BEST STUDENT PAPER AWARDS OF THE 1995 COLLEGIATE DIVISION MEETINGS

Eastern Region:

Field Biology--Stephanie French, Maryville College, Maryville, Tennessee ("Effects of Barometric Pressure Changes on the Foraging Activity of Insectivorous bats")

Biochemistry and Human Biology--Dana Brantley, Maryville College, Maryville, Tennessee ("Apolipoprotein E Synthesis by Transplanted Bone-marrow-derived Cells in Apo E-deficient Mice")

Chemistry and Physics--Derek Stewart, The University of Tennessee at Chattanooga, Chattanooga, Tennessee ("Curvature of Spacetime Demonstration")

Psychology--Stephanie Fugate, Maryville College, Maryville, Tennessee ("Working Memory and Mnemonic Strategies Across the Adult Lifespan") and Sandy Akins, Maryville College, Maryville, Tennessee ("Media Influence and Body Image in Women Bodybuilders")

Overall best paper--Dana Brantley, Maryville College, Maryville, Tennessee ("Apolipoprotein E Synthesis by Transplanted Bone-marrow-derived Cells in Apo E-deficient Mice")

Middle Region:

Biology--Lazette Williams, Tennessee State University, Nashville, Tennessee ("The Effects of Methionine Sulfoximine on Soybean (*Glycine max*)") and Eric Marsland, The University of the South, Sewanee, Tennessee ("Isolation and Purification of Lamin B From the Nuclear Envelope of HeLa Cells")

Chemistry--Ida L. Santana, Middle Tennessee State University, Murfreesboro, Tennessee ("Can You Pass a Drugs Test If You Eat Poppy Seed Cake?") and Rod L. Hartwig, Austin Peay State University, Clarksville, Tennessee ("Interactions of the Gold(I) Drug Auranofin with Glutathione")

Western Region:

James B. Tarter, Union University, Jackson, Tennessee ("Effect of Thiamine Deficiency upon Choline, Creatine, and N-Acetylasparticle in the Brain")

Nicole Nall, Lane College, Jackson, Tennessee ("Localization of Monoclonal Antibodies in Mesoderm and Endoderm Cultures of Chick Embryo Heart")

Luke Rawlings, Christian Brothers University, Memphis, Tennessee ("M. C. Escher: Regular Division of the Plane")

The following abstract was not printed in 70(3-4) with other abstracts of papers presented at the 1995 collegiate meeting in the middle region.

ISOLATION AND PURIFICATION OF LAMIN B FROM THE NUCLEAR ENVELOPE OF HELA CELLS. *Eric Marsland, Emily Sprouse, and John R. Palisano, The University of the South, Sewanee, Tennessee*. HeLa cells were cultured in roller flasks in minimum essential medium containing 10% calf serum, harvested by scraping with a rubber policeman, and lysed using a hypotonic solution. The cells then were homogenized in a Dounce homogenizer outfitted with a pestle that insured cellular disruption while leaving the nuclei intact. The nuclei were separated from the cytoplasmic brei in a Beckman J2-21 refrigerated centrifuge with a fixed rotor. The intact, pelleted nuclei were solubilized in a solution containing β-mercaptoethanol, sodium dodecyl sulfate, and Triton X-100 to extract the nuclear-envelope proteins. An aliquiot of each crude protein preparation was kept for Lowry protein analysis to monitor protein recovery. The lamin B fractions were frozen at -70°C for future use. Proteins in the nuclear-envelope fractions containing lamin B were separated on 10% continuous gradient of sodium dodecyl sulfate polyacrylamide gel electrophoresis along with bovine serum albumin. Bands in the gels that comigrated with bovine serum albumin were removed and eluted using an electroelution apparatus and concentrated by Amnicon microcentrifuge ultrafiltration technique. Blotting with a monoclonal antibody to lamin B confirmed that one of the bands was indeed lamin B.