# UC RIVERSIDE

## BCH 252 & IIGB/CEPCEB/Plants3D Seminar Series'
### *6th Annual IIGB Symposium Keynote Speaker*



**Friday, May 26th, 2023**
**2:15 p.m. PST**

**In-Person Location:**
**Genomics Auditorium**
**1102A**

## William Marzluff

Kenan Distinguished Professor, Biochemistry and Biophysics | Co-Director, UNC RNA Discovery Center | Department of Biochemistry and Biophysics | Integrative Program for Biological and Genome Sciences | UNC-Chapel Hill

## Seminar Title: "Replication-dependent histone genes and mRNAs: life without a polyA tail"

**Abstract:** Animal replication-dependent histone mRNAs, which are expressed only in S-phase of the cell cycle, are the only cellular mRNAs that are not polyadenylated, but end instead in a conserved stemloop. To coordinate expression of the 5 histone mRNAs required for chromatin replication, a novel domain is formed in the nucleus, the histone locus body (HLB), that contains all the histone genes and the factors required this for transcription and processing of these mRNAs, which are synthesized in the HLB. I will discuss the mechanism of the histone mRNA synthesis, assembly of the HLB and its role in cell-cycle regulation of histone gene expression.

**Biography:** Dr. Marzluff received his A.B. in Chemistry from the College at Harvard in 1967 and Ph.D. in Biochemistry from the Graduate school at Duke in 1971 where he worked on histone acetylation. As a postdoc, he studied transcription in isolated nuclei and chromatin associated RNAs at Johns Hopkins University before joining the biochemistry faculty at Florida State University (1974-1991). There, he worked primarily on regulation of histone mRNAs and small nuclear RNA biosynthesis. In 1991, he moved to UNC-Chapel Hill as Director of the Program in Molecular Biology and Biotechnology (1991-2012), and also served as Interim Chair of Biochemistry and Biophysics (1994-1997) and Executive Associate Dean for Research in the School of Medicine (1997-2010). His recent work has been on all aspects of histone gene expression in both mammalian cells and in Drosophila.

**Host: Dr. Jernej Murn**