

Stanford



John Gosling

Professor (Teaching) of Anatomy in Surgery, Emeritus
Surgery - Anatomy

Bio

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Surgery - Anatomy

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My main research interest lies in the functional anatomy of the urogenital system particularly in the human. We are using numerous histochemical and immunocytochemical methods to establish the normal pattern and type of autonomic nerve which supply selected regions of the urogenital system including the urinary bladder, ureter and prostate. This data forms the basis of comparison with the results obtained using the same experimental techniques on postoperative samples of refluxing ureters and prostate hypertrophy. Recently we have begun a detailed study on the morphology of the urethral sphincter mechanism particularly in relation to its functional significance in female urinary continence.

We have also begun a study on the structure and autonomic innervation of the detrusor in cases of bladder extrophy. Our objective is to correlate morphology with detrusor function following surgical correction of this clinical condition. This investigation is intended to identify prior to surgery those cases which are most likely to benefit from subsequent operative treatment.

Teaching

COURSES

2018-19

- Clinical Anatomy: SURG 203 (Aut)
- Regional Study of Human Structure: SURG 101 (Win)

2017-18

- Clinical Anatomy: SURG 203 (Aut)
- Regional Study of Human Structure: SURG 101 (Win)

Publications

PUBLICATIONS

- **Ultrastructure of the bladder in classic exstrophy: Correlation with development of continence** *JOURNAL OF UROLOGY*
Mathews, R., Gosling, J. A., Gearhart, J. P.
2004; 172 (4): 1446-1449

- **Obstructive bladder dysfunction: Morphological, biochemical and molecular changes** *17th Congress of the European-Association-of-Urology*
Levin, R. M., Chichester, P., Hass, M. A., Gosling, J. A., Buttyan, R.
ELSEVIER SCIENCE BV.2002: 14–20
- **Effect of oral tadenan treatment on rabbit bladder structure and function after partial outlet obstruction** *JOURNAL OF UROLOGY*
LEVIN, R. M., Hass, M. A., Bellamy, F., Horan, P., Whitbeck, K., Chow, P. H., Kung, L. S., Gosling, J.
2002; 167 (5): 2253-2259
- **Correlation between the structure and function of the rabbit urinary bladder following partial outlet obstruction** *JOURNAL OF UROLOGY*
Gosling, J. A., Kung, L. S., Dixon, J. S., Horan, P., Whitbeck, C., LEVIN, R. M.
2000; 163 (4): 1349-1356
- **Obstructive response of human bladder to BPH vs. rabbit bladder response to partial outlet obstruction: A direct comparison** *NEUROUROLOGY AND URODYNAMICS*
Levin, R. M., Haugaard, N., O'Connor, L., Buttyan, R., Das, A., Dixon, J. S., Gosling, J. N.
2000; 19 (5): 609-629
- **The distribution of vesicular acetylcholine transporter in the human male genitourinary organs and its co-localization with neuropeptide Y and nitric oxide synthase** *NEUROUROLOGY AND URODYNAMICS*
Dixon, J. S., Jen, P. Y., Gosling, J. A.
2000; 19 (2): 185-194
- **Tyrosine hydroxylase and vesicular acetylcholine transporter are coexpressed in a high proportion of intramural neurons of the human neonatal and child urinary bladder** *NEUROSCIENCE LETTERS*
Dixon, J. S., Jen, P. Y., Gosling, J. A.
1999; 277 (3): 157-160
- **The distribution of noradrenergic nerves in the human lower urinary tract - A review** *Pre-Congress Satellite Symposium on Alpha(1)-Adrenoceptors as Targets for Therapeutic Agents in Urology*
Gosling, J. A., Dixon, J. S., Jen, P. Y.
ELSEVIER SCIENCE BV.1999: 23–30
- **Nitric oxide synthase and tyrosine hydroxylase are colocalized in nerves supplying the postnatal human male genitourinary organs** *JOURNAL OF UROLOGY*
Jen, P. Y., Dixon, J. S., Gearhart, J. P., Gosling, J. A.
1996; 155 (3): 1117-1121
- **DEVELOPMENT OF PEPTIDE-CONTAINING NERVES IN THE HUMAN FETAL VAS-DEFERENS AND SEMINAL-VESICLE** *BRITISH JOURNAL OF UROLOGY*
Jen, P. Y., Dixon, J. S., Gosling, J. A.
1995; 75 (3): 378-385
- **IMMUNOHISTOCHEMICAL LOCALIZATION OF NEUROMARKERS AND NEUROPEPTIDES IN HUMAN FETAL AND NEONATAL URINARY-BLADDER** *BRITISH JOURNAL OF UROLOGY*
Jen, P. Y., Dixon, J. S., Gosling, J. A.
1995; 75 (2): 230-235
- **A QUANTITATIVE HISTOLOGICAL-EVALUATION OF THE DILATED URETER OF CHILDHOOD .2. ECTOPIA, POSTERIOR URETHRAL VALVES AND THE PRUNE BELLY SYNDROME** *JOURNAL OF UROLOGY*
Gearhart, J. P., Lee, B. R., Partin, A. W., Epstein, J. I., Gosling, J. A.
1995; 153 (1): 172-176
- **A QUANTITATIVE HISTOLOGICAL ANALYSIS OF THE DILATED URETER OF CHILDHOOD** *JOURNAL OF UROLOGY*
Lee, B. R., Partin, A. W., Epstein, J. I., Quinlan, D. M., Gosling, J. A., Gearhart, J. P.
1992; 148 (5): 1482-1486
- **PACEMAKER SYSTEM IN CONTROL OF URETERAL PERISTALTIC RATE IN MULTI-CALYCEAL KIDNEY OF PIG** *INVESTIGATIVE UROLOGY*
Constantinou, C. E., SILVERT, M. A., Gosling, J.
1977; 14 (6): 440-441

- **ORIGIN AND PROPAGATION OF UPPER URINARY-TRACT CONTRACTION WAVES - NEW INVITRO METHODOLOGY** *EXPERIENTIA*
Gosling, J. A., Constantinou, C. E.
1976; 32 (2): 266-267