Layers of transcriptional regulation in human

Promoter

Insulators

enhancer-promoter loop

3D genome conformation (TADs)

Histone marks

Transcription Factors

Integrator, Mediator, Cohesin complexes

Nucleus

Me

Ac

Ins

Enhancer

CTD phosphorylation code

Closed chromatin

Promoter

P

Open chromatin (accessible to TFs, enzymes)

Paused RNA Polymerase

Elongating RNA Polymerase
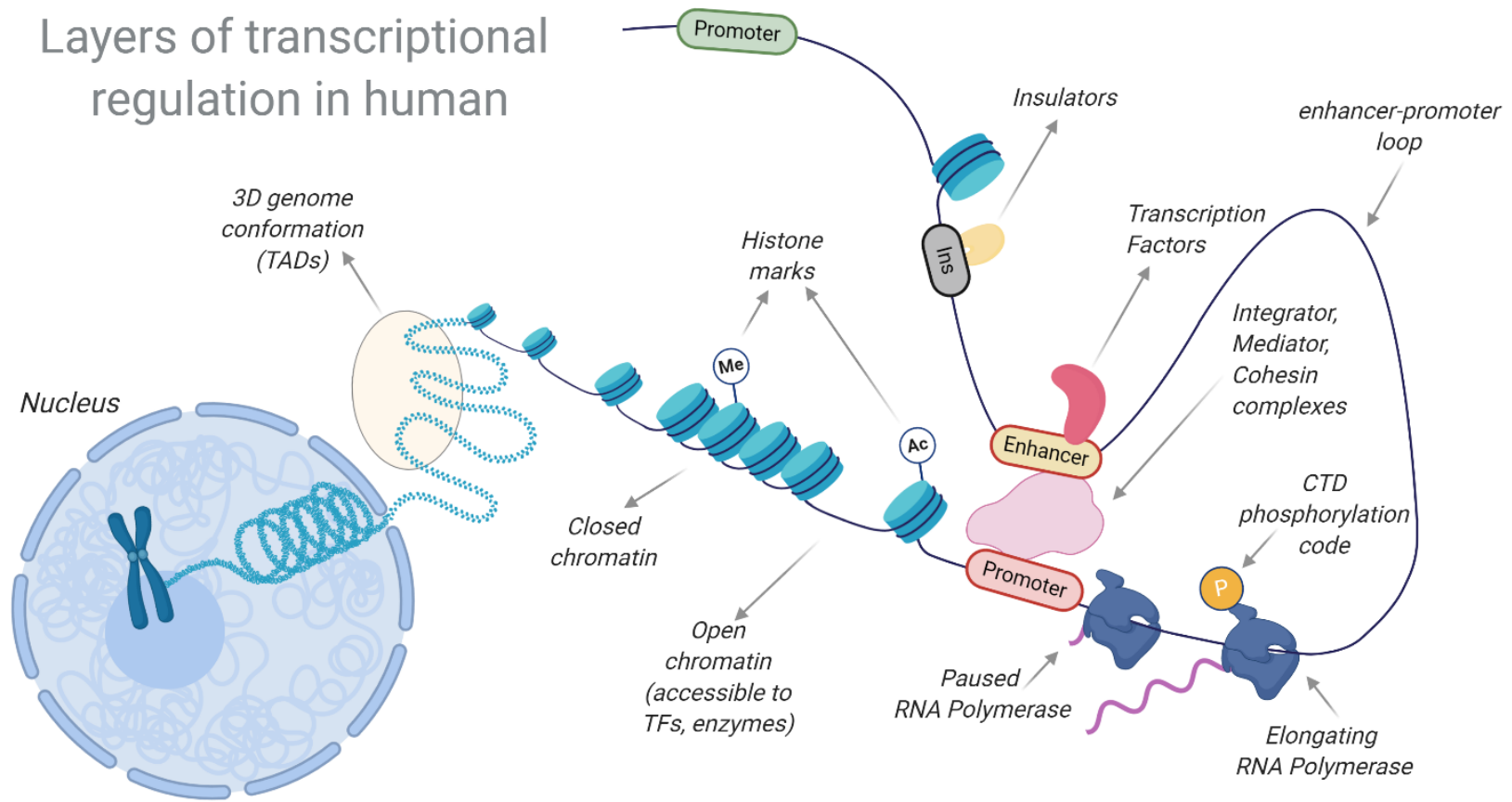
A. Gardini – created with BioRender