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Non-Confidential Technology Disclosure

Title	Virus-specific miRNA Signatures for Diagnosis and Therapeutic Treatment of Viral Infection
Inventor	Timothy Kowalik, Ph.D., and Bradford Stadler, Ph.D. University of Massachusetts Medical School.
Description	This invention is based on the discovery that different viruses produce distinct miRNA expression patterns or “miRNA signatures” in virally infected cells. Select viral and cellular miRNAs are misregulated by viruses during infection in a virus-specific manner rather than all miRNAs experiencing changes in expression. Identification of specific miRNA signatures and the targets of these miRNAs induced by viruses may provide information concerning cellular and viral genes required for replication and infection.
Application	Identifying unique and specific viral miRNA signatures may lead to novel therapeutics in the treatment of viral infections and certain cancers. The present invention may also be applied to novel diagnostics for clinical and research settings including detection of latent infections and bioterrorism applications. Viral miRNA signatures can be used to discover new cellular and viral drug targets
Advantage	This invention is the first description of distinct miRNA signatures resulting from viral infection. The invention provides for a more specific method to identify and treat viral infections and other disorders caused by misregulated miRNAs.
Patent Status	U.S. Patent Pending
Licensing Status	Available to License
Docket	UMMC 07-59
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