Sympathetic
Parasympathetic
Somatic

Bladder detrusor muscle
Urethral smooth muscle

Bladder detrusor muscle

Hypogastric nerve fibers
Pelvic nerve fibers
Pudendal nerve fibers

Cerebral cortex
Pontine micturition center

Thoracic region
Lumbar region
Sacral region

T11-L2
S2-S4

Figure 1
Figure 2

A. Diagram showing pelvic nerve, hypogastric nerve, and pudendal nerve with labels for muscle, muscle-urothelial, urothelial, and serosal layers.

B. Graphs illustrating stretch, stroke, and probe signals with labels for muscle-urothelial 14%, urothelial 14%, and muscle 63%.

C. Pie chart showing muscle 63%, urothelial 9%, and serosal 14%.

D. Diagram representing high threshold and low threshold with symbols for urothelial, serosal, muscle, and muscle-urothelial.

E. Diagram showing distribution of high threshold and low threshold with symbols for urothelial, serosal, muscle, and muscle-urothelial.
Figure 3

A. linear accelerator

B. linear accelerator

C. T₈-T₉

D. decerebrate cystometry

i. control

ii. bladder irradiated mouse (10 Gy)

iii. colon irradiated mouse (10 Gy)

iv. SCT (T₈-T₉) mouse

E. tension-isolated bladder sheets

i. control

ii. bladder irradiated mouse (10 Gy)

iii. colon irradiated mouse (10 Gy)

iv. SCT (T₈-T₉) mouse

normal bladder

SCT
Figure 4

A. Diagram showing the experimental setup with a 16 x 16 array of emission filters, a 16 x 16 array of excitation filters, dichroic filters, an excitation filter, and light source. The setup includes a radicule and a control to transducer bladder with afferent nerves.

B. Image showing a close-up of the experimental setup.

C. Image showing a different aspect of the experimental setup.

D. Graph showing control and SCT mouse data with red arrows indicating a specific event.

E. Graph showing control data.
Figure 5

A. Control

Spontaneous contraction

5 g

10 sec

0.2 mV

B. 1 µM BRL37344 (β3-agonist)

5 g

10 sec

0.2 mV

C. 1 µM BRL37344 + 10 µM L-748,337 (β3-selective antagonist)

5 g

10 sec

0.2 mV

Control

1 µM BRL37344 (β3-agonist)

1 µM BRL37344 + 10 µM L-748,337 (β3-selective antagonist)
Figure 6

A. Injection sites

B. Isolated nerves
Figure 7

A.

B. 0.1 µM capsaicin

0.2 g

1 min
A. Antimuscarinics (AM)
B. B<sub>3</sub>-Adrenergic receptor agonists
C. BTX-A

**Figure 8**

- decreases UC and IC coupling
- urethral and detrusor (?) SM relaxation