

Alli M. Antar, Ph.D.
Office: CNRC Room 6070
Lab: CNRC Room 6050
Baylor College of Medicine
1100 Bates Street
Houston, TX 77030
Office: 713.798.0324
Fax: 713.798.7130
Email: antar@bcm.edu

EDUCATION AND TRAINING

- 1997 Interdisciplinary Rural Community Health Project summer internship, Department of Family Medicine, East Tennessee State University James H. Quillen College of Medicine, Johnson City, TN
Mentor: Bruce A. Goodrow, Ed.D., M.P.H., C.H.E.S.
“Virginia Pharmacy Access Project Evaluation”
- 1998 Undergraduate summer research internship, Department of Physiology and Biophysics, The University of Alabama at Birmingham, Birmingham, AL
Mentor: C. Roger White, Ph.D.
“Effect of High Salt Diet on Cardiovascular Structure and Function in ANP Knockout Mice”
- 1995-1999 B.S., Chemistry, Sewanee: The University of the South, Sewanee, TN
- 1999-2007 Ph.D., Department of Molecular Physiology and Biophysics, Vanderbilt University, Nashville, TN
Mentors: Alyssa H. Hasty, Ph.D. and William J. Kovacs, M.D.
“11 β -HSD1 in Mice: Expression is Developmentally Regulated in the Thymus and Activity is Influential in Metabolic Outcomes”
- 2007-2012 Post-doctoral Fellowship, Departments of Medicine and Pediatrics, Baylor College of Medicine, Houston, TX
Mentor: Lawrence C. B. Chan, M.B.B.S., D.Sc.
“Dissecting the Role of ChREBP in Murine Adipose Tissue”

ACADEMIC APPOINTMENTS

- 07/17-present Assistant Professor (tenure track), Department of Pediatrics, Baylor College of Medicine
- 07/12-06/17 Instructor, Department of Pediatrics, Baylor College of Medicine

HONORS AND AWARDS

President's Scholarship at Sewanee: The University of the South (1995-1996)
Order of Gownsmen Academic Honor Society at Sewanee: The University of the South (1999)
Lupus Foundation of America, Nashville (Mid-South) Chapter, Student Stipend Award (2000)
VUMC-NICHD Reproductive Biology Pre-doctoral Training Grant Award T32 HD007043
(2000-2003)
BCM-NIDDK Pediatric Gastroenterology Postdoctoral Training Grant Award T32 DK007664
(2007-2009)
CNRC-NICHD Postdoctoral Training Grant Award T32 HD007445 (2009-2010)
ENDO2010 Presidential Poster Competition Award (2010)
AHA Postdoctoral Fellowship Award 10POST3850002, South Central Affiliate (2010-2012)
ENDO2012 Outstanding Abstract Award (2012)

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science
American Diabetes Association
American Heart Association
American Physiological Society
American Society for Nutrition
The Endocrine Society
The Obesity Society
Sigma Xi
Women in Endocrinology

REVIEWER ACTIVITY

Atherosclerosis
Childhood Obesity
Comprehensive Physiology
Diabetologia
Endocrine
FASEB Journal
International Journal of Environmental Research and Public Health
Journal of Applied Physiology
Nutrients
PLoS ONE

SERVICE AND VOLUNTEER ACTIVITIES

Caring Companion at The Methodist Hospital, Houston, TX (04/2011-07/2011)
Judge at the 53rd Annual Science and Engineering Fair of Houston (2012)

Board Member of the Rice University-Texas Medical Center Chapter of Sigma Xi, the International Scientific Research Society (03/2012-present); Vice President (2016-present)

Poster Judge at the Baylor College of Medicine 2016 Pediatric Research & Fellows' Symposium

Abstract reviewer for American Heart Association Scientific Sessions 2016

Abstract reviewer for Experimental Biology 2017

Abstract Reviewer for the Baylor College of Medicine 2017 Pediatric Research & Fellows' Symposium

Poster Judge at the Baylor College of Medicine 2017 Pediatric Research & Fellows' Symposium

MENTORING

10/07-11/07 Supervisor for Tianshu Yang, Translational Biology and Molecular Medicine graduate student at Baylor College of Medicine, throughout her rotation in the laboratory of Dr. Lawrence Chan; Tianshu obtained a PhD from BCM in 2012.

08/09-12/09 Supervisor for Ann Hua (née Qiu), Rice University undergraduate intern in the laboratory of Dr. Lawrence Chan; Ann obtained an MD from UTHSCSA in 2017.

05/12-07/12 Co-mentor for Devleena Kole, Clemson University BCM SMART Program undergraduate student, with Dr. C. Wayne Smith (collaborator); Devleena obtained an MS from UCSD, Department of Bioengineering in 2016.

08/12-05/13 Post-baccalaureate mentor for Sarah Gerard, B.S., former Research Technician at Baylor College of Medicine; Sarah is currently a pre-doctoral student in the Department of Bioengineering at The University of Iowa.

06/16-06/17 Post-baccalaureate mentor for Jordan Mar, B.S., Research Technician at Baylor College of Medicine; Jordan is currently pursuing an MS in Biological Sciences at the University of Houston-Clear Lake.

01/17-8/17 Mentor for Mélanie Guirette, University of St. Thomas undergraduate and post-baccalaureate intern.

TEACHING

03/03 Co-taught an endocrinology discussion section for the Interdisciplinary Graduate Program at Vanderbilt University.

02/16 Co-taught Term 3 of the Graduate Program in Integrative Molecular and Biomedical Sciences Director's Course, Baylor College of Medicine (course under direction of Dr. Fred Pereira, Associate Professor).

04/16 Guest taught one class for Biomedical Ethics, University of Houston-Downtown (course under direction of Dr. Jeffrey Jackson, Professor of Philosophy and Chair of the Department of History, Humanities, and Languages)

SEMINARS

At Baylor College of Medicine

04-03-08 Endocrinology Data Club

05-05-08 Pediatric Gastroenterology Research Workshop

02-02-09 Pediatric Gastroenterology Research Workshop
10-13-09 Children's Nutrition Research Center Postdoctoral Journal Club
06-15-10 Children's Nutrition Research Center Postdoctoral Journal Club
06-02-14 Nutrition and Obesity Workshop
06-02-14 Pediatric Gastroenterology Research Workshop
06-26-14 Children's Nutrition Research Center Faculty Seminar Series
01-07-16 Children's Nutrition Research Center Faculty Seminar Series
04-20-17 Children's Nutrition Research Center Faculty Seminar Series
06-05-17 Nutrition and Obesity Workshop

MEETING ABSTRACTS AND PRESENTATIONS

JS Parker, T Aune, S Chan, A Martin, **A Antar**, K Mass, N Olsen, JH Moore. Application of Symbolic Discriminant Analysis to Identifying Multivariate Gene Expression Profiles that Define Autoimmune Diseases. 51st Annual Meeting of the American Society of Human Genetics, San Diego, California, October 12-16, 2001. Published in *The American Journal of Human Genetics* 69(4 Suppl):175-681; Program Nr: 1177.

AM Antar, X Li, NJ Olsen, WJ Kovacs. Expression of Genes for Steroidogenic Enzymes and Their Regulatory Molecules in Medullary Thymic Epithelial Cell Lines. 85th Annual Endocrine Society Meeting, Philadelphia, Pennsylvania, June 19-22, 2003. Presentation Nr P3-300.

AM Antar and AH Hasty. Physiologic Effects of Carbenoxolone Inhibition of 11 β -HSDs in a Mouse Model of Obesity and Atherosclerosis. 14th South Eastern Lipid Research Conference, Callaway Gardens, GA. September 23-25, 2005.

AM Antar and AH Hasty. Carbenoxolone Inhibition of 11 β -HSDs Attenuates Symptoms of the Metabolic Syndrome and Atherogenesis in an Obese, Hyperlipidemic Mouse Model. 7th Annual Conference on Arteriosclerosis, Thrombosis, and Vascular Biology, Denver, CO, April 27-29, 2006. Published in *ATVB* 26(5):P172.

AM Antar and AH Hasty. Carbenoxolone Inhibition of 11 β -HSDs Attenuates Symptoms of the Metabolic Syndrome and Atherogenesis in an Obese, Hyperlipidemic Mouse Model. Annual Vanderbilt Diabetes Research and Training Center (DRTC) Symposium, Nashville, TN, May 17, 2006.

AM Nuotio-Antar, N Pongvarin, M Li, and L Chan. Adipose-Specific Overexpression of ChREBP Plays a Protective Role Against Obesity. 92nd Annual Endocrine Society Meeting, San Diego, CA, June 19-22, 2010. Presentation Nr P1-418. Published in *Endocrine Reviews* 31(3): S485. *ENDO2010 Presidential Poster Competition Award*.

AM Nuotio-Antar and C. Wayne Smith. MMP12 Deficiency Is Associated with Increased Insulin Resistance and White Adipose Tissue Inflammation, but Not Increased Risk of Adiposity, in Mice. 94th Annual Endocrine Society Meeting, Houston, TX, June 23-26, 2012.

Oral Presentation Nr OR42-4. Published in *Endocrine Reviews* 33(3): OR42-4. *ENDO2012 Outstanding Abstract Award*.

AM Nuotio-Antar, N Pongvarin, M Li, and L Chan. Adipose tissue overexpression of a constitutively active isoform of ChREBP protects against obesity and insulin resistance in mice. American Heart Association Scientific Sessions, Los Angeles, CA, November 2-8, 2012. Abstract 19265. Published in *Circulation* 126:A19265.

A Antar and C. Wayne Smith. Diet-induced Obese MMP-12 Deficient Mice Exhibit Impaired Total, M1, and M2 Adipose Tissue Macrophage Recruitment. Obesity Week, Los Angeles, CA, November 2-7, 2015. Oral Presentation T-OR-2029.

J Sally, Q Mo, T Roshan, **AM Nuotio-Antar**, and M-H Chen. Identification of a new supraclavicular brown fat depot in mice. Keystone Symposia: Obesity and Adipose Tissue Biology, February 15-19, 2016. Poster Presentation.

AM Nuotio-Antar, M Mohammad, and M-H Chen. ChREBP Deficiency Dysregulates BAT Homeostasis in Mice. American Diabetes Association Scientific Sessions, San Diego, CA, June 9-13, 2017. Oral Presentation 186-OR. Published in *Diabetes* 66:A49.

PUBLICATIONS

AM Nuotio-Antar, AH Hasty, WJ Kovacs. Quantitation and cellular localization of 11 β -HSD1 expression in murine thymus. *J Steroid Biochem Mol Biol*. 2006 May; 99(2-3):93-9.

ML Gruen, V Saraswathi, **AM Nuotio-Antar**, MR Plummer, KR Coenen, AH Hasty. Plasma insulin levels predict atherosclerotic lesion burden in obese hyperlipidemic mice. *Atherosclerosis*. 2006 May; 186(1):54-64.

AM Nuotio-Antar, DL Hachey, AH Hasty. Carbenoxolone treatment attenuates symptoms of metabolic syndrome and atherogenesis in obese, hyperlipidemic mice. *Am J Physiol Endocrinol Metab*. 2007 Dec; 293(6): E1517-28.

MV Li, W Chen, RN Harmancey, **AM Nuotio-Antar**, M Imamura, P Saha, H Taegtmeier, L Chan. Glucose-6-phosphate mediates activation of the carbohydrate responsive binding protein (ChREBP). *Biochem Biophys Res Commun*. 2010 May 7; 395(3):395-400.

L Huang, T Belousova, JS Pan, J Du, H Ju, L Lu, P Zhang, LD Truong, **A Nuotio-Antar**, D Sheikh-Hamad. AKI following conditional and kidney-specific knockdown of stanniocalcin-1. *J Am Soc Nephrol*. 2014 Oct; 25(10):2303-15.

L Lin*, **AM Nuotio-Antar***, X Ma, F Liu, M Fiorotto, Y Sun. Ghrelin receptor regulates appetite and satiety during aging in mice by regulating meal frequency and portion size but not total food intake. *J Nutr*. 2014 Sep; 144(9):1349-55. **co-first authors*

P Mehta, **AM Nuotio-Antar**, CW Smith. $\gamma\delta$ T cells promote inflammation and insulin resistance during high fat diet-induced obesity in mice. *J Leukoc Biol.* 2015 Jan; 97(1):121-34.

AM Nuotio-Antar, N Pongvarin, M Li, M Schupp, M Mohammad, S Gerard, F Zou, L Chan. FABP4-cre mediated expression of constitutively active ChREBP protects against obesity, fatty liver, and insulin resistance. *Endocrinology.* 2015 Nov; 156(11): 4020-32.

N Witte, M Muenzner, J Rietscher, M Knauer, S Heidenreich, **AM Nuotio-Antar**, FA Graef, R Fedders, A Tolkachov, I Goehring, M Schupp. The glucose sensor ChREBP links de-novo lipogenesis to PPAR γ activity and adipocyte differentiation. *Endocrinology.* 2015 Nov; 156(11): 4008-19.

Q Mo, J Salley, T Roshan, LA Baer, FJ May, EJ Jaehnig, AC Lehnig, X Guo, Q Tong, **AM Nuotio-Antar**, F Shamsi, YH Tseng, KI Stanford, MH Chen. Identification and characterization of a supraclavicular brown adipose tissue in mice. *JCI Insight.* 2017 Jun 2;2(11). pii: 93166.

RESEARCH SUPPORT

Ongoing Research Support

USDA-ARS (3092-51000-060-03S)

04/01/14 – 03/31/19

Cooperative Agreement

“Diet, Inflammation, and Obesity”

Role: PI

Previous Research Support

AHA, South Central Affiliate (10POST3850002)

07/01/10-06/30/12

Postdoctoral Fellowship

“Dissecting the Role of Adipocyte ChREBP in Murine Metabolism”

Role: PI