

## p53 Laboratory Seminar Announcement

**- All Are Welcome -**

**Speaker:** **Dr. Gerard Hilinski**  
Post-Doctoral Fellow in Stem Cell & Regenerative Biology  
Faculty of Arts & Sciences, Harvard University

**Title :** Next-Generation  $\alpha$ -Helical Peptide Stabilization  
Technology – Beyond Hydrocarbon-Stapled Peptides

**Date :** **19 August 2013 (Monday)**

**Time :** **11am – 12pm**

**Venue:** **Breakthrough Theatre, Matrix Level 4, Biopolis**

**Host :** **Dr Farid Ghadessy**  
Group Leader, p53Lab



### **Abstract:**

Stapled peptides have demonstrated the ability to inhibit traditionally “undruggable” intracellular protein-protein interactions through incorporation of an all-hydrocarbon macrocyclic bridge formed *via* olefin metathesis which locks the peptide into a bioactive  $\alpha$ -helical conformation. These synthetic biologics combine the broad targeting capabilities of protein therapeutics with the favorable pharmacokinetics and intracellular accessibility typical of small molecule therapeutics. The development of all-hydrocarbon stapled peptides can be hampered by suboptimal cellular uptake and aqueous solubility. To overcome this limitation, the Stem Cell & Regenerative Biology Group in Harvard University are developing a next-generation peptide stapling technology that incorporates a more hydrophilic macrocyclic bridge intended to promote cell penetration.

### **About the Speaker:**

Dr Hilinski is currently a postdoctoral fellow at Harvard University’s Department of Stem Cell & Regenerative Biology, and working with Dr Gregory Verdine to develop a novel next-generation strategy to enhance the drug-like properties of chemically-stabilised peptide therapeutics. Dr Hilinski obtained his PhD from Harvard University in 2011, and his dissertation topic was “Stapled Peptide Inhibition of Myc and the Androgen Receptor”.