ELAINE M. HULL ABRIDGED CURRICULUM VITAE

January, 2003

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EDUCATION:

Indiana University Bloomington, IN Ph.D. (1967) Psychology Austin College Sherman, TX B.A. (1963) Psychology

EMPLOYMENT HISTORY:

1967-73 State University of New York at Buffalo, Assistant Professor of Psychology
1973-86 State University of New York at Buffalo, Associate Professor of Psychology
1986-present State University of New York at Buffalo, Professor of Psychology
2003-present State University of New York at Buffalo, Research Professor of

Pharmacology

RESEARCH INTERESTS:

My research program investigates the neuroendocrine control of male rat sexual behavior. We have shown that dopamine is released in the medial preoptic area (MPOA) as soon as a male rat encounters a receptive female; release is further increased during copulation. Stimulation of dopamine receptors in the MPOA controls genital reflexes and sexual motivation. This brain area is essential for male sexual behavior in all vertebrate species that have been studied, from fish through humans. Testosterone promotes both basal and female-elicited dopamine release in the MPOA, in part, by up-regulating nitric oxide synthase. We have also shown that serotonin is released in the anterior lateral hypothalamus at the time of ejaculation and contributes to the postejaculatory sexual quiescence, in part by decreasing mesolimbic dopamine release.

AWARDS:

Chancellor's Award for Excellence in Teaching, SUNY, 1975.

Student Association Excellence in Teaching Award, SUNY at Buffalo, 1986.

New York State/Union of University Professionals Excellence Award, 1990

Sustained Achievement Award, SUNY at Buffalo, 2002

Listed in Top 100 Grantees at University at Buffalo, 2002

GRANT SUPPORT (since 1986, total costs):

\$1,412,141 (2001-2006) Hormone-Neurotransmitter Interactions in the Brain, NIMH. \$175,000 direct costs in year 2 (2002-03)

\$602,759 (2000-2005) Hormone-Neurotransmitter Interactions in the Brain, NIMH, Independent Scientist Award (salary support). \$115,844 direct costs in year 3 (2002-03)

\$1,102,150 (1996-2001) Hormone-Neurotransmitter Interactions in the Brain, NIMH (competitive renewal of the previous grant, with a different title)

\$519,630 (1993-1996) Brain Regulation of Male Sex Behavior in Rats, NIMH

\$24,000 (1992-1993) Neurotransmitter Interactions in the Medial Preoptic Area, NSF

\$387,721 (1988-1992) Brain Dopamine Regulation of Male Sex Behavior in Rats, NIMH

\$147,500 (1986-1988) Brain Dopamine Regulation of Male Sex Behavior in Rats, NIMH

GRANT REVIEW SERVICE:

Member, Integrative, Functional and Cognitive Neuroscience-1 Study Section, NIH, (1998-2000)

Member, Psychology, Behavior, and Neuroscience Study Section, NIMH, (1996-1998)

Temporary member: Biopsychology Study Section, NIH (March, 1997); Integrative,

Functional and Cognitive Neuroscience-2 Study Section, NIH, (June, 1999; February, 2000; February, 2003)

Member special NIH study section to review applications for centers for study of infertility (May, '02)

Member special NIH study section (August, 2002)

Ad hoc reviewer of numerous NSF grants

EDITORIAL BOARD MEMBERSHIP:

Archives of Sexual Behavior

RESEARCH SUPERVISION:

22 Ph.D. dissertations chaired

14 M.A. theses chaired

Member of 60 Ph.D. committees

23 undergraduate Honors theses chaired

MAJOR UNIVERSITY SERVICE (since 1986):

Member, President's Review Board for Promotion and Tenure, 1989-1992

President's Research Advisory Council, 1986-1989

Intercollegiate Athletics Board, 1995-1998

Executive Committee, Interdisciplinary Graduate Group in Neuroscience, 1990-98, 2000-present

MAJOR DEPARTMENT SERVICE (since 1986):

Director, Behavioral Neuroscience Program, 1986-1998, 2000-present

Member, Planning and Policy Committee, 1986-1994, 2000-present

Chair, Policy Committee, 1986-1987, 1990-1991

Chair, Personnel Committee, 1999-2000

Member, Personnel Committee, 2002-present

MEMBERSHIPS:

American Psychological Association, Program Chair of Div. 6, Behavioral Neuroscience and Comparative Psychology, 1999-2000; Fellow of Div. 6, 2000-present

American Psychological Society, Program Committee, in charge of Behavioral Neuroscience program, 2002, 2003

Society for Neuroscience

Society for Behavioral Neuroendocrinology

International Academy for Sex Research, member of Program Committee, 1999-2000

International Society for Psychoneuroendocrinology

New York Academy of Sciences

American Association for the Advancement of Science

PUBLICATIONS:

Articles in Refereed Journals:

- Lonstein, J.S., Dominguez, J.M., Putnam, S.K., DeVries, G.J., & **Hull, E.M.** (in press) Intracellular preoptic area dopamine and serotonin during pregnancy and lactation in rats: Possible role in maternal behavior. Brain Research.
- Powell, W., Dominguez, J.M., & **Hull, E.M.** (in press) An NMDA antagonist blocks the experience-induced enhancement of male sexual behavior. Behavioral Neuroscience.
- Dominguez, J.M., & **Hull, E.M.** (in press) The medial amygdala regulates mating-induced dopamine release in the medial preoptic area. <u>Annals, New York Academy of Sciences</u>.
- Dominguez, J.M. & **Hull, E.M.** (2001) Stimulation of the medial amygdala enhances medial preoptic dopamine release: Implications for male rat sexual behavior. <u>Brain Research</u>. 917:225-229.
- Putnam, S.K., Du, J., & **Hull, E.M.** (2001) Testosterone restoration of copulation and medial preoptic dopamine release in castrated male rats: 2-, 5-, and 10-day treatments. <u>Hormones and Behavior</u>, 39: 216-224.
- Dominguez, J., Riolo, J.V., Xu, Z. & Hull, E.M. (2001) Regulation by the medial amygdala of copulation and medial preoptic dopamine release. <u>Journal of Neuroscience</u>, 21:349-355.
- Matuszewich, L., Lorrain, D. S., & **Hull, E. M**. (2000) Dopamine alterations in the medial preoptic area of female rats in response to hormonal manipulation and sexual activity. <u>Behavioral Neuroscience</u>, 114:772-782.
- Lorrain, D.S., Matuszewich, L., Riolo, J. V., & **Hull, E. M**. (1999) Lateral hypothalamic serotonin inhibits nucleus accumbens dopamine: Implications for sexual satiety. <u>Journal of Neuroscience</u>, <u>19</u>:7648-7652.
- Du, J. & **Hull, E. M.** (1999) Effects of testosterone on neuronal nitric oxide synthase and tyrosine hydroxylase. <u>Brain Research</u>, 836:90-98.
- Hull, E. M., Lorrain, D. S., Du, J., Matuszewich, L., Lumley, L. A., Putnam, S. K., & Moses, J. (1999)
 Hormone-Neurotransmitter interactions in the control of sexual behavior. <u>Behavioral Brain</u>
 Research, Special issue on Neurobiology of Sexual Behavior, <u>105</u>:105-116.
- Lumley, L.A. & **Hull, E. M**. (1999) Effects of a D1 antagonist and of sexual experience on copulation-induced FOS-like immunoreactivity in the medial preoptic nucleus. Brain Research, 829:55-68.
- Moses, J., & **Hull, E. M.** (1999) A nitric oxide synthesis inhibitor administered into the medial preoptic area increases seminal emissions in an ex copula reflex test. <u>Pharmacology Biochemistry and Behavior</u>, 63:345-348.
- Matuszewich, L., Lorrain, D. S., Trujillo, R., Dominguez, J., Putnam, S. K., & **Hull, E. M.** (1999) Partial antagonism of 8-OH-DPAT's effects on male rat sexual behavior with a D₂, but not a 5-HT_{1A}, antagonist. <u>Brain Research</u>, 820: 55-62.
- Lorrain, D. S., Matuszewich, L., & **Hull, E. M.** (1998) 8-OH-DPAT influences extracellular levels of serotonin and dopamine in the medial preoptic area of male rats. <u>Brain Research</u>, 790: 217-223.
- Du, J., Lorrain, D. S., & **Hull, E. M.** (1998) Castration decreases extracellular, but increases intracellular, dopamine in medial preoptic area of male rats. <u>Brain Research</u>, 782: 11-17.
- Lorrain, D. S., Matuszewich, L., Friedman, R., & **Hull, E. M.** (1997). Extracellular serotonin in the lateral hypothalamic area is increased during the postejaculatory interval and impairs copulation in male rats. <u>Journal of Neuroscience</u>, 17: 9361-9366.
- **Hull, E. M.,** Du, J., Lorrain, D. S., Matuszewich, L. (1997). Testosterone, preoptic dopamine, and copulation in male rats. <u>Brain Research Bulletin</u>, 44:327-333.
- Lorrain, D.S., Matuszewich, L., Howard, R.V., Du, J., & **Hull, E.M.** (1996) Nitric oxide promotes medial preoptic dopamine release during male rat copulation. <u>NeuroReport, 8:</u>31-34.
- **Hull, E.M.**, Du, J., Lorrain, D.S., & Matuszewich, L. (1995) Extracellular dopamine in the medial preoptic area: Implications for sexual motivation and hormonal control of copulation. <u>Journal of Neuroscience</u>, 15:7465-7471.

- Markowski, V.P., & **Hull, E.M.** (1995) Cholecystokinin modulates mesolimbic dopaminergic influences on male rat copulatory behavior. Brain Research, 699:266-274.
- Matuszewich, L., Loucks, J.A., Moses, J., Lorrain, D.S., & **Hull, E.M.** (1995) Effects of morphiceptin in the medial preoptic area on male sexual behavior. <u>Psychopharmacology</u>, 122:330-335.
- Moses, J., Loucks, J.A., Watson, H.L., Matuszewich, L., & **Hull, E.M**. (1995). Dopaminergic drugs in the medial preoptic area and nucleus accumbens: Effects on motor activity, sexual motivation and sexual performance. Pharmacology, Biochemistry & Behavior, 51:681-686.
- **Hull, E. M.**, Matuszewich, L., Lumley, L.A., Dominguez, J., Moses, J., & Lorrain, D.S. (1994) The roles of nitric oxide in sexual function of male rats. Neuropharmacology, 33:1499-1504.
- Markowski, V. P., Eaton, R. C., Lumley, L. A., Moses, J., & **Hull, E. M.** (1994) Stimulation of D₁ receptors in the medial preoptic area facilitates copulation of male rats. <u>Pharmacology</u>, Biochemistry & Behavior, 47:483-486.
- Lorrain, D. S., & **Hull, E. M.** (1993) Nitric oxide increases dopamine and serotonin release in the medial preoptic area. <u>NeuroReport, 5:</u>87-89
- **Hull, E. M.**, Eaton, R. C., Moses, J., & Lorrain, D. (1993) Copulation increases dopamine activity in the medial preoptic area of male rats. <u>Life Sciences</u>, 52:935-940.
- **Hull, E. M.**, Eaton, R. C., Markowski, V. P., Moses, J., Lumley, L. A., & Loucks, J. A. (1992) Opposite influence of D₁ and D₂ receptors in the medial preoptic area on genital reflexes: Implications for copulation. Life Sciences, 51:1705-1713.
- Bazzett, T. J., Bitran, D., Lumley, L. A., & **Hull, E. M**. (1992) Male rat copulation following 6-OHDA lesions of the medial preoptic area: Resistance to repeated administration and rapid behavioral recovery. Brain Research, 580:164-171.
- **Hull, E. M.**, Weber, M. S., Eaton, R. C., Dua, R., Markowski, V. P., Lumley, L., & Moses, J. (1991). Dopamine receptors in the ventral tegmental area affect motor, but not motivational or reflexive, components of copulation in male rats. Brain Research, 554:72-76.
- Bazzett, T. J., Eaton, R. C., Thompson, J. T., Markowski, V. P., Lumley, L. A., & **Hull, E. M.** (1991). Dose dependent D₂ effects on genital reflexes after MPOA injections of quinelorane and apomorphine. <u>Life Sciences</u>, 48:2309-2315.
- Warner, R. K., Thompson, J. T., Markowski, V. P., Loucks, J. A., Bazzett, T. J., Eaton, R. C., & **Hull, E. M.** (1991). Microinjection of the dopamine antagonist cis-flupenthixol into the MPOA impairs copulation, penile reflexes and sexual motivation in male rats. <u>Brain Research</u>, 540:177-182.
- Eaton, R. C., Markowski, V. P., Lumley, L. A., Thompson, J. T., Moses, J., & **Hull**, **E. M.** (1991). D₂ receptors in the paraventicular nucleus regulate copulation and genital responses in male rats. Pharmacology, Biochemistry & Behavior, 39:177-181.
- Scaletta L. L., & **Hull, E. M.** (1990). Systemic or intracranial apomorphine increases copulation in long-term castrated male rats. Pharmacology, Biochemistry & Behavior, 37:471-475.
- **Hull, E. M.**, Bazzett, T. J., Warner, R. K., Eaton, R. C., & Thompson, J. T. (1990). Dopamine receptors in the ventral tegmental area modulate male sexual behavior in rats. <u>Brain Research</u>, 512:1-6.
- Band, L. C., & **Hull, E. M**. (1990). Morphine and dynorphin (1-13) microinjected into the medial preoptic area and nucleus accumbens: Effects on sexual behavior in male rats. <u>Brain Research</u>, <u>524:</u>77-84.
- **Hull, E. M.**, Warner, R. K., Bazzett, T. J., Eaton, R. C., Thompson, J. T., & Scaletta, L. L. (1989). D₂/D₁ ratio in the medial preoptic area affects copulation of male rats. <u>Journal of Pharmacology</u> and Experimental Therapeutics, 251:422-427.
- Pehek, E. A., Thompson, J. T., & **Hull, E. M.** (1989). The effects of intracranial administration of the dopamine agonist apomorphine on penile reflexes and seminal emission in the rat. <u>Brain</u> Research, 500:325-332.

- Pehek, E. A., Thompson, J. T., & **Hull, E. M**. (1989). The effects of intrathecal administration of the dopamine agonist apomorphine on penile reflexes and copulation in the male rat. Psychopharmacology, 99:304-308.
- Bitran, D., Thompson, J. T., **Hull, E. M.**, & Sachs, B. D. (1989). Quinelorane (LY163502), A D₂ dopamine receptor agonist, facilitates seminal emission but inhibits penile erection in the rat. Pharmacology, Biochemistry & Behavior, 34:221-226.
- Pehek, E. A., Thompson, J. T., Eaton, R. C., & **Hull, E. M.** (1988). Apomorphine and haloperidol, but not domperidone, affect penile responses in rats. Pharmacology, Biochemistry & Behavior, 31:201-208.
- Hull, E. M., Pehek, E. A., Bitran, D., Warner, R. K., Holmes, G.M., Band, L C., Bazzett, T., & Clemens, L. G. (1988). Cholinergic regulation of male sexual behavior in rats: Effects of an intracerebrally microinjected antagonist. Pharmacology, Biochemistry & Behavior, 31:175-178.
- **Hull, E. M.**, Bitran, D., Pehek, E. A., Holmes, G. M., Warner, R.K., Band, L. C., & Clemens, L. G. (1988). Cholinergic regulation of male sexual behavior in rats: Effects of an intra-cerebrally microinjected agonists. Pharmacology, Biochemistry & Behavior, 31:169-174.
- Pehek, E. A., Warner, R. K., Bazzett, T., Bitran, D., Band, L.C., Eaton, R. C., & **Hull, E. M**. (1988). Microinjection of cis-flupenthixol, a dopamine antagonist into the medial preoptic area impairs sexual behavior of male rats. Brain Research, 443:70-76.
- Bitran, D., **Hull, E. M.**, Holmes, G. M., & Lookingland, K. J. (1988). Regulation of male rat copulatory behavior by incertohypothalamic dopamine neurons, Brain Research Bulletin, 20:1-9.
- Bitran, D., & **Hull, E. M**. (1987). Pharmacological analysis of male rat sexual behavior. <u>Neuroscience</u> and Biobehavioral Reviews, 11:365-389.
- Hanulak, A. T., & **Hull, E. M**. (1987). Behavioral deficits in a rat model of maternal PKU. Psychobiology, 15:75-78.
- **Hull, E. M.**, Bitran, D., Pehek, E. A., Warner, R. K., & Band, L. C. (1986). Dopaminergic control of male sex behavior in rats: Effects of an intracerebrally infused agonist. <u>Brain Research</u>, 370:73-81.
- **Hull, E. M.**, Nishita, J. K., Bitran, D., & Dalterio, S. (1984). Perinatal dopamine-related drugs demasculinize rats. Science, 224:1011-1013.
- **Hull, E. M.**, Young, S. H., & Ziegler, M. G. (1984) Aerobic fitness affects cardiovascular and catecholamine responses to stressors. Psychophysiology, 21:353-360.
- **Hull, E. M**. (1981) Effects of neonatally administered progesterone on sexual behavior of male and female rats. Physiology and Behavior, 26:401-405.
- **Hull, E. M.**, Franz, J. R., Snyder, A. M., & Nishita, J. K. (1980) Perinatal progesterone treatment and learning, social and reproductive behavior in rats. Physiol. Behav. 24:251-256.
- Wang, L., & **Hull, E. M**. (1980) Tail pinch facilitates sexual behavior in olfactory bulbectomized male rats. Physiology and Behavior, 24:211-215.
- Snyder, A. M., & **Hull, E M.** (1980) Perinatal progesterone: Effects on infant and adult active avoidance. Psychoneuroendocrinology, 5:113-119.
- Kleese, D. A., & **Hull, E. M.** (1980) Ultrasonic vocalization in neonatal gerbils (Meriones unguiculatus): A possible mechanism underlying synchrony of behavioral interactions between parents and young. Developmental Psychobiology, 13:233-241.
- **Hull, E. M.**, L'Hommedieu, G., Kastaniotis, C., & Franz, J. R. (1979) Olfactory bulbectomy, pituitary-adrenal hormones and behavior. Physiology and Behavior, 22:417-421.
- Snyder, A. M., **Hull, E. M**., & Roth, J. A. (1979) The effect of maternal progesterone injections on fetal development of brain monoamine oxidase of rats. Brain Research, 170:184-197.
- Franz, J. R., **Hull, E. M.**, Snyder, A. M., & Roth, J. A. (1978) The effect of maternal progesterone on brain monoamine oxidase activity of neonatal rats. Brain Research, 158:397-406.

- **Hull, E. M.**, Kastaniotis, C., L'Hommedieu, G., & Franz, J. R. (1976) Environmental enrichment and crowding: Behavioral and hormonal effects in gerbils. Physiology and Behavior, 5:735-742.
- Berg, R., Shanin, R., & **Hull, E. M**. (1975) Early isolation in the gerbil (Meriones unguiculatus): Behavioral and physiological effects. <u>Physiological Psychology</u>, 3:35-38.
- **Hull, E. M.**, & Homan, H. D. (1975) Olfactory bulbectomy, peripheral anosmia, and muricide by rats. Behavioral Biology, 14:481-488.
- **Hull, E. M.**, Hamilton, K., Engwall, D., & Rosselli, L. (1974) Effects of olfactory bulbectomy and peripheral deafferentation on reactions to crowding in gerbils (Meriones unguiculatus). <u>Journal of Comparative and Physiological Psychology</u>, 86:247-254.
- **Hull, E. M.**, Chapin, E., & Kastaniotis, C. (1974) Effects of crowding and intermittent isolation on gerbils (Meriones unguiculatus). Physiology and Behavior, 13:723-727.
- DeValois, R. L., Morgan, H. C., Polson, M. C., Mead, W. R., & **Hull, E. M.** (1974) Psychophysical studies of monkey vision I. Macaque luminosity and color vision tests. Vision Research, 14:53-68.
- **Hull, E. M.**, Langan, C. J., & Roselli, L. (1973) Population density and social, territorial, and physiological measures in gerbils. Journal of Comparative and Physiological Psychology, 84:414-422.
- **Hull, E. M.**, Rosselli, L., & Langan, C. J. 1973. Effects of isolation and grouping on guinea pigs. Behavioral Biology, 9:493-497.
- Spector, S. A., & **Hull, E. M.** 1972) Anosmia and muricide by rats: A non-olfactory role for the olfactory bulbs. Journal of Comparative and Physiological Psychology. 80:354-356.
- **Hull, E. M.** (1968) Corticofugal influence in the Macaque lateral geniculate nucleus. <u>Vision Research</u> <u>8:</u>1285-1298.

Chapters in books:

- Hull, E.M. & Dominguez, J.M. (2003) Sex Behavior. In: <u>Comprehensive Handbook of Psychology</u>, Vol. 3, <u>Biological Psychology</u>, R. J. Nelson and M. Gallagher, Eds. Wiley & Sons (part of a 12 vol. set covering all of Psychology), pp. 321-353.
- Hull, E.M., Meisel, R.L., & Sachs, B.D. (2002) Male sexual behavior. In: <u>Hormones, Brain and Behavior</u>, (a 5 vol. set) D.W. Pfaff, A.P. Arnold, A.M. Etgen, S.E. Fahrbach, & R.T. Rubin, Eds. Academic Press, pp. 3-137.
- **Hull, E.M**. (2001) The Nigrostriatal and Mesolimbic Dopamine Systems. In: <u>Basic Concepts in</u> Neuroscience, Malcolm Slaughter, Ed., McGraw-Hill, pp. 187-208.
- Hendry, B., Althof, S., Benson, G.S., Haensel, S.M., Hull, E.M., Kihara, K. & Opsomer, R.J. (2000) Male orgasmic and ejaculatory disorders. In <u>Erectile Dysfunction</u>, A. Jardin, G. Wagner, S. Koury, & F. Giuliano, H. Padma-Nathan, R. Rosen, Eds. World Health Organization Publication, pp. 477-506.
- Hull, E. M., Lorrain, D. S., Du, J., Matuszewich, L., Bitran, D., Nishita, J. K., & Scaletta, L. L. (1998) Organizational and activational effects of dopamine on male sexual behavior. In L. Ellis and L. Ebertz, (Eds.) Males, Females and Behavior: Toward Biological Understanding. Greenwood Press, pp. 79-96.
- **Hull, E. M.** (1995) Dopaminergic influences on male rat sexual behavior. In P. Micevych & R. Hammer, (Eds.) Neurobiological Effects of Sex Steroid Hormones, Cambridge University Press, pp. 234-251.
- Ziegler, M. G., Milano, A. J., & **Hull, E. M.** (1984). The catecholaminergic responses to stress and exercise. In C. R. Lake & M. G. Ziegler (Eds.), <u>Psychiatric Disorders and the Catecholamines</u>. Butterworth's Publishers, 37-53.

Book:

Hull, E. M. Study Guide for Kalat's Biological Psychology, Wadsworth Press, 1981; Second Edition, 1984; Third Edition, 1987; Fourth Edition, 1991; Fifth Edition, 1995; Sixth Edition, 1997. Seventh Edition, 2000.

Invited book reviews:

- **Hull, E. M.** (2002) Review of The Barmaid's Brain and Other Strange Tales of Science. In Pharmaceutical News, 8:57-58.
- **Hull, E. M.** (1995) Review of Psychopharmacology: The Fourth Generation of Progress. F. E. Bloom & D. J. Kupfer, Eds. In Pharmaceutical News, 7:40-41.
- **Hull, E. M.** (1983) Motivational constructs: Warm blanket or patchwork quilt? Invited review of D. W. Pfaff, The Physiological Mechanisms of Motivation. Contemporary Psychology, 28:586-587.

Manuscript submitted

Putnam, S.K., Sato, S., & **Hull, E.M.** Hormonal maintenance of copulation in castrates: Association with extracellular dopamine in MPOA.

Manuscript in preparation:

Putnam, S.K., Sato, S., & **Hull, E.M.** Hormonal maintenance of copulation in castrates: Association with intracellular dopamine and with nitric oxide synthase in MPOA.

ADDRESSES TO INTERNATIONAL CONFERENCES:

- **Hull, E. M.** (2002) Sex and the Single Rat: Tales of dopamine and serotonin. Talk given as part of a symposium, Neuroendocrinology of Motivation and Reward, Chaired by L. Coolen & **E. M. Hull,** 6th Annual Meeting of Society for Behavioral Neuroendocrinology, Amherst, MA.
- **Hull, E. M.** (2001) All you ever wanted to know about male rat sexual behavior. Invited address, American Psychological Society, Montreal, Canada.
- **Hull, E. M.**, Putnam, S. K. Du, J. (2001) Hormonal control of copulation and preoptic dopamine in male rats. **E. M. Hull**, Co-Chair, Symposium: Hormones and Brain Functions. <u>International Society of Psychoneuroendocrinology Regional Meeting</u>, St. Petersburg, Russia.
- **Hull, E. M.**, Du, J., Lorrain, D. S., Matuszewich, L., & Putnam, S. K. (2000) Dopamine facilitates and serotonin inhibits male rat sexual behavior. Part of symposium: Brain mechanisms that facilitate or inhibit sexual behavior, **E. M. Hull**, Chair, <u>International Academy of Sex Research</u>, Paris, France.
- **Hull, E. M.**, Du, J., Lorrain, D. S., Matuszewich, L., & Putnam, S. K. (2000) Dopamine facilitates and serotonin inhibits male rat sexual behavior. Invited address to 5th Congress of the European Federation of Sexology, Berlin, Germany.
- **Hull, E. M.**, Du, J., Lorrain, D. S., Matuszewich, L., & Putnam, S. K. (1999) Dopamine facilitates and serotonin inhibits male rat sexual behavior. Invited address to the <u>25th Congress of the Turkish Physiological Society</u>, Elazig, Turkey.
- Hendry, B., Althof, S., Benson, G.S., Haensel, S.M., **Hull, E.M**., Kihara, K. & Opsomer, R.J. (1999)

 Male orgasmic and ejaculatory disorders. Invited contribution to the <u>First International</u>

 <u>Consultation on Erectile Dysfunction</u>, sponsored by the World Health Organization (WHO), Paris, France.
- **Hull, E. M.** (1999) Dopamine and serotonin influence sexual motivation and copulation in male rats.

 Invited presentation at an NIMH Workshop: Revisiting the Concept of the Central Motive State:

 New Perspectives in Affective Neuroscience. Washington, DC.
- **Hull, E. M.** (1997) Dopaminergic regulation of penile erection and copulation. Invited address, <u>Conference on Neurological Aspects of Masculine Sexual Behavior</u>, Paris, France.

- **Hull, E. M**. (1997) Inhibitory neural mechanisms in the control of sexual behavior. Invited address, <u>23rd</u> Annual Meeting of International Academy of Sex Research, Baton Rouge, Louisiana.
- **Hull, E. M**. (1996) Testosterone, preoptic dopamine, and copulation in male rats. Invited address, <u>5th</u> International Conference on Hormones, Brain and Behavior, Torino, Italy.
- **Hull, E. M.** (1996) Testosterone and nitric oxide affect dopamine release during sociosexual interactions. Invited address, <u>7th International Conference on in vivo Methods</u>, Santa Cruz de Tenerife, Spain (Canary Islands).
- **Hull, E. M.** (1996) Symposium organizer: Sex and Gluttony: Brain Control of Motivated Behaviors. Paper in symposium: Hull, E. M., Lorrain, D. S., Du, J., Matuszewich, L., Contributions of medial preoptic and mesolimbic dopamine in male sexual behavior. <u>European Winter Conference on Brain Research</u>, Serre-Chevalier, France.
- **Hull, E. M.** (1995) Behavioral markers of neuroendocrine development. Invited address, <u>13th</u> <u>International Neurotoxicology Conference</u>, Hot Springs, Arkansas.
- Hull, E. M., Nishita, J., Bitran, D., Lorrain, D., Matuszewich, L., & Du, J. (1995) Brain dopamine in the organization and activation of male sexual behavior. Invited address, <u>International Behavioral Development Symposium</u>, Minot, North Dakota.
- **Hull, E. M.**, Du, J., Lorrain, D. S., & Matuszewich, L. (1995). Testosterone promotes dopamine release in medial preoptic area of male rats in response to a female. <u>15th European Winter Conference</u> on Brain Research. L'Alpe d'Huez, France.
- **Hull, E. M.** (1994). Testosterone regulates dopamine release in the MPOA of male rats. <u>International</u> Society for Psychoneuroendocrinology, Seattle, WA.
- **Hull, E. M**. (1994). Effects of systemic inhibition of NO synthase on male rat sexual behavior. <u>International Conference on Nitric Oxide in the Nervous System, Montreal, Quebec, Canada.</u>
- **Hull, E. M.** (1992). Inhibition of nitric oxide synthesis impairs copulation and genital reflexes of male rats. <u>International Society for Psychoneuroendocrinology</u>, Madison WI.
- **Hull, E. M**. (1991). Hormone-transmitter interactions in the control of behavior. Invited address, Institute for Experimental Medicine of the USSR Academy of Medicine and Science, St. Petersburg, Russia.
- **Hull, E. M.** (1991). Dopamine agonists in the MPOA increase mounting by castrated male rats and regulate genital reflexes in intact males. Invited address, <u>Congress of the International Society of Psychoneuroendocrinology</u>, Siena, Italy.
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