

Endometriosis: Back to the Basics

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Why am I here?

- What causes endometriosis
- How do we diagnose endometriosis
- What is the treatment for endometriosis
- What are the long-term consequences of endometriosis

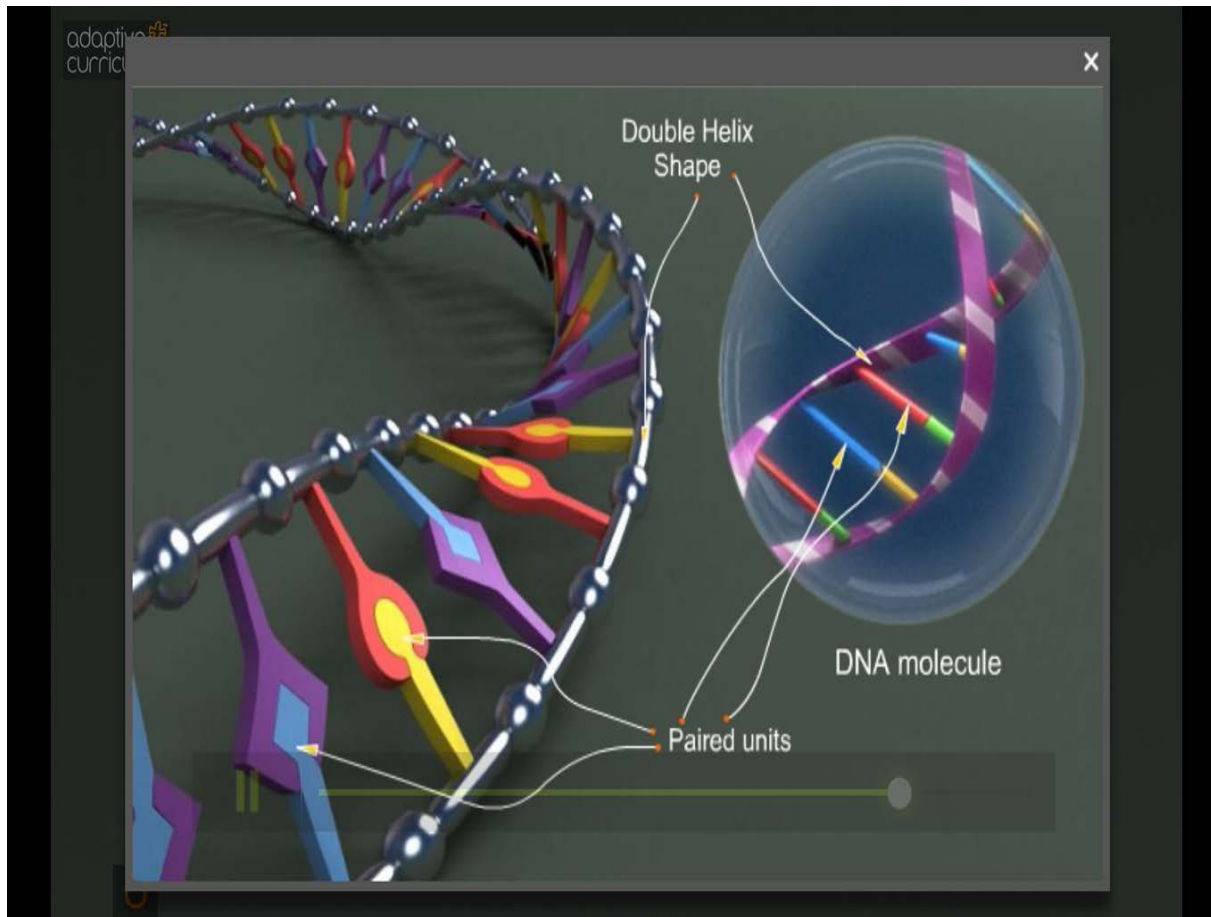


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Endometriosis: Back to the Basics.....



https://lh3.ggpht.com/VmNXsdam2ROsDaeKqWGa7Qjn2oxXmT1QRTvlyxacT4m4EUppEnR0JoQx_EXQXKqB5Q=h900



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World Endometriosis Research Foundation



- EPHect
 - Endometriosis Phenome and Biobanking Harmonization Project
 - Large-scale
 - Longitudinal
 - Multi-center
 - Phenotypic collect
 - SOPs
 - Biobanking
 - Collection
 - Transport
 - Processing
- Speaking the same language



EPHect

- Background Data
- Specimens
- Operative findings



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Diagnosis—WERF and Penn State IPM

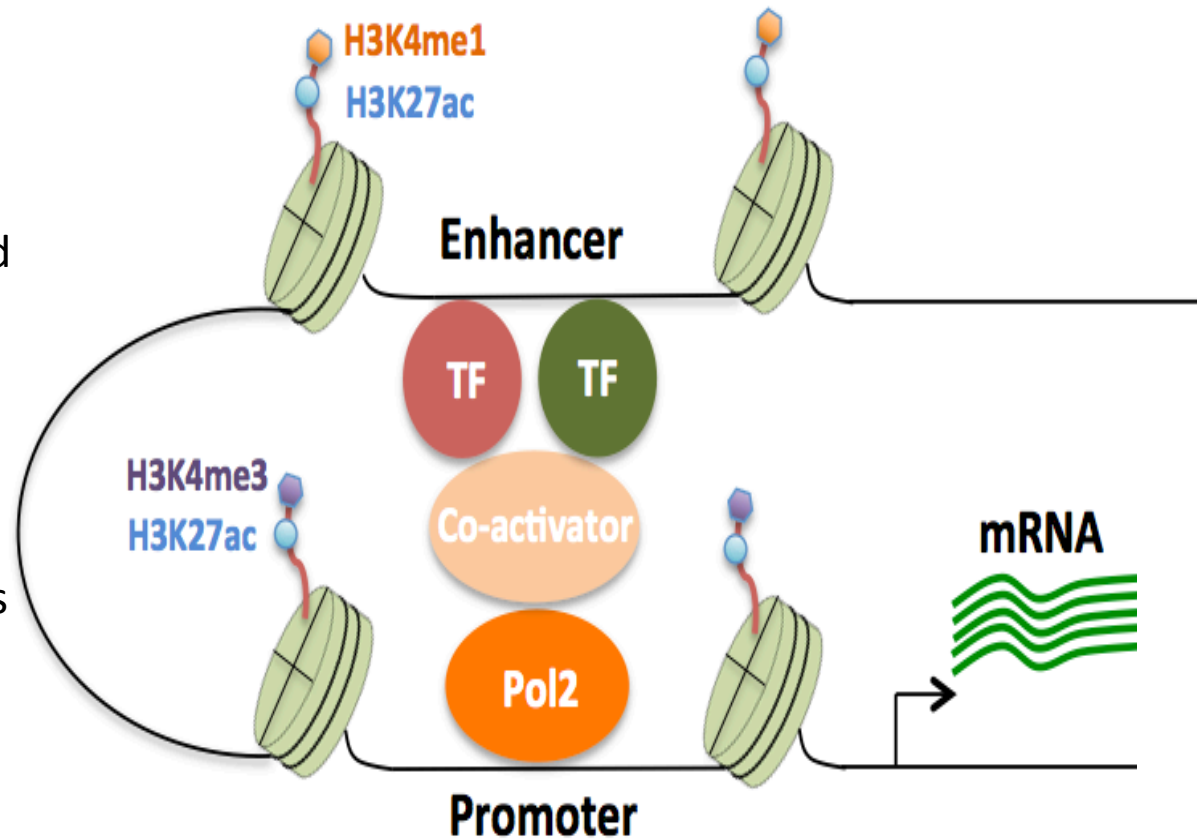
- Biomarkers
 - Blood
 - Urine
 - Saliva
 - Peritoneal Fluid
 - Endometrial Fluid
 - Menstrual Effluent
 - Myometrium
 - Ectopic endometrium
 - Eutopic Endometrium
 - Omental/visceral Fat
 - Un-affected peritoneum



Dr. Yue IPM – Histone modification

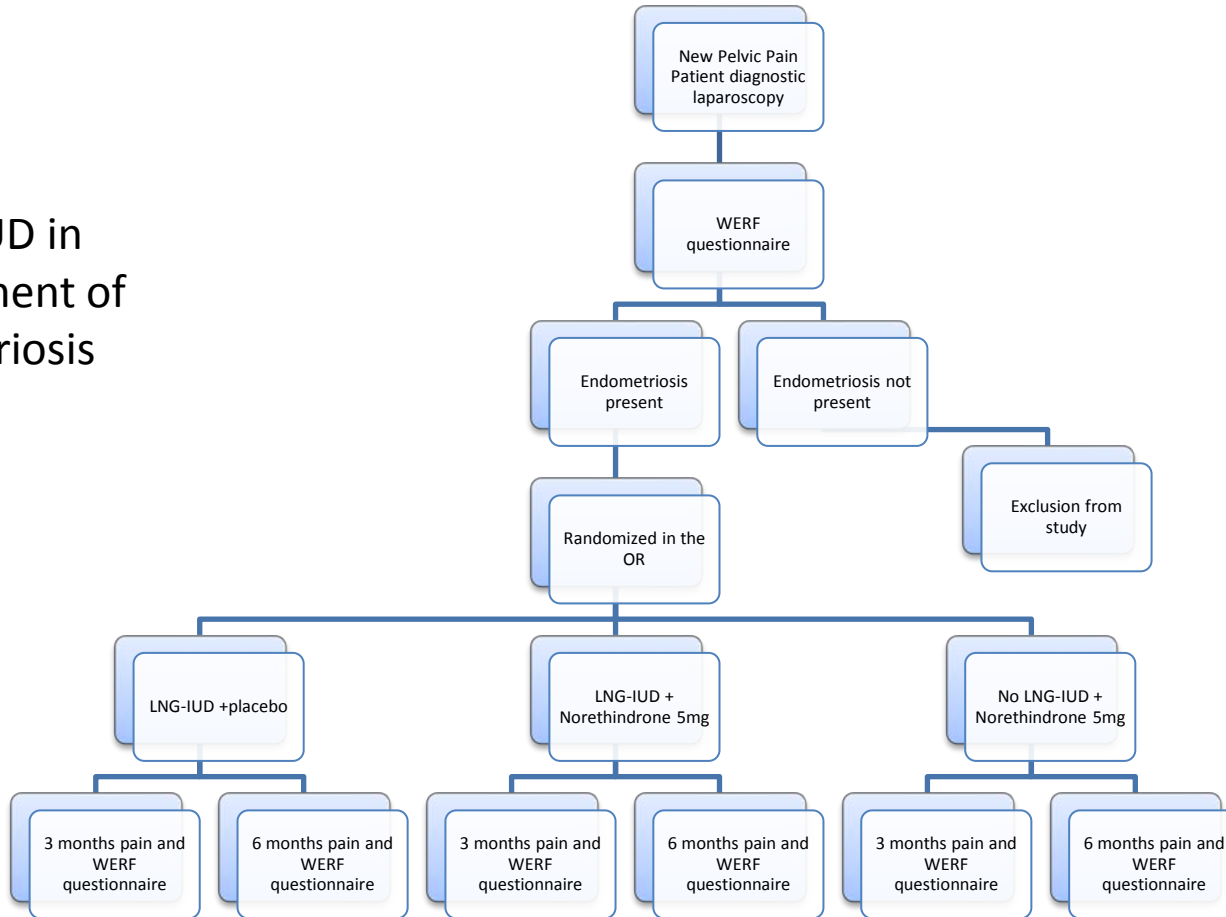
Epigenomics and bioinformatics approach

Tissue specific gene expression in endometriosis



Treatment

Role of IUD in management of endometriosis



Treatment

- Surgical Excision vs Electrosurgical ablation



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Consequences-endometriosis

- Role of endometriosis in ovarian cancer
 - Clear Cell
 - Endometrioid
- Iron Metabolism
 - Hemorrhagic lesion
 - Increased Iron
 - Increased O₂ free radicals
 - Increased DNA damage
 - Cancer



Why Back to the basics.....

- We are just getting started
- Penn State MIGS
 - Physiology
 - WERF
 - Diagnosis
 - EPHect
 - Treatment
 - RCT
 - IUD
 - Surgical management
 - Drug trials
 - Consequences
 - Role in ovarian cancer



Why am I here?

- Questions?



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