Three-hybrid analysis to study RNA decay S. cerevisiae (i.e., G18 insertions, mutations in nucleases.)

Defining degradative activities in Drosophila melanogaster

Defining degradative activities in plants RT-PCR product sequencing of mRNA decay intermediates in mammalian cells after decapping and circularization in vitro

Tethering Assays Assays of poly(A) tail length (PAT assay, specific oligo-dT anchors) and polarity of mRNA decay (Invader Assay)

In vivo crosslinking-coupled affinity purification of mRNAs for decay analysis (Streptavidin, biotin.)

Classification of ribonucleases by computational analyses

Analysis of P bodies in Saccharomyces cerevisiae

Analysis of stress granules and P bodies in mammalian cells, including neurons

PMR1-mediated mRNA decay

No-go mRNA in Saccharomyces cerevisiae mRNA decay mediated by decay factor adaptors (SLBP, PUF, Staufen1.)

Non-stop decay in Saccharomyces cerevisiae

Measuring ARE-mediated mRNA decay in cells

Measuring ARE-mediated mRNA decay in animals

Methods to study viral-mediated influences on mRNA decay

Measuring Saccharomyces cerevisiae mitochondrial mRNA half-life

Measuring mRNA decay in Arabidopsis mitochondria

Measuring mRNA decay in human mitochondria

Measuring mRNA decay in chloroplasts

Nonsense-Mediated mRNA Decay (how do you study NMD, what defines an In Saccharomyces cerevisiae

In Drosophila melanogaster

In Caenorhabditis elegans

In plants

Analysis of Nuclear RNA Decay Measuring nuclear RNA decay in Saccharomyces cerevisiae (includes pre-mRNA, mRNA, rRNA, TRAMP complex.)

Measuring nuclear RNA decay in mammals

tRNA Decay Decay of improperly modified tRNA decay in Saccharomyces cerevisiae

rRNA Decay Decay of nonfunctional rRNA in Saccharomyces cerevisiae

RNAi-Mediated mRNA Decay Defining RNAi targets (e.g., Ago knockdowns, identifying complementary siRNA/miRNA.)

Studying miRNAs in unicellular organisms (Chlamydamones reinhardtii)

Studying miRNAs in unicellular organisms: RNAi-dependent mRNA turnover in fission yeast

Assays for microRNA-mediated mRNA decay in Caenhorabditis elegans

Analyses of microRNA function in zebra fish

Targeted deletion of cell-type specific microRNAs in mice for developmental studies

Table of Contents provided by Blackwell's Book Services and R.R. Bowker. Used with permission.