

## Table of Contents

This issue is available in electronic form at  
<http://www.jlr.org>

### Thematic Review

- 1353 *Thematic review series: The Immune System and Atherogenesis. The role of natural antibodies in atherogenesis*  
 Christoph J. Binder, Peter X. Shaw, Mi-Kyung Chang, Agnès Boullier, Karsten Hartvigsen, Sohvi Hörkkö, Yury I. Miller,  
 Douglas A. Woelkers, Maripat Corr, and Joseph L. Witztum

### Rapid Communication

- 1364 **Misidentification of prostamides as prostaglandins**  
 Michelle Glass, Jiwon Hong, Timothy A. Sato, and Murray D. Mitchell

### Research Articles

- 1369 **Adiponectin promotes adipocyte differentiation, insulin sensitivity, and lipid accumulation**  
 Yuchang Fu, Nanlan Luo, Richard L. Klein, and W. Timothy Garvey
- 1380 **Heterozygous mutation of ataxia-telangiectasia mutated gene aggravates hypercholesterolemia in apoE-deficient mice**  
 DongFang Wu, Hong Yang, Wei Xiang, LiChun Zhou, Mingjian Shi, George Julies, Janice M. LaPlante, Billy R. Ballard,  
 and ZhongMao Guo
- 1388 **Lipid imaging by gold cluster time-of-flight secondary ion mass spectrometry: application to Duchenne muscular dystrophy**  
 David Touboul, Alain Brunelle, Frédéric Halgand, Sabine De La Porte, and Olivier Laprévote
- 1396 **Role of ceramide in Ca<sup>2+</sup>-sensing receptor-induced apoptosis**  
 Zhenzhen Wu, Rajnish Tandon, Jenny Ziembicki, Junko Nagano, Kristine M. Hujer, R. Tyler Miller, and Chunfa Huang
- 1405 **Loss of G2A promotes macrophage accumulation in atherosclerotic lesions of low density lipoprotein receptor-deficient mice**  
 Brian W. Parks, Ginger P. Gambill, Aldons J. Lusis, and Janusz H. S. Kabarowski
- 1416 **Genome-wide linkage analyses and candidate gene fine mapping for HDL<sub>3</sub> cholesterol: the Framingham Study**  
 Qiong Yang, Chao-Qiang Lai, Laurence Parnell, L. Adrienne Cupples, Xian Adiconis, Yueping Zhu, Peter W. F. Wilson,  
 David E. Housman, Amanda M. Shearman, Ralph B. D'Agostino, and Jose M. Ordovas
- 1426 **Membrane microdomains in hepatocytes: potential target areas for proteins involved in canalicular bile secretion**  
 P. Tietz, J. Jefferson, R. Pagano, and N. F. LaRusso
- 1433 **The recycling of apolipoprotein E in macrophages: influence of HDL and apolipoprotein A-I**  
 Alyssa H. Hasty, Michelle R. Plummer, Karl H. Weisgraber, MacRae F. Linton, Sergio Fazio, and Larry L. Swift
- 1440 **Chemical modification of proteins during peroxidation of phospholipids**  
 Andrzej S. Januszewski, Nathan L. Alderson, Alicia J. Jenkins, Suzanne R. Thorpe, and John W. Baynes

**COVER:** Lipid-enriched microdomains (red) of the plasma membrane of hepatocytes. Distinct membrane microdomain regions of the hepatocyte plasma membrane, enriched in cholesterol and sphingolipids, are thought to target and physically cluster functionally related "flux proteins" for water [aquaporins (AQP8, 9)], ions, and solutes [chloride-bicarbonate anion exchanger isoform-2 (AE2) and multidrug resistance associated protein 2 (MRP2)] involved in canalicular bile secretion. Illustration by Stephen Boyd, Medical Illustrator. (See Tietz et al., p. 1426.)

- 1450 **Determinants of variation in serum paraoxonase enzyme activity in baboons**  
*David L. Rainwater, Michael C. Mahaney, Xing Li Wang, Jeffrey Rogers, Laura A. Cox, and John L. VandeBerg*
- 1457 **Structural modification of plasma HDL by phospholipids promotes efficient ABCA1-mediated cholesterol release**  
*Houssein Hajj Hassan, Sacha Blain, Betsie Boucher, Maxime Denis, Larbi Krimbou, and Jacques Genest*
- 1466 **ApoC-III deficiency prevents hyperlipidemia induced by apoE overexpression**  
*Gery Gerritsen, Patrick C. N. Rensen, Kyriakos E. Kypreos, Vassilis I. Zannis, Louis M. Havekes, and Ko Willems van Dijk*
- 1474 **Compartmental modeling to quantify  $\alpha$ -linolenic acid conversion after longer term intake of multiple tracer boluses**  
*Petra L. L. Goyens, Mary E. Spilker, Peter L. Zock, Martijn B. Katan, and Ronald P. Mensink*
- 1484 **Differential regulation and properties of angiopoietin-like proteins 3 and 4**  
*Hongfei Ge, Ji-Young Cha, Harini Gopal, Christopher Harp, Xinxin Yu, Joyce J. Repa, and Cai Li*
- 1491 **Evidence for multiple complementary pathways for efficient cholesterol absorption in mice**  
*Jahangir Iqbal and M. Mahmood Hussain*
- 1502 **The triacylglycerol synthesis enzyme DGAT1 also catalyzes the synthesis of diacylglycerols, waxes, and retinyl esters**  
*Chi-Liang Eric Yen, Mara Monetti, Betty J. Burri, and Robert V. Farese, Jr.*
- 1512 **Peptide inhibitor of pancreatic lipase selected by phage display using different elution strategies**  
*M. Lunder, T. Bratkovič, S. Kreft, and B. Štrukelj*
- 1517 **Endothelial lipase releases saturated and unsaturated fatty acids of high density lipoprotein phosphatidylcholine**  
*M. Gauster, G. Rechberger, A. Sovic, G. Hörl, E. Steyrer, W. Sattler, and S. Frank*
- 1526 **Domain-specific lipid distribution in macrophage plasma membranes**  
*Katharina Gaus, Macarena Rodriguez, Kalani R. Ruberu, Ingrid Gelissen, Timothy M. Sloane, Leonard Kritharides, and Wendy Jessup*
- 1539 **Cholesterol-lowering effects of dietary blue lupin (*Lupinus angustifolius* L.) in intact and ileorectal anastomosed pigs**  
*José M. Martins, Michel Riottot, Manuel C. de Abreu, Ana M. Viegas-Crespo, Maria J. Lança, José A. Almeida, João B. Freire, and Ofélia P. Bento*

## Methods

- 1548 **Shotgun lipidomics of phosphoethanolamine-containing lipids in biological samples after one-step in situ derivatization**  
*Xianlin Han, Kui Yang, Hua Cheng, Kora N. Fikes, and Richard W. Gross*
- 1561 **A simple and rapid method to measure cholesterol binding to P450s and other proteins**  
*Natalia Mast and Irina A. Pikuleva*
- 1569 **A novel method for the measurement of in vitro fatty acid 2-hydroxylase activity by gas chromatography-mass spectrometry**  
*Nathan L. Alderson, Michael D. Walla, and Hiroko Hama*
- 1576 **Calendar**
- 1578 **Author Index**
- 1579 **Instructions to Authors**