

## Publications List for Papers and Journal Articles

- Dimond, R. L., Brenner, M. and Loomis, W. F., Jr. "Mutations affecting N-Acetylglucosaminidase in *Dictyostelium discoideum*." 1973. Proc. Natl. Acad. Sci., U.S.A. **70**: 3356-3360.
- Dimond, R. L. and Loomis, W. F., Jr. "Vegetative Isozyme of N-Acetylglucosaminidase in *Dictyostelium discoideum*." 1974. J. Biol. Chem. **249**: 5628-5632.
- Dimond, R. L. and Loomis, W. F. "Structure and function of  $\beta$ -glucosidases in *Dictyostelium discoideum*." 1976. J. Biol. Chem. **251**: 2680-2687.
- Brenner, M., Dimond, R. L. and Loomis, W. F. "Rapid Biochemical Screening of Large Numbers of Animal Cell Clones." 1976. Methods Cell Biol. **14**: 187-194.
- Dimond, R. L., Farnsworth, P. A. and Loomis, W. F. "Isolation and Characterization of Mutations Affecting UDPG Pyrophosphorylase Activity in *Dictyostelium discoideum*." 1976. Dev. Biol. **50**: 169-181.
- Dimond, R. L., Mayer, M. and Loomis, W. F. "Characterization and Development Regulation of  $\beta$ -Galactosidase Isozymes in *Dictyostelium discoideum*." 1976 Dev. Biol. **52**: 74-82.
- Loomis, W. F., White, S. and Dimond, R. L. "A Sequence of Dependent Stages in the Development of *Dictyostelium discoideum*." 1976. Dev. Biol. **53**: 171-177.
- Loomis, William F., Dimond, Randall L., Free, Stephen J., White, Sally S. "Independent and Dependent Sequences in Development of *Dictyostelium*." 1977 Eucaryotic Microbes as Model Developmental Systems **Vol. 2**, 177-194
- Borts, R. H., and Dimond, R. L. "The  $\alpha$ -Glucosidases of *Dictyostelium discoideum* I. "Identification and Characterization." 1981. Dev. Biol. **87**: 176-184.
- Borts, R. H., and Dimond, R. L. "The  $\alpha$ -Glucosidases of *Dictyostelium discoideum* II. "Developmental Regulation and Cellular Localization." 1981. Dev. Biol. **87**: 407-416.

- Burns, R. A., Levi, G. P. and Dimond, R. L. "Regulation and Secretion of Early Developmentally Controlled Enzymes during Axenic Growth in *Dictyostelium discoideum*." 1981. Dev. Biol. **84**: 407-416.
- Cardelli, J. A., Knecht, D. A. and Dimond, R. L. "Membrane-Bound and Free Polysomes in *Dictyostelium discoideum*. I. Isolation and Developmental Effects on Size and Distribution." 1981. Dev. Biol. **82**: 180-185.
- Cardelli, J. A. and Dimond, R. L. "Regulation of Protein Synthesis in *Dictyostelium discoideum*: Effects of Starvation and Anoxia on Initiation." 1981 Biochemistry. **82**: 7391-7398.
- Dimond, R. L., Burns, R. A. and Jordan, K. B. "Secretion of Lysosomal Enzymes in the Cellular Slime Mold, *Dictyostelium discoideum*." 1981. J. Biol. Chem. **256**: 6565-6572.
- Knecht, D. A. and Dimond, R. L. "Lysosomal Enzymes Possess a Common Antigenic Determinant in the Cellular Slime Mold, *Dictyostelium discoideum*." 1981. J. Biol. Chem. **256**: 3564-3575.
- Cullen, D., Smalley, E. B. and Dimond, R. L. "Heterokaryosis in *Fusarium tricinctum* and *F. sporotrichioides*." 1983. J. Gen. Microbiol. **129**: 3035-3041.
- Dimond, R. L., Knecht, D. A., Jordan, K. B., Burns, R. A. and Levi, G. P. "Secretory Mutants in the Cellular Slime Mold *Dictyostelium discoideum*." 1983. Methods Enzymol. **96**: 815-828.
- Knecht, D. A., Mierendorf, R. C., Jr. and Dimond, R. L. "Immunological Recognition of Modifications on Functionally Related Proteins." 1983. Methods Enzymol. **98**: 159-166.
- Mierendorf, R. C., Jr., Cardelli, J. A., Levi, G. P. and Dimond, R. L. "Synthesis of Related Forms of the Lysosomal Enzyme  $\alpha$ -Mannosidase in *Dictyostelium discoideum*." 1983. J. Biol. Chem. **258**: 5878-5884.
- Mierendorf, R. C., Jr. and Dimond, R. L. "Functional Heterogeneity of Monoclonal Antibodies Obtained Using Different Screening Assays." 1983. Anal. Biochem. **135**: 221-229.

- Freeze, J. H., Mierendorf, R. C., Jr., Wunderlich, R. and Dimond, R. L. "Sulfated Oligosaccharides Block Antibodies to Many *Dictyostelium discoideum* Acid Hydrolases." 1984. J. Biol. Chem. **259**: 10641-10643.
- Knecht, D. A. and Dimond, R. L.. "Visualization of Antigenic Proteins on Western Blots". 1984. Anal. Biochem. **136**: 180-184.
- Knecht, D. A., Dimond, R. L., Wheeler, S. and Loomis, W. F. "Antigenic Determinants Shared by Lysosomal Proteins of *Dictyostelium discoideum*. Characterization Using Monoclonal Antibodies and Isolation of Mutations Affecting the Determinant." 1984. J. Biol. Chem. **259**: 10633-10640.
- Livi, G. P. and Dimond, R. L. "Accumulation of  $\alpha$ -Mannosidase-1 in *Dictyostelium discoideum* Requires Many Developmentally Essential Genes." 1984. Dev. Biol. **101**: 503-511.
- Cardelli, J.A., Livi, G.P., Mierendorf, R.C., Knecht, D.A., and Dimond R.L. "Gene Regulation During Early Development of the Cellular Slime Mold *Dictyostelium discoideum*" in Molecular Biology of Development (Alan R. Liss, Inc.) 1984 pp 427-435
- Cardelli, J. A., Knecht, D. A., Wunderlich, R. and Dimond, R. L. "Major Changes in Gene Expression Occur during at Least Four Stages of Development of *Dictyostelium discoideum*." 1985. Dev. Biol. **110**: 147-156.
- Knecht, D. A., Green, E. D., Loomis, W. F. and Dimond, R. L. "Developmental Changes in the Modification of Lysosomal Enzymes in *Dictyostelium discoideum*." 1985. Dev. Biol. **107**: 490-502.
- Livi, G. P., Cardelli, J. A. and Dimond, R. L. "  $\alpha$ -Mannosidase-1 mutants of *Dictyostelium discoideum*: Early aggregation-essential genes regulate enzyme precursor synthesis, modification, and processing." 1985. Differentiation **29**: 207-215.
- Livi, G. P., Cardelli, J. A., Mierendorf, R. C., Jr. and Dimond, R. L. "Regulation of Lysosomal  $\alpha$ -Mannosidase-1 Synthesis during Development in *Dictyostelium discoideum*." 1985. Dev. Biol. **110**: 514-520.
- Livi, G. P., Woychik, N. A. and Dimond, R. L. "Lysosomal enzyme inactivation associated with defects in post-translational modification during development in *Dictyostelium discoideum*." 1985. Differentiation **30**: 83-91.

Mierendorf, Jr., R. C., Cardelli, J. A. and Dimond, R. L. "Pathways Involved in Targeting and Secretion of a Lysosomal Enzyme in *Dictyostelium discoideum*." 1985. J. Cell Biol.

Bennett, V. D., Dimond, R. L. "Biosynthesis of Two Developmentally Distinct Acid Phosphatase Isozymes in *Dictyostelium discoideum*." 1986. J. Biol. Chem. **261**: 5355-5362.

Cardelli, J. A., Mierendorf, R. C., Jr. and Dimond, R. L. "Initial Events Involved in the Synthesis of the Lysosomal Enzyme  $\alpha$ -Mannosidase in *Dictyostelium discoideum*." 1986. Arch. Biochem. Biophys. **244**: 338-345.

Cardelli, J. A., Golumbeski, G. S. Dimond, R. L. "Lysosomal Enzymes in *Dictyostelium discoideum* Are Transported at Distinctly Different Rates." 1986. J. Cell Biol. **102**: 1264-1270.

Golumbeski, G. S. and Dimond, R. L. "The Use of Tolerization in the Production of Monoclonal Antibodies against Minor Antigenic Determinants." 1986. Anal. Biochem. **154**: 373-381.

Green, E. D., Knecht, D. A. and Dimond, R. L. "Examination of isoelectric focusing and electrophoretic methods for resolving acidic proteins." 1986. Electrophoresis **7** (9): 407-413.

Seshadri, J., Cotter, D. A. and Dimond, R. L. "The Characterization and Secretion Pattern of the Lysosomal Trehalases of *Dictyostelium discoideum*." 1986. Exp. Mycol. **10**: 131-143.

Woychik, N. A., Cardelli, J. A. and Dimond, R. L. "A Conformationally Altered Precursor to the Lysosomal Enzyme  $\alpha$ -Mannosidase Accumulates in The Endoplasmic Reticulum in a Mutant Strain of *Dictyostelium discoideum*." 1986. J. Biol. Chem. **261** (21): 9595-9602.

Cardelli, JA; Golumbeski, GS; Woychik, NA; Ebert, DL; Mierendorf, RC; Dimond, RL "Defining the Intracellular Localization Pathways followed by Lysosomal Enzymes in *Dictyostelium discoideum*." 1987 Methods Cell Biol **28**: 139-155

Golumbeski, George S., Dimond, Randall L. "Developmentally Regulated Expression Temporally Distinct  $\beta$ -Glucosidase Lsozymes in *Dictyostelium discoideum*." 1987 Developmental Biology **123**: 494-499

- Judelson, Howard S., Freeze, Hudson H., Dimond, Randall L. "Characterization and Distribution of Multiple Antigens on N-Linked Oligosaccharides of *Dictyostelium discoideum* Proteins." 1987 Archives of Biochemistry and Biophysics **253**: (2) 305-314
- Judelson, Howard S., Burns, Robert A., Dimond, Randall L. "A Locus Regulating N-Aetylglucosaminidase Synthesis during Development in *Dictyostelium*." 1987 Developmental Biology **120**: 170-176
- Livi, George P., Woychik, Nancy A., Dimond, Randall A. "A late Developmental Change in Lysosomal Enzyme Sulfation Specific to Newly Synthesized Proteins in *Dictyostelium discoideum*." 1987 Developmental Biology **121**: 293-300
- Woychik, Nancy A., Dimond, Randall L. "A Single Mutation Prevents the Normal Intracellular Transport of Multiple Lysosomal Proteins from the Rough Endoplasmic Reticulum." 1987 The Journal of Biological Chemistry **262**: 10008-10014
- Cardelli, James A., Dimond, Randall L. "Transport and Targeting of Lysosomal Enzymes in *Dictyostelium discoideum*." 1988 Protein Transfer and Organelle Biogenesis 364-391
- Judelson, Howard S., Dimond, Randall L. "Developmental changes in glycosylation and targeting of lysosomal proteins in *Dictyostelium discoideum*." 1988 Differentiation **37**: 7-13
- Judelson, Howard S., Dimond, Randall L. "Maturation of Asparagine-Linked Oligosaccharides in *Dictyostelium discoideum* Analyzed with Modification-Specific Probes." 1988 Archives of Biochemistry and Biophysics **267**: 151-157
- Richardson, JM; Woychik, NA; Ebert, DL; Dimond, RL; Cardelli, JA "Inhibition of Early but Not Late Proteolytic Processing Events Leads to the Missorting and Oversecretion of Precursor Forms of Lysosomal Enzymes in *Dictyostelium discoideum*." 1988 J Cell Biol **107**: (6, Pt. 1) 2097-2107
- Ebert, DL; Bush, JM; Dimond, RL; Cardelli, JA "Biogenesis of Lysosomal Enzymes in the  $\alpha$ -Glucosidase II-Deficient modA Mutant of *Dictyostelium discoideum*: Retention of  $\alpha$ -1,3-Linked Glucose on N-Linked Oligosaccharides Delays Intracellular Transport but Does Not Alter Sorting of  $\alpha$ -Mannosidase or  $\beta$ -Glucosidase." 1989 Arch Biochem Biophys **273**: (2) p479-490

Ebert, DL; Freeze, HH; Richardson, J; Dimond, RL; Cardelli, JA; "A Dictyostelium discoideum Mutant That Missorts and Oversecretes Lysosomal Enzyme Precursors is Defective in Endocytosis." 1989 J Cell Biol **109** (4,Pt. 1) 1445-1456

Ebert. David L., Jordan, Kevin G., Dimond, Randall L. "Lysosomal enzyme secretory mutants of Dictyostelium discoideum." 1990 Journal of Cell Science **96**: 491-500

## **Issued Patents**

Pahuski, Edward F., Dimond Randall L., Priest, John H., Zandt, Lisa, Stebnitz, Kathleen K., and Mendoza, Leopoldo G. US5,587,286. "Methods and Kits for the Detection of Cells in Food Materials." Dec. 24, 1996.

Pahuski, Edward F., Dimond Randall L., Priest, John H., Zandt, Lisa, Stebnitz, Kathleen K., and Mendoza, Leopoldo G. US5,700,645. "Methods and Kits for Separation, Concentration, and Analysis of Cells." Dec. 23, 1997.

Pahuski, Edward F., Dimond Randall L., Priest, John H., Zandt, Lisa, Stebnitz, Kathleen K., and Mendoza, Leopoldo G. EP0542790. "Methods and Kits for Separation, Concentration, and Analysis of Cells (Clearing Wash Assay)." Jul. 2, 1997.

Dimond; Randall L., Ekenberg; Steven J., Hartnett; James R., Hudson; Geoffrey R., Mendoza; Leopoldo G., Miller; Katharine M., Monahan; John E., Jones; Christopher L., Maffitt; Mark A., Martinelli; Richard A., Pahuski; Edward E., and Schumm; James W. US 6090589. "Nucleic acid amplification with DNA-dependent RNA polymerase activity of RNA replicases." July 18, 2000

Dimond; Randall L., Ekenberg; Steven J., Hartnett; James R., Hudson; Geoffrey R., Mendoza; Leopoldo G., Miller; Katharine M., Monahan; John E., Jones; Christopher L., Maffitt; Mark A., Martinelli; Richard A., Pahuski; Edward E., and Schumm; James W. EP0519053. "Nucleic acid amplification with DNA-dependent RNA polymerase activity of RNA replicases." Dec. 31, 1997

Dimond; Randall L., Ekenberg; Steven J., Hartnett; James R., Hudson; Geoffrey R., Mendoza; Leopoldo G., Miller; Katharine M., Monahan; John E., Jones; Christopher L., Maffitt; Mark A., Martinelli; Richard A., Pahuski; Edward E., and Schumm; James W. AU694199. "Nucleic acid amplification with DNA-dependent RNA polymerase activity of RNA replicases." Nov. 5, 1998

Dimond; Randall L., Ekenberg; Steven J., Hartnett; James R., Hudson; Geoffrey R., Mendoza; Leopoldo G., Miller; Katharine M., Monahan; John E., Jones; Christopher L., Maffitt; Mark A., Martinelli; Richard A., Pahuski; Edward E., and Schumm; James W. Korea 0231383. "Nucleic acid amplification with DNA-dependent RNA polymerase activity of RNA replicases." Aug. 30, 1999

Hudson, Geoffrey R., Schumm, James W., and Dimond, Randall L. US6,100,024. "Methods and Compositions for Nucleic Acid Detection by Target Extension and Probe Amplification." Aug. 8, 2000.

Dimond; Randall L., Ekenberg; Steven J., Hartnett; James R., Hudson; Geoffrey R., Mendoza; Leopoldo G., Miller; Katharine M., Monahan; John E., Jones; Christopher L., Maffitt; Mark A., Martinelli; Richard A., Pahuski; Edward E., and Schumm; James W. US 6369207B1 "Nucleic acid amplification with DNA-dependent RNA polymerase activity of RNA replicases." April 9, 2002

Dimond, Randall L., Ekenberg; Steven J., Hartnett; James R., Hudson; Geoffrey R., Mendoza; Leopoldo G., Miller; Katharine M., Monahan; John E., Jones; Christopher L., Maffitt; Mark A., Martinelli; Richard A., Pahuski; Edward E., and Schumm; James W. US 6,677,140B2 "Nucleic acid amplification with DNA-dependent RNA polymerase activity of RNA replicases." Jan. 13, 2004.

## Abstracts

Dimond, R. L., Loomis, W. F. "Acetylglucosaminidase mutants in *Dictyostelium discoideum*." 1973 Genetics. **74**: 64

Cardelli, J. A., Dimond, R. L. "Effect of Starvation and Cell-Cell Interaction on Protein Synthesis in *Dictyostelium*-*discoideum*." The 20th Annual Meeting of the American Society for Cell Biology, Cincinnati, Ohio, USA, 1980, J. Cell Biology, **87**: (2 Part 2) 275A

Knecht, D. A., Dimond, R. L. "Synthesis and Processing of Lysosomal Enzymes in *Dictyostelium*-*discoideum*." 1980 The 20th annual meeting of the American Society for Cell Biology, USA, Nov. **14-18**, J Cell Biol. **87** (2 part 2)

Livi, George, Dimond, Randall L. "Mutants that affect  $\alpha$ -mannosidase-1 regulation in *Dictyostelium discoideum*." 1982 Meeting of the Genetics Society of America, USA, June **14-27**, Genetics **100** (1 Part 2)

- Mierendorf, R. C., Jr., Knecht, D. A. and Dimond, R. L. "Monoclonal Antibodies That Recognize Different Forms and Post Translational Modifications of a Lysosomal Enzyme." 1983. J. Cell Biochem. Suppl. **0**: 361.
- Cardelli, J.A.; Livi, G.P.; Mierendorf, R.C.; Knecht, D.A.; Dimond, R.L. "Gene Regulation during Early Development of the Cellular Slime Mold DICTYOSTELIUM DISCOIDEUM." 1984 Symposia on Molecular and Cellular Biology New Series, Vol. 19, Molecular Biology of Development; Proceedings of a Cetus-UCLA Symposium, Steamboat Springs, Colo., April 1-7, 1984
- Livi, G.P.; Cardelli, J. A.; Mierendorf, R.C.; Dimond, R. "Developmental Control of  $\alpha$ -mannosidase-1 Synthesis in Dictyostelium-Discoideum." 1984 Davidson, E.H. and R.A. Firtel (ED.), Symposia on Molecular and Cellular Biology New Series, Vol. 19 Molecular Biology of Development, Proceedings of a Cetus-UCLA Symposium, Steamboat Springs, Colo., April 1-7, 1984
- Cardelli, JA; Golumbeski, GS; Ebert, DL; Dimond, RL 1985 "Targeting of Lysosomal Enzymes in Cells that Lack Mannose-6-Phosphate Receptors." 1985 Twenty-Fifth Annual Meeting of the American Society for Cell Biology, Atlanta, GA., Nov. 18-22 J Cell Biol **101**: (5 part 2)
- Woychik, NA; Cardelli, JA; Dimond, RL 1985 "Mutant strains of Dictyostelium-Discoideum which fail to proteolytically process lysosomal enzyme precursors." Twenty-Fifth Annual Meeting of the American Society for Cell Biology. Nov. 18-22, J Cell Biol **101**: (5 part2).
- Richardson, JM; Woychik, NA; Bush, JM; Dimond, RL; Cardelli, JA "The Importance of Proteolytic Processing in the Transport and Targeting of Lysosomal Enzymes in Dictyostelium-Discoideum." 1987 Twenty-Seventh Annual Meeting of the American Society for Cell Biology, St. Louis, Missouri, USA 16-20, J Cell Biol **105**: (4 Part 2). 249A
- Pahuski, E; Martin, L; Stebnitz, K; Priest, J; Dimond, Randy - "Rapid Concentration Procedure for Microorganisms In Raw Milk" 1991 J Food Prot **54**: (10) 813