

Review Article

Biological origins of sexual orientation and gender identity: Impact on health[☆]



Katherine A. O'Hanlan^{a,*}, Jennifer C. Gordon^b, Mackenzie W. Sullivan^c

^a Laparoscopic Institute for Gynecology and Oncology (LIGO), 4370 Alpine Rd, Suite 104, Portola Valley, CA 94028, United States

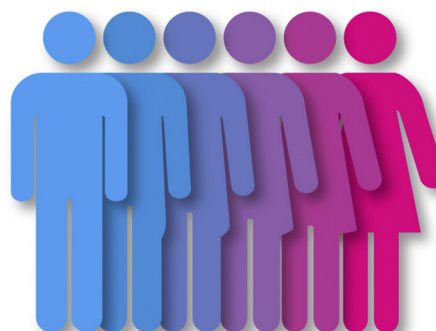
^b University of Tennessee Health Sciences Center, Memphis, TN, United States

^c University of Virginia School of Medicine, Charlottesville, VA, United States

HIGHLIGHTS

- Sexual orientation is biologically conferred in the first trimester of pregnancy.
- Gender identity is biologically conferred during the middle trimester of pregnancy.
- Health risks are conferred by the social stigma of minority status.
- Gynecologic Oncologists can provide quality care to these minority individuals.

GRAPHICAL ABSTRACT



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ABSTRACT

Gynecologic Oncologists are sometimes consulted to care for patients who present with diverse gender identities or sexual orientations. Clinicians can create more helpful relationships with their patients if they understand the etiologies of these diverse expressions of sexual humanity. Multidisciplinary evidence reveals that a sexually dimorphic spectrum of somatic and neurologic anatomy, traits and abilities, including sexual orientation and gender identity, are conferred together during the first half of pregnancy due to genetics, epigenetics and the diversity of timing and function of sex chromosomes, sex-determining protein secretion, gonadal hormone secretion, receptor levels, adrenal function, maternally ingested dietary hormones, fetal health, and many other factors. Multiple layers of evidence confirm that sexual orientation and gender identity are as biological, innate and immutable as the other traits conferred during that critical time in gestation. Negative social responses to diverse orientations or gender identities have caused marginalization of these individuals with resultant alienation from medical care, reduced self-care and reduced access to medical care. The increased risks for many diseases, including gynecologic cancers are reviewed. Gynecologic Oncologists can potentially create more effective healthcare relationships with their patients if they have this information.

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* Corresponding author.

E-mail addresses: Kate.OHanlanMD@gmail.com (K.A. O'Hanlan), jgordo22@uthsc.edu (J.C. Gordon), mws2bn@virginia.edu (M.W. Sullivan).

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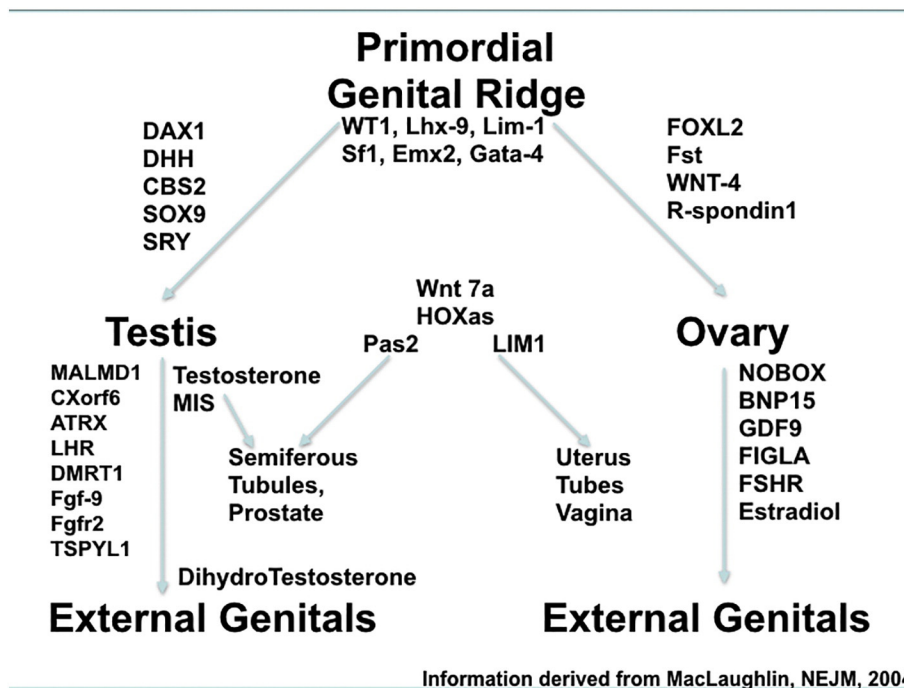


Fig. 1. Sex determination and gonadal differentiation require many proteins and endocrine stimulants to engender a fetus.¹ ¹MacLaughlin DT, Donahoe PK. Sex determination and differentiation. *N Engl J Med.* 2004;350 [4]:367–378.

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