

Jonathan D. Dinman



Current Position: Professor in the Department of Cell Biology and Molecular Genetics at University of Maryland, College Park in Maryland

Education: Ph.D. in Immunology and Infectious Diseases (1988) from Johns Hopkins School of Hygiene and Public Health where I cloned and expressed the first surface-associated antigen from the filarial parasite *Onchocerca volvulus*

Non-scientific Interests: Playing jazz piano, rep for my kids swim team, softball coaching, and Trustee for the Stamm Foundation for Holocaust Studies

My postdoc in the laboratory of Reed Wickner began shortly after his lab had obtained a cDNA clone of the L-A helper virus, which contained a presumptive programmed-1 ribosomal frameshift (PRF) signal. This led to genetic analyses of the viral *cis*-acting element and of host cellular *trans*-acting factors. Eventually, it dawned on me that a) the ribosome is THE central host cellular factor involved in PRF, and that b) PRF is simply a reflection of translational fidelity. These insights then led us into the fields of translational control and ribosome biogenesis. The emergence of the first X-ray crystal ribosome structures opened up our research to the realms of structural biology and biochemistry. Fortunately, I had access to Sidney Pestka, who taught Arturas Meskauskas and me the lost arts of ribosome biochemistry. We have spent the past decade using the tools of yeast molecular genetics, structural biology, and biochemistry to understand how the fine structures within the ribosome work together to ensure that this complex nanomachine faithfully translates genetic information and how this function is regulated. In this minireview, I present an overview of the current understanding of the eukaryotic ribosome and discuss some of the challenges facing researchers in the field.

Read Dr. Dinman's article entitled: The Eukaryotic Ribosome: Current Status and Challenges

<http://www.jbc.org/cgi/content/full/284/18/11761>