

# Hsp47, a Collagen Chaperone, as a Potential Target for Cancer Treatment

**V.S. Ananthanarayanan**

Department of Biochemistry and Biomedical Sciences, McMaster University, Hamilton, Ontario, Canada

**Date:** Fri, 15 May 2009

**Time:** 4 pm

**Venue:** LT 20

**Host:** Dr Henry Mok

Hsp47, an ER-resident protein, is a molecular chaperone involved in collagen biosynthesis. We have shown that, *in vitro*, Hsp47 inhibits fibril formation by collagen (1). This activity of Hsp47 is now regarded as its likely function *in vivo*, where it could prevent premature intracellular aggregation of triple-helical procollagen in the ER. Recently, we have screened a chemical library and identified several small-molecular weight inhibitors that effectively inhibit Hsp47 by preventing its action on collagen (2). These inhibitors have therapeutic potential in diseases where collagen is excessively produced. Our recent data gathered from cell culture and mouse model studies indicate the potential for some of these inhibitors to arrest tumour growth

**Department of Biological Sciences**  
Seminar Announcement

