

## ***THE WORLD MOLECULAR ENGINEERING NETWORK***

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\*\*\*\*\* EXAMPLE FOR POST-DOC/GRAD STUDENT \*\*\*\*\*

**LIU**

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**Topic:** Mutations of Thymidylate Synthase at Asparagine 229

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**Summary of Research:** My research focuses on the understanding of the relationship between the properties and structure of TS using site-directed mutagenesis. After mutation of Asn229 to Asp229, the enzyme is converted to a dCMP methylase. The kinetic properties of dCMP methylation by TS Asp229 were analogous to that of dUMP methylation by wild type TS. We propose a mechanism for dCMP methylation, in which the enzyme Asp 229 serves to protonate the heterocycle.

**Impressions of the Meeting:** This meeting was superb! I am very pleased to have had the opportunity to listen to and talk with many outstanding scientists. The PI's presentations were informative and inspirational. I was impressed by the sponsor's presentations. I would recommend no changes in the meeting.