

**CHIFU BRAD HUANG, Ph.D., MBA**

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**EDUCATION**

- 2000-2002     **WASHINGTON UNIVERSITY**     **St. Louis, MO**  
Master of Business Administration in 2002; Concentration in Corporate Management
- Dean's Scholar and Recipient of Frances E. Franklin Scholarship
- 1987-1995     **UNIVERSITY OF KENTUCKY**     **Lexington, KY**  
Ph.D. in Biochemistry in 1995
- Developed excellent skill in biotechnology, biochemistry, and enzyme expression in bacterial system
  - Published three research papers in international journals, produced a monoclonal antibody worth \$250,000
- Master of Science in Ecology in 1990
- Acquired modeling and statistical skills, awarded Robert Kuehne Research Fellowship
  - Published three papers in Ecology journals, received Silver Citation Award from Science Citation Index
- 1979-1983     **YUNNAN UNIVERSITY**     **Kunming, CHINA**  
Bachelor of Science in Biology in 1983
- Studied Ecology

**EXPERIENCE**

- 2002-Present     **UNIVERSITY OF KENTUCKY**     **Lexington, KY**  
*Senior Scientist/Center for Oral Health Research*
- Develop genetic finger-printing of oral bacteria and study the inflammation mechanism
  - Study the interaction between the oral bacteria and HIV-1 infected latent T cells
- 1995-2000     **HARVARD MEDICAL SCHOOL**     **Boston, MA**  
*Instructor of Medicine/Faculty Member (1997-2000)*
- Developed strong leadership skills by managing a group of multi-national drug discovery investigators
  - Managed a quarter-million dollar gene/DNA sequencing facility
  - Made groundbreaking discoveries in mast cell enzymes and invited to speak at international conferences
  - Participated in/contributed to a biomedical research grant worth \$2 million from the NIH
  - Made important discoveries in mast cell enzymes and awarded a US Patent (US PAT# 5955431)
  - Published over 10 research papers in top international journals, including Nature and Journal of Biological Chemistry
- Postdoctoral Fellow (1995-1997)*
- Participated in/contributed to a \$10 million Research program sponsored by National Institute of Health
  - Received NIH fellowship and trained in the lab of a world-renowned Harvard Endowed Chair Professor
  - Excelled in a team-oriented research environment and quickly promoted to be a Harvard Faculty member
- 1987-1995     **UNIVERSITY OF KENTUCKY**     **Lexington, KY**  
*Research Assistant*
- Performed research and scientific experiment, wrote scientific manuscripts and attended scientific meetings
- Teaching Assistant*
- Taught undergraduate Biology Lab course, tasks including lecturing, grading homework and exams

## PUBLICATIONS

1. **Huang C**, De Sanctis GT, O'Brien PJ, Mizgerd JP, Friend DS, Drazen JM, Brass LF, and Stevens RL. Evaluation of the Substrate Specificity of Human Mast Cell Tryptase  $\beta$ I and Demonstration of Its Importance in Bacterial Infections of the Lung. 2001; *Journal of Biological Chemistry* 276: 26276-26284
2. **Huang C**, Morales G, Vagi A, Qiu WT, Chanasyk K, Burklow C, Stevens RL. Formation of enzymatically active, homotypic, and heterotypic tetramers of mouse mast cell tryptases. 2000; *The Journal of Biological Chemistry* 275:351-358.
3. Humphries D, Wong WG, Friend DS, Gurish MF, Qiu WT, **Huang C**, Sharpe Ah, Stevens RL. Heparin is essential for the storage of specific granule proteases in mast cells. 1999; *Nature* 400,769-772.
4. **Huang C**, Li L, Krilis SA, Chanasyk K, Tang Y, Stevens RL. Human Tryptase  $\alpha$  and  $\beta$ /II are functionally distinct due, in part, to a single amino acid difference in one of the surface loops that forms the substrate-binding cleft. 1999; *The Journal of Biological Chemistry* 274:19670-19676.
5. Wong WG, Tang Y, Feyfant E, Sali A, Li L, Li Y, **Huang C**, Friend DS, Krilis SA, Stevens RL. Identification of a new member of the tryptase family of mouse and human mast cell proteases which possesses a novel COOH-terminal hydrophobic extension. 1999; *The Journal of Biological Chemistry* 274:30784-30793.
6. **Huang C**, Friends DS, Qiu D, Wong GW, Morales G, Hunt J, Stevens RL. Induction of a selective and persistent extravasation of neutrophils into the peritoneal cavity by the tryptase mouse mast cell protease 6. 1998; *Journal of Immunology* 160:1910-1919.
7. Xia Z, Kam CM, **Huang C**, Powers J, Mandle RJ, Stevens RL, Lieberman J. Expression and purification of enzymatically active recombinant granzyme B in a baculovirus system. 1998; *Biochemical and Biophysical Research Communications* 243:384-389.
8. **Huang C**, Tai HH. Prostaglandin E<sub>2</sub> receptor EP<sub>3 $\alpha$</sub>  subtype: the role of N-glycosylation in ligand binding as revealed by site-directed mutagenesis. 1998; *Prostaglandins, Leukotrienes and Essential Fatty Acids* 59:265-271.
9. **Huang C**, Wong GW, Ghildyal N, Gurrish MF, Sali A, Mastumoto R, Qiu WT, Stevens RL. The tryptase, mouse mast cell protease 7, exhibits anticoagulant activity *in vivo* and *in vitro* due to its ability to degrade fibrinogen in the presence of the diverse array of protease inhibitors in plasma. 1997; *The Journal of Biological Chemistry* 272:31885-31893.
10. Hunt J, Friends DS, Gurrish MF, Feyfant E, Sali A, **Huang C**, Ghildyal N, Stechschulte S, Austen KF, Stevens RL. Mouse mast cell protease 9, a novel member of the chromosome 14 family of serine proteases that is selectively expressed in uterine mast cells. 1997; *The Journal of Biological Chemistry* 272: 29158-29166.
11. **Huang C**, Tai H.H. Ser-268 plays an important role in ligand binding of prostaglandin E<sub>2</sub> receptor EP<sub>3 $\alpha$</sub>  subtypes. 1996; *Archives of Biochemistry and Biophysics* 327:161-166.
12. Ghildyal N, Friends DS, Stevens RL, Austen KF, **Huang C**, Penrose JE, Sali A, Gurrish MF. Fate of two mast cell tryptases in V3 mastocytosis and normal BALB/c mice undergoing passive systemic anaphylaxis: prolonged retention of exocytosed mMCP-6 in connective tissues, and rapid accumulation of enzymatically active mMCP-7 in the blood. 1996; *Journal of Experimental Medicine* 184:1061-1073.
13. **Huang C**, Tai H.H. Expression and site-directed mutagenesis of mouse prostaglandin E<sub>2</sub> receptor EP<sub>3 $\alpha$</sub>  subtype in insect cells. 1995; *Biochemical Journal* 307:493-398.

#### REVIEW ARTICLES

14. Tai HH, **Huang C**, Chiang N. Structure and function of prostanoid receptors as revealed by site-directed mutagenesis. 1997; *Advances in Experimental Medicine & Biology* 407:205-209.
15. **Huang C**, Sali A, Stevens RL. The role mast cell proteases in inflammation. 1998; *Journal of Clinical Immunology* 18:169-183.