



Christos E. Constantinou

Associate Professor of Urology, Emeritus

 NIH Biosketch available Online

Bio

BIO

My main recent interest is the application of Biomedical Engineering approaches for the clinical visualization and characterization of the static and dynamic properties of pelvic floor function. This extends to ultrasound Imaging and image processing, construction of computer models and biomechanics analysis of pelvic floor function. It is envisioned that these considerations are important constituents of the clinical evaluation of patients with lower urinary tract dysfunction and urodynamics.

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Urology
- Member, Bio-X
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Human Biology Program, Stanford University, (1979-2012)

HONORS AND AWARDS

- Pyeloureteral Pacemaker Systems, NIH Principal Investigator (1977)
- International Prize for Outstanding Contribution to Urology, CE Alken, Switzerland (1977)
- Detrusor/Urethral Neuromuscular Function, NIH Principal Investigator (1981)
- Alpha 2 Adrenergic agonists/Antagonists, Farnos (1995)
- Experimental Prostate Growth, Fournier Debat (1997)
- Prize in Experimental Urological Research, German Pharma Association (2000)
- Direction Sensitive Sensor, NIH Principal Investigator (2004)
- Visualization of Pelvic Floor Reflexes, NIH Principal Investigator (2009)

PROFESSIONAL EDUCATION

- PhD, Stanford University , Biomedical Engineering (1973)
- MS, Stanford University , Biomedical Engineering (1968)

COMMUNITY AND INTERNATIONAL WORK

- NewCat, Koriyama, Japan

PATENTS

- Omata, Constantinou, Yamaguchi, Usui. "United States Patent 7,615,014 B2 Device for measuring elastic properties of tissue", Nihon University, Japan, Nov 10, 2009

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My main recent interest is the application of Biomedical Engineering approaches for the clinical visualization and characterization of the static and dynamic properties of pelvic floor function. This extends to ultrasound Imaging and image processing, construction of computer models and biomechanics analysis of pelvic floor function. It is envisioned that these considerations are important constituents of the clinical evaluation of patients with lower urinary tract dysfunction and urodynamics.

PROJECTS

- Dynamics of male pelvic floor function - University of Queensland, Australia

Publications

PUBLICATIONS

- **Upper Urinary Tract Urodynamics: Initiation of Peristalsis in the Upper Urinary Tract**
Constantinou, C. E.
2023
- **Smoothing of ultrasound images using a new selective average filter** *EXPERT SYSTEMS WITH APPLICATIONS*
de Araujo, A. F., Constantinou, C. E., Tavares, J. M.
2016; 60: 96-106
- **Pattern of activation of pelvic floor muscles in men differs with verbal instructions.** *Neurourology and urodynamics*
Stafford, R. E., Ashton-Miller, J. A., Constantinou, C., Coughlin, G., Lutton, N. J., Hodges, P. W.
2016; 35 (4): 457-463
- **Recommendations for future development of contractility and obstruction nomograms for women.** *ICI-RS 2014 NEUROUROLOGY AND URODYNAMICS*
Rademakers, K., Apostolidis, A., Constantinou, C., Fry, C., Kirschner-Hermanns, R., Oelke, M., Parsons, B., Nelson, P., Valentini, F., Gammie, A.
2016; 35 (2): 307-311
- **When should video and EMG be added to urodynamics in children with lower urinary tract dysfunction and is this justified by the evidence?** *ICI-RS 2014 NEUROUROLOGY AND URODYNAMICS*
Anding, R., Smith, P., de Jong, T., Constantinou, C., Cardozo, L., Rosier, P.
2016; 35 (2): 331-335
- **Dynamic Visualization of Female Pelvic Floor Function** *Biomechanics of the Female Pelvic Floor*
Constantinou, C.
Elsevier.2016: 263–281
- **New artificial life model for image enhancement** *EXPERT SYSTEMS WITH APPLICATIONS*
de Araujo, A. F., Constantinou, C. E., Tavares, J. M.
2014; 41 (13): 5892-5906
- **International continence society guidelines on urodynamic equipment performance** *NEUROUROLOGY AND URODYNAMICS*
Gammie, A., Clarkson, B., Constantinou, C., Damaser, M., Drinnan, M., Geleijnse, G., Griffiths, D., Rosier, P., Schaefer, W., Van Mastrigt, R.
2014; 33 (4): 370-379
- **Dynamics of male pelvic floor muscle contraction observed with transperineal ultrasound imaging differ between voluntary and evoked coughs** *J Applied Physiology*
Stafford, R. E., Mazzone, S. B., Ashton-Miller, J. A., Constantinou, C. E., Hodges, P. W.

2014

- **Pelvic Floor Function in the Female** *Open Journal of Obstetrics and Gynecology*
Constantinou, C. E.
2014; 826-831
- **A New Method to Quantify Male Pelvic Floor Displacement From 2D Transperineal Ultrasound Images** *UROLOGY*
Stafford, R. E., Ashton-Miller, J. A., Constantinou, C. E., Hodges, P. W.
2013; 81 (3): 685-689
- **Novel Insight into the Dynamics of Male Pelvic Floor Contractions Through Transperineal Ultrasound Imaging** *JOURNAL OF UROLOGY*
Stafford, R. E., Ashton-Miller, J. A., Constantinou, C. E., Hodges, P. W.
2012; 188 (4): 1224-1230
- **Biomechanical Properties and Associated Collagen Composition in Vaginal Tissue of Women with Pelvic Organ Prolapse** *JOURNAL OF UROLOGY*
Zhou, L., Lee, J. H., Wen, Y., Constantinou, C., Yoshinobu, M., Omata, S., Chen, B.
2012; 188 (3): 875-880
- **Biomechanical properties and associated collagen composition in vaginal tissue of women with pelvic organ prolapse.** *J. Urology*
Zhou, L., Lee, J., Wen, Y., Yoshinobu, M., Omata, S., Constantinou, C., Chen, B.
2012
- **Visualization of pelvic floor reflex and voluntary contractions.** *Studies in health technology and informatics*
Constantinou, C. E., Korenblum, D., Chen, B.
2011; 163: 138-143
- **Stiffness mapping prostate biopsy samples using a tactile sensor** *33rd Annual International Conference of the IEEE Engineering-in-Medicine-and-Biology-Society (EMBS)*
Peng, Q., Omata, S., Peehl, D. M., Constantinou, C. E.
IEEE.2011: 8515–8518
- **Simulation of vaginal wall biomechanical properties from pelvic floor closure forces map.** *Studies in health technology and informatics*
Hasegawa, S., Yoshida, Y., Wei, D., Omata, S., Constantinou, C. E.
2011; 163: 218-223
- **Mechanisms of Pelvic Floor Muscle Function and the Effect on the Urethra during a Cough** *EUROPEAN UROLOGY*
Jones, R. C., Peng, Q., Stokes, M., Humphrey, V. F., Payne, C., Constantinou, C. E.
2010; 57 (6): 1101-1110
- **Imaging-based computation of the dynamics of pelvic floor deformation and strain visualization analysis** *Studies in Computer Science*
Constantinou, C., McLean, L., Kulh, E., Chen, B.
2010
- **Spatial distribution of mechanical vaginal closure pressures using quadrant probe in comparison to ultrasound imaging** *Computational Vision and Medical Image Processing*
Omata, S., Constantinou, C. E.
2010: 3–8
- **Dynamics of female pelvic floor function using urodynamics, ultrasound and Magnetic Resonance Imaging (MRI)** *1st Meeting on Reproductive Bioengineering*
Constantinou, C. E.
ELSEVIER SCIENCE BV.2009: S159–S165
- **Tactile resonance sensors in medicine.** *Journal of medical engineering & technology*
Lindahl, O. A., Constantinou, C. E., Eklund, A., Murayama, Y., Hallberg, P., Omata, S.
2009; 33 (4): 263-273
- **Influence of pelvic floor muscle contraction on the profile of vaginal closure pressure in continent and stress urinary incontinent women** *JOURNAL OF UROLOGY*
Shishido, K., Peng, Q., Jones, R., Omata, S., Constantinou, C. E.

2008; 179 (5): 1917-1922

- **Visualization of Biomechanical Properties of Female Pelvic Floor Function Using Video Motion Tracking of Ultrasound Imaging** *16th Conference on Medicine Meets Virtual Reality*
Rahmanian, S., Jones, R., Peng, Q., Constantinou, C. E.
I O S PRESS.2008: 390–395
- **Spatial distribution of vaginal closure pressures of continent and stress urinary incontinent women** *PHYSIOLOGICAL MEASUREMENT*
Peng, Q., Jones, R., Shishido, K., Omata, S., Constantinou, C. E.
2007; 28 (11): 1429-1450
- **Changes in levator ani anatomical configuration following physiotherapy in women with stress urinary incontinence** *JOURNAL OF UROLOGY*
Dumoulin, C., Peng, Q., Stodkilde-Jorgensen, H., Shishido, K., Constantinou, C.
2007; 178 (3): 970-977
- **Ultrasound evaluation of dynamic responses of female pelvic floor muscles** *ULTRASOUND IN MEDICINE AND BIOLOGY*
Peng, Q., Jones, R., Shishido, K., Constantinou, C. E.
2007; 33 (3): 342-352
- **Evaluation of the dynamic responses of female pelvic floor using a novel vaginal probe** *5th World Congress of Biomechanics/World Council of Biomechanics*
Constantinou, C. E., Omata, S., Yoshimura, Y., Peng, Q.
WILEY-BLACKWELL.2007: 297–315
- **Direction sensitive sensor probe for the evaluation of voluntary and reflex pelvic floor contractions** *NEUROUROLOGY AND URODYNAMICS*
Constantinou, C. E., Omata, S.
2007; 26 (3): 386-391
- **2D ultrasound image processing in identifying responses of urogenital structures to pelvic floor muscle activity** *ANNALS OF BIOMEDICAL ENGINEERING*
Peng, Q. Y., Jones, R. C., Constantinou, C. E.
2006; 34 (3): 477-493
- **Development of Tactile Mapping system for the stiffness characterization of tissue slice using novel tactile sensing technology** *SENSORS AND ACTUATORS A-PHYSICAL*
Murayama, Y., Constantinou, C. E., Omata, S.
2005; 120 (2): 543-549
- **Remote sensing of mechanical properties of materials using a novel ultrasound transducer and signal processing** *IEEE TRANSACTIONS ON ULTRASONICS FERROELECTRICS AND FREQUENCY CONTROL*
Murayama, Y., Constantinou, C. E., Omata, S.
2005; 52 (3): 439-444
- **Real time robotic tactile sensor system for the determination of the physical properties of biomaterials** *SENSORS AND ACTUATORS A-PHYSICAL*
Omata, S., Murayama, Y., Constantinou, C. E.
2004; 112 (2-3): 278-285
- **Novel directionally sensitive sensor probe for the clinical evaluation of pelvic floor biomechanics** *IEEE EMBS Asian-Pacific Conference on Biomedical Engineering (APBME2003)*
Omata, S., Yamaguchi, O., Yoshimura, Y., Constantinou, C. E.
IEEE.2003: 278–279
- **Age dependent response to exogenous estrogen on micturition, contractility and cholinergic receptors of the rat bladder** *LIFE SCIENCES*
Diep, N., Constantinou, C. E.
1999; 64 (23): PL279-PL289
- **Upper Urinary Tract Urodynamics: Initiation of Peristalsis in the Upper Urinary Tract.** *Handbook of Neurourology.*
Constantinou, C. E.

Springer.2022

- **Reply to Peter EP Petros' Letter to the Editor re: Ruth C. Lovegrove Jones, Qiyu Peng, Maria Stokes, Victor F. Humphrey, Christopher Payne, Christos E. Constantinou. Mechanisms of Pelvic Floor Muscle Function and the Effect on the Urethra During a Cough.** *Eur Urol* 2010;57:1101-10 *EUROPEAN UROLOGY*
Jones, R. L., Peng, Q., Stokes, M., Humphrey, V., Payne, C., Constantinou, C.
2010; 58 (4): E47-E48
- **Imaging-Based Computation of the Dynamics of Pelvic Floor Deformation and Strain Visualization Analysis** *6th International Symposium on Visual Computing*
Constantinou, C. E., McLean, L., Kuhl, E., Chen, B.
SPRINGER-VERLAG BERLIN.2010: 604–612
- **EFFECT OF ""THE KNACK"" ON THE PELVIC FLOOR: EVALUATED BY 2D REAL TIME ULTRASOUND AND IMAGE PROCESSING METHODS** *39th Annual Meeting of the International-Continence-Society*
Jones, L. R., Peng, Q., Humphrey, V., Stokes, M., Payne, C., Constantinou, C. E.
WILEY-BLACKWELL.2009: 662–63
- **Development of a new instrument for examination of stiffness in the breast using haptic sensor technology** *SENSORS AND ACTUATORS A-PHYSICAL*
Murayama, Y., Haruta, M., Hatakeyama, Y., Shiina, T., Sakuma, H., Takenoshita, S., Omata, S., Constantinou, C. E.
2008; 143 (2): 430-438
- **Mapping pelvic floor closure forces using novel multidirectional vaginal probe** *14th Annual Scientific Conference on Web Technology, New Media Communications and Telematics Theory, Methods, Tools and Applications Medical Imaging and D-TV*
Peng, Q., Constantinou, C. E., Omata, S.
EUROSIS.2008: 133–136
- **A critical review of the pharmacology of the plant extract of Pygeum africanum in the treatment of LUTS** *NEUROUROLOGY AND URODYNAMICS*
Edgar, A. D., Levin, R., Constantinou, C. E., Denis, L.
2007; 26 (4): 458-463
- **Elasticity Distribution Imaging of Sliced Liver Cirrhosis and Hepatitis using a novel Tactile Mapping System** *11th Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON 2007)*
Murayama, Y., Yajima, T., Sakuma, H., Hatakeyama, Y., Constantinou, C. E., Takenoshita, S., Omata, S.
SPRINGER-VERLAG BERLIN.2007: 286–87
- **High resolution regional elasticity mapping of the human prostate** *29th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society*
Murayama, Y., Omata, S., Yajima, T., Peng, Q., Shishido, K., Peehl, D. M., Constantinou, C. E.
IEEE.2007: 5803–5806
- **Topographic elasticity measurement for an estimation of hepatic fibrosis using tactile mapping system** *International Conference on Microtechnologies in Medicine and Biology*
Murayama, Y., Yajima, T., Fukuda, T., Suzuki, S., Hatakeyama, Y., Sakuma, H., Takenoshita, S., Constantinou, C. E., Omata, S.
IEEE.2006: 295–296
- **Multi-Sensory Surgical Support System Incorporating, Tactile, Visual and Auditory Perception Modalities** *13th Conference on Medicine Meets Virtual Reality*
Omata, S., Murayama, Y., Constantinou, C. E.
I O S PRESS.2005: 369–371
- **Effects of artificial obstruction on the function of the upper urinary tract of guinea pigs, rats and pigs** *EUROPEAN JOURNAL OF PEDIATRIC SURGERY*
Tillig, B., Mutschke, O., Rolle, U., Gaunitz, U., Asmussen, G., Constantinou, C. E.
2004; 14 (5): 303-315
- **Functional and anatomical effects of hormonally induced experimental prostate growth: A urodynamic model of benign prostatic hyperplasia (BPH) in the beagle** *PROSTATE*
Yokota, T., Honda, K., Tsuruya, Y., Nomiya, M., Yamaguchi, O., Gotanda, K., Constantinou, C. E.
2004; 58 (2): 156-163

- **Development of a novel surgical support instrument and virtual system incorporating new tactile sensor technology** *12th Conference on Medicine Meets Virtual Reality*
Omata, S., Murayama, Y., Constantinou, C. E.
I O S PRESS.2004: 288–290
- **Effects of artificial obstruction on the function of the upper urinary tract of Guinea pigs, rats and pigs** *Eur J Pediatr Surg.*
Tillig, B., Mutschke, O., Gaunitz U , G., Asmussen G, G., Constantinou, C. E.
2004; 14 (5): 303-15
- **Intuitive micromanipulation with haptic audio feedback** *4th International Conference on Computer and Information Technology*
Murayama, Y., Constantinou, C. E., Omata, S.
IEEE COMPUTER SOC.2004: 907–911
- **Multisensory surgical support system incorporating, tactile, visual and auditory perception modalities** *4th International Conference on Computer and Information Technology*
Constantinou, C. E., Omata, S., Murayama, Y.
IEEE COMPUTER SOC.2004: 870–874
- **Micro-mechanical sensing platform for the characterization of the elastic properties of the ovum via uniaxial measurement** *JOURNAL OF BIOMECHANICS*
Murayama, Y., Constantinou, C. E., Omata, S.
2004; 37 (1): 67-72
- **Real Time robotic sensor system for the determination of the physical properties of biomaterials** *Sensors and Actuators A*
Omata S, Murayama Y, Constantinou CE
2004; 112: 278-285
- **Development of a Novel Surgical Support Instrument and Virtual System Incorporating Tactile Sensor Technology.** *TECHNOLOGY AND INFORMATICS MMVR(12)*
Omata S, Murayama Y, Constantinou CE
2004; MMVR (12): 288-290
- **Effect of Pygeum africanum tadenan on micturition and prostate growth of the rat secondary to coadministered treatment and post-treatment with dihydrotestosterone** *UROLOGY*
Yoshimura, Y., Yamaguchi, O., Bellamy, F., Constantinou, C. E.
2003; 61 (2): 474-478
- **Supraspinal N-methyl-D-aspartate receptor inhibition influences the micturition reflex and function of the upper urinary tract of anesthetized and conscious rats** *NEUROUROLOGY AND URODYNAMICS*
Tillig, B., Constantinou, C. E.
2003; 22 (2): 164-175
- **Comparative urodynamic patterns of bladder pressure, contractility and urine flow in man and rat during micturition** *APMIS*
Schmidt, F., Yoshimura, Y., Shin, P. Y., Constantinou, C. E.
2003; 111: 39-44
- **Urodynamic patterns of normal male micturition: influence of water consumption on urine production and detrusor function** *JOURNAL OF UROLOGY*
Schmidt, F., Shin, P., Jorgensen, T. M., Djurhuus, J. C., Constantinou, C. E.
2002; 168 (4): 1458-1463
- **Displacement sequence and elastic properties of anterior prostate/urethral interface during micturition of spinal cord injured men** *ULTRASOUND IN MEDICINE AND BIOLOGY*
Constantinou, C. E., Damaser, M. S., Perkas, I.
2002; 28 (9): 1157-1163
- **Determining the displacement of the pelvic floor and pelvic organs during voluntary contractions using magnetic resonance imaging in younger and older women** *BJU INTERNATIONAL*
Constantinou, C. E., Hvistendahl, G., Ryhammer, A., Nagel, L. L., Djurhuus, J. C.
2002; 90 (4): 408-414

- **Influence of gender on the diurnal variation of urine production and micturition characteristics of the rat** *NEUROUROLOGY AND URODYNAMICS*
Schmidt, F., Yoshimura, Y., Ni, R. X., Kneesel, S., Constantinou, C. E.
2001; 20 (3): 287-295
- **Gender specificity of tolterodine on micturition and the diurnal variation of urine production of the conscious rat** *BJU INTERNATIONAL*
Yoshimura, Y., Schmidt, F., Constantinou, C. E.
2000; 86 (7): 879-885
- **Functional evaluation of tadenan on micturition and experimental prostate growth induced with exogenous dihydrotestosterone** *UROLOGY*
Choo, M. S., Bellamy, F., Constantinou, C. E.
2000; 55 (2): 292-298
- **Age dependent response to exogenous estrogen on micturition, contractility and cholinergic receptors of the rat bladder.** *Life sciences*
Diep, N., Constantinou, C. E.
1999; 64 (23): PL 279-89
- **Chronology and urodynamic characterization of micturition in neurohormonally induced experimental prostate growth in the rat** *26th Annual Meeting of the International-Continence-Society*
Lee, J. Z., Omata, S., Tillig, B., Perkas, I., Constantinou, C. E.
WILEY-LISS.1998: 55-69
- **Effect of alpha 1 adrenoceptor antagonist on the urodynamics of the upper and lower urinary tract of the male rat** *NEUROUROLOGY AND URODYNAMICS*
Lee, J. Z., Tillig, B., Perkas, I., Constantinou, C. E.
1998; 17 (3): 213-229
- **Modulation of detrusor contraction strength and micturition characteristics by intrathecal baclofen in anesthetized rats** *JOURNAL OF UROLOGY*
Watanabe, T., Perkas, I., Constantinou, C. E.
1997; 157 (6): 2361-2365
- **Comparative analysis of bladder wall compliance based on cystometry and biosensor measurements during the micturition cycle of the rat** *NEUROUROLOGY AND URODYNAMICS*
Watanabe, T., Omata, S., Lee, J. Z., Constantinou, C. E.
1997; 16 (6): 567-581
- **Videomicroscopic imaging of ureteral peristaltic function in rats during cystometry** *JOURNAL OF PHARMACOLOGICAL AND TOXICOLOGICAL METHODS*
Tillig, B., Constantinou, C. E.
1996; 35 (4): 191-202
- **Influence of hormone treatment on prostate growth and micturition characteristics of the rat** *PROSTATE*
Constantinou, C. E.
1996; 29 (1): 30-35
- **Urethral pressures in the study of female incontinence** *Female Urol.*
Constantinou CE, Christensen LL
1996; 119: 115-131
- **Analysis of pressure/flow characteristics in the female rat and their pharmacologic modulation** *NEUROUROLOGY AND URODYNAMICS*
Watanabe, T., Constantinou, C. E.
1996; 15 (5): 513-527
- **Analysis of the relative biomechanical effects of alpha 1 and alpha 2 antagonists in modifying the compliance of the prostate and micturition parameters of the hormonally manipulated male rat** *NEUROUROLOGY AND URODYNAMICS*
Constantinou, C. E., Omata, S.
1996; 15 (1): 85-101
- **New method for direct stiffness measurement of the corpora cavernosa.** *International journal of impotence research*

- Hatzichristou, D. G., Omata, S., Constantinou, C. E.
1995; 7 (4): 221-231
- **MODELING OF MICTURITION CHARACTERISTICS BASED ON PROSTATIC STIFFNESS MODULATION INDUCED USING HORMONES AND ADRENERGIC ANTAGONISTS** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
SADAO, O., Constantinou, C. E.
1995; 42 (8): 843-848
 - **IMAGING OF PELVIS FLOOR CONTRACTIONS USING MRI** *NEUROUROLOGY AND URODYNAMICS*
Christensen, L. L., Djurhuus, J. C., Constantinou, C. E.
1995; 14 (3): 209-216
 - **MRI of voluntary pelvic floor contractions in healthy female volunteers** *Intl. Urogynecol. J.*
Christensen LL, jurhuus JC, Lewis MT, Dev P, Chase RA, Constantinou PS, Constantinou CE
1995; 6: 138-152
 - **PROSTATE-SPECIFIC ANTIGEN AS A PREDICTOR OF AN ABNORMAL DIGITAL RECTAL EXAMINATION** *BRITISH JOURNAL OF UROLOGY*
Lui, P. D., Terris, M. K., Haney, D. J., Constantinou, C. E., Stamey, T. A.
1994; 74 (3): 337-340
 - **THE EFFECT OF ALPHA2 AGONISTS AND ANTAGONISTS ON THE LOWER URINARY-TRACT OF THE RAT** *JOURNAL OF UROLOGY*
Harada, T., Constantinou, C. E.
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 - **IMPACT OF RADICAL PROSTATECTOMY ON THE CHARACTERISTICS OF BLADDER AND URETHRA** *JOURNAL OF UROLOGY*
Constantinou, C. E., Freiha, F. S.
1992; 148 (4): 1215-1220
 - **THE EFFECT OF BACTERIURIA ON BLADDER AND RENAL PELVIC PRESSURES IN THE RAT** *1991 ANNUAL MEETING OF THE SECTION OF UROLOGY OF THE AMERICAN ACADEMY OF PEDIATRICS*
Issa, M. M., Shortliffe, L. M., Constantinou, C. E.
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 - **IMPAIRMENT OF URETERAL PERISTALSIS IN THE URETEROVESICAL JUNCTION BY INCREASING INTRAVESICAL PRESSURE** *AKTUELLE UROLOGIE*
Eichhorn, F., Barth, R., HARNISCH, T., Constantinou, C. E.
1992; 23 (4): 179-182
 - **RAPID EVALUATION OF THE EFFICACY OF PHARMACOLOGICAL AGENTS AND THEIR ANALOGS IN ENHANCING BLADDER CAPACITY AND REDUCING THE VOIDING FREQUENCY** *JOURNAL OF PHARMACOLOGICAL AND TOXICOLOGICAL METHODS*
Harada, T., LEVOUNIS, P., Constantinou, C. E.
1992; 27 (2): 119-126
 - **Relaxation mechanisms of antispasmodics papaverine and thiphenamil on the human corpus cavernosum.** *Japanese journal of pharmacology*
Kimoto, Y., Kumazawa, J., Kessler, R., Constantinou, C. E.
1992; 58: 384P-?
 - **ENDOTHELIUM DEPENDENT RELAXATION OF HUMAN CORPUS CAVERNOSUM BY BRADYKININ** *INTERNATIONAL SYMP ON SMOOTH MUSCLE*
Kimoto, Y., Kumazawa, J., Kessler, R., Constantinou, C. E.
JAPANESE PHARMACOLOGICAL SOC.1992: P321-P321
 - **RELAXATION MECHANISMS OF ANTISPASMODICS PAPAVERINE AND THIPHENAMIL ON THE HUMAN CORPUS CAVERNOSUM** *INTERNATIONAL SYMP ON SMOOTH MUSCLE*
Kimoto, Y., Kumazawa, J., Kessler, R., Constantinou, C. E.
JAPANESE PHARMACOLOGICAL SOC.1992: P384-P384
 - **TOPOLOGICAL LOCALIZATION OF THE FREQUENCY AND AMPLITUDE CHARACTERISTICS OF THE WHOLE AND SEGMENTED RENAL PELVIS** *UROLOGIA INTERNATIONALIS*
POTJER, R. M., Kimoto, Y., Constantinou, C. E.

1992; 48 (3): 278-283

- **Endothelium dependent relaxation of human corpus cavernosum by bradykinin.** *Japanese journal of pharmacology*
Kimoto, Y., Kumazawa, J., Kessler, R., Constantinou, C. E.
1992; 58: 321P-?
- **PHARMACOLOGICAL TREATMENT OF DETRUSOR INCONTINENCE WITH THIPHENAMIL HCL** *UROLOGIA INTERNATIONALIS*
Constantinou, C. E.
1992; 48 (1): 42-47
- **PHARMACOLOGICAL EFFECT OF THIPHENAMIL HCI ON LOWER URINARY-TRACT FUNCTION OF HEALTHY ASYMPTOMATIC VOLUNTEERS** *UROLOGIA INTERNATIONALIS*
Constantinou, C. E.
1992; 48 (3): 293-298
- **RELAXANT EFFECT OF THIPHENAMIL HCL ON UPPER URINARY-TRACT FREQUENCY OF CONTRACTION OF HEALTHY ASYMPTOMATIC VOLUNTEERS** *UROLOGIA INTERNATIONALIS*
Constantinou, C. E.
1992; 48 (1): 35-38
- **RENAL PELVIC PRESSURE ISOLATION FROM ACTIVE AND PASSIVE BLADDER PRESSURES IN THE RAT - THE FACILITATING EFFECT OF URINE FLOW-RATE** *UROLOGIA INTERNATIONALIS*
Harada, T., Constantinou, C. E.
1992; 48 (3): 284-292
- **URETHRAL PRESSURE AND PRESSURE VARIATIONS IN HEALTHY FERTILE AND POSTMENOPAUSAL WOMEN WITH REFERENCE TO THE FEMALE SEX-HORMONES** *JOURNAL OF UROLOGY*
Sorensen, S., Waechter, P. B., Constantinou, C. E., Kirkeby, H. J., Jonler, M., Djurhuus, J. C.
1991; 146 (5): 1434-1440
- **REGIONAL EFFECTS OF INDOMETHACIN, ACETYLSALICYLIC-ACID AND SC-19220 ON THE CONTRACTILITY OF RABBIT RENAL PELVIS (PACEMAKER REGIONS AND PELVIURETERIC JUNCTION)** *JOURNAL OF UROLOGY*
Kimoto, Y., Constantinou, C. E.
1991; 146 (2): 433-438
- **THE EFFECT OF URINARY FLOW AND BLADDER FULLNESS ON RENAL PELVIC PRESSURE IN A RAT MODEL** *1990 ANNUAL MEETING OF THE SECTION OF UROLOGY OF THE AMERICAN ACADEMY OF PEDIATRICS*
SMYTH, T. B., Shortliffe, L. M., Constantinou, C. E.
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- **FLOW DEPENDENCE OF 2-D TEMPERATURE DISTRIBUTIONS INDUCED IN THE PERFUSED CANINE KIDNEY BY ULTRASOUND** *INTERNATIONAL JOURNAL OF HYPERTHERMIA*
Prionas, S. D., RAFTERY, K. A., Edmonds, P. D., Constantinou, C. E.
1991; 7 (2): 367-383
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