About the Cover...

The cover photograph is of Texas Science teacher Robert Dennison dressed as Charles Darwin. Dennison is standing in Darwin's study in England. Photo copyright Martin Haswell, Haswell Digital Imaging, Unit 8, Russelltown Avenue Industrial Centre Lawrence Hill Bristol, BS5 9LT, England.

The Texas Science Teacher invites Texas science teachers and students to submit color art or a photograph for publication on our journal's cover.

CONTENTS

Opinion
Evolution Revisited by Homer Montgomery 4
Teaching Evolution in an Unfettered Manner by Gerald Skoog 5
Substandard Standards by David Dunn 5
Society Must Pursue Scientific Literacy by E-An Zen 6
Teaching Evolution - It's Our Responsibility by Susan Cory 8

Invited Contribution
Applied Evolution for the 21st Century by James Bull 11

Contribution
Correlation Between Ring Growth in a Giant Redwood Tree and the Sunspot Cycles by David Thomas and James A. Roberts 14
Science-Related Virtual Field Trips on the World Wide Web by Rebekah Nix 18
Erosion Patrol: Implementing the Vision by Quincy Spurlin and Kathryn Powell 24
Properties of Liquids Jigsaw Activity by Angela Potts 28
Immunetoon by Pamela Esprivalo Harrell 33

Book Reviews
Michael DiSpezio, Critical Thinking Puzzles; Awesome Experiments in Light and Sound 35
CONTRIBUTORS

ROBERT DENNISON
Robert Dennison has taught at Jersey Village High School in the Cypress-Fairbanks ISD for the past 22 years. In that time he taught all levels of biology and currently teaches a full load of Advanced Placement Biology, as well as being the varsity tennis coach. Dennison's interest in, and passion for the history of science has led him to portray various scientists from the past for his students, beginning with Gregor Mendel in 1984. Dennison favorite scientist is Darwin, and he began performing as Charles Darwin for audiences other than his students (primarily at teacher conventions) in 1992. In October, 1999, Dennison performed as Darwin as a featured, General Session speaker for the National Association of Biology Teachers annual convention. Dennison has also been fortunate enough to receive several teaching honors.

JAMES BULL
Dr. James Bull is Johann Friedrich Miescher Regents Professor in Molecular Biology at the University of Texas at Dallas. Bull's research is oriented toward solving basic questions about evolution mechanisms. Topics include the evolutionary significance of recombination and sex, molecular genetics of adaptations, selfish genes, and cooperation. Research organisms are chiefly bacteriophage because of the ease of laboratory manipulations afforded by them.

DAVID THOMAS and JAMES ROBERTS
David Thomas is a Journalism major who took astronomy as part of his course requirement in laboratory science at the University of North Texas. He plans to become a science writer in his journalism career.

Dr. James Roberts is professor of physics at the University of North Texas. He has taught astronomy for more than seventeen years to traditionally non-science students. He conducts workshops and training programs in science staff development and conducts fundamental research in the properties of materials. Roberts has trained doctoral candidates in physics. He also works with teachers to improve the teaching of science in public schools.

REBEKAH K. NIX
Rebekah Nix is a lecturer at the University of Texas at Dallas teaching educational technology and developing courses for distance learning. She holds a M.A.T. degree in Science Education from the University of Texas at Dallas, and is presently a doctoral Candidate at Curtin University of Technology - Western Australia.

QUINCY SPURLIN and KATHRYN POWELL
Quincy Spurlin is a Texan. She grew up on a farm near Plano when all of that rich prairie soil was covered in wheat fields, not concrete. Before earning her Ph.D. in Science Education from the University of Texas at Austin, she taught high school and middle school science. Currently she is an Associate Professor of Science Education at the University of New Mexico where her interests center around science for culturally and linguistically diverse students.

Kathryn Gomez-Tatum Powell is an Assistant Professor of Science Education at the University of New Mexico. She received a B.S. in Biology and M.Ed. from the University of Houston and a Ph.D. in Curriculum and Instruction from Texas A&M. She was a secondary teacher for 18 years in Texas. She is active in the Science Teacher Association of Texas and the Rio Grande Valley Science Association. She moved to New Mexico three years ago and currently works with preservice and in-service science and mathematics teachers.

ANGELA POTTS
Angela Potts is a recent graduate of Texas Tech University with a degree in Multidisciplinary Studies and a specialization in mathematics. She began her teaching career at Alderson Junior High School in Lubbock, Texas, teaching eighth grade mathematics. Potts is currently in her second year as an educator and is also pursuing a Masters degree in Curriculum and Instruction at Texas Tech.

Pamela Esprivalo Harrell
Pamela Esprivalo Harrell has a degree in curriculum and instruction with an emphasis in science education from the University of Houston. Currently, she teaches biology at Nimitz High School in Irving, Texas and chairs the Multicultural Education Section for NABT.