3. Molecular Aspects of Emerging Negative Strand RNA Viruses

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“Emerging” viruses are those that were previously maintained in small isolated populations, but were recently transmitted to larger populations of the same or similar host species or those that were recently transmitted to a new host. For the latter viruses, genetic changes may be required for transmission. Fundamental information about many emerging viruses is lacking; questions, e.g., what is the origin of these viruses, how are they maintained in nature, how do they cross host barriers, and which genetic changes are necessary for successful transmission, remain unanswered.

Recent technological advances (including reverse genetics) in the genetic manipulation of negative strand RNA viruses have resulted in the molecular dissection of viral factors involved in these infections. In my talk, I will discuss the molecular aspects of emerging negative strand RNA viruses that are critical for better understanding, and thus control of these viral infections.

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