

Proceedings of the Tennessee Academy of Science 2011

Teresa L. Fulcher, Secretary TAS

Pellissippi State Community College, Knoxville, Tennessee

Tennessee Academy of Science Executive Committee Meeting 15 April 2011

President Jeffrey Boles called the meeting of the Tennessee Academy of Science (TAS) Executive Committee to order at 6:50 PM CDT in the Massey Board Room on the Campus of Belmont University, Nashville, Tennessee. Attendees were President-Elect William Andrews, Treasurer Steve Murphree, Secretary Teresa Fulcher, Managing Editor Stephen Stedman, Junior Academy of Science Director Jack Rhoton, Director of Electronic Communications Jim Howard, Education Committee Chairperson Kim Cleary Sadler, Member-at-Large Gilbert Pitts, and 2011 Local arrangements Chairperson Wayne Wofford of Union University.

President Boles introduced Executive Committee members and extended thanks to Belmont University and to Steve Murphree for hosting the meeting.

Reports from Officers and Directors

Past President—Michael Gibson was not in attendance but submitted a written report on Long-range planning to be discussed later in the meeting.

President-Elect—Andy Andrews asked for suggestions for speakers for the fall meeting and requested a copy of the TAS operations manual. It was suggested that someone from the Department of Homeland security might be available for the fall meeting as that department does have an Office of Science and Technology with a Director of Research. President-Elect

Andrews said he would pursue a speaker from this department.

Treasurer—Steve Murphree discussed the treasurer's report showing a total income of \$23,885.27 and total expenses of \$17,744.93 for the 2010–2011 fiscal year. The full report follows:

Treasurer Murphree also reported the theft of \$200 from the TAS money box stored in his office at Belmont. Treasurer Murphree is continuing to investigate bonding and insurance for the Academy and intends to communicate with other State Academies to determine their policies. Executive Committee members were reminded of TAS policies on travel reimbursement. The Academy encourages Executive Committee members to seek alternative sources of funding, but will reimburse travel expenses at the current state rate. To request reimbursement, Executive Committee members should file a TAS requisition form with Treasurer Murphree. President-Elect Andrews inquired as to the policy on paying a stipend for speakers at the Annual meeting. Treasurer Murphree responded that there was no specific policy and it really depends on the year and the speaker. President Boles responded that President-Elect Andrews can negotiate with the speaker in consultation with the Treasurer. Traditionally, the Academy's largest travel expenditure is to send a representative to the American Association for the Advancement of Science (AAAS) meeting. Treasurer Murphree also noted the loss of several Institutional Sustaining members: Austin Peay, UT Martin, Volunteer State, UTSI and LMU. Electronic Communications Director Jim Howard made a motion to accept the Treasurer's report and President Andrews seconded the motion. The motion carried.

TAS Income and Expenses (7/1/2010 through 4/15/2011).

Category Description	7/1/2010–12/31/2010	1/1/2011–4/15/2011	OVERALL TOTAL
INCOME			
Annual Meeting Income	100.00	0.00	100.00
Gift Received	45.00	12.00	57.00
Library Journal Subscriptions	1,150.00	405.00	1,555.00
Meeting Lunch	687.00	0.00	687.00
Meeting Registration	3,170.00	0.00	3,170.00
Membership Dues	10,030.00	720.00	10,750.00
Page Charge for Journal	1,170.00	2,250.00	3,420.00
Vanguard Dividend Payment	1,626.54	2,519.73	4,146.27
TOTAL INCOME	17,978.54	5,906.73	23,885.27
EXPENSES			
Annual Meeting	3,098.76	0.00	3,098.76
Bank Charge	6.00	3.00	9.00
Dues and Fees	0.00	148.40	148.40
Journal	150.00	60.00	210.00
Journal printing	7,113.44	0.00	7,113.44
Junior Academy of Science	2,887.12	0.00	2,887.12
Misc. Expenses	50.00	0.00	50.00
Postage and Delivery	200.00	0.00	200.00
Renewal Fee	185.00	0.00	185.00
Science Fair	0.00	1,595.00	1,595.00
Secretary	0.00	22.25	22.25
TJAS Award	500.00	200.00	700.00
TJAS Research Grant	100.00	0.00	100.00
Travel Expenses of Executive Committee	0.00	1,415.00	1,415.00
Treasurer	10.96	0.00	10.96
TOTAL EXPENSES	14,301.28	3,443.65	17,744.93
OVERALL TOTAL	3,677.26	2,463.08	6,140.34

Managing Editor—Stephen Stedman submitted the following report:

“The journal issue for March 2011 (*JTAS* 86:1) was mailed to the TAS membership during early April 2011. Material for the June 2011 issue (*JTAS* 86:2) was emailed to Allen Press 31 March 2011. This issue includes four research articles and one review article. It is scheduled to be mailed during early June 2011.

TAS Balance Sheet as of 4/15/2011.

ASSETS	
Cash and Bank Accounts	
Checking	8,649.12
Vanguard Star Fund	186,157.30
TOTAL Cash and Bank Accounts	194,806.42
TOTAL ASSETS	194,806.42
OVERALL TOTAL	194,806.42

“The last issue of the year (*JTAS* 86:3–4) is in the process of being put together. It will contain abstracts of the Division Meetings of April 2011 and several research articles, as well as some material preparatory to the Centennial Year celebration; in particular, it might contain a centennial-related article by George Webb about the Scopes Trial.

“Other centennial-related items under consideration for inclusion in the issues for 2012 include another article by George Webb about the joint meeting of the AAAS and TAS in Knoxville in the early 1920s and several articles relating to geology and the early years of the TAS to be collected and edited by Michael Gibson. It is anticipated that some short vintage publications from the early years of the journal will be reprinted in issues for 2012; suggestions for

reprinted items are solicited. Other suggestions for centennial issues are also solicited.”

Editor Stedman commented that he would like to include reminiscences of all previous editors to be included through the Centennial volume. He will also use a traditional light blue color cover for the centennial issue with special wording on the cover. Electronic Communications Director Jim Howard made a motion to accept the report. Treasurer Murphree seconded the motion and the motion carried.

President-Elect Andrews inquired as to the possibility of including an audio CD of interviews with Academy members of historical importance. It was pointed out that another option would be to create MP3 files with links from the TAS website.

Collegiate Division—Director Fred Matthews was not in attendance, but submitted a summary report showing locations of the Collegiate Division Meetings from 1998–2011. An abbreviated version of that report follows:

Electronic Communications—Director Jim Howard reported that the website was operational and he has worked with the search committee to answer questions regarding his replacement. Director Howard reported that he had enjoyed his service to the Academy for the last nine years, but family obligations must be his current priority. Director Howard reported that he has created a compact disc of website files to pass on to the

next Director of Electronic Communications. President Boles thanked Director Howard for his service.

Tennessee Junior Academy of Science—Director Jack Rhoton submitted the following report:

“The 2011 spring meeting of the Tennessee Junior Academy of Science (TJAS) met Friday, April 15, on the campus of Belmont University. A total of twenty-three students were invited to present their research papers. This year on hundred and twenty student were involved in TJAS research, from throughout the state. The top TJAS research papers will be published in the 2011 issue of the Handbook and Proceeding of the Tennessee Junior Academy of Science. The winners of the top two papers will receive \$500 each and the ten other top winners each will receive \$200.

“During the April meeting, a plaque and a small honorarium (\$100) were presented to two outstanding secondary science teachers: Kasi Dishman (high school physics teachers), Johnson County High school, Mountain City; Shari Tharpe (high school chemistry teacher), Kenwood High School, Clarksville. These TAS outstanding secondary science teaching awards recognize teachers for their outstanding contribution to science teaching and for stimulating and inspiring students to an active interest in science.

Year	Eastern Division	Middle Division	Western Division
1998	Southern Adventist University	Austin Peay University	Union University
1999	University of Tennessee at Chattanooga	Austin Peay University	Rhodes College
2000	Carson Newman College	Austin Peay University	
2001	no meeting	Austin Peay University	University of Memphis
2002	Pellissippi State	Austin Peay University	LeMoyne-Owen College
2003	Pellissippi State	Tennessee State University	Union University
2004	Pellissippi State	Tennessee State University	Rhodes College
2005	Southern Adventist University	Tennessee State University	
2006	Pellissippi State	Tennessee State University	University of Tennessee Health Science Center
2007	Southern Adventist University	Tennessee State University	LeMoyne-Owen College
2008	Lincoln Memorial	Belmont University	University of Memphis
2009	Lincoln Memorial	Belmont University	Rhodes College
2010	Walters State	Belmont University	Christian Brothers University
2011	Walters State	Belmont University	University of Tennessee Health Science Center

"In addition, TAS supports four \$100 awards to science fair winners in the Upper East Tennessee Science Fair. This year's science fair is scheduled to meet on Thursday, April 28, on the campus of ETSU. Two recipients will be recognized in the biological sciences category and two in the physical science category."

Director Rhoton reported that he is currently printing fewer copies of the Handbook. This year, only 75 copies were printed. He recalled that in the mid 80s students presenting at the TJAS meeting received a year membership to the Academy. Director Rhoton made a motion that the Academy provides a student membership with a subscription to the *Journal* to TJAS student winners. Secretary Fulcher seconded the motion and the motion carried. It was noted that these honorary student members would not be eligible to submit papers for presentation at the Annual meeting. Director Rhoton agreed to communicate this to student members. Director Rhoton also agreed to investigate policies regarding posting of student papers on the web.

Visiting Scientist Program—Director—open position. Education Chairperson Kim Cleary Sadler reported that Dr. Stephanie Kolitsch, STEM Director at The University of Tennessee Martin, has agreed to temporarily maintain the Visiting Scientist database until a new Director is named. State Department of Education Science consultant Linda Jordan is serving as the chair of the committee to recommend a new Visiting Scientist Program Director.

Annual Meeting Coordinator—Eugene de Silva was not in attendance, but submitted a written report proposing Walters State Community College as the location for the 2014 annual meeting. Dr. de Silva's report included a description of the facilities and contact information. It was noted that the Academy would have receive a letter from the host institution extending a specific invitation before planning could proceed.

Reports from Representatives

State Department of Education—Science consultant Linda Jordan was not in attendance and did not submit a report.

AAAS Section Y Representative—Michael Redding was not in attendance, but submitted the following report:

"Representing the TAS, I attended the Annual Meeting of the American Association for the Advancement of Science in Washington, D.C. on February 17–19, 2011. The following comments summarize my activities and information deemed pertinent to the TAS.

"The National Association of Academies of Science Assembly of Delegates was held on February 18. Other than the pro forma activity reports, the principle item of discussion was a decision by the NAAS Board of Directors to limit participation of students at the American Junior Academy of Science (organized and partially funded by NAAS) to those associated with state academies which are not delinquent in dues payable to the NAAS. Several delegates argued that enforcement of this policy might unfairly deny access for some potential AJAS participants; delegates voted to rescind this decision and, rather, encourage all state academies to pay NAAS dues in a timely manner. Annual dues assessed to each affiliated state academy have been changed as follows: \$50 plus \$0.50 per member up to a maximum of \$250 per academy. President Mandana Sassanfar (Massachusetts) will lead the NAAS for the 2011–12 term and Assad Panah (Pennsylvania) was voted to be the President-Elect.

"A separate forum on February 18 for NAAS Delegates and other organizers of the American Junior Academy of Science provided an opportunity for participants to share topics of interest and concern relating to the function of state academies and junior academies. Forum attendees heard a report from Celia Waldock of the Minnesota Academy about the opportunity and impact of quarterly conference calls for member academy presidents or directors. Although few academies opted to participate during 2010, those that did seemed to do so regularly and profit from the shared conversations. State academies were urged to update annually the relevant contact information for both the state academy and junior academy. Organizers for AJAS discussed the growing difficulty of fundraising to support the

AJAS. One suggestion was for individual academies, especially those that regularly sponsor students to attend the AJAS, to provide an annual donation directly to AJAS.

"The Section on General Interest in Science and Engineering (Section Y) held its annual business meeting on February 19. Other than the recitation of reports, little of substance transpired. Chair Katherine Sullivan announced that Don Jordan (South Carolina) would replace JoAnn Valenti as Secretary. She solicited suggestions for symposia to be sponsored by the Section at the 2012 AAAS meeting in Vancouver, Canada. Julie Ann Miller, Section Delegate to the AAAS Council reported that AAAS recently launched a new journal devoted to translational medicine."

Managing Editor Stedman made a motion to accept Representative Redding's report and Member-at-Large Pitts seconded the motion. The motion carried.

Reports from Committees

Local Arrangements Committee—Chairperson Wayne Wofford from Union University reported on plans for the 2011 meeting to be held 27–28 October. Chairperson Wofford reported that a local arrangements committee is in place and several large rooms have been reserved. The Carl Grant Events Center will accommodate approximately 500 people. The dining facility can be divided into smaller rooms. Harvey Hall can hold 120 people. The dining hall has been reserved for the Thursday night (27 October) Executive Committee meeting. Room numbers for the technical sessions are a priority, but will not be available until after fall classes have been assigned. The Double Tree hotel in Jackson will possibly provide conference rates. President Boles reminded Chairperson Wofford to make arrangements with the University for parking and encouraged Wofford to contact Publicity Chairperson Mandy Carter-Lowe to coordinate publicity efforts. Treasurer Murphree noted that approximately 100 members will pre-register for the meeting with another 200 registering on-site. Approximately 100 will purchase luncheon tickets. Treasurer Murphree requested additional help in on-site registration to speed the process.

Chairperson Wofford also reported that President David Dockery and Dean Gene Fant have been invited to welcome the Academy.

Nominating Committee—Chairperson Michael Gibson was not in attendance but requested suggestions for names for President-Elect.

Education Committee—Chairperson Kim Cleary Sadler was in attendance but had no formal report to submit.

Fellows Committee—Chairperson Charles McGhee was not in attendance and submitted no nominations.

Long-Range Strategic Planning—Chairperson Michael Gibson was not in attendance but submitted a report describing the possibility of a field trip to Coon Creek Science Center in conjunction with the 2011 Union University meeting. Dr. Gibson has made arrangements and has estimated costs and logistics for the trip. A motion was made and passed authorizing Michael Gibson proceed with plans for field trip to Coon Creek while coordinating with Andy Andrews, and providing information to Managing Editor Stephen Stedman. Dr. Gibson also reported that he and Dick Stearns from Vanderbilt University were still pursuing Vanderbilt as a possible location for the 2012 Centennial Meeting. The University of Tennessee Space Institute (UTSI) is still a possibility for the 2013 meeting. President Boles reported that Scott Van Zandbergen of UTSI has supplied him with campus maps, floor plan, and room capacities. UTSI is eager to host the meeting, but President Boles is concerned that the facility might be too small. President Boles is planning to visit the facility in the spring.

Publicity and Research Committee—Chairperson Mandy Carter-Lowe was not in attendance but submitted the following report:

"Certificates were prepared and are in the process of being mailed to student winners. A large number of certificates were mailed this week and should arrive at their destinations by the earlier part of next week. Since addresses were not reported with all of the names of the student winners, I have been using the meeting program to locate a potential advising professor's name on the project and searching via the internet for their address. Some of the projects

did not list a professor's name. I will be working with the meeting coordinator and section leaders to identify addresses for the remaining students. Additional mailings will occur as I find addresses for the winners.

"Certificates were prepared and mailed to Eugene de Silva at Walters State Community College for the 35 student winners of the East Collegiate Division.

"Information concerning contact information for a person at UTSI was passed along to Dr. Jeffrey Boles for use in identifying a future meeting site." Executive committee members discussed options for speeding up the process of certificate distribution. Printing certificates on site was suggested.

Centennial Planning Ad Hoc Committee—Secretary Fulcher provided notes from the centennial round table discussion held November 19, 2010 at Tennessee Technological University. There was continued discussion on an Academy oral history project with the creation of audio files containing interviews of Academy members. President-Elect Andrews suggested that an audio compact disc could be created or the files could be converted to audio compression format (.mp3) and loaded onto the TAS website. Michael Gibson's written report noted communications with Humanities Tennessee regarding a grant. Grants are available in amounts ranging from 5–20 thousand dollars. Gibson noted that the grant application would be due in the fall, with funding available in the spring. Gibson's written report indicated that he would pursue drafting a proposal for Executive Committee members to review by end of summer. Gibson requested from everyone names of Academy members that should be included, along with addresses and contact information if possible. It was noted that the TAS Fellows should be included. Secretary Fulcher will send a list of the Academy Fellow to Michael Gibson. Also important to the application would be a list of historical events that TAS may have either participated in directly or that influenced TAS over the past hundred years. It was noted that Dr. George Webb had published in the February 2011 issue of *The Courier*, a publication of the Tennessee Historical Commission,

a brief article titled: "Towards a Centennial: The Early Years of the Tennessee Academy of Science". Dr. Webb has also been invited to submit an article on the Academy in celebration of the centennial to *The Tennessee Conservationist*. This article will be published in the spring of 2012.

Ad Hoc Search Committee for Director of Electronic Communications—Chairperson Gilbert Pitts reported that this committee (consisting of Andy Andrews, Gore Ervin, Steve Murphree and Stephen Stedman) had been charged with four tasks as follows: recommend a new director of Electronic Communications, rewrite/revise the duties of the director of Electronic Communications, develop a plan for preserving the information on the current website, and develop the structure of a new website. The committee recommends Gilbert Pitts to serve as Director of Electronic Communications. The committee recommends the duties be described as follows: "The Director of Electronic Communications will be responsible for maintaining the website for the Tennessee Academy of Science and facilitating electronic communication between the TAS, its members and the public. Meeting dates, links to *TAS Journal* articles, publication information, information concerning the Visiting Scientist Program, a database of academy members and their areas of expertise, and other items of interest will be displayed on the website. The Director of Electronic Communications will be a voting member of the Executive Committee and will serve at the pleasure of the President". The committee also reported that outgoing Electronic Communications Director Jim Howard had worked to convert all files from the current website to compact disc for transfer. The committee also reported on possible server hosting options. Chairperson Pitts reported that Austin Peay could serve as the host, but that would only be viable as long as the Director was a faculty member at Austin Peay. Therefore the committee recommended subscribing with a hosting website such as Mid-phase.com or godaddy.com. After reviewing pricing, storage space, bandwidth, e-mail address capability, and other features, the committee recommended

using Mid-phase.com. President Jeffrey Boles appointed Dr. Gilbert Pitts to serve as the new Director of Electronic Communications. Secretary Fulcher made a motion to authorize Director Pitts to subscribe with Mid-phase.com to host the TAS website for a 3-year contract for a charge of approximately \$270.00. Managing Editor Stephen Stedman seconded the motion and the motion carried. It was noted that the description of the Electronic Communications Director needs to be incorporated into the Academy Operations Manual as well as the TAS constitution subsequent to approval by the Academy membership.

New Business

Members of the Executive Committee discussed the need for updates and revisions to the TAS Constitution and Operations Manual. It was suggested that the Executive Committee should attempt to make these changes to submit to full membership prior to the 2012 Centennial meeting. All officers, directors and committee chairs were encouraged to look at the description of their role in both the Operations Manual and in the Constitution and make necessary revisions. Newly named Electronic Communications Director Gilbert Pitts agreed to upload word files of both the Constitution and the Operations Manual on Google Documents and provide to all Executive Committee members so that additions and revisions could proceed simultaneously.

Suggested changes would need to be approved by the full membership at the TAS annual meeting. According to the Constitution, the membership must be notified of proposed changes at least 15 days prior to voting. One possibility would be to submit suggested revisions to the membership with the "call for papers" mailing or with the fall program mailings (provided those are sent at least 15 days in advance of the meeting), and allow the membership to vote on those changes at the fall 2011 meeting at Union University. The other option would be to propose the changes at the 2011 Annual meeting with voting to occur at the 2012 annual meeting. Alternately, proposed changes could be included in the *Journal* issue to be mailed in October. The deadline for submission of material for the *Journal* would be mid July.

Secretary Teresa Fulcher made a motion that the Executive Committee proceed with updating the Operations Manual and recommending changes to the Constitution to reflect the current operation of the Academy. The motion was seconded by Stephen Stedman. The motion carried.

Members of the Executive Committee received the nomination of Dr. Scott T. Handy for the Outstanding University Scientist Award. This nomination included letters of support from colleagues and the curriculum vitae of Dr. Handy. Members of the Executive Committee requested additional time to review the materials. Secretary Fulcher will convert the nomination packet to portable document format (PDF) and send to all Executive Committee members, with voting to occur via e-mail.

Members of the Executive Committee discussed pending Tennessee Senate Bill 0893 regarding the teaching of controversial scientific issues with the specific mention of biological evolution. After lengthy discussion, Managing Editor Stephen Stedman made a motion to submit a letter to members of the Tennessee Senate Education committee on behalf of the Tennessee Academy of Science Executive Committee in opposition to Senate Bill 0893, and to attach the Academy's position statement on the teaching of evolution. The motion was seconded by Gilbert Pitts. After additional discussion, the motion carried. Secretary Fulcher will draft a letter and upon request for revisions and comments, will send to the Senate Education Committee members.

At 11:12 PM CDT President Jeffrey Boles made a motion to adjourn the meeting. The motion was seconded by Secretary Teresa Fulcher and the meeting was adjourned.

Respectfully submitted,
Teresa L. Fulcher
Secretary, TAS
Pellissippi State Community College

**Tennessee Academy of Science Executive
Committee Meeting
27 October 2011**

President Jeffrey Boles called the meeting of the Tennessee Academy of Science (TAS) Executive Committee to order at 7:00 PM CDT in

the President's Dining Room on the Campus of Union University, Jackson, Tennessee. Attendees were President-Elect William Andrews, Past President Michael Gibson, Treasurer Steve Murphree, Secretary Teresa Fulcher, Managing Editor Stephen Stedman, Assistant Editor Christy Carter, Director of Electronic Communications Gilbert Pitts, Publicity Chairperson Mandy Carter-Lowe, Meeting Coordinator Eugene de Silva, member-at-large Daniel Swartling, 2011 local arrangements chairperson Wayne Wofford of Union University, and guest Dr. George Webb.

President Boles introduced Daniel Swartling from the Department of Chemistry at Tennessee Technological University as member-at-large. Dr. Swartling has served as Chairperson of the Chemistry section and has been active in the Academy. President Boles also extended thanks to Union University and to Wayne Wofford for hosting the meeting.

Mandy Carter-Lowe made a motion to approve the minutes from the 15 April 2011 meeting of the Executive Committee. Director of Electronic Communications Gilbert Pitts seconded the motion and the motion carried.

Reports from Officers and Directors

Past President—Michael Gibson reported that a definite location for the 2012 meeting had not been established. Treasurer Steve Murphree reported that Vanderbilt had been visited and there is a new conference center near the gymnasium that would provide plenty of meeting space. The primary concern with that location would be parking, and attendees might have to ride a shuttle. Working around Vanderbilt football weekends would be another concern. The Nashville Public Library Conference Center is a possible venue. They have meeting rooms and a space adequate for the plenary session. It is near the state capital. The only charge would be for a one day insurance policy. Gilbert Pitts made a motion to authorize Jeff Boles and Steve Murphree to pursue using the Nashville Public Library as the location for our 2012 annual meeting with possible dates in October or the first three weeks of November. Steve Stedman seconded the motion. The centennial planning

committee established in 2010 consists of Drs. George Webb, Gore Ervin, Michael Gibson, and Teresa Fulcher. The committee needs to work with President-Elect William Andrews and Program Coordinator Eugene de Silva to begin planning the meeting. Dr. Webb commented that the centennial meeting has an ambiguous status currently and he was not sure of the direction for the meeting. Possible activities were discussed: a commemorative volume of the *Journal*, a special emphasis on history, a two day meeting, group photos, a proclamation from the Governor, additional publicity to the membership in the form of e-mails and letters, information on the website, a Friday night dinner, portions of the meeting open to the public, demonstrations, and programs for K-12 science teachers and students. President Boles asked each Executive Committee member to think of ways they could contribute to the celebration.

President-Elect—William Andrews stated that he was prepared to begin oral history audio tapings at the upcoming meeting and had prepared release forms for the participants to sign. He also thanked Michael Gibson for agreeing to serve as the keynote speaker following the cancellation by Dr. Thomas Cellucci.

Treasurer—Steve Murphree discussed the treasurer's report showing total assets of \$172,931.64. Treasurer Murphree encouraged members to discuss institutional memberships with their schools. State or land grant universities pay \$1000 per year and private schools and community colleges pay \$500 per year for institutional memberships. Treasurer Murphree also investigated insurance with the treasurers of other state academies and found a great deal of variability. Some academies have no insurance. There are two types of insurance available: bonding insurance and liability insurance for hosting a meeting. The full treasurer's report follows:

TAS Income and Expenses 7/1/2010 through 6/30/2011

INCOME

Annual Meeting Income	100.00
Gale Group Dividend Income	65.85

Gift Received	67.00
Library Journal Subscriptions	1,555.00
Meeting Lunch	687.00
Meeting Registration	3,170.00
Membership Dues	12,780.00
Page Charge for Journal	4,320.00
Unrealized Gain	28,486.05
Vanguard Dividend Payment	<u>4,146.27</u>
TOTAL INCOME	55,377.17

EXPENSES

Annual Meeting	3,098.76
Bank Charge	15.00
Collegiate Division	2,300.00
Dues and Fees	148.40
Executive Committee Meetings	434.70
Journal printing	11,188.71
Junior Academy of Science	3,557.12
Misc. Expenses	50.00
Postage and Delivery	200.00
Renewal Fee	185.00
Science Fair	1,595.00
Secretary	62.25
TJAS Award	3,298.00
TJAS Research Grant	100.00
Travel Expenses of Executive Committee	1,415.00
Treasurer	10.96
Web Site	<u>268.65</u>
TOTAL EXPENSES	28,317.55

OVERALL TOTAL

27,059.62

ASSETS

Bank Accounts	1,082.35
Vanguard Star Fund	186,157.30
Total Bank Accounts	<u>187,239.65</u>

TOTAL ASSETS

187,239.65

TAS Income and Expenses

7/1/2011 through 10/26/2011

INCOME

Annual Meeting Income	105.00
Gift Received	10.00
Library Journal Subscriptions	40.00
Meeting Lunch	132.00
Meeting Registration	405.00
Membership Dues	7,190.00

Other Inc	270.00
Page Charge for Journal	3,600.00
Unrealized Gain	377.03
Vanguard Dividend Payment	<u>1,696.62</u>
TOTAL INCOME	13,825.65

EXPENSES

Annual Meeting	195.97
Bank Charge	8.00
Journal	90.00
Journal printing	7,897.10
Junior Academy of Science	860.05
Postage and Delivery	380.00
Treasurer	10.96
Unrealized Gain-Loss on Star Fund	<u>18,191.58</u>

TOTAL EXPENSES

27,633.66

OVERALL TOTAL

13,808.01

ASSETS

Bank Accounts	
Checking	4,588.89
Vanguard Star Fund	168,342.75
Total Bank Accounts	<u>172,931.64</u>

TOTAL ASSETS

172,931.64

Treasurer Murphree reported on behalf of Dr. Thomas Wooten and the Belmont University Principles of Auditing class which conducted an informal financial review. Their report shows accounts properly reconciled. The report did note that tax was paid on a catering invoice, and there was one reimbursement request without documentation. They recommended that as a nonprofit, we do not pay tax, and that all reimbursement requests have supporting documentation. President-Elect Andrews made a motion to accept the treasurer's report. Managing Editor Stephen Stedman seconded the motion and the motion carried.

Managing Editor—Stephen Stedman submitted the following report:

“The journal issue for June 2011 (*JTAS* 86:2) was mailed to the TAS membership during late June 2011, and the issue for September–December 2011 (*JTAS* 86:3–4) was mailed during mid-October 2011.

“Material for the first issue of 2012 (*JTAS* 87:1) is being gathered with several research articles

already reviewed and ready for use in the first issue of the centennial year. These include a centennial-related article by George Webb dealing with the TAS and the 1927 meeting of AAAS in Nashville. Thus far little other centennial material has been submitted, but time remains for more such material to be submitted and used.

"With approval of the Executive Committee, *JTAS* will publish four issues during 2012; approximately 200 pages will be published. By comparison Volume 86 (2011) contained 124 pages and Volume 85 (2010) contained 106 pages. Some cosmetic changes to the journal are contemplated starting with *JTAS* 87:1. Also, a revised version of "Suggestions for Authors" will be made available at the *JTAS* website by the end of 2011.

"No changes in the composition of the *JTAS* Editorial Board have taken place since the April 2011 meeting of the Executive Committee, and it is not anticipated that there will be such changes in the near future."

Editor Stedman took time to thank Dr. George Webb for his assistance with the centennial volume and noted that he anticipates several manuscripts for 2012. Editor Stedman commented that the four issues of the 2012 volume would have about 80 additional pages over previous volumes and he planned to use a different color for the cover, reminiscent of the color from the 1960s. Editor Stedman also plans to shift the font from Times New Roman to Arial. Secretary Fulcher made a motion for the Academy to financially support the publication of four issues of the 2012 *Journal* with the additional pages. The motion was seconded by Gilbert Pitts and the motion carried.

Collegiate Division—Director Fred Matthews was not in attendance and submitted no report.

Electronic Communications—Director Gilbert Pitts submitted a report on the redesign of the Academy website and its use over the past six months. It was noted that both the TAS Constitution and the Operations Manual were loaded on Google Documents and access was provided to all Executive Committee members, with very little activity. Pages of the previous website that have been transferred (or will be transferred) are: the Networks program page, the Visiting Scientist program page, standing committee page, Fellows

page, TAS centennial page, Collegiate Division page, Jr. Academy page, K-12 teachers information page, annual meetings page, and the member database. Pitts acknowledged that getting the database built and running on the new website was a challenge and other portions of the webpage depended on completion of the database. Treasurer Murphree provided the membership database to Pitts and agreed to provide an updated list after new memberships have been processed. Pitts stated he plans to investigate installing an editor into the database so that new information could more easily be incorporated. Pitts plans to send an e-mail to Academy members based on the information in the database to inform them of the new website, verify contact information, and solicit participation in the Visiting Scientist program. Pitts requested additional information on the spring meetings of the Collegiate Division of the Academy, guidelines regarding links that can be displayed on the website, information on the Academy awards, the nomination process for the awards, and the membership of Academy standing committees. Pitts asked Executive Committee members to provide him with content to load on the webpage. Electronic Communications Director Pitts provided statistics on use of the website site over the past six months showing peak visits in the month of September.

Assistant Editor Christy Carter suggested that it would be helpful to provide a list of the electronic equipment that would be included in each technical session room on the annual meeting page as well as guidelines for presenters as to the software programs loaded on computers.

Director Pitts stated that the member registration renewal form had a minor change regarding the waiver to release name and contact information to clarify permission for participation in the Visiting Scientist program. It was noted that the sections of the Academy listed on the membership renewal form should be revisited to see if particular sections need to be removed.

Tennessee Junior Academy of Science—Director Jack Rhoton was not in attendance, but submitted the following written report:

"The 2011 spring meeting of the Tennessee Junior Academy of Science (TJAS) met Friday,

April 15, on the campus of Belmont University. A total of twenty-three students were invited to present their research papers. This year one hundred and twenty students were involved in TJAS research, from throughout the state. Prior to the April 15 meeting, a panel of readers selected twenty-three of the students for presentation at the annual meeting. The panel of judges at the annual meeting selected two top presenters. They are: Brian W. Allen, Siegel High School, Murfreesboro; and Kevin Clavin, Pope Paul 11 High School, Hendersonville. The title of Allen's paper was "Effects of pH on NIR-Dyes; Applications for Proteolytic Beacon Optical Probes." Mr. Clavin's paper was titled "Tumor and Stromal Elements are Required for Macrophage Polarization Following Induced Lung Tumor Metastasis." These top two Papers of Excellence were published in the 2011 issue of the *Handbook and Proceedings of the Tennessee Junior Academy of Science*, along with eleven other papers of the top thirteen winners. The winners of the top two papers received \$500 each and the eleven other top winners each received \$200.

"Judges for the April 15 TJAS meeting were Dr. Preston J. MacDougall of Middle Tennessee State University, Dr. Gore Ervin of Middle Tennessee State University, and Dr. Lewis Myles of Tennessee State University.

"During the April meeting, a plaque and a small honorarium (\$100) was presented to an outstanding secondary science teacher from the East and Middle regions of the state. Recipients of this year's awards are: Kasi Dishman (high school physics teacher), Mountain City High School, Mountain City; and Shari Tharpe (high school chemistry teacher), Kenwood High School, Clarksville. These TAS outstanding secondary science teaching awards recognize teachers for their outstanding contribution to science teaching and for stimulating and inspiring students to an active interest in science.

"In addition, TAS supports four \$100 awards to science fair winners in the Upper East Tennessee Science Fair. This year's science fair met on Thursday, April 28, on the campus of ETSU. Two recipients were recognized in the biological

sciences category and two in the physical science category.

"Dr. Peggy Bertrand has been named the recipient of the 2011 Tennessee Academy of Science Distinguished Science Teacher Award. Peggy teaches and supervises an AP Physics (B and C) program for between 90 and 140 students at Oak Ridge High School. She also teaches Physical World Concepts and Experimental Scientific Research. Dr. Bertrand will receive the award on October 28, during the Tennessee Academy of Science Annual meeting at Union University. Begun in 1997, the awards program is designed to recognize individuals who demonstrate excellence in science teaching. This award is given annually to one Tennessee science teacher who has made significant contributions to the teaching and learning of science. In addition to the recognition, Dr. Bertrand will receive from TAS a \$500 cash award, a plaque and certificate. (A press release will be prepared and submitted to local newspapers.)

"The criteria for the award are based on the candidate's contributions to the teaching profession, education record, involvement in professional organizations, special awards or special recognition, and letters of support.

"Past and current recipients of the TAS Distinguished Science Teacher Award are:

- Alan Redmond (1997) John Sevier Middle School, Kingsport, TN
- Linda Phelps (1998) Camden Central High School, Camden, TN
- Jane Whitaker (1999) Lenoir City High School, Lenoir, TN
- Pat Carpenter (2000) McDonald School, Mohawk, TN
- Gary Barrigar (2001) Elizabethton High School, Elizabethton, TN
- Kathryn Gemmer (2002) University School, Johnson City, TN
- Constance Brown (2003) McEwen High School, McEwen, TN
- Jan Coley (2004) Jefferson County High School, Dandridge, TN
- Marion Pitts (2005) Westview High School, Martin, TN
- Jennifer Dye (2006) Pope Paul 11 High School, Hendersonville, TN

- Ronnie L. Nixon (2007) Greenbrier High School, Greenbrier, TN
- Sarah Elizabeth Millsap (2008), Blackman High School, Murfreesboro, TN
- Laura Robertson (2009) University School, Johnson City, TN
- Luke Diamond (2010) Pope Paul 11 High School, Hendersonville, TN
- Peggy Bertrand, Ph.D (2011) Oak Ridge High School, Oak Ridge, TN”

Visiting Scientist Program, Director—position open. President-Elect William Andrews will follow up on nominations for the Director of the Visiting Scientist Program. He will contact Linda Jordan and Kim Cleary Sadler for suggestions. President Boles agreed to assist in providing content for the Visiting Scientist program on the website and it was noted that the centennial meeting might present an opportunity to inform K-12 teachers about the program.

Annual Meeting Coordinator—Eugene de Silva reported that everything was in place for the 2011 meeting. President Boles extended thanks to Wayne Wofford, Eugene de Silva, and William Andrews for their work in preparation for the meeting. Local arrangements chair Wofford reported that a guest internet access account had been created for presenters to use when logging into the computer. Complications were discussed, such as presenters using their own computer or unplugging university computers. President Boles commented that presenters should be encouraged to bring their presentation on a jump drive plus one alternate format. It was again noted that this information for presenters should be included on the TAS website.

Electronic Communication Director Gilbert Pitts suggested that the Academy look at ways to increase the quality of the presentations at the meeting and it was recommended that the Academy should require abstracts of papers prior to the meeting. Currently abstracts are not due until one week after the meeting. Past President Michael Gibson made a motion to require abstracts to accompany titles submitted to section chairs for approval three weeks in advance of the meeting to take effect in 2012. Assistant Editor Christy Carter seconded the motion. In the course of discussion it was noted that no change would

occur in the printed program; only titles of presentations would be printed. The possibility of abstracts being loaded on the website was discussed. Electronic Communications Director Pitts agreed to investigate, but did not think that was feasible currently. President Boles remarked that his secretary was very adept at creating writable PDF documents and he would solicit her expertise. Ideally abstracts could be submitted from the website and go directly to the section chair and the Annual Meeting Coordinator, as well as being in an appropriate format for temporary posting on the web. Pitts noted that the section chair potentially changes each year and having appropriate contact information would be critical. Eugene de Silva is notified of all section chairs immediately after the annual meeting. It was also suggested that the Academy send a post card in 2012 to call for papers with information and instructions for going to the website to submit title and abstracts. A vote on the original motion resulted in passage.

Reports from Representatives

State Department of Education—Science consultant Linda Jordan was not in attendance and did not submit a report.

AAAS Section Y Representative—Michael Redding was not in attendance and did not submit a report.

Reports from Committees

Nominating Committee—Chairperson Michael Gibson, after consultation with members of the Executive Committee, submitted and made a motion to accept the following slate of nominees for Academy officers for 2012: President-Elect, Mandi Carter Lowe; Treasurer, Dr. Steve Murphree; Secretary, Teresa Fulcher. No second was required and the motion carried. This slate of officers will be presented to the full membership at the annual meeting.

Education Committee—Chairperson Kim Cleary Sadler was not in attendance and did not submit a report.

Fellows Committee—Chairperson Charles McGhee was not in attendance but submitted the

following nomination for TAS Fellow: M. Gore Ervin, Ph.D., Professor and Graduate Coordinator, Department of Biology, Middle Tennessee State University. Dr. Ervin has been an active member of the Academy serving as section chairperson for Health and Medical Sciences, Editor of the *Journal*, a member of the Executive Committee, and President of the Academy in 2009. President Jeffrey Boles made a motion to accept the nomination of Dr. Ervin as a TAS Fellow. Gilbert Pitts seconded the motion and the motion carried.

Necrology Committee—Chairperson George Murphy was not in attendance but communicated with President Boles and will be in attendance for the annual meeting to present the Necrology report. President Boles also reported that Dr. Murphy will be retiring in June of 2012 and the Executive Committee should solicit a new chairperson for this committee.

Long-Range Strategic Planning—Chairperson Michael Gibson opened discussion regarding location of future Academy meetings. President Jeff Boles reported that The University of Tennessee Space Institute did not have adequate space to accommodate an Academy meeting, but the Science Chair at Motlow had expressed interest in hosting the meeting in 2013. President Boles will follow up with Motlow. Eugene DeSilva presented a formal invitation from Dr. Wade McCamey, President of Walters State Community College inviting the Academy to hold its 2014 meeting at the Morristown campus. Teresa Fulcher made a motion to accept the invitation of Walters State to host the 2014 meeting. Stephen Stedman seconded the motion and the motion carried.

Publicity and Research Committee—Chairperson Mandy Carter-Lowe submitted the following report:

“A standard press release was sent via email to daily newspapers, radio stations, and TV stations in Tennessee announcing the 121st annual meeting to be held at Union University in Jackson, TN. Tim Elsworth, university relations representative at Union University, was contacted about publicizing the meeting. He provided this link to an online news item about the meeting (<http://www.uu.edu/news/release.cfm?ID=1900>) which was written with

Thomas Cellucci as the keynote speaker. I provided updated information on the speaker and the news items has since been updated.

“Bud Grimes, university relations representative at UT-Martin, was also contacted after it was announced that Michael Gibson would be doing the keynote address. He was cautious not to duplicate anything Union was doing but said the following concerning the press release: “I’m sure that our good friends at Union won’t mind our promoting one of our high-profile professors speaking at their campus. We’ll send this out and hope for some coverage.” I also made arrangements with him to provide a picture of Dr. Gibson delivering the address and/or interacting with conference participants.

“A large number of emails for the press release were returned this year. I’m in the process of updating my media file and have found various changes in email addresses. I corrected email addresses for newspapers with larger distributions and am working to correct information for smaller newspapers.”

Membership Committee—Karen Kendall-Fite was not in attendance and submitted no report.

Centennial Ad Hoc Planning Committee—Plans were made for members of the centennial planning committee and officers to visit the Nashville Public Library as a possible location for the 2012 meeting. Once a specific date and location have been established, the centennial planning committee will meet to begin formalizing plans for the meeting. Michael Gibson commented that 2012 also marks the 200th anniversary of the New Madrid earthquake that created Reelfoot Lake. Editor Stedman reminded the Executive Committee of plans to include a copy of the TAS Constitution in the *Journal*.

Old Business

Executive Committee members were reminded of two motions handled electronically. The Executive Committee voted electronically to submit to the full membership a proposed change to the TAS constitution increasing make-up the Executive Committee to include the following positions: Director of Electronic Communications, Assistant Editor of the *Journal*, Annual Meeting Coordinator, Chairperson of the Education and

Research Committee, and the Chairperson of the Publicity Committee. Academy members were notified of this proposal at least fifteen days in advance of the meeting via e-mail, on the TAS website, and through U.S. Post for members without valid e-mail addresses. The proposal will come before the full membership at the 2011 annual meeting. Additionally the nomination of Scott T. Handy for TAS Distinguished Scientist was considered via electronic vote. The Executive Committee voted at the April 2011 meeting to send members of the Tennessee Senate

Education Committee letters expressing opposition to Tennessee Senate Bill 0893. Letters were sent to nine Senate Education Committee members by U.S. priority mail on Monday April 18, 2011.

At 10:39 PM CDT, President Boles entertained a motion to adjourn the meeting, and the motion carried.

Respectfully submitted,
Teresa Fulcher
Secretary, TAS
Pellissippi State Community College