1982-1986 Senior Registrar, Department of Ophthalmology
Royal Victoria Hospital, Belfast

1980-1982 Registrar, Eye Hospital, Southampton

1978-1980 Senior House Officer, Surgical Rotation
Amersham General Hospital, Bucks

Academic Degrees

1975 MBBS, University of Madras, India
1978 Diploma in Ophthalmology, College of Surgeons England
1980 Fellowship of the College of Surgeons England
1982 Ophthalmic Fellowship, College of Surgeons, Edinburgh
1987 PhD, Queen's University of Belfast

Academic achievements

1975 First Division Pass with Distinction in Medicine, Surgery and Ophthalmology, University of Madras, India.
1985 Winner of the Calvert award and Calvert Lecturer, Royal Victoria Hospital, Belfast
1986 Winner of the Doyne Cup for the best scientific presentation at the Oxford Congress, UK
1988 First prize for the best poster at the Oxford Ophthalmological Congress for poster titled "Morphological changes in conjunctival epithelium with age"
1989 Second Prize Winner of the International Chibret Award for dissertation entitled "Iodine plaque radiotherapy for perforating ocular injuries".
1990 First Prize poster award at the Association for Eye Research Bonn for poster titled "A comparative specular scanning, and transmission electron microscopic study of corneal endothelial wound healing"
1992 First Prize poster award at the College of Ophthalmologists, Glasgow UK for poster titled "Endothelin A vasoactive peptide".

Teaching responsibilities

1993-present

Undergraduate	First year medical students: Communication skills. Instruction time 12 hours
	Second year medical students: Molecular biology in medicine. Instruction time 5 hours
	4th year Medical Student, Vision Sciences Programme. Student selected modules, teaching at outpatient clinics, laser and theatre lists . Instruction time 60 hours per year
Post-graduate	Ophthalmology, Regional Post-graduate seminar series . Teaching nationally at most regional seminar series as invited visiting lecturer.
Laboratories	Post-graduate scientific seminar series, Vision Sciences

Fellowships of Learned Bodies

Fellow of the Royal College of Ophthalmologists, UK

Fellow of the Royal College of Surgeons, England

Memberships of Scientific Societies

Fellow of the Oxford Ophthalmological Congress

Member of the British Diabetic Association

Member of the Association for Research and Vision in Ophthalmology

Member of the International Society for Eye Research

Member of EVER (European Vision and Experimental Research)

Member of the Retina Society and Fluorescein Angiographic Club

Invited Memberships

British Eye Study Group

AMD Alliance International

Editorial Responsibilities

Previous responsibilities
Editorial board member of EYE
Current Eye Research
IOVS
Open Ophthalmology Journal

Ad hoc reviewer for Experimental Eye Research,
Ophthalmology, American J of Ophthalmology, Archives of
Ophthalmology, British Medical Journal , New England
Journal of Medicine, Nature Genetics.

Current Academic, Health service and other advisory Capacities

Chairperson Ophthalmology Specialty Group, UKCRN
Clinical Lead for the VISION network, Northern Ireland
Clinical Research Networks
Member of the Topic Selection Panel, NICE
Member of the Partners Council, NICE
Chairperson UK College of Ophthalmologists AMD
guidelines group

Previous Academic, health service and other advisory Capacities

College of Ophthalmologists Academic Group
Advisor to the Health Technologies Assessment
Member of the Advisory Panel of the Northern Ireland
Foresight Initiative.
Advisor to the UK Prevention of Blindness Committee

Current Membership of Scientific Panels

Panel member French National Research Agency
Panel member Deutsche Forschung Gemeinschaft
Scientific panel member EU Flare initiative
Scientific Panel member to the EU for the NEST programme
Member of the Scientific Advisory Board, Medical Research
Council UK
Member of Scientific Advisory Board, International AMD
Alliance.
Member of the NIHR Faculty as lead investigator for the
IVAN trial

Previous membership of Scientific Panels

Member of scientific advisory board Royal National Institute
for the Blind Stepped down 2000
Member of scientific advisory board British Retinitis
Pigmentosa Society Stepped down 2002
Member of Research and Scholarships subcommittee, QUB,
Stepped down 2004
Member of scientific advisory board, Macular Disease Society
Stepped down 2006
Member of Scientific Advisory Board, British Council for
Prevention of Blindness, Save Eyes Everywhere. Stepped
down 2007

Examination Boards

External examiner for Fellowship in Ophthalmology,
University of Malaya, Kuala Lumpur
Visiting Examiner for MSc in Eye Health, Institute of
Ophthalmology
Examiner Part 3 Fellowship and the Exit examinations, Royal
College of Ophthalmologists, London.

Grant Funding

Currently active grants

- **Chief Investigator**, Macular Disease Society. Investigation of genetic correlates of dry AMD. 2009 to 2010. £30,000
- **Co Investigator**. Guide dogs for the Blind. Further refinement of known loci in late AMD. 2009 to 2011. £110,000
- **Chief Investigator** UK NHS R and D The IVAN clinical trial 2.7 million. 2007 to 2011
- **Co Investigator**. A genetic component to the Indeye Study of Cataract and AMD in India. Wellcome Trust 2008 to 2011. £636,118
- **Chief Investigator** for VPDT cohort study . Specialised Commissioning UK, 2.55 million. 2004 to 2008
- **Co Investigator** European Vth Action Framework. EVIGENORET. Phenotyping component A. Total 149,000 Euros.2005 to 2008
- **Co Investigator** Wellcome Trust. Epidemiology of Age-Related Eye Diseases in India. 2004 to 2008 . £618,731
- **Chief Investigator** for VPDT cohort Study. Department of Health, NCCHTA UK VPDT cohort study. £778,891
- **Chief Investigator**. The multicentre CARMA clinical trial. Psychophysical outcomes in a randomised controlled clinical trial of Lutein and Zeaxanthin supplementation in early ARM Bausch and Lomb Education Grant: £450,000 2003- 2008

Projects and grants completed in the last 10 years

- PPP Health Care Trust: £278,000: Visual function and macular carotenoids and the role of polymorphic variability in xenobiotic metabolising enzymes in the development of AMD. Principal applicant and grant holder. 2001 - 2005
- BBSRC. £102,220 Variations in the density and spatial properties of the achromatic and SWS driven retinal ganglion cells with age. In conjunction with Professor RS Anderson,(University of Ulster). 2001 -2004
- Wellcome Trust, £189,000. Epidemiology of Age-Related Eye Disease in India. A Pilot Study. In conjunction with Professor Astrid Fletcher (London School of Hygiene) and Professor GV Murthy (All India Institute of Medical Sciences). 2001-2003
- Macular Disease Society UK, £58,000. A longitudinal study of factors influencing visual function. 2001 - 2004
- Macular Disease Society UK, £135,000. A study of visual disability in older people. Principal applicant and grant holder. 2001- 2004
- Visual disability in older European populations. EU Vth Action Framework Grant. Total 1.7 million (Principal applicant: Professor Astrid Fletcher). Professor Chakravarthy's component 376,322 euros. 2000 – 2003
- Guide Dogs for the Blind, Studies into QOL of life: £87,000 Principal applicant and grant holder. 2000 - 2003.
- MRC. £27,000 Scanning laser ophthalmoscopy of the macular retina. Co-applicant. 2001- 2002.

- OCT imaging diseases of the macula. JREI/MRC, £58,740. Principal applicant and grant holder. 2000-2001
- Characterisation of G proteins in retinal pericytes and their modification by high glucose concentrations. MURST/CRUI agreement, British Council Cooperative grants. Joint applicant with Dr M Mazzoni, University of Pisa, Italy, £5000. 1999-2000
- Mechanisms of chemical and photic damage in the etiology of age-related macular degeneration of the eye. Royal National Institute for the Blind, £60,000 . Principal applicant and grant holder. 1998-2000
- Radiotherapy in the management of sub-foveal CNV (1995-2002) Medical Research Council of the UK; £695,000, Principal applicant and grant holder
- Radiobiology of relatively low dose irradiation of the eye: clinicopathological and molecular mechanisms. (1998) Wellcome Burroughs USA, Travel Fund to the value of \$5500 and £500. Joint applicant with Dr S Klein, Indiana University
- Vasoactive agents in diabetic retinopathy (1994-1999), Wellcome Trust, University Award, Senior Clinical Fellowship £365, 000, Principal applicant and grant holder
- The role of polymorphic variation in genes encoding vasoactive genes in susceptibility to vascular disease in diabetes (1996-1999) Guide Dogs for the Blind, £85, 000K Joint Principal applicant and grant holder with Dr AE Hughes
- Endothelin 1 polymorphisms in diabetic retinal vascular disease (1994-1996) British Council for Prevention of Blindness, £15,000, Principal applicant and grant holder
- Mechanisms of cell death in retinal vascular pericytes and smooth muscle cells. £69,465, Joint applicant with Dr TA Gardiner. 1996-1999

Grant Funding 1992 to 1996

1992	Wellcome Trust. Role of endothelin peptides in the retinal microcirculation.£45,000
1992	NovoNordisk UK Diabetes Award: £7500
1992	Lilly UK Diabetes Award: £3000
1994	Pocklington Trust. £89,000 to investigate antagonists to endothelin peptides in a retinal vascular cell model
1995	Parke Davis. Endothelin receptor blockade in diabetic microvascular disease £97,000

Grant Funding 1988-1992

1988	Wellcome Vision Research Fellowship. £142,000
1989	Royal National Institute for the Blind: Radiosensitivity of microvascular cells. £71,000
1990	Juvenile Diabetes Foundation, Hyperglycemia and diabetes \$ 145,000

Full papers and Book Chapters since 1986

1. *Chakravarthy U*, , Maguire CJF, Archer DB. Experimental posterior perforating eye injury: A controlled study of the gross effects of localised gamma radiation. *Brit. J. Ophthalmol.*, 1986;70:561-569
2. Jackson AJ, Archer DB, *Chakravarthy U*, Mufti RAM. Long term observations on an anterior chamber Ridley intraocular lens. *Internat. Ophthalmol.*, 1986;9:161-172
3. *Chakravarthy U*, McCormick D, Maguire CJF, Archer DB. An In vitro study of irradiated vitreoretinal membranes. *Trans. Ophthalmol. Soc. UK.*, 1987;1:126-135
4. *Chakravarthy U*, , Maguire CJF Experimental traumatic intraocular proliferation modified by localised gamma irradiation. *Internat. Ophthalmol.*, 1987;10:115-116
5. *Chakravarthy U*, Biggart JH. Gardiner TA, Maguire CJF, Archer DB. A light microscopic and autoradiographic study of non-irradiated and irradiated ocular wounds. *Curr. Eye. Res.*, 1989;8:337-348
6. *Chakravarthy U*, Gardiner TA, Maguire CJF, Archer DB. Focal irradiation of perforating eye injuries. *Curr. Eye. Res.*, 1989;8:1241-1250
7. *Chakravarthy U*, Frew L, Gardiner TA, Archer DB. In vitro viability of choroidal melanomas following pre-enucleation irradiation. *International Ophthalmology*, 1991;15:303-310
8. *Chakravarthy U*. Focal irradiation of perforating ocular wounds with 125I plaques. *Chibret Journal of Ophthalmology*, 1990;5:45-50
9. *Chakravarthy U*, Gardiner TA, Anderson P, Archer DB, Trimble ER. The effect of endothelin 1 on the retinal microvascular pericyte. *Microvasc. Res.*, 1992;43:241-254
10. *Chakravarthy U*, Archer DB. Endothelin: A new vasoactive ocular peptide. *British J. Ophthalmol.*, 1992;76:107-108
11. *Chakravarthy U*, Douglas A, McKibbin B, Archer DB. Immunoreactive endothelin distribution in ocular tissues. *Invest Ophthalmol* 1994, 35: 2448-2454
12. *Chakravarthy U* McGinty A, Anderson P, Trimble ER, Archer DB. Altered endothelin 1 contraction and second messenger generation in microvascular pericytes. *Diabetologia*, 1994, 37:36-42
13. Grimshaw J, Kane A, Trocha Grimshaw J, *Chakravarthy U*. Archer DB. Quantitative analysis of hyaluronan in vitreous humor. *Electrophoresis*, 1994;15:936-940
14. *Chakravarthy U*, Houston RF, Archer DB. Treatment of age-related subfoveal choroidal neovascular membranes by teletherapy. *Brit. J. Ophthalmol.* 1993, 77:265-273
15. Hayes RG, *Chakravarthy U*, Shaw C, Buchanan KD. Tachykinin 1 gene products in porcine ocular tissues. Evidence for transcriptional and post-translational regulation. *Vision Res.* 1993; 33: 1477-1480
16. Stitt AW, *Chakravarthy U*, Gardiner TA, Archer DB. Endothelin like immunoreactivity and binding in choroid retina and optic nerve. *Curr Eye Res* 1995, 15:111-117
17. Hart PM, Archer DB, *Chakravarthy U*. Asymmetry of disciform scarring in bilateral disease when one eye is treated with radiotherapy. *Brit J Ophthalmol.* 1995; 79:562-568
18. McDonald DM, Baile J, Archer DB, *Chakravarthy U*. Characterisation of ETA and ETB receptors in bovine retinal pericytes. *Invest. Ophthalmol.* 1995; 36:1088-1094

19. McDonald DM, Baile J, Archer DB, *Chakravarthy U*. Molecular characterisation of endothelin receptors in retinal pericytes. *J Cardiovasc. Pharm.* 1995; 26:S287-289
20. Stitt AW, Gardiner TA, Bailie JR, *Chakravarthy U* and Archer DB. An investigation of receptor mediated endocytosis and endosomal sorting of albumin and transferrin in retinal vascular endothelial cells. *Endothelium* 1996;4:113-118
21. Stitt AW, *Chakravarthy U*, Archer DB and Gardiner TA. Increased endocytosis in retinal vascular endothelial cells grown in high glucose is modulated by inhibitors of nonenzymatic glycosylation. *Diabetologia* 1995, 38:1271-1275
22. *Chakravarthy U*, Stitt AW, McNally J, Bailie JR, Hoey EM, Duprex P. Nitric oxide synthase activity and expression in retinal capillary endothelial cells and pericytes. *Curr Eye Res.* 1995, 14:285-294
23. McDonald DM, Baile J, Archer DB, *Chakravarthy U*. Receptor Binding and Biological Activity of synthetic ET peptides in retinal pericytes. *Invest Ophthalmol.* 1996;37:1067-1073
24. Hart PM, Archer DB, Houston RF, *Chakravarthy U*. Teletherapy for choroidal CNVM. The results of prolonged follow up. *Brit. J. Ophthalmol.* 1996;80:1046-1050
25. Hart PM, Archer DB, *Chakravarthy U*. Teletherapy in the management of patients with age-related macular degeneration complicated by subfoveal neovascularisation: An overview. *Front. Radiat. Ther. Oncol.*, 1996, 15;59:10-19
26. Lewis SEM, Stirling S, *Chakravarthy U*, Thompson W. Asthenozoospermia is associated with low levels of nitric oxide in sperm. *Hum. Mol. Reprod.*, 1996;11:873-878.
27. Best RM, *Chakravarthy U*. Diabetic retinopathy in pregnancy. A perspective. *Brit. J. Ophthalmol.*, 1997; 81:1-3
28. Donnelly ET, Lewis SEM, Thompson W, *Chakravarthy U*. Determination of NO concentrations in human sperm using an isolated NO meter and sensor. *Mol. Hum. Reprod.*, 1997;3:755-772
29. *Chakravarthy U*, Hayes RG, Stitt AW, Douglas A. Increased ET1 expression in ocular tissues of diabetic animals. *Invest. Ophthalmol.* , 1997; 38:2144-2151
30. *Chakravarthy U*. Clinicopathological correlations provide new insights in to the etiology of wet age-related macular degeneration. *Eye.* 1997;11:442-443
31. *Chakravarthy U*. Radiotherapy for age-related macular degeneration. *JAMA*, 1997;278:288
32. Finger PT, *Chakravarthy U*. New Developments in the treatment of age-related macular degeneration. Proceedings of the workshop. Gardone Riveria, Italy, 1997, Progei Edit.
33. Donnelly ET, Lewis SEM, Thompson W, *Chakravarthy U*. Sperm motility and nitric oxide. The effect of nitric oxide synthase inhibition and stimulation. *Hum. Mol. Reprod.* 1997;3:755-762
34. Hart PM, *Chakravarthy U*. Stevenson MR. Questionnaire-based survey of the importance of Quality of life instruments in ophthalmic practice. *Eye.* 1998;12:124-126
35. Ciulla TA, Danis RP, *Chakravarthy U*. Radiation therapy for exudative age-related macular degeneration. Letter to the Editor. *Retina*, 1998;18:19-20
36. *Chakravarthy U*, Hayes RG, Stitt AW, MaCauley E. Constitutive Nitric oxide synthase expression is modulated by hyperglycemia and AGE in cultured retinal capillary endothelial cells. *Diabetes*, 1998, 47:945-952

37. *Chakravarthy U*, Hart PM, Finger PT. External Beam Radiation Therapy for CNV. *Ophthalmology*, 1998, 105:1790-1791
38. Finger PT, *Chakravarthy U*. Radiotherapy and the treatment of age-related macular degeneration. *Arch Ophthalmol*. 1998;116:1507-1511
39. *Chakravarthy U*, Gardiner TA. Endothelium-derived agents in pericyte function/dysfunction. *Prog in Ret. Eye Res.*, 1999;18:511-527.
40. Berson A, Finger PT, *Chakravarthy U* Radiation Therapy for Age-Related Macular Degeneration. *Seminars in Rad Oncol.*, 1999, 9(2) :155-162
41. Berson A, Finger PT, *Chakravarthy U*. External Beam Radiation therapy for Age-Related Macular Degeneration. *Radiation Oncology*, 1999;9:155-162
42. Warpeha K, Xu W, Ahfat F, Harding S, Patterson CC, *Chakravarthy U* Hughes A. Dinucleotide polymorphisms in EDN1 and NOS3 are not associated with severe diabetic retinopathy in type 1 and type 2 diabetes. *Eye*, 1999,13:174-178
43. Best RM, Hayes RG, Hadden DR, *Chakravarthy U* Archer DB. Plasma levels of endothelin 1 in diabetic pregnancy. *Eye*. 1999,13:179-182
44. KM Warpeha, F Ah-Fat, , W Xu, S Harding, C Patterson, P Hart, U Chakravarthy, and AE Hughes (1999) Functional analysis of the polymorphic (CCTTT)_n locus of NOS2A in diabetic retinopathy, *FASEB J*, 1999, 13:1825-1832
45. Hart PM, *Chakravarthy U*, Stevenson MR, Jamison JQ. A Vision-specific functional index for use in patients with age-related macular degeneration. *Brit. J. Ophthalmol.*, 1999; 83:1115-1120
46. Chakravarthy U, Hart PM. Age related macular disease. Intervention possibilities. *Community Eye Health*, 1999;29:9-10
47. McClure M, Hart PM, Stevenson MR, Jackson AJ. *Chakravarthy U*. Measuring aspects of vision relating to visual disability. *Irish Optician.*, 1999;9:4-5
48. McClure M, Hart PM, Stevenson MR, Jackson AJ. *Chakravarthy U*. Macular Degeneration. Daily living tasks. *Proceedings International Society for Low Vision Research and Rehabilitation*, Lighthouse Vision 1999. New York.
49. Patton W, Davies RJH, Archer DB, *Chakravarthy U*. Mechanisms of UV induced-DNA damage in RPE cells. *Invest. Ophthalmol*. 1999;40:3268-3275
50. *Chakravarthy U* Mackenzie G. External Beam Radiotherapy for Age-related macular degeneration. *Brit. J. Radiol*. 2000; 73:305-313
51. McClure M, Hart PM, Stevenson MR, Jackson AJ. *Chakravarthy U*. Correlations between visual function and performance of daily living tasks. *Brit. J. Ophthalmol*.2000;84:244-250
52. Chakravarthy U. Radiotherapy for choroidal neovascularisation of age-related macular degeneration. A fresh prespective. *Eye*, 2000;14:151-1544
53. Chakravarthy U, Klein SB. Radiation Biology of choroidal neovascularisation of age-related macular degeneration. In *Retinal Vascular Disease*. Ed. Alberti. Chapter 9 pp. 79-83. . Elsevier Press. 2000
54. Chakravarthy U. External beam radiotherapy in age-related macular degeneration. In *Retinal Vascular Disease*. Ed. Alberti. Chapter 1, pp:149-154. Elsevier Press. 2000
55. Elmalah M, Hart PM, *Chakravarthy U*. Amblyopia is visual loss permanent. *Brit. J. Ophthalmol*. 2000;84:952-956
56. Doris N, Hart PM, McClelland J, Jackson AJ, Stevenson MR *Chakravarthy U*,... Relation between macular morphology and visual function in patients with choroidal neovascularisation of age-related macular degeneration. *B J Ophthalmol*, 2001;85:184-188

57. Elmalah M, Hart PM, Stevenson MR, McClure, Silvestri G, White SR, Chakravarthy U. Improvements in measures of vision and self-reported visual function after cataract extraction in patients with late stage age-related maculopathy . *Optom Vis. Sci.* 2001;78:683-688
58. Ceccarelli F, Rosa Mazzoni M, *Chakravarthy U.* Binding characteristics of ET receptors in retinal pericytes and effects of high glucose incubation. *Curr Eye Res.* 2001;23:263-270
59. Verteporfin Roundtable 2000 and 2001 Participants; Treatment of age-related macular degeneration with photodynamic therapy (TAP) study group principal investigators; Verteporfin in photodynamic therapy (VIP) study group principal investigators: Guidelines for using verteporfin (visudyne) in photodynamic therapy to treat choroidal neovascularization due to age-related macular degeneration and other causes. *Retina.* 2002 Feb;22(1):6-18. Review.
60. Patton WP, Routledge MN, Jones GD, Lewis SEM, Davies RJH, *Chakravarthy U.* Retinal pigment epithelial cell DNA is damaged by exposure to benzo[a]pyrene, a constituent of cigarette smoke. *Exp.Eye Res.*, 2002;74:513-522
61. Patton W, Gillespie H, Lewis S, Frew L, Burns M, *Chakravarthy U* The effects of high ambient glucose on the radiosensitivity of retinal microvascular endothelial cells and pericytes. *Curr eye Res.*, 2002;54:51-57
62. Hart PM, Chakravarthy U, Bird AC et al. Subfoveal Radiotherapy Study. Visual outcomes at 12 and 24 months. *Arch. Ophthalmol*, 2002; 120: 1029-38
63. Warpeha K, Chakravarthy U. Genetics of Diabetic Retinopathy. A short perspective. *Eye.* 2002, 16:1-7
64. Foot B, Foy R, Chakravarthy U, Wormald R. A new health technology where is the consensus on a clinically worthwhile benefit? *Eye* 2002 Jul 16;4 469-71
65. Montgomery AM, Stevenson MR, Cupples M, Chakravarthy U. Self reported visual functioning in older people. In Press, *Journal of General Practice.*
66. Boyd S, Chakravarthy U, Zachary I, Allen G, Hykin PG. Aqueous protein profile correlates with degree of ischaemia in retinal vein occlusive disease. *Arch. Ophthalmol*, 2002;120:644-650
67. Hogg R, Stevenson MR, Winder J, McClure M, Chakravarthy U. Macular lesion composition and location influence visual function in AMD. *Brit. J. Ophthalmol*, 2003; 87:609-614
68. Abugreen S, Muldrew KA, Van Leeuwen R, de Jong PTVM, Chakravarthy U. Does CNV subtype in first eyes predict ARM severity in fellow eyes of subjects with age related macular degeneration. . *Brit. J. Ophthalmol*, 2003;87:307-311
69. Chopdar A, Chakravarthy U. Macular Degeneration. Clinical Evidence. *British Medical Journal*, 2003;326:485-488
70. Van Leeuwen R, Chakravarthy U, Vingerling H et al. Grading of age-related maculopathy for epidemiological studies. Is digital imaging as good as 35 mm film. *Ophthalmology* . 2003;110:1540-1544
71. Foot B, Foy R, Chakravarthy U, Wormald R. Introduction of photodynamic therapy for the treatment of neovascular age-related macular degeneration. Tracking a moving target. *Eye* ; 2003, 17:583-6
72. Increasing use of a new health technology during the wait for NICE guidance: findings from the third national tracker survey of photodynamic therapy. *J Public Health (Oxf).* 2004 26 :52-5.
73. Ali F, Chan W, Muldrew KA, Stevenson MR, Chakravarthy U. Changes in CNV composition: a natural history. *Archives of Ophthalmol.*, 2004;123:680-688

74. Augood C, Fletcher A, Bentham G, Chakravarthy U et al. Methods for a population based study of the prevalence of and risk factors for age-related maculopathy and macular degeneration in elderly European populations: The EUREYE study. *Ophthalmic Epidemiology*, 2004;11:117-129
75. Stevenson MR, Hart PM, Montgomery A, McCulloch D, Chakravarthy U. AMD impairs ability to self care and interferes with role as carer. *Brit. J. Ophthalmol.*, 2004, 89:30-37
76. Foot B, Foy R, Chakravarthy U, Wormald R. Increasing use of a new health technology during the wait for NICE guidance. *J Public Health*, 2004;26:52-5
77. Hogg RE, Chakravarthy U. Carotenoids in Age-Related Macular Degeneration. A systematic analysis of the literature. *Curr Eye Research* 2004, 57:23-30
78. Chakravarthy U, Stevenson MR. Self reported visual functioning and quality of life in AMD. *Curr Opin Ophthalmol.*, 2005;16:179-183
79. Esfandiary H, Chakravarthy U, Patterson C, Young I, Hughes AE. Association study of detoxification genes in age-related macular degeneration. *Br. J. Ophthalmol.*, 2005;89:470-4
80. Hogg R and Chakravarthy U. AMD and micronutrient antioxidants. *Curr Eye Res.* 2004; 29:387-401
81. Foy RC, Foot B, Francis J, Chakravarthy U, Wormald RP. Trends in provision of photodynamic therapy and clinician attitudes: A tracker survey of a new health technology. *BMC Health Serv Res*, 2005 May 10;5(1):34
82. Stevenson MR, Hart PM, Chakravarthy U, et al. Subfoveal radiotherapy study. Visual functioning and quality of life in a randomised controlled clinical trial SFRADS report 2. *Br J Ophthalmol.* 2005 : 89(8):1045-51.
83. Hart PM, Stevenson MR, Montgomery AM, McClure ME, Chakravarthy U. Further Validation and assigning of subscales to the Daily Living Tasks dependent on vision visual functioning questionnaire *Br J Ophthalmol.* 2005 Sep;89(9):1127-30
84. Logan J, Chakravarthy U, Hughes A et al. Evidence for the association of the endothelial nitric oxide synthase gene in glaucoma subjects with a history of migraine. *Invest Ophthalmol Vis Sci.* 2005, 46(9):3221-6.
85. Smeeth L, Cook C, Chakravarthy U, Fletcher AE. A case control study of age related macular degeneration and use of statins. *Br J Ophthalmol.* 2005; 89 (9):1171-5.
86. Self-reported visual functioning and quality of life in age-related macular degeneration. *Curr Opin Ophthalmol.* 2005 ;16(3):179-83. Review
87. McGimpsey S, Woodside J, Chakravarthy U et al. Hyperhomocystemia and carriage of the thermolabile variant are not risk factors for CRVO *Invest. Ophthalmol.* 2005;46:4712-16
88. Augood C, Vingerling H, Chakravarthy U et al. Prevalence of age-related macular degeneration in the EUREYE study. *Arch Ophthalmol.* 2006 Apr;124(4):529-35
89. Hogg RE, Chakravarthy U. Visual function and dysfunction in early and late age-related maculopathy. *Prog Retin Eye Res.* 2006 25:249-76
90. Ke K, Chakravarthy U, O'Neill C. Economic cost of age-related macular degeneration : a review of recent research. *Drugs Aging.* 2006;23(3):217-25
91. Hopkins J, Walsh A, Chakravarthy U. Fundus Autofluorescence: An Epiphenomenon. *IOVS.* 2006, 47:2269-71

92. Chakravarthy U et al. Evolving European Guidance on the Management of Neovascular Age-Related Macular Degeneration. *Brit J Ophthalmol. BJO*, 2006;90:1188-96
93. Hogg RE, Anderson RS, Stevenson MR, Chakravarthy U. In vivo macular pigment measurements. A comparison of Resonance Raman Spectroscopy and Heterochromatic Flicker Photometry. *BJO* epub 2006.
94. Beirne RO, Hogg RE, Anderson RS, Chakravarthy U. Deficits in S-cone isolating grating resolution acuity are associated with advancing age-related maculopathy stage. *IOVS*, 2006;47:4624-31
95. Hughes AE, Orr N, Esfandiary H, Diaz-Torres M, Goodship T, Chakravarthy U. A common CFH haplotype with deletion of CFHR1 and CFHR3 is associated with a lower risk of age-related macular degeneration. *Nat Genetics* 2006, 38:1173-7
96. Chakravarthy U. Age-Related Macular Degeneration. *British Medical Journal*, 2006;333:869-70
97. Chakravarthy U for the VISION Study group. Year 2 efficacy results of 2 randomized controlled clinical trials of pegaptanib for neovascular age-related macular degeneration. *Ophthalmology*. 2006 113:1-25.
98. GV Murthy, U. Chakravarthy, A Fletcher. Lens opacities in the Indeye study. In *IOVS*, 2007 ;48(1):88-95.
99. U. Chakravarthy, Walsh AC, Updike PG, , A Muldrew, T Barbour, S Sadda. Quantitative fluorescein angiographic analysis of choroidal neovascular membranes: validation and correlation with visual function. *Invest Ophthalmol Vis Sci*. 2007;48:349-54.
100. Chakravarthy U and Lim J. New treatments for age-related macular degeneration. *British Medical Journal*. 2007;334:269-70
101. S Gupta, U Chakravarthy AE Fletcher. Age-related macular degeneration in the Indeye Study. *IOVS*, 2007;48:1007-11
102. Chakravarthy U et al. Cigarette smoking and age-related macular degeneration in the EUREYE study. *Ophthalmology*, 2007 Jun;114(6):1157-63.
103. Kathleen Ke, Montgomery AM, Stevenson MR, O'Neill C, Chakravarthy U. Formal and informal care utilisation in elderly persons with age related macular degeneration. *BJO*, 2007;91:1279-1281
104. Denny F, Hart PM, Marshall A, Stevenson MR, Chakravarthy U. Rasch Analysis of the DLTV. *IOVS*, May;48(5):1976-82.
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Published Abstracts: Over 200

Invited Presentations and seminars: Over 200

Chairperson/Lead Organiser for 5 International Meetings in 2007/2008

Eponymous Lectures and Medals in 2008, Fleming Lecturer, Royal College of Surgeons of Glasgow April 2008

Current Administrative responsibilities

Clinical Lead Vision CRN, NI Clinical Research Network

Member of the NICRN steering group

Member of the Ophthalmic Directorate

Chairperson General Ophthalmic Services Committee, Northern Ireland

