

transit through the gastrointestinal tract. Degree of depolymerization (%) by dextranase determined by DNS method at 37°C for dextran-NA with DS of 7, 19, or 32 was 81, 68, or 8, respectively, in 8 hrs and that for dextran was 91. When dextran-NA (equivalent to 50 µg of NA) with DS of 7 or 17 was incubated with cecal contents (100 mg) of rats at 37°C, the extent of NA released in 24 hrs was 41% or 32% of the dose, respectively. NA was not liberated from the incubation of dextran-NA with the homogenate of tissue and contents of the small intestine.

[PD1-19] [ 04/21/2000 (Fri) 14:50 – 15:50 / [1st Fl, Bldg 3] ]

### **Synthesis of Affinity column-packing Materials for Seeking Binding Protein Related to Costunolide**

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Costunolide, which is known as chemopreventive drug, is a sesquiterpene lactone compound isolated from *Magnolia sieboldii* and has antitumor and anti-inflammatory activities. It is expected to be farnesyl transferase inhibitor and anti-inflammatory activities, because the structure of costunolide is similar to farnesyl moiety. Costunolide is one of macrocyclic compounds and their derivatives have already been synthesized from santonin as a starting material by Corey and followed by Grieco and Nishizawa presented total synthesis from santonin through Cope rearrangement.

The aim of this research is to develop new and easy method. Costunolide has farnesyl moiety in its structure. We can synthesize costunolide resin by attaching it with resin using a linker. Once synthesized, product, derivatives, and all of its intermediates go through Affinity Column-packing material. Anti-inflammatory Protein will come out late since it binds with Protein resulting in longer retention time. However, unbounded ones will come out fast. For now, we are trying to synthesize various derivatives. After attaching resins on these derivatives, we will put them through Affinity Column-packing and search for prospective anti-inflammatory proteins.

[PD1-20] [ 04/21/2000 (Fri) 14:50 – 15:50 / [1st Fl, Bldg 3] ]

### **Synthesis of Some Cyclopropyl Nucleosides as Potential Antiviral Agents**

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Some novel cyclopropyl nucleosides possessing additional methyl spacer between the base and the ring were synthesized as potential antiviral agents. The important intermediate, cyclopropyl compound was synthesized from feist's acid, via esterification, reduction, the partial protection by using TBDPS chloride and activated by tosylation. The condensation of cyclopropyl intermediate with bases in the presence of potassium carbonate and a crown compound and its deprotection by using tetrabutylammonium fluoride gave the final cyclopropyl nucleosides.

[PD1-21] [ 04/21/2000 (Fri) 14:50 – 15:50 / [1st Fl, Bldg 3] ]

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