

## Practical 10: Histology of the Male Reproductive Tract

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### Objectives

1. Gain an overview of the microanatomy of the male reproductive system.
2. Undertake a microscopical examination of the testis, epididymis, vas deferens, seminal vesicle, prostate gland, penis, and sperm. The functional significance of the various histological structures identified will be discussed.

### Virtual Slide Box

The virtual histology slides for this practical can be found at: <http://vslides.unsw.edu.au/>

#### Virtual Slides: Testis and Rete testis

- Identify the tunica albuginea. What type of tissue resides here?

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- Identify the mediastinum testis and the rete testis.

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- What is the function of the rete testis?

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- Identify a seminiferous tubule and locate within it; spermatogonia, spermatocytes, spermatids, and Sertoli cells. Name a function of a Sertoli cell?

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- Locate blood vessels in the connective tissue septa.

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- Identify the interstitial cells of Leydig and give their function.

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#### Virtual Slides: Efferent ductules and Epididymis

- Identify the efferent ductules and epididymis.

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- What type of epithelium lines the efferent ductules and epididymis and what surface specialisation is present?

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- Name one function of the epididymis.

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#### Virtual Slide: Vas deferens

- Identify the epithelium and muscle layers.

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- What structures reside in the lamina propria (proper layer)?

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- What structures reside in the adventitia (outer layer)?

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- What is the function of the vas deferens?

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**Virtual Slide: Seminal vesicle**

- Identify the epithelium and muscle.
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- What is the function of the paired seminal vesicles?
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**Virtual Slides: Prostate glands (adult). Also an infant prostate gland and a prepubescent prostate gland.**

- Identify the prostatic urethra, prostatic glands, prostatic concretions and stroma.
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- What type of epithelium lines the prostatic urethra?
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- Name 2 products produced by the prostate gland and what are their functions?
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- Observe the increase in prostatic glands with age.
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- Notice that the prostate gland is encapsulated and what is the clinical significance of this in prostatic carcinoma?
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**Virtual Slide: Penis**

- Identify the **urethra, corpus spongiosum, corpus cavernosum, mucous glands of Littre, blood vessels and nerves.**
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- What **type of epithelium** lines the penile urethra?
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- Identify the **cavernous sinuses** and **tunica albuginea.**
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**Virtual Slide: Sperm**

- Identify the **head, midpiece** and **tail** of an individual sperm and present individual **functions** of these structures.
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**Additional resources to support this practical and help with revision are:****Prescribed Textbook:**

Mescher, A.L. (2010) Chapter 21: The Male Reproductive System in **Junqueira's Basic Histology:Text & Atlas**, (12th ed). New York: Lange Medical Books/McGraw-Hill NB: The 12th edition is available online.

[http://info.library.unsw.edu.au/cgi-](http://info.library.unsw.edu.au/cgi-bin/local/access/access.cgi?url=http://www.accessmedicine.com/resourceTOC.aspx?resourceID=15)

[bin/local/access/access.cgi?url=http://www.accessmedicine.com/resourceTOC.aspx?resourceID=15](http://info.library.unsw.edu.au/cgi-bin/local/access/access.cgi?url=http://www.accessmedicine.com/resourceTOC.aspx?resourceID=15)

**Computer resources**

1) "Access Medicine, the medical education resource for on-going study, review, and reference. Access via UNSW Library, [Access Medicine Link](#)

2) **Fabric of Life** program on the desktop of student computers.