

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2.  
Follow the sample format on preceding page for each person. **DO NOT EXCEED FOUR PAGES.**

NAME		POSITION TITLE	
Kathleen MI Caron, Ph.D.		Assistant Professor	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Emory University, Atlanta, GA	B.S.	1992	Biology
Emory University, Atlanta, GA	B.A.	1992	Philosophy
Duke University, Durham, NC	Ph.D.	1997	Cell Biology
Univ. of North Carolina-CH, Chapel Hill, NC	Postdoctoral	1997-2003	Genetics of Hypertension

**A. Positions and Honors****Professional Experience**

Howard Hughes Summer Research Stipend, Duke University, NC (PI Lefkowitz) 1990, 1991  
 Student, Applied Physiology, Finch Univ. of Health Sciences, Chicago, IL 1992-1993  
 Graduate Student, Cell Biology, Duke University, NC (Mentor KL Parker) 1993-1997  
 Postdoctoral Fellow, Pathology, UNC-Chapel Hill, NC(Mentor O Smithies) 1997-2003  
 Assistant Professor, Cell & Molecular Physiology, UNC-Chapel Hill, NC 2003-  
 Joint Appointment, Genetics Department, UNC-Chapel Hill, NC 2003-

**Awards & Honors**

Lecturer at WHO Symposium on Molecular Approaches to Reproductive Health- Oulu, Finland, 1996  
 Keynote Speaker at Serono Symposia on Ovarian Cell Growth, Apoptosis and Cancer- Ontario, 1996  
 Guest Lecturer at Gordon Research Conference on Reproductive Tract Biology, 1998  
 Elected as Department of Pathology & Laboratory Medicine Faculty/Post-doctoral Liaison, 1998  
 NIH Individual National Research Service Award, Postdoctoral Training Fellowship, 1999  
 American Heart Association Postdoctoral Fellowship- Awarded but declined, 2000  
 Poster Presenter at Gordon Research Conference on Reproductive Tract Biology, 2000  
 Recipient of Burroughs Wellcome Fund Career Award in the Biomedical Sciences, 2001  
 Invited Speaker, COE International Symposium, Endogenous Vasodilators- Osaka, Japan 2002  
 Guest Lecturer at Gordon Research Conference on Reproductive Tract Biology, 2002  
 Invited Speaker, Triangle Telemetry User Group; "Telemetry in Mouse Models"- Durham, NC, 2002  
 Invited Speaker, Cell & Molecular Physiology and Genetics Depts., UNC-Chapel Hill, NC, 2003  
 Invited Speaker, Genetics Dept., Duke University Medical Center, Durham, NC, 2003  
 Invited Speaker, Wake Forest University, Winston Salem, NC, 2003  
 Invited Speaker, Triangle Consortium for Reproductive Biology, Durham, NC, 2004

**B. Selected Peer-Reviewed Publications**

1. Clark, B.J., Soo, S.-C., **Caron, K.M.**, Ikeda, Y., Parker, K.L., and Stocco, D.M. (1995) Hormonal and developmental regulation of the steroidogenic acute regulatory protein. *Molecular Endocrinology* 9:1346-1355.
2. **Caron, K.M.**, Ikeda, Y., Soo, S.-C., Stocco, D.M., Parker, K.L., and Clark, B.J. (1997) Characterization of the promoter region of the mouse gene encoding the steroidogenic acute regulatory protein. *Molecular Endocrinology* 11:138-147.

3. **Caron, K.M.**, Clark, B.J., Ikeda, Y., and Parker, K.L. (1997) Steroidogenic factor 1 acts at all levels of the reproductive axis. *Steroids* 62:53-56.
4. **Caron, K.M.**, Soo, S.-C., Wetsel, W.C., Stocco, D.M., Clark, B.J., and Parker, K.L. (1997) Targeted disruption of the mouse gene encoding steroidogenic acute regulatory protein provides insights into congenital lipid adrenal hyperplasia. *Proc. Natl. Acad. Sci. USA.* 94(21): 11540-5.
5. Wong, M., Ikeda, Y., Luo, X., **Caron, K.M.**, Weber, T.J., Swain, A., Schimmer, B.P., and Parker, K.L. (1997) Steroidogenic factor 1 plays multiple roles in endocrine development and function. *Recent Progress in Hormone Research* 52:167-84.
6. **Caron, K.M.**, Soo, S.-C., and Parker, K.L. (1998) Targeted disruption of StAR provides novel insights into congenital adrenal hyperplasia. *Endocrine Research* 24(3-4):827-34.
7. **Caron K.M.**, Ikeda Y., Luo X., and Parker K.L. (1998) Steroidogenic factor 1 plays key roles in adrenal and gonadal development and in endocrine function. In: *Contemporary Endocrinology: Neurosteroids: a new regulatory function in the nervous system*, edited by E.-E Baulieu, P. Robel, and M. Schumacher, Humana Press, Inc. Totowa NJ.
8. Dellovade T.L., Young M., Ross E.P., Henderson R., **Caron K.M.**, Parker K.L., and Tobet S.A. (2000) Disruption of the gene encoding SF-1 alters the distribution of hypothalamic neuronal phenotypes. *J. Comp. Neurol.* 423(4):579-589.
9. Hasegawa T., Zhao L., **Caron, K.M.** and Parker K.L. (2000) Developmental roles of the steroidogenic acute regulatory protein (StAR) knockout mice. *Mol. Endocrinol.* 14(9):1462-1472.
10. **Caron KM** and Smithies O. Extreme hydrops fetalis and cardiovascular abnormalities in mice lacking a functional Adrenomedullin gene. 2001 *Proc Natl Acad Sci USA* 98(2):615-619.
11. Rapacciuolo A, Esposito G, **Caron KM**, Mao L, Thomas SA and Rockman HA. Important role of endogenous norepinephrine and epinephrine in the development of in vivo pressure-overload cardiac hypertrophy. 2001 *J Am College of Cardiology* 38(3):876-882.
12. **Caron KM**, James L, Kim H-S, Morham S, Lopez ML, Gomez A, and Reudelhuber T, and Smithies O. A genetically clamped renin transgene for the induction of hypertension. 2002 *Proc Natl Acad Sci USA* 99(12):8248-8252.
13. **Caron KM** and Smithies O. Multiple roles of adrenomedullin revealed by animal models. 2002 *Micros Resch Tech* 57:55-59.
14. **Caron KM**, Hasegawa T, Bakke M, Hanley N, Parker KL. Animal Models of Impaired Steroidogenesis. 2003 In: *Modern Genetics Book Series Genetics of Steroid Biosynthesis and Function*, edited by J I Mason, Taylor & Francis Group, London, UK.
15. **Caron KM**, James LR, Kim HS, Knowles J, Uhler R, Mao L, Hagaman JR, Cascio W, Rockman H, Smithies O. Cardiac hypertrophy and sudden death in mice with a genetically clamped renin transgene. 2004 *Proc Natl Acad Sci U S A.* 101(9):3106-3111.

### C. Research Support

#### Ongoing

1 R01 HD46970-01 Caron (PI) 4/01/04 – 03/31/09  
 NIH/NICHD “Phenotype of Genetically Reduced Adrenomedullin During Pregnancy”  
 The major goal of this project is to genetically modified mouse strains to elucidate the role of adrenomedullin in the mechanism of intrauterine growth restriction.

Career Award in Biomedical Sciences Caron (PI) 9/1/01 - 08/31/07  
 The Burroughs Wellcome Fund  
 The goal of this career award is to elucidate the reproductive and cardiovascular role of adrenomedullin system by generating and characterizing genetically modified mouse models of adrenomedullin, its receptor and associated signaling proteins.

Vascular Biology Training Grant Maeda (PI) 2002-2006  
 NIH/NHLBI

Genetics & Molecular Biology Training Grant Duronio (PI) 2002-2006  
 NIH

**Completed**

1 F32 HL10344-01, Caron (PI); (Oliver Smithies- Mentor)

6/1/00 - 8/31/01

NIH/NIHLB Fellowship

The goal of this post-doctoral fellowship was to generate "gene titration" adrenomedullin mouse models and characterize their cardiovascular phenotype.