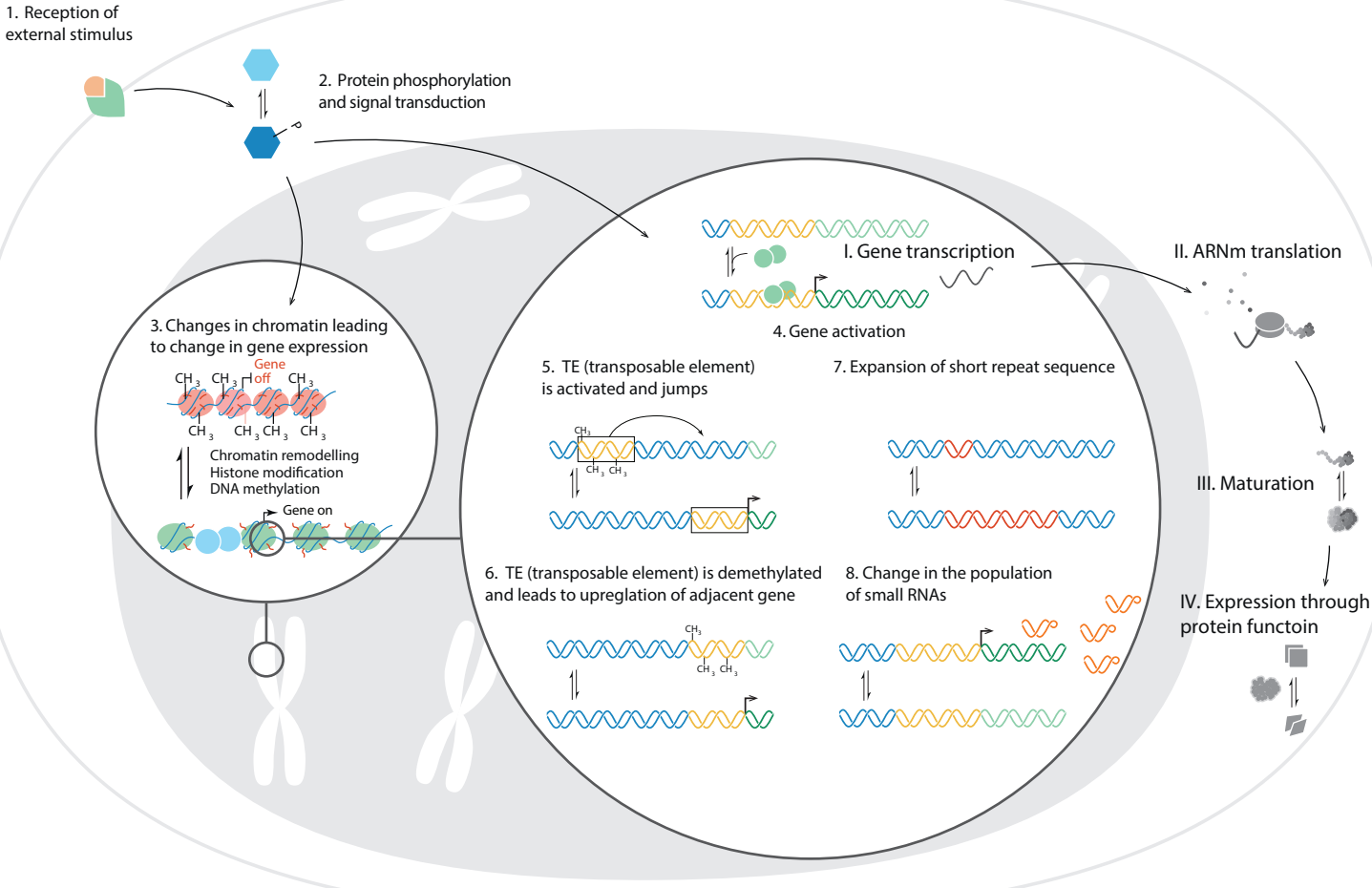
1. Reception of external stimulus
2. Protein phosphorylation and signal transduction
3. Changes in chromatin leading to change in gene expression
Gene off
Chromatin remodelling
Histone modification
DNA methylation
Gene on
I. Gene transcription
4. Gene activation
5. TE (transposable element) is activated and jumps
6. TE (transposable element) is demethylated and leads to upreglation of adjacent gene
7. Expansion of short repeat sequence
8. Change in the population of small RNAs
II. ARNm translation
III. Maturation
IV. Expression through protein functoin