

CURRICULUM VITAE

WANGSUN CHOI

University of North Carolina at Chapel Hill
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EDUCATION

University of Kentucky

Lexington, Kentucky
Ph.D., Biochemistry 2008 (Advisor: Dr. Sidney W. Whiteheart)

Korea University

Seoul, South Korea
M.S., Life Science and Biotechnology, 1999 (Advisor: Dr. Kwangseog Ahn)
B.A., Genetic Engineering, 1997

RESEARCH EXPERIENCE

Postdoctoral fellow, University of North Carolina at Chapel Hill, 2009-current
The function of adhesion adaptor proteins in *Drosophila* embryogenesis

Advisor: Dr. Mark Peifer, Department of Biology

Postdoctoral fellow, University of Kentucky, 2008-2009

The Role ADP-ribosylation factor 6 (Arf6) in platelet activation

Advisor: Dr. Sidney W. Whiteheart, Department of Molecular and Cellular Biochemistry

Doctoral Research, University of Kentucky, 2002 – 2008.

The Role ADP-ribosylation factor 6 (Arf6) in platelet activation

Advisor: Dr. Sidney W. Whiteheart, Department of Molecular and Cellular Biochemistry

Research Assistant, University of Kentucky, 2001 –2002.

2,2',4,6,6'-pentachlorobiphenyl (PCB 104)-induced proinflammatory reactions in human vascular endothelial cells

Advisor: Dr. Michal Toborek, Department of Surgery

Research Assistant, Korea University, South Korea, 2001 –2001

Clinical relationship between human cervical cancer and the serum level of mannose binding lectin (MBP)

Advisor: Dr. Jeok-Jun Hwang, Department of Forensic Science

Research Assistant, Seoul National University, South Korea, 2000 –2001

Development of bioartificial liver (BAL) system to support the liver function of patients during liver transplantation

Advisor: Dr. Kun-uk Lee, Department of Surgery

Masters Research, Korea University, South Korea, 1997 –1999

The role of molecular chaperones in the endoplasmic reticulum (ER) for the proper assembly of Hantaan virus glycoprotein, G1 and G2

Advisor: Dr. Kwangseog Ahn, Department of Life Science and Biotechnology

PUBLICATIONS

Choi W, Peifer M. Cell biology. Arranging a cellular checkerboard. *Science*. 2011;333(6046):1099-100.

Sawyer JK, **Choi W**, Jung KC, He L, Harris NJ, Peifer M. A contractile actomyosin network linked to adherens junctions by Canoe/afadin helps drive convergent extension. *Mol Biol Cell*. 2011;22(14):2491-508.

Choi W, Jung KC, Nelson KS, Bhat MA, Beitel GJ, Peifer M, Fanning AS. The single Drosophila ZO-1 protein Polychaetoid regulates embryonic morphogenesis in coordination with Canoe/Afadin and Enabled. *Mol Biol Cell*. 2011;22(12):2010-30.

Choi W., Karim Z. A., Whiteheart S. W. Protein Expression in Platelets from Six Species that Differ in their Open Canalicular System. *Platelets*. 2010;21(3):167-75.

Karim Z.A., **Choi W.**, Whiteheart S.W. Primary platelet signaling cascades and integrin-mediated signaling control ADP-ribosylation factor (Arf) 6-GTP levels during platelet activation and aggregation. *J. Biol. Chem*. 2008;283(18):11995-2003.

Ren Q., Barber H.K., Crawford G.L., Karim Z.A., Zhao C., **Choi W.**, Wang C.C., Hong W., Whiteheart S.W. Endobrevin/VAMP-8 is the primary v-SNARE for the platelet release reaction. *Mol. Biol. Cell*. 2007;18(1):24-33.

Choi W., Karim Z.A., Whiteheart S.W. Arf6 plays an early role in platelet activation by collagen and convulxin. *Blood*. 2006;107(8):3145-3152

Schraw T.D., Crawford G.L., Ren Q., **Choi W.**, Thurmond D.C., Pessin J., Whiteheart S.W. Platelets from Munc18c heterozygous mice exhibit normal stimulus-induced release. *Thromb. Haemost.* 2004;92(4):829-37.

Choi W., Eum S.Y., Lee Y.W., Hennig B., Robertson L.W., Toborek M. PCB 104-induced proinflammatory reactions in human vascular endothelial cells: relationship to cancer metastasis and atherogenesis. *Toxicol. Sci*. 2003;75(1):47-56.

ABSTRACTS AND PRESENTATIONS

Choi W. The adhesion scaffold proteins: the frontline linkers from adhesion to cell shape and cell polarity (2011) Invited seminar at the Yeungnam University School of Medicine, Dae-ku, South Korea

Choi W. The adhesion scaffold proteins: the frontline linkers from adhesion to cell shape and cell polarity (2011) Invited seminar at the Gwang-ju Institute of Science and Technology, Gwang-ju, South Korea

Choi W. Roles of Polychaetoid and Canoe in regulating cell shape change and epithelial polarity during *Drosophila* embryo morphogenesis (2011) The Fly Club at UNC Chapel Hill, Chapel Hill, NC

Choi W., Sawyer J. K., Harris N. J., Slep K. S., Fanning A., Peifer M. The Role of Canoe/Afadin and Polychaetoid/ZO-1 in Regulation of Cell-Cell Adhesion during *Drosophila* Morphogenesis. (2010) The 51st Drosophila Conference, Washington, DC

Choi W., Karim Z. A. and Whiteheart S.W. The role of ADP-ribosylation factor 6 (Arf6) in platelet activation. (2008) Midwest Platelet Conference, Lexington, KY

Choi W., Karim Z. A. and Whiteheart S.W. The role of ADP-ribosylation factor 6 (Arf6) in platelet activation. (2007) Gill Heart Institute Cardiovascular Research Day, Lexington, KY

Choi W., Karim Z. A. and Whiteheart S.W. The role of ADP-ribosylation factor 6 (Arf6) in platelet activation. (2006) Gill Heart Institute Cardiovascular Research Day, Lexington, KY

Choi W., Karim Z. A. and Whiteheart S.W. The role of ADP-ribosylation factor 6 (Arf6) in platelet activation. (2006) Midwest Platelet Conference, Chicago, IL

Choi W., Karim Z. A. and Whiteheart S.W. Arf6 plays an early role in platelet activation by collagen and convulxin. (2006) Midwest Blood Club Meeting in 2006, Lexington, KY

Choi W. and Whiteheart S.W. Arf6 plays an early role in platelet activation in response to collagen. (2005) Annual Midwest Blood Club Meeting, Louisville, KY

Choi W. and Whiteheart S.W. The role of ADP-ribosylation factor 6 (Arf6) in platelet activation. (2004) American Society of Biochemistry and Molecular Biology, Boston, MA

Choi W., Eum S.Y., Lee Y.W., Hennig B., Robertson L.W., Toborek M. PCB 104-induced proinflammatory reactions in human vascular endothelial cells: relationship to cancer metastasis. (2002) American Society of Biochemistry and Molecular Biology, New Orleans, LA

ACADEMIC SERVICES

Category judge at the State-wide Kentucky Science Fair, Lexington, KY (2009)

Category judge at the Kentucky American Water Company Science Fair, Lexington, KY (2006)

PROFESSIONAL AFFILIATIONS

Sponsored membership in AAAS (the American Association for the Advancement of Science) 2008-2011

HONORS AND AWARDS

American Heart Association (AHA) Predoctoral Fellowship, 2006 – 2008,

- Title of Project: The Role of ADP-ribosylation factor 6 (Arf6) in Platelet Activation

REFERENCES

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