CURRICULUM VITAE

NAME:	STUART S. HOWARDS, M.D.
DATE OF BIRTH:	March 29, 1937
WIFE:	Carter Nelson Howards Married: August 20, 1966
CHILDREN:	Penelope Page Born: February 1, 1968 Hugh Nelson July 23, 1969
ACADEMIC DEGREES:	B.A.: Yale University, 1959 M.D.: College of Physicians and Surgeons, Columbia University, 1963
LICENSED BY:	State of Virginia
INTERNSHIP:	Peter Bent Brigham Hospital, 1963-1964 (Surgical)
ASSISTANT RESIDENCY:	Peter Bent Brigham Hospital & Children's Hospital Boston, Massachusetts, 1964-1965 (Surgical) Peter Bent Brigham Hospital, 1968-1970 (Urology) Boston, Massachusetts
CHIEF RESIDENCY:	Peter Bent Brigham Hospital, 1970-1971 (Urology)
RESEARCH APPOINTMENT:	National Heart Institute, 1965-1968 (Staff Associate)
ACADEMIC POSITIONS:	Assistant Professor, Department of Urology, University of Virginia School of Medicine, Charlottesville, VA, 1971-1973 Associate Professor of Urology, 1973-1975 Professor of Urology and Associate Professor of Physiology, 1975-1982 Professor of Urology and Molecular Physiology and Biophysics, 1982-present
SOCIETIES:	American Society of Nephrology Virginia Urological Association Virginia Medical Society Society of University Urologists American Society Reproductive Medicine Southern Medical Association Society for the Study of Reproduction American Association for the Advancement of Science American Society of Andrology American College of Surgeons American Society of Genitourinary Surgeons Clinical Society of Genitourinary Surgeons

Society of Pediatric Urology
Society of Reproductive Board of Directors as a lifetime SRS member

HONORS:

Phi Beta Kappa, Yale, 1958
Edward John Noble Fellow, 1959-63
Alpha Omega Alpha, Columbia, 1962
American Cancer Society Clinical Fellow, 1970-71
President-Elect, Clinical Staff, University of Virginia Hospital, 1973
Examination Committee American Board of Urology, 1976-80, 1982-90
Career Development Award - NICHD, NIH, 1976-81
Executive Committee, American Society of Andrology, 1976
University of Virginia Faculty Senate, 1976-80
Robert Bean Award for Teaching Excellence by the 2nd year class, 1978
Diplomate, American Board of Urology, 1975
Associate Editor, Investigative Urology, 1977-85
Co-Editor, Yearbook of Urology, 1978-present
Editorial Board, Journal of Andrology, 1980-present
American Urological Association Gold Cystoscope Award, 1980
Editorial Board, Fertility and Sterility, 1980-1994
University of Virginia Faculty Form for Scientific Research, 1980-82
American Journal of Kidney Disease - Editorial Board, 1981-85
Member Chief Editorial Board- Int. J. Androl., 1982-1983
Associate Editor- Seminars in Urology, 1982-96
Listed in Who's Who and The First Edition of Who's Who in Frontier Science and Technology
Editor - Investigative Section, Journal of Urology 1985-2000
Fellow - American Academy of Pediatrics- 1987-
Member - American Board of Urology 1986-1992
President American Board of Urology 1992
Chairman - Examination Committee AUA/ABU, 1986-1991
Russell & Mary Hugh Scott Award of AUA for Medical Education, 1990
AUA Hugh Hampton Young Award for Outstanding Contributions to the Basic Study of Genitourinary Disease, 1991
Member Board of Directors of The American Society of Reproductive Medicine 1993-96
Treasurer The American Society of Reproductive Medicine 1997-
Executive Secretary American Board of Urology 1997-
AUA Distinguished Service Award 2001
National Board of Medical Examiners 2002
Senior Scientific Advisor to the NIDDK Director for Urology 2/2002 –
AUA Ramon Guiteras Lecture 2003
Distinguished Service Award – October 17, 2004
American Society of Reproductive Medicine
AUA Distinguished Contributor Award, 2006
Vice President Clinical Society of Genitourinary Surgeons 2007-2008

MAJOR RESEARCH INTERESTS:

Renal Physiology
Male Reproductive Physiology

GRANT SUPPORT:

Principal Investigator: NIH-NICHD Contract No. 72-2770. Micropuncture Studies of Effects of Vasectomy on Testis and Epididymis. 1972-80.

Principal Investigator: NIH-NICHD Contract No. HD09490. Micropuncture Studies of Testis and Epididymis. 1975-84.

Career Development Award: NIH-NICHD Contract No. l-K04-HD00180. 1976-81.

Co-Principal Investigator: NIH-NICHD Grant. In Vitro Assessment of Fertilizing Capacity of Human Sperm. 1978-86.

Rockefeller Foundation Fellowship for Dr. Barry Hinton. Sept. 1979-August 1980.

Principal Investigator: NIH-NICHD Grant 1R01-14445-01. Microperfusion Studies of SNT and Caput CHO Transport. 1980-83.

Principal Investigator: NIH-NICHD Grant 2-R01-HD09490-07. August 1981- July 1984

Co-Investigator: NIH NICHD H18252. July 1983-July 1992.

Principal Investigator: NIH NICHD Grant HD18825. 9/1/84-8/31/87.

Principal Investigator: NIH NICHD Grant HD18825. 5/1/91-4/30/95.

Co-Investigator: NIH NICHD Grant HD23789. 12/1/88-11/31/91.

Co-Investigator: Multidisciplinary Training Grant NIH T32 DK07642. 7/1/90-6/30/95.

Consultant NIH NICHD Grant Torsion of the Testis ,Terry T Turner PI. 1994-

Clinical Consultant, NIH Center for Recombinant Gamete Contraceptive Vaccinogens, John Herr, PhD. PI 1991-

External Advisory Committee V-54 application for Cooperative Center in Infertility Baylor University Dori Lamb PI, To be submitted 2001

SELECTED CONSULTATIONS, COMMITTEES, AND INVITED LECTURES:

World Health Organization Consultation on Male Reproductive Research, February 1976.

NIH Committee on Research Needs in Nephrology and Urology Section on Acute Renal Failure, 1977 and 1978.

NIH-NICHD Workshop on Future Goals of Male Reproductive Medicine, Palm Springs, California, 1977.

NIH Reproductive Biology Study Section, Guest Member, June 1977.

NIH-NICHD Special Study Section on the Effect of DES on Male Offspring, January 1978, April 1978, and December 1978.

World Health Organization Consultation on Male Reproductive Research, May 1978.

NIH-NICHD Vasectomy Workshop, April 1978.

NIH-NICHD Contraceptive Evaluation Branch Program Review, August 1979.

NIH-NICHD Workshop on Future Goals of Male Reproductive Medicine, Washington, DC, September 1979.

Harvard University Laboratory of Human Reproduction and Reproductive Biology Lecture: The Blood Testis Barrier, January 1976.

American Urological Association Endocrine Forum Lecture: Endocrine Control of Spermatogenesis, May 1979.

International Symposium on the Spermatozoan Lecture: The Fluid Environment of the Maturing Spermatozoan, Woods Hole, May 1978.

Johns Hopkins University School of Hygiene and Public Health Reproductive Biology Lecture Series: Lecture on the Epididymis, September 1978.

Visiting Professor of Urology, University of Texas at Houston, Feb. 1980.

Scientific Advisory Board, American Kidney Foundation 1981-1984.

NIH-NIAMD: Human Research Review Group A, 1981-1983.

NIH Testis Workshop, New York, Invited Speaker, April 13-15, 1981.

Visiting Professor of Urology, Dartmouth Medical School, Hanover, New Hampshire, October 16-17, 1981.

Visiting Professor of Urology, Geisanger Clinic, September 15-16, 1982.

Visiting Professor of Urology, Indiana Medical School, Nov. 18-19, 1982.

Visiting Professor of Urology, University of Chicago Medical School, December 6-7, 1982.

Visiting Lecturer, Maryland Urological Association, September 10, 1983.

AUA Workshop, Future of Research in Urology, New York, April 27, 1985.

Visiting Professor of Urology, University of Kansas Medical College February 17, 1984.

Visiting Professor of Urology, University of Connecticut, April 11-14, 1984.

Visiting Professor of Urology, Bowman Gray Medical School, August 24-26, 1984.

Visiting Lecturer, Pacific Coast Fertility Society, September 19-23, 1984.

Visiting Professor of Urology, Eastern Virginia Medical School, January 21-22, 1985.

Visiting Lecturer, Case Western Reserve University School of Medicine, February 20, 1985.

Visiting Professor of Urology, Tripler Army Hospital, Honolulu, Hawaii, March 9-14, 1985.

Visiting Professor of Urology, Ohio State Medical School, September 13-14, 1985.

Visiting Professor of Urology, University of Louisville Medical School, October 30, 1985.

Visiting Lecturer, University of South Carolina Medical School, February 27-28, 1986.

Visiting Professor of Urology, Harvard Program in Urology, June 12-14, 1986.

Visiting Professor of Urology, University of Massachusetts Medical School, October 15-19, 1986.

Visiting Lecturer, Cleveland Clinic, March 10-12, 1988.

Visiting Professor of Urology, University of Alabama, April 6-9, 1988.

Visiting Professor of Urology, Medical College of Virginia,

December 8-10, 1988.

Visiting Professor of Urology, University of Iowa, May 17-20, 1989.

Visiting Professor of Urology, Yale University, March 4-7, 1990.

Visiting Professor of Urology, Loyola University of Chicago, October 18-20, 1990.

Visiting Professorships 1991 to present approximately 20 more

External Reviewer, Dept. of Urology, University of Texas Southwestern Medical School, Dallas, TX, January 6-7, 1991.

Invited Lecturer, Japanese Andrology Society, Nagoya, Japan, June 18-20, 1991.

Invited Lecturer, Nordic Andrology Society, Sonderberg, Denmark, August 22-24, 1991.

Consultant, WHO Meeting on Vasectomy and Cancer, Geneva, Switzerland, October 23-25, 1991.

Invited Lecturer, Quebec Association of Urologists, November 15-17, 1991.

Surgical Forum Committee, American College of Surgeons, 1990-1993.

Visiting Professor, Madigan Army Medical Center, Sept 6-8, 2000.

CMSS (Urology) Representative to National Board of Medical Examiners, 2003.

Visiting Professor, Wake Forest, November 2 -4, 2004

Visiting Professor, Easter Virginia Medical School, September 2006

Presidential Guest Speaker, AUA South Central Section, October 2006

Guest Speaker, AUA Mid-Atlantic Section, October 2006

PUBLICATIONS (Abstracts Excluded):

Borkowski AJ, Howards SS, Laragh JH: Angiotensin and electrolyte excretion in renovascular hypertension. Amer. J. Physiol. 208(6):1087, 1965.

Johnston CI, Davis JO, Howards SS, Wright FW: Cross-circulation experiments on the mechanisms of the natriuresis during saline loading in the dog. Circ. Res. XX: -10, 1967.

Johnston CI, Davis JO, Wright FS, Howards SS: Effects of renin and ACTH on adrenal steroid secretion in the American bullfrog. Amer. J. Physiol. 213(2):393, 1967.

Davis JO, Howards SS, Johnson CI, Wright FW: Renin sodium retaining and sodium excreting hormones and experimental renal hypertension. Circ. Res. Suppl. II, XX & XXI:167-175, 1967.

Davis JO, Hartcroft PM, Howards SS, Wright FW: The phylogenetic and physiologic importance of the renin-angiotensin-aldosterone system. Proc. 3rd. Int. Cong. Nephrology, Washington, DC, 1966, l:215-225, 1967.

Davis JO, Howards SS, Johnston CI, Wright FW: Deoxycortisone secretion in chronic experimental heart failure during infusion of angiotensin II. Proc. Soc. Experim. Biol. & Med. 127:164-168, 1968.

Howards SS, Davis JO, Johnston CI, Wright FS: Steroidogenic response in normal dogs receiving blood from dogs with caval constriction. Amer. J. Physiol. 214 (5):990, 1968.

Howards SS, Davies BB, Knox FG, Wright FS, Berliner RW: Depression of fractional reabsorption of sodium by the proximal tubule of the dog without sodium diuresis. J. Clin. Invest. 47(7):1561, 1968.

Wright FW, Knox FG, Howards SS, Berliner RW: Reduced sodium reabsorption by the proximal tubule of DOCA escaped dogs. Amer. J. Physiol. 216(4):869, 1969.

Wright FW, Howards SS, Knox FG, Berliner RW: Measurement of sodium reabsorption by the proximal tubule of the dog. Amer. J. Physiol. 217:199, 1969.

Knox FG, Wright FS, Howards SS, Berliner RW: The effect of furosemide on the proximal tubule reabsorption in the dog. Amer. J. Physiol. 217:192, 1969.

Knox FG, Howards SS, Wright FS, Berliner RW: The effect of dilution and expansion of blood volume on proximal tubule reabsorption of sodium. Amer. J. Physiol. 215(5):1041, 1968.

Davis BB, Knox FG, Wright FS, Howards SS: Effect of expansion of extracellular fluid volume on proximal sodium reabsorption in hyponatremic dogs. Metabolism 19:291-300, 1970.

Howards SS: Regulation of sodium excretion with special emphasis on the current status of natriuretic hormone. J. Urol. 105:749, 1971.

Howards SS, Harrison JH: Retroperitoneal phlegmon - a fatal complication of retrograde pyelography. J. Urol. 109:92, 1973.

Howards SS, Merrill E, Harris S, Cohen J: Ultrasonic lithotripsy-laboratory evaluation. Invest. Urol. 11:273, 1974.

Howards SS: Postobstructive diuresis - a misunderstood phenomenon. J. Urol. 110:537, 1973.

Howards SS, Merrill E, Harris S, Cohen J: Effect of ultrasonic irradiation on urinary calculi and urothelium. Surgical Forum, Vol. XXIII:2543, 1972.

Augusta VE, Orr WA, Howards SS, Gillenwater JY: Increased GFR in hydrated children. J. Urol. 110:113, 1973.

Howards SS, Piecka A, Merrill E, Marshall R, Harris S: Current status of mechanical lithotripsy. Transactions of the American Association of Genitourinary Surgeons 65:123, 1973.

Howards SS, Johnson A, Miller S: Micropuncture and microanalytic studies of the testis and epididymis. Fertil. Steril. 26:13, 1975.

Howards SS, Miller S, Johnson A: Micropuncture and microanalytic studies of the effect of vasectomy on the testis and epididymis. Fertil. Steril. 26:20, 1975.

Howards SS, Wyker A: Transpubic repair of urethral strictures. Virginia Medical Monthly 102:133, 1975.

Agusta VE, Howards SS: Posterior urethral valves: a study with long term follow-up. J. Urol. 112:280, 1974.

Howards SS: Delusional priapism. Letter to the editor. Urology 3:528, 1974.

Sachdev YV, Howards SS: Enterobiasis vermicularis (pinworm) infestation and secondary enuresis. J. Urol. 113:143, 1975.

Howards SS: Sperm maturation, transport and capacitation and semen analysis in syllabus for American Fertility Society 6th Post Graduate Course, 1974.

Johnson A, Howards SS: Intratubular hydrostatic pressure in the tubules of the testis and epididymis before and after vasectomy. Amer. J. Physiol. 228:556, 1975.

Middleton G, Howards SS, Gillenwater JY: Sex-linked familial reflux. J. Urol. 114:36, 1975.

Gillenwater JY, Westervelt FB, Jr, Vaughan ED, Jr, Howards SS: Renal function one week after release of chronic unilateral hydronephrosis in man. Kid. Int. 7:179, 1975.

Sherlock KT, Howards SS: Postobstructive anuria: a documented entity. J. Urol. 115:212, 1976.

Johnson A, Howards SS: Intratubular hydrostatic pressure in the seminiferous tubules and epididymis of the guinea pig. Biology of Reproduction 14:371, 1976.

Howards SS, Miller J, Johnson A: Micropuncture studies of the blood seminiferous tubule barrier to organic molecules. Biol. of Reprod. 14:264, 1976.

Rogers PCJ, Howards SS, Komp SM: Urogenital rhabdomyosarcoma. J. Urol. 115:788, 1976.

Harrison RB, Howards SS, Woods JJ: Medical deviation of the upper pole calyx on the excretory urogram as an indication of vesicoureteral reflux. A. J. Roent. 126:1189, 1976.

Vigersky RA, Louriax DL, Howards SS, Hodgen GB, Lippert MB, Chrambach AC: Androgen binding proteins of testis, epididymis and plasma in man and monkey. J. Clin. Invest. 58:1061, 1976.

Jessee S, Howards SS: A survey of spermatozoa, sodium, and potassium concentrations in the hamster epididymis. Biol. Reprod. 15:626, 1976.

Howards SS: Effect of trimethoprim-sulfamethoxazole on the renal excretion of creatinine in man. Letter to editor. J. Urol. 116:134, 1976.

Wyker R, Howards SS: Micropuncture studies of the motility of rete testis and epididymal spermatozoa. Fert. Steril. 28:108, 1977.

Turner TT, Hartmann PK, Howards SS: In vivo sodium and potassium, and sperm concentrations in the rat epididymis. Fert. Steril. 28(2): 191, 1977.

Johnson AL, Howards SS: Hyperosmolality in the intraluminal fluids from the hamster testis and epididymis - a micropuncture study. Science 195:492, 1977.

Noller DW, Howards SS: Metabolic effects of unilateral orchiectomy on the guinea pig testis. Fert. Steril. 28(2):186, 1977.

Viets DH, Howards SS, Goldstein G: Serum alpha-fetoprotein and testicular tumors. Correspondence in: N.E.J.M.: 296:693, 1977.

Noller DW, Gillenwater JY, Howards SS, Vaughan ED, Jr: Intercostal nerve block with flank incision. J. Urol. 117:759-761, 1977.

Panko WB, Noller DW, Howards SS: A simplified method for the quantitation of spermatogenesis in the guinea pig. J. Reprod. Fert. 51:123-125, 1977.

Turner TT, Howards SS: Hyperglycemia in golden hamsters anesthetized with Inactin R. Laboratory Animal Sci. 27(3): 380-382, 1977.

Noller DW, Flickinger CJ, Howards SS: Duration of the cycle of the seminiferous epithelium in the guinea pig determined by tritiated thymidine autoradiography. Biol. Reprod. 17:532-534, 1977.

Moody TE, Howards SS, Schneider JA, Rudolf LE: Intestinal obstruction: a complication of percutaneous cystotomy. A case report. J. Urol. 118:680, 1977.

Viets DH, Vaughan ED, Jr, Howards SS: Experience gained from the management of 9 cases of bilateral renal cell carcinoma. J. Urol. 118:937-940, 1977.

Noller DW, Howards SS, Flickinger, CJ: Duration of the seminiferous epithelial cycle in the mature guinea pig. Influence of unilateral orchiectomy. Fert. Steril. 28(9):998-1002, 1977.

Lohr JA, Nunley DH, Howards SS, Ford RF: Prevention of recurrent urinary tract infections in girls. Pediatrics 59:562-565, 1977.

Turner TT, Howards SS: Factors involved in the initiation of sperm motility. Biol. Reprod. 18:571-578, 1978.

Turner TT, Howards SS: Effects of vasectomy on movement of C-14-urea in seminiferous tubule hamster. Invest. Urol. 16(3):237-239, 1978.

Gillenwater JY, Howards SS, Vaughan ED, Jr: Postoperative diuresis: a rationale for management. Medical World News, Urology 61, 1972.

Viets DH, Howards SS, Goldstein G: Letter to the Editor: Serum alpha-fetoprotein and non-seminomatous testicular tumors. N.E.J.M. 296(12):693, 1977.

Flickinger CJ, Howards SS, English HF: Ultrastructural differences in efferent ducts and several regions of the epididymis of the hamster. Amer. J. Anat. 152:557-586, 1978.

Howards SS, Lechene C, Vigersky R: The fluid environment of the maturing spermatozoon. Proceedings of the International Symposium on the Spermatozoon, May 1978.

Turner TT, D'Addario D, Howards SS: Further observations on the initiation of sperm motility. Biol. Reprod. 19:1095-1101, 1978.

Turner TT, D'Addario D, Howards SS: The effect of vasectomy on the blood-testis barrier of the hamster. J. Reprod. Fert. 55:323-328, 1979.

Turner TT, Hartmann PK, Howards SS: Urea in the seminiferous tubule: evidence for active transport. Biol. Reprod. 20(3):511-515, 1979.

Howards SS, Flickinger CJ, Noller DW, Panko WB: The effects of vasectomy on testicular metabolism in the guinea pig. J. Reprod. Fert. 55(2):401-405, 1979.

Howards SS, Turner TT: The blood testis barrier: a morphologic or physiologic phenomenon? Trans. Amer. Assoc. Genitourinary Surge. 70:74-75, 1979.

Bergman S, Howards SS, Sanger W: Practical aspects of banking patient's semen for future artificial insemination. Urology 13(4):408-411, 1979.

Amann RP, Howards SS: Daily spermatozoal production and epididymal spermatozoal reserves of the human male. J. Urol. 124:211, 1980.

Forrest JB, Turner TT, Howards SS: Cyclophosphamide and the blood-testis barrier. Surge. Forum 30:552-553, 1979.

Howards SS, Bergman S: Analysis of the feasibility of storing human semen for future artificial insemination. Trans. Amer. Assoc. of Genitourinary Surg. 71:45-46, 1979.

D'Addario DA, Turner TT, Howards SS: Effect of vasectomy on the osmolality of hamster testicular and epididymal intraluminal fluid. J. Androl. 1(4):167-170, 1980.

Turner TT, D'Addario DA, Howards SS: [3H]-3-0-methyl-D-glucose transport from blood into the lumina of the seminiferous and epididymal tubules of intact and vasectomized hamsters. J. Reprod. Fert. 60:285-289, 1980.

Saypol DC, Turner TT, Howards SS: The effect of surgically induced cryptorchidism in testicular blood flow. Surg. Forum, 31:569-572, 1980.

Jenkins AD, Lechene CP, Howards SS: The concentrations of seven elements in the intraluminal fluids of the rat seminiferous tubule, rete testis, and epididymis. Biol. Reprod. 23:981-987, 1980.

Forrest JB, Howards SS, Gillenwater JY: Osmotic effects of intravenous contrast agents on renal function. J. Urol. 125:147, 1981.

Thorner MO, Martin WH, Rogol AD, Morris JL, Pennyman RL, Conway BP, Howards SS, Walfman MG, MacLeod RM: Rapid regression of pituitary prolactinomas during bromocriptine treatment. J. Clin. Endocrinol. and Metabol. 51(3):438-445, 1980.

Forrest JB, Buschi AJ, Howards SS: Neonatal urinary ascites secondary to distal ureteral stenosis. J. Urol. 124:919-920, 1980.

Forrest JB, Turner TT, Howards SS: Cyclophosphamide, vincristine, and the blood testis barrier. J. Invest. Urol. 18:443, 1981.

Miller JB, Howards SS, McLeod RM: Serum prolactin in organic and psychogenic impotence. J. Urol. 123:862-864, 1980.

Hinton BT, Howards SS: Permeability characteristics of the epithelium in the rat caput epididymidis. J. Reprod. Fert.63:95-99, 1981.

Saypol DC, Howards, SS, Turner TT: Influence of surgically induced varicocele on testicular blood flow, temperature, and histology in adult rats and dogs. J. Clin. Invest. 68:39-45, 1981.

Turner TT, D'Addario DA, Howards SS: The blood-epididymal barrier to [3H]-inulin in intact and vasectomized hamsters. Invest. Urol. 19(2):89-91, 1981.

Turner TT, Giles RD, Howards SS: The effects of estradiol valerate on the rat blood-testis and blood-epididymal barriers to [3H]-inulin. J. Reprod. Fert. 63:355-358, 1981.

Turner TT, Cochran RC, Howards SS: The transfer of steroids across the hamster blood testis and blood epididymal barriers. Biol. Reprod. 25:342-348, 1981.

Turner TT, Howards SS: Microscopic vasoepididymostomy: examination of epididymal lumen fluid content for presence of spermatozoa. Fert. Steril 36(4):533-534, 1981.

Hinton BT, Howards SS: Permeability characteristics of the epithelium in the rat caput epididymidis. J. Reprod. Fert. 63:95-99, 1981.

Forrest JB, Sabio H, Howards SS: Testicular relapse of childhood acute leukemia. J. Surg. Oncology 21:132-134, 1982.

Hinton BT, Howards SS: Micropuncture and microperfusion techniques for the study of testicular physiology. Annals of the New York Academy of Sciences 29:43, 1982.

Turner TT, D'Addario DA, Forrest JB, Howards SS: The effects of experimental cryptorchidism on the entry of [3H]-inulin and [3H]-horseradish peroxidase into the lumen of the rat seminiferous tubule. J. Androl. 3:178-183, 1982.

Goldstein, Gerald interviews Stuart S. Howards: Cancer trends: In neoplastic diseases, a role for human sperm banking. Virginia Medical 109:514-515, 1982.

Hinton BT, Howards SS: Rat testis and epididymis can transport [3H]-3-0-methyl-D-glucose, [3H]-inositol and [3H]- -aminoisobutyric acid across the epithelia in vivo. Biol. Reprod. 27:1181-1189, 1982.

Forrest JB, Sabio H, Howards SS: Testicular relapse in acute childhood leukemia. J. Surg. Oncology 21:132-134, 1982.

Howards SS: Guest Editorial: Infertility. J. Urol. 128:64, 1982.

Feldman PS, Howards SS, Harris C, Harris C: A geographic cluster of testicular seminomas. J. Urol. 129:839-840, 1983.

Proctor KG, Howards SS: The effect of sympathomimetic drugs on post-lymphaden-ectomy aspermia. J. Urol. 129:837-838, 1983.

Hinton BT, Hernandez H, Howards SS: The male antifertility agents alpha chlorohydrin, 5-thio-D-glucose, and 6-chloro-6-deoxy-D-glucose interfere with sugar transport across the epithelium of the rat caput epididymidis. Am. Soc. Androl. 4:216-221, 1983.

Hinton BT, Hernandez H, Howards SS: Luminal absorption of some organic solutes from the proximal regions of the rat epididymis. Submitted to J. Reprod. Fert.

Saypol DC, Peterson GA, Howards SS, Yazel JJ: Impotence: Are the newer diagnostic methods a necessity? J. Urol. 130:260-262, 1983 (Aug.).

Jenkins AD, Lechene CP, Howards SS: The effect of spironolactone on the elemental composition of the intraluminal fluids of the seminiferous tubules, rete testis and epididymis of the rat. J. Urol. 129:851-854, 1983 (April).

Jenkins AD, Lechene CP, Howards SS: The effect of estrogen administration in vivo on the elemental composition of the intraluminal fluids of the seminiferous tubules, rete testis, and epididymis of the rat. J. Androl. 4:272-275, 1983.

Jenkins AD, Lechene CP, Howards SS: The effects of cyproterone acetate on the elements in the intraluminal fluids of the testis and epididymis of the rat. Arch. of Androl. 11:151-155, 1983.

Turner TT, D'Addario DA, Howards SS: The transepithelial movement of 3H-3-0-methyl-D-glucose in the hamster seminiferous and cauda epididymal tubules. Fert. Steril. 40(4):530, 1983 (Oct.).

Howards SS: Varicocele. Fert. Steril. 41(3):356-358 1984.

Forrest JB, Howards SS: Survival following orchiectomy for stage D adenocarcinoma of the prostate. J. Surg. Oncol. 25:71-72, 1984.

Lipshultz LI, Howards SS: Evaluation of the subfertile man. Seminars in Urology 2(2):73-81, 1984 (May).

Turner TT, Jones CE, Howards SS, Ewing LL, Zegeye EB, Gunsalus GL: On the androgen microenvironment of maturing spermatozoa. Endocrinology 115(5):1925-1932, 1984.

Lippert MC, Teates CD, Howards SS: Detection of enteric-urinary fistulas with a noninvasive quantitative method. J. Urol. 132:1134, 1984 (Dec).

Green KF, Turner TT, Howards SS: Varicocele: Reversal of the testicular blood flow and temperature effects by varicocelectomy. J. Urol. 131:1208-1211, 1984.

Herr JC, Fowler JE Jr, Howards SS, Sigman M, Sutherland WM, Koons DJ: Human antisperm monoclonal antibodies constructed postvasectomy. Biol. Reprod. 32:695-711, 1985.

Turner TT, Ewing LL, Jones CE, Howards SS, Zegeye B: Androgens in tissue and luminal fluids of male rat reproductive tract: Hypophysectomy and steroid replacement. Am. J. Physiol. 248:E274-E280, 1985.

Green KF, Turner TT, Howards SS: Effects of varicocele after unilateral orchiectomy and sympathectomy. J. Urol. 134:378-383, 1985.

Turner TT, Ewing LL, Jones CE, Howards SS, Zegeye B: Androgens in various fluid compartments of the rat testis and epididymis after hypophysectomy and gonadotropin supplementation. J. Androl. 6:353-358, 1985.

Hurt GS, Howards SS, Turner TT: Repair of experimental varicocele in rat: Long-term effects on testicular blood flow and temperature and cauda epididymal sperm concentration and motility. J. Androl. 7(5):271-276, 1986 (Sept./Oct.).

Herr JC, Flickinger CJ, Howards SS, Yarbro S, Spell DR, Caloras D, Gallien TN: An enzyme-linked immunosorbent assay for measuring antisperm autoantibodies following vasectomy in Lewis rats. Amer. J. Reprod. Immun. & Microbiol. 11:75-81, 1986.

Hadziselimovic F, Snyder H, Duckett J, Howards SS: Testicular histology in children with unilateral testicular torsion. J. Urol. 136 (1, part 2):208-210, July 1986.

Wilson TA, Wachtel SS, Howards SS, Linniger J, Johanson A: HY intermediate phenotype in male pseudohermaphroditism. J. Ped., 1986.

Flickinger CJ, Yarbro ES, Howards SS, Herr JC, Caloras TN, Gallien TN, Spell DR: The incidence of spermatic granulomas and their relation to testis weight after vasectomy and vasovasostomy in Lewis rats. J. Androl. 7:285-291, 1986.

Howards SS, Sigg C, Shutte B: Testicular biopsy (Dialogues in Pediatric Urology 9(10):1-8, October 1986.

Herr JC, Flickinger CJ, Howards SS, Yarbro ES, Spell DR, Caloras D, Gallien TN: Temporal appearance of antisperm autoantibodies in Lewis rats following vasectomy. J. Androl. 8:253-258, 1986.
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