

**BAYLOR
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CURRICULUM VITAE**

Dr. Bingzhi Yang, M.D.

Present academic rank and title

Director, Molecular Diagnostics,
Principle Investigator,
Institute of Metabolic Disease,
Baylor University Medical Center, Dallas, TX

Assistant Professor, (1997)
Institute of Biomedical Studies
Baylor University Graduate School, Waco, Texas

Education:

1963–68	Henan Medical University Zhong Zhou, Henan , China, M.D.
1967–68	Rotating Internship, First Hospital, Henan Medical College, Zhong Zhou , Henan, China
1969–71	Resident, Internal Medicine, Quingyang Hospital, Henan, China
1971–73	Clinical Fellow, Obstetrics /Gynecology, Henan Hospital, Zhong Zhou, China
1973–74	Clinical Fellow (Hematology, Oncology), First Hospital , Henan Medical College, Zhong Zhou, Henan, China
1984–85	Visiting Fellow, Molecular Pharmacology, NICHD, NIH, Bethesda, MD, USA.

Professional Societies and Memberships:

1990 - Member, American Society of Human Genetics
1995 - Member, American Association For The Advancement of Science
1998 - Member, Society For Inherited Metabolic Disorders

Professional Experience:

1997-	Assistant professor Institute of Biomedical Studies Baylor University Graduate School, Waco, Texas USA
1995-	Director, Molecular Diagnostics, Principle Investigator, Institute of Metabolic Disease, Baylor University Medical Center, Dallas, TX. USA

- 1987–95 Research Associate, Division of Genetics and Metabolism
 Department of Pediatrics,
 Duke University Medical Center, Durham, NC USA
- 1984–85 Visiting Fellow, Molecular Pharmacology,
 NICHD, NIH, Bethesda, MD. USA
- 1976–84 Head, Division of Hematology and Radiation Disease,
 Institute of Occupation Diseases, Zhong Zhou, Henan, China
- 1974–76 Physician, Division of Hematology and Oncology,
 Henan Medical College, Zhong Zhou, Henan, China

Awards: The ACGA Post–doctoral Fellow Award, (with a paper entitled, "Molecular basis of the enzymatic variability in Type III glycogen storage disease (GSD–III)" The Association of Chinese Geneticists in America, San Francisco, CA, November, 1992.

Publications:

1. D.S. Roe, **B. Z. Yang, M.D.**; Christine Vianey-Saban, Ph.D; Eduard Struys; Lawrence Sweetman, PhD; Charles R Roe, M.D. Differentiation of long chain fatty acid oxidation disorders using alternative precursors and acylcarnitine profiling in fibroblasts. **Molecular Genetics and Metabolism 87, 40-47. (2006)**
2. Shuyuan Chen, Raffi Bekeredjian, Jia-huan Ding, **Bing-zhi Yang**, Wendy Pan, Roger H. Unger, Ralph V. Shohet, Stephen A. Johnston, Christopher B. Newgard, Paul A. Grayburn. Gene Expression Targeted to Pancreatic Islets with Ultrasonic Destruction of Lipid-Stabilized Micro bubbles, **Nature, in prepare (2006)**
3. **Bing-Zhi Yang**¹, Jia-Huan Ding¹, Matthew Mysliwiec, Robert Grier¹, Lawrence Sweetman¹, Katrinka Zanchetta¹ and Charles Roe¹. Identification of four novel mutations in six patients with Medium -Chain Acyl-CoA Dehydrogenase Deficiency detected by new born screening Tandem Mass Spectrometry. **Molecular Genetics and Metabolism In prepare,(2006)**
4. G Korpany, S. Chen, RV Shohet, Jia-huan Ding, **BZ Yang**, PA Frenkel. PA Grayburn. Targeting of VEGF- mediated angiogenesis to rat myocardium using ultrasonic destruction of microbubbles. **Gene therapy (2005)12, 1305-1312 2005**
Nature Publishing Group 0969-7128 (2005)
5. Li-Feng Zhang, Jia-Huan Ding, **Bingzhi Yang** and Charles Roe
 Characterization of the Bi-directional promoter region between the human VLCAD and PSD-95 genes. **Genomics 82 660-668.(2003)**
6. **Bing-Zhi Yang**¹, Jason M. Mallory, , Diane S. Roe¹, G. D. Michele Brivet³ Strobel², , Kerry M. Jones¹, Jia-Huan Ding¹ and Charles Roe¹ Carnitine/Acylcarnitine Translocase Deficiency (Neonatal phenotype): Successful Prenatal and Postmortem diagnosis Associated with a Novel Mutation in a Single Family. **Molecular Genetics and Metabolism 73, 64-70 (2001).**

7. **Bing-Zhi Yang**¹, Jia-Huan Ding¹, Changcheng Zhou¹, Mazen DiMachkie², Jeff Wilkinson¹, Larry Sweetman¹, Majed J. Dasouki³ and Charles Roe¹. Identification of A Novel Mutation in Patients with Medium-Chain Acyl-CoA Dehydrogenase Deficiency. Molecular Genetics and Metabolism 69, 259-262 (2000)
8. Guocheng He, **Bing-Zhi Yang**, Diane Roe, Teramoto, Kirk Aleck. Theresa A. Grebe, Charles R. Roe, and Jia-Huan Ding. Identification of two novel mutations in the Hypoglycemic Phenotype of Very Long Chain Acyl-CoA Dehydrogenase deficiency. Biochemical and Biophysical Research Communications 264, 483-487 (1999).
9. Agnes G.A. Bijvoet^{1,2}, Esther H.M. van de Kamp², Marian A. Knoos¹, Jia-Huan Ding^{3,+}, **Bing Z. Yang**^{3,+}, Pim Visser⁴, Catty E. Bakkeri, Martin Ph. Verbeet⁵, Ben A. Oostra¹, Arnold J.J. Reuser^{1,*} and Ans T. van der Ploeg². Generalized Glycogen Storage and Cardiomegaly in a Knockout Mouse Model of Pompe Disease. Human Molecular Genetics, Vol. 7, No.1 53-62 1998.
10. **Bing-Zhi Yang**, Jia-Huan Ding, Diane Roe, Tracy Dewese, Donald W. Day*, and Charles Roe. A novel Mutation Identified in Carnitine Palmitoyltransferase II Deficiency. Molecular Genetics and Metabolism 63, 110-115. 1998.
11. **Bing-Zhi Yang**, Jia-Huan Ding, Tracy Dewese, Diane Roe, Guocheng He, Jeff Wilkinson, Donald W. Day*, France Demaugre*, Daniel Rabier**, Michele Brivet** and Charles Roe. Identification of four novel mutations in patients with Carnitine palmitoyltransferase II (CPT II) deficiency. Molecular Genetics and Metabolism 64, 229-236 (1998).
12. Bao Y, **Yang BZ**, Dawson TL Jr, Chen YT. Isolation and nucleotide sequence of human liver glycogen debranching enzyme mRNA: identification of multiple tissue-specific isoforms. Gene 1997 Sep 15; 197(1-2): 289-98
13. **Yang, B.Z.**, Heng, H.H., Ding, J.-H., and Roe, C.R. The Genes for the Alpha and Beta Subunits of the Mitochondrial Trifunctional Protein are Both Located in the Same Region of Human Chromosome 2p23. Genomics 37, 141-143 (1996)
14. Ding, J.-H., **Yang, B.-Z.**, Nada, M.A., and Roe, C.R. Improved Detection of the G1528C Mutation in LCHAD Deficiency. Biochemical and Molecular Medicine. 58, 46-51 (1996).
15. Gregersen N, Winter V, Curtis D, Deufel T, Willems PJ, Ponzzone A, Ding J.H., **Yang, B.Z.**, Iafolla, A.K., Chen, Y.T., Roe, C.R., Kolvra, S., Scheiderman, K., Andresen, B.S., Bross, P., Bolund, L. Medium-chain acyl-CoA dehydrogenase (MCAD) deficiency: the prevalent mutation G985 (K304E) is subject to a strong founder effect from northwestern Europe. Hum Hered. 43:342-50, 1993.

16. Ding J.H., Bross, P., **Yang, B.Z.**, Iafolla, A.K., Millington DS, Roe, C.R. Genetic heterogeneity in MCAD deficiency: Frequency of K329E allele and identification of three additional alleles. *Prog Clin Biol Res.*, 1992; 375: 478-88
17. Ding, J.-H., **Yang, B.-Z.**, Boa, Y., Roe, C.R., and Chen, Y.-T.: Identification of a new mutation in medium-chain acyl-CoA dehydrogenase deficiency. *Am J Hum Genet* 50:229-233, 1992.
18. **Yang, B.-Z.**, Ding, J.-H., Enghild, J.J., Bao, Y. and Chen Y.-T. Molecular Cloning and Nucleotide Sequence of cDNA Encoding Human Muscle Glycogen Debranching Enzyme. *J.Biol.Chem.* Vol.267, No. 13, pp.9294-9299, 1992.
19. Teresa L. Yang-Fang, Kequin Zheng, Jingwei YU, **Bing -Zhi Yang**, Yuan-Tsong Chen and Fa-Ten Kao. Assignment of the Human Glycogen Debrancher Gene to Chromosome 1p21, *Genomics* 13:5 931-934, 1992.
20. **Yang, B. -Z.**, Stewart, C., Ding, J.-H., and Chen, Y.-T.: Type III glycogen storage disease: an adult case with mild disease but complete absence of debrancher protein. *Neuromuscular Disorder* 1:173-176, 1991.
21. **Yang, B. - Z.**, Ding, J.-H., Brown, B.I., and Chen, Y.-T.: Definitive prenatal diagnosis for Type III glycogen storage disease. *Am J Hum Genet* 47:735-739, 1990.
22. Ding, J.-H., Harris, D.A., **Yang, B.-Z.** and Chen, Y.-T.: Molecular Cloning of cDNA for human muscle glycogen debrancher, the enzyme deficient in Type III glycogen storage disease. *Pediatr Res* 25:140A, 1989.
23. **Yang, B.-Z.**, Li, D.-Z.: The relationship between radiation doses and their effects: a report of 388 x-ray medical workers. *Industrial Hygiene and Occupational Diseases* 1:50-59, 1984
24. **Yang, B.-Z.**, Wang, Z.: Chromosome aberrations in peripheral blood lymphocytes from unirradiated and occupationally exposed people. *Industrial Hygiene and Occupational Diseases* 2:36-39, 1984
25. **Yang, B.-Z.**, Wang, Z.: Micronucleus in peripheral blood lymphocytes from unirradiated and x-ray medical workers. *Henan Medical Research* 1:9-11, 1984
26. **Yang, B.-Z.**, Wang, Z.-M. , Incidence of micronucleus in peripheral blood lymphocytes of 102 medical workers. *Chinese J Industrial Hygiene and Occupational Diseases* Third Symposium, p. 242, 1983.

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28. **Yang, B.-Z.**, Zhen, Y.: Investigation of radiation doses to x-ray medical workers and it's influence on health: a report of 94 cases. Industrial Hygiene and Occupational Diseases 1:47-53, 1978 .

Book Chapters;

1. Ding, J.-H., Bross, P., **Yang, B. -Z.**, Iafolla, A.R., Millington, D.S., Roe, C.R., Gregersen, N., and Chen, Y.-T.: Genetic heterogeneity in MCAD deficiency: frequent of K329 allele and identification of three additional mutant alleles. In: New Development in Fatty Acid Oxidation, pp. 479-488, (Coates, P.M. and Tanaka, K., Editors), Wiley-Liss, Inc., New York 1992.

Abstracts;

1. **B.Z. Yang**, J.H. Ding, L. Daina Roe and Charles R. Roe. Long-chain 3 dehydroxyacyl-CoA dehydrogenase (LCHAD) deficiency The Molecular aspect and phenotype. Institute of Metabolic Disease, Baylor University Medical Center, Dallas, TX. 11th International Congress of Human Genetics Augst 6-10, 2006 Brisbane Australia October 6 -10, 2006.
2. **B.Z. Yang**, J.H. Ding, L. Sweetman, C.R. Roe. Identification of novel mutations in patients with medium-chain acyl-CoA dehydrogenase deficiency. Institute of Metabolic Disease, Baylor University Medical Center, Dallas, TX. The American Society of Human Genetics 55th Annual Meeting at Salt Lake October 26 -30, 2005.
3. J.H. Ding, **B.Z. Yang**, D.S. Roe, L. Sweetman, C.R. Roe. Carnitine palmitoyltransferase II deficiency: molecular aspects in twenty-five unrelated families. Institute of Metabolic Disease, Baylor University Medical Center, Dallas, TX. The American Society of Human Genetics 55th Annual Meeting at Salt Lake October 26 -30, 2005.
4. **Bing-Zhi Yang**, Jia-Huan Ding, , L. Sweetman and Charles Roe. Identification of novel mutations in patient with Medium-Chain Acy-CoA Dehydrogenase Deficiency. European Human Genetics Conference 2004 Munich, Germany June 12-15., 2004
5. Jia-Huan Ding, **Bing-Zhi Yang**, Markovna Akselrod, Michele Brivet*, and Charles Roe. Identification of a novel mutation in patient with carnitine-acylcarnitine translocase (CACT) deficiency. European Human Genetics Conference 2004 Munich, Germany June 12-15., 2004

6. Jia-Huan Ding, J.M. Mallory, **B.Z. Yang**, A.J. Davis*, D. Macgregor*, and C.R. Roe MOLECULAR ANALYSIS OF CARNITINE-ACYLCARNITINE TRANSLOCASE DEFICIENCY 2003 The American Society of Human Genetics Annual Meeting at Los Angeles CA . USA November 3 –7, 2003.
7. Jia-Huan Ding, J.M. Mallory, **B.Z. Yang**, A.J. Davis*, D. Macgregor*, and C.R. Roe MOLECULAR ANALYSIS OF CARNITINE-ACYLCARNITIN
8. TRANSLOCASE DEFICIENCY. 2003 The American Society of Human Genetics Annual Meeting at Los Angeles CA . USA November 3 –7, 2003.
9. **Bing-Zhi Yang**¹, Jia-Huan Ding¹, Lawrence Sweetman¹, Robert Grier¹, Katrinka Zanchetta¹ and Charles Roe¹ MOLECULAR ASPECTS OF MEDIUM-CHAIN ACYL-COA DEHYDROGENASE DEFICIENCY 2002 Annual of Meeting Society For the Inborn Errors of Metabolism University College Dublin, Dublin , Ireland September 3-6 2002
10. K.Zanchetta, R. Grier, **B. Yang**, J. Ding and L. Sweetman, MS/MS Newborn Screening. Kimberly H. Courtwright & Joseph W. Summers Institute of Metabolic Disease, Baylor University Medical Center. 2002 Annual Meeting of Society For Inherited Metabolic Disorders Pacific Grove, Monterey Peninsula USA. March 15-18. 2002
11. K.Zanchetta, R. Grier, **B. Yang**, J. Ding and L. Sweetman, Elective Newborn Screening by MS/MS in South Dakota. Kimberly H. Courtwright & Joseph W. Summers Institute of Metabolic Disease, Baylor University Medical Center. Washington DC. October 2001
12. **Bing-Zhi Yang**¹, Matt.R. Mysliwiec, Jia-Huan Ding and Charles R. Roe. Medium-Chain Acy-CoA Dehydrogenase Deficiency: identification and characterization of three novel mutations. The American Society of Human Genetics 51th Annual Meeting at San Diego, California October 12 –16, 2001.
13. **Bing-Zhi Yang**¹, L-F. Zhang¹, D.S. Roe¹, Charles R. Roe¹, H.E.Wiltse² and Jia-Huan Ding¹. Identification of A Novel Mutation in Patient with Carnitine palmitoyltransferase II (CPT II)Deficiency. The American Society of Human Genetics 50th Annual Meeting at Philadelphia October 3 –7, 2000.
14. Jia-Huan Ding¹, **Bing-Zhi Yang**¹, J.M.Mallory¹, D.S. Roe¹, G.D.Strobel², M. Mrivet³ and C.R. Roe¹. Identification of A Novel Mutation in Patient with Carnitine acycarnitine translocase (CACT)Deficiency. The American Society of Human Genetics 50th Annual Meeting at Philadelphia October 3 –7, 2000.
15. Jia-Huan Ding , Guocheng He, **Bing-Zhi Yang** and Charles R. Roe. Structure and function of the 5' flanking region of human Very Long Chain Acyl-CoA Dehydrogenase possible bi-directional promoter activity. The American Society of Human Genetics 49th Annual Meeting San Francisco CA, Oct. 18-23, 1999

16. Guocheng He, **Bing-Zhi Yang**, Diane Roe, Charles R. Roe, and Jia-Huan Ding. Very Long Chain Acyl-CoA Dehydrogenase deficiency : Clinical phenotype, prenatal diagnosis and four novel mutations The American Society of Human Genetics 49th Annual Meeting San Francisco CA, Oct. 18-23, 1999
17. **Bing-Zhi Yang**, Charles R. Roe, Jason M. Mallory, Kern M. Jones, and Jia-Huan Ding. Carnitine/acylcarnitine translocase deficiency: Mutation characterization and prenatal diagnosis. Society For the Inborn Errors of Metabolism Genova, Italy. Sep. 7-11, 1999
18. Jia-Huan Ding, **Bing-Zhi Yang**, Jeff wilkinson and Charles Roe. Molecular basis of methylmalonic semialdehyde dehydrogenase (MMSDH) deficiency. Society For the Inborn Errors of Metabolism Genova, Italy. Sep. 7-11, 1999
19. Ton J. deGrauw, M.D., Ph.D., C. R. Roe, M.D., **B-Z Yang, M.D.**, J-P Bonnefont, M.D., S. Williams, M.D., and A. Hershey, M.D. Unusual presentation of carnitine palmitoyl transferase type II deficiency: Child Neurology Society Annual meeting of Neurology Nashville, TN. Oct. 14-17, 1999
20. Jia-Huan Ding, **Bing-Zhi Yang**, Diane Roe, and Charles Roe. Multiple specific fluorescent primer extension length (msfpel) assay: a new system for simultaneous analysis of dna alterations. The American Society of Human Genetics 48th Annual Meeting Denver, Colorado Oct. 27-31, 1998
21. **Bing-Zhi Yang**, Jia-Huan Ding, Diane Roe, Tracy Dewese, Jeff Wilkinson, and Charles Roe. Carnitine palmitoyltransferase II (CPT II) deficiency: Simultaneous mutation analysis by MSFPEL assay. The American Society of Human Genetics 48th Annual Meeting Denver, Colorado Oct. 27-31, 1998
22. Jia-Huan Ding, Guocheng He, **Bing-Zhi Yang**, , Diane Roe, Christine Vianey-Saban * and Charles Roe. Very long - Chain Acyl-CoA Dehydrogenase Deficiency: Clinical Phenotypes and Mutations. Society For the Inborn Errors of Metabolism York Meeting , UK. September 1-4 , 1998.
23. **Bing-Zhi Yang**, Jia-Huan Ding, , Diane Roe, Jeff Wilkinson, and Charles Roe. Prenatal diagnosis of mitochondrial fatty acid oxidation defects by simultaneous mutation analysis. Society For the Inborn Errors of Metabolism York Meeting , UK. September 1-4 , 1998.
24. **Bing-Zhi Yang**, Jia-Huan Ding, Tracy Dewese, Diane Roe, Jeff Wilkinson, Guocheng He, and Charles Roe. Identification of a novel mutation in patients with carnitine palmitoyltransferase II deficiency. Annual Meeting of Society For Inherited Metabolic Disorders Pacific Grove, Monterey Peninsula USA. March 15-18 . 1998

25. **Bing-Zhi Yang**, Jia-Huan Ding, Diane Roe, Tracy Dewese, France Demaugre*, Michele Brivet** and Charles Roe. Carnitine Palmitoyltransferase II Deficiency: Clinical Forms and Mutations. 7 International Congress of Inborn Errors of Metabolism Vienna, Austria, May 21-25 . 1997
26. **Yang, B-Z.** Ding, J-H., Roe, C. R., The Molecular Basis of the Beta Subunit of Mitochondrial Trifunctional Protein.. Long Beach Institute. Long Beech. NC. April, 24-27. 1996
27. Ding, J-H., **Yang, B-Z.**, Nada, M. A. and Roe, C. R.: Roe. Roe. long- Chain 3-hydroxyacyl-CoA Dehydrogenase ; The Major Disease-Causing Mutation and Diagnosis. Society for inherited Metabolic Disorders, in Maxco City. Maxco. march 6-9, 1996.
28. **Yang, B-Z.** Ding, J-H., Roe, C. R., A Novel Mutation in Long-Chain 3-hydroxyacyl-CoA Dehydrogenase Deficiency. Society for inherited Metabolic Disorders, in Maxco City. Maxco. March 6-9, 1996.
29. Ding, J.-H., **Yang, B.-Z.**, Liu, H.-M., Nada, M., and Roe, C. Mutations in long-Chain 3-hydroxyacyl-CoA Dehydrogenase Deficiency. Abstract Society for inherited Metabolic Disorders, Perdido Beach, AL, March 18-22, 1995.
30. **Yang, B.-Z.** Heng, H.H.Q., Liu, H.-M, and Ding, J.-H. CTP Gene Encoding Alpha and Beta Subunits are Located on the Same Region of Human Chromosome. Abstract Society for Inherited Metabolic Disorders, Orange Beach, AL, March 18-22, 1995.
31. **Yang, B.-Z.** Ding, J.-H., Roe, C.R., Zhang, H., Cooney, D.A., Roller, P.P., Johns, D.G. Identification and characterization of a novel cDNA homologous to murine CTP synthase. Abstract The American Society of Human Genetics, Montreal, Quebec, Canada, October 18-22, 1994.
32. Ding, J.-H., **Yang, B.-Z.**, Liu, H.-M., and Reuser, A. J. J. Cloning the mouse homologue of the human lysosomal acid -glucosidase gene. Abstract The American Society of Human Genetics, Montreal, Quebec, Canada, October 18-22, 1994.
33. Bao, Y., **Yang, Bing-Zhi**, Chen, Y.-T. Structural organization of the multifunctional human glycogen debrancher gene. Abstract American Society of Human Genetics, New Orleans, LA, October 5-9, 1993.
34. **Yang, B.-Z.**, Ding, J.-H., Bao, Y., Eason, J.F.M., Chen, Y.-T. Molecular basis of the enzymatic variability in Type III glycogen storage disease (GSD-III). Abstract American Society of Human Genetics, San Francisco, CA, November 9-13, 1992.
35. J. H. Ding, W. Zhang, S. G. Kahler, L. F. Holfman, D. S. Willington, **B. Z. Yang**, C.R.Roe, Y.T. Chen, Screening of K329 Mutation for Medium-Chain Acy-CoA

- Dehydrogenase Deficiency in Newborn: Preliminary Report. Abstract 9th National Neonatal Screening Symposium. Raleigh, NC. June, 1992.
36. Ding, J.-H., Roe, C.R., **Yang, B.-Z.**, Bao, Y., and Chen, Y.-T.: Identification of a new mutation in medium-chain acyl-CoA dehydrogenase deficiency. Abstract 8th International Congress of Human Genetics, Washington, DC, October 6-11, 1991.
 37. **Yang, B.-Z.**, Ding, J.-H., Roe, C.R., Iafolla, A.K., and Chen, Y.-T.: Diagnosis of medium-chain acyl-CoA dehydrogenase deficiency from children dying suddenly without explanation by mutation analysis in postmortem fixed tissue. Abstract Presented at 8th International Congress of Human Genetics, Washington, DC, October 6-11, 1991.
 38. **Yang, B.-Z.**, Ding, J.-H., Brown, B.I., and Chen, Y.-T. Definitive prenatal diagnosis for type III glycogen storage disease. Abstract presented at American Society of Human Genetics. Cincinnati, Ohio. October 17-23, 1990
 39. Chen, Y.-T., Ding, J.-H., Harris, D.A., and **Yang, B.-Z.**: Type III glycogen storage disease: molecular cloning and genetic heterogeneity. Abstract presented at Society of the Study of Inborn Errors of Metabolism, Munich, Germany, September 12-15, 1989.

