

**BIOGRAPHICAL SKETCH**

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

NAME De la Llera-Moya, Margarita		POSITION TITLE Research 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
Barry College, Miami, Florida	B.S.	1966	Biology & Chem.
Marquette Univ., Milwaukee, WI	M.S.	1969	Physiology
Medical College of PA, Philadelphia, PA	Ph.D.	1977	Biochemistry

**POSITIONS AND EMPLOYMENT**

1969-1970	Teaching Assistant, Biology Department, Marquette University, Milwaukee, Wisconsin
1972-1975	Laboratory Assistant, Clinical Research Center, Philadelphia General Hospital, Philadelphia, Pennsylvania
1975-1976	Research Assistant, Physiology/Biochemistry Department, Medical College of Pennsylvania
1976-1977	Teaching Assistant, Physiology/Biochemistry Department, Medical College of Pennsylvania
1978-1980	American Heart Association and National Institutes of Health Fellow, Physiology/Biochemistry Department, Medical College of Pennsylvania
1980-1982	Research Associate, Department of Medicine, University of Pennsylvania, Philadelphia, PA
1982-1988	Ascites Manager, Operations Department Centocor, Malvern, Pennsylvania
1988-1993	Research Instructor, Physiology/Biochemistry Department, Medical College of Pennsylvania
1990-1993	Co-Director, Lipid Laboratory, Lipid Disorders Clinic, Medical College of Pennsylvania
1993-2000	Research Assistant Professor, Biochemistry Department, MCP Hahnemann University (formerly Medical College of Pennsylvania), Philadelphia, Pennsylvania
2000-	Adjunct Assistant Professor of Biochemistry, MCP Hahnemann University
2000-	Associate Member, Stoke's Research Institute, The Children's Hospital of Philadelphia
2000-	Research Assistant Professor of Pediatrics, University of Pennsylvania

**HONORS:**

1962-1966	Full scholarship to Barry College, Miami, Florida
Summer 1965	NSF Science Fellowship at University of Tennessee, Nashville, Tennessee
1966-1969	USPHS Trainee, Marquette University, Milwaukee, Wisconsin
1978-1980	Postdoctoral Fellow, American Heart Association, National Institutes of Health
1996-1999	NHLBI Mentored Scientist Development Award for Minority Faculty

**SELECTED PUBLICATIONS**

- de la Llera, M., G. Rothblat and B.V. Howard. "Cell triacylglycerol accumulation from very low density lipoprotein isolated from normal and hypertriglyceridemic human sera," *Biochim. Biophys. Acta* **574**: 414-422. (1979).
- Macarak, E.J., M. de la Llera, N.A. Kefalides and B.V. Howard. "A comparison of the intracellular lipids of cultured vascular endothelial cells and fibroblasts," *In Vitro* **15**: 936-940. (1979).
- de la Llera, M., J.M. Glick and G.H. Rothblat. "Mechanism of triglyceride accumulation in rat preadipocyte exposed to very low density lipoproteins," *J. Lipid.Res.* **22**: 245-253. (1981).
- de la Llera-Moya, M., G.H. Rothblat, J.M. Glick and J.M. England. "Etoposide treatment suppresses atherosclerotic plaque development in cholesterol-fed rabbits," *Arteriosclerosis and Thrombosis* **12**: 1363-1370. (1992).
- de la Llera-Moya, M., V. Atger, T.L. Paul, N. Fournier, N. Moatti, P. Girol, K. Friday and G. Rothblat. "A Cell Culture System for Screening Human Serum: Relationships Between Serum Components and Efflux Esterification and Transfer," *Arteriosclerosis and Thrombosis* **14**: 1056-1065. (1994).
- Morel, D.W., M. de la Llera-Moya and K. Friday. "Treatment of cholesterol-fed rabbits with antioxidants alone inhibits lipoprotein oxidation but not atherosclerosis," *Journal of Nutrition* **124**: 2123-2130. (1994).
- Atger, V., M. de la Llera Moya, M. Bamberger, O. Francone, P. Cosgrove, A. Tall, A. Walsh, N. Moatti and G. Rothblat. "Cholesterol Efflux Potential of Sera from Mice Expressing Human Cholesteryl Ester Transfer Protein and/or Human Apolipoprotein AI," *J. Clin. Invest.* **96**: 2613-2622. (1995).
- Fournier, N., M. de la Llera-Moya, B. Burkey, J. Swaney, J. Paterniti, Jr., N. Moatti, V. Atger and G. Rothblat. "Role of HDL Phospholipid in Efflux of Cell Cholesterol to Whole Serum: Studies with Human Apo AI Transgenic Rats," *J. Lipid Res.* **37**: 1704-1711. (1996).

9. Atger, V.M., M. de la Llera-Moya, G.W. Stoudt, W.V. Rodriguez, M.C. Phillips and G.H. Rothblat. "Cyclodextrins as Catalysts for the Removal of Cholesterol from Macrophage Foam Cells," *J. Clin Invest.* **99**: 773-780. (1997).
10. Jian, B., M. de la Llera-Moya, L. Rogers, G.H. Rothblat, O. Francone and J.B. Swaney. "Modification of the Cholesterol Efflux Properties of Human Serum by Enrichment with Phospholipid," *J. Lipid Res.* **38**: 738-744. (1997).
11. Fournier, N., J.L. Paul, V. Atger, A. Cogny, T. Soni, M. de la Llera-Moya, G. Rothblat. "HDL-phospholipid Content as a Major Factor Determining Cholesterol Efflux Capacity from Fu5AH Cells to Human Serum," *Arterioscler. Thromb. Vasc. Biol.* **17**: 2685-2691. (1997).
12. Ji, Y., B. Jian, N. Wang, Y. Sum, M. de la Llera-Moya, M.C. Phillips, G.H. Rothblat, and A.R. Tall. "Scavenger Receptor BI Promotes High Density Lipoprotein-mediated Cellular Cholesterol Efflux," *J. Biol. Chem.* **272**:20982-20985. (1997).
13. Jian, B., M. de la Llera-Moya, Y. Ji, N. Wang, M.C. Phillips, J.B. Swaney, A.R. Tall, and G.H. Rothblat. "Scavenger Receptor Class B Type I as a Mediator of Cellular Cholesterol Efflux to Lipoproteins and Phospholipid Acceptors," *J. Biol. Chem.* **273**: 5599-5606. (1998).
14. Gillotte, K.L., S. Lund-Katz, M. de la Llera-Moya, J.S. Parks, L.L. Rudel, G.H. Rothblat and M.C. Phillips. "Dietary Modification of High Density Lipoprotein Phospholipid and Influence on Cellular Cholesterol Efflux," *J. Lipid Res.* **39**: 2065-2075. (1998).
15. de la Llera-Moya, M., G.H. Rothblat, M.A. Connelly, G. Kellner-Weibel, S.W. Sakr, M.C. Phillips and D.L. Williams. "Scavenger Receptor B1 (SR-B1) Mediates Free Cholesterol Flux Independently of HDL tethering to the Cell Surface," *J. Lipid Res.* **40**: 575-580. (1999).
16. Fournier, N., V. Atger, J.-L. Paul, M. de la Llera-Moya, G. Rothblat, and N. Moatti. "Fractional Efflux and Net Change in Cellular Cholesterol Content Mediated by Sera from Mice Expressing both Human Apolipoprotein AI and Human Lecithin:Cholesterol Acyltransferase Genes," *Atherosclerosis*, **147**: 227-235. (1999).
17. Kellner-Weibel, G., M. de la Llera-Moya, M.A. Connelly, G. Stoudt, A.E. Christian, M.P. Haynes, D.L. Williams, and G.H. Rothblat. "Expression of Scavenger Receptor BI in COS-7 Cells Alters Cholesterol Content and Distribution," *Biochem.* **39**: 221-229. (2000).
18. Williams, D.L., M. de la Llera-Moya, S.T. Thuahnai, S. Lund-Katz, M.A. Connelly, S. Azhar, G.M. Anantharamaiah, and M.C. Phillips. "Binding and Cross-linking Studies Show That Scavenger Receptor BI Interacts with Multiple Sites in Apolipoprotein A-I and Identify the Class A Amphipathic  $\alpha$ -Helix as a Recognition Motif," *J. Biol. Chem.*, **275**: 18897-18904. (2000).
19. Yancey, P.G., M. de la Llera-Moya, S. Swarnakar, P. Monzo, S.M. Klein, M.A. Connelly, W.J. Johnson, D.L. Williams, and G.H. Rothblat. "HDL Phospholipid Composition is a Major Determinant of the Bi-directional Flux and Net Movement of Cellular Free Cholesterol Mediated by Scavenger Receptor-BI (SR-BI)," *J. Biol. Chem.*, **275**: 36596-36604. (2000).
20. Connelly, M.A., de la Llera-Moya, M., Monzo, P., Yancey, P.G., Drazul, D., Stoudt, G., Fournier, N., Klein, S.M., Rothblat, G.H., Williams, D.L. "Analysis of Chimeric Receptors Shows that Multiple Distinct Functional Activities of Scavenger Receptor, Class B, Type I (SR-BI), are Localized to the Extracellular Receptor Domain," *Biochemistry*, **40**(17): 5249-5259. (2001).
21. de la Llera-Moya, M., Connelly, M.A., Drazul, D., Klein, S.M., Favari, E., Yancey, P.G., Williams, D.L., Rothblat, G.H. "Scavenger Receptor Class B Type I Affects Cholesterol Homeostasis by Magnifying Cholesterol Flux Between Cells and HDL," *J. Lipid Res.* **42**: 1969-1978. (2001).
22. Yancey, P.G., Bortnick, A.E., Kellner-Weibel, G., de la Llera-Moya, M., Phillips, M.C., Rothblat, G.H. "Importance of Different Pathways of Cellular Cholesterol Efflux", *Arterioscler. Thromb. Vasc. Biol.* **23**: 712-719 (2003).
23. Connelly, M.A., M. de la Llera-Moya, Y. Peng, D. Drazul-Schrader, G.H. Rothblat, D.L. Williams. "Separation of Lipid Transport Functions by Mutations in the Extracellular Domain of Scavenger Receptor Class B, Type I," *J. Biol. Chem.* **28**: 25773-25782 (2003).
24. Parathath, S., M.A. Connelly, R.A. Rieger, S.M. Klein, N.A. Abumrad, M. de la Llera-Moya, C.R. Iden, G. H. Rothblat, D.L. Williams. "Changes in Plasma Membrane Properties and Phosphatidylcholine Subspecies of Insect Sf9 Cells due to Expression of Class B Scavenger Receptor SR-BI and CD36," *J. Biol. Chem.* In Press (2004).
25. Thuahnai, S.T., S. Lund-Katz, P. Dhanasekaran, M. de la Llera-Moya, M.A. Connelly, D.L. Williams, G.H. Rothblat, M.C. Phillips. "Scavenger Receptor Class B Type I-mediated Cholesteryl Ester-selective Uptake and Efflux of Unesterified Cholesterol," *J. Biol. Chem.* **279**: 12448-12455 (2004).