

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Anthony E. Archibong	POSITION TITLE Associate Professor		
eRA COMMONS USER NAME (credential, e.g., agency login) AARCHIBONG			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Nigeria, Nsukka, Nigeria	BSc Hons	1973	Animal Science
Tuskegee University, Tuskegee, Alabama	MS	1979	Reproductive Physiology
Oregon State University, Corvallis, Oregon	Ph.D.	1987	Reprod. Endocrinology
N.C. State University, Raleigh, North Carolina	Post-Doc	1987-88	Embryo Physiology
Oregon Natl. Primate Research Center, Oregon	Post-Doc	1988-1993	Gamete Science

A. Positions and Honors.

Positions and Employment

2006- Pres. Associate Professor
 2003-Pres. Visiting Scholar, Dept of Cell and Developmental Biology, Vanderbilt University
 1993-2006. Assistant Professor, Dept. of OB/GYN, Meharry Medical College.
 1988-1993 Research Fellow, Reproductive Biology and Behavior, Oregon Regional Primate Research Center. 1988-90, Andrology and Primate (human and monkey) IVF (Drs. Don P. Wolf & Dale D. Hoskins, supervisors)
 1987-1988 Postdoctoral Research Associate (Embryology), North Carolina State University (Drs. R. M. Petters and B. H. Johnson, supervisors)
 1980-1987 Graduate Research Assistant, Oregon State University (Dr. Fred Stormshak, Major Professor).
 1986 Predoctoral Fellowship, USDA, ARS, Roman Hruska, US Meat Animal Research Center, Clay Center Nebraska

Professional Memberships Honors

1983-1987 Research Assistantship, Oregon State University
 1991-1993 Reviewer:- J. American Society of Reproductive Medicine
 1992-Present Reviewer:- Biology of Reproduction
 1992-Present Reviewer:-Theriogenology
 1999-Present Member:- Editorial Board of Advances in Reproduction
 2001-Present Member:- Editorial Board of Archives of Andrology
 2000-Present Member:- Editorial Board of The Society for the Study of Reproduction
 1987-Present Member:- American Society of Animal Science
 1992-Present Member:- Society for the Study of Reproduction
 1993-Present Member:- American Society of Reproductive Medicine
 1993-Present Member:- National Medical Association
 2004 & 2005 Member:- USDA Animal Reproduction Study Panel
 1996 & 2001 Distinguished Service Award, Dept. of OB/GYN, Meharry Medical College
 Chairman: SSR Minority Affairs Committee
 1993-Present Chairman: Meharry Medical College OB/GYN Research Committee

1998 Recipient: Travel award to attend the "Write Winning Grant" Seminar and Workshop (Tucson, Arizona)

Program Director/Principal Investigator (Last, First, Middle): Archibong, Anthony, E.
2002 National Medical Fellowship (NMF) 2002 Academic Medicine (**Mentor**)

2002 INVITED SPEAKER

Texas A&M University, Reproduction Forum. Alteration of pregnancy related hormones and fetal survival in F-344 rats exposed by inhalation to benzo(a)pyrene (2002).

B. Selected peer-reviewed publications

1. **Archibong, A.E.**, England, D.C., and Stormshak, F. (1986). Ovulation and embryonic survival in GnRH treated pubertal gilts Proc. *West. Sec. Amer. Soc. Anim. Sci.*, **37**: 20-22.
2. **Archibong, A.E.**, England, D.C., and Stormshak, F. (1987). Factors contributing to embryonic mortality in gilts bred at pubertal estrus. *J. Anim. Sci.*, **64**: 474-478.
3. **Archibong, A.E.**, England, D.C., and Stormshak, F. (1987). Ovulation and embryonic survival in pubertal gilts treated with gonadotropin releasing hormone. *J. Anim. Sci.*, **65**: 752-755.
4. Gardiner, C.S., Menino A.R. jr., **Archibong, A.E.**, Williams, J.S., Stormshak, F., and England, D.C. (1988). Suppressed development of cultured mouse and swine embryos by diethylstilbestrol. *J. Anim. Sci.*, **66**: 2401-2406.
5. Menino, A.R. jr., **Archibong, A.E.**, J.-R. Li, F. Stormshak, F., and England, D.C. (1989). In vitro development of swine embryos collected from first and third estrous gilts. *J. Anim. Sci.* **67**:1387-1393.
6. Krisher, R.L., Petters, R.M., Johnson, B.H., Bavister, B.D., and **Archibong, A.E.** (1989). Development of porcine embryos from the one-cell stage to blastocyst in mouse oviducts maintained in organ culture. *J. Expt. Zool.*, **249**: 235-239.
7. **Archibong, A.E.**, Petters, R.M., and Johnson, B.H. (1989). Development of porcine embryos from the one-cell stage to blastocyst in modified kreb ringer buffer supplemented with porcine oviductal fluid. *Biol. Reprod.*, **41**:1076 -1083.
8. Lanzendorf, S., Gliessman, P., **Archibong, A.E.**, Alexander, M., and Wolf, D. (1990). Collection and quality of rhesus monkey semen. *Mol. Reprod. Dev.*, **25**: 61- 66.
9. Petters, R.M., Johnson, B.H., Reed, M.L. and **Archibong, A.E.** (1990). Glucose, glutamine and inorganic phosphate in early development of pig embryos in vitro. *J. Reprod. Fertil.*, **89**: 269-275.
10. **Archibong, A.E.**, R.R. Maurer, D.C. England and F. Stormshak. (1992). Influence of sexual maturity of donor on in vivo survival of transferred porcine embryos. *Biol. Reprod.*, **47**:1026 -1030.
11. **Archibong, A.E.**, Lee, C.Y.G. and Wolf, D.P. (1995). Functional characterization of the primate sperm acrosomal antigen (PSA-63). *J. Androl.*, **16**: 318 -326.
12. **Archibong, A.E.** and Abdelgadir, S.E. (2000). Pharmacotoxicologic Factors and Reproduction: In *Reproduction in Farm Animals* (Hafez, E.S.E., ed.), pp 331-340, Lippincott/Williams/Wilkins.
13. Kopsombut, P., S. Mukherjee, D.P. Roa, E.A. Turner, A. Powell, A.A. Ademoyero, S.K. Das and **Archibong, A.E.** (2000). Hydroxyurea and indices of male reproduction. *Adv Reprod.*, **4**:19-32.
14. Ramesh, A., Inyang, F., Hood, D.B. **Archibong, A.E.**, Knuckles, M.E and Nyanda, A.M., (2001). Metabolism, bioavailability, and toxicokinetics of benzo(a)pyrene in F-344 rats after oral administration. *Exp. Toxic. Pathol* **15**:275-290.

15. Freeman, M.R., **Archibong, A.E.**, Mrotek, J.J., Whitworth, C.M., Weitzman, G.A., and Hill, G. (2001). Male partner screening before in vitro fertilization: preselecting patients who require intracytoplasmic sperm injection with the sperm penetration assay. *Fertil Steril.*, **76**:1113-1118.
16. **Archibong, A.E.**, Ramesh, A., and Inyang, F. (2002). Endocrine/environmental factors contributing to early embryonic mortality in gilts mated at first estrus. *Adv Reprod.*, **6**:121-128.
17. S. Mukherjee, S.K. Das, W. Kabiru, K.R. Russell, K. Greaves, A.A. Ademoyero, F. Rhaney, E.R. Hills and **A.E. Archibong** (2002). Acute cadmium toxicity and male reproduction. *Adv Reprod.*, **6**: 143-155.
18. Ramesh, A., Inyang, F., and **Archibong, A.E.** (2002) Altered imprinting in male rats: a toxicological perspective. *Adv Reprod* **6**:156-167.
19. Ramesh, A., Hood, D.B., Inyang, F., Greenwood, M., **Archibong, A.E.**, Knuckles, M.E., Nyanda, A.M. (2002). Comparative metabolism, bioavailability and toxicokinetics of benzo(a)pyrene in rats after acute oral, inhalation, and intravenous administration. *Polycyclic Aromatic Compounds* **22**: 969-980.
20. **Archibong, A.E.**, F. Inyang, A. Ramesh, M. Greenwood, T. Nayyar, P. Kopsombut, D.B. Hood, A. M. Nyanda (2002) Alteration of pregnancy related hormones and fetal survival in F-344 rats exposed by inhalation to benzo(a)pyrene. *Reprod Toxicol.*, **16**: 801-808.
21. Inyang, F., Ramesh, A., Niaz, M., Kopsombut, P., Hood, D.B., Nyanda, A.M., and **Archibong, AE.** (2003) Disruption of testicular steroidogenesis and epididymal function by inhaled benzo(a)pyrene. *Reprod Toxicol.*, **17**:527-537.
22. Walker, S.A., Whitten, L.B., Seals, G.B., Lee, W.E., **Archibong, AE** and Ramesh, A. (2006). Inter-species comparison of microsomal metabolism of fluoranthene. *J. Food & Chem. Toxicol.*, **44**:380-387.
23. Smith, TL., Merry, ST., Harris, DL., Joe Ford, J., Ike, J., **Archibong, AE.**, and Ramesh, A. (2007). Species-specific testicular and hepatic microsomal metabolism of benzo(a)pyrene, an ubiquitous toxicant and endocrine disruptor. *Toxicol In Vitro.*, **21**: 753-758.
24. C.M. Brooks, K.M. Jones, M.S. Niaz, M. P. Aguinaga, E.R.Hills, V. Montgomery Rice and **A.E. Archibong.** (2007). Authentication of a transgenic sickle cell mouse model with intent to study sickle cell disease-induced hypogonadism. *Andrology Update; Intl J* 1:331-340.
25. Aramandla Ramesh, Frank Inyang, Donald D. Lunstra, Mohammad S. Niaz, Michael Greenwood, Prapaporn M. Kopsombut, Kea M. Jones, Darryl B. Hood, Edward R. Hills and **Anthony E. Archibong** (2008). Alteration of fertility endpoints in adult male F-344 rats by subchronic exposure to inhaled benzo(a)pyrene. *Experiment. Toxicol. Pathol.*, **60**: 269-280.
26. **Anthony E. Archibong**, Aramandla Ramesh, Mohammad S. Niaz, Cynthia M. Brooks, Shannon I. Roberson, and Donald D. Lunstra (2008). Effects of benzo(a)pyrene on intratesticular function in F-344 rats. *Int J Environ Res Public Health* **5**:32-40.
27. Jones, K.M., M.S. Niaz, C.M. Brooks, S.I. Roberson, M.P. Aguinaga, E.R. Hills, V. Montgomery Rice, P. Bourne, D. Bruce, **A.E. Archibong** (2009). Adverse effects of a clinically relevant dose of hydroxyurea used for the treatment of sickle cell disease on male fertility endpoints. *Int J Environ Res Public Health* **6**:1124-1144.
28. Harris, D.L., A.C. Hudson, M.S., Niaz, J.J. Ford, **A.E. Archibong**, A. Ramesh (2009). Comparative Metabolism of Benzo(a)pyrene by ovarian microsomes of various species. *Environ Toxicol*

Program Director/Principal Investigator (Last, First, Middle): Archibong, Anthony, E.

C. Research Support:

U-54 HD044315 (PI: Bogdan Nowicki)

NICHD

Cooperative Center for Research in Reproduction

Sub-Project: Core Endocrine Laboratory PI (Archibong) 07/01/03 – 06/31/10 (Extended)

The major goal of this grant is to establish infrastructure for reproductive sciences research in minority institutions (Meharry Medical College).

Program Director/Principal Investigator (Last, First, Middle): Archibong, Anthony, E.