THE CHI BETA PHI RECORD



2020-2022

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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: Michelle Mabry

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CHI BETA PHI

Is a national science honorary whose purpose is to promote interest in science and give recognition to scholarly attainment in and outstanding contributions to the fields of science.

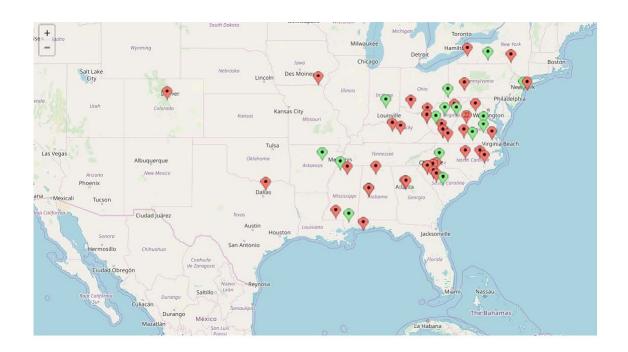
Scientia Omnia Vincit

SCIENCE CONQUERS ALL

Chi Beta Phi Chapters

Chapter	Year	Location
Alpha		Randolph-Macon College, Ashland, VA
Beta		The College of William and Mary, Williamsburg, VA
Gamma		Hampden-Sydney College, Hampden-Sydney, VA
Delta		Emory University, Atlanta, GA
Epsilon	1923	
•		Charleston, WV)
Zeta		Davis & Elkins College, Elkins, WV
Eta	1925	Presbyterian College, Clinton, SC
Theta	1925	Wofford College, Spartanburg, VA
lota	1925	University of Alabama, University, AL
Kappa	1925	Marshall University, Huntington, WV
Lambda	1925	West Virginia Institute of Technology, Montgomery, WV (now West
		Virginia University Institute of Technology, Beckley, WV)
Mu		Wilmington College, Wilmington, OH
Nu		Furman University, Greenville, SC
Xi		University of Buffalo, Buffalo, NY
Omicron	1930	Centre College, Danville, KY
Pi	1930	Concord College (now Concord University), Athens, WV
Rho	1935	West Liberty State College (now West Liberty University), West Liberty, WV
Sigma	1935	Austin College, Sherman, TX
Tau		Southwestern College (now Rhodes College), Memphis, TN
Upsilon	1940	University of North Carolina Chapel Hill, Chapel Hill, NC
Phi	1947	Memphis State University (now University of Memphis), Memphis, TN
Chi		Columbia College, Columbia, SC
Psi	1948	Bridgewater College, Bridgewater, VA
Omega	1948	Lynchburg College (now University of Lynchburg), Lynchburg, VA
Alpha Alpha	1951	Parsons College, Fairfield, IA (college now closed)
Alpha Beta	1952	Lenoir-Rhyne College (now Lenoir-Rhyne University), Hickory, NC
Alpha Gamma	1953	East Carolina University, Greenville, NC
	1953	Franklin College, Franklin, IN
Alpha		Keuka College, Keuka Park, NY 14478
Epsilon		
Alpha Zeta	1955	William Carey College (now William Carey University), Hattiesburg, MS
Alpha Eta	1957	Newberry College, Newberry, SC
Alpha Theta	1963	Indiana State University of Pennsylvania, Indiana, PA
Alpha lota	1964	Glenville State College (now Glenville State Uniersity), Glenville, WV
Alpha Kappa	1964	Athens State College (now Athens State University), Athens, AL
Alpha	1967	Whitworth College, Brookhaven, MS (college now closed)
Lambda		
Alpha Mu	1968	Alderson-Broaddus College (Alderson-Broaddus University; now closed), Philippi, WV
Alpha Nu	1968	
Alpha Xi	1969	St. Francis College, Brooklyn, NY

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Alpha	1969	North Carolina Wesleyan College, Rocky Mount, NC
Omicron		
Alpha Pi		Rio Grande College (now Rio Grande University), Rio Grande, OH
Alpha Rho	1973	Arkansas College (now Lyon College), Batesville, AR
Alpha Sigma	1932	Agnes Scott College, Decatur, GA
#1		
Alpha Sigma	1975	Molloy College, Rockville Centre, NY (now Alpha Sigma)
#2		
Alpha Tau	1984	Rust College, Holly Springs, MS
Alpha	1985	Shenandoah College (now Shenandoah University), Winchester, VA
Upsilon		
Beta Sigma	1935	University of Alabama, University, AL
Gamma		Marshall University, Huntington, WV
Sigma		
Delta Sigma	1937	Davis & Elkins College, Elkins, WV
Epsilon	1939	University of Charleston, Charleston, WV (now Epsilon)
Sigma #1		
Epsilon	1965	State University of Oneonta, Oneonta, NY (now Epsilon Sigma)
Sigma #2		
Zeta Sigma	1939	Furman University, Greenville, SC
Eta Sigma	1939	Concord College (now Concord University), Athens, WV
lota Sigma		Radford College (now Radford University), Radford, VA
Kappa	1945	
Sigma		Fredericksburg, VA
Theta	1941	
Sigma		
Alpha Phi	2012	University of Mobile, Mobile, AL
Alpha Chi		University of Colorado-Boulder, Boulder, CO



GRAND CHAPTER OFFICERS 2022-2024

PRESIDENT

Dr. Shalika Silva Glenville State Univ. Science Hall 302B 200 High Street Glenville, WV 26351 shalika.silva@glenville.edu 304-462-6307

VICE-PRESIDENT

Dr. Shawn Stover Davis & Elkins College 100 Campus Dr. Elkins, WV 26241 stovers@dewv.edu (304) 637-1275

SECRETARY Dr. Michelle Mabry Davis & Elkins College 100 Campus Dr. Elkins, WV 26241 (304) 637-1248 mabrym@dewv.edu TREASURER Dr. Arbin Thapaliya Franklin College 101 Branigin Blvd Franklin, IN 46131 athapaliya@franklincollege.edu

HISTORIAN/MARSHALL Katerina Pawlowski Glenville State University Pawlowski.KaterinaG@gsu.glenville.edu

www.chibetaphi.org

Chi Beta Phi 73rd National Conference October 15, 2022 Zeta chapter, host (virtual)

Due to the COVID-19 pandemic, the national officers decided to cancel the national conference in 2020 and 2021. The 2022 national conference was held virtually, via Zoom, and hosted by Vice-President Stover at Davis & Elkins College.

- 9:00 am Session I (Zoom main session) Call to Order Greeting from National Officers Roll Call of Chapters Proxy Assignments Chapter Reports Report from the National Officers Committee Assignments Awards Presentations Election
- 10:00—11:00 am Committee Meetings (Zoom breakout rooms)
 11:00- 11:30 am Session II (Zoom main session) Conclusion of Old Business New Business Awards Committee Report to the President
- 11:30- 12:30 pm Guest Speaker, Dr. Jennifer Wade (Zoom main session)



Dr. Wade manages the Petrology & Geochemistry program in NSF's Division of Earth Sciences, where she has worked for 11 years. This is the program that funds research on volcanoes, the chemistry of the Earth, and how the Earth has evolved since it formed. She specializes in analytical geochemistry, which uses tools like microscopes, lasers, and other beams to study rocks and minerals, which in turn tell us about volcanic eruption style or the recycling of elements at tectonic boundaries. She has also managed the Antarctic Earth Sciences program at NSF, deploying to the continent to serve as NSF Science Representative. Jennifer serves on numerous cross-NSF and cross-agency working groups

focused on multidisciplinary collaboration and scientific outreach. She holds a PhD from Boston University, MS from Michigan State University, and BS from Boston College.

1:00 pm Presentation of papers (Zoom main session) TBD Presentation Committee Meeting (Zoom breakout room) Awards and Announcements (Zoom main session) Adjournment

Roll call of chapters and proxies

Chapter	Chapter Report	Delegate or Proxy
Alpha	Yes	Shawn Stover
Gamma	Yes	Andrew Sehack
Epsilon	Yes	Michelle Mabry
Zeta	Yes	Tessa Chenoweth
Rho	No	
Kappa Sigma	Yes	Shreya Murali
Phi	No	
Chi	No	
Alpha Beta	Yes	Randal Reif
Alpha Delta	No	
Alpha Epsilon	Yes	Austin Glazier
Alpha Zeta	No	
Alpha Eta	No	
Alpha lota	Yes	Katerina Pawlowski
Alpha Xi	No	
Alpha Rho	No	
Alpha Sigma	Yes	Dominique Dermino
Alpha Phi	No	
Alpha Chi	No	

Minutes of the Chi Beta Phi 73rd National Conference

The meeting began on Zoom at 9:00. Drs. Mabry and Stover welcomed the participants back to the first national conference held since 2019 due to the COVID-19 pandemic. We then proceeded to the roll call of chapters, chapter reports, and proxy assignments. We then asked for volunteers to be on the election, presentation, and award committees. Separate Zoom rooms were set up for election and award committees. There was only one student presentation scheduled, so that was combined with awards.

Dr. Mabry and Dr. Stover were the only national officers in attendance, and each gave a brief report.

The committees briefly met, then gave their reports back to Drs. Mabry and Stover. The Awards Committee reported their deliberations:

- Host Chapter Award: not awarded
- Blackwell Distance Award: not awarded
- Outstanding Chapter Award: Kappa Sigma, The University of Mary Washington
- Most Improved Chapter Award: Alpha Epsilon, Keuka College

We were pleased to announce that Dr. Shalika Silva of Glenville State University accepted the nomination to be the next Chi Beta Phi national president and Katerina Pawlowski accepted the nomination to be the next Historian. The other current officers agreed to serve another term.

After a short break, Dr. Jennifer Wade talked about her scientific career and the varied path she took to get there. There was only one oral presentation from Katerina Pawlowski, Alpha lota, Glenville State University but we agreed that it was worth of the first place award.

The meeting wrapped up around 1:00, and several participants commented that they liked the virtual format.

Respectfully submitted,

Michelle Mabry, Ph.D.

National Secretary, Chi Beta Phi

CHAPTER REPORT- ALPHA

Chapter report for _11/2021____ through __11/2022____

Chapter ____Alpha_____

Mailing Address

Victoria Cooper

Computer Science Department

304 Henry Street

Ashland VA 23005

Advisor(s) and email address(es)

Dr. Victoria Cooper victorialcooper@rmc.edu

Current Officers' names and email addresses:

President	Ana Leal (analeal@go.rmc.edu)
Vice-President	Lily Phipps (lilyphipps@go.rmc.edu)
Secretary	Janelle de Guzman (jdeguzman@go.rmc.edu)
Treasurer	Megan Gunn (megangunn@go.rmc.edu)
Historian	Ryan Aud (ryanaud@go.rmc.edu)
Other	

Officers for next year if determined:

President TBD

Vice-President TBD

Secretary TBD

Treasurer TBD

Other TBD

Current number of members:

student <u>15</u> faculty <u>1</u> pledges <u>0</u> active alumni <u>1</u>

Frequency of meetings:

Twice a semester

Function or purpose of meetings:

- □ chapter business X
- □ fund raising
- presentations
- □ conference planning
- □ other (explain)

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

N/A

Social activities of chapter:

N/A

Honors awarded to chapter members:

Other chapter activities:

□ Efforts to reactivate a chapter or establish a new one

□ Fund raising

- □ Service to school (include any awards by chapter)
- □ Service to community
- □ Trips or other activities

Please add any additional information or comments below.

CHAPTER REPORT-GAMMA

Chapter: Gamma – Hampden-Sydney College

Dates of chapter report: 9/29/22, 10/7/22

Mailing Address:

172 Via Sacra

Department of Chemistry at Hampden Sydney College

Hampden Sydney, Virginia

23943

Advisor(s) and email addresses: Herb Sipe – hsipe@hsc.edu

Current officers and email addresses:

- President: Andrew Rehak rehaka23@hsc.edu
- Vice-President: Caleb Manu manuc23@hsc.edu
- Secretary: Ben Rose roseb23@hsc.edu_
- Treasurer : Ben Rose roseb23@hsc.edu
- Other

Officers for next year if determined: N/A

- President
- Vice-President_
- Secretary _____
- Treasurer ____
- Other

Current number of members:

- Student: 12
- Faculty: 3
- Pledges: 0
- Active alumni: 0

Frequency of meetings: Biannual ____

Function or purpose of meetings: Chapter Business/Initiations

- □ Chapter business
- □ Fund raising
- Social _____
- Presentations
- □ Conference planning
- Other _____

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

Social activities of chapter:

Honors awarded to chapter members:

Other chapter activities:

- o Efforts to reactivate a chapter or establish a new one
- o Fund raising
- Service to school (include any awards by chapter)
- Service to community
- Trips or other activities

Please add any additional information or comments below.

CHAPTER REPORT EPSILON

Chapter report for <u>2020</u> through <u>2021</u>.

Mailing Address 2300 MacCorkle Ave SE, Charleston WV 25304

C.O. Heather Arnett

Advisor – <u>Dr. Heather Arnett</u>

Email Address <u>heatherarnett@ucwv.edu</u>

Current Officers:	Name	Email address
President	Fallon Gallimore	fallongallimore@ucwv.edu
Vice-President	Sharmel Cavender	sharmelcavender@ucwv.edu
Secretary	Alyssa Yungwirth	alyssayungwirth@ucwv.edu
Treasurer	Emily Taylor	emilytaylor@ucwv.eduu
Other	RaeAnne Reed (recruitment officer),	
	raeannereed@ucwv.ed	u; Sidra Tahir (SOC representative)
	<u>sidratahir@ucwv.edu</u>	
Officers for next year (if determined):		
President		
Vice-President		

Secretary

Treasurer

Other

Current number of members

student 28 faculty 2 pledges 9 (SP20), 4 (FA21) active alumni 0

Frequency of meetings: Once per month, additional meetings if there are planned activities

Function or purpose of Meetings:
Chapter business <u>X</u>
Fund raising
Social
Presentations X
Conference planning
Other

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

Fall 2021: Hosted informational session for students interested in joining Chi Beta Phi; hosted a journal club and discussed a research paper that STEM students had interest in; hosted Graduate School Night with STEM students talking about application process

Activities relative to the Annual Theme:

N/A

Social Activities of Chapter:

<u>0</u>

Honors Awarded to Chapter Members:

Name, honor

<u>N/A</u>

Other Chapter Activities:

Efforts to reactivate a chapter or establish a new one:

<u>N/A</u>

Fund raising

<u>N/A</u>

Service to school (include any awards by chapter)

N/A

Service to community

Adopt-a-Highway Program; participated in various service projects hosted by school's student government organization and Gamma Beta Phi (various food/clothing drives)

Trips or other activities

N/A

Please add any additional information or comments below.

Several of our students completed research projects in the 2021 WV-INBRE Summer Research Program. One of our students is currently completing a First2 Network/WV-INBRE internship at the University of Charleston. Planned events for 2021-22 academic year:

- Informational session for potential new members
- Journal club(s)
- Science study hall
- Adopt-a-Highway service
- Graduate school Q&A session with current graduate students
- Science lending library
- Friendly competitions with other science organizations

CHAPTER REPORT- EPSILON

Chapter: Chi Beta Epsilon

Dates of chapter report: SP 22 and FA 22 (early information, no pledges etc)

Mailing Address:2300 MacCorkle AVE SE, Charleston WV, 25304

Advisor(s) and email addresses: <u>Heather Arnett, heatherarnett@ucwv.edu</u>

Current officers and email addresses:

- President: <u>Sharmel Cavender</u>, <u>sharmelcavender@ucwv.edu</u>
- Vice-President: Anthony Bradford, anthonybradford@ucwv.edu
- Secretary: <u>CJ Raines, curtisraines@ucwv.edu</u>
- Treasurer: Morgan Hoppe, morganhoppe@ucwv.edu
- SOC Representative: Sidra Tahir, sidratahir@ucwv.ucwv
- Recruitment Officer: <u>Alex D'Angelo, alexdangelo@ucwv.edu</u>

Officers for next year if determined:

- President
- Vice-President
- Secretary ____
- Treasurer _____
- Other

Current number of members:

- Student 24
- Faculty 1
- Pledges
- Active alumni _____

Frequency of meetings: <u>1 per month (2-3 if events)</u>

Function or purpose of meetings and descriptions:

⊠Chapter business

□Fund raising

⊠Social ____

□Presentations

□Conference planning

⊠Other ____

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

Social activities of chapter:

Honors awarded to chapter members:

Other chapter activities and descriptions:

Efforts to reactivate a chapter or establish a new one

□Fund raising

Service to school (include any awards by chapter)

Service to community

⊠Trips or other activities

Please add any additional information or comments below.

Adopt-A-Highway clean up for community service is in the works.

Animal Shelter drive

CHAPTER REPORT- ZETA

Chapter: Zeta, Davis & Elkins College

Dates of chapter report: fall 2019- fall 2022

Mailing Address: 100 Campus Dr., Elkins WV 26241

Advisor(s) and email addresses: Michelle Mabry mabrym@dewv.edu; Shawn Stover stovers@dewv.edu

Current officers and email addresses:

- President
 Tessa Chenoweth
- Vice-President
 Theresa Canfield
- Secretary/historian Shelbe Craig
- Treasurer
 Kyle Hawthorne

canfieldt@dewv.edu craigs@dewv.edu hawthorne@dewv.edu

chenowetht@dewv.edu

• Other

Officers for next year if determined:

- President
- Vice-President_
- Secretary ____
- Treasurer
- Other

Current number of members:

- Student 2019-2020 5; 2021-2022 13
- Faculty 2
- Pledges ~30 eligible members invited to join in Sept. 2022
- Active alumni _____

Frequency of meetings: monthly____

Function or purpose of meetings:

- □ X Chapter business
- □ Fund raising
- Social _____
- X Presentations
- □ X Conference planning
- Other ____

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

Zeta chapter hosted Biology and Environmental Science Forum speakers:

- Spring 2020 Dr. Jay Adams (Appalachian Animal Hospital, Chi Beta Phi and D&E alum)
- 2021 Holly Cyphert (Marshall University)
- 2022 Nikki Yokum (Parexel Clinical Research, Chi Beta Phi and D&E alum)

These events were open to the campus community.

Social activities of chapter:

Post Adopt-A-Highway snacks

Honors awarded to chapter members:

- Biology and Environmental Science Departmental Academic Achievement Awards to Theresa Canfield, Tessa Chenoweth, Inza Pacella, Jordon Waddell, Tycen Allan, Casey M. Shiflett
- Chemistry Departmental Academic Achievement Awards to Zoe Van Dijk, Chris Berman
- Robert Urban Memorial Award to Jordon Waddell, Tycen Allan
- Mathematics, Product Design, and Physics Departmental Academic Achievement Awards to Shelbe Craig
- The Tatiana Jardetzky Scholarship in Foreign Languages and Cultures to Casey King

- Outstanding Senior Student Life Award to Tycen Allan
- Junior Marshall to Inza Pacella
- Graduating Magna Cum Laude: Casey King
- Numerous Dean's List and President's List awardees

Other chapter activities:

- Efforts to reactivate a chapter or establish a new one
- Fund raising
- Service to school (include any awards by chapter)

Annual Pi Day dessert bar at the cafeteria

• Service to community

Adopt-A-Highway road cleanup, fall and spring semesters.



• Trips or other activities

Please add any additional information or comments below.

CHAPTER REPORT - Kappa Sigma Chapter

Chapter report for Oct. 2020 through Oct. 2021

Mailing Address:

Randall Reif

Jepson Science Center

University of Mary Washington

1301 College Avenue

Fredericksburg, VA 22401

Incumbent Advisors:

Randall Reif

rreif@umw.edu

April Wynn

awynn@umw.edu

Current Officers:

President:

Abby Delapenha

adelapen@mail.umw.edu

Vice President:

Takoda Chris

tchris@mail.umw.edu

Events Coordinator:

Katie Warlick

kwarlick@mail.umw.edu

Secretary/Treasurer:

Sarah Kerner

skerner2@mail.umw.edu

Current number of members:

13 students 2 faculty 17 Inductees 0 active alumnus

Frequency of Meetings: Monthly

Function or Purpose of Meetings:

To discuss upcoming events and service opportunities

Chapter Activities:

With the suspension of in-person learning, we began to adapt our events and host webinars rather than invite guests in person for the 2021 calendar year. The activities we have managed to sustain and construct include:

- Inviting multiple distinguished professionals in the field to come and discuss topics within their respective research areas of expertise, including, but not limited to, the following:
 - Dr. Craig Group, a Professor of Physics from the University of Virginia, presenting a colloquium entitled "Asking the Universe Fundamental Questions"

- Dr. Duane Deardorff, a Professor of Physics and Astronomy at UNC Chapel Hill, presenting a webinar on Measurement Uncertainty
- Dr. Ken Ono, Vice President of the American Mathematical Society, presenting a webinar entitled "Why does Ramanujan, the Man Who Knew Infinity, Matter?"
- Collaborating with the Center for Career and Professional Development to host a webinar with tips and tricks for applying to graduate school in a STEM-related field
- Organizing a program called "STEM Pals" with a local middle school where letters written by sixth graders about their aspirations in STEM are delivered to the University and are paired with a member of the chapter to showcase what being a STEM major is like, what careers our members hope to hold in the future, their research interests, etc.

Social Activities of Chapter:

- STEM Trivia Night: STEM themed trivia event for Chi Beta Phi members hosted via Zoom

Honors Awarded to Chapter Members:

- Most Active Senior of the Kappa Sigma Chapter of Chi Beta Phi – Shannon Brindle

Service to school:

- Chi Beta Phi Student Selected 2019-2020 Annual Faculty Award Winner:
 - No winner was selected due to the COVID-19 pandemic. We were unable to conduct surveys among the community for a consensus on any faculty members.

Service to community:

- Hospital Volunteering: Members volunteer to perform administrative work on the inpatient wards
- Moss Free Clinic: Members volunteer to be either a medical screener or medical scribe at our local free outpatient clinic.
- Tutoring: Members volunteer to tutor in STEM subjects both independently and through organizations like ACS
- Emergency Services: Members volunteer as paramedics and volunteer for a rescue squad

- Other Volunteering: Members volunteered for invasive plant removal, a Day of Democracy event, and volunteered to manage a STEM research program for High School girls

Research Conducted by Members

Summer Science Institute: Students participate in full-time, individual research over the summer.

- Research Works:
 - "The Effects of Voluntary Physical Exercise on Hedonic Drive and Hypothalamic Orexin Levels in CD1 Mice" conducted by Katie Warlick
 - "Numerical Study of COVID-19" conducted by Catlin Holt
 - "Analysis of Gene Expression in *Crithidia fasciculata* as a Result of Oxidative Stress" conducted by Ryan Meek
 - "Plant Genetics" conducted by Chandler Carson
 - "Fluctuating Asymmetry of Bluegill as a Bioindicator of Environmental Stress from Urbanization in the Rappahannock Watershed Area" conducted by Sarah Kerner
 - "Impact of Nitrogen Loading and Land Use Change on Selected Northeastern Virginia Streams Using Normalized Difference Vegetation Index (NDVI) and National Land Cover Dataset to Compare with Bluegill Fluctuating Asymmetry (FA) Patterns" conducted by Sarah Kerner
 - "Myokine Expression in a Myotonic Dystrophy Type 1 Cell Culture Model" conducted by Abigail Vorsteg
 - "Interactions between Physical Exercise, Social Dominance and Orexin" conducted by Jane Sullivan
 - "Apoptosis Induction in Jurkat T Lymphocytes by Proton Pump Inhibitors" conducted by Shreya Murali

Member Achievements

• Since the last national meeting, our members have logged a total of 418 STEM-related service

hours

· Several students accepted to an Early Selection Agreement between George Washington

University School of Medicine and the University of Mary Washington are active members of our chapter.

- Abby Delapenha and Shreya Murali

Alumni Achievements

- From the most recent graduating class, we have multiple students attending graduate school:
 - Marina Berry: University of Texas at Austin
 - Thomas Bustamante: Virginia Polytechnic Institute
 - Ashley Utz: North Carolina State
- From the most recent graduating class, we have multiple students attending Master programs:
 - Katherine Safian: University of Mary Washington
 - Macy Justice: UNC Gillings School of Global Health

CHAPTER REPORT - Kappa

Sigma Chapter Chi Beta Phi

National Conference

Chapter report for October 2021-October 2022

Mailing Address:

Randall Reif Jepson Science Center University of Mary Washington 1301 College Avenue Fredericksburg, VA 22401

Current Officers:

Incumbent Advisors: Randall Reif rreif@umw.edu

April Wynn awynn@umw.edu

<u>President:</u> Shreya Murali <u>smurali@mail.umw.edu</u>

Vice President: Abigail Delapenha adelapenha@mail.umw.edu

Events Coordinator/Faculty Award Chair: Maddie Killian mkillia2@mail.umw.edu Treasurer: Abigail Swanson aswanso@mail.umw.edu

Current number of members:

Students 29 Faculty 2 Inductees 11 Active Alumni 0

Frequency of meetings: Monthly

Function or purpose of meetings:

- At each meeting, the officers go over chapter rules and regulations.
- The officers address how to stay in good standing with the chapter.
- Each student makes sure to fill out the attendance forms and any new meeting opportunities and activities are introduced.

Social activities of chapter:

- Aside from the monthly meetings, chapter members have participated in various social events throughout last year.
- Every month there were 1-2 Physics and Chemistry colloquiums with guest speakers where members had a chance to meet and discuss different topics.
- Chi Beta Phi also co-hosted a University wide "Women in Stem" event where students and professors were able to discuss the topic.
- Members had the chance to participate with the ecology club for a STEM kickball night as well as the physics club telescope night. When a new biology and physics faculty member was being hired last year, members had the chance to attend hiring lectures.
- The club held several powerpoint STEM nights to promote the collaboration

between different STEM fields.

- In order to connect with alumni, members attended several STEM alumni panels throughout the year.

Honors awarded to chapter members:

Induction Ceremony for new Inductees: April 20th, 2022 Award Ceremony for graduating seniors: April 20th, 2022 Most Active Senior of the Kappa Sigma Chapter of Chi Beta Phi – Nicholas Hacker

Service to school

- Nicholas Hacker, who was most active as a senior in the chapter, was given a pin for the most service to the school.
- Many students who are part of the chapter spend significant time volunteering and tutoring other groups of students across campus.

Service to community

- STEM Pen pals: students wrote letters to a 6th grade science student talking about their major, career aspirations, and answering any questions the student had.
- STEM Night volunteering: members were able to volunteer at a STEM night put on by our school's Optica chapter at Anne E Moncure Elementary School. Members conducted and explained demos of fun science experiments to the elementary school students.
- Hospital Volunteering: Members volunteer to perform administrative work on the inpatient wards
- Moss Free Clinic: Members volunteer to be either a medical screener or medical scribe at our local free outpatient clinic.

- Emergency Services: Members volunteer as paramedics and volunteer for a rescue squad.

Research Conducted by Members

- Summer Science Institute: Students participate in full-time, individual research over the summer.
- Research Works:
 - "The Relic Abundance of Dark Matter and Indirect Detection" conducted by Abigail Swanson
 - "Characterization of Toxoplasma gondii Calcium regulator proteins TGGT1_253640 and TGGT1_222060 for Toxoplasma gondii growth and invasion" conducted by Abigail Delapenha
 - "Apoptosis Induction in Jurkat T-Lymphocytes by Proton Pump Inhibitors" conducted by Shreya Murali
 - "In-Vitro Testing of Indazole Inhibitors of KasA, a Vital Enzyme of M.
 Tuberculosis" conducted by Karissa Highlander
 - "The Effect of Fluorouracil on Pathogenic and Non-pathogenic Oral Microorganisms and Microbial Interactions with Restorative and Preventative Measures" conducted by Val Ortiz
 - "Improving Biological Pedagogy by Formulating a Laboratory Experiment
 Including the Effect of Icariin on Tyrosinase" conducted by Eliza Van Essendelft

CHAPTER REPORT- ALPHA BETA

Chapter report for October 2020 through October 2021

Chapter – Alpha Beta

Mailing Address –

Dr. Michael Stiff

LR Box 7153

Hickory, NC 28603

Advisor – Dr. Michael R. Stiff	Email Address –	michael.stiff@lr.edu
<u>Co-advisor – Dr. Judy Moore</u>	Email Addres	ss_–judy.moore@lr.edu_

Current Officers:	Name	Email address
President	Emma Throneburg	emma.throneburg@my.lr.edu
Vice-President	Maggie Lou Alice Carter	maggie.carter@my.lr.edu
Secretary	Samantha Jarrett	samantha.jarrett@my.lr.edu
Treasurer	Melissa Craemer	melissa.craemer@my.lr.edu
Historian	Alaina Curry	alaina.curry@my.lr.edu_

Officers for next year if determined: N/A

Current number of members:

- student 28
- faculty <u>14</u>
- pledges <u>0</u>
- active alumni <u>0</u>

Frequency of meetings: monthly

Function or purpose of Meetings:

- chapter business X
- fund raising
- social <u>X</u>
- presentations
- conference planning _____
- other

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

Social Activities of Chapter:

- Picnic/Initiation ceremony October 27, 2020 on LRU campus
- Usual Induction for April 2021 postponed until April 2022 due to COVID-19

Honors Awarded to Chapter Members:

- Honor cords were earned by 0 seniors in 2020-2021.
- At our University's Academic Awards Ceremony in April:

Other Chapter Activities:

Fund raising

> None this year

Service to school (include any awards by chapter)

None during this period

Service to community

Graduate School Information Night for the College of Math & Natural Sciences, held virtually, February 23, 2021 "Let's Talk About Vaccines with Dr. Esch" community presentation on the science of vaccines, held virtually, March 2021

Trips or other activities

➢ none

Please add any additional information or comments below.

March 2021, John Gonzalez, Magdelene Keller, Kelsey Krumanocker, Jefferson Norwood, Olivia Nunn, and Jillian Petersen presented their Honors undergraduate senior research to a virtual Annual Meeting of the North Carolina Academy of Sciences and (April 2021) presented at the virtual Research Thesis competition for Lenoir-Rhyne University's annual Symposium on Undergraduate Research and Creative Expression.

Planned activities for the 2021-22 academic year include:

• Cookout/Initiation ceremony on April 2022 at LRU outdoor classroom as part of the Campus Celebration of Excellence at LRU

CHAPTER REPORT- ALPHA BETA

Chapter report for October 2021 through October 2022

Chapter – Alpha Beta

Mailing Address –

Dr. Judy Moore

LR Box 7285

Hickory, NC 28603

Advisor – <u>Dr. Judy Moore</u>	Email Address	Email Address – judy.moore@lr.edu		
<u>Co-advisor –</u> Dr. Michael R. Stiff	Email Address –	michael.stiff@lr.edu		

Current Officers:	Name	Email address
President	Caleb Fluno	caleb.fluno@my.lr.edu
Vice-President	Colette Romp	colette.romp@my.lr.edu
Secretary	Ashley Sierzenga	ashley.sierzenga@my.lr.edu
Treasurer	Demmi Ramos	demmi.ramos@my.lr.edu
Historian	Tanner Chase White	tanner.white@my.lr.edu

Officers for next year if determined: N/A

Current number of members:

- student 24
- faculty <u>14</u>
- pledges <u>3</u>
- active alumni <u>0</u>

Frequency of meetings: monthly

Function or purpose of Meetings:

- chapter business X
- fund raising
- social <u>X</u>
- presentations
- conference planning _____
- other

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

Social Activities of Chapter:

- Picnic/Membership Drive completed November 8, 2021 on LRU campus
- Initiation & Celebration ceremony April 12, 2022 on LRU campus

Honors Awarded to Chapter Members:

- Honor cords were earned by 5 seniors in 2020-2021.
- At our University's Academic Awards Ceremony in April:
 - Angel Martin and Maggie Lou Alice Carter were each awarded the Distinguished Scholar Award for outstanding research and service at Lenoir-Rhyne University.

Other Chapter Activities:

Fund raising

> None this year

Service to school (include any awards by chapter)

> Developing a peer-mentor program for LR students in STEM

Service to community

- Graduate School Information Night for the College of Math & Natural Sciences, November 15, 2021
- Home School Science Day, April 06, 2022

Trips or other activities

➢ none

Please add any additional information or comments below.

- March 2022, Gabriel Corn, Maggie Lou Alice Carter, Magdelene Keller, and Zachary Norman presented their Honors undergraduate senior research to a Annual Meeting of the North Carolina Academy of Sciences
- and (April 2021) presented at the in-person Lenoir-Rhyne University Symposium on University Research and Creative Expression.

Planned activities for the 2020-21 academic year include:

- Recruitment picnic in Oct 2022
- Initiation & Celebration April 2023
- Home School Science Day Spring 2023
- Initiate peer-mentor program for LR students in STEM

CHAPTER REPORT- ALPHA EPSILON

Chapter report for: 2021-2022

Chapter: Keuka College

Mailing Address 141 Central Ave, Keuka Park, NY 14478

Advisor(s) and email address(es) Dr. Michael Keck mkeck@keuka.edu

Current Officers' names and email addresses:

- President Jason Canestrino, jcanestrino@keuka.edu
- Vice-President Delaney Yorks, dyorks@keuka.edu
- Secretary- Lydia Hall, Ihall1@keuka.edu
- Treasurer Megan Mott, mmott@keuka.edu
- Senate Representative Austin Glazier, aglazier@keuka.edu

Officers for next year if determined: N/A

- President
- Vice-President
- Secretary
- Treasurer
- Other

Current number of members:

- student <u>11</u>____
- faculty <u>2</u>
- pledges <u>0</u>
- active alumni <u>0</u>

Frequency of meetings:

- We meet once a month (in addition to days spent volunteering or fundraising).

Function or purpose of meetings:

⊠Chapter business

⊠Fund raising

⊠Social ____

□Presentations

□Conference planning

□Other

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

• We are planning to host a campus-wide science seminar during the spring. For our first session, Dr. Frank Engler, the Director of Clinical Pharmacology at Certara (Buffalo, NY), has tentatively agreed to be our speaker. He is also going to have a separate meeting with students to talk about career development in the pharmaceutical and drug development industry. Our goal is to make this into an annual seminar in the sciences sponsored by Chi Beta Phi.

Social activities of chapter:

• We will have an Induction Ceremony for new members in the spring. Fundraising is also on the agenda. We plan on hosting volunteering events such as a Keuka Lake Trail clean-up, serving at the local humane society, and a science fair for the young students in Penn Yan (NY). We will also hold an ice cream social in the spring for all members and faculty.

Honors awarded to chapter members:

• Our chapter does not give out specific awards to members, but some have been recipients of awards from other entities on campus. For example, Vice president Delaney Yorks was inducted into Sigma Lambda Sigma, which is a campus-wide honor society into which only 10 people are invited annually. Our President, Jason Canestrino was awarded with the Strasenburg Prize in Chemistry, which is awarded by the science department to the top Junior chemist.

Other chapter activities:

Efforts to reactivate a chapter or establish a new one

⊠Fund raising

□Service to school (include any awards by chapter)

Service to community

□Trips or other activities

Please add any additional information or comments below.

• Like every other campus, and presumably every other Chi Beta Phi chapter, our ability to participate in events has been hindered by COVID regulations and health concerns. We hope that we will be able to do more in the future.

CHAPTER REPORT- ALPHA EPSILON

Chapter: Keuka College, alpha epsilon chapter

Dates of chapter report: 10/07/2022

Mailing Address: 141 Central Ave. Keuka Park, NY, 14478

Advisor(s) and email addresses:

Michael V Keck - mkeck@keuka.edu

Dominique Derminio - dderminio@keuka.edu

Current officers and email addresses:

•	President:	<u>Austin</u>	<u>Glazier</u>	aglazier@keuka.edu
•	Vice-Presid	ent:	Aliyah Brewer	abrewer@keuka.edu_

- Secretary: Brett Beynon
- Treasurer: Rebecca Cramer
- abrewer@keuka.edu_ bbeynon@keuka.edu rcramer1@keuka.edu_ rconklin@keuka.edu
- Other: Rage Conklin

Officers for next year if determined: N/A

- President
- Vice-President
- Secretary ____
- Treasurer
- Other

Current number of members:

- Student 12 Students
- Faculty 2 Faculty
- Pledges 0 Pledges
- Active alumni

Frequency of meetings: ____

Meetings occur once every two weeks or more as needed

Function or purpose of meetings:

⊠Chapter business

⊠Fund raising

⊠Social ____

□ Presentations

□Conference planning

□Other

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

Starting with the 21-22 academic year, the Keuka College chapter of Chi Beta Phi has begun to sponsor a campus-wide science seminar each Spring in which a scientist is invited to campus to meet with members and give a general presentation in their area of expertise. The goals are several-fold, including:

- Elevate the presence and prominence of the sciences on the Keuka College campus.
- Allow students to meet with science professionals and discuss career paths, goals, options, etc.
- Increase the exposure of Keuka College and its science program to people and entities outside of campus.

Last year, for the inaugural and first annual Chi Beta Phi lecture, we hosted Dr. Frank Engler, the Director of Clinical Pharmacology at Certara, Inc (Buffalo, NY) (<u>https://www.certara.com/</u>) who gave a seminar titled "The Role of Clinical Pharmacology and Pharmacometrics in the Drug Development of COVID-19 Therapeutics".

Chi Beta Phi are students are currently working to identify an individual for this year's lecture.

Social activities of chapter:

In addition to the lecture described above, we typically try to host 1 or 2 events such as ice cream socials. The spring induction ceremony for new members also usually includes some type of social event. The last few years have been rather "unique" in that regard, but we plan on resuming a more normal set of activities going forward.

Honors awarded to chapter members:

We do not have any chapter-specific awards. Members of Chi Beta Phi are common recipients of various departmental and campus-wide awards. Examples include:

- Maeve Verity, Bonnie Harrington, and Aliyah Brewer were all inducted into Sigma Lambda Sigma, the top Keuka College academic honor society to which only 10 students are invited each year.
- Austin Glazier received the *Katherine Gillette Blyley Scholarship*, which is awarded to a top rising senior at the college, as well as the *Hazel Ellis Loomis Award* for outstanding performance in the biological sciences by a junior.
- May 22 graduates Jason Canistrino and Lydia Hall shared the *Biology Outstanding Senior Award*. These two individuals are off to medical school and vet school, respectively.
- May 22 graduate Emily Pitonyak won the ACS Senior Chemistry Award.
- Makayla Soutar earned the Judd Prize for outstanding work in Calculus.
- **Bonnie Harrington** won the *Roy Shortt Award* for outstanding work in Mathematics by a junior.

Other chapter activities:

• Fund raising

Chi Beta Phi sponsors one fund raising event every year. Last year, we held a campus-wide plant sale.

- Service to school (include any awards by chapter)
- Service to community

Chi Beta Phi members participate with members of other departmental and campus clubs in service projects such as the Keuka Lake Outlet Trail clean-up.

• Trips or other activities

Please add any additional information or comments below.

CHAPTER REPORT Alpha lota Chapter

Chapter report for 2019 through 2021

Mailing Address

Alpha lota Chapter

C/o Larry R. Baker/Wenwen Du

Glenville State College

<u>200 High St.</u>

Glenville, WV 26351

Co-Advisor – Larry R. Baker Email Address Larry.Baker@glenville.edu

Co-Advisor –<u>Wenwen Du</u>

Email Address Wenwen.Du@glenville.edu

Email address

Current Officers: 21-22 Name

President – Katerina Pawlowski – <u>Pawlowski.KaterinaG@gsc.glenville.edu</u>

Vice President – Dalton McGeeney – <u>Mcgeeney.DaltonJ@gsc.glenville.edu</u>

Secretary – Nathaniel Wheeler – <u>Wheeler.NathanielR@gsc.glenville.edu</u>

Treasurer – Victoria Porterfield – <u>Porterfield.VictoriaJ@gsc.glenville.edu</u>

Historian – Jenna Sprouse – <u>Sprouse.JennaM@gsc.glenville.edu</u>

Vice-President

Secretary

Treasurer

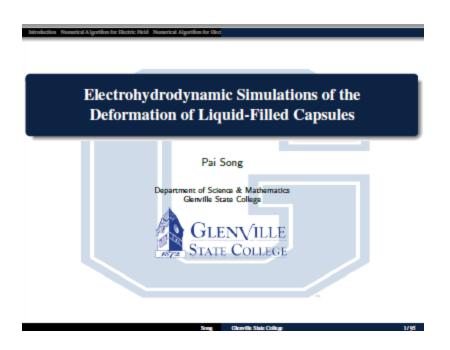
Historian

Officers for next year if determined:

	Preside	nt			_
	Vice-Pr	esident			
	Secreta	ry			_
	Treasur	er			_
	Other				_
Current	t numbe	r of members			
student	t <u>9</u>	faculty <u>17</u>	pledges <u>0</u>	active alumni <u>1</u>	
Freque	ncy of m	eetings: <u>Onc</u>	e a month with sp	ecial meetings as needed via Tl	<u>EAMS</u>
Functio	n or pur	pose of Meet	<u>ings</u> :		
chapter	r busines	55 <u>x</u>	fund raising <u>x</u>	social <u>x</u> conference p	lanning <u>N/A</u>

Presentations sponsored by the Chapter

One with TEAMS presented by our new math professor Pia Song - "Electrohydrodynamic Simulations of the Deformation of Liquid-Filled Capsules"



Presentation activity by Chapter members

None due to COVID

Activities relative to the Annual Theme:

<u>None</u>

Social Activities of Chapter:

The Chapter had a party as part of an induction ceremony in December. Chapter sponsored an End of the Spring Semester Picnic in May. It was well attended even with COVID.

Efforts to reactivate a chapter or establish a new one:

<u>None</u>

Fund raising

The Chapter had one major fund raising projects.

In spring 2020 semesters, we held our annual Valentine's Day Rose Sale. Two generous alumni members of the Chapter bought the roses. Many members of the Chapter were involved in processing and selling roses and the sale was very successful with the Chapter making over \$500 from this project.

Service to school (include any awards by chapter)

The Chapter's presentations were advertised and open to the campus community. We had one via TEAMS

The Chapter continued to assist the campus wide recycling program. Chapter members were responsible for taking recyclables from Science Hall to the campus collection center.

The Chapter volunteered and provided temperature checks at the entrance of main campus "COVID Screening" every Thursday morning from 7AM to 10AM with assistance from campus security

Service to community

Our presentations were advertised in local media and open to the public.

Trips or other activities

Please add any additional information or comments below.

List of new members inducted during the period since the last Chapter Report:

Brian Quinn

Zakiyah Winfield

Abigail Taylor

Jacob Petry – Now adjunct faculty but was a student member last year

CHAPTER REPORT- ALPHA IOTA

Chapter: Alpha Iota Chapter: Glenville State University

Dates of chapter report: Fall 2022 – Spring 2023

Mailing Address:

C/o Larry R. Baker/Wenwen Du

Glenville State University

200 High St.

Glenville, WV 26351

Advisor and email addresses:

Co-Advisor – Larry R. Baker – Larry.Baker@glenville.edu

Co-Advisor – Wenwen Du – Wenwen.Du@glenville.edu

Current officers and email addresses:

- President Katerina Pawlowski Pawlowski.KaterinaG@gsu.glenville.edu
- Vice-President Samuel Dudgeon Dudgeon.SamuelA@gsu.glenville.edu ____
- Secretary Josie Hill Hill.JosieL@gsu.glenville.edu
- Treasurer Brandon Layne Layne.BrandonM@gsu.glenville.edu
- Historian Brandon Layne Layne.BrandonM@gsu.glenville.edu

Officers for next year if determined: Current officers are serving Fall 2022 to Spring 2023.

Current number of members:

- Students 7
- Faculty 17
- Pledges 0
- Active alumni 1 _

Frequency of meetings: Every 2 Weeks

Function or purpose of meetings and descriptions:

⊠Chapter business

⊠Fund raising

⊠Social ____

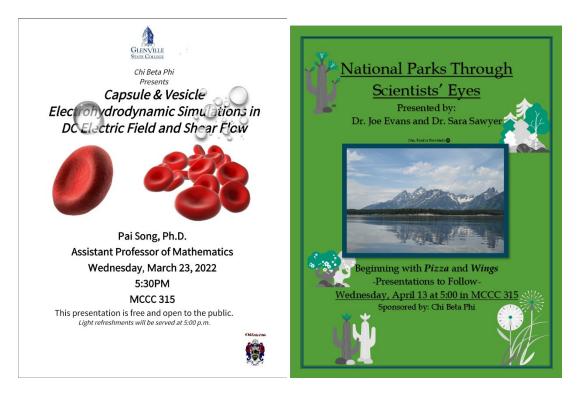
⊠Presentations

□Conference planning

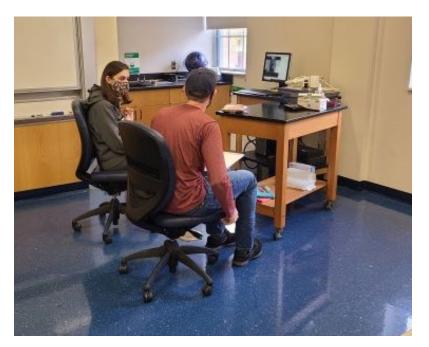
 \Box Other ____

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

Last semester, our chapter hosted several lectures by professors on campus. Dr. Sara Sawyer and Dr. Joe Evans described the flora, fauna, and geology of national parks in a lecture titled "*National Parks Through Scientists' Eyes*". We also hosted a research presentation by Dr. Pai Song titled, "*Capsule and Vesicle Electrohydrodynamic Simulations in DC Electric Field and Shear Flow*", as he was unable to present in person previously due to COVID.



We support the graduate development of students by arranging meetings between students and graduate institutions such as a Zoom Q&A session with several members of Marshall University's Joan C. Edwards School of Medicine admissions committee. This served to help prepare students interested in attending medical school or other graduate science programs with applications.



Our chapter also worked with the on-campus Environmental Science Club and Dr. Nabil Nasseri to organize a campus wide recycling program titled "*Adpot a Building Project*". Major buildings on campus

were split up into responsibilities and student organizations volunteered to take care of the collection and disposal of recycling in their chosen responsibility. Our chapter took care of duties in the Science Hall on campus. Students from the chapter volunteered to collect the recycling for four week periods during the semester and take it to the main collection bin off campus.



Social activities of chapter:

Each term our chapter hosts an end of semester outdoor picnic potluck and games evening where cords are presented to any graduating members. This occurred for both the Fall 2021 semester and the Spring 2022 semester. We also hosted a movie night for "*Jim Allison: Breakthrough*". To raise awareness about our chapter and the possibility of being invited to join Chi Beta Phi, we participated in a student organization fair. During this event, we also spread awareness about our joint recycling program with other organizations and recruited them to adopt a building.



Honors awarded to chapter members:

Other chapter activities and descriptions:

Efforts to reactivate a chapter or establish a new one

□Fund raising

Service to school (include any awards by chapter)

Service to community

□Trips or other activities

Please add any additional information or comments below.

New members as of Spring 2022:

Anthony Rader

Natalie Fout

CHAPTER REPORT- ALPHA SIGMA

Chapter report for ____2019____ through ___2021_____

Chapter ____Molloy College_____

Mailing Address

1000 Hempstead Ave

Rockville Centre, NY 11570

Advisor(s) and email address(es)

Current Officers' names and email addresses:

President

Vice-President

Secretary

Treasurer

Other

Officers for next year if determined:

President

Vice-President

Secretary

Treasurer

Other

Current number of members:

student <u>5</u> faculty <u>17</u> pledges ____active alumni _____

Frequency of meetings: 2x/semester

Function or purpose of meetings:

chapter businessxfund raising

xsocial

xpresentations

- □ conference planning
- □ other (explain)

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

Online zoom research seminars are held for Chi Beta Phi 2x/semester. Active student research, alumni, and member's o the community are invited speakers for these events.

Social activities of chapter:

Social hour over zoom was held

Honors awarded to chapter members:

n/a

Other chapter activities:

□ Efforts to reactivate a chapter or establish a new one

□ Fund raising

- □ Service to school (include any awards by chapter)
- □ Service to community

xTrips or other activities- working on trip to attend research conference, Spring 2022

Please add any additional information or comments below.

CHAPTER REPORT- ALPHA SIGMA

Chapter: Alpha Sigma 1975 Molloy University, Rockville Centre, NY Dates of

chapter report: October 10, 2022

Mailing Address: 1000 Hempstead Ave. Dept. of Biology Rockville Centre, NY 11571

Advisor(s) and email addresses: Li Li, PhD lli@molloy.edu

Current officers and email addresses: N/A

- President
- Vice-President
- Secretary
- Treasurer
- Other

Officers for next year if determined: N/A

- President
- Vice-President
- Secretary _____
- Treasurer _____
- Other

Current number of members:

- Student 29
- Faculty 1
- Pledges
- Active alumni

Frequency of meetings: <u>once a semester</u>

Function or purpose of meetings:

- Chapter business
- P Fund raising
- ? Social <u>x</u>
- Presentations
- Conference planning
- Other ____

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

Social activities of chapter:

Induction ceremony, April 19, 2022 With the presence of parents, Chi Beta Phi cords were presented to each member.

Honors awarded to chapter members:

Other chapter activities:

- Efforts to reactivate a chapter or establish a new one
- Fund raising
- Service to school (include any awards by chapter)
- Service to community
- Trips or other activities

Please add any additional information or comments below.

Report of the President

Long-serving President William Pohley made his retirement official. We wish him all the best in his retirement. Dr. Shalika Silva was elected President at this meeting.

Report of the Vice-President

No new Meadors Grant applications were received during this time.

Report of the Secretary

As usual, my duties this year consisted of co-advising the Zeta chapter at Davis & Elkins College, preparing the Record, and assisting the host chapter in planning the national conference.

Treasurer's Report

The treasury remains stable.

Chronic Headache Pain Mapping: A 3-Dimensional Printing and Neuroimaging Study.

Katerina G. Pawlowski, James W. Lewis, PhD. Department of Neuroscience, Rockefeller Neuroscience Institute, West Virginia University, Morgantown WV

Chronic pain affects daily activities in an estimated 20% of U.S. adults with an added 7% debilitated and unable to maintain steady jobs or proper personal care. Due to the mostly nonmodulatory nature of chronic pain, functional neuroimaging of brain regions involved in neurologic (versus physiologic) pain perception is lacking. Our group has access to an adult patient-participant with a category of chronic headache termed new daily persistent headache (NDPH): his headache has persisted for 13 years but can be modulated up or down in severity through deep pressure to different regions of his scalp and face. Previously, we utilized functional magnetic resonance imaging (fMRI) to modulate the participant's discomfort in an effort to localize brain regions with activation that correlated with perceived pain. However, those earlier efforts were limited due to motion artifacts during MRI scanning. Here, we developed a custom fit 3-dimensional printed and MRI-compatible face mask with hydraulic manipulanda that can be used to modify discomfort with minimal motion artifact and maximize patient comfort. The facemask was designed using 3-dimensional software (Meshmixer) and printed in polylactic acid (PLA). This device will be used for a next phase of fMRI mapping to modulate the severity of this patient's chronic pain. Our expectation is that mapping specific brain regions associated with neurologic pain will lead to therapies such as transcranial magnetic brain stimulation (TMS) or deep brain stimulation (DBS) to alleviate symptoms of chronic pain in patients. (Supported by NIH Grant P20GM103434 to the West Virginia IDeA Network for Biomedical Research Excellence)

Active XB Φ Chapters and Advisors 2020-22

Chapter	Year	Address	Advisors	Email
Alpha	1916	Randolph-Macon College 114 College Ave. Ashland, VA 23005	Dr. Nicholas Ruppel	nicholasruppel@rmc.edu
Gamma	1921	Hampden-Sydney College 80 College Rd. Hampden-Sydney, VA 23943	Mr. Herb Sipe	hsipe@hsc.edu
Epsilon	1923	Univ. of Charleston 2300 MacCorkle Ave. SE Charleston, WV 25304	Dr. Heather Arnett	heatherarnett@ucwv.edu
Zeta	1925	Davis & Elkins College 100 Campus Dr. Elkins, WV 26241	Dr. Shawn Stover Dr. Michelle Mabry	stovers@dewv.edu mabrym@dewv.edu
Rho	1935	West Liberty Univ. 208 University Dr. West Liberty, WV 26074	Dr. Chad Kuhns	chad.kuhns@westliberty.edu
Kappa Sigma	1945	The Univ. of Mary Washington 1301 College Ave. Fredericksburg, VA 22401	Dr. Randall Reif Dr. April Wynn	rreif@umw.edu awynn@umw.edu
Phi	1947	Univ. of Memphis 3720 Alumni Ave Memphis, TN 38152	Dr. David Freeman	Dfreemn1@memphis.edu
Chi	1948	Columbia College 1301 Columbia College Dr. Columbia, SC 29203	Dr. Adrienne Oxley	ayoxley@columbiasc.edu
Alpha Beta	1952	Lenoir-Rhyne Univ. 625 7th Ave NE Hickory, NC 28603	Dr. Michael Stiff	Michael.stiff@lr.edu
Alpha Delta	1953	Franklin College 101 Branigin Blvd. Franklin, IN 46131	Dr. Arbin Thapaliya	AThapaliya@franklincollege.edu
Alpha Epsilon	1954	Keuka College 141 Central Ave Keuka Park, NY 14478	Dr. Michael Keck	mkeck@keuka.edu
Alpha Zeta	1955	William Carey Univ. 710 William Carey Pkwy Hattiesburg, MS 39401	Dr. Randall Harris	rharris@wmcarey.edu
Alpha lota	1964	Glenville State Coll. 200 High St. Glenville, WV 26351	Wenwen Du	Wenwen.Du@glenville.edu
Alpha Xi	1969	St. Francis College Dept. of Biology 180 Remsen St. Brooklyn, NY 11201	Dr. James Corrigan	jcorrigan@sfc.edu
Alpha Rho	1973	Lyon College 2300 Highland Rd. Batesville, AR 72501	Dr. Jeremy Chapman	jeremy.chapman@lyon.edu

Alpha	1974	Molloy College	Dr. Noelle	ncutter@molloy.edu
Sigma		1000 Hempstead Ave.	Cutter	mkusenda@molloy.edu
_		Rockville Centre, NY	Dr. Mary	
		11570	Kusenda	
Alpha	2012	Univ. of Mobile	Dr. Gail Shelly	gshelly@umobile.edu
Phi		5735 College Pkwy	Dr. Lesley	lbaggett@umobile.edu
		Mobile, AL 36613	Baggett	rmorrow@umobile.edu
			Dr. Rebekah	
			Morrow	