

## CURRICULUM VITAE

### **Donna Marie Driscoll, Ph.D.**

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### **EDUCATION**

- 1974 B.Sc. in Biology, Purdue University, West Lafayette IN  
1976 M.S. in Veterinary Science, University of Wisconsin, Madison, WI  
1984 Ph.D. in Pathology, University of Chicago, Chicago, IL (Advisor: Godfrey S. Getz)

### **POSTGRADUATE TRAINING**

- 1984-1987 Postdoctoral Scientist, Department of Developmental Gene Expression, Imperial Cancer Research Fund, UK. (Advisor: Jeffrey G. Williams)  
1987-1989 Non-Clinical Scientist, Department of Molecular Medicine, MRC Clinical Research Centre, Harrow, UK. (Advisor: James Scott)

### **ACADEMIC APPOINTMENTS**

- 1989-1992 Assistant Scientist, Department of Physiology and Medicine, Southwest Foundation for Biomedical Research, San Antonio, TX  
1990-1992 Assistant Professor, Department of Cellular and Structural Biology, University of Texas Health Science Center, San Antonio, TX  
1992-1996 Assistant Staff, Department of Cell Biology, Cleveland Clinic Foundation, Cleveland, OH  
1993-1997 Assistant Professor, Department of Physiology and Biophysics, Case Western Reserve University, Cleveland, OH  
1996-2001 Associate Staff, Department of Cell Biology, Cleveland Clinic Foundation, Cleveland, OH  
1997-present CCF Associate Professor, Department of Clinical Chemistry, Cleveland State University  
2001-present Staff, Department of Cell Biology, Cleveland Clinic Foundation, Cleveland, OH  
2002-present Adjunct Professor, Center for RNA Molecular Biology, Division of General Medical Sciences, Case Western Reserve University  
2003-present Professor, Department of Molecular Medicine, Cleveland Clinic College of Medicine at Case Western Reserve University

### **HONORS AND AWARDS**

- 1978-1984 Trainee, NIH Genetics Training Grant  
1989 Irvine H. Page Arteriosclerosis Research Award for Young Investigators, American Heart Association  
1990 Lyndon Baines Johnson Research Award, American Heart Association, Texas  
1993-1998 Established Investigator of the American Heart Association

2001 Elected Co-Vice-Chair (2003) and Co-Chair (2005), Gordon Research  
Conference on RNA Editing

### **MAJOR RESEARCH INTERESTS**

Mechanism of apolipoprotein-B mRNA editing  
Translational recoding of UGA as selenocysteine

### **INSTITUTIONAL RESPONSIBILITIES**

#### **Cleveland Clinic Foundation (CCF) Committees**

Member, Committee on Enhanced Opportunity for Underrepresented Groups, 1993-1994  
Chair, Basic Science Abstract Selection Committee for CCF Research Day, 1993-1995  
Member, Cardiovascular Biology Department Task Force Committee, 1994  
Member, Organizing Committee for CCF Research Day, 1994-1998  
Co-chair, CCF Research Day, 1995  
Member, Committee to Review the Chairman of Clinical Radiology Department, 1997  
Member, Search Committee for Chair of Immunology Department, 1997-1998  
Member, Search Committee for Transplantation Biologist, 1999-2001  
Member, Committee to Create Molecular Biology Curriculum for Medical Subspecialty  
Fellows, 2002  
Member, Committee to Develop “Advances in Medicine Series” for Clinicians

#### **Cleveland Clinic College of Medicine (CCLCM) Committees**

Member, Curriculum Development Task Force Committee, 2002-present  
Chair, Committee on Curriculum Development for Biochemistry, Molecular Biology and  
Cell Biology, 2002-2004  
Member, CCLCM Admissions Committee, 2004-present  
Member, Clinical Education Committee (Basic Science Liaison for Family Practice  
Clerkship), 2004  
Member, Curriculum Design Team for Year III, Block I (Surgery, Internal Medicine,  
Family Practice), 2004-present  
Member, Design Team for Fundamentals in Molecular Medicine Course, 2005

#### **Lerner Research Institute (LRI) Committees**

Member, Search Committee, Molecular Biologist in Transcription, 1993  
Member, Search Committee, Molecular and Cellular Biologist in Neurosciences, 1994  
Member, Search Committee, RNA Biologist, 1995  
Chair, Organizing Committee for LRI Annual Three-day Retreat, Salt Fork State Park,  
OH, 1995-1998  
Member, Search Committee, Cell Adhesion Biologist in Molecular Cardiology, 1997  
Member, Selection Committee for LRI Graduate Student Research Award, 1999, 2001  
Chair, Committee on Promotions for LRI Research Technologists, 1999–2004  
Member, Search Committee, Tendon Biologist, Biomedical Engineering Department, 2003  
Member, Committee on Appointments and Promotions, 2003-present  
Member, Search Committee for Tendon Mechanobiologist, Orthopedic Research Center  
and Department of Biomedical Engineering, 2004  
Member, Search Committee, Cell Biologist, Cell Biology Department, 2004-2005  
Member, Search Committee, Nanoscientist, Biomedical Engineering Department, 2004-  
present

#### **Department of Cell Biology Responsibilities**

Organizer, Weekly Lab Update and Journal Club Series, 1992-1993

Coordinator, Seminar Series, 1993-1995  
Organizer, Elsa Albrecht Award for Fellows and Students, 1994-present  
Media representative for public relations, 1995-1998  
Organizer, Fellows Seminar Series, 1997-1998  
Faculty advisor, Annual Visiting Professor Series for Fellows and Students, 1998-present  
Organizer, Weekly Lab Update Series, 1999-2001  
Organizer, Cell Biology Department Retreat at Sawmill Creek, Sandusky OH, May 2001  
Member, Organizing Committee for CCF/CWRU Cell Biology Retreat at Sawmill Creek, Sandusky OH, May 2004  
Member, Organizing Committee, 20<sup>th</sup> Annual Irving H. Page Lecture, 2004

### **Case Western Reserve University Committees, Physiology and Biophysics Department**

Member, Committee on Seminars, 1993-1996  
Member, Committee on Appointments, Promotions, and Tenure, 1996-1997

### **RESEARCH GRANT AWARDS**

#### **Active grant support**

2000-2005 NIH R01: Editing of Apolipoprotein-B mRNA (D. M. Driscoll, P.I.)  
2003-2008 NIH Program Project: Vascular Cell Function and Atherosclerosis (P.E. DiCorleto, P.I.); Project 2: Mechanism of Selenoperoxidase Biosynthesis (D.M. Driscoll, Project Leader)

#### **Previous national grant support**

1998-2003 NIH Program Project: Oxidation, Vascular Cell Function and Atherosclerosis (P.E. DiCorleto, P.I.); Project 2: Mechanism of Selenoperoxidase Biosynthesis (D.M. Driscoll, Project Leader)  
1996-2000 NIH R01: Editing of Apolipoprotein-B mRNA (D.M. Driscoll, P.I.)  
1995-1999 NIH R01: Mechanism of Selenoprotein Biosynthesis (D.M. Driscoll, P.I.)  
1993-1998 American Heart Association Established Investigator Award  
1993-1998 NIH Program Project: Lipoproteins and Cell-derived Factors in Atherogenesis. (P.E. DiCorleto, P.I.); D.M. Driscoll, Project 5 Co-Leader: Plasma Lipid Transfer Protein  
1991-1996 NIH R29 FIRST Award: Editing of Apolipoprotein-B mRNA (D.M. Driscoll, P.I.)

#### **Other grants**

2005 NSF (MCB 0434464). 2005 Gordon Research Conference on RNA Editing (D.M. Driscoll, P.I.)  
2005 - 2007 NIH R13 (MH073163-01). 2005 and 2007 Gordon Research Conferences on RNA Editing (D.M. Driscoll, P.I.)

### **PROFESSIONAL ACTIVITIES**

#### **Grant Reviews**

NIH, Parent Review Committee for SCORs in Arteriosclerosis, 1991  
NIH, Review Committees for SCORs in Arteriosclerosis  
1991 Johns Hopkins University  
1991 Washington University  
NIH, Review Committees for Program Projects  
1993 Gladstone Institute of Cardiovascular Disease/UCSF  
1994 Georgetown University  
1995 Rockefeller University  
1996, 1997 UC-Berkeley  
1998 Gladstone Institute of Cardiovascular Disease/UCSF

American Heart Association, Northeast Ohio Affiliate  
1993 Student Selection Committee for Research Fellowships  
1994-1996 Study Section for Grants and Postdoctoral Fellowships  
1997 Vice-Chair of Study Section for Grants and Postdoctoral Fellowships,  
American Heart Association, National  
1996-1999 Study Section on Lipids and Lipoproteins  
American Heart Association, Mid-America Research Consortium  
1998 Co-Chair of Study Section for Grants and Postdoctoral Fellowships  
*Ad hoc* reviewer for: National Science Foundation, U.K. Biotechnology and Biological  
Sciences Research Council, Wellcome Trust, Science Foundation Ireland, Philip  
Morris External Research Program

### **Manuscript Reviews**

*Arteriosclerosis and Thrombosis, Biochemistry, EMBO J, EMBO Reports, Gene, Journal of  
Biological Chemistry, Journal of Clinical Investigation, Journal of Lipid Research, Journal  
of Molecular Biology, Molecular and Cellular Biology, Nature, Nature Structural &  
Molecular Biology, Nucleic Acids Research, Proceedings of the National Academy of  
Sciences, USA; RNA, Trends in Cardiovascular Medicine*

### **National Committees**

Member, Council of Gordon Research Conferences, 2003-2005

### **Membership in Professional Societies**

Fellow, Council on Arteriosclerosis, American Heart Association  
Member, American Association for the Advancement of Science  
Member, American Society for Microbiology  
Member, RNA Society

### **INVITED PRESENTATIONS**

#### **National Meetings**

Invited Speaker, Gordon Research Conference on Atherosclerosis, Meriden NH, 1989  
Invited Speaker, Steenbock Symposium on Atherosclerosis, Madison WI, 1990  
Session Chair, American Heart Association Meeting, Anaheim CA, 1991  
Session Chair, American Heart Association Meeting, Dallas TX, 1994  
Invited Speaker, Gordon Research Conference on RNA Editing, Ventura CA, 1997 - 2003

#### **Seminars**

Parke-Davis Pharmaceuticals, 1990  
Cellular and Structural Biology Department, University of Texas at San Antonio, 1990  
Pathology Department, University of Chicago, 1990  
Gladstone Institute for Cardiovascular Disease, UC- San Francisco, 1991  
Vascular Cell Biology and Atherosclerosis Department, Cleveland Clinic, 1991  
Physiology and Biophysics Department, Case Western Reserve University, 1993  
Molecular Biology Department, Case Western Reserve University, 1993  
Cleveland RNA Club, Cleveland OH, 1996 - present  
Clinical Chemistry Department, Cleveland State University, 1997  
Medical Biochemistry Department, Ohio State University, 1997  
CCF-OSU Symposium on Molecular Medicine, 1997  
Molecular Cardiovascular Research Center, Case Western Reserve University, 1997  
Chemistry Department, Manhattan College, 1998  
Biology Department, Cleveland State University, 2000  
Biology Department, John Carroll University, 2000  
Physiology Department, Tufts University, 2001

Institute for Environmental Medicine, University of Pennsylvania, 2001  
Cell Biology Club, Case Western Reserve University, 2001  
Biochemistry Department, University of Nebraska, 2002  
Department of Microbiology, Ohio State University, 2003  
Department of Biochemistry, University of Rochester, 2004  
Department of Molecular Genetics, Robert Wood Johnson Medical School - UMDNJ, 2004  
Center for Nutritional Sciences, University of Kentucky, 2005  
Pulmonary Department, Case Western Reserve University, 2005

## **TRAINEES**

### **Postdoctoral fellows**

T.R. Pushpa-Rekha, Ph.D., 1993-1996: Current position: Research Associate, Division of Endocrinology and Metabolism, University of Virginia  
Subhas Banerjee, M.D., 1994-1996: Current position: Assistant Professor of Medicine, Department of Gastroenterology, Stanford University  
Anuradha Mehta, Ph.D., 1994-2001; Current position: Scientist, PTC Therapeutics, NJ  
Paul Copeland, Ph.D., Postdoctoral Fellow, 1997-2002; Current position: Assistant Professor, Department of Molecular Genetics and Microbiology, Robert Wood Johnson Medical School, University of Medicine & Dentistry of New Jersey  
Shigenori Murata, Ph.D., Postdoctoral Fellow, 1997-2001; Current position: Scientist, DNA Chip Research Inc., Yokohama Japan  
Carri Gerber, Ph.D., Postdoctoral Fellow, 2000-present  
Laurent Chavatte, Ph.D., Postdoctoral Fellow, 2002-2005; Current position: Assistant Professor, CNRS-Paris, France  
Mithu Majumder, Ph.D., Postdoctoral Fellow, 2002-present  
Lisa Middleton, Ph.D., Postdoctoral Fellow, 2003-present  
Jodi Bubenik, Ph.D., Postdoctoral Fellow, 2005-present

### **Undergraduate students**

Jeff Kniele, John Carroll University, Summer Internship, 1998  
Tammy Pylawka, University of Illinois, Summer Internship, 1999  
Vince Stepanik, John Carroll University, Research Student, June 1999 - June 2001  
Craig Recko, John Carroll University, Summer Internship, 2000  
Emily Rainey, College of Wooster, Summer Internship, 2001  
Anil Perumbeti, Xavier University, Summer Internship, 2001  
Marc Spelar, John Carroll University, Summer Internship, 2002  
Luke Reinecke, John Carroll University, Summer Internship, 2002 and 2003  
Nicholas James, John Carroll University, Summer Internship, 2003, 2004, 2005

### **CCLCM medical students**

Justin Bohrer, Basic Science Research Rotation, Summer 2004

### **High school students**

Jenny Obiaya, Cleveland Heights High School, Summer Internship, 2004 and 2005

### **Awards to Trainees**

T.R. Pushpa-Rekha, Ph.D.  
a. American Heart Association Postdoctoral Fellowship, 1994-1996  
b. 2<sup>nd</sup> Place, Elsa Albrecht Award for Best Manuscript, Cell Biology Dept., 1996  
Anuradha Mehta, Ph.D.  
a. Elsa Albrecht Award for Best Manuscript, Cell Biology Dept., 1997  
b. Merlin Bumpus Junior Investigator Award in Basic Science, CCF, 1999  
Paul Copeland, Ph.D.

- a. NRSA Postdoctoral Fellowship, 1998-2001
- b. Elsa Albrecht Award for Best Manuscript, Cell Biology Dept., CCF, 1999
- c. Scientist Development Grant, American Heart Association (\$260,000) 2001-2005

Carri Gerber, Ph.D.

American Heart Association Postdoctoral Fellowship, 2002-2004

Lisa Middleton, Ph.D.

Trainee on NIH Vascular Cell Biology Training Grant, 2003-2004

American Heart Association Postdoctoral Fellowship, 2004-2006

Finalist, Merlin Bumpus Junior Investigator Award in Basic Science, CCF, 2004

Laurent Chavatte, Ph.D.

1<sup>st</sup> Place, Merlin Bumpus Junior Investigator Award in Basic Science, CCF, 2004

### **Participation in Training Grants**

1999-2004 NIH T32 Grant: "Training Program in Vascular Cell Biology" (E.F. Plow, P.I.)

2001-2006 NIH T32 Grant: "Morehouse School of Medicine Training Program in Cardiovascular Science" (G.H. Gibbons, P.I.)

### **TEACHING EXPERIENCE**

Note: Curriculum development activities are listed under CCLCM Committees, page 2

Member, Thesis Committees for:

3 Ph.D. students, Physiology and Biophysics Dept., CWRU;

2 Ph.D. students, Molecular Biology and Microbiology Dept., CWRU;

3 Ph.D. students and 1 M.S. student, Biochemistry Dept., CWRU

Member, Qualifying Exam Committees for Ph.D. students, Physiology and Biophysics

Dept. CWRU Organizer, Molecular Biology Journal Club; Physiology and Biophysics Dept., CWRU

Lecturer, Horizons in Biomedical Research: Career Enhancement for Minorities, CWRU

Member, Team Teaching Group for the following survey courses for graduate students:

CWRU PHOL 460: Molecular Biology

CWRU PHOL 514: Systems Physiology

CSU CHEM 750: Cardiovascular Risk Factors and Atherosclerosis

Supervisor, Molecular Biology Rotation for Ph.D. students in Physiology and Biophysics

Dept., CWRU, and in Clinical Chemistry Dept., CSU

Panel member, Course on Responsible Conduct of Research and Scientific Integrity, CCF

Facilitator, Fundamentals in Molecular Medicine and Translational Research, CCLCM

15 contact hours, including sessions on:

Organization and function of the genome

Decoding genetic information

RNA processing

Protein turnover and posttranslational modification

Transcriptional and posttranscriptional gene regulation

Basic Science Research Preceptor for 1<sup>st</sup> Year Medical Student, CCLCM, Summer 2004

Facilitator, Summer Journal Club for 1<sup>st</sup> Year Medical Students, CCLCM, 2004, 2005

Writer for Problem Solving Sessions, Fundamentals in Molecular Medicine Course, 2005

Assessor, Basic Science and Translational Research Summer Project Presentations by 1<sup>st</sup> Year CCLCM students, 2005

### **PUBLICATIONS**

### Peer-reviewed articles

- Driscoll, D.M. and G.S. Getz. Extrahepatic synthesis of apolipoprotein E. *J. Lipid Res.* 25:1368-1379, 1984.
- Driscoll, D.M., Schreiber, J., Schmit, V., and G.S. Getz. Regulation of apolipoprotein E synthesis in rat ovarian granulosa cells. *J. Biol. Chem.* 260:9031-9038, 1985.
- Reardon, C.A., Driscoll, D.M., Davies, R.A., Borchardt, R.A., and G.S. Getz. Charge polymorphism of rat apoprotein E. *J. Biol. Chem.* 261:4638-4645, 1986.
- Driscoll, D.M. and J.G. Williams. Two divergently transcribed genes of *Dictyostelium discoideum* are cyclic AMP inducible and coregulated during development. *Mol. Cell. Biol.* 7:4482-4489, 1987.
- Driscoll, D.M., Pears, C.J., and J.G. Williams. Characterization of two divergently transcribed *Dictyostelium* gene pairs and identification of G-rich sequence elements between them with characteristics of a basal promoter element. *Dev. Genet.* 9:455-468, 1988.
- Simon, M.-N., Driscoll, D., Mutzel, R., Part, D., Williams, J., and M. Veron. Over-production of the regulatory subunit of the cAMP-dependent protein kinase blocks the differentiation of *Dictyostelium discoideum*. *EMBO J.* 8:2039-2043, 1989.
- Davies, M.S., Wallis, S.C., Driscoll, D.M., Wynne, J.K., Williams, G., Powell, L.M., and J. Scott. Sequence requirements for the editing of apolipoprotein-B mRNA in transfected hepatoma cells. *J. Biol. Chem.* 264:13395-13398, 1989.
- Driscoll, D.M., Wynne, J.K., Wallis, S.C., and J. Scott. An *in vitro* system for the editing of apolipoprotein B mRNA. *Cell* 58:519-525, 1989.
- Driscoll, D.M., Mazzone, T., Matsushima, T., and G.S. Getz. Apoprotein E biosynthesis in the cholesterol-fed guinea pig. *Arteriosclerosis* 10:31-39, 1990.
- Driscoll, D.M. and E. Casanova. Characterization of the apolipoprotein-B mRNA editing activity in baboon enterocyte extracts. *J. Biol. Chem.* 265:21401-21403, 1990.
- Harwood, A.J., Hopper, N.A., Simon, M.-N., Driscoll, D.M., and J.G. Williams. Culmination in *Dictyostelium* is regulated by the cAMP-dependent protein kinase. *Cell* 69:615-624, 1992.
- Mott, G.E., DeLallo, L., Driscoll, D.M., McMahan, C.A., and D.S. Lewis. Influence of breast and formula feeding on hepatic concentrations of apolipoprotein and low density lipoprotein mRNAs. *Biochem. Biophys. Acta* 1169:59-105, 1993.
- Hixson, J.E., Driscoll, D.M., Birnbaum, S., and M.L. Britten. Baboon lecithin cholesterol acyltransferase (LCAT): cDNA sequences of two alleles, evolution and gene expression. *Gene* 128:295-299, 1993.
- Driscoll, D.M., Lakhe-Reddy, S., Oleksa, L.M. and D.L. Martinez. Induction of RNA editing at heterologous sites by sequences in apolipoprotein-B mRNA. *Mol. Cell. Biol.* 13:7288-7294, 1993.
- Driscoll, D.M., and Q.W. Zhang. Expression and characterization of p27, the catalytic subunit of the apolipoprotein-B mRNA editing enzyme. *J. Biol. Chem.* 269:19843-19847, 1994.
- Pushpa-Rekha, T.R., Burdsall, A.L., Oleksa, L.M., Chisolm, G.M., and D.M. Driscoll. Rat phospholipid hydroperoxide glutathione peroxidase: cDNA cloning and identification of multiple transcription and translation start sites. *J. Biol. Chem.* 270:26993-26999, 1995.
- Yamanaka, S., Poksay, K.S., Driscoll, D.M., and T.L. Innerarity. Hyperediting of apolipoprotein-B mRNA by apobec-1 requires auxiliary protein(s) but not a mooring sequence motif. *J. Biol. Chem.* 271:11506-11510, 1996.
- Mehta, A., Banerjee, S., and D.M. Driscoll. Apobec-1 interacts with a 65 kDa complementing protein to edit apolipoprotein-B mRNA *in vitro*. *J. Biol. Chem.* 271:28294-28299, 1996.
- Lesoon, A., Mehta, A., Singh, R., Chisolm, G.M., and D.M. Driscoll. An RNA-binding protein recognizes a mammalian selenocysteine insertion sequence element required for cotranslational incorporation of selenocysteine. *Mol. Cell. Biol.* 17:1977-1985, 1997.

- Mehta, A. and D.M. Driscoll. A sequence-specific RNA-binding protein complements apobec-1 to edit apolipoprotein-B mRNA. *Mol. Cell. Biol.* 18:4426-4432, 1998.
- Wang, X., Driscoll, D.M., and R.E. Morton.. Molecular cloning and expression of lipid transfer inhibitor protein reveals its identity with apolipoprotein F. *J. Biol. Chem.* 274:1814-1820, 1999.
- Copeland, P.R., and D.M. Driscoll. Purification, redox sensitivity and RNA binding properties of SECIS-binding protein 2, a protein involved in mammalian selenoprotein biosynthesis. *J. Biol. Chem.* 274:25447-25454, 1999.
- Copeland, P.R., Fletcher, J.E., Carlson, B.A., Hatfield, D.L., and D.M. Driscoll. A novel RNA-binding protein, SBP2, is required for the translation of mammalian selenoprotein mRNAs. *EMBO J.*, 19:306-314, 2000.
- Mehta, A., Kinter, M.T., Sherman, N.E., and D.M. Driscoll. Molecular cloning of apobec-1 complementation factor (ACF), a novel RNA-binding protein involved in the editing of apolipoprotein-B mRNA. *Mol. Cell. Biol.*, 20:1846-1854, 2000.
- Tujebajeva, R.M., Copeland, P.R., Xu, X.-M., Carlson, B.A., Harney, J.W., Driscoll, D.M., Hatfield, D.A., and M.J. Berry. Decoding apparatus for eukaryotic selenocysteine insertion. *EMBO Reports*, 1:158-163, 2000.
- Fletcher, J.E., Copeland, P.R., and D.M. Driscoll. Polysome distribution of phospholipid hydroperoxide glutathione peroxidase mRNA: Evidence for a block in elongation at the UGA/selenocysteine codon. *RNA*, 6:1573-1584, 2000.
- Copeland, P.R., Stepanik, V.A., and D.M. Driscoll. Insight into mammalian selenocysteine insertion: Domain structure and ribosome binding properties of Sec insertion sequence binding protein-2. *Mol. Cell. Biol.*, 21:1491-1496, 2001.
- Fletcher, J.E., Copeland, P.R., Driscoll, D.M., and A. Krol. The selenocysteine incorporation machinery: Interactions between the SECIS RNA and SECIS-binding protein SBP2. *RNA*, 7:1442-1453, 2001.
- Mehta, A. and D.M. Driscoll. Identification of domains in Apobec-1 Complementation Factor required for RNA binding and apolipoprotein-B mRNA editing. *RNA*, 8: 69-82, 2002.
- Driscoll, D.M. and L. Chavatte. Finding needles in a haystack: *In silico* identification of eukaryotic selenoprotein genes. *EMBO Rep.*, 5:140-141, 2004.
- Sampath P., Mazumder, B., Seshadri, V., Gerber, C.A., Chavatte, L., Kinter, M., Dignam, J.D., Kim, S., Driscoll, D.M., and P.L. Fox. Noncanonical function of glutamyl-prolyl-tRNA synthetase: Gene-specific silencing of translation. *Cell*, 119: 195-208, 2004.
- Chavatte, L. and D.M. Driscoll. Ribosomal protein L30 is a component of the UGA/selenocysteine recoding machinery in eukaryotes. *Nature Str. Mol. Biol*, 12, 408-416, 2005.  
\*Featured in *News and Views* article in *Nature Str. Mol. Biol*, 12, 389-390, 2005.

### Invited book chapters and review articles

- Driscoll, D.M. and G.S. Getz. An overview. The molecular biology of lipoprotein biosynthesis and metabolism. *Methods Enzymol.* 128:41-70, 1986.
- Hay, R.V., Driscoll, D.M., and G.S. Getz. Biogenesis of lipoproteins. In: *The Biochemistry and Biology of Plasma Lipoproteins* (Scanu, A.M. and Spector, A.A., eds.), New York, N.Y., Marcel-Dekker, pp. 11-52, 1986.
- Williams, J., Pears, C., Jermyn, K., Driscoll, D., Mahbubani, M., and R. Kay. Control of gene expression during cellular differentiation of *Dictyostelium discoideum*. In: *Regulation of Gene Expression* (Booth, I. and Higgins, C., eds.), Cambridge, England, Cambridge University Press, pp. 277-298, 1986.

- Scott, J., Wallis, S.C., Davies, M.S., Wynne, J.K., Powell, L.M., and D.M. Driscoll. RNA editing: a novel mechanism for regulating lipid transport from the intestine. *Gut Festschrift* 30:35-43, 1989.
- Driscoll, D.M. The editing of apolipoprotein-B mRNA. In: Proceedings of the Twentieth Steenbock Symposium: Molecular Biology of Atherosclerosis (Attie, A.D., ed.), New York, N.Y., Elsevier Science Publishers, pp. 79-86, 1990.
- Mehta, A. and D.M. Driscoll. Molecular Cloning of Apobec-1 Complementation Factor (ACF) Using HUCL Membranes. *Strategies*,13: 74-75, 2000.
- Driscoll, D.M. and T.L. Innerarity. RNA Editing by Cytidine Deamination in Mammals. In: RNA Editing: Frontiers in Molecular Biology (B.L. Bass, ed), Oxford University Press, 2001.
- Copeland, P.R. and D.M. Driscoll. SECIS Binding Proteins . In: Selenium: Its Molecular Biology and Role in Human Health (D.L. Hatfield, ed.), Kluwer Academic Publishers, 2001.
- Copeland, P.R. and D.M. Driscoll. RNA-binding proteins and selenocysteine. *BioFactors*: 14:11-16, 2001.
- Berry, M.J., Tujebajeva, R.M., Copeland, P.R., Xu, X.-M., Carlson, B.A., Martin, G.W., Low, S.C., Mansell, J.B., Grundner-Culemann, E., Harney, J.W., Driscoll, D.M., and D.L. Hatfield. Selenocysteine incorporation directed from the 3'UTR: characterization of eukaryotic EFsec and mechanistic implications. *Biofactors*, 14: 17-24, 2001.
- Copeland, P.R. and D.M. Driscoll. Purification and analysis of SECIS Binding Protein-2. *Methods Enzymol.*, 347: 40-49, 2002.
- D.M. Driscoll and P.R. Copeland. Mechanism and regulation of selenoprotein synthesis. *Ann. Rev. Nutrition*, 23:17-40, 2003.
- C.A. Gerber, A. Relich, and D.M. Driscoll. Isolation of factors involved in C to U editing. In: RNA Interference, Editing and Modification (J.M. Gott, ed.), Humana Press, 2004.
- Copeland, P.R. and D.M. Driscoll. SECIS binding proteins and eukaryotic selenoprotein synthesis. In: Selenium: Its Molecular Biology and Role in Human Health (Hatfield, D.L. and M.J. Berry, eds.), Kluwer Academic Publishers, in press.