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EDUCATION

U.G. Louisiana State University (Chemistry, 1960-1962)
B.S. California State Polytech University (Chemistry and Biological Sciences, 1964)
Ph.D. University of California, Riverside (Biochemistry, 1968)
Postdoc Albert Einstein College of Medicine, N.Y. (Molecular Biology, 1968-1970)

PROFESSIONAL EXPERIENCE

2006-present Vice President for Research, University of Texas at San Antonio
2006-present Adjunct Faculty, University of North Texas Health Science Center (UNTHSC), Fort Worth, Texas
2004-2006 Associate Vice President for Research Alliance Development; and Professor of Molecular Biology and Immunology, UNTHSC, Fort Worth, Texas
2000-2004 Associate Vice President for Research and Biotechnology; and Professor of Molecular Biology and Immunology, UNTHSC, Fort Worth, Texas
1997-2000 Dean for Research and Biotechnology; and Professor of Molecular Biology and Immunology, UNTHSC, Fort Worth, Texas
1993-1997 Assoc. Dean for Research and Biotechnology; and Professor of Biochemistry and Molecular Biology, UNTHSC, Fort Worth, Texas
1976-1993 Professor and Chairman, Dept. of Biochemistry & Molecular Biology, UNTHSC and Texas College of Osteopathic Medicine (TCOM)
1990-1991 Visiting Professor, Dept. of Physiology Chemistry, University of Würzburg, Würzburg, West Germany
1986-1988 Acting Chairman, Dept. of Microbiology and Immunology, TCOM, Fort Worth, Texas
1975-1976 Visiting Professor, Dept. of Physiology. Chemistry, University of Würzburg, Würzburg, West Germany
1973-1975 Associate Professor of Chemistry and Basic Health Sciences, University of North Texas, Denton, Texas
1970-1973 Assistant Professor of Chemistry, University of North Texas, Denton, Texas
1968-1970 Albert Einstein College of Medicine, Postdoctoral Fellow of the Damon Runyon Cancer Foundation

HONORS AND AWARDS

Governor's Appointment: Texas Council on Science and Biotechnology Development (2001-2003)
Governor's Appointment: Texas Health Care Information Council, Member & Vice Chair (1999-2004)
International Achievement Award for Science and Medicine: World Affairs Council of Greater Fort Worth (2000)
American Chemical Society Wilfred T. Doherty Award (1995)
National Institutes of Health (NIH) MERIT Award for Research in Aging (1987-1997)
National Institutes of Health Research Career Development Award (1972-1977)
National AOA Gutensohn-Denslow Research Award (1989)
Fellow of the Alexander von Humboldt Foundation (1990-1991, 1976-1977)
Visiting Professor, Dept. of Physiology. Chemistry, University of Würzburg (1990, 1976)
FASEB Visiting Professor: Barry University, Miami Shores, FL (1989); Institute of Gerontology, Ann Arbor, MI (1988); Florida A & M University, Tallahassee, FL (1988); University of the Sacred Heart, Puerto Rico (1986); University of Puerto Rico, Cayay, Puerto Rico (1986); University of the Virgin Islands (1984)
Visiting Professor, Peoples Republic of China (1988)
NIH Special Study Sections - Scientific Instrumentation; Physiology Chemistry (1982-1988)
Outstanding International Professor, NTSU (1982)
NTSU Chemistry Award for Outstanding Research and Teaching (1974)
Damon Runyon Cancer Foundation, Postdoctoral Fellow (1968-1970)

BOARDS OF DIRECTORS/TRUSTEES (past and present)

Texas Research and Technology Foundation
Texas Healthcare and Bioscience Institute (THBI); Vice Chair
BioMed San Antonio
Texas Healthcare Information Council (THCIC); Vice Chair
Fort Worth MedTech Business Incubator (TechFort Worth); founding Chairman of Board
Health Industry Council of Dallas/Fort Worth
Fort Worth South, Inc.
BIO DFW, Steering Committee
NexMed, Inc.
Trinity Terrace, Inc. (Executive Committee)
Botanical Research Institute of Texas (BRIT)
Texas Lifescience Biotech Consortium
Hillwood Alliance Task Force
Healthcare Enterprise Research Center

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Chemical Society	Drug Information Association
American Association for the Advancement of Sciences	National Council of University Research Administrators
American Association of University Professors	The Protein Society
American Society of Biochemistry and Molecular Biology	Sigma Xi
Association for Gerontology in Higher Education	Tarrant Area Gerontological Society
Association of University Technology Managers, Inc.	Texas HealthCare and Biomedical Institute
Biotechnology Industry Organization	Texas Technology Transfer Association

TEACHING EXPERIENCE

Graduate

Protein Chemistry	Analytical Ultracentrifugation
Evolution of Proteins	Protein and Peptide Microsequencing
Enzyme Chemistry	Biochemistry Seminar
Electrophoresis and Isoelectric Focusing	Molecular Basis of Human Genetic Diseases
Applied Enzymology/Industrial Biochemistry	Ocular Biochemistry
Amino Acid and Peptide Analysis	Protein Biochemistry Proteomics
Biochemistry of Aging	

Medical

Basic Biochemistry & Metabolism	Clinical Biochemistry
Principles of Biochemistry	SystemsBiochemistry

Undergraduate

Vistas of Biochemistry	General Chemistry
Quantitative Analysis	The Biology of Aging
	Physical Biochemistry

PUBLICATIONS

Research Papers

1. Gracy, R.W. and Noltmann, E.A.: Studies on Phosphomannose Isomerase. I. Isolation, Homogeneity Measurements and Determination of Some Physical Properties. *J. Biol. Chem.* 243, 3161-3168 (1968).
2. Gracy, R.W. and Noltmann, E.A.: Studies on Phosphomannose Isomerase. II. Characterization as a Zinc Metalloenzyme. *J. Biol. Chem.* 243, 4109-4116 (1968).
3. Gracy, R.W. and Noltmann, E.A.: Studies on Phosphomannose Isomerase. III. A Mechanism for Catalysis and for the Role of Zinc in the Enzymatic and Nonenzymatic Isomerization. *J. Biol. Chem.* 243, 5410-5419 (1968).
4. Saunders, S.A., Gracy, R.W., Schnackerz, D.K. and Noltmann, E.A.: Are Honeybees Deficient in Phosphomannose Isomerase? *Sci.* 164, 858-859 (1969).
5. Gracy, R.W., Lacko, A.G. and Horecker, B.L.: Subunit Structure and Chemical Properties of Rabbit Liver Aldolase. *J. Biol. Chem.* 244, 3913-3919 (1969).
6. Brox, L.W., Lacko, A.G., Gracy, R.W., Adelman, R.C. and Horecker, B.L.: Muscle-Type Aldolase Isolated from a Liver Tumor. *Biochem. Biophys. Res. Commun.* 36, 994-998 (1969).

7. Horecker, B.L., Gracy, R.W., Lacko, A.G., Davis, L. and Adelman, R.C.: The Function of C-terminal Tyrosine Residues in Aldolases. *Proc. Natl. Acad. Sci.* 63, 227-228 (1969).
8. Gracy, R.W., Lacko, A.G., Brox, L.W., Adelman, R.C. and Horecker, B.L.: Structural Relationships in Aldolases Purified from Rat Liver and Muscle and Novikoff Hepatoma. *Arch. Biochem. Biophys.* 136, 480-490 (1970).
9. Lacko, A.G., Brox, L.W., Gracy, R.W. and Horecker, B.L.: The Carboxyl Terminal Structure of Rabbit Liver Aldolase (Aldolase B). *J. Biol. Chem.* 245, 2140-2141 (1970).
10. Davis, L.D., Brox, L.W., Gracy, R.W., Ribereau-Gayon, G. and Horecker, B.L.: Photosensitization of Specific Histidine Residues of Rabbit Muscle and Spinach Leaf Aldolases by Pyridoxal Phosphate. *Arch. Biochem. Biophys.* 140, 215-222 (1970).
11. Brian, B.L., Gracy, R.W. and Scholes, V.E.: Analysis of Acetylated and Trifluoroacetylated Phenylthiohydantoin Amino Acids by Gas Chromatography. *J. Chromatog.* 63, 386-388 (1971).
12. Purdom, M.E., Mondragon, N.H., Pryor, W.W. and Gracy, R.W.: Effect of Carbohydrate on Growth, Plasma Proteins and Liver Enzymes. *J. Amer. Dietetic Assoc.* 60, 394-398 (1971).
13. Rozacky, E.E., Sawyer, T.H., Barton, R.A. and Gracy, R.W.: Studies on Human Triosephosphate Isomerases. I. Isolation and Properties of the Enzyme from Erythrocytes. *Arch. Biochem. Biophys.* 146, 312-320 (1971).
14. Brian, B.L., Gracy, R.W. and Scholes, V.E.: Gas Chromatography of Cyclopropane Fatty Acid Methyl esters Prepared with Methanolic Boron Trichloride and Boron Trifluoride. *J. Chromatog.* 66, 138-140 (1972).
15. Payne, D.M., Porter, D.W. and Gracy, R.W.: Evidence Against the Occurrence of Tissue-Specific Variants and Isoenzymes of Phosphoglucose Isomerase. *Arch. Biochem. Biophys.* 151, 122-127 (1972).
16. Fodge, D.W., Gracy, R.W. and Harris, B.G.: Studies on Enzymes from Parasitic Helminths. I. Purification and Physical Properties of Malic Enzyme from the Muscle Tissue of *Ascaris Suum*. *Biochem. Biophys. Acta.* 268, 271-284 (1972).
17. Sawyer, T.H., Tilley, B.E. and Gracy, R.W.: Studies on Human Triosephosphate Isomerase. II. Nature of the Electrophoretic Multiplicity in Erythrocytes. *J. Biol. Chem.* 247, 6499-6505 (1972).
18. Burke, W.F., Gracy, R.W. and Harris, B.G.: Studies on Enzymes from Parasitic Helminths. III. Purification and Properties of Lactate Dehydrogenase from the Tapeworm *Hymenolepis diminuta*. *Comp. Biochem. Physiol.* 43B, 345-359 (1972).
19. Dedman, J.R., Lycan, A.C., Gracy, R.W. and Harris, B.G.: Studies on Enzymes Parasitic Helminths. IV. Purification and Characterization of Aldolase from the Muscle Tissue of *Ascaris suum*. *Comp. Biochem. Physiol.* 44B, 291-305 (1972).
20. Li, T., Gracy, R.W. and Harris, B.G.: Studies on Enzymes from Parasitic Helminths. II. Purification and Properties of Malic Enzyme from the Tapeworm, *Hymenolepis diminuta*. *Arch. Biochem. Biophys.* 150, 397-406 (1972).
21. Allen, B.L., Gracy, R.W. and Harris, B.G.: Studies on Aldolase from Human Cardiac Tissue. *Arch. Biochem. Biophys.* 155, 325-331 (1973).
22. Porter, D.W., Harris, B.G. and Gracy, R.W.: Removal of Triosephosphate Isomerase from Albumins. *Prep. Biochem.* 3, 149-156 (1973).
23. Tilley, B.E., Porter, D.W. and Gracy, R.W.: Metal Ion Catalysis of Aldose-Ketose Isomerizations in Acidic Solutions. *Carbohydrate Res.* 27, 289-296 (1973).
24. Hendrickson, R.J., Snapka, R.M., Sawyer, T.H. and Gracy, R.W.: Studies on Human Triosephosphate Isomerase. III. Characterization of the Enzyme from Patients with *Cri du Chat* Syndrome. *Amer. J. Human Genet.* 25, 433-438 (1973).
25. Hartman, F.C. and Gracy, R.W.: An Active Site Peptide from Human Triosephosphate Isomerase. *Biochem. Biophys. Res. Commun.* 52, 388-393 (1973).
26. Mo, Y.C., Harris, B.G. and Gracy, R.W.: Triosephosphate Isomerases and Aldolases from Light and Dark Grown *Euglena gracilis*. *Arch. Biochem. Biophys.* 157, 580-587 (1973).
27. Feramisco, J.R., Tilley, B.E., Conn, W.R., Gracy, R.W. and Noltmann, E.A.: Some Homogeneity Studies on Commercial Preparations of Allegedly Crystalline Phosphomannose Isomerase. *Biochem. Biophys. Res. Commun.* 55, 636-641 (1973).
28. Snapka, R.W., Sawyer, T.H., Barton, R.W. and Gracy, R.W.: Comparison of Electrophoretic Properties of Triosephosphate Isomerase of Various Tissues and Species. *Comp. Biochem. Physiol.* 49B, 733-741 (1974).
29. Dedman, J.R., Gracy, R.W. and Harris, B.G.: A Method for Estimating Sequence Homology from Amino Acid Compositions. The Evolution of *Ascaris* Employing Aldolase and Glyceral-dehyde-3-Phosphate Dehydrogenase. *Comp. Biochem. Physiol.* 49B, 715-731 (1974).
30. Tilley, B.E., Gracy, R.W. and Welch, S.G.: A Point Mutation Increasing the Stability of Human Phosphoglucose Isomerase. *J. Biol. Chem.* 249, 4571-4579 (1974).
31. Tilley, B.E., Izaddoost, M., Talent, J.M. and Gracy, R.W.: Recovery and Analysis of Peptides from Thin Layer Cellulose. *Anal. Biochem.* 62, 281-285 (1974).
32. Phillips, T.L., Porter, D.W. and Gracy, R.W.: Nature of the Multiple Forms of Sweet-Potato Glucose Phosphat Isomerase. *Biochem. J.* 147, 381-384 (1975).
33. Mo, Y.C., Young, C.D., Gracy, R.W., Carter, N.D. and Dando, P.R.: Isolation and Characterization of Tissue-Specific Isozymes of Glucosephosphate Isomerase from Catfish and Conger. *J. Biol. Chem.* 250, 6747-6755 (1975).

34. Sawyer, T.H. and Gracy, R.W.: Ligand Binding and Denaturation Titration of Free and Matrix-Bound Triosephosphate Isomerases. *Arch. Biochem. Biophys.* 169, 51-57 (1975).
35. Kester, M.V. and Gracy, R.W.: Alteration of Human Lymphocyte Triosephosphate Isomerase Isozymes During Blastogenesis. *Biochem. Biophys. Res. Commun.* 65, 1270-1277 (1975).
36. Izaddoost, M., Harris, B.G. and Gracy, R.W.: Structures and Toxicity of Alkaloids and Amino Acids of *Sophora secundiflora*. *J. Pharmaceut. Sci.* 65, 352-354 (1976).
37. Phillips, T.L., Talent, J.M. and Gracy, R.W.: Isolation of Rabbit Muscle Glucosephosphate Isomerase by a Single Step Substrate Elution. *Biochem. Biophys. Acta* 429, 624-628 (1976)
38. Tsai, P.K. and Gracy, R.W.: Isolation and Characterization of Crystalline Methylglyoxal Synthetase from *Proteus Vulgaris*. *J. Biol. Chem.* 251, 364-367 (1976).
39. Yuan, P.M., Tsai, P.K. and Gracy, R.W.: A Methylglyoxal Bypass of Glycolysis in *Proteus Vulgaris*, Transactions of the Gulf Coast Molecular Biology Conference. *Tex. J. Sci. Spec. Publ.* 1, 1-11 (1976).
40. Bruch, P., Schnackerz, K.D. and Gracy, R.W.: Matrix-Bound Phosphoglucose Isomerase, Formation and Properties of Monomers and Hybrids. *Eur. J. Biochem.* 68, 153-158 (1976).
41. Kester, M.V., Jacobson, E.L. and Gracy, R.W.: The Synthesis of a Labile Triosephosphate Isomerase Isozyme in Human Lymphoblasts and Fibroblasts. *Arch. Biochem. Biophys.* 180, 562-569 (1977).
42. Schiltz, E., Schnackerz, K.D. and Gracy, R.W.: Comparison of Ninhydrin, Fluorescamine and 1-Phthaldialdehyde for the Detection of Amino Acids and Peptides and Their Effects on the Recovery and Composition of Peptides from Thin Layer Fingerprints. *Anal. Biochem.* 79, 33-41 (1977).
43. Gracy, R.W. and Schnackerz, K.D.: Subunit Complementation of Glucosephosphate Isomerases with Matrix-Bound Monomers. *Tex. J. Sci. Spec. Publ.* 3, 27-33 (1977).
44. Yuan, P.M., Gracy, R.W. and Hartman, F.C.: Haloacetol Phosphate as Affinity Labels for Methylglyoxal Synthase. *Biochem. Biophys. Res. Commun.* 74, 1007-1013 (1977).
45. Kester M.V., Phillips, T.L. and Gracy, R.W.: Changes in Glycolytic Enzyme Levels and Isozyme Expression in Human Lymphocytes During Blast Transformation. *Arch. Biochem. Biophys.* 183, 700-709 (1977).
46. Yuan, P.M. and Gracy, R.W.: The Conversion of Dihydroxyacetone Phosphate to Methylglyoxal and Inorganic Phosphate by Methylglyoxal and Inorganic Phosphate by Methylglyoxal Synthase. *Arch. Biochem. Biophys.* 183, 1-6 (1977).
47. Gibson, D.R., Talent, J.M., Hartman, F.C. and Gracy, R.W.: Affinity Labeling of Human Glucosephosphate Isomerase with N-Bromacetyethanolamine Phosphate. *Biochem. Biophys. Res. Comm.* 78, 1241-1246 (1977).
48. Yuan, P.M., Brenton, G.E., Tsai, P.K. and Gracy, R.W.: The Quantitative Measurement of Methylglyoxal Synthase in Tissue and Cell Extracts. The Distribution of the Enzyme. *Tex. J. Sci.* 30, 207-215 (1978).
49. Gracy, R.W. and Yuan, P.M.: The Catalytic Mechanism of Methylglyoxal Synthase, Transactions of the Gulf Coast Molecular Biology Conference. *Tex. J. Sci.* 3, 33-43 (1978).
50. Gibson, D.R., Talent, J.M., Gracy, R.W., Schnackerz, K.D. and Ishimoto, G.: A Preparative Method for the Isolation of Genetic Variant Forms of Glucosephosphate Isomerase and a Study of Five Variants. *Clin. Chim. Acta* 89, 355-362 (1978).
51. Gracy, R.W.: Three Phase Program for the Identification and Characterization of Genetic Variant Forms of Glucosephosphate Isomerase. *J. Amer. Osteop. Assn.* 78, 2341 (1978).
52. Yuan, P.M., Dewan, R.N., Zaun, M., Thompson, R.E. and Gracy, R.W.: Isolation and Characterization of Triosephosphate Isomerase Isozymes from Human Placenta. *Arch. Biochem. Biophys.* 198, 42-45 (1979).
53. Yuan, P.M., Zaun, M.R., Kester, M.V., Snider, C.E., Johnson, M. and Gracy, R.W.: A Deletion Mutation in Glucosephosphate Isomerase (GPI Denton). *Clin. Chim. Acta* 92, 481-489 (1979).
54. Izaddoost, M. and Gracy, R.W.: Occurrence and Chemotaxonomic Use of Uncommon Ninhydrin-Reacting Compounds Found in the Genus *Sophora*. *Tex. J. Sci.* 31, 247-254 (1979).
55. Gibson, D.R. and Gracy, R.W.: Extraction of Proteins and Peptides from Coomassie Blue-Stained Sodium Dodecyl Sulfate-Polyacrylamide Gels. *Anal. Biochem.* 96, 352-354 (1979).
56. Marshall, J.R., Gracy, R.W. and Kester, M.V.: Maple Syrup Urine Disease: Response to Dietary Modification. *J. Amer. Osteop. Assn.* 79, 51-53 (1979).
57. Yuan, P.M., Talent, J.M. and Gracy, R.W.: Elucidating Protein Structures at the Subnanomole Level. *Tex. J. Sci.* 31, 43-49 (1979).
58. Khan, A., Garrison, O., Hill, J.M., Antonetti, A., Hill, N.O. and Gracy, R.W.: Isolation and Characterization of Immunopeptide from Dialyzable Leukocyte Extract. *Cell Immunol.* 55, 420-427 (1980).
59. Purdy, K.L., Jones, S., Tai, H.H. and Gracy, R.W.: A Radio-Immunoassay from Human Glucosephosphate Isomerase: Measurement of Immunoreactive Enzyme from Genetic Variants. *Arch. Biochem. Biophys.* 200, 485-491 (1980).
60. Gibson, D.R., Gracy, R.W. and Hartman, F.C.: Affinity Labeling and Characterization of the Active-Site Histidine of Glucosephosphate Isomerase. *J. Biol. Chem.* 255, 9369-9374 (1980).
61. Tollefsbol, T.O. and Gracy, R.W.: Proteolytic Modification of Human Phosphoglycerate Kinase from Lymphoblasts. *Arch. Biochem. Biophys.* 205, 280-282 (1980).

62. Tollefsbol, T.O. and Gracy, R.W.: Proteolytic Modification of Phosphoglycerate Kinase During Lymphocyte Transformation. *J. Amer. Osteop. Assn.* 222, (1980).
63. Chapman, M.L., Zaun, M.R. and Gracy, R.W.: Effects of Age on Energy Status and Redox State of Lymphocytes During Blastogenesis. *Biochem. Biophys. Res. Commun.* 98, 303-310 (1981).
64. Yuan, P.M., Talent, J.M. and Gracy, R.W.: A Tentative Elucidation of the Sequence of Human Triosephosphate Isomerase by Homology Peptide Mapping. *Biochem. Biophys. Acta* 671, 211-218 (1981).
65. Yuan, P.M., Talent, J.M. and Gracy, R.W.: Molecular Basis for the Accumulation of Acidic Isozymes of Triosephosphate Isomerase on Aging. *Mech. Age. Dev.* 17, 151-162 (1981).
66. Lu, H.S., Yuan, P.M., Talent, J.M. and Gracy, R.W.: A Simple, Rapid, Manual Peptide Microsequencing Procedure. *Anal. Biochem.* 110, 159-164 (1981).
67. Lu, H.S., Talent, J.M. and Gracy, R.W.: Chemical Modification of Critical Catalytic Residues of Lysine, Arginine and Tryptophan in Human Glucose Phosphate Isomerase. *J. Biol. Chem.* 256, 785-793 (1981).
68. Tollefsbol, T.O., Chapman, M.L., Zaun, M.R. and Gracy, R.W.: Impaired Glycolysis of Human Lymphocytes During Aging. *Mech. Age. Devel.* 17, 369-379 (1981).
69. Lu, H.S. and Gracy, R.W.: Specific Cleavage of Glucosephosphate Isomerases at Cysteinyl Residues Using 2-Nitro-5-thiocyanobenzoic Acid: Analyses of Peptides Eluted from Polyacrylamide Gels and Localization of Active Site Histidyl and Lysyl Residues. *Arch. Biochem. Biophys.* 212, 347-359 (1981).
70. Gracy, R.W.: Glucosephosphate and Triosephosphate Isomerases. Significance of Isozyme Structural Differences in Evolution Physiology and Aging. *Isozymes: Current Topics in Bio. and Med. Research* 6, 169-205 (1982).
71. Tollefsbol, T.O., Zaun, M.R. and Gracy, R.W.: Increased Lability of Triosephosphate Isomerase in Progeria and Werner's Syndrome Fibroblasts. *Mech. Age. Devel.* 20, 93-101 (1982).
72. Oray, B., Jahani, M. and Gracy, R.W.: High Sensitivity Peptide Mapping of Triosephosphate Isomerase: A Comparison of High Performance Liquid Chromatography with Two Dimensional Thin Layer Methods. *Anal. Biochem.* 125, 131-138 (1982).
73. Chapman, M.L., Zaun, M.R. and Gracy, R.W.: Changes in NAD Levels in Human Lymphocytes and Fibroblasts During Aging and in Premature Aging Syndromes. *Mech. Age. Devel.* 21, 151-167 (1983).
74. Tollefsbol, T.O. and Gracy, R.W.: Premature Aging Diseases: Cellular and Molecular Changes. *Bio-Science* 33, 634-639 (1983).
75. Oray, B., Lu, H.S. and Gracy, R.W.: High Performance Liquid Chromatographic Separation of Dansyl Amino Acid Derivatives and Applications to Peptide and Protein Structural Studies. *J. Chromatog.* 270, 253-266 (1983).
76. Oray, B., Yüksel, Ü. and Gracy, R.W.: The Separation of Deamidated Forms of Triosephosphate Isomerase by Chromatofocusing: A Comparison of Chromatofocusing with Column Isoelectric Focusing. *J. Chromatog.* 265, 126-130 (1983).
77. Lu, H.S., Yuan, P.M. and Gracy, R.W.: Primary Structure of Human Triosephosphate Isomerase. *J. Biol. Chem.* 259, 11958-11968 (1984).
78. Lu, H.S. and Gracy, R.W.: Solid Phase Protein and Peptide Sequencing Using Either 4-N, N-Dimethylaminoazo- benzene 4'-isothiocyanate or Phenylisothiocyanate. *Arch. Biochem. Biophys.* 235, 48-62 (1984).
79. Srivastava, S.K., Das, B., Hair, G.A., Gracy, R.W., Awasthi, S., Ansari, N.H. and Petrash, J.M.: Interrelationships Among Human Aldo-Ketose Reductases: Immunochemical, Kinetic and Structural Properties. *Biochimica et Biophysica Acta* 840, 344-343 (1985).
80. Gracy, R.W., Wheeler, C.E., Lu, H.S., Jahani, M. and Mo, Y.C.: New Protein Structure-Function Technology and Applications. *J. Amer. Oil. Chem. Soc.* 62, 1565-1567 (1985).
81. Yüksel, K.Ü. and Gracy, R.W.: The Quantitation of Proteins in Silver Stained Polyacrylamide Gels. *Electrophoresis* 6, 361-366 (1985).
82. Tam, L.T., Engelbrecht, S., Talent, J.M., Gracy, R.W. and Erdos, E.G.: The Importance of Disulfide Bridges in Human Endopeptidase (Enkephalinase) after Proteolytic Cleavage. *Biochem. Biophys. Res. Commun.* 133, 1187-1192 (1985).
83. Yüksel, K.Ü. and Gracy, R.W.: *In Vitro* Deamidation of Human Triosephosphate Isomerase. *Arch. Biochem. Biophys.* 248, 452-459 (1986).
84. Cini, J.K. and Gracy, R.W.: Molecular Basis of the Isozymes of Bovine Glucose-6-Phosphate Isomerase. *Arch. Biochem. Biophys.* 249, 500-505 (1986).
85. Chapman, M.L., Rubin, B.R. and Gracy, R.W.: The Redox State in Lymphocytes from Patients with Rheumatoid Arthritis. *J. of Rheumatology*, 13:5, 850-852 (1986).
86. Park, Y.B., Yüksel, K.Ü., Gracy, R.W. and Lacko, A.G.: The Catalytic Center of Lecithin: Choles. Acyltransferase: Isolation and Sequence of Diisopropyl Fluorophosphate-Labeled Peptides. *Bioc. and Biophys. Res. Comm.*, 143, 360-363 (1987).
87. Cini, J.K., Cook, P.F. and Gracy, R.W.: Molecular Basis for the Isozymes of Bovine Glucose-6-Phosphate Isomerases. *Arch. Biochem. Biophys.* 263, 96-106 (1988).

88. Chen, J.W., Cha, Y., Yüksel, K.Ü., Gracy, R.W. and August, J.T.: Isolation and Sequencing of a cDNA Clone Encoding Lysosomal Membrane Glycoprotein Mouse LAMP-1: Sequence Similarity to Proteins Bearing Onco-Differentiation Antigens. *J. Biol. Chem.* 263, 8754-8758 (1988).
89. Yüksel, K.Ü., Park, Yong B., Jinha, Jung, Gracy, R.W. and Lacko, A.G.: Studies on the Structure of Lecithin Cholesterol Acyltransferase (LCAT)-Comparisons of the Active Site Region and Secondary Structure of the Human and the Porcine Enzymes. *Comp. Biochem. Physiol.* 94B, 389-394 (1989).
90. Chapman, M.L., Rubin, B.R. and Gracy, R.W.: Increased Carbonyl Content of Proteins in Synovial Fluid from Patients with Rheumatoid Arthritis. *J. Rheumatol.* 16, 15-18 (1989).
91. Boswell, G.S., Dimitrijevic, S.D. and Gracy, R.W.: Simultaneous Assay for Plasmin and DNase Using Radiolabeled Human Fibroblasts on Microcarriers. *Anal. Biochem.* 182, 20-24 (1989).
92. Talent, J.M., Peng, L.F. and Gracy, R.W.: Experimental Parameters Affecting the Ultraviolet-Induced Tryptophan Modification in the Lens. *Curr. Eye Res.* 8, 1153-1161 (1989).
93. Dimitrijevic, S.D., Tatarko, M., Linsky, C.B., Olsen, C. and Gracy, R.W.: Biodegradation of Oxidized Regenerated Cellulose. *Carbohydrate Res.* 195, 247-256 (1990).
94. Dimitrijevic, S.D., Tatarko, M., Gracy, R.W., Wise, G., Oakford, L.X., Linsky, C.C. and Kamp, L.: *In Vivo* Degradation of Oxidized Regenerated Cellulose. *Carbohydrate Res.* 198, 331-341 (1990).
95. Jacobson, T.M., Yüksel, K.Ü., Geesin, J., Gordon, J., Lane, A.T. and Gracy, R.W.: Effects of Aging and Xerosis on the Amino Acid Composition of Human Skin. *J. Invest. Dermatol.* 95, 296-300 (1990).
96. Jacobson, T.M., Yüksel, K.Ü., Grant, S.R. and Gracy, R.W.: Rapid Isolation of Triosephosphate Isomerase Utilizing High Performance Liquid Chromatography (HPLC). *Protein Express. Purification* 1, 9-12 (1990).
97. Tang, C.Y., Yüksel, K.Ü., Jacobson, T.M. and Gracy, R.W.: Isoforms of Chicken Triosephosphate Isomerase are due to Specific Oxidation of Cysteine-126. *Arch. Biochem. Biophys.* 183, 12-19 (1990).
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