Teaching area:

- Microanatomy (histology)
- Reproductive physiology

Research area:

- Reproductive toxicology (endocrine disruptors and reproductive disorders)

Biographical sketch:

Dr. Goyal received BVSc from Punjab Agriculture University, Hissar, India, and PhD from University of Saskatchewan, Saskatoon, Canada. He served as department head of Anatomy/Biomedical Sciences from 1989-1996 and 1999-2009, and Associate Dean of Academic Affairs from 1996-1998. Dr. Goyal’s research focus lies in the area of endocrine disruptors and developmental reproductive disorders. Dr. Goyal and his colleagues have reported for the first time that adult male rats treated neonatally with estrogens, including the female contraceptive ethinyl estradiol (EE) or a known teratogen diethylstilbestrol (DES), were infertile and developed permanently malformed penis characterized by loss of smooth muscle cells and blood vessels and abnormal accumulation of fat cells. In light of these novel findings, Dr. Goyal’s lab has been engaged for the last ten years in elucidating molecular, cellular, and/or hormonal mechanisms by which neonatal exposure to estrogens reprograms penile stromal cells such that they differentiate into fat cells instead of smooth muscle cells. This work is funded by NIH grants and has led to ten publications in peer-reviewed journals.

Representative Publications (Selected from 47)


Book Chapters:

