

CURRICULUM VITAE

June 9, 2010

NAME: *Dennis R. Hoffman*
TITLE: *Senior Research Scientist*
DATE OF BIRTH: *09/07/51*
MARITAL STATUS: *Divorced, two children*
CITIZENSHIP: *United States Citizen*
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EDUCATION: *B.S., 1973, Chemistry, Jamestown College
Jamestown, ND
Ph.D., 1979, Biochemistry, University of North Dakota,
Grand Forks, ND*

RESEARCH EXPERIENCE:

*1979 - 1980 Postdoctoral fellow, Department of Biochemistry,
University of North Dakota, Grand Forks, ND*

*1980 - 1984 Research Associate-National Cancer Institute
Carcinogenesis Training Program through the
University of Tennessee, Biology Division, Oak Ridge
National Laboratory, Oak Ridge, TN*

*1984 - 1987 Chilton postdoctoral fellow, Departments of
Biochemistry and Obstetrics-Gynecology, The
University of Texas Southwestern Medical Center at
Dallas, TX (UTSWMC)*

*1987 - 1989 Assistant Instructor, Department of Pediatrics,
UTSWMC*

1989 - 1991 Instructor, Department of Pediatrics, UTSWMC

1991 - 1997 Research Scientist, RFSW, Dallas, TX

*1991 – present Director, Alice B. Pearson Visual Biochemistry
Laboratory*

*1991 - 2000 Adjunct Instructor, Department of Pediatrics,
UTSWMC*

2002 - 2007 Radiation Safety Officer, RFSW

1997 - present Senior Research Scientist, RFSW

1999 - 2009 Assistant Research Director, RFSW

2009- present Chief Research Officer, RFSW

PROFESSIONAL SOCIETIES:

American Society for Biochemistry and Molecular Biology - Member
Sigma Xi - Member;
American Oil Chemists' Society - Member
Association for Research in Vision and Ophthalmology - Member
International Society for the Study of Fatty Acids and Lipids (ISSFAL)-Member
American Society for Nutritional Sciences - Member
American Society for Clinical Nutrition – Member
Journal of Oleo Science -Editorial Advisory Board Member

JOURNAL REFEREE:

Lipids
Journal of Lipid Research
Metabolism
Experimental Eye Research
British J. of Ophthalmology
Early Human Development
European J Clinical Nutrition
Molecular Vision
Biochimica et Biophysica Acta
American Journal of Clinical Nutrition
Invest. Ophthalmol. Vis. Sci.
Journal of Clinical Investigation
European J Clinical Nutrition
Proc. Natl Acad Sci.
Pediatric Research

GRANT REVIEWER:

Thrasher Research Fund
Foundation Fighting Blindness
National Eye Institute

GRANT SUPPORT:

PENDING:

Federal Support: 3RO1 FD 002543-07 & 08 **DRH Role: PI**
Food and Drug Administration, Orphan Diseases Program
2/2011 – 1/2013 direct: \$567,619 total: \$760,964
“High Dose DHA and X-Linked Retinitis Pigmentosa: Phase II”. Randomized placebo-controlled clinical trial of high dose DHA intervention to slow cone ERG loss in patients with XLRP.

Non-Federal Support: Mead Johnson Nutritionals (DIAMOND STUDY)
~8/10 – 12/10 \$39,300 **DRH Role: Investigator**
“Plasma Lipoprotein Studies as a Function of DHA Level in Term Infant Formula”

ACTIVE:

Federal Support: 3RO1 FD 002543-01 to 06 **DRH Role: PI**
Food & Drug Administration, Orphan Diseases Program
10/2004 – 2/2011 direct: \$1,604,307 total: \$2,170,044
“High Dose DHA and X-Linked Retinitis Pigmentosa: Phase II”. Randomized placebo-controlled clinical trial of high dose DHA intervention to slow cone ERG loss in patients with XLRP.

Non-Federal Support: Martek Biosciences

DRH Role: Co-PI

8-1-10 – 7/14 total: \$1,707,427

“The effects of extended duration of long-chain polyunsaturated fatty acid (LCP) supplementation on neurological and immunological development in toddlers”
ClinicalTrials.gov NCT00982462

Non-Federal Support:

Foundation Fighting Blindness

D. Birch: PI DRH Role: Co-Investigator

7/1/2007 – 6/30/2012

\$82,476/yr (total: \$378,557)

Southwest Regional Research Center for the Study of Retinal Degenerations

“High Dose DHA and X-Linked Retinitis Pigmentosa: Phase II”. Provides supplemental funds for randomized controlled clinical trial.

Non-Federal Support: Mead Johnson Nutritionals (MJ-9)

5/08 – present

\$66,000

DRH Role: Investigator

“Feeding Study in Premature Infants”

Non-Federal Support: Mead Johnson Nutritionals (DIAMOND follow-up)

1/06 – present

\$66,000

DRH Role: Co-PI

“The Effects of Infant Formula Supplemented with Long Chain Polyunsaturated Fatty Acids on Visual and Cognitive Development in Term Infants- Cognitive Studies”

CONSULTING ACTIVITIES:

Paul, Hastings, Janofsky & Walker LLP Mead Johnson Nutritionals/ - Presentation to Federal Trade Commission

Paul, Hastings, Janofsky & Walker LLP/ Mead Johnson Nutritionals – Presentation to National Advertising Division of the Council of Better Business Bureaus

Discovery International/ Mead Johnson Nutritionals/ Presentation for Enfamil LIPIL Regional Consultants Meetings

ICF Consulting/ Reviewer for Food & Drug Administration

PATENTS:

BABY-FOOD COMPOSITIONS ENHANCING VISUAL ACUITY AND METHODS THEREFOR; Richard C. Theuer, Eileen E. Birch, Dennis R. Hoffman, Gerald E. Shaul, Terry L. Rockin, Mary Beth Cool, Virginia A. San Fanandre, , Robert A. Harvey; Beech-Nut Nutrition Corp. and Retina Foundation of the Southwest; United States Patent Office; #7,141,266, November 28, 2006.

METHOD OF ENHANCING COGNITIVE ABILITY IN INFANT FED DHA CONTAINING BABY-FOOD COMPOSITIONS; Eileen E. Birch, Mary Beth Cool, Robert A. Harve,; Dennis R. Hoffman, Terry L. Rockin, Virginia A. San Fanandre, Gerald E. Shaul, Richard C. Theuer, Beech-Nut Nutrition Corp. and Retina Foundation of the Southwest; United States Patent Office #7,413,759 B2; August 19, 2008.

PEER-REVIEWED PUBLICATIONS:

1. **Hoffman DR**, Skurdal DN and Cornatzer WE: Viral stimulation of choline phosphotransferase in spleen microsomes, Lipids **10**:829-834, 1975.
2. **Hoffman DR**, Cornatzer WE and Duerre JA: Relationship between tissue levels of S-adenosylhomocysteine and transmethylations reactions, Can. J. Biochem. **57**:56-65, 1979.
3. **Hoffman DR**, Uthus EO and Cornatzer WE: Effect of diet on choline phosphotransferase, phosphatidylethanolamine methyltransferase and phosphatidyl dimethyl ethanolamine methyltransferase in liver microsomes, Lipids **15**:439-446, 1980.
4. **Hoffman DR**, Marion DW, Cornatzer WE and Duerre JA: Adenosylmethionine and adenosylhomocysteine metabolism in isolated rat liver: Effects of L-methionine, L-homocysteine, and adenosine, J.Biol.Chem. **255**:10822-10827, 1980.
5. **Hoffman DR**, Haning JA and Cornatzer WE: Microsomal phosphatidylethanolamine methyltransferase: Effect of altered S-adenosylmethionine: S-adenosyl- homocysteine ratios in rat liver, Internatl. J. Biochem. **13**:745-748, 1981.
6. **Hoffman DR**, Haning JA and Cornatzer WE: Effects of alloxan diabetes on phosphatidylcholine biosynthetic enzymes, Proc. Soc. Exptl. Biol. Med. **167**:143-146, 1981.
7. **Hoffman DR** and Cornatzer WE: Microsomal phosphatidylethanolamine methyltransferase: Some physical and kinetic properties, Lipids **16**:533-540, 1981.
8. **Hoffman DR**, Haning JA and Cornatzer WE: Microsomal phosphatidylethanolamine methyltransferase: Inhibition by S-adenosylhomocysteine, Lipids **16**:561-567, 1981.
9. **Hoffman DR**, Haning JA and Cornatzer WE: Effect of a methyl-deficient diet on rat liver phosphatidylcholine biosynthesis, Can. J. Biochem. **59**:543-550, 1981.
10. **Hoffman DR** and Huberman E: The control of phospholipid methylation by phorbol diesters in differentiating human myeloid HL-60 leukemia cells, Carcinogenesis **3**:875-880, 1982.
11. Berdel WE, Grainer E, Fink U, Stavrou D, Reichert A, Rastetter J, **Hoffman DR** and Snyder F: Cytotoxicity of alkyllysophospholipid derivatives and low alkyl-cleavage enzyme activities in rat brain tumor cells. Cancer Res. **43**:541-545, 1983.
12. **Hoffman DR**, Haning JA and Cornatzer WE: Effects of diethanolamine on phosphatidylcholine biosynthetic enzymes of rat liver microsomes, Internatl. J. Biochem. **15**:367-371, 1983.
13. Cornatzer WE, **Hoffman DR** and Haning JA: The effect of embryological development on phosphatidylethanolamine methyltransferase, phosphatidyl-dimethylethanolamine methyltransferase and choline phosphotransferase of rabbit liver microsomes, Lipids **19**:1-4, 1984.
14. Cornatzer WE, **Hoffman DR** and Haning JA: The effect of hyper and hypothyroidism, hypophysectomy and adrenalectomy on

- phosphatidylethanolamine methyltransferase, phosphatidylmethyl-ethanolamine methyltransferase, and choline phosphotransferase of rat liver microsomes, *Internatl. J. Biochem.* **16**:567-570, 1984.
15. **Hoffman DR**, Hajdu J and Snyder F: Cytotoxicity of platelet activating factor and related alkyl-phospholipid analogs in human leukemia cells, polymorphonuclear neutrophils and skin fibroblasts. *Blood* **63**:545-552, 1984.
 16. **Hoffman DR**, Stanley JD and Snyder F: Cytotoxicity of ether-linked phytanyl phospholipid analogs and related derivatives in human HL-60 leukemia cells and polymorphonuclear neutrophils. *Res Commun Chem Pathol Pharmacol* **44**:293-306, 1984.
 17. **Hoffman DR**, Haning JA and Cornatzer WE: Effect of Friend virus infection on phosphatidylcholine biosynthetic enzymes in mouse spleen microsomes. *Life Sci.* **34**:2621-2626, 1984.
 18. Billah MM, DiRenzo GC, Ban C, Truong CT, **Hoffman DR**, Anceschi MM, Bleasdale JE and Johnston JM: Platelet-activating factor metabolism in human amnion and the response of this tissue to extracellular platelet activating factor. *Prostaglandins* **30**:841-850, 1985.
 19. **Hoffman DR**, Truong CT and Johnston JM: The role of platelet-activating factor in human fetal lung maturation. *Amer J Obstet Gynecol.* **155**:70-75, 1986.
 20. **Hoffman DR**, Truong CT and Johnston JM: Metabolism and function of platelet-activating factor in rabbit fetal lung development. *Biochim Biophys Acta* **879**:88-96, 1986.
 21. **Hoffman DR**, Hoffman LH and Snyder F: Cytotoxicity and metabolism of alkyl phospholipid analogs in neoplastic cells. *Cancer Res.* **46**:5803-5809, 1986.
 22. Snyder F, Record M, Smith Z, Blank ML and **Hoffman DR**: Selective cytotoxic action of ether-lipid analogs of PAF: Mechanistic studies related to their metabolism, subcellular localization, and effects on cellular transport systems, *Aktuel. Onkol*, **34**:19-26, 1987.
 23. Maki N, **Hoffman DR** and Johnston JM: PAF (platelet-activating factor) acetylhydrolase activities in maternal, fetal, and newborn rabbit plasma during pregnancy and lactation, *Proc. Natl. Acad. Sci., U.S.A.*, **85**:728-732, 1988.
 24. **Hoffman DR**, Bateman MK and Johnston JM: Synthesis of platelet-activating factor by 1-alkyl-2-acetyl-glycerol: CDP-choline cholinephosphotransferase in developing fetal rabbit lung, *Lipids*, **23**, 96-100, 1988.
 25. **Hoffman DR**, White RG, Angle MJ and Johnston JM: Platelet-activating factor induces glycogen degradation in fetal rabbit lung *in utero*, *J. Biol. Chem.*, **263**, 9316-9319, 1988.
 26. **Hoffman DR**, Romero R and Johnston JM: Detection of platelet-activating factor in amniotic fluid of complicated pregnancies. *Am. J. Obstet. Gynecol.* **162**:525-528, 1990.
 27. Uauy R, Birch D, Birch E, Tyson J and **Hoffman DR**: Effect of omega-3 fatty acids on retinal function of very low birth weight neonates. *Pediatric Res.*, **28**,485-492, 1990.
 28. McCoshen JA, **Hoffman DR**, Kredentser JV, Araneda C and Johnston JM: The role of fetal membranes in regulating production, transport and metabolism of

- prostaglandin E₂ during labor. *Am. J. Obstet. Gynecol.*, **163**:1632-1640, 1990.
29. Zhu Y-P, **Hoffman DR**, Hwang S-B, Miyaura S, and Johnston JM: Prolongation of parturition in the rat following treatment with platelet-activating factor (PAF) receptor antagonists. *Biology of Reproduction*, **44**:39-42, 1991.
 30. Bourbon JR, **Hoffman DR**, and Johnston JM: Effects of platelet-activating factor on the fetal rat lung *in vivo* and *in vitro*. *Exp. Lung Res.*, **17**:789-801, 1991.
 31. Birch DG, Birch EE, **Hoffman DR**, and Uauy RD: Retinal development in very-low-birth-weight infants fed diets differing in omega-3 fatty acids. *Invest. Ophthalmol. Vis. Sci.*, **33**:2365-2376, 1992.
 32. **Hoffman DR**, Thomas VL, and Snyder F: Inhibition of cellular transport systems by alkyl phospholipid analogs in HL-60 human leukemia cells. *Biochim. Biophys. Acta* **1127**:74-80, 1992.
 33. Treen M, Uauy R, Jameson D, Thomas VL, and **Hoffman DR**: Effect of docosahexaenoic acid (DHA) on membrane fluidity and function in Y-79 retinoblastoma cells. *Arch. Biochem. Biophys.*, **294**:564-570, 1992.
 34. Birch EE, Birch DG, **Hoffman DR**, and Uauy R: Dietary essential fatty acid supply and visual acuity development. *Invest. Ophthalmol. Vis. Sci.*, **33**:3242-3253, 1992.
 35. **Hoffman DR**, and Uauy R: Essentiality of dietary omega-3 fatty acids for premature infants: plasma and red blood cell fatty acid composition. *Lipids*, **27**:886-895, 1992.
 36. Moya FR, **Hoffman DR**, Zhao B, and Johnston JM: Platelet-activating factor in surfactant preparations. *Lancet* **341**:858-860, 1993.
 37. Birch E, Birch D, **Hoffman D**, Hale L, Everett M, and Uauy R: Breast-feeding and optimal visual development. *J. Pediatr. Ophthalmol. Strabismus*, **30**:33-38, 1993.
 38. **Hoffman DR**, Uauy R, and Birch DG: Red blood cell fatty acid levels in patients with autosomal dominant retinitis pigmentosa. *Exper. Eye Res.*, **57**:359-368, 1993.
 39. **Hoffman DR**, Favour S, Uauy R, Rosenfeld CR, and Magness RR: Distribution of unsaturated fatty acids in phospholipids of arteries from nonpregnant, pregnant and fetal sheep. *Prostaglandins Leukotrienes and Essential Fatty Acids*, **49**:901-914, 1993.
 40. Uauy R, **Hoffman DR**, Birch EE, Birch DG, Jameson DM, and Tyson J: Safety and efficacy of omega-3 fatty acids in the nutrition of very low birth weight infants: soy oil and marine oil supplementation of formula. *J. Pediatr.* **124**:612-620, 1994.
 41. **Hoffman DR** and Birch DG: Docosahexaenoic acid in red blood cells of patients with X-linked retinitis pigmentosa. *Invest. Ophthalmol. Vis. Sci.* **36**: 1009-1018, 1995.
 42. **Hoffman DR**, Uauy R, and Birch DG: Metabolism of omega-3 fatty acids in patients with autosomal dominant retinitis pigmentosa. *Exp. Eye Res.* **60**: 279-289, 1995.
 43. Buraczynska M, Wu W, Fujita R, Buraczynska K, Phelps E, Andreasson S, Bennitt J, Birch DG, Fishman GA, **Hoffman DR**, Jacobson SG, Musarella MA, Sieving PA, and Swaroop A: Spectrum of mutations in 20% of families with X-linked retinitis pigmentosa. *Am. J. Hum. Genet.* **61**: 1287-1292, 1997.
 44. Birch EE, **Hoffman DR**, Uauy R, Birch DG, and Prestidge C: Visual acuity and

- the essentiality of docosahexaenoic acid and arachidonic acid in the diet of term infants. *Pediatr. Res.* **44**: 201-209, 1998.
45. Gieser L, Fujita R, Goring HHH, Ott J, **Hoffman DR**, Cideciyan AV, Birch DG, Jacobson SG, and Swaroop A: A novel locus (RP24) for X-linked retinitis pigmentosa maps to Xq 26-27. *Am. J. Hum. Genet.* **63**: 1439-1447, 1998.
 46. **Hoffman DR**, Birch EE, Birch DG, and Uauy R: Fatty acid profile of buccal cheek cell phospholipids as an index for dietary intake of docosahexaenoic acid in preterm infants. *Lipids* **34**: 337-342, 1999.
 47. Birch EE, Garfield S, **Hoffman DR**, Uauy R: A randomized controlled trial of early dietary supply of long chain polyunsaturated fatty acids and mental development in term infants. *Dev. Med. Child Neurol.* **42**: 174-181, 2000.
 48. **Hoffman DR**, Birch EB, Birch DG, Uauy R, Castañeda YS, Lapus MG, Wheaton DH: Impact of early dietary intake and blood lipid composition of long-chain polyunsaturated fatty acids on later visual development. *J. Pediatr. Gastroenterol. Nutr.* **31**: 540-53, 2000.
 49. Guevara-Fujita M, Fahrner S, Buraczynska K, Cook J, Wheaton D, Cortes F, Vicencio C, Pena M, Fishman GA, Mintz-Hittner H, Birch D, **Hoffman D**, Mears AJ, Fujita R, and Swaroop A: Five novel RPGR mutations in families with X-linked retinitis pigmentosa. *Human Mutation*, **396**: Online, 2000.
 50. **Hoffman DR**, DeMar JC, Heird WC, Birch DG, and Anderson RE: Impaired synthesis of docosahexaenoic acid (DHA) in patients with X-linked retinitis pigmentosa (XLRP). *J. Lipid Res.* **42**: 1395-1401, 2001.
 51. Birch EE, **Hoffman DR**, Castañeda YS, Fawcett SL, Birch DG, and Uauy RD: A randomized controlled trial of long-chain polyunsaturated fatty acid supplementation of formula in term infants after weaning at 6 wk of age. *Am. J. Clin. Nutr.* **75**: 570-580, 2001.
 52. Birch DG, Hood DC, Locke KG, **Hoffman DR**, and Tzekov RT: Quantitative ERG measures of phototransduction in cone and rod photoreceptors: normal aging, progression with disease, and test-retest variability. *Arch. Ophthalmol.*, **1120**: 1045-1051, 2002.
 53. Breuer DK, Yashar BM, Filippova E, Hiriyan S, Lyons RH, Mears AJ, Asaye B, Acar C, Vervoort R, Wright AF, Musarella MA, Wheeler P, MacDonald I, Iannaccone A, Birch D, **Hoffman DR**, Fishman GA, Heckenlively JR, Jacobson SG, Sieving PA, and Swaroop AA. Comprehensive mutation analysis of RP2 and RPGR in a North American cohort of families with X-linked retinitis pigmentosa. *Am. J. Human Genetics*, **70**: 1545-1554, 2002.
 54. Rojas CV, Martinez JI, **Hoffman DR**, and Uauy R. Gene expression analysis in human fetal retinal explants treated with docosahexaenoic acid. *Invest. Ophthalm. Vis. Sci.*, **44**:3170-3177, 2003.
 55. **Hoffman DR**, Birch EE, Castañeda YS, Fawcett SL, Wheaton DH, Birch DG, and Uauy R: Visual function in breast-fed term infants weaned at 4 and 6 months to formula with or without long-chain polyunsaturates: A randomized clinical trial. *J. Pediatr.* **142**:669-677, 2003.
 56. Wheaton DH, **Hoffman DR**, Locke KG, Watkins RB, and Birch DG. Biological safety assessment of docosahexaenoic acid (DHA) supplementation in X-linked retinitis pigmentosa (XLRP). *Arch. Ophthalmol.* **121**:1269-1278, 2003.

57. **Hoffman DR**, Locke KG, Wheaton DH, Fish GE, Spencer, R. and Birch DG. A randomized, placebo-controlled clinical trial of docosahexaenoic acid supplementation for X-linked retinitis pigmentosa. Amer. J. Ophthalmol. **137**: 704-718, 2004.
58. **Hoffman DR**, Theuer RC, Castañeda YS, Wheaton DKH, Morale SE, Wiedemann LE, and Birch EE: Maturation of visual acuity is accelerated in breast-fed term infants fed baby food containing DHA-enriched egg yolk. Journal of Nutrition **134**: 2307-2313, 2004.
59. Morale SE, **Hoffman DR**, Castañeda YS, Wheaton DH, Burns RA, and Birch EE: Duration of long-chain polyunsaturated fatty acids availability in the diet and visual acuity. Early Human Development **81**: 197-203, 2005.
60. Birch EE, Castañeda, YS, Wheaton, DH, Birch, DG, Uauy, RD, and **Hoffman DR**: Visual maturation of term infants fed LCP-supplemented or control formula for 12 months. American Journal of Clinical Nutrition **81**: 871-879, 2005
61. Makrides M, Gibson RA, Udell T, Ried K, and the International LCPUFA Investigators. Supplementation of infant formula with long-chain polyunsaturated fatty acids does not influence the growth of term infants. American Journal of Clinical Nutrition. **81**: 1094-1101, 2005.
62. Udell T, Gibson RA, Makrides M, and the PUFA Study Group. The effect of alpha-linolenic acid (ALA) and linoleic acid (LA) on the growth and development of formula-fed infants: a systematic review and meta-analysis of randomized controlled trials. Lipids **40**: 1-11, 2005.
63. **Hoffman DR**, Wheaton DKH, James KJ, Tuazon M, Diersen-Schade DA, Harris CL, Stolz S, and Berseth CL. Docosahexaenoic acid in red blood cells of term infants receiving two levels of long-chain polyunsaturated fatty acids. J.Pediatr. Gastroenterol. Nutr. **42**: 287-292, 2006.
64. Lloyd-Still JD, Powers CA, **Hoffman DR**, Boyd-Trull K, Lester LA, Benisek DC, and Arterburn LM. Bioavailability and safety of a high dose of docosahexaenoic acid triacylglycerol of algal origin in cystic fibrosis patients: a randomized, controlled study. Nutrition **22**: 36-46, 2006.
65. Birch EE, Garfield S, Castañeda YS, Wheaton DKH, Uauy R, **Hoffman DR**. Visual acuity and cognitive outcomes at 4 years of age in a double-blind, randomized trial of long-chain polyunsaturated fatty acid-supplemented infant formula. Early Human Development **83**:279-284, 2007.
66. **Hoffman D**, Ziegler E, Mitmesser SH, Harris CL, Diersen-Schade DA. Soy-based infant formula supplemented with DHA and ARA supports growth and increases circulating levels of these fatty acids in infants. Lipids **43**:29-35, 2007.
67. Scalabrin DM, Johnston WH, **Hoffman DR**, P'pool VL, Harris CL, Mitmesser SH. Growth and tolerance of healthy term infants receiving hydrolyzed infant formulas supplemented with Lactobacillus rhamnosus GG: randomized, double-blind, controlled trial. Clin. Pediatr. **48**:734-744, 2009.
68. Drover JR, **Hoffman DR**, Castañeda YS, Morale SE, Birch EE. Three randomized controlled trials of early long-chain polyunsaturated fatty acid supplementation on means-end problem solving in 9-month-olds. Child Development, **80**:1376-1384, 2009.

69. **Hoffman DR**, Boettcher JA, Diersen-Schade DA. Toward optimizing vision and cognition in term infants by dietary docosahexaenoic and arachidonic acid supplementation: A review of randomized controlled trials. Prostaglandins, Leukotrienes, and Essential Fatty Acids, 81:151-158, 2009.
70. Birch EE, Carlson SE, **Hoffman DR**, Fitzgerald-Gustafson KM, Fu VLN, Drover JR, Castañeda YS, Minns L, Wheaton DKH, Mundy D, Marunycz J, Diersen-Schade DA. The DIAMOND (DHA Intake And Measurement Of Neural Development) Study: a double-masked, randomized controlled clinical trial of the maturation of infant visual acuity as a function of the dietary level of docosahexaenoic acid. Am J Clin Nutr, 91: 1-12, 2010.
71. Drover JR, **Hoffman DR**, Castañeda YS, Morale SE, Garfield S, Wheaton DH, Birch EE. The DIAMOND study: a randomized controlled clinical trial of cognitive development as a function of dietary level of docosahexaenoic acid. (submitted).

REVIEWS, BOOK CHAPTERS, and INVITED PAPERS:

1. Johnston JM and **Hoffman DR**: The regulation of arachidonic acid release in parturition. In: Enzymes of Lipid Metabolism (L Freysz, H Dreyfus, R Massarelli and S Gatt, eds) Plenum Press (New York), pp 633-645, 1986.
2. **Hoffman DR** and Johnston JM: Platelet-activating factor metabolism in fetal rabbit lung development. In: New Horizons in Platelet Activating Factor Research (M Lee and C Winslow, eds) John Wiley and Sons Ltd (Sussex, England), pp. 51-55, 1987.
3. Johnston JM, Bleasdale JE and **Hoffman DR**: Functions of PAF in fetal lung maturation and parturition. In: Platelet-Activating Factor and Related Lipid Mediators (F Snyder, ed) Plenum Press (New York), pp. 375-402, 1987.
4. Uauy R, Treen, M, and **Hoffman DR**: Essential fatty acid metabolism and requirements during development. Seminars in Perinatology **13**:118-130, 1989.
5. Johnston JM, Maki N, Angle MJ, and **Hoffman DR**: Regulation of the arachidonic acid cascade and PAF metabolism in reproductive tissues. In: Eicosanoids in Reproduction (M. Mitchell, ed), CRC Press, Boca Raton, FL, pp. 5-37, 1990.
6. Uauy R., Treen M, and **Hoffman DR**: Essential fatty acid metabolism and requirements for the low birth weight neonate. In: Advances On Infant Nutrition, Vol.3, (Ballabriga, A. ed.) UNIASA-EDDA, Grenada, pp. 153-180, 1990.
7. Uauy R and **Hoffman DR**: Essential fatty acid requirements for normal eye and brain development. Seminars in Perinatology, **15**:449-455, 1991.
8. Uauy R, Birch D, Birch E, Tyson J, and **Hoffman D**: Are omega-3 fatty acids required for normal eye and brain development of the very low birth weight infant? In: Recent Advances in Infant Feeding, (B.Koletzko, ed.) Verlag, New York, 13-21, 1992.
9. Uauy R, Birch DG, Birch EE, and **Hoffman DR**: Essential fatty acid requirements for normal visual and neural development. In: Human Growth: Basic and Clinical Aspects. (Hernandez M, and Argente J., eds.) Elsevier Sci. Publ., New York, pp. 197-203, 1992.
10. Uauy R, Birch D, Birch E, **Hoffman D**, and Tyson J: Effect of dietary essential ω -3 fatty acids on retinal and brain development in premature infants, In: Essential

- Fatty Acids and Eicosanoids* (A. Sinclair, R. Gibson, eds.) American Oil Chemists' Society, Champaign, IL, pp. 197-202, 1993.
11. **Hoffman DR**, Uauy R, Birch EE, and Birch DG: Effects of ω -3 long-chain polyunsaturated fatty acid supplementation on retinal and cortical development in premature infants. *Am. J. Clin. Nutr.*, **57**:807S-812S, 1993.
 12. Uauy R, Birch DG, Birch EE, **Hoffman D** and Tyson J: Visual and brain development in infants as a function of essential fatty acid supply provided by the early diet. In: *Lipids, Learning, and the Brain: Fats in Infant Formula* (J Dobbing & JD Benson, eds.) Ross Laboratories (Columbus, OH) pp. 215-232, 1993.
 13. **Hoffman DR**: Visual development in the neonate. *Clinic Talk*, **10**:4-5, 1994.
 14. Uauy-Dagach R, Birch EE, Birch DG, and **Hoffman DR**: Significance of ω -3 fatty acids for retinal and brain development of preterm and term infants. In: *Fatty Acids and Lipids: Biological Aspects. World Rev. Nutr. Diet* (Galli C, Simopoulos AP, Tremoli E, eds.) Karger, Basel, vol. **75**: 52-62, 1994.
 15. Uauy R, Birch DG, **Hoffman DR**, and Birch EE: Omega-3 fatty acids: essential nutrients for optimal retinal and brain development. In: *Proc. Sci. Conf. Omega-3 Fatty Acids in Nutrition, Vascular Biology, and Medicine*, (H.J. Pownall, A.A. Spector, eds.) American Heart Assoc., Dallas, TX, pp.33-46, 1994.
 16. Uauy-Daguch R, Mena P, and **Hoffman DR**: Essential fatty acid metabolism and requirements for LBW infants. *Acta Paediatrica*, **S405**: 78-85, 1994.
 17. **Hoffman DR**, Uauy R, and Birch DG: Docosahexaenoic acid abnormalities in red blood cells of patients with retinitis pigmentosa. In: *Degenerative Diseases of the Retina* (RE Anderson, MM LaVail, and JG Hollyfield, eds.) Plenum Publ., New York, 1995; 385-393.
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 108. Hughbanks-Wheaton, D, Kimberling W, Jensen M, **Hoffman D**. Omega-3 fatty acid dietary intake and red blood cell (RBC) docosahexaenoic acid (DHA) levels in Usher Syndrome subtypes. International Symposium on Usher Syndrome and Related Diseases, Valencia, Spain, May 27-29, 2010.

INVITED TALKS (2007-2010):

1. **Hoffman DR**. "The Functional Impact of Long-chain Polyunsaturated Fatty Acids on Infant Development" Grand Forks Human Nutrition Research Center, United States Department of Agriculture, Grand Forks, ND, April 10, 2007.
2. **Hoffman DR**. "The Functional Impact of Supplementing Long-chain Polyunsaturated Fatty Acids into Infant Formula" Mastering Metabolic Therapy, Nutricia North America, Las Vegas, NV, October 15-17, 2007.
3. **Hoffman DR**. "New Discoveries: The Impact of DHA and ARA Levels on Developmental Outcomes from Newborns to Toddlers" The Obstetrical and Gynaecological Society of Hong Kong, Hong Kong, China, June 29, 2007.
4. **Hoffman DR**. "Recent Evidence that Dietary Supply of DHA and ARA in Early Infancy Leads to Positive Trends in IQ of 4-year-olds" The 13th Congress of The Asean Pediatric Federation and the 45th Annual Convention of The Philippine Pediatric Society Joint Meeting, Manila, Philippines, April 14, 2008.
5. **Hoffman DR**. "Optimizing Vision and Cognition in Term Infants By Dietary DHA+ARA Supplementation" Workshop on DHA as a Required Nutrient, Baltimore, MD, June 20-21, 2008.

6. **Hoffman DR.** *"Inherited Retinal Degeneration and Nutrition: The Science Behind the Headlines"* Foundation Fighting Blindness Visions 2008, Washington, DC, August 8-10, 2008.
7. **Hoffman DR.** *"What's Cooking for Your Retina: A Culinary Demonstration"* Foundation Fighting Blindness Visions 2008, Washington, DC, August 8-10, 2008.
8. **Hoffman DR,** *"Update of High-Dose DHA Supplementation in Early Stage X-linked Retinitis Pigmentosa: A Placebo-Controlled Clinical Trial".* The Foundation Fighting Blindness Southwest Regional Research Center for the Study of Degenerative Retinal Diseases, Dallas, TX, Oct. 9, 2009.