Curriculum Vitae

Donald C. Hood

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Born: North Merrick, New York, on June 2, 1942

Education:

Northeastern University	1960-1962	(E.E. major)
Harpur College, SUNY Binghamton	1962-1965	B.A. (Psych. and Math)
Brown University	1965-1969	M.Sc. (1968); Ph.D. (1970) (Psych.)

Positions Held:

2005-Present	Professor of Ophthalmic Science Dept. of Ophthalmology, Columbia University
1990-Present	James F. Bender Professor of Psychology, Columbia University
2000-2002	Chair, Dept. of Psychology, Columbia University
1982-1987	Vice President for Arts and Sciences, Columbia University
1978-Present	Professor, Dept. of Psychology, Columbia University
1975-1978	Chairman, Dept. of Psychology, Columbia University
1973-1978	Associate Professor, Dept. of Psychology Columbia University
1969-1973	Assistant Professor, Dept. of Psychology Columbia University
1965-1969	Graduate Student, Dept. of Psychology Brown University (Adviser: Prof. L.A. Riggs)

Selected Outside Professional Positions (Science):

Secretary and Treasurer of ARVO Foundation of Eye Research:
2009- present
Trustee, Association for Research in Vision and Ophthalmology:
2004-2009
2006-2009 Chair of Budget and Finance.
Editorial Board of Translational Vision Science and Technology:
2012-present

Editorial Board of Documenta Ophthalmologica:
2004-present
Vice President for the Americas, International Society for Clinical Electrophysiology of Vision:
2003-present.
Editorial Board of Journal of Vision:
2000-present
Editorial Board of Investigative Ophthalmology and Visual Science:
1992-present
Editorial Board of Vision Research:
2004-2012
Committee on Vision (Nat. Acad. Sci./ Nat. Res. Council):
1987-1991
Program Committee OSA Noninvasive Assessment Meeting:
1990-1992
Program Committee (Visual Psychophysics)-Assoc. for Res. in Vision and Ophthalmology:
1978-1981 (chair-1981)

Selected Outside Professional Positions (University and Foundations):

Fellow (Trustee), Brown University Corporation: 2002-present
2010-present (Senior Fellow)
2008-present (Secretary of the Corporation)
2009-2010 (Chair of Academic Affairs)
2005-2009 (Vice Chair Academic Affairs)
Trustee, Smith College: 1989-1999
1991-1999 (Vice Chair of the Board)
1993-4 Search Committee for the President
Trustee, The Harry Frank Guggenheim Foundation:
1996-present
Expert Panel for study sponsored by Consortium for Policy Research in Education (Stanford Institute for Higher Education Research):
1992-1994
Committee on Managing Academic Resources (Advisory committee to Dean of Arts and Sciences at Harvard University):
1990-1992
Committee on Mandatory Retirement in Higher Education (Nat. Acad. Sci./ Nat. Res. Council):
1989-1991

Selected University Activities:

Science in the Core Committee
2013-present
Presidential Advisory Committee on Diversity initiatives
2004- 2009
Columbia College Board of Visitors
1997-present
Search committee for Dean of General Studies
1996-7
Search committee for Vice President for Arts and Sciences
1994-5
Columbia College Committee on Instruction:
1993-1997

Provost's Committee on the End to Mandatory Retirement:
1992-1994
Search committee for Vice President for Arts and Sciences
1991-1992
Advisory Board, School of General Studies:
1987-1997
International Advisory Board of the School of International and Public Affairs:
1986-1996
Executive Committee of the Faculty of Arts and Sciences:
1991-1993
1991-1992 (chair)

Memberships:

Association for Research in Vision and Ophthalmology
Optical Society of America (Elected Fellow 1990)
Society of Experimental Psychologists (Elected 1992)
Society for Neurosciences

Current Grants:

"Studying models and mechanisms of optic nerve diseases."
NIH-RO1-EY02115-35 (expires 12/31/15)

"A measure of human receptor and post-receptor activity"
NIH-RO1-EY09076-20 (expires 7/16)

Awards, Fellowships, and Honors:

Elected Fellow of the American Academy of Arts and Sciences, 2013
ARVO Distinguished Service Award, 2010
William Theodore de Bary Award for Distinguished Service to the Core Curriculum, 2010.
ARVO Fellow (Gold), 2009
Presidential Award for Outstanding Teaching, 2007
Great Teacher Award (Society of Columbia Gradates), 2004
Vice President for the Americas, International Society for Clinical Electrophysiology of Vision, 2003-2006.
Honorary Degree (Doctor of Science) from Smith College, 2000
Mark van Doren Award for Outstanding Teaching in the College: 1993
Elected member of the Society of Experimental Psychologists: 1992
Elected Fellow of Optical Society of America: 1990
PHS Predoctoral Fellow: 1967-1969:
NYS College Teaching Fellow: 1965-1967

PUBLISHED PAPERS (abstracts omitted)**: h-index = 58**

Hood, D.C. and Whiteside, J.A. Brightness of ramp stimuli as a function plateau and gradient widths. Journal of the Optical Society of America, 1968, **58**, 1310-1311.

Hood, D.C. Adaptational changes in the frog's isolated retina. Vision Research, 1972, **12**, 875-888.

Hood, D.C. Suppression of the frog's cones in the dark. Vision Research, 1972, **12**, 889-907.

Hood, D.C., and Mansfield, A.F. The isolated receptor potential of the frog isolated retina: Action spectra before and after extensive bleaching. Vision Research, 1972, **12**, 2109-2119.

Hood, D.C. and Hock, P.A. Recovery of cone receptor activity in the frog's isolated retina. Vision Research, 1973, **13**, 1943-1951.

Hood, D.C., Hock, P.A., and Grover, B.G. Dark adaptation of the frog's rods. Vision Research, 1973, **13**, 1953-1963.

Ebrey, T.G. and Hood, D.C. The effects of cyclic nucleotide phosphodiesterase inhibitors on the frog rod receptor potential. In Biochemistry and physiology of visual pigments (Ed. H. Langer), Springer-Verlag, Berlin, 1973, 341-350.

Hood, D.C. The effects of edge sharpness and exposure duration on detection threshold. Vision Research, 1973, **13**, 759-766.

Petry, S., Hood, D.C. and Goodkin, F. Time course of lateral inhibition in human visual system. Journal of the Optical Society of America, 1973, **63**, 385-386.

Hood, D.C. and Ebrey, T.G. On the possible role of cAMP in receptor dark adaptation. Vision Research, 1974, **14**, 437-440.

Schacter, S.M., Holtzman, E., and Hood, D.C. Uptake of horseradish peroxidase by frog photoreceptor synapses in the dark and the light. Nature, 1974, **249**, 261-263.

Hood, D.C., and Grover, B.G. Temporal summation of light energy by a vertebrate visual receptor. Science,1974, **184**, 1003-1005.

Hood, D.C., and Hock, P.A. Light adaptation of the receptors: Increment threshold functions for the frog's rods and cones. Vision Research, 1975, **15**, 545-553.

Gordon, J. and Hood, D.C. Anatomy and physiology of the frog retina. In: The Amphibian Visual System: A Multidisciplinary Approach., ed. by K. Fite. New York: Academic press. 1976, 29-86.

Schacter, S.M., Holtzman, E., and Hood, D.C. Synaptic activity of frog retinal photoreceptors: A peroxidase uptake study. J. Cell Biology, 1976, **70**, 178-192.

Hood, D.C. Visual Sensitivity. In: International Encyclopedia of Neurology, Psychiatry, Psychoanalysis and Psychology., ed. by B. Wolman, 1976.

Schneider, B., Hood, D.C., Cohen, H. and Stampfer, M. Behavioral threshold and rhodopsin content as a function of a vitamin A deprivation. Vision Research, 1977, 17, 799-806.

Petry, S., and Hood, D.C. A comparison of brightness and sensitivity during metacontrast. Vision Research, 1978, **18**, 983-993.

Evans, J., Hood, D.C. and Holtzman, E. Differential effects of cobalt ions on rod and cone synaptic activity in the frog isolated retinal. Vision Research, 1978, **18**, 145-151.

Hood, D.C., Ilves, T., Wandell, B., Buckingham, E. Human cone saturation as a function of ambient intensity: A test of models of shifts in the dynamic range. Vision Research, 1978, **18**, 983-993.

Hock, P. and Hood, D.C. Light adaptation of the frog's cone system: A comparison of receptor and ganglion cell increment threshold functions. Vision Research, 1978, **18**, 1155-1164.

Hood, D.C. Psychophysical and electrophysiological tests of physiological proposals of light adaptation. In Visual Psychophysics: Its physiological basis. (Edited by J. Armington, J. Krauskopf and B. Wooten), Academic Press, 1978, 141-155.

Hood, D.C. and Finkelstein, M.A. A comparison of changes in sensitivity and sensation: Implications for the response intensity function of the human visual system. Journal of Experimental Psychology: Human Perception and Performance, 1979, **19**, 401-406.

Hood, D.C. Finkelstein, M.A. and Buckingham, E. Psychophysical tests of models of the reponse function. Vision Research, 1979, **19**, 401-406.

Finkelstein, M.A. and Hood, D.C. Cone system saturation: more than one stage of sensitivity loss. Vision Research, 1981, **21**, 319-328.

Hood, D.C. and Gordon, J. The frog ganglion cell: Not a feature detection and not a monkey cortical cell. Perception, 1981, **10**, 421-422.

Greenstein, V. and Hood, D.C. Variations in brightness at two retinal locations. Vision Research, 1981, **21**, 885-891.

Hood, D.C. and Finkelstein, M.A. On relating physiology to sensation. Behavioral and Brain Sciences, 1981, **4**, 195.

Hochberg, J. and Hood, D.C. Artificial intelligence or the real thing? Contemporary Psychology, 1981, **26**, 672-673 (book review).

Evans, J. Liscum, L., Holtzman, E. and Hood, D.C. Uptake of horseradish peroxidase by presynaptic terminals of bipolar cells and photoreceptors. Journal of Histochemistry and Cytochemistry, 1981, **29**, 511-518.

Liscum, L., Hauptman, P.J., Hood, D.C. and Holtzman, E. Effect of barium and tetrae thylammonium on membrane circulation in frog retinal photo receptors. Journal of Cell Biology, 1982, **95**, 196-309.

Finkelstein, M.A. and Hood, D.C. Opponent-color cells can influence detection of small brief lights. Vision Research, 1982, **22**, 89-95.

Benimoff, N., Schneider, S. and Hood, D.C. Interactions between rod and cone channels above threshold: A test of various models. Vision Research, 1982, **22**, 1133-1140.

Hood, D.C. and Greenstein, V.C. An approach to testing alternative hypotheses of changes in visual sensitivity due to retinal disease. Investigative Ophthalmology, 1982, 23, 96-101.

Greenstein, V., Hood, D.C., and Campbell, C.J. The use of a flash-on-flash paradigm to assess sensitivity changes due to retinal disease. Investigative Ophthalmology, 1982, **23**, 102-112.

Hochberg, J. Hood, D.C., and Graham, N. Visions of how we see. Contemporary Psychology, 1983, **28**, 27-29 (book review).

Greenstein, V., Hood, D.C., Siegel, I.M., and Carr, R.E. A psychophysical technique for testing explanations of sensitivity loss due to retinal disease. In Advances in Diagnostic Visual Optics,

Proceedings of the 2nd International Symposium on Visual Optics (Edited by Breinin, G.M. and Siegel, I.M.), Springer-Verlag, 1983.

Bowen, R.W. and Hood, D.C. Improvement in visual performance following a prolonged field of light: a test of the equivalent background principle. Journal of the Optical Society of America, 1983, **73**, 1551-1556.

Hood, D.C. and Finkelstein, M.A. A case for the revision of textbook models of color vision: The detection and appearance of small brief lights. In Color Vision: Physiology and Psychophysics (Edited by J.D. Mollon and L.T. Sharpe), Academic Press, 1983, 385-398.

Greenstein, V., Hood, D.C., Siegel, I.M., and Carr, R.E. Retinitis pigmentosa: A psychophysical test of explanations for early foveal sensitivity loss. Investigative Ophthalmology and Visual Science, 1984, **25**, 118-120.

Hood, D.C., Benimoff, N.I., and Greenstein, V.C. The response range of the blue cone pathways: A source of vulnerability to disease. Investigative Ophthalmology and Visual Science, 1984, **25**, 864-867.

Finkelstein, M.A. and Hood, D.C. Detection and discrimination of small, brief lights: Variable tuning of opponent channels: Vision Research, 1984, **24**, 175-181.

Hood, D.C. and Finkelstein, M.A. Chapter 5: Visual Sensitivity. In Handbook of Perception in Human Performance, vol. 1. (Edited by K. Boff, L. Kaufman, and J. Thomas), Wiley, 1986.

Greenstein, V., and Hood, D.C.: Test of the decreased responsiveness hypothesis in retinitis pigmentosa. American Journal of Optometry and Physiological Optics, 1986, **63**, 22-27.

Greenstein, V., Hood, D.C., and Carr, R.F. Foveal sensitivity changes in retinitis pigmentosa. Applied Optics, 1987, **26**, 1385-1389.

Hayhoe, M.M., Benimoff, N.I. and Hood, D.C. Time course of multiplicative and subtractive adaptation processes. Vision Research, 1987, **27**, 1981-1996.

Hood, D.C. Non-linear response functions and adaptation, Die Farbe, 1987, **34**, 185-191.

Greenstein, V., Hood, D.C., Siegel, I.M., and Carr, R.F. A use of rod-cone interaction in congenital stationary night blindness. Clinical Vision Science, 1988, **3**, 69-74.

Hood, D.C. and Greenstein, V.C. Blue (S) cone vulnerability: A test of a fragile receptor hypothesis. Applied Optics, 1988, 1025-1029.

Greenstein, V.C., Hood, D.C., and Carr, R.E. A comparison of blue (S) cone pathway sensitivity loss in patients with diabetes and retinitis pigmentosa. IXth IRGCVD Symposium 1988

Hood, D.C. Testing hypotheses about development with ERG and incremental threshold data. Journal of the Optical Society of America, 1988, **5**, 2159-2165.

Greenstein, V.C., Hood, D.C., Ritch, R.,Steinberger, D. and Carr, R.E. Blue (S) cone pathway vulnerablity in retinitis pigmentosa, diabetes and glaucoma. Investigative Ophthalmology and Visual Science, 1989, **30**, 1732-1737.

Walraven, J., Enroth-Cugell C., Hood D.C., MacLeod D.I.A and Schnapf J. Ch 5: The control of visual sensitivity: Receptoral and postreceptoral processes. In Visual Perception: The Neurophysiological Foundations. L. Spillman and J. Werner (Eds.) Academic Press. 1989, pp. 53-101.

Hood, D.C. The ERG and sites and mechanisms of retinal disease, adaptation, and development. In Advances in Photoreception: In Proceedings of a Symposium on Frontiers of Visual Science, National Academy Press, 1990, pp. 41-58.

Hood, D.C. and Greenstein, V. C. Models of the normal and abnormal rod system. Vision Research, 1990, **30**, 51-68.

Greenstein, V, Sarter, B., Hood, D, Noble, K. and Carr, R. Hue discrimination and S cone pathway sensitivity in early diabetic retinopathy. Investigative Ophthalmology and Visual Science, 1990, **31**, 1008-1014.

Hood, D.C. and Birch, D.G. The relationship between models of receptor activity and the a-wave of the human ERG. Clinical Vision Science, 1990, **5**, 293-297.

Finkelstein, M.A., Harrison, M., and Hood, D.C. Sites of sensitivity control within a long-wavelength cone pathway. Vision Research,1990, **30**, 1145-1158.

Hood, D. C. and Birch, D. G. The a-wave of the human ERG and rod receptor function. Investigative Ophthalmology and Visual Science, 1990, **31**, 2070-2081.

Hood, D. C. and Birch, D. G. A quantitative measure of the electrical activity of human rod photoreceptors using electroretinography. Visual Neuroscience, 1990, **5**, 379-387.

Hood, D. C. and Birch, D. G. Models of human rod receptors and the ERG. In Computational Models of Visual Processing. M. Landy and A. Movshon (Eds.) MIT Press, 1991, 57-67.

Greenstein, V. and Hood D. The effects of light adaptation on L-cone sensitivity in retinal disease. Clinical Vision Sciences, 1992, **7**, 1-7.

Hood, D. C., and Birch, D. G. A computational model of the amplitude and implicit time of the b-wave of the human ERG. Visual Neuroscience, 1992, **8**, 107-126.

Graham, N. and Hood, D. C. Quantal noise and decision rules in dynamic models of light adaptation. Vision Research, 1992, **32**, 779-787.

Zaidi, Q, Shapiro, A. and Hood, D. C. The effect of adaptation on the differential sensitivity of S-cone color system. Vision Research, 1992, **32**, 1297-1318.

Graham, N. and Hood, D. C. Models of adaptation: the merging of two traditions. Vision Research, 1992, **32**, 1373-1393.

Seiple, W., Holopigian, K., Greenstein, V. and Hood, D. C. Temporal frequency dependent adaptation a the level of the outer retina in humans. Vision Research, 1992, **32**, 2043-2048.

Greenstein, V. C., Shapiro, A., Zaidi, Q. and Hood, D. C. Psychophysical evidence for post-receptoral sensitivity loss in diabetes. Investigative Ophthalmology and Visual Science, 1992, **33**, 2781-2790.

Hood, D. C., and Birch, D. G. (1992). A model of the human ERG: Predicting changes in a- and b-wave amplitude and timing with congenital stationary nightblindness. Noninvasive Assessment of the Visula System Technical Digest(OSA), **1**, 124-127.

Hood, D. C., and Birch, D. G. (1992). Changes in the gain and the time course of human cone receptors with light adaptation Advances in Color VisionTechnical Digest (OSA), **4**, 10-12.

Hood, D.C. Birch, D. G., Birch, E.E. The use of models to improve hypothesis delineation: A study of the infant ERG. In Early Visual Development: Normal and Abnormal. Simons, K. (ed.) New York: Oxford Univeristy Press. 1993, 517-535.

Seiple, W., Holopigian, K., Greenstein, V. and Hood, D.C. Sites of cone system sensitivity loss in retinitis pigmentosa. Invest. Ophthalmol. Vis Sci. , 1993, **34**:2638-2645.

Greenstein, V.C., Shapiro, A., Hood, D.C. and Zaidi, Q. Chromatic and luminance sensitivity in diabetes and glaucoma. J. Opt. Soc. Am. A 1993, **10,** 1785-1791.

Hood, D.C., Shady, S. Birch, D. G. Heterogeneity in retinal disease and the computational model of the human rod response. Journal of the Optical Society of America, 1993, **10**, 1624-1630.

Hood, D. C. and Birch, D. G. Light adaptation of human rod receptors: The leading edge of the human a-wave and models of rod receptor activity. Vision Research,1993, **33**, 1605-1618.

Hood, D. C. and Birch, D. G. Human cone receptor activity: The leading edge of the a-wave and models of receptor activity. Visual Neuroscience, 1993, **10**, 857-871.

Hood, D. C., Shady, S., and Birch, D. G. (1993). Interpretation of Naka-Rushton parameters from patients with ADRP and CRD. Noninvasive Assessment of the Visual System Technical Digest 1993(OSA), **2**, 338-342.

Hood, D. C.Shady, S, and Birch, D. G. Understanding changes in the b-wave of the ERG caused by heterogeneous receptor damage. Investigative Ophthalmology and Visual Science, 1994, **35**, 2477-2488.

Hood, D. C. and Birch, D. G. Rod phototransduction in retinitis pigmentosa: Estimation and interpretation of parameters derived from the rod a-wave. Investigative Ophthalmology and Visual Science, 1994, **35**, 2948-2961.

BIrch, D. G., Hood, D. C., Nusinowitz, S., and Pepperberg, D. R. (1994) Recovery from activation in human rods. Vision Science and Its Application, 1994 Technical Digest Series, Vol 2 (OSA), 272-275.

Hood, D. C. and Birch, D. G. (1994). The human rod a-wave and phototransduciton: Interpreting the fit of the Lamb and Pugh model. Vision Science and Its Application, 1994 Technical Digest Series, Vol 2 (OSA), 268-271.

Hood, D. C. and Birch, D. G. Computational models of rod-driven retinal activity. IEEE Engineering in Medicine and Biology. 1995, 59-66.

Shady, S., Hood, D. C. and Birch, D. G. Rod phototransduction in retinitis pigmentosa: Distinguishing alternative mechanisms of degeneration. Investigative Ophthalmology and Visual Science, 1995, **36**, 1027-1037.

Hood, D. C., Cideciyan, A. V., Roman, A. J., and Jacobson, S. G. Enhanced S cone syndrome: Evidence for an abnormally large number of S cones. Vision Research, 1995, **35,** 1473-1481.

Birch, D. G., Hood, D. C., Nusinowitz, S. and Pepperberg, D. R. Abnormal activation and inactivation mechanisms of rod transduction in patients with autosomal dominant retinitis pigmentosa and the pro-23-his mutation. Investigative Ophthalmology and Visual Science, 1995, 1603-1614.

Nusinowitz, S., Birch, D. G., and Hood, D. C. Rod transduction parameters from the a-wave of local receptor populations. Journal of the Optical Society of America, 1995, **12**, 2259-2266.

Wiegand, T. E., Hood, D. C., and Graham, N. V. Testing a computational model of light-adaptation dynamics. Vision Research, 1995, **35**, 3037-3051.

Hood, D. C. and Birch, D. G. Abnormal cone receptor activity in patients with hereditary degeneration. Chapter in Degenerative Diseases of the Retina. Eds: R. E. Anderson et al,. 1995, 349-358.

Birch, D. G. and Hood, D. C. Abnormal rod photoreceptor function in retinitis pigmentosa. Chapter in Degenerative Diseases of the Retina. Eds: R. E. Anderson et al, 1995, 359-370.

Gratton, G., Corballis, P. M., Cho, E., Fabiani, M., and Hood, D. C. Shades of gray matter: Noninvasive optical images of human brain responses during visual stimulation. Psychophysiology, 1995, **32**, 505-509.

Johnson, M. A., and Hood, D. C. (1995) Rod phototransduction is altered in proliferative central retinal vein occlusion. Vision Science and its Applications ,1995, OSA Technical Digest Series (Optical Society of America, Washington, D.C.), 264-267.

Pepperberg, D. R., Hood, D. C., and Birch, David G. (1995) Light adaptation and post-flash recovery in human rods, Vision Science and its Applications ,1995, OSA Technical Digest Series (Optical Society of America, Washington, D.C.), 268-271.

Hood, D. C. and Birch, D. G. (1995) Retinitis pigmentosa affects cone phototransduction as well As post-synaptic cone activity, Vision Science and its Applications ,1995, OSA Technical Digest Series (Optical Society of America, Washington, D.C.), 272-275.

Greenstein, V., Hood, D. C. (1995) Cideciyan, A. V., Jacobson, S. G., Enhanced S cone syndrome: Testing an explanation for hypersensitivity of the S cone system, Vision Science and its Applications ,1995, OSA Technical Digest Series (Optical Society of America, Washington, D.C.), 278-281.

Hood, D. C. and Birch, D. G. Phototransduction in human cones measured using the a-wave of the ERG. Vision Research, 1995, **35**, 2801-2810.

Hood, D. C., Cideciyan, A. V., Halevy, D. A., and Jacobson, S. G. Sites of Disease Action in a Retinopathy with Supernormal and Delayed Rod Electroretinogram b-waves. Vision Research, 1996, **36,** 889-902.

Johnson, M. A. and Hood, D. C. Rod photoreceptor transduction is affected in central retinal vein occulsion associated with iris neovascularization. Journal of the Optical Society of America, 1996. **13**, 572-576.

Pepperberg, D. R., Birch, D. G., Hofmann, K. P. and Hood, D. C. Recovery kinetics of human rod phototransdcution inferred from the two-branched a-wave “saturation function”. Journal of the Optical Society of America, 1996. **13**, 586-600.

Hood, D. C. and Birch, D. G. The b-wave of the scotopic (rod) ERG as a measure of the activity of human on-bipolar cells. Journal of the Optical Society of America, 1996. **13**, 623-633.

Hood, D. C. and Birch, D. G. Abnormalities of the retinal cone system in retinitis pigmentosa. Vision Research, 1996, **36**, 1699-1709.

Greenstein, V., Zaidi, Q., Hood, D. C., DeBonet, J., Spehar, B., Cideciyan, A. V., and Jacobson, S. G. The enhanced s cone syndrome: an analysis of receptoral and post-receptoral changes. Vision Research, 1996, **36**, 3711-3722.

Birch, D., Pepperberg, D., and Hood, D. (1996). The effect of light adaptation on recovery kinetics of the human rod receptors. Vision Science and its Applications ,1996, OSA Technical Digest Series (Optical Society of America, Washington, D.C), 1, 60-63.

Hood, D., Birch, D., and Pepperberg, D. (1996). The trailing edge of the photoresponse from human cones derived using a two-flash ERG paradigm. Vision Science and its Applications ,1996, OSA Technical Digest Series (Optical Society of America, Washington, D.C), 1, 64-67.

Pepperberg, D., Birch, D., Hofmann, K., and Hood, D. (1996). Recovery kinetics of human rod photoresponse: a model suggested by the two-branched a-wave "saturation function". Vision Science and its Applications ,1996, OSA Technical Digest Series (Optical Society of America, Washington, D.C), 1, 68-71.

Hood, D. C., Graham, N., von Wiegand, T. E. and Chase, V.M. Probed-sinewave paradigm: A test of models of light-adaptation dynamics. Vision Research, 1997, **37**, 1177-1191.

Pepperberg, D. R., Birch, D. G., and Hood, D. C. Photoresponses of human rods in vivo derived from paired-flash electroretinograms. Visual Neuroscience, 1997, **14**, 73-82.

Hood, D. C., Seiple, W., Holopigian, K., and Greenstein, V. A comparison of the components of the multi-focal and full-field ERGs. Visual Neuroscience, 1997, **14**, 533-544.

Holopigian, K., Greenstein, V. C., Seiple, W., Hood, D. C., and Carr, R. E. Evidence for photoreceptor changes in patients with diabetic retinopathy. Investigative Ophthalmology and Visual Science, 1997, **38**, 2355-2365.

Birch, D. G., Travis, G. H., Locke, K. G., and Hood, D. C. (1997) Rod ERGs in mice and humans with putative null mutations in the RDS gene. Vision Science and its Applications , Vol. 1,1997 OSA Technical Digest Series (Optical Society of America, Washington, D.C), 262-265.

Hood, D. C., Holopigian, K., Greenstein, V., Seiple, W., Li, J., Sutter, E. E. and Carr, R. E. (1997) A comparison of visual field loss to multi-focal ERG changes in patients with RP. Vision Science and its Applications , Vol. 1,1997 OSA Technical Digest Series (Optical Society of America, Washington, D.C), 272-275.

Felius, J., Hood, D. C., and Swanson, W. H. (1997) Photopic temporal processing in patients with retinitis pigmentosa studied with the multi-focal ERG and psychophysical techniques. Vision Science and its Applications , Vol. 1,1997 OSA Technical Digest Series (Optical Society of America, Washington, D.C), 276-279.

Gratton, G, Gabiani, M, Corballis, P. M., Hood, D. C., Goodman-Wood, M. R., Hirsh, J., Kim, Karl, Friedman, D. and Gratton, E. Fast and localized event-related optical signals (EROS) in the human

occipital cortex: Comparisons with the visual evoked potential and fMRI. Neuroimage, 1997, **6**, 168-180.

Hood, D. C. and Li, L. A technique for measuring individual multifocal ERG records. In ed. D. Yager Non-invasive assessment of the visual system. Optical Society of America, Trends in Optics and Photonics. 1997, **11**, 33-41.

Hood, D. C. and Birch, D. G. Assessing abnormal rod photoreceptor activity with the a-wave of the ERG: Applications and methods. Documenta Ophthalmologica, 1997, **92**, 253-267.

Hood, D. C., Holopigian, K., Seiple, W., Greenstein, V., Li, J., Sutter, E. E,, and Carr , R. E. Assessment of local retinal function in patients with retinitis pigmentosa using the multi-focal ERG technique. Visual Research, 1998, **38**, 163-180.

Hood, D. C. Lower-level visual processing and models of light adaptation. Annual Review of Psychology, 1998, **49**, 503-535.

Hood, D. C., Wladis, E. J., Shady, S., Holopigian, K., Li, J., and Seiple, W. Multifocal rod ERGs. Investigative Ophthalmology and Visual Science, 1998, **39**, 1152-1162.

Cideciyan, A. V., Hood, D. C., Huang, Y., Banin, E., Li, Z-Y, Stone, E., Milam, A. H., and Jacobson, S. G. Disease sequence from mutant rhodopsin allele to rod and cone photoreceptor degeneration in man. Proceedings of the National Academy of Science, 1998, **95**, 7103-7108.

Hood, D. C. and Graham, N. Threshold fluctuations on temporally modulated backgrounds: a possible physiological explanation based upon a recent computational model. Visual Neuroscience, 1998,**15**, 957-967.

Hood, D.C., Frishman, L.J., Robson, J.G. Shady, S., Ahmed, J., and Viswanathan, S. (1999) A frequency analysis of the regional variation in the contribution from action potentials to the primate multifocal ERG. Vision Science and its Applications, 1999 OSA Technical Digest Series (Optical Society of America, Washington, D.C), Vol. 1, 56-59

Pillers, D.M., Weleber, R.G., Green, D.G., Rash, S.M., Dally, G.Y., Howard, P.L., Powers, M.R., Hood, D.C., Chapman, V.M., Ray, P.N., and Woodward, W.R. (1999) Effects of dystrophin isoforms on signal transduction through neural retina: Genotype-phenotype analysis of Duchennes muscular dystrophy mouse mutants. Molecular Genetics and Metabolism, **66**, 100-110.

Hood, D.C., Greenstein, V., Frishman, L.J., Holopigian K. Viswanathan S. Seiple W. Ahmed J. Robson JG. (1999) Identifying inner retinal contributions to the human multifocal ERG. Vision Research, **39**, 2285-2291.

Hood, D.C., Frishman, L.J., Viswanathan, S., Robson, J.G. and Ahmed, J (1999) Evidence for a ganglion cell contribution to the primate electroretinogram (ERG) The effects of TTX on the multifocal ERG in macaque. Visual Neuroscience, 16, 411-416.

Pepperberg, D.R., Birch, D.G. and Hood D.C. (2000) Electroretinographic determination of human rod flash response in vivo. Methods in Enzymology, 316, 202-23.

Holopigian K, Greenstein VC, Seiple W, Hood DC, Ritch R. (2000) Electrophysiologic assessment of photoreceptor function in patients with primary open-angle glaucoma. Journal Glaucoma, 9, 163-178.

Hood, D.C., Greenstein, V.C., Holopigian, K., Bauer, R., Firoz, B., Liebmann, J.M., Odel, J.G. and Ritch, R. (2000) An attempt to detect glaucomatous damage to the inner retina with the multifocal ERG. Investigative Ophthalmology and Visual Science, 41, 1570-1579.

Hood, D.C., Zhang, X., Greenstein, V.C., Kangovi, S., Odel, J.G., Liebmann, J.M., and Ritch, R. (2000) An interocular comparison of the multifocal VEP: A possible technique for detecting local damage to the optic nerve. Investigative Ophthalmology and Visual Science, 41, 1580-1587.

Hood, D. C. (2000) Assessing retinal function with the multifocal ERG technique. Progress in Retinal and Eye Research, 19, 607-646.

Miele, D.L., Odel, J.G., Behrens, M., Zhang, X. and Hood, D.C. (2000) Functional bitemporal quadrantopia and the multifocal visual evoked potential. J. Neuro-Ophthal., 20, 159-162.

Hood, D. C., Odel, J. G. and Zhang, X. (2000) Tracking the recovery of local optic nerve function after optic neuritis: A multifocal VEP study. Invest Ophthal Vis Sci., 41, 4032-4038.

Hood, D. C. and Zhang, X. (2000) Multifocal ERG and VEP responses and visual fields: comparing disease-related changes. Documenta Ophthalmologica. 100, 115-137.

Greenstein, V. C., Holopigian, K., Hood, D.C., Seiple, W., and Carr, R.E. (2000) The nature and extent of retinal dysfunction associated with diabetic macular edema. Invest Ophthal Vis Sci., 41, 3643-3654.

Greenstein, V. C ., Chen, H., Hood, D.C., Holopigian, K., Seiple, W., and Carr, R.E. (2000) Retinal function in diabetic macular edema after focal laser photocoagulation. Invest Ophthal Vis Sci., 41, 3655-3664.

Kardon RH, Givre SJ, Wall, M, Hood, D: Comparison of threshold and multifocal-VEP perimetry. In Recovered Optic Neuritis. In Perimetry Update 2000:Proceedings of the XVIIth International Perimetric Society Meeting Sept. 6-9, 2000, edited by Wall,& Mills New York: Kugler, 2001:19-28.

Hood, D.C., Bearse, M.A., Sutter, E.E. and Frishman, L.J. (2001) The optic nerve head component of the monkey's (Macaca mulatta) multifocal electroretinogram (mERG). Vision Research, **41**:2029-41.

Holopigian K, Seiple W, Greenstein VC, Hood DC, Carr RE. (2001) Local cone and rod system function in patients with retinitis pigmentosa. Invest Ophthalmol Vis Sci.;42, 779-88.

Seiple W, Greenstein VC, Holopigian K, Carr RE, Hood DC. (2002) A method for comparing psychophysical and multifocal electroretinographic increment thresholds. Vision Research, **42**, 257-269.

Zhang X, Hood DC, Chen CS, Hong JE. (2002) A signal-to-noise analysis of multifocal VEP responses: An objective definition for poor records. Documenta Ophthalmologica, **104**, 287-302.

Hood DC, Zhang X, Hong JE, Chen CS. (2002) Quantifying the benefits of additional channels of multifocal VEP recording. Documenta Ophthalmologica, **104**, 303-320.

Chen CS, Odel JG, Miller JS, Hood DC. (2002) Multifocal visual evoked potentials and multifocal electroretinograms in papillorenal syndrome. Arch Ophthalmol, **120**, 870-871

Hood, D.C., Yu, A.L., Zhang, X., Albrecht, J., Jagle, H., and Sharpe, L.T. (2002) The multifocal visual evoked potential and cone isolating stimuli: Implications for L- t M-cone ratios and normalization. J. of Vision, **2,** 178-189.

Albrecht, J., Jagle, H., Hood, D.C. and Sharpe, L.T. (2002) The multifocal electroretinogram (mfERG) and cone isolating stimuli: Variations in L- and M-cone driven signals across the retina. J. of Vision, **2,** 543-558.

Hood, D.C., Frishman, L.J., Saszik, S. and Viswanathan, S. (2002) Retinal origins of the primate multifocal ERG: Implications for the human response. Investigative Ophthalmology and Visual Science, 43, 1676-1685.

Holopigian K, Seiple W, Greenstein VC, Hood DC, Carr RE. (2002) Local cone and rod system function in progressive cone dystrophy. Investigative Ophthalmology and Visual Science, 43, 2364-2373.

Birch DG, Hood DC, Locke KG, Tzekov RT. (2002) Quantitative measures of phototransduction in cone and rod photoreceptors: normal aging, progression with disease, and test-retest reliability. Archives of Ophthalmology, 120, 1045-1051.

Hood, D. C., Greenstein, V. C., Odel, J. G., Zhang, X., Ritch, R., Liebmann, J. M., Hong, J. E., Chen, C. S., and Thienprasiddhi, P. (2002) Visual field defects and multifocal visual evoked potentials: Evidence for a linear relationship. Archives of Ophthalmology, 120, 1672-1681.

Marmor MF, Hood D, Keating D, Kondo M, Miyake Y. (2003) Guidelines for basic multifocal electroretinography (mfERG). Documenta Ophthalmologica, 106, 105-115.

Fortune, B. & Hood, D.C. (2003) Conventional pattern-reversal VEPs are not equivalent to summed multifocal VEPs. Investigative Ophthalmology and Visual Science, 44, 1364-1375.

Hood, D. C., Zhang, X., and Winn, B. J. (2003) Detecting glaucomatous damage with the mfVEP: How can a monocular test work? Journal of Glaucoma, 12, 3-15.

Hood DC, Greenstein, VC. (2003) The multifocal VEP and ganglion cell damage: applications and limitations for the study of glaucoma. Progress in Retinal and Eye Research, 22, 201-251.

Hood, D. C. (2003) Objective measurement of visual function in glaucoma. Current Opinion in Ophthalmology, 14, 78-82.

Hood DC. (2003) Comment on Bengtsson paper. Int glau rev, 3, 473-474.

Holopigian K, Hood DC. (2003) Electrophysiology. Ophthalmol Clin N Am, 16, 237-251.

Thienprasiddhi. P., Greenstein, V. C., Chen, C. S. Liebmann, J. M., Ritch, R., Hood, D. C. (2003) Multifocal VEP responses in glaucoma patients with unilateral hemifield defects. Am J Ophthalmol. 136, 34-40.

Rangaswamy, NV, Hood, DC, Frishman, LJ (2003) Regional variations in the local contributions to the primate photopic flash ERG revealed using the slow-sequence mfERG. Investigative Ophthalmology and Visual Science, 44, 3233-3247.

Tzekov, RT, Locke, KG, Hood, DC, and Birch, DG. (2003) Cone and rod ERG phototransduction in retinitis pigmentosa. Investigative Ophthalmology and Visual Science, 44, 3993-4000.

Hood, DC, Odel, J. G. and Winn, B. J. (2003) The Multifocal Visual Evoked Potential (VEP): Applications and Limitations in Neuro-Ophthalmology. Journal of Neuro-Ophthalmology, 23; 279-289.

Hood, DC, Odel, J. G., Chen, C. S. and Winn, B. J. (2003) The Multifocal Electroretinogram (ERG): Applications and limitations in Neuro-Ophthalmology. Journal of Neuro-Ophthalmology, 23, 225-235.

Chen, C.S., Hood, D.C., Zhang, X., Karam, E.Z., Liebmann, J.M., Ritch, R., Thienprasiddhi, P., Greenstein, V.C. (2003) Repeat Reliability of the Multifocal Visual Evoked Potential in Normal and Glaucomatous Eyes. Journal of Glaucoma, 12, 399-408.

Holopigian, K., Greenstein, V.C., Seiple, W., Hood, D.C., and Carr, R.E. (2004) Rod and cone photoreceptor function in patients with cone dystrophy. Investigative Ophthalmology and Visual Science, 45, 275-281.

Zhang, X. and Hood, D.C. (2004) A principle component analysis of multifocal pattern reversal VEP. J. of Vision, 4, 32-43.

Hood, D. C., Thienprasiddhi, P., Greenstein, V. C., Winn, B. J., Ohri, N., Liebmann, J. M., and Ritch, R. (2004) Detecting early to mild glaucomatous damage; A comparison of the multifocal VEP and automated perimetry. Investigative Ophthalmology and Visual Science, 45, 492-498.

Greenstein, V. C., Thienprasiddhi, P., Ritch, R., Liebmann, Hood, D. C. (2004) A method for comparing electrophysiological, psychophysical, and structural measures of glaucomatous damage. Archives of Ophthalmology, 122:1276-84.

Hood, D. C. (2004) Electrophysiologic imaging of retinal and optic nerve damage: the multifocal technique. Ophthalmological Clinics of North America, 17, 69-88.

Zhang, X. & Hood, D.C. (2004) Increasing the sensitivity of the multifocal visual evoked potential (mfVEP) technique: Incorporating information from higher order kernels using a principal component analysis method. Documenta Ophthalmologica, 108:211-22.

Greenstein VC, Holopigian K, Seiple W, Carr RE, Hood DC. (2004) Atypical multifocal ERG responses in patients with diseases affecting the photoreceptors. Vision Res, 44:2867-74.

Fortune, B., Zhang, X., Hood, D.C., Demirel, S. & Johnson, C.A. (2004) Normative ranges and specificity of the multifocal VEP: questions of age, gender and race. Documenta Ophthalmologica,109:87-100.

Hargitai J, MacKay C, Behrens M, Odel JG, Hood DC, Gouras P. (2004) Auto-immune-like cone dystrophy. Documenta Ophthalmologica, 109:215-21.

Hood, D. C., Zhang, X., Rodarte, C., Yang,E. B., Ohri, N., Fortune, B., Johnson, C.A. (2004) Determining abnormal interocular latencies of multifocal visual evoked potentials. Documenta Ophthalmologica, 109:177-187.

Hood, D. C., Ohri, N., Yang, E. B., Rodarte, C., Zhang, X., Fortune, B., Johnson, C.A. (2004) Determining abnormal latencies of multifocal visual evoked potentials: A monocular analysis. Documenta Ophthalmologica, 109:189-199.

Winn, B.J., Shin, E., Odel, J.G., Greenstein, V.C. & Hood, D.C. (2005) Interpreting the mfVEP: How can refractive error, fixation error and cataract affect the mfVEP. British Journal of Ophthalmology. 89:340-4.

Seiple, W., Holopigian, K., Clemens, C., Greenstein, V.C., Hood, D. C. (2005) The multifocal visual evoked potential: An objective measure of visual field? Vision Res., 45:1155-63.

Fortune B, Demirel S, Zhang X, Hood DC, Johnson CA. Repeatability of the normal multifocal VEP: implications for detecting progression. In: Barber C, Bradnam MS, et al., eds. Proceedings of the XLIII Symposium of the International Society for Clinical Electrophysiology of Vision (ISCEV). Glasgow, U.K.: ISCEV Publications; 2005: 167.

Hood, D. C., Li, X, Thienprasiddhi, P., Greenstein, V. C., Odel, J. G., Grippo, T. M., Liebmann, J. M., and Ritch, R. (2005) The pattern electroretinogram (PERG) in glaucoma patients with visual field deficits confirmed with automated perimetry and multifocal VEP. Investigative Ophthalmology and Visual Science, 46:2411-8.

Holopigian, K., Shuwairi, S.M.,Greenstein, V.C.,Winn, B.J., Zhang, X., Carr, R.E., & Hood, D.C. (2005) Multifocal visual evoked potentials to cone specific stimuli in patients with retinitis pigmentosa. Vision Research, 45, 3244-3252.

Fishman G. A., Jacobson, S. G., Alexander, K. R., Cideciyan, A. V., Birch, D. G., Weleber, R. G., Hood, D. C. (2005) Outcome measures and their application in clinical trials for retinal degenerative diseases: outline, review, and perspective. Retina. 25, 772-777.

Hood, D. C. and Birch, D. G. (2006) Ch. 35. Measuring the health of the human photoreceptors with the leading edge of the a-wave. In Principles and Practice of Clinical Electrophysiology of Vision. J. R. Heckenlively and G. B. Arden, Eds., MIT Press, 487-501.

Hood, D. C. (2006) Ch. 14. The multifocal ERG and VEP techniques. In Principles and Practice of Clinical Electrophysiology of Vision. J. R. Heckenlively and G. B. Arden, Eds., MIT Press, 197-205.

Hood, D. C., Ghadliali, Q., Zhang, J. C., Graham, N. V., Wolfson, S. S., Zhang, X. (2006) Contrast-response functions for multifocal visual evoked potentials (mfVEP): A test of a model relating V1 activity to mfVEP activity. Journal of Vision, 6, 580-593.

Fortune, B., Demirel, S., Zhang, X., Hood, D. C., Johnson, C. A. (2006) Repeatability of normal multifocal VEP: Implications for detecting progression. Journal of Glaucoma, 15, 131-141.

Thienprasiddhi P, Greenstein VC, Chu DH, Xu L, Liebmann JM, Ritch R, Hood DC. (2006) Detecting early functional damage in glaucoma suspect and ocular hypertensive patients with the multifocal VEP technique. Journal of Glaucoma,15, 321-7.

Rodarte C, Hood DC, Yang EB, Grippo T, Greenstein VC, Liebmann JM, Ritch R. (2006) The effects of glaucoma on the latency of the multifocal visual evoked potential. British Journal Ophthalmology, 90, 1132-6.

Kanadani FN, Hood DC, Grippo TM, Wangsupadilok B, Harizman N, Greenstein VC, Liebmann JM, Ritch R. (2006) Structural and functional assessment of the macular region in patients with glaucoma. British Journal Ophthalmology, 90, 1393-1397.

Chen JY, Hood DC, Odel JG, Behrens MM. (2006) The effects of retinal abnormalities on the multifocal visual evoked potential. Investigative Ophthalmology and Visual Science, 47, 4378-85.

Grippo TM, Hood DC, Kanadani FN, Ezon I, Greenstein VC, Liebmann JM, Ritch R. (2006) A comparison between multifocal and conventional VEP latency changes secondary to glaucomatous damage. Investigative Ophthalmology and Visual Science, 47, 5331-6.

Hood DC, Chen, JY, Yang EB, Rodarte C, Wenick AS, Grippo TM, Odel JG, Ritch R. (2006) The role of the multifocal visual evoked potential (mfVEP) latency in understanding optic nerve and retinal diseases. Transactions American Ophthalmological Society, 104, 71-77.

Semela L, Yang EB, Hedges TR, Vuong L, Odel JG, Hood DC. (2007) Multifocal visual evoked potential in unilateral compressive optic neuropathy. British Journal of Ophthalmology, 91, 445-8.

Fortune B. Demirel S, Zhang X, Hood DC, Patterson A, Jamil A, Mansberger SL, Cioffi GA, Johnson, C. A. (2007) Comparing multifocal VEP and standard automated perimetry in high-risk ocular hypertension and early glaucoma. Investigative Ophthalmology and Visual Science, 48, 1173-80.

Yang EB, Hood DC, Rodarte C, Zhang X, Odel JG, Behrens MM. (2007) Improvement in conduction velocity after optic neuritis measured with the multifocal VEP. Investigative Ophthalmology and Visual Science, 48, 692-8.

Hood DC. (2007) Relating retinal nerve fiber thickness to behavioral sensitivity in patients with glaucoma: The application of a linear model. J Optical Society of America, 24, 1426-30.

Hood DC & Holopigian K. (2007) The use of multifocal electroretinograms and visual evoked potentials in diagnosing optic nerve disorders. In Optic Nerve Disorders. J. Chan, Ed., Springer, NY.

Tari S, Vidne-Hay O, Greenstein VC, Barile GR, Hood DC, Chang S. (2007) Functional and structural measurements for the assessment of ILM peeling in idiopathic macular pucker. Retina, 27, 567-572.

Hood DC, Harizman N, Kanadani FN, Grippo TM, Baharestani S, Greenstein VC, Liebmann JM, Ritch R. (2007) Retinal nerve fiber thickness measured with optical coherence tomography (OCT) accurately detects confirmed glaucomatous damage. British Journal Ophthalmology, 91, 901-904.

Hood, DC, Anderson, SC, Wall, M, Kardon, RH. (2007) Structure versus function in glaucoma: An application of a linear model. Investigative Ophthalmology and Visual Science, 48, 3662-8.

Holopigian K, Wynn, P, Seiple, W, Carr, RE, Hood, DC (2007) Eccentricity-dependent changes in local onset and offset responses in patients with progressive cone dystrophy. Vision Research, 47, 2297-304.

Hood DC & Kardon, RH. (2007) A framework for comparing structural and functional measures of glaucomatous damage. Progress in Retinal and Eye Research, 26, 688-710.

Greenstein VC, Eggers H, Hood DC. (2008) Multifocal VEP and automated perimetry abnormalities in strabismic amblyopes. JAAPOS, 12, 11-17.

Hood DC, Bach M, Brigell M, Keating D, Kondo M, Lyons JS, Palmowski-Wolfe AM. (2008) ISCEV guidelines for clinical multifocal electroretinography (2007 edition). Documenta Ophthalmologica,116, 1-11.

Grover LK, Hood DC, Ghadiali Q, Grippo TM, Wenick AS, Greenstein VC, Behrens MM, Odel JG. (2008) A comparison of multifocal and conventional visual evoked potential techniques in patients with optic neuritis/multiple sclerosis. Documenta Ophthalmologica, 117, 121-8.

Fortune B, Zhang X, Hood DC, Demirel S, Patterson E, Jamil A, Mansberger SL, Cioffi GA, Johnson CA. (2008) Effect of recording duration on the diagnostic performance of multifocal visual-evoked potentials in high-risk ocular hypertension and early glaucoma. Journal of Glaucoma, 17, 175-182.

Ghadiali Q, Hood DC, Lee C, et al. (2008) An analysis of normal variations in retinal nerve fiber layer thickness profiles measured with optical coherence tomography. Journal of Glaucoma, 17, 333-340.

Zhang X, Park JC, Salant J, Thomas S, Hirsch J, Hood DC. (2008) A multiplicative model for spatial interaction in the human visual cortex. Journal of Vision, 8(8), 4.1-9.

Hood DC, Anderson S, Rouleau J, Wenick AS, Grover LK, Behrens MM, Odel JG, Lee AG, Kardon RH. (2008) Retinal nerve fiber structure versus visual field function in patients with ischemic optic neuropathy: A test of a linear model. Ophthalmology, 115, 90-101.

Hood DC, Fortune B, Arthur SN, Xing D, Salant JA et al. (2008) Blood vessel contributions to retinal nerve fiber layer thickness profiles measured with optical coherence tomography. Journal of Glaucoma, 17, 519-528.

Park JC, Zhang X, Ferra J, Hirsch J., Hood DC. (2008) Comparison of contrast-response functions from multifocal visual-evoked potentials (mfVEPs) and functional MRI responses. Journal of Vision, 8(10), 8.1-12.

Wangsupadilok B, Greenstein VC, Kanadani FN, Grippo TM, Liebmann JM, Ritch R, Hood DC. (2009) A method to detect progression of glaucoma using the multifocal visual evoked potential technique. Documenta Ophthalmologica. 2009, 118(2):139-50.

Grippo TM, Ezon I, Kanadani FN, Wangsupadilok B, Tello C, Liebmann JM, Ritch R, Hood DC. (2009) The Effects of Optic Disc Drusen on the Latency of the Pattern-reversal Checkerboard and Multifocal Visual Evoked Potentials. Investigative Ophthalmology and Visual Science. 2009 Jan 31. [Epub ahead of print]

Hood DC, Raza AS, Kay KY, Sandler SF, Xin D, Ritch R, Liebmann. (2009) A comparison of retinal nerve fiber layer (RNFL) thickness obtained with frequency and time domain optical coherence tomography (OCT). Optics Express, 17, 3997-4000.

Hood DC, Lin EL, Lazow MA, Locke KG, Zhang X, Birch DG. (2009) Thickness of receptor and post-receptor retinal layers in patients with retinitis pigmentosa measured with frequency-domain optical coherence tomography (fdOCT). Investigative Ophthalmology and Visual Science. 50, 2328-2336.

Wang M, Hood DC, Cho JS, Ghadiali Q, De Moraes GV, Zhang X, Ritch R, Liebmann JM. (2009) Measurement of local retinal ganglion cell layer thickness in patients with glaucoma using frequency-domain optical coherence tomography. Arch Ophthalmol. 127:875-81

Gomes NL, Greenstein VC, Carlson JN, Tsang SH, Smith RT, Carr RE, Hood DC, Chang S. (2009) A comparison of fundus autofluorescence and retinal structure in patients with Stargardt disease. Investigative Ophthalmology and Visual Science. 50, 3953-9.

Hood DC, Anderson SC, Wall M, Raza AS, Kardon RH. (2009) A test of a linear model of glaucomatous structure-function loss reveals sources of variability in retinal nerve fiber and visual field measurements. Investigative Ophthalmology and Visual Science. 127, 875-81.

Hood DC, Salant JA, Arthur SN, Ritch R, Liebmann JM. (2009) The Location of the inferior and superior temporal blood vessels and interindividual variability of the retinal nerve fiber layer thickness. J. Glaucoma. 19, 158-166.

Thonginnetra O, Greenstein VC, Chu D, Liebmann JM, Ritch R, Hood DC: (2010) Normal versus high tension glaucoma: a comparison of functional and structural deficits. J Glaucoma. 19, 151-157.

Dale, EA, Hood DC, Greenstein VC, Odel J. (2010) A comparison of multifocal ERG and frequency domain OCT changes in patients with abnormalities of the retina. Documenta Ophthalmologica. 120, 175-86.

Birch DG, Williams PD, Callanan D, Wang R, Locke KG, Hood DC. (2010) Macular atrophy in birdshot retinochoroidopathy: An optical coherence tomography and multifocal electroretinography analysis. Retina. 30, 930-7.

Rangaswamy NV, Patel HM, Locke KG, Hood DC, Birch DG. (2010) A comparison of visual field sensitivity to photoreceptor thickness in retinitis pigmentosa. Investigative Ophthalmology and Visual Science. 51, 4213-9.

Hood DC, Ritch R. Other tests in glaucoma: multifocal visual evoked potential. In Pearls of Glaucoma Management, Springer, 2010, 175-181.

Zhang X, Wang M, Hood DC. (2010) Simultaneous recording of multifocal VEP responses to short-wavelength and achromatic stimuli. Doc Ophthalmol.121:93-102.

Yang Q, Resiman CA, Wang Z, Fukuma Y, Hangai M, Yoshimua N, Tomidokoro A, Araie M, Raza AS, Hood DC, Chan K. (2010) Automated layer segmentation of macular OCT images using dual-scale gradient information. Opt Exp, 18, 21293-307.

Hood DC, Cho J, Raza AS, Dale EA, Wang M. (2011) Reliability of a computer-aided manual procedure for segmenting optical coherence tomography scans. Optom Vis Sci, 88, 113-123.

Xin D, Greenstein VC, Ritch R, Liebmann JM, De Moraes CG, Hood DC. (2011) A Comparison of functional and structural measures for identifying progression of glaucoma. Investigative Ophthalmology and Visual Science. 52, 519-526.

Hood DC, Lazow MA, Locke KG, Greenstein VC, Birch DG. (2011) The transition zone between healthy and diseased retina in patients with retinitis pigmentosa (RP). Invest Ophthalmol Vis Sci. 52, 101-108.

Hood DC, Raza AS, de Moraes CGV, Odel JG, Greensten VC, Liebmann JM, Ritch R (2011) Initial arcuate defects within the central 10 degrees in glaucoma. Investigative Ophthalmology and Visual Science. 52, 940-946.

Wen Y, Locke KG, Hood DC, Birch DG. (2011) Rod Photoreceptor Temporal Properties in Retinitis Pigmentosa. Exp Eye Res. 98, 202-208.

Hood, DC, Raza AS. (2011) Method for comparing visual field defects to local RNFL and RGC damage seen on frequency domain OCT in patients with glaucoma. Biomedical Optics Express. 2, 1097–1105.

Hood DC, Ramachandran R, Holopigian K, Lazow M, Birch DG, Greenstein VG. (2011) Method for deriving visual field boundaries from OCT scans of patients with retinitis pigmentosa. Biomedical Optics Express, 2, 1106–1114.

Zhang X, Bregman CJ, Raza AS, De Moraes G, Hood DC. (2011) Deriving visual field loss based upon OCT of inner retinal thicknesses of the macula. Biomedical Optics Express, 2, 1734-1742.

de Moraes CGV, Ketner S, Teng CC, Ehrlich JR, Raza AS, Liebmann JM, Ritch R, Hood DC. (2011) Beta-zone parapapillary atrophy and multifocal visual evoked potentials in eyes with glaucomatous optic neuropathy. Doc Ophthalmol.123:43-50.

Birch DG, Wen Y, Locke K, Hood DC. (2011) Rod sensitivity, cone sensitivity and photoreceptor layer thickness in retinal degenerative diseases. Investigative Ophthalmology and Visual Science. 52:7141-7.

Xin D, Talamini CL, Raza AS, de Moraes CG, Greenstein VC, Liebmann JM, Ritch R, Hood DC. (2011) Hypodense regions ("holes") in the retinal nerve fiber layer in frequency-domain OCT scans of glaucoma patients and suspects. Investigative Ophthalmology and Visual Science. 52:7180-6.

Park JC, Moura AL, Raza AS, Rhee DW, Kardon RH, Hood DC. (2011) Toward a clinical protocol for assessing rod, cone and melanopsin contributions to the human pupil response. Investigative Ophthalmology and Visual Science. 52:6624-35.

Raza AS, Cho JS, de Moraes CGV, Wang M, Zhang X, Kardon RH, Liebmann JM, Ritch R, Hood DC. (2011) Retinal ganglion cell layer thickness and local visual field sensitivity in glaucoma. Archives of Ophthalmology, 129, 1529-36.

Yang Q, Reisman CA, Chen K, Ramachandran R, Raza A, Hood DC. (2011) Automated segmentation of outer retinal layers in macular OCT images of patients with retinitis pigmentosa. Biomedical Optics Express. 2, 2493-2503.

Burke TR, Rhee DW, Smith RT, Tsang SH, Allikmets R, Chang S, Lazow MA, Hood DC, Greenstein VC. (2011) Quantification of Peripapillary Sparing and Macular Involvement in Stargardt Disease (STGD1). Investigative Ophthalmology and Visual Science. 52, 8006-15.

Talamini CL, Raza AS, Dale EA, Greenstein VC, Odel JG, Hood DC. (2011) Abnormal multifocal ERG findings in patients with normal-appearing retinal anatomy. Documenta Ophthalmologica. 123:187-92.

Hood DC, Zhang X, Ramachandran R, Talamini CL, Raza A, Greenberg JP, Sherman J, Tsang SH, Birch DG. (2011) The inner segment/outer segment border seen on optical coherence tomography is less intense in patients with diminished cone function. Investigative Ophthalmology and Visual Science. 52, 9703-9.

Hood DC, Bach M, Brigell M, Keating D, Kondo M, Lyons JS, Marmor MF, McCulloch DL, Palmowski-Wolfe AM. (2012) ISCEV standard for clinical multifocal electroretinography (mfERG) (2011 edition). Documenta Ophthalmologica. 124, 1-13.

Wen Y, Locke KG, Hood DC, Birch DG.(2012) Rod photoreceptor temporal properties in retinal degenerative diseases. Adv Exp Med Biol. 723, 495-502.

Greenstein VC, Duncker T, Holopigian K, Carr RE, Greenberg JP, Tsang SH, Hood DC. (2012) Structual and functional changes associated with normal and abnormal fundus autofluorescence in patients with retinitis pigmentosa. Retina. 32, 349-57.

Wen Y, Klein M, Hood DC, Birch DG. (2012) Relationships among multifocal electroretinogram amplitude, visual field sensitivity, and SD-OCT receptor layer thicknesses in patients with retinitis pigmentosa. Investigative Ophthalmology and Visual Science. 53, 833-40.

Moura AL, Raza AS, Lazow MA, de Moraes CGV, Hood DC. (2012) Retinal ganglion cell and inner plexiform layer thickness in regions of severe visual field sensitivity loss in patients with glaucoma. Eye. 26, 1188-93.

de Moraes CG, Liebmann JM, Ritch R, Hood DC. (2012) Clinical use of multifocal visual-evoked potentials in a glaucoma practice: a prospective study. Documenta Ophthalmologica. 125, 1-9.

de Moraes CGV, Liebmann JM, Ritch R, Hood, DC. (2012) Understanding disparities among diagnostic technologies in glaucoma. Archives of Ophthalmology. 130, 833-40.

Hood DC, Raza AS, de Moraes CGV, Johnson CA, Liebmann JM, Ritch R. (2012) The nature of macular damage in glaucoma as revealed by averaging optical coherence tomography data. Translational Vision Science & Technology. 1, 1-15.

Fernandes DB, Raza AS, Nogueira RG, Wang D, Callegaro D, Hood DC, Monteiro ML. (2012) Evaluation of inner retinal layers in patients with multiple sclerosis or neuromyelitis optica using optical coherence tomography. Ophthalmology. 120, 387-394.

Acton JH, Smith RT, Hood DC, Greenstein VC. (2012) Relationship between retinal layer thickness and the visual field in early age-related macular degeneration. Investigative Ophthalmology and Visual Science. 12, 7618-24.

Hood DC, Raza AS, de Moraes CGV, Liebmann JM, Ritch R. (2013) Glaucomatous damage of the macula. Progress in Retinal and Eye Research. 32, 1-21.

Birch DG, Locke KG, Wen, Y, Locke, KI, Hoffman, DR, Hood DC (2013) Spectral-domain optical coherence tomography measures of the outer segment layer of progression in patients with x-linked retinitis pigmentosa. JAMA Ophthalmology, 131, 1143-50..

Zhang X, Raza AS, Hood DC. (2013) Detecting glaucoma with visual fields derived from frequency-domain optical coherence tomography. Investigative Ophthalmology and Visual Science. 54, 3289-96.

Hokazono K, Raza AS, Oyamada MK, Hood DC, Monteiro ML. (2013) Pattern electroretinogram in neuromyelitis optica and multiple sclerosis with or without optic neuritis and its correlation with FD-OCT and perimetry. Documenta Ophthalmologica. 127, 201-15.

Barile GR, Garg A, Hood DC, Marr B, Hussein S, Tsang SH. (2013) Unilateral retinopathy secondary to occult primary intraocular lymphoma. Documenta Ophthalmologica. 127, 261-9.

Hood DC, Wang DL, Raza AS, de Moraes CG, Liebmann JM, Ritch R. (2013) The locations of circumpapillary glaucomatous defects seen on frequency-domain OCT scans. Investigative Ophthalmology and Visual Science. 54, 7338-43.

Moura AL, Nagy BV, La Morgia C, Barboni P, Oliveira AG, Salomão SR, Berezovsky A, de Moraes-Filho MN, Chicani CF, Belfort R Jr, Carelli V, Sadun AA, Hood DC, Ventura DF. (2013) The pupil light reflex

in Leber's hereditary optic neuropathy: evidence for preservation of melanopsin-expressing retinal ganglion cells. Invest Investigative Ophthalmology and Visual Science. 54:4471-7.

Ramachandran R, Zhou L, Locke KG, Birch DG, Hood DC. (2013) A comparison of methods for tracking progression in X-linked retinitis pigmentosa using frequency domain OCT. Translational Vision Science & Technology. 2:1-9.

Hood DC, Slobodnick A, Raza AS, De Moraes CG, Teng CC, Ritch R. (2014) Early glaucoma involves both deep local, and shallow widespread, retinal nerve fiber damage of the macular region. Investigative Ophthalmology and Visual Science. 55:632-49.

Traynis I, de Moraes CG, Raza AS, Liebmann JM, Ritch R, Hood DC. (2014) The prevalence and nature of early glaucomatous defects in the central 10° of the visual field. JAMA Ophthalmol, E-pub

Raza AS, Zhang X, De Moraes CG, Reisman C, Liebmann JM, Ritch R, Hood DC. (2014) Improving glaucoma detection using spatially correspondent glusters of damage and by combining standard automated perimetry and optical coherence tomography. Investigative Ophthalmology and Visual Science. 55:612-24.

Duncker T, Greenberg JP, Ramachandran R, Hood DC, Smith RT, Hirose T, Woods RL, Tsang SH, Delori FC, Sparrow JR. (2014) Quantitative Fundus Autofluorescence and Optical Coherence Tomography in Best Vitelliform Macular Dystrophy. Investigative Ophthalmology and Visual Science. E-pub