



**REGIONAL CENTRE FOR BIOTECHNOLOGY**

**Colloquium**

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**Structural Molecular Biology:  
A Cutting Edge Science for Drug Discovery**

**K Ravi Acharya, PhD**

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**Wednesday, September 26, 2012**

**12:00 noon**

**Seminar Room**

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Biological Science is in the post-genome era and research is now fuelled by genomic sequence data. The sequence of the human genome has provided the backdrop for understanding the biology of disease and therapeutic intervention. The most immediate challenge is represented by the era of functional genomics – assigning function/s to the proteins corresponding to novel gene sequences. For most genomes, proteins of unknown function are in the majority, and structural biology has demonstrated record in contributing to the annotation of function, leading to biological understanding. Arguably structural biology is one of the most powerful tools available to manipulate and understand the function of macromolecules. We have studied structures of some key molecules involved in inflammatory disorders with a view to understanding their function and use them as target molecules for the design of drug molecules. I intend to present some of our results with a view of where structural biology is now, and what its future holds