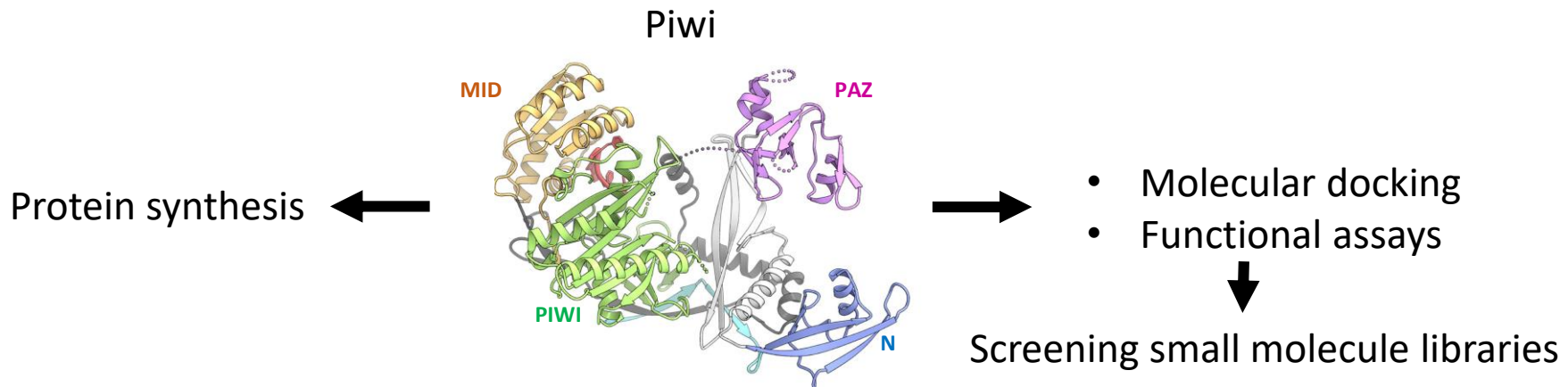


Structural and functional characterization of human Piwi proteins

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Synthesis / method / protocol: Human Piwi proteins synthesized by the biochemical group is used for developing functional assays by the genetic group. Final goal: identification of Piwi-blocking small molecules (drug candidates).

Scientific Goal: In the light of the structure of Piwi proteins (in human: PIWIL1-4) playing a primary role in genomic stability, we intend to identify Piwi-interacting small molecules with anti-tumorigenic effect.

Result: Knowing the 3D structure of Piwi domain we identified potential binding partners by using molecular docking, the synthesis of Piwi protein is in progress, and we developed an in vivo assay system.