

Rôle de la dynamique des ADN dans la formation du nucléosome

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ADN

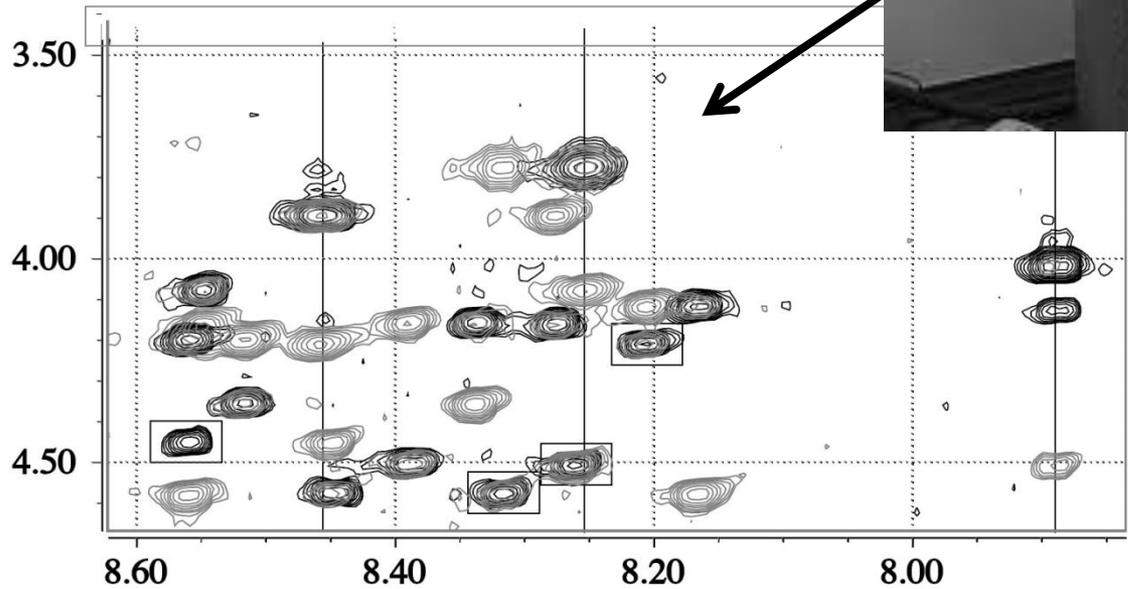
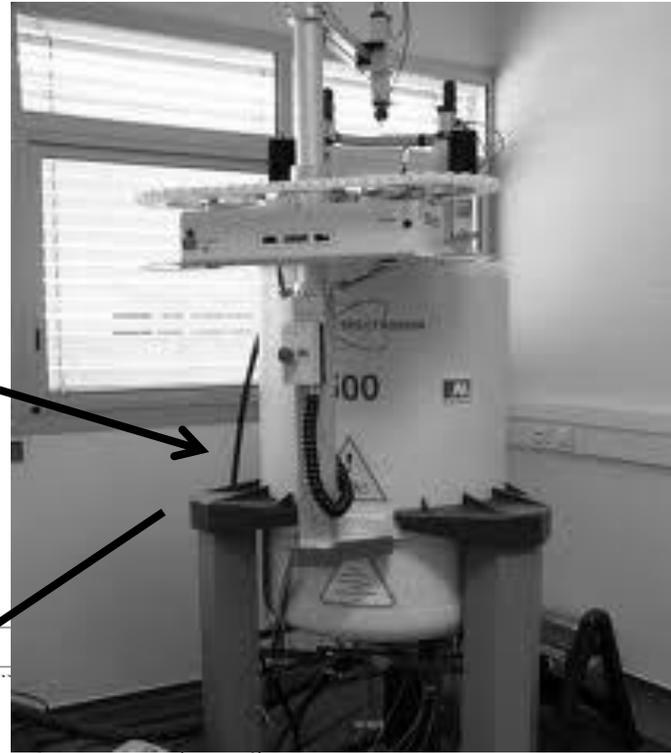
Structure, flexibilité  **séquence**

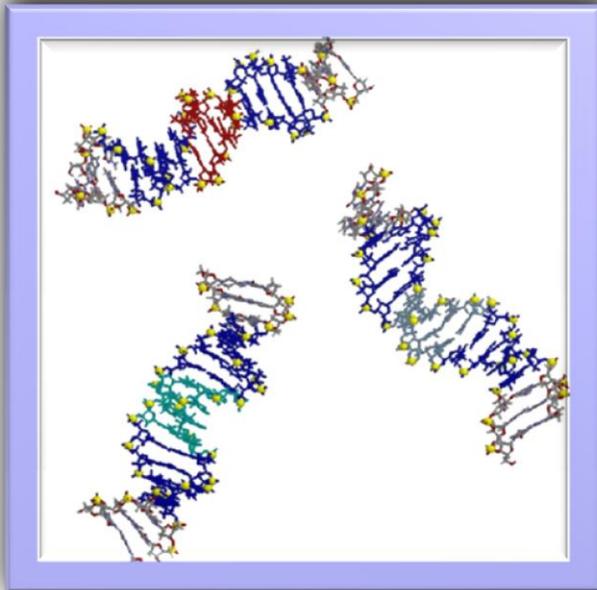
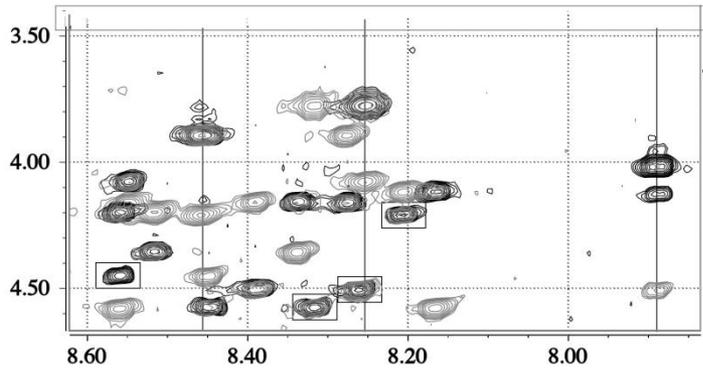
Biologie Structurale

RMN & Modélisation

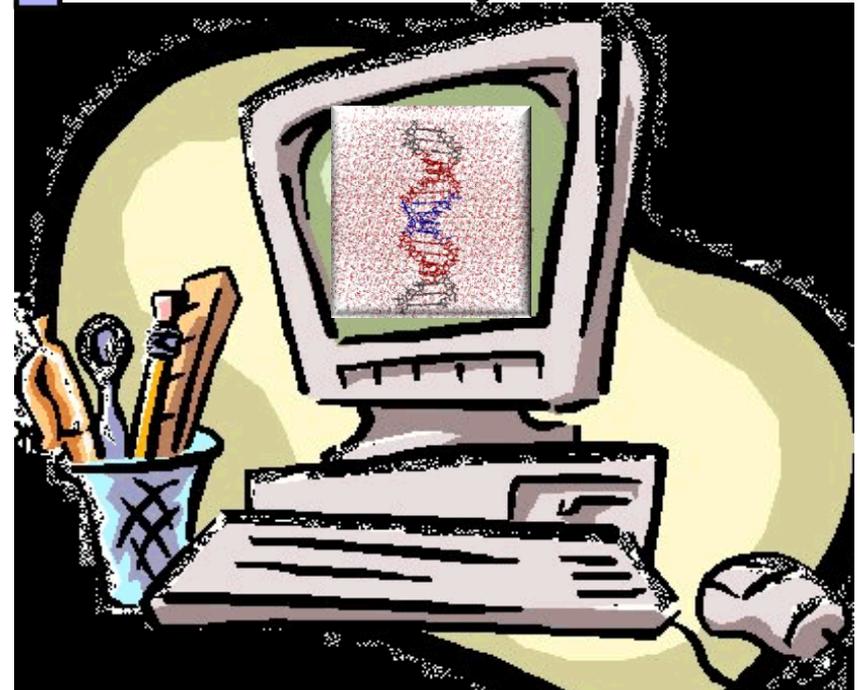
**Quelles sont les propriétés
de structure et de flexibilité de l'ADN
qui
influencent les interactions ADN-protéines**

RMN: ADN de 12 à 40 bp

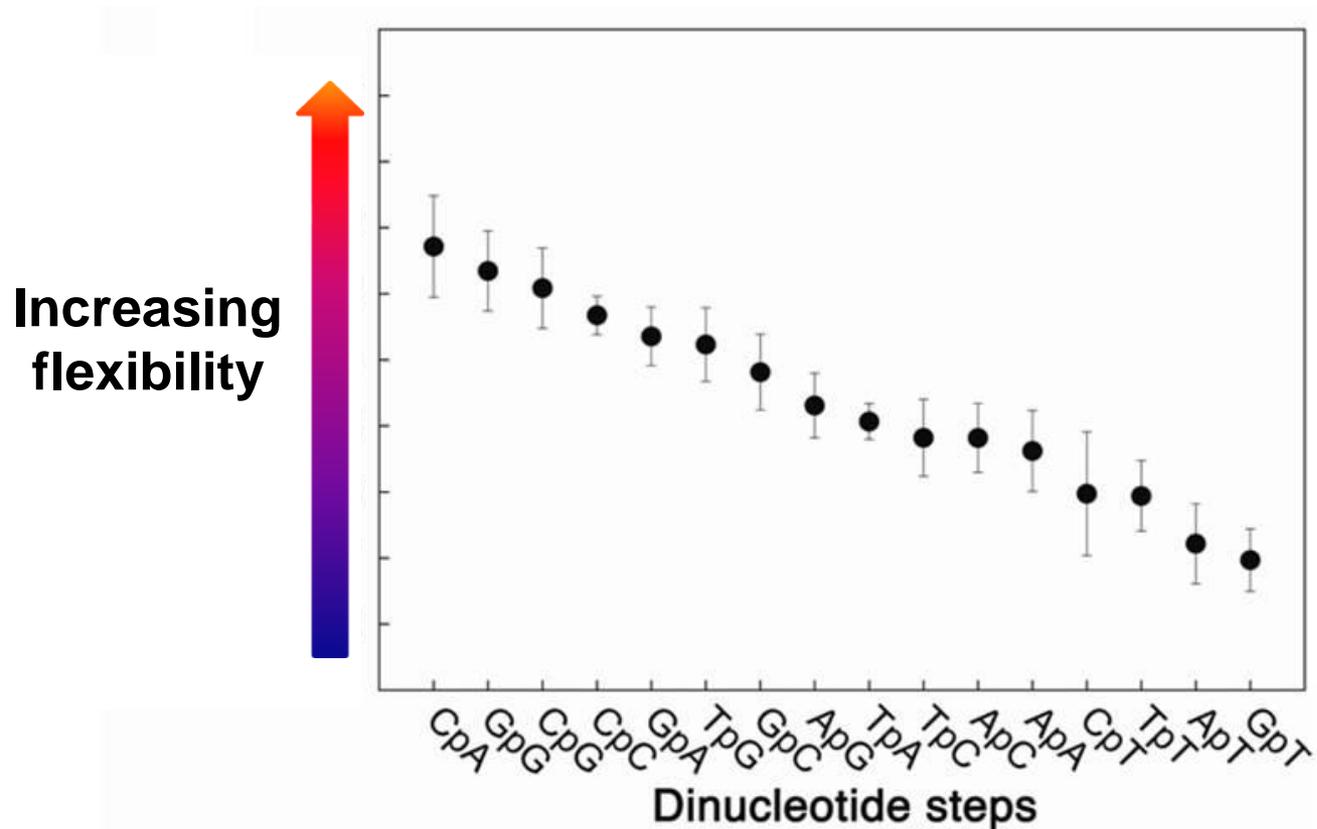




Familles de structures

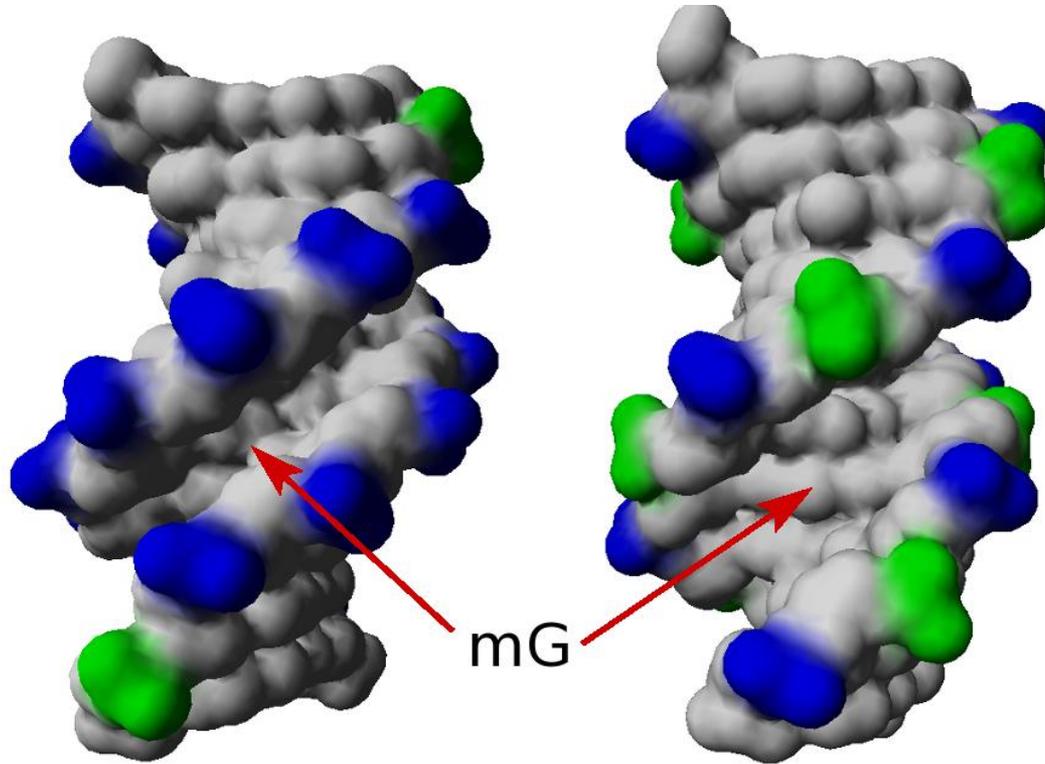


**Échelle TRX : effet de la
séquence sur la flexibilité**



**TRX scale: DNA nano-timescale flexibility
directly inferred from NMR data (no modeling)**

TRX → Prédiction de la taille des sillons

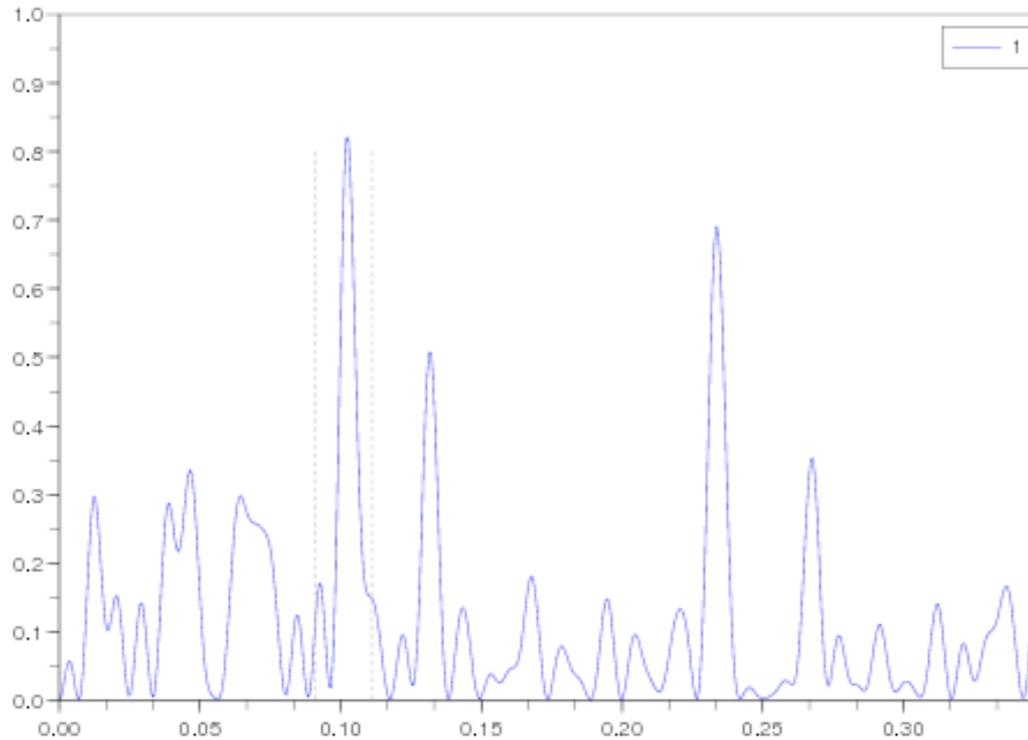


TRX



Périodicité

alternance de régions rigides/flexibles

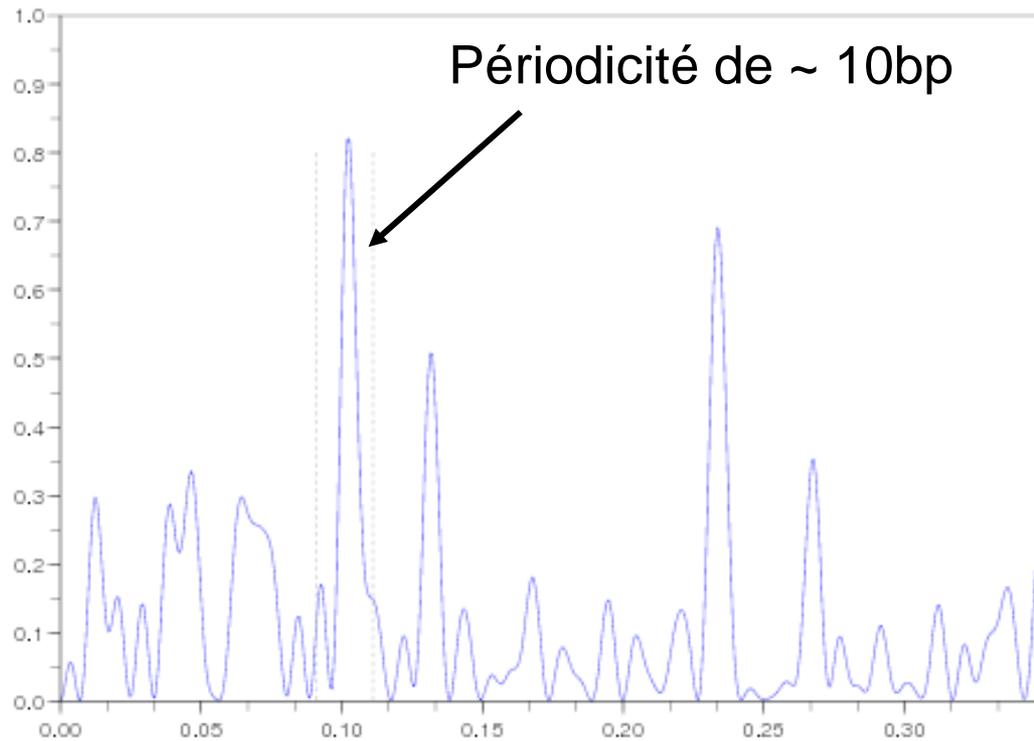


TRX

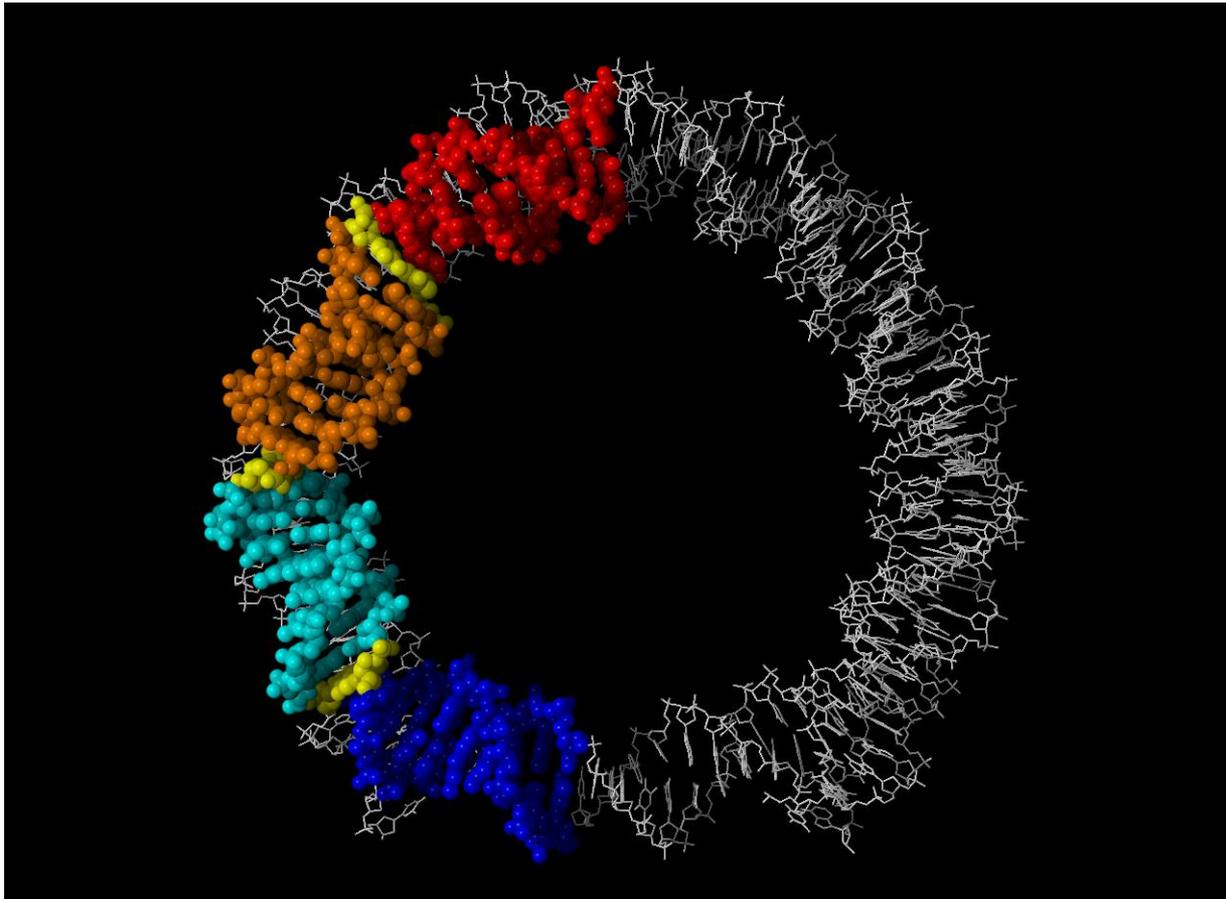


toutes les 10bp, région rigide
toutes les 10bp, région flexible

Séquence 601

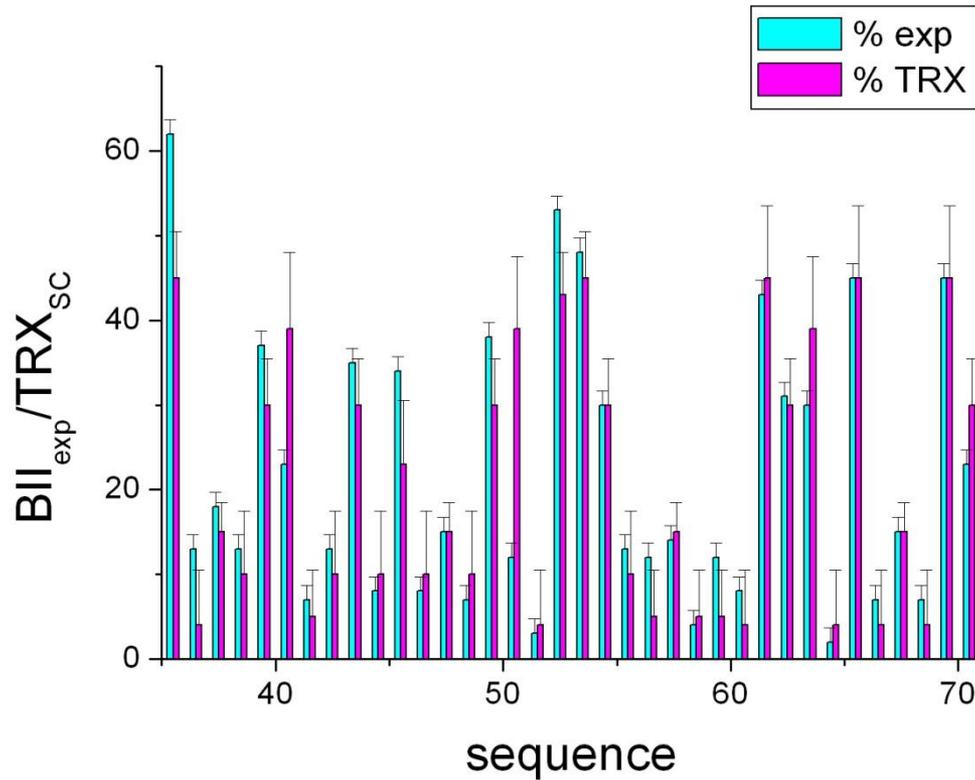


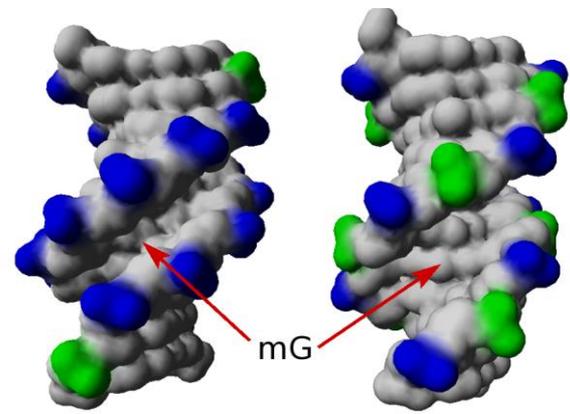
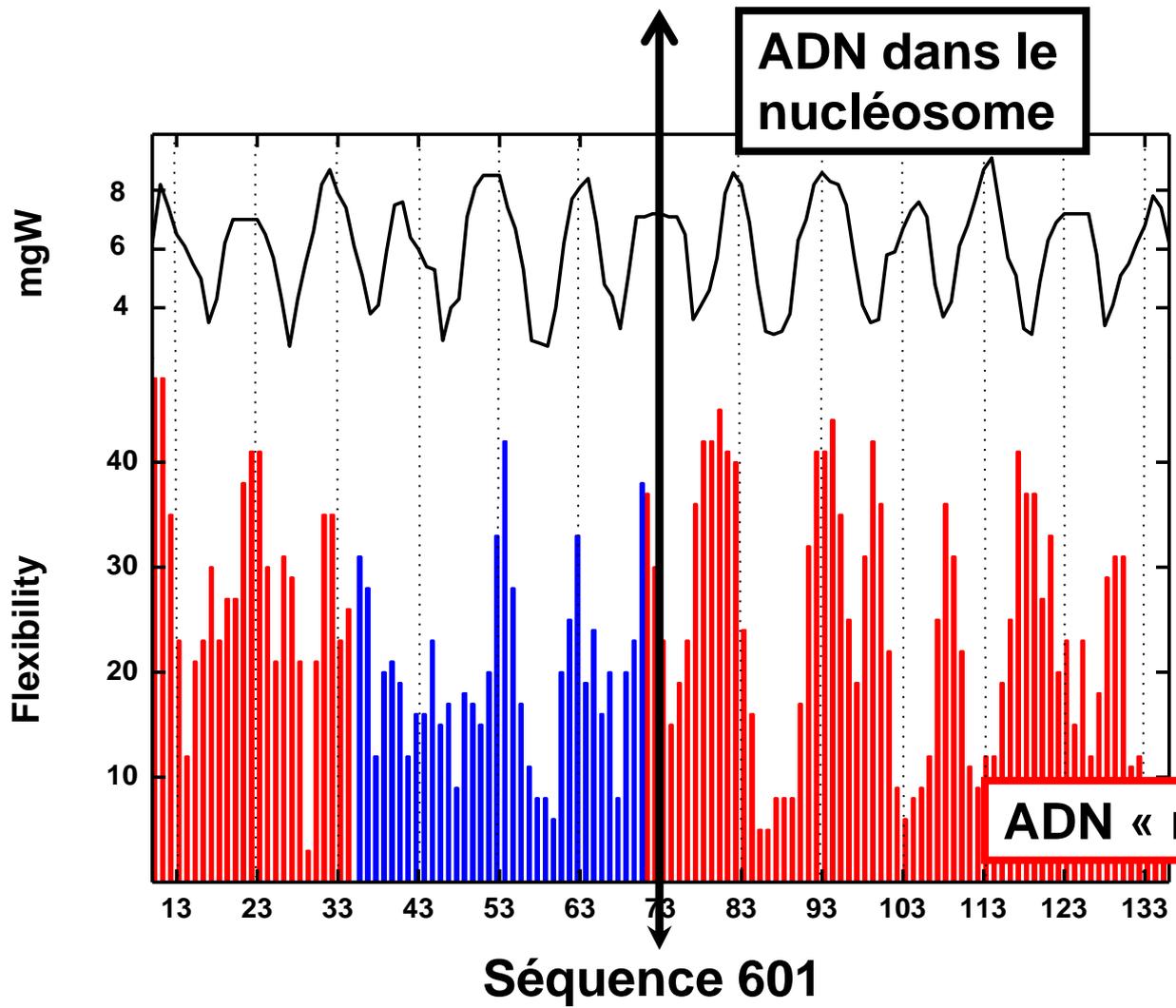
En cours : RMN d'oligomères représentatifs de la séquence 601

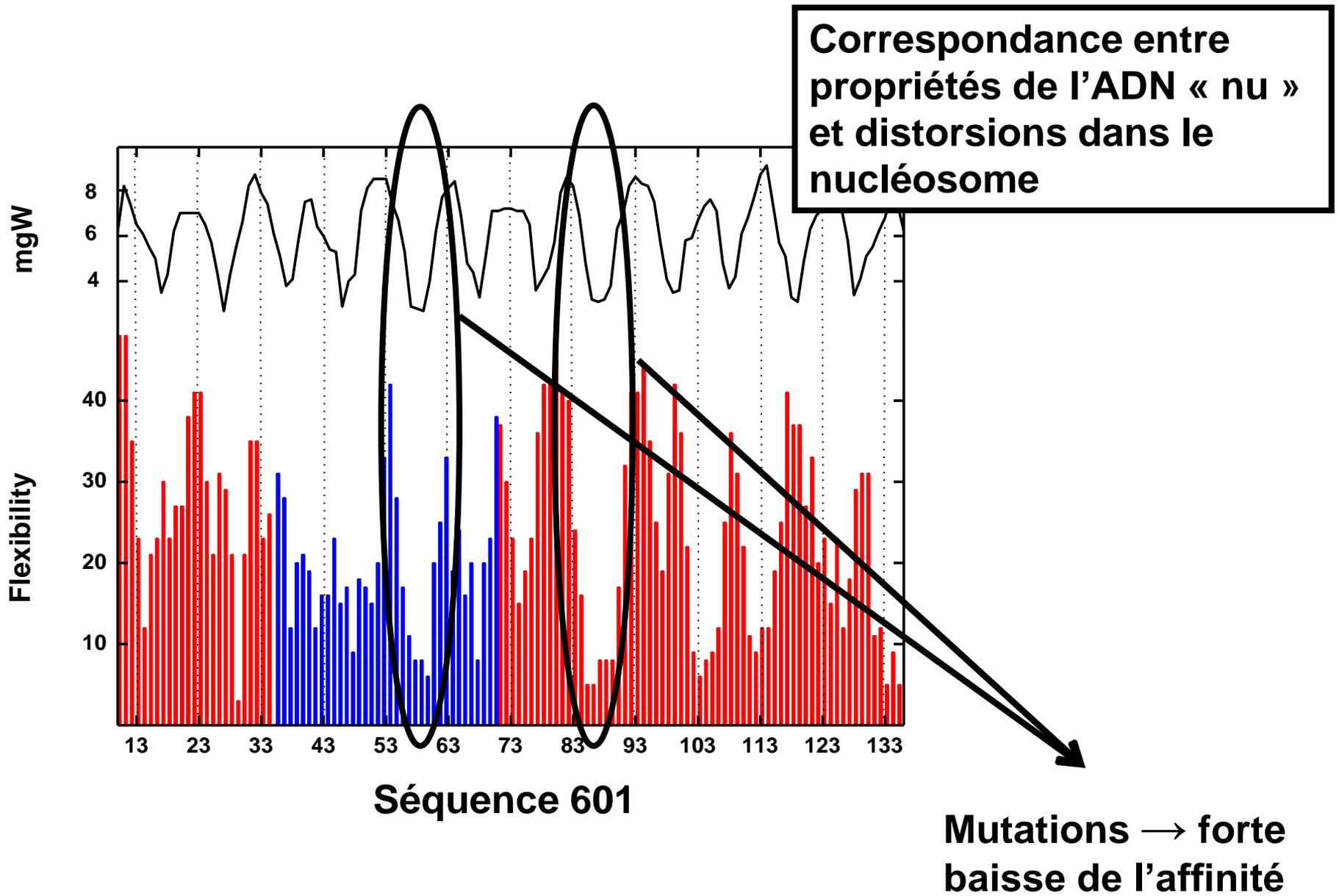


1^{er} résultat:

L'échelle TRX est réellement prédictive







Collaborations au sein du LBPA, UMR 8113 :

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&

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