



Department of Biomathematics Seminar Series:
Frontiers in Systems and Integrative Biology

RNA as a Linear Polymer, but a Branched Genome



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4:00 PM

**A2-342 MDCC, Moss Auditorium
Marion Davies Children's Clinic**

ABSTRACT:

We learn in school that the genetic material of life is DNA. But the genome of most viruses is single-stranded (ss) RNA, as opposed to double-stranded (ds) DNA. And, even though ssRNA is strictly a linear polymer -- involving a chain of covalently-linked nucleotides -- it behaves effectively as a highly branched polymer, because of the large extent of self-complementarity (base-pairing between distant nucleotides along the chain). In my talk I discuss how we characterize and quantify the "branchedness" of long RNA molecules, and its role in determining the physical properties of virus-like particles and the infectivity of viruses.

Host: Mary Sehl, M.D., Ph.D.

To receive e-mail seminar notices, contact David Tomita (dtomita@biomath.ucla.edu)

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