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Education
- Ph.D., University of Georgia, 1987
- M.S., University of Alberta, 1983
- B.S., Ohio University, 1973

Research Interest
- **Obesity and Type 2 Diabetes:**
  - How does increased adiposity promote inflammation and insulin resistance?
  - Role of gut microbiota in mediating inflammation and insulin resistance?
- **Nutritional Regulation of Human Adipocytes and Cross-talk with Macrophages:**
  - How do fatty acids impact adipocyte gene/protein expression and metabolism?
  - Mechanism(s) by which grape powder prevents inflammation and insulin resistance?
- **Current Research** (using macrophages, adipocytes, and myotubes as cell models or mice)
  - Anti-obesity mechanism of CLA isomer
  - Anti-inflammatory role of bioactive components found in grapes

Recent Publications (* = graduate students)

Bumrungpert, A,* Kalpravidh, R., Chuang, C.*, Overman, A., Martinez, K. et al. 2010. Xanthones from Mangosteen Inhibit Inflammation of Human Macrophages and in Human Adipocytes Exposed to Macrophage-conditioned Media. J. Nutr 140: 842-847.

Overman, A.*****, Bumrungpert, K.*****, Kennedy, A.*****, Martinez, K*., Chuang, C.*, et al. 2010. Polyphenol-rich grape extract attenuates inflammation in human macrophages and in human adipocytes exposed to macrophage-conditioned media. Int. J. Obesity 34: 800-808.

Kennedy, A.*****, Martinez, K. *****, Schmidt, S. *****, Mandrup, S., Lapoint, K. McIntosh, M. 2010. Anti-obesity Mechanisms of Action of Conjugated Linoleic Acid. J. Nutr. Biochem. 21: 171-179.

Martinez, K.*****, Kennedy, A. ***,** West, T., Milatovic, D., Aschner, M., McIntosh, M. 2010. Trans-10, cis-12 Conjugated Linoleic Acid Promotes Inflammation to a Greater Extent in Human Adipocytes Compared to Preadipocytes. J. Biol. Chem. 285: 17701-17712.

Kennedy, A.*, Martinez, K.*, Chung, S.*, et al. 2010. Inflammation and Insulin Resistance Induced by Trans-10, Cis-12 Conjugated Linoleic Acid are Dependent on Intracellular Calcium Levels in Primary Cultures of Human Adipocytes. J. Lipid Research 51: 1906-1917.

Chuang, C-C. *****, Bumrungpert, A.*****, Kennedy, A.***,** West. T., Dawson. B., McIntosh, M. 2010. Grape Powder Extract Attenuates Tumor Necrosis Factor α-Mediated Inflammation and Insulin Resistance in Primary Cultures of Human Adipocytes J. Nutr. Biochem 22: 89-94.

Chuang, C-C.*, Martinez, K.*, Xie, G., Kennedy, A.*, et al. 2010. Quercetin is equally or more effective than resveratrol in attenuating tumor necrosis factor α-mediated inflammation and insulin resistance in primary human adipocytes. Am. J. Clin. Nutr. 92: 1511-1522.

Overman, A.*, et al. 2011. Quercetin attenuates inflammation in human macrophages and in human adipocytes exposed to macrophage-conditioned media. Int. J. Obesity 35:1165-72.

Chuang, C-C.* et al. 2011. Potential Mechanisms by Which Polyphenol-rich Grapes Prevent Obesity-Mediated Inflammation and metabolic diseases. Annual Rev. Nutr. 31: 155-176.

K. Martinez,* A. Kennedy*, et al. 2011. SP600125 attenuates trans-10, cis-12 conjugated linoleic acid mediated regulation of inflammation and lipogenic gene expression. Lipids. 46:885-92.

Obsen,T.*, Faergeman, N., Chung, S.*, et al. 2011. Trans-10, cis-12 Conjugated Linoleic Acid Decreases *de novo* Lipid Synthesis in Human Adipocytes. J. Nutr. Biochem (in press).