

BARRY T. HINTON, Ph.D.
CURRICULUM VITAE

Personal data:

Place of Birth: Chadwell-St-Mary, Essex, England
Nationality: British and U.S.A. (dual citizen)

Education:

B.Sc. (Hons) Pharmacology & Biochemistry, 1974.
University of East London, U.K.

Ph.D., Reproductive Physiology, 1979.
The Babraham Institute, Cambridge, U.K.

Positions Held:

Post-Graduate Scholar, 1974-75, Max-Planck Institute for Biophysics, Frankfurt, Germany.

Pharmacology Instructor, 1975-79, University of Cambridge, U.K.

Ph.D. Student, 1975-1979

The Babraham Institute (Institute of Animal Physiology), Cambridge, U.K.

Ph.D. Thesis: The concentration and movement of luminal fluid in the testis and epididymis.

The Rockefeller Foundation Individual Postdoctoral Fellow, 1979-81

Research Associate, 1981-82; Instructor, 1982-83

Department of Urology, University of Virginia

Adjunct Faculty: Collaborative Scientist, 1982-2000.

Yerkes Regional Primate Research Center, Emory University, Atlanta.

Assistant Professor, 1983-1988

Associate Professor, 1988-1995

Department of Cell Biology, University of Virginia

Current Position:

Professor, 1995-pres.

Department of Cell Biology, University of Virginia

Awards:

Research:

Rockefeller Foundation Individual Postdoctoral Fellowship, 1979-1981

Young Andrologist Award, 1989. American Society of Andrology.

Outstanding Original Research Award, 1997. Award for best paper published in Journal of Andrology, 1997: Rudolph & Hinton, J, Androl., 18:501-512, 1997. American Society of Andrology, presented March 1998.

Runner-Up, Outstanding Original Research Award, 1998. Markey et al., J. Androl., 19:92-99, 1998. American Society of Andrology, presented April, 1999.

Visiting Professor, Shanghai Second Medical School, Shanghai, China October 2002

Teaching:

Robert Bennett Bean Teaching Award, 1989, 1997, 2001, 2003, 2009; University of Virginia School of Medicine. Presented by the second year class in recognition of excellence in teaching of the basic medical sciences.

Distinguished Professor Award, 1989, 1991, 1992, and 1993; University of Virginia Student Medical Society. Presented by the first year class in recognition of excellence in teaching.

School of Medicine Dean's Excellence in Teaching Award, 1996. Presented by the students and faculty in the School of Medicine in recognition for excellence in teaching.

David Harrison University of Virginia Teaching Award, 1996. Presented by the faculty of the University of Virginia in recognition for excellence in teaching.

Basic Sciences Teaching Award, 2000, 2004. Presented by the first year class in recognition of excellence in teaching of the basic medical sciences.

Founding member, the Academy of Distinguished Educators, School of Medicine, 2003.

Basic Science Teaching Award for Excellence as a Small Group Leader, 2009. Presented by the UVA School of Medicine Class 2011.

Mulholland Award for Teaching Excellence in Foundations of Medicine, 2009, Presented by the UVA School of Medicine Class 2012

Mulholland Award for Teaching Excellence in Foundations of Medicine, 2010, Presented by the UVA School of Medicine Class 2013

Other:

Distinguished Service Award. American Society of Andrology, 2005.

Editorial Board: Journal of Andrology (1986-1990)
Editorial Advisory Board, Asian Journal of Andrology (1998-pres)
Associate Editor, International Journal of Andrology (2002-2009)

Reviewer - Journals:

American Journal of Anatomy
American Journal of Physiology
Asian Journal of Andrology
Biochimica et Biophysica Acta
Biology of Reproduction
Cell & Molecular Biology
Development
Developmental Biology
Endocrinology
European Journal of Endocrinology (Finland)
Fertility & Sterility
Gene
Genes & Development
International Journal of Andrology
Journal of Andrology
Journal of Endocrinology (U.K.)
Journal of Reproduction & Fertility (U.K.)
Journal of Reproductive Immunology
Journal of Structural Biology
Journal of Urology
Molecular Endocrinology
Molecular Reproduction & Development (U.K)
Peptides
Reproduction, Fertility & Development (Australia)

Reviewer - Books:

Grant's Atlas of Anatomy, 9th Ed.
A.D.A.M. Atlas of Anatomy, 1st Ed.
Grant's Dissector, 11th Ed.

Reviewer - Grants:

NIH site reviewer, Ohio State University, 1981
March of Dimes, 1989
Medical Research Council, Canada, 1991, 1996, 1997.
USDA, ad hoc reviewer, 1993, 1997, 1998
Smithsonian Institute, 1993
Medical Research Council Australia, 1993
Jeffress Trust, 1993, 1994
Lalor Foundation, 1994, 2000
Health Research Council of New Zealand, 1994
NIH-NICHD, Reproductive Sciences Branch Study Section Panel Member, 1995
National Science Foundation, ad hoc reviewer, 1995
USDA Study Section, Panel Member, Washington, D.C., 1996
Chair, NIH-NICHD, Reproductive Endocrinology Study Section, ad hoc panel, 1997
NIH-NICHD, Reproductive Biology Study Section, Panel Member, 1992, 1996, 1998, 2000 (ad hoc)
NIH-NICHD, Reproductive Biological Sciences, Panel Member, 2000 (ad hoc)
Hong Kong Medical Research Council, 2000, 2004, 2006
NIH-NICHD Reproductive Biology Study Section, Panel Member (Full member), 2001-2005
Medical Research Council, South Africa, 2002
Chair, NIH-NICHD ad hoc review panel, July 2004
NIH-NICHD Cell Molecular Integrative Reproduction ad hoc, 2006, 2007
NIH TRO1 reviewer, ad hoc, 2009

Invited Speaker - Seminars:

University of Virginia: Departments of: Cell Biology, Biology, Chemistry, Physiology, Pathology, Endocrinology, Reproductive Sciences Group, Medical Center Hour.

Universities and Institutes

Emory University
Vanderbilt University
Georgetown University
Kent State University
University of Adelaide, Australia
University of Cambridge, England
Mary Baldwin College
Virginia Tech
Colorado State University
Baylor Medical College
University of Pennsylvania
Worcester Foundation
University of Connecticut
Pennsylvania State University
Bucknell University

Eastern Virginia Medical School (Jones Institute)
Hofstra University
McMaster University, Canada.
University of Turku, Finland
University of Munster, Munster, Germany
Hormone and Fertility Institute, Hamburg, Germany
University of Newcastle, Newcastle, Australia
University of Canberra, Canberra, Australia
University of Pennsylvania
Harbor-UCLA, California
Shanghai Second Medical School, China
University of Texas, Houston
Medical College of South Carolina, Charleston
University of Wisconsin, Madison
Imperial College, London, UK
University of South Florida
University of Illinois, Champaign
Harvard/BW Hospital, Boston
Texas A&M, College Station, TX
Harvard University, MA
University of California, Davis

Invited Speaker - National & International Meetings:

Carnitine Biosynthesis, Metabolism & Function, University of Texas, Dallas, March 1979.

Comparative Biology of Primate Semen, University of Siena, Italy, June 1980.

Blood-Tissue Barriers & Transport Mechanisms, Detroit Physiological Society, April 1988.

Mid-Atlantic Reproductive Meetings, June 1988, 1991, 1993, 1995, 1999.

Epididymis and Male Fertility, Chinese University of Hong Kong, Hong Kong, November 1992.

American Society of Andrology, Postgraduate Course, Springfield, Illinois, April 1994.

Seventh International Symposium on Spermatology, Cairns, Australia October 1994.

NIH Workshop on Targets for Contraceptive Development: The Sperm Membrane in Fertilization, Bethesda, MD., November 1994.

Mellon Reproductive Biology Center's Meeting: New Frontiers in Male Contraception, Durham, North Carolina, April 1995.

Gordon Research Conference: Reproductive Tract Biology, Plymouth State College, N.H., July 1996.

Schering Foundation/Rockefeller Foundation/CONRAD Workshop on Epididymis and Contraception, Berlin, Germany, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2004.

Boden Conference on the Epididymis, Sydney, Australia, February 1998.

Symposium on the Epididymis, University of Western Australia, March 1998.

Schering Foundation/Rockefeller Foundation Epididymal Workshop, Bellagio, Italy, August 1998.

Society of Toxicology: Postgraduate Course, Evaluation of Male Reproductive Toxicity. New Orleans, March, 1999.

Serono Symposium (Testis Workshop) - From Stem Cell to Sperm Function, Louisville, KY, April 1999.

European Society of Human Reproduction and Embryology Annual Meeting; Andrology Special Interest Group: Recent Advances in Male Contraception. Tours, France, June 1999.

Schering Foundation/The Rockefeller Foundation Workshop on Epididymis. Elmau, Germany, September, 1999.

NIH-NICHD Workshop on Male Contraception, Bethesda, MD, September 1999.

NIH-NICHD Advisory Meeting on Post-Testicular Male Contraception, Bethesda, MD, March 2000.

First European Congress of Andrology, European Academy of Andrology, L'Aquila, Italy, March 2000.

Schering Foundation/ The Rockefeller Foundation Workshop on Epididymis, Berlin, September, 2000.

American Physiology Society, Experimental Biology Meeting: Symposium on Ion Transport in Gametes and Reproductive Epithelia, Orlando, Florida March 2001.

Frontiers in Reproduction Symposium: Reproductive Genetics, Genomics and Proteomics, Boston, MA, June 2001.

Third International Conference on the Epididymis, Charlottesville, Virginia, May/June 2002.

Schering Foundation/Rockefeller Foundation Workshop on the Epididymis, Bellagio, Italy, October 2002.

First Asia-Pacific Forum on Andrology, Symposium on the Epididymis. Shanghai, China October 2002.

Australian Society of Reproductive Biology Annual Meeting, Symposium on Development and Techniques, Melbourne, Australia, September 2003.

NIH-NICHD meeting “The Future of Male Contraception”, Seattle, WA, September 2004.

American Society of Andrology, Symposium on Male Contraception, Seattle, WA. April 2005.

Satellite Meeting “Post-Meiotic Approaches to Male Contraception”, International Congress of Andrology Satellite Meeting, Hong Kong, June 2005.

FASEB, Experimental Biology 2006 Symposium “Oxidative Stress in Epithelial Tissues”, San Francisco, April 2006.

American Society of Andrology, Trainee Affairs invited speaker, April 2006.

Gordon Research Conference Male Reproductive Tract Biology, June 2006.

International Symposium on Animal Biology of Reproduction, Belo Horizonte, Brazil, November 2006.

4th International Conference on the Epididymis, Chatel-Guyon, France, December 2006.

Male Contraceptive Meeting, Berlin, Germany, May 2007.

Male Contraceptive Meeting UO1 NIH grant report, Seattle, September 2007.

10th Annual Regional Meeting of Biomedicine, Botucatu, Brazil November 2007.

First Workshop on Male Reproductive Biology, Botucatu, Brazil November 2007.

Society for the Study of Reproduction Symposium Speaker, Hawaii, May 2008.

Gordon Conferences, Male Reproductive Tract Session Leader, June 2008.

American Society of Andrology Symposium Speaker and Trainee Affairs Speaker, Philadelphia, April 2009.

Fifth International Symposium on the Biology of Vertebrate Sex Determination, Hawaii, April 2009.

Gordon Research Conference on Reproductive Tract Biology, August 2010.

5th International Conference on the Epididymis, Sao Paulo, Brazil, October 2010.

Society Memberships:

Society for the Study of Fertility (U.K.)
American Society of Andrology
Society for the Study of Reproduction
Society for Developmental Biology

Research Grant Support:**PI:**

Recently completed:

NIH-NICHD RO1 HD042089-01; Functional analysis and regulation of epididymal OCTN2. 25% effort, 07/1/03 – 6/31/10

6/30/09 – 7/1/10 UVA Research and Development; Tubular morphogenesis of the developing Wolffian/epididymal duct, 5% effort

Current

NIH-NICHD RO1 HD052035; Lumicrine regulation of epididymal function. 35% effort, 07/1/06-06/31/11

Submitted

NIH-NICHD RO1 HD068365 Regulation of postnatal epididymal cell proliferation. 35% effort, 04/01/2011-03/31/2016

Current Scientific Collaborations:

Involves visits to institutes to perform experiments/advise:

Department of Physiology, University of Turku, Finland
Institute of Reproductive Medicine of the University, Münster, Germany
Shanghai Second Medical School, Shanghai, China
University of Minnesota, MN

Committees:

University of Virginia

Council on Medical Education (CME) (1986-89)
CME Task Force on Teaching Effectiveness (1987-88)
CME Subcommittee on Teaching Awards (1989, 1993, 1997)
Department of Cell Biology Graduate Student Committee (1988-91)
Department of Cell Biology Faculty Search Committee (1989-90; 91-92)
Preclinical Committee (PC; 1990-2000)

Orthopedic Chair Search Committee (1990-92)
 Elected to University of Virginia Faculty Senate (1991-95)
 Student Academic Support Committee (1992-2000)
 Admissions Committee: Medical Academic Advancement Program (MAAP: 1992)
 Promotions Committee: Postbacc Program, School of Medicine (1992-1996)
 Chair, Admissions Committee MAAP (1993)
 Committee on Committees, School of Medicine (1993-2000)
 Ad hoc Grievances Committee, School of Medicine (1993)
 Admissions Committee, School of Medicine (1993-1999)
 Medical Student Promotions Committee, School of Medicine (1996-2002)
 Medical Student Advocacy Committee, School of Medicine (1996-2000)
 School of Medicine LCME Task Force (1997-98)
 Chair, Anatomist Search Committee, Department of Cell Biology (1997-98)
 Task Force on Medical School Objectives for CME (1998)
 Electives Committee (2000-2002)
 Principals of Medicine Committee (2000-2002; 2005-pres)
 Elected to University of Virginia Faculty Senate (2002-2006)
 Activities Committee, Academy of Distinguished Educators (2004-pres)
 Chair, Anatomist Search Committee, Department of Cell Biology (2005-2006)
 Co-Chair School of Medicine Sub-Committee Education Objectives, LCME Task Force Re-Accreditation Project (2005-2006)
 Academic Committee, Cell & Development Graduate Student Program (2006-pres)
 University of Virginia Internal Review (grants) Committee (2008-2009)
 Postdoctoral T32 Review Committee, Center for Research in Reproduction, 2009-pres
 Summer Medical and Dental Education Program (previously MAAP/Postbac) for under-represented minorities Advisory Committee
 Co-Chair, Teacher Coaching Program, Academy of Distinguished Educators (2009-pres)
 Member, Mentoring Institute for under represented minorities (2010-pres)

National:

American Society of Andrology:

Nominating Committee (1982-84)
 Student Affairs Committee (1982-85)
 Publications Committee (1984-88)
Chair, Student Affairs Committee (1985-87)
Elected to Executive Council (1987-90)
 1989 Program Committee (1988-89)
 Future Meetings Committee (1989-90)
 Annual meeting abstracts reviewer (multiple years)
Elected Secretary (1992-1995)
 International Liaison Committee (1993-1998)
 1995 Program Committee (1993-1994)
 1997 Program Committee (1996-1997)

Chair, International Liaison Committee (1995-1998)
Chair, 1998 Annual Meeting Scientific Program Committee (1996-1998).
Elected Vice President (1998-1999)
President (1999-2000)
2002 Annual Meeting Program Committee (2000-2002)
Future Meetings Committee (2003-2008)
2010 Annual Meeting Program Committee (2008-pres)
2011 Annual Meeting Program Committee (2009-pres)
Trainee Affairs Committee (2009-pres)

American Society of Reproductive Immunology:
Annual Meeting Local Organization Committee (1991)

Society for the Study of Reproduction:
Program Committee/Abstracts reviewer 1991, 1993, 1996, 2007, 2008, 2009
annual meetings.
Program Committee, 2006-2009

Serono Symposia:
Testis Workshop Scientific Program Committee, 1997-2002

National Institutes of Health
Contributor and reviewer of the 5 year plan for the NIH-NICHD Reproductive
Biology Branch

Students/Postdocs/Fellows:

Independent Research: (Undergraduates & Medical students):

Darell Buck
Steven Heinmann
Richard McCarthy
Lee Ann Rollins
Amy Pepper
Frank Gordon
Andrea McGuire
David deHoll (MD)
Dawn Roselli (MD)
Helen MacMillan (MD/PhD)
Joan Stalzer (MD)
Vivia Liang
Marc Harvey (MD)
Abbe Hoffman
Giza High
Richard Peng
Judah Hwang
Sherry Xuetong Wei

Chirag Patel (currently in lab)
JingJing Cui (currently in lab)

Ph.D. Graduate Student Committees (Dept of Cell Biology, UVA unless otherwise stated):

Wendy Wilson (Grad. 1986)
Robert McGee (Grad. 1987)
Lisa Kisalus (Grad. 1987)
Kelly Beecher (Grad 1992; MS)
James Foster (Grad. 1993)
Alex Freerman (Grad. 1994)
Cecilia Videaus (Grad. 1998)
Elizabeth Norton (Grad. 2000)
Danyelle Townsend (Grad. 2001)
Connie Grafer (1996) - Department of Microbiology
Fan Yeung (Grad. 2001)
Patrick Martin (Grad. 2003)
Sunil Tholpady (MD/Ph.D; Grad 2003)
Shannon Beck (Grad 2005)
George Kao (Grad 2006; Cell Biology, University of South Carolina)
Tresa Thompkins (2004-pres)
Isabel Gonzales (2006-pres)

Graduate Student (Ph.D.) Advisor:

Kathryn Colonna (Grad. 1990)
Danette Mattmueller (Grad. 1992)
Michael Palladino (Grad. 1994)
Zi Jian Lan (Grad. 1998).
Jennifer Kirby (M.D./Ph.D; Grad. 2003)
Sallie Crenshaw (nee Fox) (Grad 2008)

Postdocs/Fellows:

Kevin Billups, MD (1992-93)
Dan Rudoph, Ph.D. (1993-97).
Caroline Markey, Ph.D. (1995-97).
R. John Lye, Ph.D. (1997-Pres)
Carmen Rodriguez, Ph.D. (1999-2003)
Daniela Bomgardner, M.D. (2003-2007)
Leanne Cotton, Ph.D. (2005-2008)
Bingfang Xu, Ph.D. (2007-pres)
Rana Abdel-Fattah (2008-pres)

External Ph.D. Examiner

David W. Fisher, University of the Western Cape, South Africa. Mentor: G. Van der Horst, 1998
Brett Nixon, University of Newcastle, Australia. Mentor: Michael K. Holland, 1999
Heath Ecroyd, University of Newcastle, Australia. Mentor; Prof. R. John Aitken, 2003
Petra Sipila, University of Turku, Finland. Mentor: Ilpo Huhtaniemi, 2003.
Katja Wolski, University of South Florida, Tampa. Mentor: Don Cameron, 2006
Amy Glover, University of Otago, New Zealand. Mentor: Steve Assinder, 2007
Yun Hwa Lee, University of Newcastle, Australia. Mentor: John Aitken, 2008

Teaching Experience

Pharmacology Instructor to medical students, University of Cambridge, U.K. (1975-79).

Histology Laboratory Instructor to medical students, University of Virginia (1981-1983).

Gross Anatomy Lecturer to medical students, University of Virginia (1983-pres)

Pharmacology (1980-1982); Elective course in Health Care (1983-1990) School of Nursing, University of Virginia

Summer Family Practice Course for Medical Students, University of Virginia (1984-96)
Virginia High School Teachers Refresher Course in Developmental Biology.

Invited speaker, undergraduate course in Biology, Dept of Biology, University of Virginia (1987-1995)

Head and neck anatomy and development review sessions to Residents, Department of Plastic Surgery (1993-pres), and Department of Otolaryngology (1994-pres)

MAAP II summer program in Gross Anatomy (1990-2001). This program was designed for under-represented minorities and/or under-privileged students attending Medical School.

Mini Med School program (1995-pres), University of Virginia. A lecture on “Faces of Anatomy” is given as part of a series of lectures to the Charlottesville community (<http://www.healthsystem.virginia.edu/internet/minimed/>).

Have given the same lecture to High School students and on Parent’s Day to parents of the first year medical school class (2006-pres).

Graduate Student Colloquium on Development. Department of Cell Biology, 2004

Graduate Student Colloquium on Evolution of Fertilization and Activation of Development, Department of Cell Biology, 2006. Co-Director

Presentation Workshops: Teaching Resource Center, UVA, UVA Medical School Faculty Development programs and Residency Programs (Urology, Otolaryngology),

UVA SEAS Center for Diversity in Engineering, FBI Academy (2009-pres), School of Nursing

Frontiers in Reproduction Course, Wood's Hole, MA. Teach the unit on tubular morphogenesis and development of the Wolffian duct (2007-pres)

Mentor, The Mentoring Institute, Graduate Student Diversity Program, University of Virginia (2010-pres)

Course Director

Advances in Reproductive Biology (Anat 802) Graduate student course (1984-1995)

Gross and Developmental Anatomy. First year medical students (1990-2002)

Co-Course Director, MAAP II Summer Program in Gross Anatomy (1990-2000)

Interim Course Director, Gross and Developmental Anatomy (2006-2007)

Organizer/Chair

University of Virginia

Co-Organizer of Colloquium on Evolution of Fertilization for graduate students, University of Virginia (1988)

Co-Organizer of Reproductive Sciences Seminar Series, University of Virginia (1986-88)

Organizer and Co-Organizer of Reproductive Biology Journal Club, University of Virginia (1986-88; 1999-pres).

Organizer of seminar series, Department of Cell Biology (1989-90)

Organizer of 2nd, 11th and 14th Mid-Atlantic Reproductive Meeting, University of Virginia (1989, 1998, 2001)

National/International Meetings

Session Chair & Co-Chair American Society of Andrology Annual Meetings: New Orleans 1989; Washington D.C. 1992; Tampa 1993; Raleigh, NC 1995; Baltimore, 1997; Boston, 2000; Baltimore 2004, Philadelphia 2009.

Organizer and Chair, American Society of Andrology Sponsored Symposium: "Advances in Prostatic Research and Disease", International Congress of Andrology Meeting, Salzburg, Austria, May 1997.

Session Chair, 11th European Workshop on Molecular and Cellular Endocrinology of the Testis. St. Malo, France, May 2000

Co-Organizer/Chair NIH-NICHD: Workshop on Male Contraception, 1999.

Organizer and Chair of Symposium "Homeobox Genes and Urogenital Development" The Rockefeller Foundation/ Ernst Schering Research Foundation., Elmau Castle, Germany, October 1999

Co-Organizer of Third International Epididymal Meeting, May 2002, Charlottesville, USA.

Co-Organizer, Post-Meiotic Approaches to Male Contraception, June 2005, Hong Kong. Satellite Meeting to International Congress of Andrology (Seoul, Korea)

Society for the Study of Reproduction, Annual Meeting. Organizer of and chair of one session, 2007, 2009

Gordon Research Conference, Reproductive Tract Biology. Organizer of and chair of one session, 2008

Scientific Program Committee, Fifth International Conference on the Epididymis. Sao Paulo, Brazil, October 2010.

Published Papers

Peer-Reviewed Journals (including peer-reviewed reviews)

1. Ullrich, K.J., Frömter, E., Hinton, B.T., Rumrich, G., Kleinzeller, A. Specificity of sugar transport across the brush-border of the rat proximal tubule. *Curr. Prob. Clin. Biochem.*, 6:256-261, 1976.
2. Setchell, B.P., Hinton, B.T., Jacks, F. & Davies, R.V. The restricted penetration of iodinated rat FSH and LH into seminiferous tubules of the rat testis. *Molec. Cell Endocrinol.*, 6:59-69, 1976.
3. Setchell, B.P., Davies, R.V., Gladwell, R.T., Hinton, B.T., Main, S.J., Pilsworth, L. & Waites, G.M.H. The movement of fluid in the seminiferous tubules and rete testis. *Ann. Biol. Anim. Biochem. Biophys.*, 18:623-632, 1978.
4. Hinton, B.T., Dott, H.M. & Setchell, B.P. The measurement of the motility of rat spermatozoa collected by micropuncture from the testis and from different regions along the epididymis. *J. Reprod. Fert.*, 55:167-172, 1979.

5. Hinton, B.T., Snoswell, A.M. & Setchell, B.P. The concentration of carnitine in the luminal fluid of the testis and epididymis of the rat and some other mammals. *J. Reprod. Fert.*, 58:401-406, 1979.
6. Hinton, B.T., White, R.W. & Setchell, B.P. The concentration of free myo-inositol in the luminal fluid of the mammalian testis and epididymis. *J. Reprod. Fert.*, 58:395-399, 1980.
7. Hinton, B.T. & Setchell, B.P. The concentration of glycerophosphocholine, phosphocholine and inorganic phosphate in the luminal fluid of the rat testis and epididymis. *J. Reprod. Fert.*, 58:401-406, 1980.
8. Hinton, B.T. & Setchell, B.P. A simple device for measuring nanolitre volumes of fluid. *Experientia*, 36:624, 1980.
9. *Hinton, B.T. The epididymal microenvironment. A site of attack for a male contraceptive? *Invest. Urol.*, 18:1-10, 1980.
10. Hinton, B.T., Brooks, D.E., Dott, H.M. & Setchell, B.P. The effects of carnitine and some related compounds on the motility of rat spermatozoa from the caput epididymidis. *J. Reprod. Fert.*, 61:59-64, 1981.
11. Hinton, B.T. & Setchell, B.P. Micropuncture and microanalytical studies of the monkey and baboon epididymis, and the human ductus deferens. *Am. J. Primatol.*, 1:251-256, 1981.
12. Hinton, B.T., Pryor, J.P., Hirsch, A.V. & Setchell, B.P. The concentration of some inorganic and organic compounds in the luminal fluid of the human ductus deferens. *Int. J. Androl.*, 4:457-461, 1981.
13. Pilsworth, L.M.C., Hinton, B.T. & Setchell, B.P. Effects of obstruction of flow of seminiferous tubule fluid on the germinal epithelium in the rat. *J. Reprod. Fert.*, 63:347-353, 1981.
14. Hinton, B.T. & Howards, S.S. Permeability characteristics of the epithelium in the rat caput epididymidis. *J. Reprod. Fert.*, 63:95-99, 1981.
15. Suarez, S.S., Hinton, B.T. & Oliphant, G. Binding of a marker for immunoglobulins to the surface of rabbit testicular, epididymal and ejaculated spermatozoa. *Biol. Reprod.*, 25:1091-1097, 1981.
16. Samarzija, I., Hinton, B.T. & Frömter, E. Electrophysiological analysis of rat renal sugar and amino acid transport. II. Dependence on various transport parameters and inhibitors. *Pflügers Arch.*, 393:190-197, 1982.
17. Hinton, B.T. Hyperglycemia in urethane-anesthetized rats: Involvement of the adrenal gland. *Lab. Anim. Sci.*, 32:251-252, 1982.

18. Hinton, B.T. & Howards, S.S. The rat testis and epididymis can transport 3H-3-O-methyl-D glucose, 3H-inositol and 3H-a-aminoisobutyric acid across its epithelia in vivo. *Biol. Reprod.*, 27:1181-1189, 1982.
19. Hinton, B.T., Hernandez, H. & Howards, S.S. The antifertility agents alpha chlorhydrin, 5 thio-D-glucose and 6-chloro-6-deoxy-D-glucose interfere with sugar transport across the epithelium of the rat caput epididymidis. *J. Androl.*, 4:216-221, 1983.
20. Hinton, B.T. & Keefer, D.A., Evidence for protein absorption from the lumen of the seminiferous tubule and rete of the rat testis. *Cell Tissue Res.*, 230:367-375, 1983.
21. Gould, K.G., Young, L.G. & Hinton, B.T. Alteration in surface charge of chimpanzee sperm during epididymal transit and at ejaculation. *Arch. Androl.*, 12:9-17, 1984.
22. Hoffer, A.P. & Hinton, B.T. Morphological evidence for a blood-epididymis barrier and the effects of gossypol on its integrity. *Biol. Reprod.*, 30:991-1004, 1984.
23. Olson, G.E., & Hinton, B.T. Regional differences in luminal fluid polypeptides of the rat testis and epididymis revealed by two-dimensional gel electrophoresis. *J. Androl.*, 6:20-34, 1985.
24. Young, L.G., Hinton, B.T. & Gould, K.G. Surface changes in chimpanzee sperm during epididymal transit. *Biol. Reprod.*, 32:399-412, 1985.
25. Hinton, B.T. & Keefer, D.A., Binding of 3H-aldosterone to a single population of cells within the rat epididymis. *J. Steroid Biochem.*, 23:231-233, 1985.
26. Hinton, B.T. & Hernandez, H. Selective luminal absorption of L-carnitine from the proximal regions of the rat epididymis: Possible relationships to development of sperm motility. *J. Androl.*, 6:300-305, 1985.
27. Young, L.G., Gould, K.G. & Hinton, B.T. Lectin binding sites on the plasma membrane of epididymal and ejaculated chimpanzee sperm. *Gamete Res.*, 14:75-87, 1986.
28. Young, L.G., Gould, K.G. & Hinton, B.T. Changes in binding of a 27 kilodalton chimpanzee cauda epididymal protein glycoprotein component to chimpanzee sperm. *Gamete Res.*, 18:163-178, 1987.
29. Hinton, B.T. & Hernandez, H. Neutral amino acid absorption by the rat epididymis. *Biol. Reprod.*, 37:288-292, 1987.
30. Gould, K.G., Young, L.G. & Hinton, B.T. Alterations in primate sperm motility with maturation and during exposure to theophylline. *Am. J. Primatol.*, 15:325-336, 1988.

31. Hinton, B.T. & Turner, T.T. Is the epididymis a kidney analog ? *News Phys. Sci.* 3:28-31, 1988.
32. Veeramachaneni, D.N.R., Amann, R.P., Palmer, J.S. & Hinton, B.T. Proteins in luminal fluid of the ram excurrent ducts: Changes in composition and evidence for differential endocytosis. *J. Androl.*, 11:140-154, 1990.
33. Hinton, B.T. The testicular and epididymal luminal amino acid microenvironment. *J. Androl.*, 11:498-505, 1990.
34. Hinton, B.T., Palladino, M.A., Mattmueller, D.R., Bard, D. & Good, K. Expression and activity of gamma-glutamyl transpeptidase in the rat epididymis. *Molec. Reprod. Develop.*, 28:40-46, 1991.
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