

**THE  
CHI BETA PHI  
RECORD  
2004**

The Chi Beta Phi Record is published annually by the Grand Chapter of the  
Chi Beta Phi National Science Honorary and is the official publication of  
Chi Beta Phi.

Editor ..... William J. Pohley

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# *CHI BETA PHI*

IS A NATIONAL SCIENCE HONORARY

WHOSE PURPOSE IS

TO PROMOTE INTEREST IN SCIENCE

AND

TO GIVE RECOGNITION TO SCHOLARLY ATTAINMENT

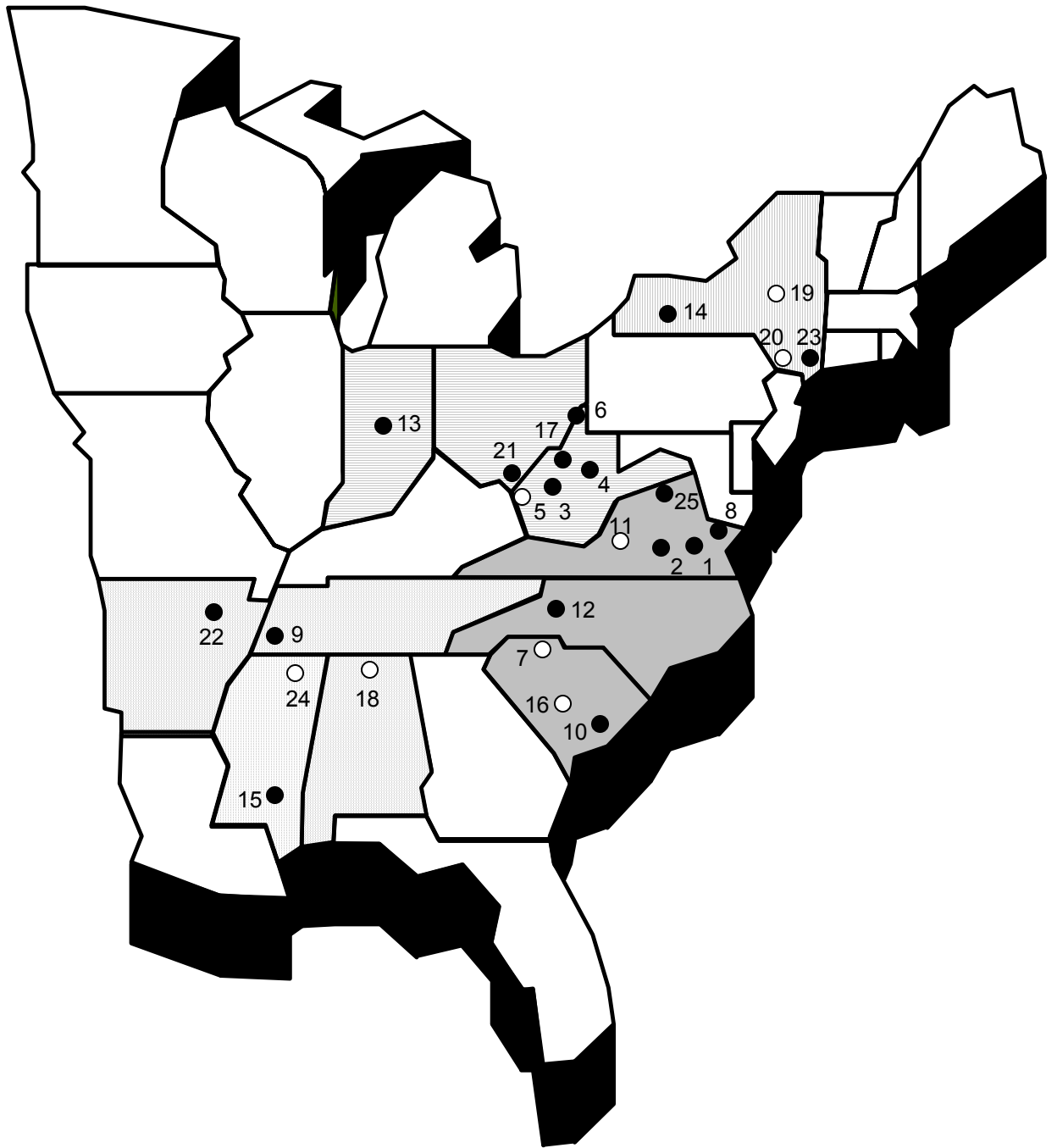
IN AND OUTSTANDING CONTRIBUTIONS TO THE

FIELDS OF SCIENCE

*Scientia Omnia Vincit*

**SCIENCE CONQUERS ALL**

# Chi Beta Phi Chapters



● = Active

○ = Inactive

## CHI BETA PHI CHAPTERS

Alpha	1916	Randolph-Macon College, Ashland, Virginia
Gamma	1921	Hampden-Sydney College, Hampden-Sydney, Virginia
Epsilon	1923	University of Charleston, Charleston, West Virginia
Zeta	1925	Davis & Elkins College, Elkins, West Virginia
Kappa	1925	Marshall University, Huntington, West Virginia
Rho	1935	West Liberty State College, West Liberty, West Virginia
Theta Sigma	1941	Limestone College, Gaffney, South Carolina
Kappa Sigma	1945	Mary Washington College, Fredericksburg, Virginia
Phi	1947	University of Memphis, Memphis, Tennessee
Chi	1948	Columbia College, Columbia, South Carolina
Omega	1948	Lynchburg College, Lynchburg, Virginia
Alpha Beta	1952	Lenoir-Rhyne College, Hickory, North Carolina
Alpha Delta	1953	Franklin College, Franklin, Indiana
Alpha Epsilon	1954	Keuka College, Keuka Park, New York
Alpha Zeta	1955	William Carey College, Hattiesburg, Mississippi
Alpha Eta	1956	Newberry College, Newberry, South Carolina
Alpha Iota	1964	Glenville State College, Glenville, West Virginia
Alpha Kappa	1964	Athens State College, Athens, Alabama
Epsilon Sigma	1965	State University of Oneonta, Oneonta, New York
Alpha Xi	1969	St. Francis College, Brooklyn, New York
Alpha Pi	1970	University of Rio Grande, Rio Grande, Ohio
Alpha Rho	1973	Arkansas College, Batesville, Arkansas
Alpha Sigma	1974	Molloy College, Rockville Centre, New York
Alpha Tau	1984	Rust College, Holly Springs, Mississippi
Alpha Upsilon	1984	Shenandoah University, Winchester, Virginia

## GRAND CHAPTER OFFICERS

2004 – 2006

### **PRESIDENT**

Dr. William J. Pohley  
Franklin College  
501 East Monroe Street  
Franklin, IN 46131  
Ph. (317) 738-8304  
Fax (317) 738-8310  
[wpohley@franklincollege.edu](mailto:wpohley@franklincollege.edu)

### **VICE-PRESIDENT**

Prof. Paul Peck  
Glennville State College  
Glennville, WV 26351  
Ph. (304) 462-7361 (ext. 7310)  
[Paul.Peck@glennville.edu](mailto:Paul.Peck@glennville.edu)

### **SECRETARY**

Amanda Short  
155 Washington Avenue  
Madison, WV 25130  
Ph. (304)369-4261 h  
Ph. (304) 541-2392 c  
[amandashort@cc.ucwv.edu](mailto:amandashort@cc.ucwv.edu)

### **TREASURER**

Prof. Carl T. Meadors  
Post Office Box 253  
St, Albans, WV 25177  
Ph. (302) 727-0649  
[bioprof@earthlink.net](mailto:bioprof@earthlink.net)

### **HISTORIAN/MARSHALL**

Nathanael Mason  
Post Office Box 235  
Ellenboro, WV 26346  
Ph. (304) 869-3711  
[masonn1@aol.com](mailto:masonn1@aol.com)

webpage

[www.franklincollege.edu/bioweb/CBP](http://www.franklincollege.edu/bioweb/CBP)

57<sup>th</sup> Chi Beta Phi National Conference Host  
2004

The fifty-seventh conference was graciously welcomed by the host chapter, Alpha Iota of Glenville State College, Glenville, West Virginia on March 27, 2004. The advisor of Alpha Iota is Professor Paul Peck. Meetings were held in the Science Hall. Refreshments were available prior to the call to order and throughout the day. Audiovisual equipment, including powerpoint, was provided. The group enjoyed lunch together in the college cafeteria. The dinner meeting, capping the events of the day, was held at Trezans Restaurant at 6:00. The results of the awards committee were announced at the dinner. Dr. Eric Pyle of West Virginia University was the after-dinner speaker. (See presentations section.)

Glenville State College is the most centrally located of the state-supported colleges of West Virginia. It was established by an act of the West Virginia Legislature in 1872 as the “Glenville Branch of the State Normal School of West Virginia”. Its purpose was to provide “instruction and practice for common school teachers in the science of education and the art of teachers”. Glenville remained a Normal School until 1930 when the State Board of Education authorized the school to award the Bachelor of Arts in Education degree and on March 4, 1931 the State Legislature changed its name to Glenville State Teachers College. Degrees were first granted to a class of nine in 1931. In keeping with ideas prevalent at the time, the name of the school was changed to Glenville State College in 1943. Subsequent revisions of the curriculum provided for an increased emphasis on teacher training, pre-professional courses, vocational programs and expanded field service.

From the late 1940’s to the present, the college has concentrated on excellence in the preparation of teachers. Today, in addition to programs in teacher education, the college offers a four-year curriculum in liberal arts culminating in the granting of Bachelor of Arts, Bachelor of Science, Bachelor of Science in Business Administration, Bachelor of Science in Nursing, and the Regent’s Bachelor of Arts degrees. The college also offers pre-professional curricula in dentistry, medical technology, medicine, Pharmacy, and Law. Associate in Science and associate in Arts degrees are also offered in General Studies as well as a number of vocational or technical fields.

## Chi Beta Phi 57<sup>th</sup> National Conference

March 27, 2004  
Alpha Iota Chapter Host  
Glennville State College  
Glennville, WV

8:30 – 9:00	Refreshments
	Session I
9:00 – 10:45	Call to Order, Opening Prayer Roll Call of Chapters - Proxy Assignments Chapter Reports Report of National Officers Committee Assignments: 1) Awards 2) Presentations 3) Election
10:45 – 11:00	Break
11:00 – 12:00	Committee Meetings
12:00 – 1:00	Lunch
	Session II
1:00 – 1:30	Elections
1:30 – 2:00	Plans for Expansion Discussion and Implementation
2:00 – 5:00	Presentation of Papers
2:00	Water Quality Monitoring – Prof. L. Hilton-Taylor
2:30	Preparing Resumés for Science Employment – Dr. P. Taylor
3:00	Student Presentations
5:00 – 6:00	Break
6:00	Dinner* Awards and Announcements Speaker

\*\$10.00 per person payable to host chapter

## Roll Call of Chapters/Proxies

First roll call	representative or proxy and chapter	Second roll call	representative or proxy and chapter
Chapter		Chapter	
Alpha		Alpha	
Gamma		Gamma	
Epsilon	Amanda Short	Epsilon	Amanda Short
Zeta		Zeta	
Kappa		Kappa	
Rho		Rho	
Theta Sigma		Theta Sigma	
Kappa Sigma	Rebecca Caylor	Kappa Sigma	Rebecca Caylor
Phi	Jason Tucker, alpha iota	Phi	Jason Tucker
Chi		Chi	
Omega		Omega	
Alpha Beta		Alpha Beta	
Alpha Delta	Melissa Jones, alpha iota	Alpha Delta	Melissa Jones
Alpha Epsilon		Alpha Epsilon	
Alpha Zeta	Wesley Spinks, alpha iota	Alpha Zeta	Wesley Spinks
Alpha Eta	Judy Crissman, kappa sigma	Alpha Eta	Judy Crissman
Alpha Iota	Nathanael Mason	Alpha Iota	Nathanael Mason
Alpha Kappa		Alpha Kappa	
Epsilon Sigma		Epsilon Sigma	
Alpha Xi	Andrew Minigh, alpha iota	Alpha Xi	Andrew Minigh
Alpha Pi		Alpha Pi	
Alpha Rho	Chris Conrad, alpha iota	Alpha Rho	Chris Conrad
Alpha Sigma	Jessica Nelson, alpha iota	Alpha Sigma	Jessica Nelson
Alpha Tau		Alpha Tau	
Alpha Upsilon		Alpha Upsilon	



## Minutes of the 57<sup>th</sup> National Conference

Refreshments were served by the host chapter prior to the conference. They were well received by all.

President C. T. Meadors served as Chair for the conference and hereinafter referred to as the Chair in the minutes. He called the conference to order at 9:00 a.m.

The Chi Beta Phi prayer, in keeping with tradition, was read by one of the members of the host chapter.

Dr. Robert Freeman, President of Glenville State College, welcomed the group in attendance. His address was one of admiration for Chi Beta Phi and he wished for continued future success in our endeavors. He was very complimentary of Alpha Iota Chapter and its role at Glenville. He expressed his pleasure with such an exemplary national organization being a part of the college.

Dr. Philip Taylor, Chair of the Science Department at Glenville, then welcomed the conference and offered his help if needed and to make use of the Science building as needed.

The Chair then welcomed everyone and quickly reviewed the agenda for the day. He then announced the establishment of the Chi Beta Phi website and put it on the board so all could copy it. He informed the group that it was the work of Dr. Bill Pohley of Alpha Delta Chapter and that Dr. Pohley was to be commended. He commented that it was not quite complete at this time but it looks good and will be completed soon. He recommended that members access it frequently as it is hoped that it will serve as a forum for announcements and news.

The Chair then scanned the roll of chapters and announced that there was not a quorum. He then assigned proxies and explained the responsibility of anyone serving as proxy for a chapter. Proxy assignments may be found on the Roll Call page of this Record. A roll call of chapters provided a quorum, there being ten chapters present.

The Chair then called for Chapter Reports and explained the value of hearing and sharing reports from the chapters. For those chapters lacking a delegate in actual attendance, either the proxy or the Chair read their report. Chapter reports were presented from: Epsilon, Kappa Sigma, Alpha Delta, Alpha Zeta, Alpha Eta, Alpha Iota, Alpha Xi, and Alpha Rho. The Chair then explained that the report from Alpha Sigma was lost in sending and it should be recorded that Alpha Sigma be considered as having submitted a report and thus, by proxy, in attendance.

Following the Chapter Reports, the reports of the National Officers were presented. Their reports follow this section of this Record.

The Chair then assigned committees. He explained the function as well as the responsibilities of each committee. There were three committees formed: Awards, Presentations, and Election. The committees were comprised of both volunteers and assignments by the Chair, the majority being volunteers. As it was now after 10:00, the Chair suggested a break and that refreshments were still available. He then charged the committees to meet, following the break, at 10:30 and assigned rooms for their use. They were asked to attempt to conclude their business by 11:30 or no later than 12:00. Everyone is to re-convene and go to lunch together in the college cafeteria. The conference will re-convene for the afternoon session at 1:00 p.m.

At 1:00 p.m. the Chair called the session to order. The roll was called and all delegates and proxies were present.

The Chair asked for the written report of the Awards Committee. It was submitted by Dr. Crissman. The Chair then informed the group that the awards would be announced at the evening dinner. He also informed that some of the 2003 awards would be presented at the dinner.

The Presentations Committee was then asked if they were ready to review and judge the presentation of science papers. Dr. Robinson said they had met, discussed an evaluation plan, and were ready.

The Chair then informed the group that the election of the National Board of Officers would be held at this time. He asked for the report of the Election Committee. Professor Peck announced they had a slate consisting of one person for each office. He then announced the constituents of the slate. Professor Peck and also the Chair asked if there were any further nominations or volunteers. There were none. Professor Peck then submitted a motion to accept the slate of officers as presented by acclamation rather than voting on each individual office. The motion was seconded by Melissa Jones (Alpha Delta). Upon vote, the motion carried unanimously. The officers for 2004-2006 are in place and will commence their tenure on July 1, 2004.

The Chair then introduced the subject of the expansion of Chi Beta Phi. He reiterated concerns expressed in the Officer Reports that if Chi Beta Phi is to survive and become strong again, we must solidify existing chapters and seek new chapters. He then passed out a printed Plan for Expansion (see addenda) and gave the group time to peruse it. He then went over each step with explanations and asking for input from the group. He said the plan consisted of two major parts: 1) Seek the reactivation of existing chapters and 2) establish new chapters. After asking for any further questions or comments, the Chair then made a motion that the conference accept the suggested Plan for Expansion and put it into effect. The motion was seconded by Jessica Shreve (Alpha Iota). Upon vote, the motion was passed unanimously.

The Chair then discussed the necessity to amend the National constitution in keeping with the plan just accepted. He informed the group that the present Constitution does not really contain a section for re-activation of inactive chapters. He stated that there should be a section specifically for this and it should be simple and clear. The Chair then passed out copies of a Board-approved suggested amendment to the Constitution. The copies also contained a suggested Form for Reactivation. (see addenda) The group was allowed adequate time to review the information. The Chair then asked for questions or comments. He asked for any criticism or suggestions for change. An active discussion followed after which the Chair made the following motion:

“Be it moved that the Chapter Reactivation procedure be made to the National Constitution of Chi Beta Phi National Science Honorary in order to establish a Formal and consistent procedure for the reactivation of inactive chapters and Further move that he addition be inserted as Article X – Chapter Reactivation And the existent Articles X and XI be renumbered as Articles XI and XII.”

The motion was seconded by Professor Paul Peck (Alpha Iota). Questions were called for and the group asked for any further input. The vote was called for. The motion passed unanimously.

The Chair then discussed more details of the Expansion Plan relative to seeking new chapters. He passed out printed copies of a suggested procedure for establishing new chapters and a Petition Form. (see addenda) He commented that the present Board Officers had reviewed the procedure and approved. All steps were then discussed by the group including the form.

Several questions and comments were received. There were no suggestions to change the procedures or form as presented. The Chair then made the following motion:

“Be it moved that the proposed changes to the National Constitution of Chi Beta Phi National Science Honorary be made to Articles VI and VII in order to update and expedite the establishment of new chapters.”

The motion was seconded by Amanda Short (Epsilon). Questions or further discussion were called for. There being none, the vote on the motion was called for. The motion passed unanimously.

The Chair expressed his appreciation to the members for their consideration and support of the plans for strengthening and expanding Chi Beta Phi. He said he believed they had just taken some bold steps and the future will probably view this conference as one of great significance for Chi Beta Phi.

The Chair then asked if there were any further items of business or other matters for consideration. There were none. He then reminded the group that following the afternoon session they would reconvene at Trezans Restaurant at 6:00 for dinner. He also reiterated that some 2003 awards would be presented at that time and also the announcement of the awards of this conference. He added that our after-dinner speaker would be Dr. Eric Pyle of West Virginia University.

The Chair then opened the portion of the conference for presentation of papers and announced who would be presenting. He asked if the Presentations Committee was ready to evaluate the presentations. Dr. Robinson said they were. The Chair then commented that the number of papers presented at conference is increasing. This is good. He said he would like to see this aspect of future conferences expand and become a major part of the conference and the conference become “less business and more science”.

Please see the Committee Reports section for a list of presentations and subjects. Presentations were made from 2:00 pm until 4:20 pm. Following the last presentation the Chair thanked the presenters and asked if there were any further questions, comments, or discussions. Being none he motioned the session II of the 2004 conference be adjourned. It was seconded by Alpha Iota. The motion passed unanimously and the Chair declared the conference closed until we reconvene for dinner.

The group met at Trezans Restaurant at approximately 6:00 pm President Meadors called the group to order at 6:20 at which time he announced that there were several 2003 awards to be presented.

President Meadors announced that the recipient of the Most Improved Chapter of 2003 was our host, Alpha Iota. He presented a framed certificate to the Advisor, Professor Paul Peck.

The recipient of the Bardwell Outstanding Advisor Award for 2003 was Professor Paul Peck of Alpha Iota. He presented Professor Peck with a duly inscribed plaque.

President Meadors then announced the results of the Awards Committee. The Host Chapter Award, a framed certificate, was presented to Alpha Iota. He thanked our hosts for a well-organized, successful, and enjoyable conference.

The Blackwell Distance Award recipient was Kappa Sigma of Mary Washington College in Virginia. Considering the number of representatives and the distance traveled, they had a total of 1300 miles.

The National Key Award recipient was Amanda Short of Epsilon Chapter. Ms. Short was presented with the key.

The recipient of the Bardwell Outstanding Advisor Award for 2004 is Dr. Stuart Hutton of Alpha Rho Chapter of Lyon College in Batesville, Arkansas. The President then summarized the letter of nomination for Dr. Hutton. His plaque will be provided to the President of Alpha Rho for formal presentation to Dr. Hutton by his chapter.

The Outstanding Chapter Award was a tie between Epsilon Chapter and Alpha Iota Chapter. President congratulated the two chapters. He said that Dr. Crissman, chair of the Awards Committee, had informed him that there were a number of active chapters as indicated by the chapter reports. All chapters submitting reports should be congratulated for a job well done.

President Meadors then announced the results submitted by the Presentations Committee. The most outstanding paper was that presented by Nathanael Mason. The President presented Mr. Mason with a check of \$100. The second most outstanding paper was that presented by Dan Judy and Amanda Short. They were presented a check, to be shared, for \$75. The third outstanding paper was that presented by Jason Tucker. Mr. Tucker was presented a check for \$50. The President said a check for \$20 will be sent to Megan Holliday for her excellent paper submitted for presentation.

President Meadors then recognized the guests present at the dinner which were Dr. Kevin Evans and Dr. and Mrs. Ralph Bame and Mr. and Mrs. Short, the parents of the Key Award winner, Amanda Short. Dr. Bame took a number of photographs during the dinner and will send copies to the Board.

Following dinner, President Meadors then introduced the banquet speaker, Dr. Eric Pyle of West Virginia University. Dr. Pyle spoke on the proper and improper use of visual illustrations in science presentations. It was a most informative, useful, and well illustrated presentation enjoyed by all. A brief resume of Dr. Pyle follows.

President Meadors then thanked everyone again for their participation during the conference and wished everyone a safe trip home. The 2004 National Conference was concluded.

**Eric J. Pyle, Ph.D.**, is an Associate Professor of Science Education at West Virginia University, where he has worked since 1995. Since that time he has conducted research and scholarly activities in the preparation and professional development of science teachers, the design and evaluation of science instructional materials, the support for students with special needs in the science classroom, and informal science education. Dr. Pyle is the current president of the West Virginia Science Teachers Association, and he has served as the District VIII director for the National Science Teachers Association. He currently teaches middle and secondary science teaching methods and the history & philosophy of science and science education. Prior to his graduation from the University of Georgia, he was a science teacher at Monroe High School in Monroe, North Carolina, taking good advantage of his prior training as a geologist at Emory University and UNC-Charlotte. He enjoys automobile repair, rocketry, and metal fabrication as hobbies.



**Chapter Report**  
**Chi Beta Phi**

Chapter report for April 2003 through March 2004.

Chapter Epsilon

Mailing address is:

University of Charleston  
2300 MacCorkle Avenue, S.E.  
Charleston, WV 25304

Advisor: Dr. John Robinson  
E-mail Address: [johnrobinson@ucwv.edu](mailto:johnrobinson@ucwv.edu)

Current Officers:	Name	addresses (e-mail preferred)
President	Amanda Short	<a href="mailto:amandashort@cc.ucwv.edu">amandashort@cc.ucwv.edu</a>
Vice President	Daniel Judy	<a href="mailto:danieljudy@cc.ucwv.edu">danieljudy@cc.ucwv.edu</a>
Secretary	Ramadeep Bambrah	<a href="mailto:ramadeepbambrah@cc.ucwv.edu">ramadeepbambrah@cc.ucwv.edu</a>
Treasurer	Dorane Smith	<a href="mailto:doranesmith@cc.ucwv.edu">doranesmith@cc.ucwv.edu</a>
Other		

Officers for next year if determined:

President	Amanda Short	<a href="mailto:amandashort@cc.ucwv.edu">amandashort@cc.ucwv.edu</a>
Vice President	Daniel Judy	<a href="mailto:danieljudy@cc.ucwv.edu">danieljudy@cc.ucwv.edu</a>
Secretary		
Treasurer		
Other		

Current number of members:  
students - 9    faculty - 7    pledges -    active alumni –

Frequency of meetings:  
2 times per month.

Function or purpose of meetings:

chapter business	<u>XX</u>	fund raising	<u>XX</u>	social	<u>XX</u>
presentations	_____	trips or outings	<u>XX</u>	conference planning	<u>XX</u>
other	_____				

Presentations, lectures, seminars, etc. attended or as part of chapter meeting:  
Senior seminars, student evaluations/presentations of prospective biology faculty, undergraduate research day at the State Capitol, Presentation at W.V. science academy, assessment day/showcase at the University of Charleston and induction lecture.

Social Activities of Chapter:  
Induction dinner and Spring picnic.

Honors Awarded to Chapter Members:

Name	Honor
Amanda Short	Selected to present research at State Capitol.
Daniel Judy	Selected to present research at State Capitol.

Other Chapter Activities: (briefly describe)

Fund raising:  
Humanities – raised money to save part of the rainforest.

Service to school:  
Sponsored visits from W.V. Osteopathic School of Medicine and Marshall Medical School.

Service to community:  
Judging local science fairs.

Trips or other activities:  
National Convention and planned trip to Brazil that at least 14 of our members will be going on to receive credit for Tropical Ecology.

Efforts to reactivate a chapter or establish a new chapter:  
We are trying to induct several new freshman to revitalize the Chapter. We are holding meetings more frequently and getting involve in the community.

Please add any additional information or comments below:

We are in the planning stages of sponsoring a bone marrow drive on our campus!



**Chapter Report**  
**Chi Beta Phi**

Chapter report for Fall 2003 through Spring 2004.

Chapter **Kappa Sigma Chapter**

Mailing address is:

Jepson Science Center  
Mary Washington College  
1301 College Avenue  
Fredericksburg, VA 224001

Advisor: Judith Crissman, Stephen Fuller, and Marie Sheckels

E-mail Address:

Current Officers:	Name	addresses (e-mail preferred)
President	Layne Havens	
Vice President	Stephanie Eyes	
Secretary	Allison Bourget	
Treasurer	Jill Hurst	
Historian	Claudia Thomas	

Officers for next year if determined: (will be elected in April)

President  
Vice President  
Secretary  
Treasurer  
Other

Current number of members:

students – 118    faculty - 3    pledges -    active alumni –

Frequency of meetings:

3 times per semester.

Function or purpose of meetings:

chapter business XX    fund raising \_\_\_\_\_    social \_\_\_\_\_  
presentations \_\_\_\_\_    trips or outings \_\_\_\_\_    conference planning \_\_\_\_\_  
other \_\_\_\_\_

Presentations, lectures, seminars, etc. attended or as part of chapter meeting:

Social Activities of Chapter:

Honors Awarded to Chapter Members:

Name	Honor
Elizabeth Griffiths	Earl G. Insley Chi Beta Phi Scholarship (03-04)
Jessica Mangun	Earl G. Insley Chi Beta Phi Scholarship (03-04)

Other Chapter Activities: (briefly describe)

Fund raising:

Service to school:

Service to community:

Trips or other activities:

Efforts to reactivate a chapter or establish a new chapter:

Please add any additional information or comments below:

**Chapter Report**  
**Chi Beta Phi**

Chapter report for April 2003 through March 2004.

Chapter Alpha Delta

Mailing address is:  
Chi Beta Phi  
c/o Dr. William J. Pohley  
Franklin College  
Franklin IN 46131

Advisor: Dr. Bill Pohley  
E-mail Address: [wpohley@franklincollege.edu](mailto:wpohley@franklincollege.edu)

Current Officers:	Name	addresses (e-mail preferred)
President	Thomas Baird	<a href="mailto:tbaird@franklincollege.edu">tbaird@franklincollege.edu</a>
Vice President	Julia Milligan	<a href="mailto:jmilligan@franklincollege.edu">jmilligan@franklincollege.edu</a>
Secretary	Sara Carew	<a href="mailto:scarew@franklincollege.edu">scarew@franklincollege.edu</a>
Treasurer	Mary Bramlett	<a href="mailto:mbramlett@franklincollege.edu">mbramlett@franklincollege.edu</a>
Other		

Officers for next year if determined:

President  
Vice President  
Secretary  
Treasurer  
Other

Current number of members:  
students – 15    faculty - 6    pledges - 0    active alumni – 0

Frequency of meetings:  
Monthly.

Function or purpose of meetings:  
chapter business XX    fund raising \_\_\_\_\_    social \_\_\_\_\_  
presentations \_\_\_\_\_    trips or outings \_\_\_\_\_    conference planning \_\_\_\_\_  
other \_\_\_\_\_

Presentations, lectures, seminars, etc. attended or as part of chapter meeting:

Social Activities of Chapter:

Spring 2004 we are planning our annual dinner and spring initiation. Our annual trip will be a trip to the Indianapolis Zoo.

Honors Awarded to Chapter Members:

Most members are on the dean's list every semester and many receive department honors and scholarships.

Other Chapter Activities: (briefly describe)

Fund raising:

Most of our money comes from our Student Congress. We are only required to allow our activities to be open to all members of the student body.

Service to school:

We provide tutors for our Teaching and Learning Center to help other students in the sciences.

Service to community:

Trips or other activities:

Efforts to reactivate a chapter or establish a new chapter:

Continue to work with Dr. Bruce Evans of Huntington College to establish a new chapter.

Working on the Chi Beta Phi introductory brochure and a list of possible colleges suitable for chapters.

Please add any additional information or comments below:

We have extended invitations to 12 eligible students. We are working to expand faculty involvement. We also plan to reexamine chapter GPA requirements as a result of the college instituting a plus, minus grading system. We currently require a 3.5 GPA in the sciences and a 3.0 overall. A relatively large number of potential invitees fell short of the 3.5 minimum GPA by less than 0.1.

**Chapter Report**  
**Chi Beta Phi**

Chapter report for 2003-2004.

Chapter Alpha Zeta Chapter

Mailing address is:

Department of Biological Sciences  
William Carey College  
498 Tuscan Avenue  
Hattiesburg, MS 39401

Advisor: Dr. Randall Harris

E-mail Address:

Current Officers:                      Name                                      addresses (e-mail preferred)

President	Larissa Parsley
Vice President	Matt Smith
Secretary/Treasurer	Janelle Austrom
Other	

Officers for next year if determined:

President  
Vice President  
Secretary  
Treasurer  
Other

Current number of members:

students – 12    faculty - 1    pledges - 0                      active alumni – 1

Frequency of meetings:

One a month.

Function or purpose of meetings:

chapter business <u>XX</u>	fund raising _____	social <u>XX</u>
presentations _____	trips or outings _____	conference planning _____
other _____		

Presentations, lectures, seminars, etc. attended or as part of chapter meeting:

N/A.

Social Activities of Chapter:

School of Arts, Humanities, and Sciences Christmas Party (see below).

Honors Awarded to Chapter Members:

The President, Larissa Parsley, was chosen to be a science journalist for the online magazine. *The Journal of Young Investigators* ([www.jyi.org](http://www.jyi.org)). Her first article, currently in press, deals with the social scientific, and political issues involved in genetically modified crops.

Other Chapter Activities: (briefly describe)

Fund raising:

Service to school:

We have maintained our aluminum recycling project on campus. We also assisted in the Christmas party given by the School of Arts, Humanities, and Sciences as we do every year.

Service to community:

Members judged two local science fairs (one elementary school, one middle school) in January 2004.

Trips or other activities:

Efforts to reactivate a chapter or establish a new chapter:

Please add any additional information or comments below:

One of our perennial problems as a chapter is getting students to “squeeze in” Chi Beta Phi among their other activities. Students that have the credentials necessary to be able to join an honorary are also very busy, involved students who often do not have much time to give to the chapter to make it truly active. We are continuing to explore ways to change this.

**Chapter Report**  
**Chi Beta Phi**

Chapter report for May 2003 through March 2004.

Chapter Alpha Eta

Mailing address is:  
Biology, Chemistry, and Veterinary  
Technology Department  
2100 College Street  
Newberry, SC 29018

Advisor: Dr. Charles Horn  
E-mail Address: [chorn@newberry.edu](mailto:chorn@newberry.edu)

Current Officers:	Name	addresses (e-mail preferred)
President	Deidre Culbreth	<a href="mailto:dculbreth@newberry.edu">dculbreth@newberry.edu</a>
Vice President	Jennifer Leverett	<a href="mailto:jleverett@newberry.edu">jleverett@newberry.edu</a>
Secretary	Katyona Sanders	<a href="mailto:kisanders@newberry.edu">kisanders@newberry.edu</a>
Treasurer	Beth Allawos	<a href="mailto:ballawos@newberry.edu">ballawos@newberry.edu</a>
Public Relations	Matt Rickard	<a href="mailto:mrikard@newberry.edu">mrikard@newberry.edu</a>

Officers for next year if determined: Not yet elected (elections in April)

President  
Vice President  
Secretary  
Treasurer  
Other

Current number of members:  
students – 19    faculty - 1    pledges - 6    active alumni – 1

Frequency of meetings:  
Meetings are on an as needed basis. They average one meeting every two months.

Function or purpose of meetings:  
chapter business XX    fund raising \_\_\_\_\_    social XX  
presentations \_\_\_\_\_    trips or outings \_\_\_\_\_    conference planning \_\_\_\_\_  
other \_\_\_\_\_

Presentations, lectures, seminars, etc. attended or as part of chapter meeting:

### Social Activities of Chapter:

January 31, 2004: Dinner at Dr. Horn's home to socialize and plan for Science Olympiad event in February.

### Honors Awarded to Chapter Members:

Beth Allowos – Inducted in Omicron Delta Kappa Leadership Honor Society.  
Heather Arnold – Dean's List (Spring & Fall semesters)  
Anastasia Baima – Inducted in Omicron Delta Kappa Leadership Honor Society. Dean's List (Spring & Fall semesters).  
Deidre Culbreth – Named to Who's Who of Colleges and Universities. Inducted into Kappa Delta Pi (Education) Honor Society. Dean's List (Spring & Fall semesters).  
Jennifer Leverett – Named to Who's Who of Colleges and Universities. Inducted into Cardinal Key Honor Society. Inducted into Kappa Delta Pi (Education) Honor Society. Inducted in Omicron Delta Kappa Leadership Honor Society.  
April McCaskill – Dean's List (Spring & Fall semesters).  
Kayce McLeod – Inducted in Omicron Delta Kappa Leadership Honor Society. Dean's List (Spring & Fall semesters).  
Rebecca Mull – Dean's List (Spring & Fall semesters).  
Kim Nesmith – Named to Who's Who of Colleges and Universities.  
Pam Robinson – Inducted into Cardinal Key Honor Society. Inducted into Kappa Delta Pi (Education) Honor Society. Student Marshal. Dean's List (Spring & Fall semesters).  
Kaytonya Sanders – Inducted into Cardinal Key Honor Society.  
Jonathan Sisk – Dean's List (Spring & Fall semesters).  
Melody Spires – Dean's List (Spring & Fall semesters).  
Courtney-Lin Sember – Inducted in Omicron Delta Kappa Leadership Honor Society. Student Marshal. Dean's List (Spring & Fall semesters).  
Jane Wilson – Dean's List (Spring & Fall semesters).

### Other Chapter Activities: (briefly describe)

Fund raising:

None.

Service to school:

February 21, 2004: Ran the event *Picture This* for the South Carolina Science Olympiad. Activity included describing the event to middle school students, running event, one team at a time, and producing the final score. Seven Chi Beta Phi members assisted with the event.



Service to community:

None.

Trips or other activities:

None.

Efforts to reactivate a chapter or establish a new chapter:

None.

Please add any additional information or comments below:

**Chapter Report**  
**Chi Beta Phi**

Chapter report for April 1, 2003 through March 26, 2004.

Chapter Alpha Iota

Mailing address is:

Alpha Iota of Chi Beta Phi  
c/o Paul Peck  
200 High Street  
Glennville State College  
Glennville, WV 26351

Advisor: Mr. Paul Peck  
E-mail Address: [paulpeck@glennville.edu](mailto:paulpeck@glennville.edu)

Current Officers:	Name	addresses (e-mail preferred)
President	Nathanael Mason	
Vice President	Melissa Jones	
Secretary	Kelly Johnston	
Treasurer	Kimberly McPherson	
Other		

Officers for next year if determined:  
Not determined at this time.

Current number of members:  
students - 25 faculty - pledges - active alumni –

Frequency of meetings:  
Bi-monthly

Function or purpose of meetings:  
chapter business XX fund raising XX social XX  
presentations XX trips or outings \_\_\_\_\_ conference planning XX  
other \_\_\_\_\_

Presentations, lectures, seminars, etc. attended or as part of chapter meeting:  
Advisor Paul Peck gave presentation at WVCTM on Hamiltonian Graphs.  
Nathanael Mason presented research entitled “Microflora Diversity in the Little Kanawha River Watershed: at WV State Capitol.

Social Activities of Chapter:

Installation ceremonies for new members.

Social gatherings after meetings.

Acquaintance dinners to familiarize the new members with chapter.

Honors Awarded to Chapter Members:

Name	Honor
Three students who graduated with honors	
Jessica Nelson	Chisler Scholarship recipient 2004-2005
Jason Tucker	Pribble Scholarship recipient; ACS Outstanding Student at GSC
Nathanael Mason	Presented research at Undergraduate Research Day at Capitol

Other Chapter Activities: (briefly describe)

Fund raising:

Fall raffle of a quilt, coffee maker, and cash prize

Spring sale of frozen cookie dough

Service to school:

Fall Children's Festival at GSC (Hosted activities for local children) –

Tremendous membership involvement

Proposed project for updating the clocks in the science hall at GSC

Service to community:

Collected and organized donations for the Armed Services

Hosted activities for Fall Children's Festival at GSC

Trips or other activities:

Efforts to reactivate a chapter or establish a new chapter:

Please add any additional information or comments below:

Our chapter was recognized as the outstanding student organization at Glenville State College for 2003-2004. Also, our advisor Paul Peck received the Glenville State College Outstanding Advisor Award for 2003-2004. Moreover, our chapter has toiled diligently during the past year preparing for the honor of being the host chapter for the national conference.

## Chapter Report Chi Beta Phi

Chapter report for August 2003 through May 2004.

Chapter Alpha Rho

Mailing address is:  
Lyon College  
Derby Science Center  
2300 Highland Road  
Batesville, AR 72501

Advisor: Stuart Hutton, Ph.D.  
E-mail Address: [shutton@lyon.edu](mailto:shutton@lyon.edu)

Current Officers:	Name	addresses (e-mail preferred)
President	Shawn Zimmerman	<a href="mailto:sz0911@lyon.edu">sz0911@lyon.edu</a>
Vice President	Talli Powers	<a href="mailto:tp6881@lyon.edu">tp6881@lyon.edu</a>
Secretary	Aimee Davis	<a href="mailto:ad2299@lyon.edu">ad2299@lyon.edu</a>
Treasurer	Samantha Dale	<a href="mailto:sd0902@lyon.edu">sd0902@lyon.edu</a>
Other		

Officers for next year if determined:

President	Seth Purcell	<a href="mailto:sp1642@lyon.edu">sp1642@lyon.edu</a>
Vice President	Ryan Thornton	<a href="mailto:rt2332@lyon.edu">rt2332@lyon.edu</a>
Secretary	Casandra Spurlock	<a href="mailto:cs9717@lyon.edu">cs9717@lyon.edu</a>
Treasurer	Sarah Phillips	<a href="mailto:sp4624@lyon.edu">sp4624@lyon.edu</a>
Other	Patrick McLaurin	<a href="mailto:pm0800@lyon.edu">pm0800@lyon.edu</a>

Current number of members:  
students - 32    faculty - 6    pledges -    active alumni -

Frequency of meetings:  
1-2 meetings per month.

Function or purpose of meetings:  
chapter business XX    fund raising XX    social XX  
presentations XX    trips or outings \_\_\_\_\_    conference planning XX  
other \_\_\_\_\_

Presentations, lectures, seminars, etc. attended or as part of chapter meeting:  
Dr. Dave Thomas – lecture on “Astrobiology Research at Lyon College.”  
Dr. Tim Lindblom – lecture on “Nuclear Receptor Regulation of Detoxification Networks in *C. eleg.*”  
Dr. Stuart Hutton – lecture on “Dielectric Relaxation Instrumentation at Lyon College.”

Dr. Barry Gehm – lecture on “Reversatrol: A novel Phytoestrogen in Grapes and Wine.”  
Dr. Bob Gregerson – lecture on “microbial Interactions in Legume Root Nodules.”  
Dr. Dave Thomas – seminar on “Opportunity Rover Landing on Mars.”  
Dr. Stuart Hutton and Dr. Dave Sonnier – workshop on “Construction of Computer Animations.”

Social Activities of Chapter:

Last official Club Meeting (Pizza party).  
Formal Initiation of new members.  
(Catered dinner afterwards).

Honors Awarded to Chapter Members:

Name	Honor
------	-------

None at this time. It is planned agenda for next year.

Other Chapter Activities: (briefly describe)

Fund raising:

Had small surplus in budget this year. Next year tentatively planning to sell XBO goggles and t-shirts.

Service to school:

All workshops and research symposium are open to entire campus, and outside attendance is encouraged.

Service to community:

None at this time.

Trips or other activities:

Undergraduate Research Symposium hosted by our chapter this April.

Efforts to reactivate a chapter or establish a new chapter:

See below. Also have added a historian position to help our advisor with starting Alpha Rho's website.

Please add any additional information or comments below:

This entire year has been focused on reactivating our chapter. In the past, Alpha Rho met just once or twice a semester. Typically only club business was discussed, and there was only one – two featured speakers a year. This year our organization has strived to expand the membership and promote research. Meetings are now held 1-2 a month and at each meeting a professor makes a research presentation. Alpha Rho finishes the year hosting an undergraduate

research symposium for Lyon students to share their work. Our chapter also sponsors various workshops and seminars from time to time. It has been a great year!

**Chapter Report**  
**Chi Beta Phi**

Chapter report 3/15/2004

Chapter Alpha XI

Mailing address is:  
St. Francis College  
Department of Biology  
180 Remsen Street  
Brooklyn, NY 11201

Advisor: Dr. James Corrigan

E-mail address: [bugman38@hotmail.com](mailto:bugman38@hotmail.com)

The Alpha Xi Chapter last year inducted twenty new members into the Fraternity and three honorary faculty members. This was the largest induction group we have had in our thirty-five year history. Unfortunately, one half of the group graduated two weeks after the induction. The fraternity is active and healthy supporting peer assistance to other science majors through a volunteer tutoring service, which reaches down to the freshman year. We have come a long distance from about ten years ago when we had only two inductees. We still experience problems on the financial level. We look forward to inducting a smaller group this year. Stephen Caronia (the President) and I will put together an annual report but because of limited funds we will not be able to attend the conference.

**Chapter Report**  
**Chi Beta Phi**

Chapter report

Chapter Alpha Sigma

Mailing address is:  
Chi Beta Phi  
Alpha Sigma Chapter  
Malloy College  
1000 Hempstead Avenue  
Rockville Centre, NY 11570

Advisor: Professor Grace D. Matzen  
E-Mail Address: [gmatzen@molloy.edu](mailto:gmatzen@molloy.edu)

Current Officers

	<b>Name</b>	<b>Addresses</b>
President	Noelle Cuomo	c/o Molloy College
Vice-President	Michael Funk	c/o Molloy College
Secretary	Lauren Montano	c/o Molloy College
Treasurer	Chantel O'Shea	c/o Molloy College

Officers for next year:

Election to be held 9/04

Current number of members:  
student 8 faculty 6 pledges 6 active alumni –

Frequency of meetings: every 3 or 4 weeks

Function or purpose of Meetings:

chapter business ✓      fund raising ✓      social ✓  
presentations ✓      conference planning ✓

Presentations, lectures, seminars, etc. attended as part of chapter activities:

1. Noelle Cuomo taught us about her research on Bloom's Syndrome under Dr. Maureen Sanz.
2. Prof. Matzen conducted a discussion on the use of genetics and biochemistry to trace the course of evolution.
3. We discussed materials about Orca research, including our adopted Orca, Crewser.



Other Presentations attended on and off campus by our members include: Stem cell research, rape awareness, Pre-Med lecture by New York College of Medicine representative, lectures on strokes, asthma and defibrillators, Dental Association Conference.

Social Activities of Chapter:

We held a reception to welcome our eight newly inducted students and two faculty members on April 27, 2003, with family and friends attending.

Honors Awarded to Chapter Members at graduation on May 17, 2003:

Magna Cum Laude: Shaun Riebl, Stacey M. Fitzpatrick, Lauren Iannone

Cum Laude: Lisa Ruggiero, Michelle Barbera, Erica M. Harris

Members inducted into Delta Epsilon Sigma National Scholastic Honor Society:

Noelle Cuomo  
Michael A. Funk  
Thomas Jones  
Andrew Kolodziej

Other Chapter Activities:

Fund raising:

Activity to be conducted next month to support chapter expenses and our Orca adoption.

Service to School:

Members assisted at Open House for H.S. students, Science Fair for 150 high school students, Middle States Committee meetings, Breast Cancer Walk, Pre-Med Club, Student Government, Alumni fundraiser and Homecoming. Our members also produced a Laboratory manual for the Developmental Mammalian Anatomy course.\

Service to Community:

Members helped with Toy Drive for children with Aids, Blood drive, Nursing Home visits for ten weeks, Baseball camp for neighborhood children, American Cancer Society's Camp Adventure, tutoring and Box Town for the Homeless.

Comments:

This semester will be the last that Prof. Matzen will be moderator of Alpha Sigma chapter. After twelve years she is passing that role to Dr. Anthony Tolvo.

## **Presidents Report**

**2004**

An old song tells us to “accentuate the positive”. I believe we can do that. The turn-around time for membership certificates is still rapid, jewelry and cords are readily available, the treasury remains stable, the national conference is agendized and becoming less business and more science, several chapters have been reactivated, research grants are now available, and the potential for growth and expansion is at hand.

However real these and other “positives” may be, one must recognize the “negatives”. Chi Beta Phi has problems which must be addressed. The recent reactivation of several chapters is essentially nullified by others becoming less active. There is a serious lack of response from chapters purportedly active. There is, then, a serious lack of “nationalism” among the chapters. Look around you now. How many chapters are in attendance? Yes, there are valid reasons for some not being represented except by proxy. To be represented by proxy and a chapter report is one thing but to not respond to repeated communications nor submit a chapter report is another matter. Yes, we are an “honorary”. And yes, each chapter should be self-governing and active in their own sphere. However, the Constitution refers to the obligation and responsibility of a chapter to respond to communications from the National Board. It concerns me that some chapters do not meet this obligation. I believe the National Board elected by this conference should address this issue.

What can we do now, at this conference? I believe an important action is to initiate an expansion program. If Chi Beta Phi is being weakened by less active chapters, let us strengthen by gaining new chapters. As chapters are inducted we must make clear to them the responsibility of national cohesion. But as we attempt to gain new chapters we must not abandon the extant chapters even if demonstrating little activity. In summary, the strengthening of Chi Beta Phi, I believe, must involve three actions:

1. Attempt the reactivation of inactive chapters.
2. Initiate an expansion program to gain new chapters.
3. Make the national conference more attractive to participation.

The first two of these will require changes and additions to the National Constitution. There is no procedure or reference in the present constitution concerning chapter reactivation. We need that. Also, there is a need to clarify and update the chartering of new chapters. We are prepared to submit the necessary amendments for the consideration of this conference.

Lastly, I want to express my appreciation to all those who have been helpful and supportive to me during my tenure as your President. That support was not only related to Chi Beta Phi but to me personally during some very difficult times. It is deeply appreciated. I have enjoyed serving you and Chi Beta Phi. I have attempted to do the right thing for ten years. Any successes I must share with others – any failures I accept as my own responsibility. But I believe you need new leadership. I will not accept nomination, if it would have occurred, for the office of President. I will continue to serve Chi Beta Phi but I believe I can better serve the Honorary in another capacity.

Respectfully submitted by C.T. Meadors  
March 27, 2004

## **REPORT OF THE GRAND VICE PRESIDENT**

**March 27, 2004**

I have finished revising the introductory brochure concerning the Honorary that will be presented at this National Conference. My hope is that this can help recruit new chapters as well as stimulate interest on campuses with existing chapters. I spent time investigating a number of organizations with respect to participation of members and participation at the National level. My conclusion is that Chi Beta Phi is not unique when it comes to representation at off-campus meetings. It is not uncommon for organizations to have about 25% of active chapters represented at National meetings. Unfortunately the relatively small number of active Chi Beta Phi chapters at the present time results in low attendance at the National Conference. I urge this conference to act aggressively on the theme of expansion. Consider the many advantages of Chi Beta Phi and communicate those advantages to as many different colleges as possible. I believe if we all work together we can expand and diversify our membership. Students and faculty should take brochures and at every opportunity make them available to colleagues at other colleges. I pledge to help in any way possible to recruit new chapters.

Indiana has an Academy of Science and a College Biology Teachers Association. I am preparing to send information to many of the faculty who are members of these organizations. A personal letter will be included to those faculty I know or have met.

I think Chi Beta Phi has tremendous potential for growth in the future and I hope I can contribute to the future success of the organization.

Respectfully submitted,  
William J. Pohley  
20 March 2004

## **TREASURERS REPORT**

### **2004**

This report covers the period from April 2003 to March 2004. Itemized figures and details of the treasury will be found on the accompanying page.

The treasury remains stable and is in good order. All debts are erased quickly and there are presently no debts outstanding. The annual report to the IRS has been completed and we continue our satisfactory tax-free status with the IRS.

Tax-free and at-cost jewelry and graduation honor cords remain available from the Treasurer. The cost of these will be increasing. Graduation cords have been raised from \$5.95 per set to \$6.25 as of January 2004. This will not be reflected in the cost to a chapter until the present cords are exhausted and a re-order is necessary. I have been informed by Jostens that the jewelry will most likely increase but the company has not yet determined the eventual price. No profit is realized from jewelry or cords as they are provided at cost. I recommend this practice be continued.

Printing costs remain a major debit item. The Treasurer negotiated with six printers in the area to determine the best cost but maintaining good quality and a quick response. This was necessary because the previous printer closed their business last year. The Treasurer has his own personal printer and a copier which is used to print as much as is practical and thus no cost to the Honorary except sometimes for paper.

A remaining concern is that the treasury depends entirely on new membership dues as the single source of income. Several years ago Secretary Merewyn Meadors investigated the possibility of investing some of the treasury into a high-interest-generating account with several local financial institutions. It was found that a significant portion of the treasury would have to be removed for this. Considering expenditures such as travel reimbursement, operating costs, and that we were considering grants and awards, it was not at that time deemed advisable. Also, the Honorary must consider the fact that to remain a tax-free organization with the IRS we are limited in the amount of profit we can earn. As changes occur with financial institutions, the Treasurer plans to re-investigate this in the future.

Serving as Treasurer demands constant and careful attention and no small amount of time. But it is satisfying to know that the treasury and Chi Beta Phi survived its problems of ten years ago and is now stable and growing. If the expansion program being introduced at this conference is initiated, the demands on the Treasurer will increase. I am ready to accept and respond to those demands. If it is the will and wishes of this conference, I will accept nomination for the office of the Treasurer.

Respectfully submitted by Carl T. Meadors  
March 2004

**Financial Statement**  
**Chi Beta Phi**

**April 2003 to March 2004**

Citizens Bank, Morgantown, WV (Savings)

April 2003	\$1,852.52
Interest	<u>5.37</u>
March 2004	\$1,857.89

Huntington Banks, Charleston, WV (Checking)

Beginning Balance April 2003 \$25,638.23

New Deposits:

Memberships (169)	4,225.00
Jewelry/cords	<u>1,096.91</u>
Total	\$5,321.91

subtotal \$30,960.14

Disbursements:

checks #231-234, 1001-1008*	1,755.13
(*new checks issued beginning with 1001)	

Closing Balance March 2004 \$29,205.01

**Total Assets March 2004 \$31,062.90**

Total Assets April 2003 27,490.61

Net Gain: \$3,572.29

Respectfully submitted by C. T. Meadors  
March 27, 2004

## Committee Reports

### Awards Committee:

Chair: Dr. Judith Crissman (Kappa Sigma)

Members: Melissa Jones (Alpha Delta), Chris Conrd (alpha Rho), Dan Judy (Epsilon)

#### Host Chapter Award

The awards committee recommends that the Host Chapter Award for the conference of 2004 be awarded to our host chapter Alpha Iota.

#### Outstanding Chapter Award

The committee reviewed all chapter reports submitted to the conference. The following reports were available: Epsilon, Kappa Sigma, Alpha Delta, Alpha Zeta, Alpha Eta, Alpha Iota, Alpha Xi, and Alpha Rho.

After much deliberation the committee could not decide between Epsilon and Alpha Iota. As there is a precedent for ties, the committee verdict was to call a tie between the two chapters and recommend they both be awarded the Outstanding Chapter Award for 2004.

#### Most Improved Chapter Award

This award could not be considered by the committee as the chapter reports for the previous year were not available for comparison to current chapter reports. The committee recommends that the National board review past and current reports and determine the most improved chapter.

#### Blackwell Distance Award

The committee calculated the mileage driven by each chapter in attendance and multiplied this by the number of members attending. Kappa Sigma had only two members but the mileage driven over twice as much as any other chapter. The committee recommends the Blackwell Distance Award be awarded to Kappa Sigma.

#### National Key Award

The committee reviewed the Chapter Key Award recipients which were provided to the conference. From the Chapter Key recipients, one was chosen to receive the National Key. All nominees are to be commended for their outstanding activities.

The committee judged Amanda Short, Epsilon Chapter, as the most outstanding member of the nominees and hereby recommend that she receive the Chi Beta Phi National Key Award.

#### Bardwell Outstanding Advisor Award

The committee reviewed the nominations submitted by the several chapters. All nominees were impressive in the support of their respective chapters. The committee recommends that Dr. Stuart Hutton, Advisor of Alpha Rho, receive this award.

## **2004 Awards Summary**

### Host Chapter Award

Alpha Iota Chapter  
Glennville State College  
Glennville, West Virginia

### Outstanding Chapter Award

Epsilon Chapter  
University of Charleston  
Charleston, West Virginia

And

Alpha Iota Chapter  
Glennville State College  
Glennville, West Virginia

### Blackwell Distance Award

Kappa Sigma Chapter  
Mary Washington College  
Fredericksburg, Virginia

### National Key Award

Amanda Short  
Epsilon Chapter  
University of Charleston  
Charleston, West Virginia

### Bardwell Outstanding Advisor Award

Dr. Stuart Hutton  
Alpha Rho Chapter  
Lyon College  
Batesville, Arkansas

## Presentation Committee

Chair: Dr. John Robinson (Epsilon)

Members: Rebecca Caylor (Kappa Sigma), Wesley Spinks (Alpha Zeta), Jessica Nelson (Alpha Sigma).

The committee listened to and reviewed the presentations during the “papers session” of the conference. Detailed discussion followed. Six papers were presented. Two of these were by faculty members of the host chapter. They were very informative and interesting. However, the committee believes the judging should be limited to student papers. The committee recommends the conference Chair express to the faculty members the appreciation of the conference for their informative and interesting presentations.

The following papers were presented:

1. “Little Kanawha River Biological Watershed Project Center”  
Dr. Lorlyn Hilton-Taylor
2. “Preparing Resumés for Science Employment”  
Dr. Philip Taylor
3. “Studies of the Indiana Bat in West Virginia”  
Dan Judy and Amanda Short (Epsilon)
4. “Microflora Diversity and Antibiotic Resistance in the Little Kanawha River Watershed”  
Taylor P.A., J.B. Fincham, N.L. Mason, D.M. Mong, C.C. Mills  
Presented by Nathanael Mason (Alpha Iota)
5. “Antibiotic Resistance in Cattle Microflora”  
Jason Tucker (Alpha Iota)
6. “Isolation and Differentiation of Methylootrophs from Plant Surfaces”  
Megan Holliday and C.T. Meadors (Epsilon)

The committee found all the papers were excellent and reflected good scientific research. The top three presentations were judged to be:

1. Nathanael Mason
2. Dan Judy and Amanda Short
3. Jason Tucker

The committee recommends the top three recipients be presented cash awards in the amount of \$100, \$75, and \$50, respectively. We further recommend that Megan Holliday be awarded \$20 as stated in the charges to the committee.



Election Committee:

Chair: Professor Paul Peck (Alpha Iota)

Members: Andrew Minigh (Alpha Xi), Jason Tucker (Phi), Jessica Shreve (Alpha Iota),  
and Bryan Richardson (Alpha Iota)

The committee considered the reports of the present Board members, volunteer nominations, and nominations from the conference attendees. The purpose of the committee was to determine a suggested slate of officers for the 2004-2006 term. The committee was aware that at least one member is to be a student member, according to the National Constitution. The following slate determined is as follows:

President	Dr. William Pohley
Vice-President	Professor Paul Peck
Secretary	Amanda Short
Treasurer	C. T. Meadors
Historian/Marshall	Nathanael Mason

As there is only one person nominated for each office of the proposed slate, we recommend that, if there are no further nominations or volunteers from the floor, the suggested slate be voted for an acclamation. If any nominations are received from the floor for any office, then that office be voted on individually. If approved by acclamation, the above slate of members will serve as the National Officers, comprising the Grand Chapter of Chi Beta Phi, for the ensuing term of two years, 2004 – 2006.

## **Papers Presented**

### **Microflora Diversity and Antibiotic Resistance in the Little Kanawha River Watershed**

**P .A. Taylor III, J.B. Fincham, N.L. Mason, D.M. Mong, C.C. Mills  
Glennville State College, Department of Biology, Glennville, WV**

#### **Abstract**

Contamination from human activities has been shown to alter the diversity of waterborne micro flora. We hypothesized that the type of contamination (abandoned mine drainage (AMD) vs. commercial/light industrial/wastewater treatment (WWT)) the location in the watershed and the body of water (pond vs. river) would impact population diversity. Specifically, we hypothesized that antibiotic sensitivity (AS) would be lower in areas of WWT than AMD and that local micro flora populations would also differ. Water samples were collected from 4 different locations which were marked by GPS. Two sites in the Little Kanawha River near a commercial/light industrial region, above and below the effluent pipe of the water treatment plant in Glennville, WV, represented continual contamination from daily human activities (WWT). Two additional samples were taken from abandoned coal mine drainage ponds which have not been exposed to continuous human activity for over 50 years (AMD). Measurements of Oxygen saturation, Biological Oxygen Demand, Nitrate, Phosphate, pH, temperature, and turbidity were taken at each site. Samples were collected and cultured under both aerobic and anaerobic conditions. Pure isolate cultures were made of all viable organisms and were Gram stained. Antibiotic sensitivity was assessed by growing each isolate in the presence of 8 commonly prescribed antibiotics using the Kirby Bauer disk diffusion method. As expected, total antibiotic sensitivity was found to be 207% higher at the AMD vs. the WWT sites. Interestingly, no differences in AS were found between the WWT site above the effluent pipe and the WWT site downstream. Population differences were found with Gram positive bacteria comprising 2/3 of the total isolated upstream while 100% of downstream bacteria were Gram negative. There was also a marked difference in combined AS. At the WWT sites, one organism was completely insensitive to both Novobiocin and Tetracycline, while all AMD site organisms were sensitive to all 8 antibiotics. Investigations continue into the sensitivity of these microfloral populations to commonly used detergents and disinfectants.



**Studies of the Indiana Bat in West Virginia**

**Daniel Judy and Amanda Short**

University of Charleston  
Biology  
Dr. Phillip Clem – Advisor

## **Abstract:**

One area of biological research at the University of Charleston has focused on the Indiana bat, *Myotis sodalis*, and its habitat in West Virginia. Since 1998, the research has pertained to sampling bats in various West Virginia counties in connection with habitat alteration caused by mining, highway construction, or other projects. On occasion, undergraduate students have participated in sampling, habitat evaluation, and identification of species. In addition, many have studied other aspects of bat biology by utilizing samples collected in the field from bats captured during the netting activities (Totten, 2000; Cao, 2001; Starcher, 2002; Clem, Judy, and Short, 2003).

The Indiana bat is a federally endangered species whose primary habitat is centered in Kentucky, Indiana, Illinois, and Missouri. However, some wintering populations have been found in the caves located in the eastern panhandle region of West Virginia. The poster session will provide information about the Indiana bat, past research conducted at the university, and an outline of the sampling methods used in studying bats. One key to bat conservation is education. It is essential that individuals understand bat habitat, conservation, behavior, and the benefits of bats to the ecosystem. Viewers will have an opportunity to acquire knowledge about environmental science and the ecology of an important group of mammals. While this helps the viewers, bats also benefit. Bats are usually misunderstood and have often become endangered due to human activities. Public education is an important aspect of helping to save bat habitat.

## **Introduction:**

The purpose of this research was to sample bats in various West Virginia counties in connection with habitat alteration caused by mining, highway construction, or other projects. The endangered Indiana bat, *Myotis sodalis*, was the primary target. Had the Indiana bat been found in one of the areas of construction, the companies may have been forced to adjust their plans in order to accommodate for the bat's habitat. A drastic change to the environment, such as the ones associated with mining, could prove fatal to the Indiana bat, or bats of other species.

The slight keel of the calcar, small foot size, and hair pattern on the foot generally distinguishes the Indiana myotis from other similar species. The color of this endangered species is usually dark gray or sometimes brownish with the fur being of dull appearance. These characteristics are important distinguishing features used to separate the Indiana bat from the little brown bat (*Myotis lucifugus*) and the northern longeared bat (*Myotis septentrionalis*).

## **Materials and Methods:**

All netting was done using standard 38.0 mm mesh nets with reduced "bag" of varying lengths. The nets were held in place by a framework of 1¼ inch diameter metal antenna poles. Eyebolts in the end of the top pole section allowed for attachment of the top-line above the net, the guy-lines to anchor the poles to the bank of the stream or flight corridor, and to hold the top pulley for the pulley rope system, used to raise and lower the nets. Another eyebolt in the bottom section provided an anchoring point for the bottom pulley. The pole sections were five feet in length, allowing systems of varying heights to be constructed according to the situation

encountered in the field. Small diameter (3-4 mm) braided nylon climbing rope was used in the pulley system to prevent twisting of the rope when under the tension of the pulleys. Guy-lines were of ¼ inch Manila hemp rope. Top-lines were of ¼ inch braided nylon. All bats collected were identified to species and weighed using a model GS-200 digital electronic balance. Readability was to the nearest 0.100 g with a 200 g capacity. Forearm measurements were taken to the nearest 0.100 mm using dialMax calipers. In addition, the bats were sexed, assessed as to reproductive status and condition, and a determination was made as to their age (juvenile versus adult). Any unusual features or characteristics were noted as well as any noticeable parasites. Bats were held only long enough to collect the above data and then released. Temperature in degrees Fahrenheit was recorded at the time of capture of each bat, using a digital thermometer accurate to the nearest 0.100 degree.

All netting was done, beginning at dusk and continuing for five hours following. Netting was halted if the temperature dropped below 50.00° F or if a heavy or steady rain occurred.

**Results:**

*Species of bats collected during five seasons of mist netting in the state of West Virginia.*

<b>SPECIES</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>TOTAL</b>
<i>Myotis lucifugus</i>	0	109	31	5	2	147
<i>Eptesicus fuscus</i>	1	37	14	8	6	66
<i>Myotis septentrionalis</i>	6	12	18	6	9	61
<i>Pipistrellus subflavus</i>	1	18	4	1	10	34
<i>Lasiurus borealis</i>	0	10	12	0	1	23
<i>Lasiurus noctivigans</i>	0	1	6	0	0	7
<i>Myotis leibii</i>	0	3	2	0	0	5
<i>Lasiurus cinereus</i>	0	0	1	1	0	2
<i>Corynorhinus townsendii</i>	0	0	1	0	0	1
<b>TOTALS</b>	8	190	89	21	28	346

Trapping effort for the summers of 1998, 1999, 2000, 2001, 2002 in eleven West Virginia Counties.

<b>COUNTY</b>	<b>BATS COLLECTED</b>	<b>NIGHTS OF TRAPPING EFFORT</b>	<b>MIST NETS ERECTED</b>	<b>TOTAL METERS OF MIST NETS</b>	<b>BATS CAUGHT PER MIST NET NIGHT</b>
Hardy County	142	40	95	618.8	1.49
Grant County	54	30	104	748.2	0.52
Raleigh County	42	20	23	261.2	1.83
Wyoming County	22	6	19	122.2	1.16
Summers County	22	6	8	65.2	2.75
Tucker County	17	32	76	473.6	0.53
Randolph County	14	14	40	257.6	0.35
Nicholas County	8	6	12	114.0	0.66
Kanawha County	6	5	12	72.0	0.50
Mercer County	6	4	4	20.2	1.50
Boone County	2	3	9	54.0	0.22
<b>TOTALS</b>	<b>335</b>	<b>164</b>	<b>402</b>	<b>2807.0</b>	<b>0.83</b>

**Conclusion:**

During the five years of this sampling effort, no Indiana bats were collected in the eleven counties sampled. All other species of bats known to occur in West Virginia were taken during this sampling effort. The data suggest that the Indiana myotis is a rare species in the state of West Virginia.

**Literature Cited:**

**Cao, Quyen, 2001.** *The use of hair as a taxonomic tool in the Identification of Bats.*  
Unpublished manuscript. Univ. of Charleston, Charleston, WV.

**Clem, Phil; Judy, Daniel; and Amanda Short, 2003.** *Mist net report for the re-mining of Grapevine South and West prepared for the Little Boyd Coal Co.* Univ. of Charleston, Charleston, WV.

**Starcher, Amanda, 2002.** *Bacterial fauna of bats in West Virginia.* Unpublished manuscript. Univ. of Charleston, Charleston, WV.

**Totten, Jamie, 2000.** *Bacteria of bats in West Virginia.* Unpublished manuscript. Univ. of Charleston, Charleston, WV.



## **Antibiotic Resistance in Cattle Microflora**

**Jason Tucker**  
**Glennville State College, Biology Department**  
**Glennville, WV**

### **Abstract:**

An investigation has taken place on whether administering antibiotics to beef cattle is having an adverse effect on humans by creating antibiotic resistant bacterial strains. Humans can be greatly affected when traditionally common antibiotics do not work against defiant bacteria. These strains, whether resistant or not, ultimately end up in the local city water system through the Little Kanawha River and its tributaries. Our goal was to qualitatively determine the differences in resistant strains of bacteria in three local cattle farms, located in Glennville, WV, by studying sites which use varying amounts of antibiotics. Another important objective was to find out whether bacteria in stationary physical features within each site varied noticeably. We did expect to see increased insensitivity in the seasoned bacterial strains, as opposed to products of the frequently shifted cattle.

The three sites used all gave different dosages of antibiotics, which were as follows: intermediately administered, heavily administered, and no known dosages in recent years, respectively. Using streak-plated results from water, soil, and cow manure samples, the bacteria were grown using the Kirby-Bauer disk diffusion method. These bacteria were immediately supplied with eight common human antibiotics and allowed to incubate for approximately 48 hours. The resulting inner and outer “rings” were measured as an indication for sensitivity.

Interestingly enough, one of the most solid pieces of evidence that came out of the data results, was that regardless of the location or the sample type, we found a 100% resistant rate in the extensively and long-time used antibiotic penicillin; no gram positive or gram negative bacteria expressed any sensitivity toward this disk. In addition, the data seemed to state that samples taken from the water and soil contained more resistant bacteria as a whole. Even though the beef cattle only stay for short periods of time on the farms, the microbes are most likely staying for longer periods of time. The bacteria, may be finding individual niches on the various farms, by using natural evolutionary means of survival, because of their continual contact with the antibiotics.

**The Isolation of Methyloprophs from  
Leaf Surfaces  
Megan Holliday and C. T .Meadors  
University of Charleston, Charleston, WV**

**Abstract:**

Bacteria which can utilize single-carbon compounds as their only source of nutrition are termed methyloprophs. Those methyloprophs which can exist on only methane are methanotrophs. These bacteria are aerobic, typically Gram-negative rods and cocci and catalase positive.

It was hypothesized that a simple method of isolating and culturing methyloprophs and specifically methanotrophs, could be developed and they would be found inhabiting the surface of plant leaves.

A mineral agar medium was formulated which contained no carbon sources. Cyclohexamide was added as an antifungal agent. Methanol was added as a carbon source. Leaves were collected from twenty-one plant species. The leaves were pressed, ventral side down, onto plates of mineral-methanol agar and also on plates containing no methanol as controls. The leaves were removed and the plates incubated at 22°C and observed for the development of pink colonies characteristic of methyloprophs. Any colonies developing would be streaked for isolation on fresh plates of mineral-methanol agar to obtain pure cultures. Once obtained, the isolates would be Gram-stained and tested for catalase production.

Isolates found to be indicative of methyloprophs would then be streaked on mineral-methanol agar and also on mineral-glucose agar. This would determine if they were obligate methyloprophs, restricted to single-carbon sources, or were facultative methyloprophs, able to utilize multi-carbon compounds. Obligates would then be screened to determine if any were methanotrophs. This was done by streaking isolates on mineral agar containing no carbon source. These plates were then inverted and sealed by adding sterile water in the lid. These were then placed in larger plates, also inverted, and another water seal added to the lids. A small flexible capillary tube was inserted through the larger plate and into the smaller culture plate. Methane was added by way of the tube to equal about 25% of the atmosphere in the smaller plate. After removal of the tube, the large plate was given a final seal with electrical tape. Control plates were prepared in the same manner but no methane was added to the atmosphere of the culture plate. All plates were incubated at 22°C and observed daily for the development of the typical colonies.

Methyloprophs were isolated from sixteen of the twenty-one plant species (76%). In turn, 57% of the methyloprophs isolated were found to be obligate methyloprophs, subsisting well on only methanol as a carbon source and not utilizing glucose. Upon testing the obligates, 50% proved to be methanotrophs, that is, six of the twenty-one plant species were found to possess methanotrophs.

It was thus shown that methyloprophs, and specifically methanotrophs, can be simply cultured and isolated. The results support the hypothesis that plant surfaces support populations of methyloprophs, a significant percent being methanotrophs.

**The Isolation of Methyloprophs from**  
**Leaf Surfaces**  
**Megan Holliday and C. T. Meadors**  
**University of Charleston, Charleston, WV**

**Introduction:**

A nutritional characteristic of bacteria is their extraordinary flexibility with respect to carbon sources. It has been stated (Prescott 1999) that there is no naturally occurring organic molecule that cannot be used by some microbe. This ability would obviously involve some very complex multi-carbon compounds. However, some bacteria can utilize single carbon compounds as their only source of nutrition. All of the organic constituents of the bacteria cell must be built from a one-carbon precursor. The single-carbon compound may be methane, methanol, formaldehyde, methylamine, and others. These bacteria are termed “methyloprophs”, as they are utilizing the methyl group.

Classification of methyloprophs is in both versions of Bergeys Manuals (Kreig 1984, Holt 1994). Their classification is most clearly described by White (1995) who designates them as facultative and obligate methyloprophs. The facultative methyloprophs can grow on both single-carbon and multi-carbon compounds, whereas the obligate methyloprophs cannot. The obligates utilize only single-carbon molecules. An obligate methyloproph which can utilize methane as their sole carbon source is termed a “methanotroph”.

Methyloprophs are Gram-negative aerobes. They vary in form from cocci to rods. They are in the family Methylococcaceae and of the order Methylococcales, these names being applied as a result of coccal forms initially isolated. Genera designations are in a state of change. Of the seven genera listed in Bergeys Manual of Determinative Bacteriology, five were not listed in Bergeys Manual of Systematic Bacteriology. Of the seven in the former, four are facultative genera and three are obligates. In turn, only two of the three obligate genera are true methanotrophs.

Interest in the methyloprophs is beginning to grow (Prescott 1999). They have been found to be involved in the decomposition of such pollutants as engine exhaust hydrocarbons and other hydrocarbons from pesticides and other toxic wastes. They are also believed to play a significant role in the balance of atmospheric methane.

The methyloprophs are found in aerobic soils and water, particularly over-laying the lower anaerobic decomposition zones which serve as sources of methane and other single-carbon molecules. Klein and Bicknell (2001) reported that they believed them to occur on the surface of plant leaves but confirmation was difficult due to the common presence of yeasts and molds as well as many common bacteria. Their hypothesis might have been related to the statement of Heldt (1997) that most leaf surfaces release single-carbon compounds.

This research was initiated to test the hypothesis that methyloprophs could be isolated and found to occur on a variety of plant species and that some would prove to be methanotrophs.

## Materials and Methods:

Leaves were removed from twenty-one plant species and placed in plastic bags for transport. The species and common names are listed in the accompanying table. The plants were speciated according to Strausbaugh and Cores Flora of West Virginia (1970).

A mineral-agar medium was prepared containing the minerals commonly required by bacteria but containing no carbon sources. The medium was based on one found in the Difco Manual of Media (1984) and modified by replacing sodium citrate with sodium chloride. Agar was employed at the standard concentration of 1.5%. The medium was tubed at 10 ml per tube and autoclaved.

Cyclohexamide, an antifungal agent frequently employed in bacteria isolation, was employed to suppress yeasts and molds. It was employed at a concentration of 20 micrograms per ml of medium by adding 0.1 ml of a 0.2% aqueous solution to each 10 ml of medium at the time of plating.

Plates for initial isolation were prepared by pipetting 0.1 of cyclohexamide and 0.2 ml of methanol into empty sterile plates. A tube of melted and tempered (46° C) mineral-agar was added to the plate and rotated for mixing before gelling.

Leaves were removed from the transport bags and the ventral surface lightly pressed on the agar surface for 10 seconds. The plates were numbered to correlate with the numbers assigned to the plant species. The leaves were removed and discarded. The plates were incubated at 22° C and examined daily for growth. The development of pink colonies was employed to determine the possible growth of methylotrophs. A common characteristic of methylotrophs is the production of a pink pigment.

If growth suspected of being a methylotroph was found it would be streaked on fresh plates of methanol-mineral-agar to attempt isolation of pure cultures. Once obtained, isolates would be Gram-stained, tested for catalase production, and for the ability to grow on glucose-mineral-agar, thus differentiating between obligate and facultative methylotrophs.

The glucose plates were prepared by pipetting 0.5 ml of sterile 10% glucose into a plate followed by a tube of melted and tempered mineral-agar. Duplicate sets of plates, consisting of one methanol-mineral-agar and one glucose-mineral-agar plate, was streaked with each isolate and incubated at 22° C. Growth on both plates would indicate a facultative methylotroph and growth only on the methanol plate would indicate an obligate methylotroph.

Isolates found to be obligate methylotrophs were then examined to determine if they were also methanotrophs, indicated by the ability to grow with methane as the sole source of carbon. This was accomplished by preparing plates of mineral-agar without methanol or any carbon source. The plates were streaked with the isolates and then inverted and the lid sealed by adding ten ml of sterile water. A small flexible capillary tube was inserted under the plate base and extended into the plate chamber. Methane was dispersed into the plate chamber for 45 seconds.

The tube was removed and the still inverted plate placed in an inverted larger plate which was also sealed with water. The larger plated was also sealed with tape to prevent evaporation of the water seals. These “methane incubators” were then incubated at 22° C and observed daily for the development of pink growth.

### **Results:**

Small pink colonies, scattered among white ones, were found on all plates except for numbers 2, 7, 14, 15, and 16. (See the Table.) Very little yeast or mold developed on any plates. The growth appeared so as to outline the shape of the leaf and appeared most dense along the veins.

Isolation streak plates, prepared from the initial plates, revealed distinct pink colony formation after 5 to 7 days. Gram staining found them all to be Gram-negative. All the isolates were found to be catalase-positive. Subsequent testing to determine the ability to utilize only methanol or both methanol and glucose revealed both facultative and obligate methylotrophs present.

These results indicated the possible genera to be *Methylobacterium*, a facultative methylotroph, and *Methylomonas* or *Methylobacillus*, both being obligate methylotrophs. As the table indicates, the facultative *Methylobacterium* was isolated from four of the plant species (6, 9, 10, 11). The obligate methylotrophs were more common and isolated from twelve plant species (1, 3, 4, 5, 8, 12, 13, 17, 18, 19, 20, and 21). It is interesting to note that both types of methylotrophs were not isolated from any single plant species. This raises the question of possible antagonism between the two types.

Of the twelve obligate isolates, six were found to be able to utilize methane, thus indicating them to be true methanotrophs (8, 12, 13, 17, 18, and 21). The most probable genus is *Methylomonas*. Repeated attempts to achieve culture of the other six obligates (1, 3, 4, 5, 19, and 20) in the methane incubators failed. Viability of the isolates was confirmed by culturing on methanol plates concurrently with the methane plates. The identification of these are indicated to most probably be *Methylobacillus*, an obligate which is unable to utilize methane alone.

The results confirm that methylotrophs, both facultative and obligate, can be isolated from plant leaf surfaces and are found to be common. True methanotrophs are also rather common and simply cultured.

## Methylotroph Isolation Results

<u>sample</u>	<u>plant species</u>	<u>methanol</u>	<u>glucose</u>	<u>methane</u>	<u>ID</u>
1	<i>Berberis canadensis</i> (barberry)	+	-	-	o*
2	<i>Acer negundo</i> (box elder)	-	-	-	-
3	<i>Cornus florida</i> (dogwood)	+	-	-	o
4	<i>Euonymus americana</i> (euonymous)	+	-	-	o
5	<i>Vitis aestivalis</i> (grape)	+	-	-	o
6	<i>Liquidambar styraciflur</i> (gum)	+	+	-	f
7	<i>Ilex opaca</i> (holly)	-	-	-	-
8	<i>Verononia altissimo</i> (ironweed)	+	-	+	om
9	<i>Acer saccharinum</i> (maple)	+	+	-	f
10	<i>Albizzia julibrissin</i> (mimosa)	+	+	-	f
11	<i>Quercus rubra</i> (oak)	+	+	-	f
12	<i>Rosa multiflora</i> (wild rose)	+	-	+	om
13	<i>Eupatorium fistulosum</i> (joe pye weed)	+	-	+	om
14	<i>Rhododendron maximum</i> (rhododendron)	-	-	-	-
15	<i>Sedum purpureum</i> (sedum)	-	-	-	-
16	<i>Lindera benzoin</i> (spicebush)	-	-	-	-
17	<i>Calycanthus floridus</i> (sweet shrub)	+	-	+	om
18	<i>Impatiens capensis</i> (touch-me-not)	+	-	+	om
19	<i>Ailanthus altissima</i> (tree of heaven)	+	-	-	o
20	<i>Liriodendron tulipifera</i> (tulip tree)	+	-	-	o
21	<i>Euonymus atropurpureus</i> (wahoo)	+	-	+	om

\* o = obligate  
 f = facultative  
 om = obligate  
 methanotroph

### Percent of Plant Species with Methylotrophs

no isolates	5 of 21	24%
facultative methylotrophs	4 of 21	19%
obligate methylotrophs	12 of 21	57%
methanotrophs	6 of 21	28%

## Bibliography

- Difco Manual, 10th ed., 1984. Difco Laboratories, Detroit, MI.
- Heldt, H-W, 1997. Plant Biochemistry and Molecular Biology, Oxford Univ. Press NY, 522 pp.
- Holt, J. G., 1994. Bergeys Manual of Determinative Bacteriology, 9<sup>th</sup> ed., Williams & Watkins, Baltimore.
- Klein, John, and M. Bicknell, 2001, Microbiology Experiments, 3rd Ed, McGraw-Hill, Boston, MA, 342 pp.
- Krieg, N.R., and J.G. Holt Editors, 1984. Bergeys Manual of Systematic Bacteriology Vol. 1, pp. 256-261, Williams & Watkins Pub. Baltimore.
- Prescott, L.M., J.P. Harley, and D.A. Klein, 1999. Microbiology, 4th Ed, McGraw-Hill, Boston, 962 pp.
- Strausbaugh, P.D. and E.L. Core, 1970, Flora of West Virginia, 2nd Ed, West Virginia University, Morgantown, WV.
- White, David, 1995. The Physiology and Biochemistry of Prokaryotes. Oxford Univ. Press, NY, 378 pp.

### **Plan for Seeking New Chapters**

1. All advisors will be asked to submit names and addresses of schools in their state or area. Any science faculty names known should be provided. Their information will be sent to the Treasurer. As there will be printing and mailing costs, it would be logical to have the Treasurer handle this and save someone else having to submit bills.
2. The Treasurer will send packets (intro. letter, brochure, names and addresses of Board, website, forms, etc.) to all the schools. By e-mail, all advisors and Board members will be informed as to whom packets are sent, in case they know someone.
3. National Counselors (the appointment of which is provided in the Constitution) will be appointed, at least one in each state or area, and most probably willing and agreeable advisors. They will serve as contact persons. The Treasurer will inform the National Counselor of any schools receiving packets in his/her area and will be asked to contact the school, introduce themselves and offer any assistance if needed.
4. Prospective chapters will send their application form to the Treasurer who will immediately inform the remainder of the Board and the National Counselor in the state or area of the applicant chapter. The Historian/Marshall will send a note of welcome and “glad you’ve applied” to the school. (E-mails will be known per the application form and will be provided.) Perhaps the President and Counselor could also send a similar note. There should be a response from someone besides the Treasurer.
5. All Board members will inform the President of his/her approval or disapproval. If all members approve, the President will send a letter of congratulations and approval to the prospective chapter and also informs them that an induction officer will contact them to arrange the formal induction. The President also e-mails the approval to the Board and the Counselors and announces it on the webpage. The Treasurer will then immediately prepare the charter and membership certificates. These will be provided to the induction officer.
6. An induction officer will be determined, overseen by the President and working with the Board members. The induction officer would probably depend on where the applicant chapter is located. The Constitution allows any Board member or an advisor to induct a chapter. An available member of the Board or a willing nearby advisor could be given instructions.
7. The induction officer will prepare a brief report (with pictures if possible) of the induction. This would be for publication in The Record and webpage.



(Changes and additions are in boldface print)

## Article VI

### Organization and Government of Chapters

Section 1. A science club **or group** in an accredited, four-year, degree-granting college or university may apply for a charter membership in the organization. As is hereinafter provided, the Board of Directors must approve each application by unanimous vote before a charter can be granted. When application for a charter is made, the prospective chapter must submit to the **Treasurer** the following:

1. **The Form for Chapter Establishment. The form must be completed in its entirety. (The form is available on the Chi Beta Phi website at [www.franklincollege.edu/bioweb/cbp](http://www.franklincollege.edu/bioweb/cbp) or from the President.)**
2. **A letter from the President of the institution, stating that the chapter, if established, will be recognized by the administration. This shall be attached to the form.**
3. **A remittance of the chapter charter fee and the life membership fee of each person on the form comprising the charter membership. This is to be enclosed with the form.**

Section 2. same

Section 3. same

Section 4. same

Section 5. same

Section 6. same

## Article VII

### Extension

- Section 1. same
- Section 2. Upon receipt and approval of the Form for Chapter Establishment, the Treasurer shall so inform the remaining Board members and the National Counselor in the applicants area. The National Counselor and the Historian/Marshall will contact the applicant chapter with congratulations and to offer his/her assistance if needed. Upon unanimous approval of the Board of Directors, the President will direct the Treasurer to prepare the Charter and membership certificates for issuance to the new chapter. The Charter and certificates will be provided to the Installation Officer for presentation at the formal installation of the chapter.**
- Section 3. Upon approval, the President will also determine an Installation Officer who will then arrange with the new chapter the date and details for the formal installation. Immediately following the installation, the installing officer will submit a descriptive report of the installation to the Vice-President for publication in the Chi Beta Phi Record. The installing officer will also inform all other Board members of the completion of the installation.**
- Section 4. The Installation Officer will assure that the new chapter has in its possession the National Constitution, the suggested Chapter Constitution, the ritual for member initiation, the Chi Beta Phi History, and any other literature deemed pertinent.**
- Section 5. If the application for chapter establishment is not approved by the Board of Directors, the President shall instruct the Treasurer to remit all fees submitted by the applicant.**
- Section 6. (previous section 2)  
The President shall **request from** the board of Directors a vote on the petition of each prospective chapter. The Directors shall then **report** to the President, a unanimous vote being necessary for the granting of a charter.
- Section 7. (previous section 3) same

**Petition Form for Chapter Establishment**

College or University \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Letter from administrative officer attached \_\_\_\_\_

Prospective Advisor \_\_\_\_\_ Field \_\_\_\_\_  
e-mail \_\_\_\_\_ phone \_\_\_\_\_ fax \_\_\_\_\_  
mailing address (if different from above)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Members: (all names should be clearly typed or printed as desired on the membership certificate)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Chapter Charter fee sent to Treasurer \_\_\_\_\_

Life membership fees sent to Treasurer \_\_\_\_\_

Date Forms submitted \_\_\_\_\_

## Article X

### Chapter Reactivation

- Section 1. A faculty member (or two) willing to serve as Advisor (or coadvisors) shall complete the Form for Reactivation. The form shall be submitted to the National Historian/Marshall. (The Form is available on the Chi Beta Phi website at or available from the President.)
- Section 2. The advisor(s) shall obtain a group of science students willing to constitute the initial membership of the reactivated chapter. They shall determine (by vote, unanimous agreement, or appointment by the Advisor) the officer positions of President, Vice-President, Secretary, and Treasurer. Other offices (Historian, Marshall, etc.) may also be determined if desired. The names and addresses of the officers shall be recorded on the form.
- Section 3. Qualifications for membership are twenty hours in the sciences with a minimum gpa of 3.0 in the sciences. The overall gpa varies somewhat among different chapters, some requiring 3.0 and some allowing a bit lower. The sciences include Biology, Chemistry, Math, Physics, Psychology, and the Computer Sciences.
- Section 4. The Advisor, officers, and other members shall determine the frequency of meetings, as required on the form. This is to assure the chapter has organization and intent.
- Section 5. The Advisor and chapter members should meet to review and discuss the National Constitution and the extant Chapter Constitution. If neither of these documents are available, a National Constitution and a suggested Chapter Constitution are available from the Board of Directors. Once in hand, the Chapter Constitution should be completed and finalized.
- Section 6. The lifetime membership fee (\$25.00) for each member shall be submitted to the National Treasurer. This must be accompanied by a list of the members names as they wish them printed on their membership certificates, as requested on the Form. Upon receipt of the names and dues and the approval of the National Board President, certificates of membership will be mailed to the Advisor.
- Section 7. There is no fee for reactivation of a chapter.
- Section 8. It is strongly urged that initial meetings address plans for future activities and plans for the chapter (campus activities, fund-raising, guest speakers, science papers for presentation, supporting research, national conference, etc.). The Chapter must consider providing a delegate to the National Conference. There is no limit on the number who can attend from a Chapter but the National Constitution states that each Chapter has an obligation and responsibility to

provide a delegate to the conference. Science papers can be presented at the conference and will be published in the Chi Beta Phi Record. There is financial aid available for the delegate to attend and also for any member presenting a paper. There are also research grants available to support research by a member. The National Conference is hosted by a different chapter each year. The Chapter may wish to consider being the host in a coming year.

- Section 9. If there are questions or problems, the Advisor or an officer should contact the National Counselor in their area or a member of the National Board as soon as possible. The National Board is the governing body of Chi Beta Phi but their principle function is to provide support of the constituent chapters. The Board Officers names and addresses are available on the Chi Beta Phi web page or from the National Counselor.
- Section 10. Please check the Chi Beta Phi web page:  
[www.franklincollege.edu/bioweb/cbp](http://www.franklincollege.edu/bioweb/cbp)
- Section 11. Upon receipt and approval of the Form for Reactivation, the Historian/Marshall shall so inform the members of the Board. The National President shall then inform all National Board members of his/her approval and also inform the applicant Chapter. The National Treasurer shall then provide membership certificates to the members of the reactivated Chapter.

(form follows)



## Form for Chapter Reactivation

Chapter \_\_\_\_\_ Date \_\_\_\_\_

College or University \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Advisor \_\_\_\_\_ Field \_\_\_\_\_  
e-mail \_\_\_\_\_ phone \_\_\_\_\_ fax \_\_\_\_\_  
mailing address (if different from above)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Officers:

President _____	e-mail _____
Vice-President _____	e-mail _____
Secretary _____	e-mail _____
Treasurer _____	e-mail _____
Other _____	e-mail _____

Members: (all member and officer names should be clearly typed as desired on the membership certificate)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Life membership fees sent to Treasurer \_\_\_\_\_

Check any of the following documents you need to be provided:

National Constitution _____	Initiation Ritual _____
Chapter Constitution _____	History _____