



# The Nucleus

*Official Quarterly Newsletter of the  
Texas Association of Biology Teachers*

**Volume 16, Issue II**

**Summer, 2003**

## **President's Message:**

It is once again time for the Texas State Board of Education (SBOE) to adopt biology books. We all know that can only mean one thing: creationists and other special interest groups will try to exert their influence on the content of those textbooks, thereby influencing most of the biology books available to the rest of the nation.

This year we are already witnessing a concerted effort by the Discovery Institute (DI) to have the books rejected, or radically altered due to alleged errors in every single book's coverage of evolution. The DI is a think tank based in Seattle, Washington which is devoted primarily to the promotion of intelligent design. Two representatives of DI testified before the SBOE on July 9, 2003, after earlier submitting 55 pages of written testimony taken directly from the book, *Icons of Evolution*, by Jonathan Wells. That book, and these representatives, claim that DI "researchers" have uncovered numerous weaknesses and outright falsehoods in several classic cases/experiments used in standard textbook presentations of evolution. For a detailed examination of Wells' book see <http://www.ncseweb.org/icons/>

Fortunately, over 40 other individuals, including myself, testified that day and all but 4, by my count, testified in favor of adopting the books as they are now written, with no changes in their coverage of evolution. However, this fight as only just begun. Several members of the board seemed swayed by the arguments of the DI and it is up to the biology teachers of Texas to help all members of the board understand the importance of evolution to our discipline. The SBOE will hold another hearing on biology textbook adoptions on either

September 10<sup>th</sup> or 11<sup>th</sup>. You can be sure that many more DI supporters will be present at that meeting. I am urging all members of TABT to make their voices heard during these hearings. You can find updated information on the hearings and the entire textbook adoption process by going to the TEA website at <http://www.tea.state.tx.us>. Should you be able to testify in person in September, please call Larry Thomas of TEA at 512-463-1594 in order to register. However, it is not necessary to travel to Austin in September in order to testify regarding textbooks (though I sincerely hope that many of you will), as the board will accept written testimony, as well. Of course, it is also a good idea to email, write or phone your SBOE member to make your opinion known. Contact information for board members is available at <http://www.tea.state.tx.us/sboe/board/index.html>.

Finally, I am including the text of my July testimony before the board in this issue of *The Nucleus*. In that testimony I refer to documents which were included in my written testimony. Those documents are too lengthy to include here, but I will be happy to share them via email with anyone who is interested ([rdennison@houston.rr.com](mailto:rdennison@houston.rr.com))

As most of you know, the versions of the biology books which are adopted in Texas will determine the content of books available to most of the biology classes across the nation due to the enormous amount of money spent by our state on those books. This is a critical time and biology teachers all over the U.S. are counting on us. Please make your voice heard.  
Robert Dennison, TABT President      Page 1

**Testimony Submitted to the Texas State Board of Education  
Regarding Biology Textbook Adoptions  
July 9, 2003**

Robert Dennison, President, Texas Association of Biology Teachers

My name is Robert Dennison. I have been teaching biology in Texas for the past 25 years and I am currently the president of the Texas Association of Biology Teachers. Thank you for allowing me to speak with you today. I am here to strongly encourage the board to adopt the texts currently on the 2003 Biology Textbook list, thereby providing Texas teachers with numerous quality books from which to choose.

As a teacher, my primary concern is what is best for my students. As a biology teacher, I am confident there is no more important field for my students to understand than biology, the study of life itself. Furthermore, it is imperative that our students acquire scientific literacy in order to compete in today's world. To that end, I want my students to be provided with a textbook that accurately reflects the current consensus among biologists regarding all aspects of the study of life. To quote the American Association for the Advancement of Science (AAAS), "To become informed and responsible citizens in our contemporary technological world, students need to study the theories and empirical evidence central to current scientific understanding." The textbooks before you today provide students with the means to carry out those studies and, in turn, help assure them of success in that world.

However, I am sure that some individuals will testify that most, if not all, of these textbooks are not suitable for use in Texas due to their coverage of evolution. Specifically, I have read the Discovery Institute's written testimony purporting to show factual errors in every single one of these textbooks' coverage of evolution. These alleged errors are based on an examination of four criteria which are in themselves flawed. In my written testimony, I have included a discussion of the fallacies of these arguments, as well as the deceptive manner in which they were used. By singling out four topics as alleged weaknesses in evolutionary theory and textbooks' coverage of that theory, the authors of the Discovery Institute reviews are attempting to discredit all of evolutionary theory, ignoring the many, many lines of evidence which converge to support the modern evolutionary view of the living world. I have also attached a statement from the American Association for the Advancement of Science on the so-called "intelligent design theory" which is actively promoted by the Discovery Institute as an alternative to Darwinian evolution.

As a biology teacher, I want to assure you that there is no concept more important to my students' understanding of the study of life than evolution. It is the theory of evolution which allows us to see biology as the unified discipline it is today. The theory of evolution has been and continues to be one of the most robust and fruitful theories in all of science. No other theory which has sparked more productive research into the diverse fields of biology; research which benefits all of us and which our students must understand in order to successfully continue the work done before them. I have also included in my written testimony position statements on the teaching of evolution from both the National Association of Biology Teachers and the National Science Teachers Association. To quote from the NABT statement, "Teaching biology in an effective and scientifically-honest manner requires classroom discussions and laboratory experiences on evolution." Furthermore, our state's science standards directly mandate the teaching of evolution in biology classes.

The textbooks being considered for adoption do an admirable job of presenting the theory of evolution in a manner befitting its importance to biology. I close by again urging the board to adopt the 2003 Biology Textbook List, and further urge that the board not require any changes in those books which would weaken their coverage of evolution either by altering the coverage itself or by adding nonscientific "alternatives" such as intelligent design. Any such changes would do an injustice to the students of the state of Texas. Thank you for your kind attention.

# Free Continuing Education Program Sponsored by American Society For Reproductive Medicine

*“Real Science, Right Now”*

Plan to join the American Society for Reproductive Medicine (ASRM) for “Real Science, Right Now” in San Antonio on October 11, 2003, for an exciting day of discussion and learning! The ASRM is offering a free, one-day continuing education program in conjunction with its Annual Meeting as a public service to the community’s educators.

If you teach high school science or biology, you won’t want to miss this day-long series of seminars. The program will feature cutting-edge reproductive science and research presented in both medical and social contexts. Faculty from the University of Texas Health Science Center at San Antonio will strive to make the information easy to understand in ways you can transmit to your students.

ASRM is a national medical professional society whose 9,000 members (physicians, scientists, nurses, technicians, mental health professionals) are dedicated to excellence in patient care and research in reproductive medicine.

As a public service, ASRM is reaching out to the community through its educators. “We would like to provide teachers with information and resources that they may not encounter elsewhere, that they can use to enrich their biology curriculum,” says Robert W. Rebar, M.D., ASRM Executive Director. “This program will help teachers explain to their students the nuts and bolts of medical research and evaluate the impact that research has on our lives.”

Dr. Rebar describes the curriculum: “First we’ll look at the process of doing scientific research. We’ll discuss how researchers get ideas, form hypotheses, design studies, and the ways in which the resulting data can be interpreted. We will use real-life medical research studies as models, and we’ll look at ways that scientists can sometimes be misled.

“Next, we’ll discuss cultural and gender issues in medicine, with the help of Martha Medrano, M.D., from the Hispanic Center for Excellence. Later, we’ll look at how science and

society influence each other by examining the evolution of in vitro fertilization. IVF has evolved from an exotic and controversial intervention to a standard (albeit high-tech) treatment for infertility. We’ll also talk about ethical issues in research, the ways human subjects are protected, and the controversies surrounding cloning.

“Last, we’ll focus on the ‘scientific meeting,’ using our own Annual Meeting as an example, and discuss the way that research results are submitted and accepted for presentation and publication. We’ll also discuss some of the most exciting research to be presented at our meeting.”

Teachers participating in the seminar day will be invited to attend, at no charge, portions of the ASRM Annual Meeting such as plenary sessions, oral and poster research presentations, post graduate courses, and press briefings.

ASRM is seeking approval to provide Continuing Professional Education credit for the program under the auspices of the University of Texas Health Science Center or as a provider in our own right.

For registration or further information, contact Eleanor Nicoll in the ASRM Office of Public Affairs at 202-863-2439 or [enicoll@asrm-dc.org](mailto:enicoll@asrm-dc.org).

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## TABT Officer Nominees

Elections for TABT officers are approaching, so in the interest of an informed electorate, *The Nucleus* shares biographies and resumes provided by the candidates.



**Anita Gordon** runs uncontested for the position of TABT President-elect. During her career Anita has been active in organizations supporting classroom teachers and professional growth. She has served as an officer in STAT

(secretary) and in TABT (secretary/treasurer). Over the past few years Anita has been actively engaged in providing learning opportunities for teachers through district in-service, CAST, NABT, and College Board Institutes. Her workshops are usually a channel for passing on the great ideas other teachers have shared that have proved effective for her as well. She recently collaborated with Michelle Bubnis of Leander ISD to host the TABT Drive-In Conference in July 2003. Although working with teachers is rewarding, Anita most enjoys the dynamics of the classroom and the interactions with students.

From childhood, Anita found the greatest pleasure spending time immersed in nature (the mountains of Wyoming), but it was not until college that she found her niche as a student and teacher of biology. Drs. Gerald Thompson, J. Hoyt Bowers, and Harold Reese at Wayland Baptist College deserve credit for their instruction, encouragement, and opportunities to develop her fledgling skills. Learning from other teacher leaders through their willingness to share best practices in forums like CAST and AP Institutes has been a continuing source of inspiration to Anita.

If elected, Anita would like to hear from the membership of TABT to set goals for the direction of the organization. Our influence is needed as part of the STAT board, to give input to the State Board of Education, and to provide continuing personal and professional development through workshops at CAST and our own meetings.

Two candidates are running for the position of Secretary-Treasurer. **Jane Delaney** of Leander High School is originally from Chicago but she and her husband “saw the light” and have been Texas residents since 1979. A classroom teacher for 22 years, Jane is a mentor on her campus leading students to success in AP and IB Biology courses, science UIL and Academic Decathlon.

Professional recognitions include Texas Excellence Award for Outstanding High School Teachers, Who’s Who Among America’s Teachers, University of Texas-Houston Medical School Student Recruitment Award, and Sigma Xi Outstanding Science Educator Award nominee.



Jane has served in many capacities including AP lab instructor for the Master Teacher Summer Institute in Biology at the University of Texas and TEXTEAM Biology presenter for Region 13.

“When I was growing up, my parents always encouraged me to explore nature. I made ant farms and worm jars, I pressed leaves and flowers in books, I took pictures of animals, and I collected fossils. Some of these samples and pictures are what I share with my students. Today, I offer some of the same experiences to my students to encourage them to explore the world around them.”

**Nadine Dickson** is also a candidate for Secretary-Treasurer. She writes “Being a veteran teacher of 20 years, I remain as passionate about biology today as I was when I started teaching. Being a wife and mother of two, the third most important role in my life is to instill a love of discovery and lifelong learning in my students. The highlight of my career came in 2001 when TABT awarded me the Outstanding Biology Teacher of the Year award. That encouragement continues to inspire me as I hope to inspire others.”

Kendall/Hunt Publishing Company Announces

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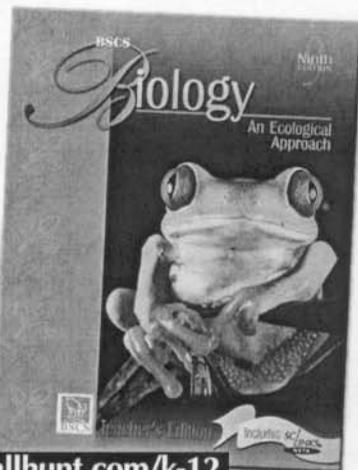
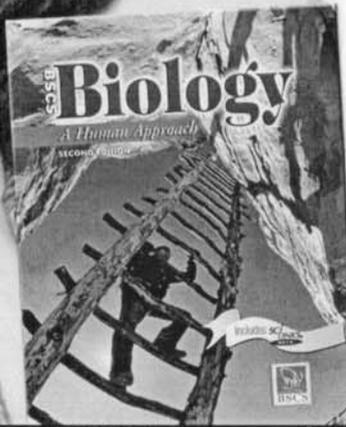
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# Science Kit & Boreal Laboratories Professional Development Workshop Series

## Introducing Digital Microscopy into your Classroom

Date and Location: El Paso, November 7<sup>th</sup>, 2003 and San Antonio, December 5<sup>th</sup>, 2003

**Workshop Summary:** The workshop will introduce you to the exciting world of digital microscopy through the use of practical applications and hands-on experience. Teacher trainers will present activities for Biology, Chemistry, Earth Science, and Physical Science. Activities will include: how to capture images, precise measurement, video capture of live daphnia, amalgamation of images and more!

**What is included:** Each participant will receive 4 hours of training and their choice of a *Boreal Digital Microscope with mechanical stage* or *Boreal Digital Inclined Stereoscope* (\$600 value), **Motic Images Capture and Manipulation software**(\$200 value), **manual, and classroom activities.**

**Cost: \$900 payable by check, purchase orders, or credit card. Make checks payable to Science Kit.**

## Teach Smart with Technology Workshop \*an outstanding program to use for reviewing for TAKS

Date and Location: San Antonio, December 6<sup>th</sup>, 2003

**Workshop Summary:** In this workshop you will be trained in the use of an interactive teaching system called Qwizdom. The system uses software which allows you to use prepared, standard-based curriculum and/or create your own interactive lessons, tests, group activities and games. Students actively take part by instantly responding to questions using multi-function infrared remotes. This allows for instant feedback to students and instructor. Track your student's success by using the Qwizdom grading program. Lessons are linked to the National Standards.

**What is included:** Each participant will receive 4 hours of training and Qwizdom Teaching Assistant Software, 1 teacher remote, 8 student remotes, 1 receiver and computer cables, and a \$50 gift certificate which can be used towards the purchase of additional student remotes or Qwizdom curriculum software and 1 \$350.00 curriculum series of choice. (Total \$1,165.00 value).

**Who should attend:** K-12 teachers, Supervisors or Department Chairs, Curriculum Directors, Technology Specialists, and Special Education Science teachers.

**Cost: \$950 payable by check, purchase orders, or credit card. Make checks payable to Science Kit.**

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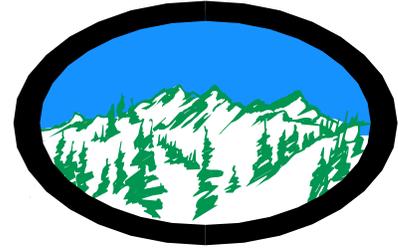
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# Your Invitation to NABT Convention 2003

## October 8-11, 2003

### Portland, Oregon



The National Association of Biology Teachers invites you to attend its 2003 Convention in Portland, October 8-11. Why should you attend an NABT Convention? As **The Leader in Life Science Education**, our members reach more than a million students. But that's not the only reason.

**Go to network!** You can network while standing in line, sharing a meal, or eavesdropping on conversations around you. Networking simply means sharing ideas and information with others. You can get some great classroom ideas from networking but even more important, you can get sources to contact.

**Go for the sessions!** These include symposiums, demonstrations, hands-on workshops, and papers. You can learn some new techniques for the classroom and lab and hear the latest developments from experts in their disciplines. NABT Conventions have included such speakers as James Watson, E.O. Wilson, Stephen J. Gould, Francis Collins, and Thomas Lovejoy.

**Go for the exhibits!** They're full of the latest in classroom technology as well as lots of resources to take home. And the vendors often sponsor daily door prize drawings. Exhibitors are eager to talk, not only about their products, but also about ideas and methods to use in your classroom.

**Go to present!** Take advantage of the opportunity to deliver a conference presentation. It allows you to share information with other participants interested in your subject. They may even have suggestions or ideas for you. The presentation builds leadership skills, which may lead to presentations at other conferences.

**Go for the field trips!** Field trips are a fun part of any convention. Not only do they provide a break from the sessions; they provide interesting local phenomena as well as experiences to take back to your students.

**Go to learn about opportunities!** You never know whom you'll meet or what you'll learn at conventions. Frequently organizations offer grants for various projects. Some of these might be excellent for your classroom. Pick up an application and see what happens.

**Go to meet new friends and old!** As you begin to attend conventions, you'll see friends and colleagues from previous conferences. You'll meet them for dinner, go on field trips with them, and develop lasting friendships. At the same time, you'll meet new friends who may be attending their first convention.

#### **Go to experience Portland!**

Also known as the "City of Roses," Portland, Oregon is populated by friendly people and surrounded by breathtaking beauty. The Portland metropolitan area is located in the northwestern corner of Oregon at the confluence of the Columbia and Willamette Rivers. It is about 65 miles inland from the Pacific Ocean on the Oregon-Washington state border. It is nestled between the Cascade Mountain Range to the east and the Coast Range to the west. Tall trees, snow-capped mountains, lush green fields, gently flowing rivers, moderate climate, and bountiful flower gardens explain why *Outside Magazine* calls Portland "one of the 10 greatest places to live."

Portland's diverse neighborhoods are home to all manner of people, and its districts possess distinct personalities, perhaps unusual for a relatively small city. The artistic Pearl District, sophisticated Nob Hill, and bohemian Hawthorne are just a few neighborhoods that consistently draw enthusiastic crowds of visitors. Within these districts, the Rose City's culture simmers in hip coffeehouses, Native American art galleries, ubiquitous bookstores, and lively brewpubs.

**Make plans to join NABT in Portland in 2003.**  
**For the latest information, visit our web site at [www.nabt.org](http://www.nabt.org).**



Texas Association of Biology Teachers  
c/o Alton Biggs, Computer Records Clerk  
1002 Madera Court  
Allen, Texas 75013-3639



**Membership Application**  
**(Please Print)**

Name: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

Home Street Address, City, State, Zip: \_\_\_\_\_

E-mail address (if available): \_\_\_\_\_

Type of membership:  Active (\$10)  Student (\$5)  Retired (\$5)  Life (\$250)

Please complete the following to assure balanced representation in planning TABT activities

1. Professional Class (**Check one only**)

Biology Teacher  Department Chairman  Curator/Interpreter  
 Supervisor/Administrator  Teacher Training  Student  
 Other \_\_\_\_\_

2.  Male  Female (**OPTIONAL**)

3. Have you ever received the OBTA?  No  Yes If yes, what year? \_\_\_\_\_

4. Number of years teaching? \_\_\_\_\_

5. Organizational Class (**Check one only**)

Elementary  Middle/Junior High  Secondary  College/University  Zoo/Aquarium  
 Business/Institution  Other \_\_\_\_\_

6. Special Interests (**Check no more than 2**)

Cellular/Molecular  Botany/Plant Science  Laboratory Science  Reproduction/Evolution  Zoology  
 Computer Instruction  Environmental Biology  Teaching Materials  Other \_\_\_\_\_

7. I am also a member of (**Check all that apply**):  National Association of Biology Teachers (NABT)

National Science Teachers Association (NSTA)  Science Teacher Association of Texas (STAT)

**Please send membership application and dues to:** Alton L. Biggs, TABT Records Clerk  
1002 Madera Court, Allen, TX 75013-3639

**Make all checks payable to: Texas Association of Biology Teachers**