

### **Quarterly Board Meeting**

September 28, 2023 Roaden University Center, Room 282 1:30 p.m.

#### **AGENDA**

C-11	1	Ord	
( )	ו דה	ıırn	Δr

- II. Recognition of Brass Arts Quintet
- III. Recognition of Students
- IV. Approval of Minutes of June 22, 2023
- V. Student Trustee Report
- VI. President's Report
- VII. Certification of President's Responsibilities Related to Athletics
- VIII. Approval of Mission Statement
- IX. Consent Agenda
  - A. Tenure Upon Appointment Recommendations
  - B. Policy 217 (Student Academic Misconduct)
- X. Executive Committee Recommendation

President's Compensation

XI. Audit & Business Committee Recommendations

**Disclosed Projects** 

XII. Board Secretary Report

XIII. Board of Trustees' meeting dates:

Next Meeting: November 30, 2023

Calendar Year 2024:

March 7

June 20

September 26

December 5

XIV. Other Business

XV. Adjournment



### **Agenda Item Summary**

Date: September 28, 2023						
Agenda Item: Recognition of Brass Arts Quintet						
Review	Action	$\boxtimes$	No action required			
PRESENTERS: Chair H	larper					
<b>PURPOSE &amp; KEY POINTS:</b> The Brass Arts Quintet from the College of Fine Arts is being recognized for their 60th anniversary as a faculty brass quintet, which is thought to be the longest continually running university brass quintet in the United States.						
The current members of the Brass Arts Quintet are Scott Hagarty, Trumpet; Chris McCormick, Trumpet; Justin Stanley, Horn; Joshua Hauser, Trombone; and Preston Light, Tuba.						
During our lunch break, the Quintet performed:						
Bouncin' Brass by Chris McCormick Take the A Train by Duke Ellington, arranged by Chris McCormick						

They will now perform Road Rage by Joshua Hauser

#### Brass Arts Quintet Biography

Founded in 1963, the Brass Arts Quintet has entertained audiences throughout the eastern United States, appeared at major music conferences, and toured for the Tennessee Arts Commission. They bring the joy of music to thousands of listeners of all ages through both community and school performances. The quintet has appeared on public television with two Christmas specials and "Patriotic Brass", which celebrates the music of America. The group has also recorded eight compact discs: Premiere Recordings of Music for Professional and Student Brass Quintets, The Spirit of America, Shazam!, Serengeti, Suites and Treats: Celebrating 50 Years with the Brass Arts Quintet, Christmas Brass: Suites and Treats for the Holidays, BAQ plays Chicago, and most recently, Christmas Brass 2: Santa Claus is BAQ.

The ensemble has premiered numerous original works by American composers such as Robert Jager, Walter Ross, Earl George, and Aldo Rafael Forte. The members of the quintet are also adept at arranging and composing and continually add new works to their repertoire that are designed to showcase the unique talents of this outstanding group of performers. Their latest projects include an album of works transcribed for brass by former TTU Professor of Trumpet Charles Decker, and an album celebrating the 60<sup>th</sup> anniversary of the ensemble, both scheduled to be released during the 2023-24 concert season.

The individual members who comprise this remarkable ensemble have performed throughout the world in solo and ensemble settings. Members of the Brass Arts Quintet are Scott Hagarty and Chris McCormick, trumpets; Justin Stanley, horn; Joshua Hauser, trombone and euphonium; and Preston Light, tuba. They have performed and recorded with many prestigious ensembles including the Kansas City Symphony Orchestra, the Rochester Philharmonic, the Wisconsin Chamber Orchestra, the Huntsville Symphony Orchestra, the New England Chamber Orchestra, the Baton Rouge Symphony, the Tokyo Kosei Wind Orchestra, the Guy Lombardo Orchestra, the Four Tops, the Temptations,

Widespread Panic, the Matteson-Phillips Tubajazz Consort, and the critically acclaimed MJT Project.

The quintet is currently in residence at the Tennessee Technological University School of Music and we believe the Brass Arts Quintet to be the longest continually running university brass quintet in the United States.



### **Agenda Item Summary**

Date: September 28, 2023						
<b>Agenda Item:</b> Re	cognition of Stude	ents				
Review	A	Action	No action required			
PRESENTERS: Cha	PRESENTERS: Chair Harper					
<b>PURPOSE &amp; KEY POINTS:</b> The Golden Eagle Marching Band this fall will be the largest in Technistory, with 211 members from 32 different undergraduate majors. Four students will talk about their perspective of how the band is an important part of their Tech experience and how thelped recruit them. One will attend in the new uniform that they will perform in next year.						
Abby Lane						
Senior Mus	ic Education Major					

Senior Music Education Major Murfreesboro, TN Drum Major

Emily Castillo Senior Music Education Major/Early Childhood Minor Franklin, TN Black Jacket (undergraduate teaching assistant)

Chloe Johnson
Senior Music Education Major
White County, TN
Black Jacket (undergraduate teaching assistant)

Walker Andrews Sophomore Music Education Major Columbia, TN Mellophone Section Leader

### TN, Cookeville: Tennessee Tech University

### SAMPLE & ORDER APPROVAL





#### **BOARD OF TRUSTEES**

# June 22, 2023 Roaden University Center, Room 282 MINUTES

#### Meeting streamed live via link found on this web page:

https://www.tntech.edu/board/board-and-board-committee-meetings.php

#### AGENDA ITEM I – CALL TO ORDER

The Tennessee Tech Board of Trustees met on Thursday, June 22, 2023, in Roaden University Center, Room 282. Chair Trudy Harper called the meeting to order at 1:31 p.m.

Chair Harper asked Mr. Lee Wray, Secretary, to call the roll. The following members were present:

- Savannah Griffin
- Fred Lowery
- Tom Jones
- Thomas Lynn
- Rhedona Rose
- Johnny Stites
- Barry Wilmore
- Trudy Harper
- Dan Allcott, virtual

Professor Allcott confirmed that he could simultaneously hear and speak to the Board members, that he was by himself, and that he received the Board materials in advance of the meeting.

A quorum was physically present. Tennessee Tech faculty, staff and members of the public were also in attendance.

#### **AGENDA ITEM II – SPOTLIGHT ON STUDENTS**

Chair Harper introduced three student orientation assistants (SOAs) who represent a group of about 20 students who welcome, teach, and inspire students and parents during Student Orientation, Advisement, and Registration (SOAR.) These students teach Tech traditions and provide new freshmen with the advice and knowledge they need to live Wings Up.

Bri Pharris stated that she led SOAR and helped facilitate it. Through SOAR, she became a true leader. She stated that her favorite part about serving as an SOA was learning to bring students, family and guests out of their shells. She stated the role was a blessing that she will take with her throughout the remainder of her life.

Cole Campbell introduced himself as a sophomore electrical engineering major, originally from Kansas City, KS and currently from Dickson, TN. He stated that it was an honor and privilege to be an SOA and to gain the leadership qualities provided by the role. He also stated that he has a desire to make the students' transitions to campus easier and more enjoyable.

Lindsay Taylor introduced herself as an Interdisciplinary Studies major – business, leadership and organizational behavior with a minor in finance - from Johnson City, Tennessee. She stated that her favorite part of being an SOA was helping incoming students who were not familiar with Cookeville and the middle Tennessee region make the adjustment to campus and the region.

Chair Harper asked Lindsay to explain the difference in Trailblazers and SOAs. Lindsay stated that Trailblazers provide potential students – primarily juniors and seniors in high school – VIP, one-on-one tours around campus. SOAs interact with incoming freshmen and transfer students and help those new students become acclimated to Tech.

Bri also stated and Cole agreed that the professors and students at Tennessee Tech really care about learning and academics. Class sizes and professor-to-student ratio was good. Bri stated that she got to know all of her professors, and they want to get to know her and to see her succeed.

Cole also commented on how clean and maintained our campus is and stated that was one of the reasons he chose Tennessee Tech.

Lindsay stated that one of the best things new students can do to get the most from their experience at Tennessee Tech was to get involved. Joining one or more of the 250 available organizations makes students' campus experiences better. Students need more than just an academic life to connect to campus. The new Marc L. Burnett Recreation Center is often a highlight of campus tours.

Cole agreed that the Lab Science building and the Stonecipher Lecture Hall are beautiful buildings. Potential students and other guests love the Commons area and Einstein Bagels in

the Lab Science building; students love to study in that area. The Main Quad is another popular area.

Chair Harper stated that she was very proud that the SOAs are Golden Eagles and make Tennessee Tech degrees look more important because of what the students are doing.

#### **AGENDA ITEM III – APPROVAL OF MINUTES**

Chair Harper asked for approval of the minutes of the March 9, 2023, Tennessee Tech Board of Trustees meeting. Chair Harper asked if there were questions or comments regarding the minutes. There being none, Mr. Jones moved to recommend approval of the March 9, 2023, Board of Trustees minutes. Mr. Stites seconded the motion. Mr. Wray called a roll call vote. The motion carried unanimously.

#### AGENDA ITEM IV – STUDENT TRUSTEE REPORT

Chair Harper stated that the next agenda item was a new item and Ms. Griffin, in her last meeting as a Trustee, would provide a report from the student perspective.

Ms. Griffin stated that as student Trustee, she had the privilege of representing a diverse and vibrant student body this past year. She also stated that academic performance remained outstanding because more than 3800 students earned top academic performance honors by being named to the Dean's List. Students continued to excel in their studies.

Ms. Griffin stated that many faculty members go above and beyond to ensure students' educational experiences remain engaging. Through their efforts, an environment is fostered to encourage critical thinking, creativity and collaboration. However, it is important to acknowledge that Tennessee Tech's student body includes individuals with varying levels of academic motivation and abilities. Some students face challenges related to time management, workload and balancing extracurricular activities which can impact their overall academic performance. Continued strategies to support and guide students in navigating these challenges are essential to foster academic success.

She stated that Tennessee Tech's new Eagle Engage system allows students to connect with organizations, campus events and more. More than 200 student organizations have registered with Eagle Engage and 2770 unique users are registered in the system. Almost 4000 total users are registered which includes students registered in multiple groups and it is expected that these numbers will continue to grow.

Tennessee Tech's Student Government Association allocates Student Organization Life Opportunity (SOLO) funding to different student organizations and SGA funded 227 organization events and activities. Through these activities, students developed valuable life

skills, built lasting friendships and left a positive impact on our campus and the Cookeville community. Contrary to the commonly held notion that Tennessee Tech campus has been characterized as a suitcase campus, Ms. Griffin's observations indicate a robust engagement of the student body with the surrounding college town community.

She stated that one of the students' main concerns was the need for more efficient campus shuttle routes. Students would like to see better transportation options, especially between the recreation center and library. Students are interested in the possibility of shuttle pickups from off-campus apartments and having more consistently communicated shuttle schedules. Students would like to see the possibility of a 24/7 library for unrestricted access to study materials. Students hope for more online tools provided by the library to support research needs.

Ms. Griffin stated that students have expressed a desire for improved textbook access to help them succeed without financial burdens. They would appreciate expanded counseling center resources to ensure support for well-being.

She stated that while students were excited about welcoming more Golden Eagles to campus, they were also curious about the plans for updated and additional housing options. Students believe expanding on-campus living options would provide a better overall experience for all students and create a more vibrant and inclusive community.

Ms. Griffin stated that she was incredibly proud of the achievements as a student body and honored to have had the privilege of representing such an exceptional group of individuals. Together, Tennessee Tech students live up to the university's motto of living "bold, fearless, confident and kind." She stated that she wanted to thank everyone for their support and she looks forward to keeping up with the Board and everything they are able to accomplish this next year.

#### AGENDA ITEM V – PRESIDENT'S REPORT

Chair Harper stated that President Oldham would provide the President's Report.

President Oldham thanked the Board members for all they do on a regular basis to support Tennessee Tech.

He stated that it was another successful appropriations cycle for Tennessee Tech in the Tennessee General Assembly. He thanked all of the representatives that support higher education, particularly the university's local representatives, Senator Paul Bailey, Representative Ryan Williams and Speaker Cameron Sexton, for their tremendous support for Tennessee Tech and higher education.

Tennessee Tech is scheduled to receive \$80,500,000 in annual state appropriations and that

includes the portion of the five percent salary pool that was discussed previously. The university also is scheduled to receive an additional \$2,000,000 of recurring funding for the wind tunnel and super computer facility to be located in Crossville in Cumberland County.

President Oldham stated that Tennessee Tech received \$1,200,000, of which \$1,000,000 of that was recurring dollars for the Cybersecurity Education and Research Center. Tennessee Tech is also scheduled to receive another million dollars of one-time money for Rural Reimagined to support efforts that continue to exceed all expectations. The university also received \$150,000 for the Water Center and \$6,500,000 for capital maintenance. He stated that Tennessee was in a good financial position as a state and has heavily invested in higher education and that investment continues.

He stated that Tennessee Tech was still in the final part of the current recruitment cycle and final enrollment numbers won't be known until September. An update to include specifics will be provided at the fall Board meetings but enrollment numbers look quite positive at this point. More than 2,000 students have registered for freshman SOAR. About 1450 of those have already attended a SOAR session, with four more SOAR sessions remaining before the end of the summer.

President Oldham stated that academically, the group of potential freshmen are quite strong, with about one-third of the students having a perfect 4.0 high school GPA. The average high school GPA is 3.68. Six students in this cohort have a perfect 36 ACT score, five of which are national merit semifinalists. The current group is more diverse; we are seeing an increase in African-American, Hispanic and Asian.

He stated that of the roughly 2,000 freshmen, 1,850 are from Tennessee. Slightly less than one-third are from the Upper Cumberland region, a little more are from the metro Nashville area, and we also draw significantly from both the Knoxville and Chattanooga metropolitan areas. Tennessee Tech typically attracts a healthy mix of students from rural and suburban areas. West Tennessee requires a more challenging recruitment effort on our part but we do get students from west Tennessee.

President Oldham stated that Tennessee Tech's goal for enrollment is to reach 12,000 students in the 2025-26 year. The baseline year, in 2018-19 was just over 10,000. Last fall, we were at 9,902 and we will likely be slightly above 10,000 in fall 2023.

He also stated that the minority goal is 22 percent. Significant progress has been made in this area, reaching 19.5 percent this past year, and that should continue to climb.

Great strides were made in first year retention rate this past year; we reached 78.5 percent. At this time, we are tracking at about 80 percent for this next fall and are making good progress toward the 82 percent goal.

He stated that Tennessee Tech still has a way to go with four-year graduation rates but we are

making progress. We have been bouncing up and down around the 40 percent range for the past two or three years. Our long-term goal of 60 percent for the six-year graduation rate was met the past couple of years. Most freshmen starting at Tennessee Tech graduate within five years. We discussed at length at previous meetings about the benefits, particularly the financial benefits, to students to graduate on time and what we do to encourage that.

We continue to be among the best value in the region and certainly in the state. Approximately half of our students graduate debt-free and average federal indebtedness for a graduating class decreased over the last two or three years. Tennessee Tech students are back down below \$20,000 now for the average indebtedness on graduation.

President Oldham stated that the Ashraf Islam Engineering building is making substantial progress now. It is expected that this building will likely be completed next spring, about a year from now. We have privately raised close to \$10,000,000 which is a high watermark for Tennessee Tech in terms of capital fundraising efforts.

The big project currently ongoing in terms of parking and transportation is the pedestrian walkway through the center of campus, along Peachtree. It should be completed by late January or early February of 2024.

He stated that the Tucker Stadium project is moving along. It is in the design phase and great progress is being made. We anticipate that we will be in demolition of the west side of the stadium this December. If everything stays on schedule, tear down of the west side to make room for the new construction will begin soon after football season is completed. New construction will likely begin next summer and it is anticipated that completion will be roughly fall 2025 season. Current work is being done to ensure that the facility can be utilized throughout the construction phase. We expect to use the east side stadium for at least one full season to accommodate the construction.

Foster Hall, the old chemistry building, is expected to be demoed this fall and probably completed early next spring. Asbestos work needs to be done in the interior before it can be imploded.

President Oldham stated that the Johnson Hall renovation is in design phase and the building is expected to reopen after renovation in the fall of 2025.

He stated that the next newest building, the advanced construction and manufacturing engineering (ACME) building, is currently in the programming phase and we anticipate it will go to bid in 2024 for construction. A matching requirement is associated with the ACME building. We have already achieved a \$1 million private donation commitment for a portion of the required matching on the ACME building.

President Oldham also stated that Tennessee Tech has acquired \$32,400,000 year to date in research funding. That is a record high and is roughly 40 percent above last year's number. This

number is a result of tremendous work on everyone's part, particularly the faculty, investigators involved in securing these funds, and the number speaks to the quality of the research that we do at Tennessee Tech. He stated that the scholarly work the faculty do is tremendous and those that publish their work or present it in peer-reviewed settings, speaks to the quality of the work. Our aspirational goal for research funding is \$40,000,000 so it is looking like that figure is much more attainable today than when we started that journey. President Oldham thanked Dr. Pinkert who has been with us this year helping out. I appreciate all the Research Office staff and everyone else who helped us reach this level.

President Oldham stated that Athletics finished second place for the OVC Commissioner's Cup, the highest Tennessee Tech has ever finished. Out of ten institutions, we had the best overall sports performance, second only to Southeast Missouri State University this year. That was a tremendous accomplishment for us and we did that while still maintaining a great deal of sportsmanship and integrity in how we competed, by winning the Overall Sportsmanship Award. This was our second time to win the award but it has been over a decade since that happened. Five of our 15 team sports actually won their Sportsmanship Award.

#### **AGENDA ITEM VI – CONSENT AGENDA**

- A. EMERITUS PRESIDENT CONTRACT
- **B. TENURE RECOMMENDATIONS**
- C. ACADEMIC PROGRAM MODIFICATION (APM) FOR M.A. IN LEARNING DESIGN TECHNOLOGY
- D. NEW ACADEMIC PROGRAM PROPOSAL (NAPP) FOR PH.D. IN HIGHER EDUCATION

Mr. Jones moved to pass the consent agenda as presented. Mr. Lowery seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

Chair Harper then stated that she would use her chair prerogative to raise an item, provide background, and an update on where we are with this topic. She stated that at the last meeting, the Board voted 6:1 to take a certain direction with salary increases for the upcoming year, to be effective July 1. The proposal included a merit component.

A statement was previously made in a Board meeting that the state has a statute that requires employees to be reviewed on a merit basis. The Faculty Senate questioned the validity of the statement, stating they were not aware there was such a statute and provided reasons they thought that was not the case.

Chair Harper asked Troy Perdue, General Counsel, to research the possible statute and he stated that there is a statute that says the state human resources department is charged with ensuring merit is used as a criterion for salary increases for state employees. However, an exception exists for higher education. So, higher education institutions are exempted from the requirement to use merit for employee salary increases.

Chair Harper stated that she wanted Trustees to have an opportunity to ask for a

reconsideration of the March 9, 2023, decision. She also stated that, per Robert's Rules, only a person who voted in favor of the first motion can ask for a reconsideration but she would open it up for reconsideration. There being no motion for reconsideration, the prior decision stands and they moved to the next agenda item.

# AGENDA ITEM VII.A. – AUDIT & BUSINESS COMMITTEE REPORT AND RECOMMENDATIONS – MAINTENANCE AND MANDATORY FEES

Upon the committee's recommendation, Mr. Stites moved the Board approve the proposed FY2023-24 maintenance and mandatory fees. Mr. Lynn seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

# AGENDA ITEM VII.B. – AUDIT & BUSINESS COMMITTEE REPORT AND RECOMMENDATIONS - NON-MANDATORY FEE SUMMARY

Upon the committee's recommendation, Mr. Stites moved the Board approve the Non-Mandatory fee for Craft Center Housing, effective Fall 2023. Mr. Lowery seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

# AGENDA ITEM VII.C. – AUDIT & BUSINESS COMMITTEE REPORT AND RECOMMENDATIONS – FY2022-23 ESTIMATED AND FY2023-24 BUDGET

Upon the committee's recommendation, Mr. Stites moved the Board approve Tennessee Tech's FY2022-23 estimated and FY2023-24 proposed budgets and organizational chart. Mr. Lynn seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

# AGENDA ITEM VII.D. – AUDIT & BUSINESS COMMITTEE REPORT AND RECOMMENDATIONS – DISCLOSED PROJECTS FY2023-24

Upon the committee's recommendation, Mr. Stites moved the Board approve the FY2023-24 disclosed projects for the Student Event Center and J.J. Oakley Residence Hall and Innovation Center. Ms. Rose seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

# AGENDA ITEM VII.E. – AUDIT & BUSINESS COMMITTEE REPORT AND RECOMMENDATIONS – CAPITAL BUDGET FY2024-25

Upon the committee's recommendation, Mr. Stites moved the Board approve the FY2024-25 Capital Budget requests. Mr. Jones seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

# AGENDA ITEM VII.F. – AUDIT & BUSINESS COMMITTEE REPORT AND RECOMMENDATIONS – TECH FARM OPERATING AGREEMENT

Mr. Stites stated that following a lengthy discussion in the morning committee meeting and upon the committee's recommendation, he moved to approve the Tech Farm Operating Agreement with the understanding that the President would work with the General Counsel to make any needed amendments to the agreement to clarify that no state funds would be used to support the physical building infrastructure on the farm and to ensure that the agreement is consistent with the intent. Mr. Jones seconded the motion. Mr. Wray called a roll call vote. The motion passed 7-0, with Mr. Allcott abstaining.

# AGENDA ITEM VIII.A. – EXECUTIVE COMMITTEE RECOMMENDATIONS – ELECTION OF CHAIR OF THE BOARD FOR JULY 1, 2023-JUNE 30, 2025

Upon the committee's recommendation, Mr. Jones moved approval of Trudy Harper as Board Chair for the term of July 1, 2023 – June 30, 2025. Mr. Lynn seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

# AGENDA ITEM VIII.B. – EXECUTIVE COMMITTEE RECOMMENDATIONS – ELECTION OF VICE CHAIR OF THE BOARD FOR JULY 1, 2023 – JUNE 30, 2025

Upon the committee's recommendation, Mr. Stites moved approval of Rhedona Rose as Board Vice-Chair for the term of July 1, 2023 – June 30, 2025. Mr. Lynn seconded the motion. Mr. Wray called a roll call vote. The motion passed 7-0, with Ms. Rose passing.

# AGENDA ITEM VIII.C. – EXECUTIVE COMMITTEE RECOMMENDATIONS – ELECTION OF THE ADDITIONAL MEMBER OF THE EXECUTIVE COMMITTEE

Upon the committee's recommendation, Mr. Jones moved approval of Fred Lowery as the additional member of the Executive Committee for the term of July 1, 2023 – June 30, 2025. Mr. Stites seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

# AGENDA ITEM VIII.D. – EXECUTIVE COMMITTEE RECOMMENDATIONS – ELECTION OF AUDIT COMMITTEE MEMBERS AND CHAIR

Upon the committee's recommendation, Ms. Rose moved approval of Johnny Stites as Chair, and Tom Jones and Thomas Lynn as Audit Committee members for the term of July 1, 2023 – June 30, 2025. Mr. Lowery seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

# AGENDA ITEM VIII.E. – EXECUTIVE COMMITTEE RECOMMENDATIONS – ANNOUNCEMENT OF ACADEMIC & STUDENT AFFAIRS CHAIR AND COMMITTEE MEMBERS

Chair Harper announced that she had appointed Rhedona Rose as Chair, and Barry Wilmore and Dr. Jeannette Luna as Academic & Student Affairs Committee members for the term of July 1, 2023 – June 30, 2025.

#### **AGENDA ITEM IX – ELECTION OF STUDENT TRUSTEE**

Upon a recommendation from the Student Government Association, Mr. Lowery nominated Addison Dorris to serve as the student trustee for fiscal year 2023-24. Mr. Wilmore seconded the motion. Mr. Wray called a roll call vote. The motion passed unanimously.

#### AGENDA ITEM X – BOARD SECRETARY REPORT

Mr. Wray welcomed Trustee Luna and Trustee Dorris to the board beginning July 1. He stated that Deb Combs would handle their transition process. He also stated that Trustees would be receiving information from Vice Chair Rose about the president's evaluation process.

#### AGENDA ITEM XI – OTHER BUSINESS – RECOGNITION OF TERM-ENDING TRUSTEES

Chair Harper stated that she had other business to cover and it was bittersweet. A plaque was presented to Savannah Griffin for her time served on the Board. Savannah stated that she would be traveling to Auburn University this fall to earn a Master's degree in Higher Education Administration. She also thanked Tennessee Tech for all that has been given to her, especially the opportunity to serve on the Board.

Chair Harper also stated that a plaque would be awarded to Professor Allcott when he returned to Cookeville. She also stated that he has helped her appreciate the role, perspective and the importance of the fine arts in our institution. Professor Allcott stated that he appreciated the opportunity to serve with everyone on the Board and he felt that he now knows more about the university.

#### **AGENDA ITEM XII – ADJOURNMENT**

There being no further business, the Tennessee Tech Board of Trustees meeting adjourned at 3:01 p.m.

Approved,	
Lee Wray, Secretary	



### **Agenda Item Summary**

Date: September 28, 2023						
Agenda Item: Studen	t Trustee Report					
Review	Action	No action required				
PRESENTER(S): Addison	on Dorris					
PURPOSE & KEY POIN	TS: Newly elected Stude	nt Trustee Addison Dorris will report on student	life			

from the perspective of the student body.



### Agenda Item Summary

<b>Date</b> : Se	eptember 28, 2023	3			
Agenda I	Agenda Item: Certification of President's Responsibilities Related to Athletics				
	Review	Action	No action required		

**PRESENTERS:** Chair Harper

**PURPOSE & KEY POINTS:** The Ohio Valley Conference requires the Chair of the Board to attest that the President is responsible for the administration of the athletics program, he has the support of the Board in operating a program of integrity, and he may vote on behalf of the institution on NCAA and OVC matters. The Chair's attestation must also be presented to the Board.



#### Governing Board Certification Form Academic Year 2023-24

As Chairman of the Governing Board at Tennessee Tech Univ, I attest that:

- 1) Responsibility for the administration of the athletics program has been delegated to the Chief Executive Officer of the institution.
- 2) The Chief Executive Officer has the mandate and support of the board to operate a program of integrity in full compliance with NCAA, OVC, and all other relevant rules and regulations.
- 3) The Chief Executive Officer, in conjunction with the Director of Athletics and Faculty Athletic Representative, determines how the institutional vote shall be cast on issues of athletics policy presented to the NCAA and the Ohio Valley Conference.

Date Presented to the Governing Board: _	9/28/2023	
Signed:		
(Chair of the Governing Board)		

Please return completed form to:

Beth DeBauche Commissioner Ohio Valley Conference 215 Centerview Drive, Suite 115 Brentwood, TN 37027 bdebauche@ovc.org



#### **Agenda Item Summary**

Date:	Septem	ber	28,	2023
-------	--------	-----	-----	------

Agenda Item: Approval Mission Statement

<sup>□</sup> Review	No action required	

**PRESENTER:** Chair Harper

#### **PURPOSE & KEY POINTS:**

The President requests approval of the mission statement as presented. For the purposes of meeting certain regulatory and statutory requirements, the mission statement, which is included in the strategic plan, has been extracted as a stand-alone document for approval.

On June 26, 2018, the Board delegated authority on a continuing basis to the President to make technical changes to the mission profile and to submit the mission profile and the mission statement annually to the Tennessee Higher Education Commission.

SACSCOC Standard 4.2.a requires that "The governing board ensures the regular review of the institution's mission. (Mission review)".

### **SECTION 4: Governing Board**

The institution's governing board holds in trust the fundamental autonomy and ultimate well-being of the institution. As the corporate body, the board ensures both the presence of viable leadership and strong financial resources to fulfill the institutional mission. Integral to strong governance is the absence of undue influence from external sources.

- 1. The institution has a governing board of at least five members that:
  - (a) is the legal body with specific authority over the institution.
  - (b) exercises fiduciary oversight of the institution.
  - (c) ensures that both the presiding officer of the board and a majority of other voting members of the board are free of any contractual, employment, personal, or familial financial interest in the institution.
  - (d) is not controlled by a minority of board members or by organizations or institutions separate from it.
  - (e) is not presided over by the chief executive officer of the institution.

(Governing board characteristics) [CR]

- 2. The governing board
  - a. ensures the regular review of the institution's mission. (*Mission review*)
  - b. ensures a clear and appropriate distinction between the policy-making function of the board and the responsibility of the administration and faculty to administer and implement policy. (Board/administrative distinction)
  - c. selects and regularly evaluates the institution's chief executive officer. (CEO evaluation/selection)

- d. defines and addresses potential conflict of interest for its members. (*Conflict of interest*)
- e. has appropriate and fair processes for the dismissal of a board member. (*Board dismissal*)
- f. protects the institution from undue influence by external persons or bodies. (*External influence*)
- g. defines and regularly evaluates its responsibilities and expectations. (*Board self-evaluation*)
- 3. If an institution's governing board does not retain sole legal authority and operating control in a multiple-level governance system, then the institution clearly defines that authority and control for the following areas within its governance structure:
  - (a) institution's mission, (b) fiscal stability of the institution, and
  - (c) institutional policy. (Multi-level governance)

### Our Mission and Vision

### Vision Statement

Tennessee Tech will achieve national prominence and impact through its engaged students, dedicated faculty, and career-ready graduates known for their creativity, tenacity, and analytical approach to problem solving.

### Mission of Tennessee Tech University

Tennessee's technological university creates, advances, and applies knowledge to expand opportunity and economic competitiveness. As a STEM-infused, comprehensive institution, Tennessee Tech delivers enduring education, impactful research, and collaborative service.

Tennessee Tech Board of Trustees reviewed and approved the mission statement on June 26, 2018.



### **Agenda Item Summary**

Review	⊠ Action	☐ No action required		
Agenda Item: Tenure Upon Appointment Recommendations				
Division: Planning and Finance				
Date: September 28, 2023	3			

PRESENTER: Dr. Lori Bruce, Provost

#### **PURPOSE & KEY POINTS:**

This tenure recommendation is being presented at the September 2023 Board meeting, as Dr. Michael Hoane, Dr. Anthony Skjellum and Dr. Zhanjiang (John) Liu were hired after the June 2023 Board meeting. Dr. Hoane was hired as Chair of the Department of Counseling and Psychology in the College of Education. Dr. Skjellum was hired as Professor in the Department of Computer Science in the College of Engineering. Dr. Liu was hired as Vice President of Research with tenure in the Department of Biology. All supporting documents are included.

Recommendation for tenure for each of these individuals is supported by their respective department faculty, college dean, and the provost.

February, 2023

#### MICHAEL R. HOANE, Ph.D.

#### PERSONAL INFORMATION

Home address:

Work address: Department of Psychological Sciences

Augusta University Augusta, GA 30912

Citizenship: United States of America

Google Scholar:

https://scholar.google.com/scholar?hl=en&as\_sdt=0%2C11&q=hoane+mr&btnG= Research Gate: http://www.researchgate.net/profile/Michael\_Hoane/ (viewable pdfs)

#### **CURRENT POSITION**

Full Professor with Tenure Departmental Chairperson Director, Restorative Neuroscience Laboratory Department of Psychological Sciences Augusta University

#### PREVIOUS FACULTY APPOINTMENTS

Augusta University: Department of Psychological Sciences (2018-pres)

Full Professor

Southern Illinois University: Department of Psychology (2004-2018)

Assistant, Associate, Full Professor

East Carolina University: Department of Psychology (1999-2004)

Visiting Assistant Professor, Assistant Professor

#### **EDUCATION**

Texas Christian University, Fort Worth, TX

Department of Psychology

Ph.D., in Experimental Psychology (Behavioral Neuroscience); May, 1996

Hoane 2

9.

Advisor: Dr. Timothy Barth

Dissertation: Establishing the window of opportunity for MgCl<sub>2</sub>: The effect

of onset of testing

M.S., in Experimental Psychology (Behavioral Neuroscience); December, 1994

Advisor: Dr. Timothy Barth

Thesis: The effects of three neuroprotective drugs on recovery of function in an electrolytic lesion model of neural trauma in the rat

Knox College, Galesburg, IL

B.A's. in Psychology and Biology; May, 1990

#### POST-DOCTORAL APPOINTMENTS

#### Northwestern University School of Medicine

**Post-doctoral Research Associate** (1998 – 1999)

CMIER, Neurobiology Program 2300 Children's Plaza #209 Chicago, IL

#### CytoTherapeutics Inc. (affiliate of Brown University)

**Post-doctoral Scientist** (1997 – 1998) Department of Behavioral Neuroscience 701 George Washington Highway Lincoln, RI

#### **Emory University School of Medicine**

**Post-doctoral Fellow** (1996 – 1997) Brain Research Laboratory Department of Neurology Atlanta, GA

#### APPOINTMENTS: ADMINISTRATIVE/PROFESSIONAL

Chair, Dept. of Psychological Sciences, Augusta Univ. (2018-pres)

Chair, Dept. of Psychology, SIU (2016-2018).

Undergraduate Program Director, Dept. of Psychology, SIU (2016-2017).

Executive Committee of the Neuroscience Research Center, Southern Illinois University (2012-2018).

- Director of Undergraduate Neuroscience, Southern Illinois University (2012-pres).
- Faculty Sponsor, SIU Neuroscience Undergraduate Student Organization

**Federal Appointment** to Veterans Health Administration Advisory Committee Scientific Merit Review Board for Brain Injury: TBI & Stroke (2012-2016).

#### CURRENT ADMINISTRATIVE DUTIES/ACCOMPLISHMENTS

#### Augusta University (2018-pres)

New Building Design, Build, and Move Committee (5 committees) (2018-2023)

Core Team member for evaluation/implementation of new course evaluations

AU Pandemic Evaluation Committee-Research Activities workgroup

Research workgroup campus reopening committee

Steering committee for TRIBA initiative

- Transdiscipinary Research Inflamm-aging and Brain Aging
- 25M\$ cluster hire initiative

Development of a BS in neuroscience

Faculty workload taskforce

#### (Department level)

Performed Academic Program Review (2023)

Changed the climate of the department from authoritarian to group-based leadership

Prepared and presented a proposal for a PsyD program to upper leadership

Provided leadership for a large diverse academic department

- Manage 15+ tenure, tenure track, and adjunct faculty
- 30+ M.S. students
- 350 undergraduate majors, 150+ minors
- Departmental staff

Oversight of MPCAC accreditation for M.S. in clinical/consuling tract

Oversight of M.S. in Experimental and Applied tracts

Launched a new B.S. in psychology pre-health concentration

Successfully guided the department to fully online instruction during the pandemic

Recruited 2 new tenure track and 1 lecturer during the pandemic

Curriculum, scheduling, P&T, and grievance arbitration

#### PAST ADMINISTRATIVE DUTIES/ACCOMPLISHMENTS (Department level) **Southern Illinois University**

Provided leadership for a large diverse academic department

- Managed 20+ tenure, tenure track, and adjunct faculty
- 100 graduate students in 4 different programs
- 420 undergraduate majors, 500+ minors
- 2 revenue generating institutes
- Departmental staff

Leadership of Brain and Cognitive Science, Clinical, Counseling and Applied Ph.D. programs

Primary fiscal officer for the department

- Manage \$1M training assignment budget and other accounts
- Staff personnel matters
- Recruited a revenue generating institute into the department
- Budget and productivity exercises and evaluations

Grievance arbitration

Curriculum: scheduling, assessment, review and enhancement

Recruitment and retention of faculty and students

Foster extramural research support

Alumi relations

Mentor, support, and evaluate promotion and tenure process

Annual reviews of staff and faculty

Progran development: neuroscience and accelerated Masters in Applied Psychology

#### PAST ADMINISTRATIVE DUTIES/ACCOMPLISHMENTS (College level)

Served on college of Liberal Arts Dean's Council

- Executive council to the Dean's office
- Program review and new program evaluation
- Responsible for college level awards

College level promotion and tenure committee (review 14-20 portfolios a year)

College and Department level student recruitment and retention efforts

#### PAST ADMINISTRATIVE DUTIES/ACCOMPLISHMENTS (University level)

#### **Faculty Senator**

- Department representative (elected) to a large senate that governs academic units on the Carbondale and Springfield campuses
- Approve curriculum change requests, provide shared governance between the faculty and administration
- Support faculty and student welfare

Neuroscience Research Center Executive Council

- Administration of neuroscience activities on the Carbondale and Springfield campuses
- Faculty recruitment and retention, academic program development, and extramural funding

#### Institutional Animal Care and Use Committee

- Provide administration, oversight, and enforcement of Federal, State and University laws governing the use of animal in research and teaching on campus
- Annual facility and Federal Accreditation inspections

#### Special Assignement, Vice Chancellor for Research

- Appointed to Chair a committee tasked with evaluation of the Laboratory Animal Program on campus and research climate
- Prepared white paper report detailing pro's and con's related to the Animal Program
- Used by Chancellor's office in evaluation of university resources and budget cutting

#### Special Assignement, Vice Chancellor of Academic Affairs

- Member of a special faculty judicial committee
- Tasked to investigate a serious allegation of scientific misconduct on campus

- Interviewed all parties associated with the allegation and provided a final assessment report to the VCAA

Pre-health Advisory Committee

- University wide committee tasked with administration of the pre-health majors on campus
- Conduct mock interviews and evaluations of students during the application process for professional health school admissions
- Curriculum development for the pre-health majors

#### **ACADEMIC PROGRAM REVIEWS**

Dept of Psychological Sciences, undergraduate program review. Interval (Spring 2023). Department of Psychology, undergraduate program. External Evaluator (Spring 2023).

#### COMMUNITY APPOINTMENTS: ADMINISTRATIVE/PROFESSIONAL

Herrin Youth Sports Board of Directors; elected member (2013-2018) The Science Center of Carbondale Board of Directors; elected member (2013-2015)

#### **AWARDS**

Awarded the 2014 CoLA Scholar Excellence Award (April 7, 2014)

Nominated for University Teaching Awards (2003 – 2004).

Hazel F. Stapleton Memorial Excellence in Teaching Award (2002 – 2003).

Presented by the Department of Psychology.

College Research Award. (2002).

Presented by the ECU College of Arts & Sciences.

Finalist for the 1996 Goldberger Behavioral Neuroscience Prize presented by the National Neurotrauma Society.

Animal Care Fellowship (1993 – 1996), Department of Psychology, Texas Christian University.

#### **RESEARCH INTERESTS**

- Translational neuroscience and development of novel therapies for brain injury and neurological disorders
- o The role of nutritional factors on neural plasticity following brain injury
- The role of environmental, rehabilitative and age factors on plasticity and recovery from brain injury
- o Behavioral assessment of CNS dysfunction and model test development
- o Characterization of the pathophysiological events associated with brain injury

#### **GRANTS**

#### Completed

**Faculty Senate Creative Active Grant. M.R. Hoane; PI**. Eat your Wheaties: Can riboflavin improve outcome following traumatic brain injury in the rat? (Summer 2002). Awarded \$13,000.

**UNC: Institute of Nutrition. M.R. Hoane; PI.** Dietary magnesium and traumatic brain injury. 7/02/02-6/30/03. Awarded \$4,700.

**ECU College of Arts & Sciences**. **M.R. Hoane; PI**. Evaluation of the potential efficacy of vitamin D<sub>3</sub> therapy in an experimentally induced Parkinson's disease model. (Spring 2003). Awarded \$35,750.

**National Institute of Neurological Disorders and Stroke**. 1 R15 NS045647-01. **M.R. Hoane; PI**. Vitamin B<sub>3</sub> and traumatic brain injury. 4/01/03-04/01/05. Awarded \$132,525.

National Institute of Neurological Disorders and Stroke. 3 R15 NS045647-01S1. M.R. Hoane; PI. Vitamin B<sub>3</sub> and traumatic brain injury. 10/01/03-10/01/05. Awarded \$30,724.

**ORDA, Southern Illinois University. M.R. Hoane; PI.** Development of embryonic stem cell treatment strategies for the traumatically injured brain. 06/01/05 - 05/31/06. \$24,704.

**National Institute of Neurological Disorders and Stroke**. R15 NS045647-03 **M.R. Hoane; PI**. Vitamin B<sub>3</sub> and traumatic brain injury. 03/01/06-02/29/09. Awarded \$217.500.

#### Cognosci Inc. M.R. Hoane; PI.

Initial preclinical efficacy testing of COG1410 in a rat model of TBI. 03/01/06-07/31/06. Awarded \$25,001.

#### State of Illinois. M.R. Hoane; Co-Investigator.

**Illinois Regenerative Medicine Institute.** "The Southern Illinois Regenerative Medicine Institute - An ABC Approach". Awarded \$1,100,000.

#### Cognosci Inc. M.R. Hoane; PI.

Preclinical screening of novel apoE-derived peptides in a rat model of traumatic brain injury. 12/01/06-05/01/09. Awarded \$203,000.

#### Cognosci Inc. M.R. Hoane; PI.

Preclinical screening of novel apoE-derived peptides in a rat model of traumatic brain injury. (10/31/08). Awarded \$3,000.

**National Institute of Neurological Disorders and Stroke**. 2R15 NS045647-04 **M.R. Hoane; PI**. Vitamin B<sub>3</sub> and traumatic brain injury. Awarded \$218,250.

#### Center for Integrative Research - Cognitive and Neural Science.

**M.R. Hoane; PI.** A pilot study: Evaluation of a preclinical model of motor enrichment in young and old Fischer 344 rats. Awarded \$2000.

**Department of Defense: TBI Concept Award. (A. Tan; PI) M.R. Hoane; Co-I.** Vagus nerve stimulation and TBI. 08/01/08-07/31/10. Awarded \$216,750.

**National Institute of Neurological Disorders and Stroke**. 2R15 NS045647-04 **M.R. Hoane; PI**. Vitamin B<sub>3</sub> and traumatic brain injury. 07/01/09-06/31/12. Awarded \$218,250.

#### NINDS and the NICHHD. 1RO1HD061944-01

(Gail Anderson; PI) M.R. Hoane; Co-PI. Multi-drug combinations to promote neurological recovery in traumatic brain injury. 08/01/09-07/31/15. Awarded subcontract \$1,594,033. Total awarded \$3,690,321.

#### **Center for Integrative Research – Cognitive and Neural Science.**

**M.R. Hoane; PI.** A novel cognitive therapy for the treatment of TBI in aged Fischer 344 rats. 08/01/10-08/31/15. Awarded \$37,000.

#### **Student Grants**

2006 REACH Award, SIU. Student.

COG1410 and TBI. Awarded \$1,500.

LaVonne A. Straub Annual Student Research Award. Awardee, M.R. Hoane; Supervisor.

Determining the duration of nicotinamide treatment post-traumatic brain injury. 10/11/06-5/01/07. Awarded \$1,000.

2007 REACH Award, SIU. Student.

Modeling PTSD following bilateral frontal contusion injury in the rat. Awarded \$1,500.

2008 REACH Award, SIU. Student.

McTBI: The effects of a fast food diet on outcome from TBI. Awarded \$1,500.

2011 REACH Award, SIU. Student.

Does PTSD worsen functional recovery after TBI? Awarded \$1,500.

#### **PUBLICATIONS**

#### **Bold = Undergraduate Co-author Bold = Graduate Co-author**

- 1. Saponjic, R.M., Hoane, M.R., Barbay, S., & Barth, T.M. (1995). Scopolamine facilitates recovery of function following unilateral electrolytic sensorimotor cortex lesions in the rat. Restorative Neurology and Neuroscience, 8, 205-212.
- 2. Hoane, M.R., Raad, C., & Barth, T.M. (1997). Non-competitive NMDA antagonists and anti-oxidant drugs reduce striatal atrophy and facilitate recovery of function following lesions of the rat cortex. Restorative Neurology and Neuroscience, 11, 71-82.
- 3. Hoane, M.R., Irish, S.L., Marks, B.B., & Barth, T.M. (1997). Pre-operative regimens of magnesium chloride facilitate recovery of sensorimotor function following unilateral electrolytic lesions of the rat somatic sensorimotor cortex. Brain Research Bulletin, 45, 45-51.
- 4. Janis, L.S., Hoane, M.R., Conde, D., Fulop, Z., & Stein, D.G. (1998). Acute ethanol administration reduces the cognitive deficits associated with traumatic brain injury in rats. Journal of Neurotrauma, 15, 105-115.
- 5. Lindner, M.D., Cain, C.K., Plone, M.A., Frydel, B.R., Blaney, T.J., Emerich, D.F., & Hoane, M.R. (1999). Partial nigrostriatal dopaminergic cell loss in middle-aged rats produces robust, enduring akinesia, rigidity, tremor and cognitive deficits despite exuberant compensatory neurological mechanisms. Behavioural Brain Research, 102, 1-16.
- Hoane, M.R., Gulwadi, A.G., Morrison, S., Hovanesian, G., Lindner, M.D., & Tao, W. (1999). Differential in vivo effects of neurturin and glial cell-line-derived neurotrophic factor. Experimental Neurology, 160, 235-243.
- 7. Hoane, M.R., Puri, K.D., Xu, L., Stabila, P., Zhao, H., Gulwadi, A.G., Phillips, H., Devaux, B., Lindner, M.D., & Tao, W. (2000). Mammalian cell-produced neurturin is more potent than purified e. coli-produced NTN. Experimental Neurology, 162, 189-193.
- 8. Hoane, M.R., Barbay, T.M., & Barth, T.M. (2000). Large cortical lesions produce enduring placing deficits in untreated rats and treatment with NMDA antagonists or anti-oxidants induce behavioral recovery. Brain Research Bulletin, 53, 175-186.
- 9. Hoane, M.R. & Barth, T.M. (2001). The behavioral and anatomical effects of MgCl<sub>2</sub> treatment in an electrolytic lesion model of cortical injury in the rat. Magnesium Research, 14, 51-63.
- 10. Hoane, M.R., & Barth, T.M. (2002). The window of opportunity for administration of magnesium therapy following focal brain injury is 24 hours but task dependent in the rat. Physiology & Behavior, 76, 271-280.
- 11. Gulwadi, A.G., Hoane, M.R., Saydoff, J.A., Frydel, B., & Lindner, M.D. (2002). No detectable analgesic effects in the formalin test even with one million bovine adrenal chromaffin cells. Pain, 99, 263-271.

- 12. Hoane, M.R., **Knotts, A.A.**, Akstulewicz, S., **Aquilano, M.**, & Means, L.W. (2003). The behavioral effects of magnesium therapy on recovery of function following bilateral cingulate cortex lesions in the rat. Brain Research Bulletin, 60, 105-114.
- 13. Hoane, M.R., **Akstulewicz, S.L**., & Toppen, J. (2003). Treatment with vitamin B<sub>3</sub> improves functional recovery and reduces GFAP expression following traumatic brain injury in rats. Journal of Neurotrauma, 20, 1189-1199.
- 14. Hoane, M.R., **Becerra, D., Shank, E.J., Tsatko, L**., Pak, E.S., & Murashov, A.K. (2004). Transplantation of neuronal and glial precursors dramatically improves sensorimotor function but not cognitive function in the traumatically injured brain. Journal of Neurotrauma, 21, 163-174.
- 15. Hoane, M.R., <u>Lasley, L.A.</u>, & Akstulewicz, S.L. (2004). Middle age increases tissue vulnerability and impairs sensorimotor and cognitive recovery following traumatic brain injury in the rat. Behavioural Brain Research, 153, 189-197.
- 16. Hoane, M.R. (2004). Magnesium therapy and recovery of function in experimental models of brain injury and neurodegenerative disease. Clinical Calcium, 14, 65-70.
- 17. Hoane, M.R. (2005). The effect of MgCl<sub>2</sub> on recovery of function following traumatic brain injury in the rat. Restorative Neurology and Neuroscience, 23, 67-77.
- 18. Hoane, M.R., **Wolyniak, J.G.**, & **Akstulewicz, S.L.** (2005). Administration of riboflavin improves behavioral outcome and reduces edema formation and GFAP expression following traumatic brain injury. Journal of Neurotrauma, 22, 1112-1122.
- <u>Kokiko, O.N.</u>, Murashov, A.K., & Hoane, M.R. (2006). Administration of raloxifene reduces sensorimotor and working memory deficits following traumatic brain injury. Behavioural Brain Research, 170, 233-240.
- 20. **Barbre**, **A.B**. & Hoane, M.R. (2006). Magnesium and riboflavin combination therapy following cortical contusion injury in the rat. Brain Research Bulletin, 69, 639-646.
- Hoane, M.R., Gilbert, D.R., Holland, M.A., & Pierce, J.L. (2006). Nicotinamide reduces acute cortical neuronal death and edema in the traumatically injured brain. Neuroscience Letters, 408, 35-39.
- Hoane, M.R., Tan, A., Pierce, J.L., Anderson, G.D., & Smith, D.C. (2006).
   Nicotinamide treatment reduces behavioral impairments and provides cortical protection following fluid percussion injury. Journal of Neurotrauma, 23, 1535-1548.
- 23. Hoane, M.R., Ellis, A., & Kaplan, S. (2006). Nicotinamide reduces blood-brain barrier breakdown and apoptosis following contusion injury in rats. Brain Research, 1125, 185-193.
- 24. **Becerra, D., Tsatko, L.**, Pak, E.S., Murashov, A.K., & Hoane, M.R. (2007). Transplantation of GABAergic neurons but not astrocytes induces recovery of sensorimotor function in the traumatically injured brain. Behavioural Brain Research, 179, 118-125.
- 25. Hoane, M.R., Pierce, J.L., Holland, M.A., Birky, N.D., Dang, T., Vitek, M.P., & McKenna, S.E. (2007). The Novel apolipoprotein E-based peptide COG1410 improves sensorimotor performance and reduces injury magnitude following cortical contusion injury. Journal of Neurotrauma, 24, 1108-1118.
- 26. Hoane, M.R. (2007). Assessment of cognitive function following magnesium therapy in the traumatically injured brain. Magnesium Research, 20, 229-236.

- 27. **Holland, M.A.**, Tan, A.A., Smith, D.C., & Hoane, M.R. (2008). Nicotinamide treatment provides acute neuroprotection and GFAP regulation following fluid percussion injury, Journal of Neurotrauma, 25, 140-152.
- 28. Hoane, M.R., Gilbert, D.R., Barbre, A.B., & Harrison, S.A. (2008). Magnesium dietary manipulation and recovery of function following controlled cortical damage in the rat. Magnesium Research, 21, 29-37.
- 29. Hoane, M.R., **Pierce, J.L., Holland, M.A.,** & Anderson, G.D., (2008). Nicotinamide induces behavioral recovery when administered up to four hours following cortical contusion injury in the rat. Neuroscience, 154, 861-868.
- 30. Hoane, M.R., **Pierce, J.L., <u>Kaufman, N.A.</u>**, & **Beare, J.E.**, (2008). Variation in chronic nicotinamide treatment after traumatic brain injury can alter components of functional recovery independent of histological damage. Oxidative Medicine and Cellular Longevity, 1, 46-53.
- 31. Hoane, M.R., <u>Kaufman, N.A.</u>, Vitek, M.P., & McKenna, S.E. (2009). COG1410 improves cognitive performance and reduces cortical neuronal loss in the traumatically injured brain. Journal of Neurotrauma, 26, 121-130.
- 32. Young, M.E., Clark, M.H., <u>Goffus, A.</u>, & Hoane, M.R. (2009). Mixed effects modeling of Morris water maze data: Advantages and cautionary notes. Learning and Motivation, 40, 160-177.
- 33. Tan, A.A., <u>Quigley, A.</u>, Smith, D.C., & Hoane, M.R. (2009). Strain differences in response to traumatic brain injury in Long Evans compared to Sprague-Dawley rats. Journal of Neurotrauma, 26, 539-548.
- 34. **Quigley, A.**, Tan, A.A., & Hoane, M.R. (2009). The effects of hypertonic saline and nicotinamide on behavioral and cognitive function following cortical contusion injury in the rat. Brain Research, 1304, 138-148.
- 35. <u>Goffus, A.M.</u>, Anderson, G.D.& Hoane, M.R. (2010). Sustained delivery of nicotinamide limits cortical injury improves functional recovery following traumatic brain injury. Oxidative Medicine and Cellular Longevity, 3, 145-152.
- 36. <u>Kaufman, N.A.</u>, Beare, J.E., Tan, A.A., Vitek, M.P., McKenna, S.E., & Hoane, M.R. (2010). COG1410, an apolipoprotein E-based peptide, improves cognitive performance and reduces cortical loss following moderate fluid percussion injury in the rat. Behavioral Brain Research, 214, 395-401.
- 37. **Kuypers, N.J.**, & Hoane, M.R. (2010). Pyridoxine (vitamin B6) administration improves behavioral and anatomical outcome following unilateral contusion injury in the rat. Journal of Neurotrauma, 27, 1275-1282.
- 38. Swan, A.A., Chandrashekar, R., Beare, J., Kaufman, N.A., & Hoane, M.R. (2011). Preclinical Efficacy testing in middle-aged rats: Nicotinamide, a novel neuroprotectant, losses functional efficacy following controlled cortical impact. Journal of Neurotrauma, 28, 431-440.
- 39. **Vonder Harr, C.**, Anderson, G.D., & Hoane, M.R. (2011). Continuous nicotinimide administration improves behavioral recovery and reduces lesion size following bilateral frontal controlled cortical impact injury. Behavioural Brain Research, 224, 311-317.

- Anderson, G.D., Beyer, R.P, Farin, F.M., Bammler, T.K., Kantor, E.D., <u>Swan, A.A.</u>,
   Hoane, M.R. (2011). The effects of progesterone dosing on gene expression following traumatic brain injury. Journal of Neurotrauma, 28, 1827-1843.
- 41. **Vonder Haar, C., Emery, M.A.**, & Hoane, M.R. (2012). Low dose folic acid administration confers no treatment effects, while high dose administration contributes to impairments following unilateral controlled cortical impact injury in the rat. Restorative Neurology & Neuroscience, 30, 291-302.
- 42. Martens, K.M., Vonder Haar, C., Hutsell, B., & Hoane, M.R. (2012). A simple discrimination task used as a novel method of testing decision-making behavior following traumatic brain injury in the rat. Journal of Neurotrauma, 29, 2505-2512.
- 43. **Peterson, T.C.**, Kantor, E.D., Anderson, G.D., & Hoane, M.R. (2012). A comparison of the effects of nicotinimide and progesterone on functional recovery of cognitive behavior following cortical contusion injury in the rat. Journal of Neurotrauma, 29, 2823-2830.
- 44. Martens, K.M., Vonder Haar, C., Hutsell, B.A., & Hoane, M.R. (2013). The dig task: A simple scent discrimination reveals deficits following frontal brain damage. Journal of Visualized Experiments, 71, 1-6. http://www.jove.com/video/50033.
- 45. Anderson, G.D., <u>Peterson, T.C.</u>, Farin, F.M., Bammler, T.K., Beyer, R.P., Kantor, E.D., & Hoane, M.R. (2013). The effect of nicotinimide on gene expression in a traumatic brain injury model. Frontiers in Neuroscience, 7, 1, 10.3389/fnins.2013.00021.
- 46. Pefuzzaro, S.T., Gallagher, J.T., Dunkerson, J., Fluharty, S., Mudd, D., Hoane, M.R., & Smith, J.S. (2013). The impact of enriched environment and transplantation of murine cortical embryonic stem cells on recovery from controlled cortical contusion injury. Restorative Neurology and Neuroscience, 31, 431-450.
- 47. **Vonder Harr, C., Peterson, T.C., Martens, K.M.,** & Hoane, M.R. (2013). The use of nicotinimide as a treatment for experimental traumatic brain injury and stroke: A review and evaluation. Clinical Pharmacology & Biopharmaceutics, S1: 005, http://dx.doi.org/10.4172/2167-065X.S1-005.
- 48. Anderson, G.D., <u>Peterson, T.C., Vonder Haar, C.</u>, Kantor, E.D., Farin, F.M., Bammler, T.K., MacDonald, J.W., & Hoane, M.R. (2013). Comparison of the effects of erythropoietin and anakinra on functional recovery and gene expression in a traumatic brain injury model, Frontiers in Pharmacology, 4,129, doi: 10.3389/fphar.2013.00129.
- 49. **Vonder Haar**, Anderson, G.D., **C., Elmore, B.E., Bunton, A.,** Kantor, E.D., Farin, F.M., Bammler, T.K., MacDonald, J.W., & Hoane, M.R. (2014). Comparison of the effect of minocycline and simvastatin on functional recovery and gene expression in a traumatic brain injury model, Journal of Neurotrauma, 15, 961-975.
- 50. <u>Vonder Haar, C., Smith, T.R.</u>, French E.J., <u>Martens, K.M</u>., Jacobs, E.A., & Hoane, M.R. (2014). Simple tone discriminations are disrupted following experimental frontal traumatic brain injury in rats, Brain Injury, 28, 235-243.
- 51. **Vonder Haar, C., Maass, W.,** Jacobs, E.A., & Hoane, M.R. (2014). Deficits in discrimination following experimental frontal brain injury are mediated by motivation and can be improved by nicotinamide administration, Journal of Neurotrauma, 15, 1711-1720.

- 52. **Peterson, T.C.**, Hoane, M.R., **McConomy, K.S.**, Farin, F.M., Bammler, T.K., MacDonald, J.W., Kantor, E.D., & Anderson, G.D. (2015). A combination therapy of nicotinimide and progesterone improves functional recovery following traumatic brain injury. Journal of Neurotrauma, 32, 765-779.
- 53. Anderson, G.D., <u>Peterson, T.C., Vonder Harr, C.</u>, Farin, F.M., Bammler, T.K., MacDonald, J.W., Kantor, E.D., & Hoane, M.R. (2015). Effect of traumatic brain injury, erythropoietin and anakinra on hepatic metabolizing enzymes and transporters in a rodent model of traumatic brain injury, American Association of Pharmaceutical Scientists Journal, 17, 1255-1267.
- 54. <u>Peterson, T.C.</u>, Maass, W., Anderson, G.D., & Hoane, M.R. (2015). A behavioral and histological comparison of fluid percussion injury and controlled cortical impact injury to the rat sensorimotor cortex. Behavioral Brain Research, 294, 254-263.
- 55. Margulies SS, Anderson GD, Atif F, Badaut J, Clark RS, Empey P, Guseva M, Hoane MR, Huh JW, Pauly JR, Raghupathi R, Scheff S, Stein D, Tang H & Hicks M. (2016). Combination therapies for traumatic brain injury: Restrospective considerations, Journal of Neurotrauma, 33, 101-112...
- 56. <u>Vonder Haar, C., Peterson, T.C., Martens, K.M.</u>, & Hoane, M.R. (2016). Vitamins and nutrients as primary treatments in experimental brain injury: Clinical implications for nutraceutical therapies. Brain Research, 1640, 114-29.
- 57. **Young, J.M.**, & Hoane, M.R., (2018) Magnesium administration after experimental traumatic brain injury improves decision-making skills, Brain Research Bulletin, 139, 182-189.
- 58. <u>Smith, A.C., Holden, R.C.</u>, Rasmussen, S.M., Hoane, M.R., & Hylin, M.J. (2019). Effects of nicotinamide on spatial memory and inflammation after juvenile traumatic brain injury. Behavioural Brain Research, 364, 123-132. PMID: 30771366
- 59. Young, M.E. & Hoane, M.R. (2021). Mixed effects modeling of Morris water maze data revisited: Bayesian censored regression. Learning and Behavior, 49(3), 307-320.
- 60. Packer, J.M., Boyer, N., & Hoane, M.R. An experimental analysis of tianeptine as a treatment for traumatic brain injury. Behavioral Brain Research, under review.
- 61. <u>Martens, M.</u>, Young, M.E., & Hoane, M.R. The Role of graded injury severity on cognitive deficits following frontal traumatic brain injury in the rat. Journal of Neurotrauma, under review.

#### INDUSTRY RESEARCH WHITEPAPER (PAID)

1. Hoane, M.R. (2023). Nicotine therapy for the treatment of neurodegenerative disease and benefical neuroplasticity. British American Tobacco Company.

#### **BOOK CHAPTERS**

1. Barth, T.M., Hoane, M.R., Barbay, S., & Saponjic, R.M. (1998). Effects of glutamate antagonists on recovery of behavioral functions after brain injury. In L.B. Goldstein (Ed.), <u>Restorative neurology: Advances in the pharmacotherapy of recovery after</u> stroke. (pp. 121-140) Futura: New York.

- 2. Saponjic, R.M., Hoane, M.R., & Barth, T.M. (1998). The effects of cholinergic antagonists on recovery of function following brain injury. In L.B. Goldstein (Ed.), Restorative neurology: Advances in the pharmacotherapy of recovery after stroke. (pp. 79-89) Futura: New York.
- 3. Hoane, M.R. (2011). The role of magnesium therapy in learning and memory. In R. Vink and M. Nechifor (Eds.), <u>Magnesium in the Central Nervous System</u>, (pp. 115-124) University of Adelaide Press; Aldelaide, AU.
- 4. Hoane, M.R. (2012). The role of magnesium in the pathophysiology and treatment of stroke and other neurological injuries. In Y. Li and J. Zhang (Eds.), <u>Stroke Metals</u>, (pp. 431-444) Springer; New York.
- 5. Kolowski, D.A., & Hoane, M.R. (2016). Neuroprotection and neuroplasticity following traumatic brain injury. Brain Injury Association of America's, Essential Brain Injury Guide.

#### PUBLISHED JOURNAL ARTICLE COVERS

1. Flourescent immunohistochemistry of GFAP and FJ in the damaged rodent brain. **Holland, M.A.**, Tan, A.A., Smith, D.C., & Hoane, M.R. (2008). Nicotinamide treatment provides acute neuroprotection and GFAP regulation following fluid percussion injury, Journal of Neurotrauma, 25, 140-152.

#### PUBLISHED ABSTRACTS FROM CONFERENCES

**Bold = Undergraduate Co-author Bold = Graduate Co-author** 

- 1. Hoane, M.R., **Tramonte, J.J., Wright, A.J.**, <u>Raad, C.</u>, & Barth, T.M. (1996). Magnesium chloride and PBN can induce recovery of function when none is expected in rats with large lesions of the sensorimotor cortex. Journal of Neurotrauma, 13.
- 2. Hoane, M.R., Gulwadi, A.G., Blaney, T.J., Handy, J.T., Devaux, B., Lindner, M.D., Tao, W., & Phillips, H.S. (1998). Evaluation of the biological activity and potential adverse effects of chronic intraventricular infusions of neurturin in the rat. Journal of Neurotrauma, 15.
- 3. Hoane, M.R., **Knott, A.A.**, & Means, L.W. (2000). The effects of magnesium chloride on recovery of function following bilateral cingulate cortex lesions in the rat. Journal of Neurotrauma, 17, 968.
- 4. Hoane, M.R. & Akstulewicz, S.L. (2002). The effects of vitamin B<sub>3</sub> (nicotinamide) on behavioral outcome following bilateral frontal cortex contusion injury in the rat. Journal of Neurotrauma, 19, 1328.
- 5. <u>Lasley, L.A.</u>, Akstulewicz, S.L., & Hoane, M.R. (2002). The effect of age on sensorimotor and cognitive recovery following bilateral frontal cortex contusion injury in the rat. Journal of Neurotrauma, 19, 1328.

- L.W. Means & M.R. Hoane. (2003). Rats with dorsal, but not complete, hippocampal lesions show temporally graded retrograde amnesia on a plus maze spatial task. Abstracts of the Behavioral Neuroscience Society, 12, 31.
- 7. **Smith, A.B.**, & Hoane, M.R. (2003). Magnesium and vitamin B<sub>2</sub> combination therapy following cortical contusion injury in the rats. Journal of Neurotrauma, 20, 1105.
- 8. Wolyniak, J.G., Akstulewicz, S.L., & Hoane, M.R. (2003). Administration of riboflavin improves behavioral outcome and reduces edema formation and GFAP expression following traumatic brain injury. Journal of Neurotrauma, 20, 1083.
- 9. **Becerra, D., Shank, E.J., Tatko, L.M.**, Pak, E.S., Murashov, A.K., & Hoane, M.R. (2003). Transplantation of neuronal and glial precursors dramatically improves sensorimotor function but not cognitive function in the traumatically injured brain. Journal of Neurotrauma, 20, 1055.
- 10. **Ellis, A**. & Hoane, M.R. (2004). The effects of vitamin B<sub>3</sub> on apoptosis following cortical contusion injury in the rat. Journal of Neurotrauma, 21, 1334.
- 11. **Gilbert, D.R**. & Hoane, M.R. (2004). Effects of vitamin B<sub>3</sub> on edema formation following cortical contusion injury in the rat. Journal of Neurotrauma, 21, 1316.
- 12. Hoane, M.R., & **Kaplan, S.** (2004). Administration of vitamin B<sub>3</sub> reduces blood-brain barrier breakdown in the traumatically injured brain. Journal of Neurotrauma, 21, 1328.
- 13. <u>Kokiko, O.N</u>., Akstulewicz, S.L., Murashov, A.K., Hoane, M.R. (2004). Administration of raloxifene reduces sensorimotor and working memory deficits following traumatic brain injury. Journal of Neurotrauma, 21, 1331.
- Becerra, G.D., Strickland, D., Tatko, L.M., Pak, E.S., Murashov, A.K. & Hoane, M.R. (2004). Transplantation of GABAergic neurons but not astrocytes induces recovery of sensorimotor function in the traumatically injured brain. Journal of Neurotrauma, 21, 1327.
- Hoane, M.R., Modglin, A., <u>Hutsell, B., Watkins, C.</u>, Pierce, J.L., Anderson, G.D., & Smith, D.C. (2005). The effects of nicotinamide treatment following fluid percussion injury in the rat. Journal of Neurotrauma, 22, 1235.
- 16. **Pierce, J.L., Holland, M.A.**, Anderson, G.D., & Hoane, M.R. (2006). Nicotinamide treatment induces recovery when administered up to 4 hours post-tbi in the rat. Journal of Neurotrauma, 23, 989.
- 17. Tan, A., <u>Duke, A.</u>, Hoane, M.R., & Smith, D.C. (2006). Differential behavioral outcomes and durations of unconsciousness in long evans vs. Sprague-dawley rats following identical fluid percussion brain injury. Journal of Neurotrauma, 23, 1032.
- 18. **Holland, M.A.**, Tan, A., Smith, D.C., & Hoane, M.R. (2006). Nicotinamide treatment provides acute neuroprotection and GFAP regulation in the brain following fluid percussion injury. Journal of Neurotrauma, 23, 1014.
- 19. **Pierce, J.L. Yearwood, J.**, Al-Talla, Z., Tolley, L., & Hoane, M.R. (2007). Examination of the window of opportunity for chronic low-dose administration of nicotinamide following TBI in the rat. Journal of Neurotrauma, 24, 1266.
- 20. <u>Goffus, A.</u>, & Hoane, M.R. (2007). Chronic administration of nicotinamide dramatically improves and facilitates sensorimotor recovery in the traumatically injured brain. Journal of Neurotrauma, 24, 1265.

- 21. <u>Swan, A.</u>, & Hoane, M.R. (2007). Preclinical efficacy testing in middle aged rats: Nicotinamide, a novel neuroprotectant, worsens functional outcome following controlled cortical impact. Journal of Neurotrauma, 24, 1238.
- 22. **Quigley, A.**, & Hoane, M.R. (2009). The effects of hypertonic saline and nicotinamide on behavioral and cognitive function following cortical contusion injury. Journal of Neurotrauma, 25, 914.
- 23. <u>Kaufman, N.</u>, Beare, J., Tan, A., McKenna, S., Vitek, M., & Hoane, M.R. (2009). COG1410, an apolipoprotein E-based peptide, improves cognitive performance and reduces cortical loss following moderate fluid percussion injury in the rat. Journal of Neurotrauma, 25, 909.
- 24. **Kuypers, N**. & Hoane, M.R. (2009). Pyridoxine administration improves behavioral and anatomical outcome following unilateral CCI in rats. Journal of Neurotrauma, 25, 889.
- 25. <u>Swan, A.</u>, & Hoane, M.R. (2009). Age influences the efficacy of nicotinamide, a novel neuroprotectant, in the treatment of traumatic brain injury following controlled cortical impact. Journal of Neurotrauma, 25, 910.

#### INVITED PRESENTATIONS

- 1. The effects of magnesium treatment following cortical injury on recovery of function in the rat. Presented at the 2002 **Gordon Research Conference**: Magnesium in Biochemical Processes and Medicine, Ventura CA., February 3-8.
- Vita-nutrient therapies for the treatment of brain injuries and diseases. ECU Brody School of Medicine, Physiology Department Seminar, Greenville, NC, November 21, 2002.
- 3. The effects of dietary magnesium on traumatic brain injury. Kaplan, S., & Hoane, M.R. **Undergraduate Research at the Capital Day**, Raleigh, NC, April 2003.
- Fixing the damaged brain: Vita-nutrient and stem cell therapies.
   ECU Department of Biology Seminar Series, Greenville, NC, September 25, 2003.
- 5. Transplantation of neuronal and glial precursors dramatically improves sensorimotor function but not cognitive function in the traumatically injured brain. Becerra, D., Shank, E.J., Tatko, L.M., Pak, E.S., Murashov, A.K., & Hoane, M.R. Selected as a finalist for the Student Oral Competition at The National Neurotrauma Symposium, 2003, Biloxi, MS.
- 6. Fixing the damaged brain: Vita-nutrient and stem cell therapies. **East Carolina Neuroscience Symposium**, Greenville, NC, October 25, 2003.
- 7. Vita-nutrient therapies and brain injury. **Neuroscience Symposium Series**, Greenville, NC, May 8, 2005.
- 8. The development of vitamin B3 as a treatment for TBI: Contributions of undergraduate neuroscience majors. **Psi Chi Colloquium, Department of Psychology**, Mount Union College, OH, October 21,2005
- 9. The preclinical development of nicotinamide for the treatment of the traumatically injured brain. **Neurology Research Seminar, Duke University School of Medicine**, Durham, NC, November 29, 2005.

- Recovery of function following traumatic brain injury: Preclinical assessment of nicotinamide. Behavioral Neuroscience Lecture Series, Texas Christian University, Fort Worth, TX, September 17<sup>th</sup>, 2007.
- The preclinical evaluation of a novel neuroprotectant in the traumatically injured brain. Cognitive and Behavioral Sciences Lecture Series, Illinois State University, Normal, IL, September 28<sup>th</sup>, 2007.
- 12. The Translational Neuroscience of Nicotinamide: Behavior to Genomics. **SCoBirc Seminar Series**, University of Kentucky, KY, February 2009.
- 13. Translational neuroscience of nicotinamide for the treatment of traumatic brain injuries. **SIU-SOM Dept. of Physiology Seminar Series**, SIU-C, IL, September 2009.
- 14. The translational neuroscience of traumatic brain injury: The role of the undergraduate researcher. **Neuroscience Symposium Series**, Baldwin Wallace College, January, 2011.
- 15. The war on terror: Traumatic brain injuries and the laboratory rat. **83<sup>rd</sup> Annual Midwestern Psychological Association Meeting**, Chicago, IL, May. 2011.
- 16. Invited Symposium: Brain Plasticity and Behavior. The effects of a novel cognitive rehabilitation program on functional outcome following TBI: A model for neuroplasticity. 84<sup>rd</sup> Annual Midwestern Psychological Association Meeting, Chicago, IL, May. 2012.
- 17. Traumatic Brain Injury and Nicotinamide Pharmacotherapy. **Field Neuroscience Institute Neurosurgical Grand Rounds,** Saginaw, MI, May 11<sup>th</sup>, 2012.
- 18. The Role of Mg<sup>2+</sup> in CNS dysfunction and cognitive performance. **13<sup>th</sup> International Magnesium Symposium**, Merida, Mexico, October 19<sup>th</sup>, 2012.
- Translational Neuroscience: TBI, Neuroprotection and Recovery of Function,
   Neuroscience Symposium Series, East Carolina University, Greenville, NC, January 28<sup>th</sup>, 2013.
- Translationa Neuroscience in a Psychology Department: Brain Injury, Neuroprotection, and Recovery of Function. Neuroscience Symposium Series, University of Texas-Arlington, February 25<sup>th</sup>, 2013.
- Translational Neuroscience: TBI, Neuroprotection and Recovery of Function, Neuroscience Symposium Series, Central Michigan University School of Medicine, Mt. Pleasant, MI, June 28<sup>th</sup>, 2013.
- 22. Pharmacological Optimization of Multi-drug therapy in TBI, **2013 National Neurotrauma Symposium**, Nashville, TN Aug 6<sup>th</sup>, 2013.
- 23. Experimental Analysis of Behavior and Animal Models of Traumatic Brain Injury. Association for Behavioral Analysis Conference. Panel Chair/Disscusant. Chicago, IL, May 23, 2014.
- 24. Functional Assessment of the Rodent Frontal Cortex Following TBI. Executive Function After Experimental and Clinical TBI session, 2015 **National Neurotrauma Symposium**, June, 2015, Sante Fe, NM.
- 25. Traumatic Brain Injury and the Undergraduate Researcher, 2018, **Illinois Junior Science and Humanities Symposium**, Carbonale, IL.
- 26. TCU Department of Psychology 60<sup>th</sup> Anniversary Talk, 09/07/2019, **TCU Dept of Psychology**, Fort Worth, TX.

27. Traumatic Brain Injuries, 12/05/2022, **School of Neuroscience, Virginia Tech University**, Blacksburg, VA.

#### **CONFERENCE PRESENTATIONS**

**Bold** = Undergraduate Co-author **Bold** = Graduate Co-author

- 1. Saponjic, R.M., Hoane, M.R., Barbay, H.S., & Barth, T.M. The effects of scopolamine on recovery of function following cortical injury. Society for Neuroscience, 1993, Washington, D.C.
- 2. Hoane, M.R. The effects of scopolamine on recovery of function following caudal-forelimb lesions in the rat. Psi Chi Conference, 1994, Fort Worth, TX.
- 3. Saponjic, R.M., Hoane, M.R., Barbay, S., & Barth, T.M. Effects of scopolamine and MK-801 on recovery of function following sensorimotor cortex lesions in the rat. Society for Neuroscience, 1994, Miami, FL.
- 4. Hoane, M.R., & Barth, T.M. Noncompetitive NMDA antagonists and antioxidant drugs facilitate behavioral recovery following electrolytic lesions of the rat cortex. Society for Neuroscience, 1994, Miami, FL.
- 5. Hoane, M.R. The effects of magnesium chloride on recovery of function in the rat. Psi Chi Conference, 1995, Fort Worth, TX.
- 6. Saponjic, R.M., Hoane, M.R., Irish, S.L., & Barbay, H.S. The effect of MK-801 and scopolamine on behavior and cortical neuronal survival following unilateral lesions of the sensorimotor cortex of the rat. Society for Neuroscience, 1995, San Diego, CA.
- 7. Hoane, M.R., <u>Raad, C.</u>, & Barth, T.M. Large lesions of the sensorimotor cortex produce "permanent" impairments in untreated rats and transient impairments in rats treated with MK-801, MgCl<sub>2</sub>, or PBN. Society for Neuroscience, 1995, San Diego, CA
- 8. Hoane, M.R., & Barth, T.M. Does the onset of behavioral testing affect the efficacy of magnesium chloride to promote recovery following cortical lesions in the rat. Society for Neuroscience, 1996, Washington, D.C.
- 9. <u>Hart, C.L.</u>, Hoane, M.R., & Barth, T.M. Recovery from locomotor placing deficits following unilateral cortical lesions in the rat: A floor effect. Society for Neuroscience, 1996, Washington, D.C.
- 10. Hoane, M.R., **Tramonte, J.J., Wright, A.J.**, <u>Raad, C.</u>, & Barth, T.M. Magnesium chloride and PBN can induce recovery of function when none is expected in rats with large lesions of the sensorimotor cortex. Neurotrauma Society Symposium, 1996, Washington, D.C.
- 11. Hoane, M.R., Plone, M.A., Cain, C.K., Liu, H., Blaney, T.J., Frydel, B., Emerich, D.F., & Lindner, M.D. Akinesia/Bradykinesia, rigidity, tremor and cognitive deficits in young and middle-aged rats with partial bilateral dopamine depletions of the ventrolateral striatum. Society for Neuroscience, 1997, New Orleans, LA.
- 12. Saydoff, J.A., Hoane, M.R., Blaney, T.J., & Hu, Z-Y. Conantokin G protects striatal gabaergic and cholinergic neurons in a model of Huntington's disease. Society for Neuroscience, 1997, New Orleans, LA.

- 13. Puri, K.D., Gulwadi, A.G., Stabila, P., Ferland, P., Ahmed, A., Xu, L., Zhao, H., Bruhn, S., Frydel, B., Devaux, B., Hoane, M.R., Lindner, M.D., Phillips, H., & Tao, W. Neuroprotection by recombinant neurturin (NTN) delivered by encapsulated genetically engineered fibroblast cell line. Society for Neuroscience, 1998, Los Angeles, CA.
- 14. Hoane, M.R., Gulwadi, A.G., Blaney, T.J., Handy, J.T., Devaux, B., Lindner, M.D., Tao, W., & Phillips, H.S. Evaluation of the biological activity and potential adverse effects of chronic intraventricular infusions of neurturin in the rat. Neurotrauma Society Symposium, 1998, Los Angeles, CA.
- 15. Hoane, M.R., **Knott, A.A.**, & Means, L.W. The effects of magnesium chloride on recovery of function following bilateral cingulate cortex lesions in the rat. Neurotrauma Society Symposium, 2000, New Orleans, LA.
- 16. **Watson, N.P.**, Means, L.W., **Aguilano, M.A.**, Johnson, S.C., & Hoane, M.R. Hippocampal lesions impair positive patterning go no-go performance when stimuli are presented successively. Society for Neuroscience, 2000, New Orleans, LA.
- 17. **Knotts, A.A.**, Akstulewicz, S., **Acquilano, M.**, Means, L.W., & Hoane, M.R. The behavioral effects of magnesium therapy on recovery of function following bilateral medial prefrontal cortex lesions in the rat. ECU Neuroscience Symposium, 2000, Greenville, NC.
- 18. Hoane, M.R., <u>Wickham, S.R., Lasley, L.</u>, <u>Lucas, K., Wolyniak, J.</u>, & Akstulewicz, S.L. The evaluation of novel therapies for the treatment of traumatic brain injury using the cortical contusion injury model in rats. ECU Neuroscience Symposium, 2001, Greenville, NC.
- 19. Means, L.W., Akstulewicz, S.L., **Jordan, A.L.**, & Hoane, M.R. Preoperative overtraining on a spatial task does not appear to improve retention in rats with hippocampal lesions. ECU Neuroscience Symposium, 2001, Greenville, NC.
- 20. Hoane, M.R., Smith, A.B., Murphree, M.A., Wolyniak, J.G., & Akstulewicz, S.L. The effects of vitamin B3 administration on behavioral outcome and GFAP expression following bilateral frontal cortex contusion injuries in the rat. ECU Neuroscience Symposium, 2002, Greenville, NC.
- 21. <u>Lasley, L.A.</u>, Akstulewicz, S.L., & Hoane, M.R. The effect of age on sensorimotor and cognitive recovery following bilateral frontal cortex contusion injury in the rat. ECU Neuroscience Symposium, 2002, Greenville, NC.
- 22. Means, L.W., Akstulewicz, S.L., **Walker, D.W.**, & Hoane, M.R. Preoperative overtraining does not reduce postoperative retention deficits on a spatial task in rats sustaining large hippocampal lesions. Society for Neuroscience, 2002, Orlando, FL.
- 23. Hoane, M.R. & Akstulewicz, S.L. The effects of vitamin B<sub>3</sub> (nicotinamide) on behavioral outcome following bilateral frontal cortex contusion injury in the rat. NINTS, 2002, Tampa, FL.
- 24. <u>Lasley, L.A.</u>, Akstulewicz, S.L., & Hoane, M.R. The effect of age on sensorimotor and cognitive recovery following bilateral frontal cortex contusion injury in the rat. NINTS, 2002, Tampa, FL.
- 25. **Smith, A.B.**, Akstulewicz, S.L., & Hoane, M.R. The effects of a combination therapy of magnesium and riboflavin on traumatic brain injury. First Annual ECU Undergraduate Research Symposium, 2003, Greenville, NC.

- 26. **Gilbert, D.**, Akstulewicz, S.L., & Hoane, M.R. The effects of 2-PMPA, a glutamate release inhibitor, on behavioral outcome following traumatic brain injury. First Annual ECU Undergraduate Research Symposium, 2003, Greenville, NC.
- Wolyniak, J.G., Akstulewicz, S.L., & Hoane, M.R. Administration of riboflavin improves behavioral outcome and reduces edema formation and GFAP expression following traumatic brain injury. First Annual ECU Undergraduate Research Symposium, 2003, Greenville, NC.
- 28. **Kaplan, S.**, Akstulewicz, S.L., & Hoane, M.R. The effects of dietary magnesium on traumatic brain injury. First Annual ECU Undergraduate Research Symposium, 2003, Greenville, NC.
- 29. **Becerra, D., Shank, E.J., Tatko, L.M.**, Pak, E.S., Murashov, A.K., & Hoane, M.R. The effects of murine embryonic stem cell transplantation in a model of traumatic brain injury in the rat. First Annual ECU Undergraduate Research Symposium, 2003, Greenville, NC.
- 30. Tatko, L.M., Becerra, D., Pak, E.S., Shank, E.J., Smith, M., Hoane, M.R., & Murashov, A.K. Embryonic stem cells are able to differentiate and integrate into host tissue when injected into the traumatically injured brain. ECU Neuroscience Symposium, 2003, Greenville, NC.
- 31. **Green, R.S.**, **Tatko, L.M.**, Akstulewicz, S.A., Pak, E.S., Murashov, A.K., & Hoane, M.R. Transplantation of neuronal and glial precursors mediate behavioral recovery in rat model of huntington's disease. ECU Neuroscience Symposium, 2003, Greenville, NC.
- 32. Watkins, C., Ward, R., Henry, B., Jacobs, E. A., Smith, D.C., & Hoane, M.R. The effects of lesioning the orbital prefrontal cortex on sensitivity to temporally extended consequences in rats. Poster presented at the annual meeting of the Association for Behavior Analysis, 2005, Chicago, IL.
- 33. Hoane, M.R. Embryonic stem cells differentiated into GABAergic neurons improve sensorimotor function after transplantation into the traumatically injured brain, Midwest Psychological Association, 2005, Chicago, IL.
- 34. Bell, T.P., Smith, D.C., Jacobs, E.A., Hoane, M.R., & Jensen, R.A. Effects of vagus nerve stimulation on anxiety in rats. Society for Neuroscience, 2005, Washington, DC.
- 35. **Holland, M.A.**, & Hoane, M.R. Acute neuroprotective effects of nicotinamide treatment in the traumatically injured brain. SIU Undergraduate Research Forum, 2006, Carbondale, IL.
- 36. **Pierce, J.L.**, & Hoane, M.R. The window of opportunity for nicotinamide treatment following cortical contusion injury in the rat. SIU Undergraduate Research Forum, 2006, Carbondale, IL.
- 37. Hoane, M.R. Nicotinamide reduces behavioral impairments and provides cortical protections following fluid percussion injury in the rat. Midwest Psychological Association, 2006, Chicago, IL.
- 38. **Holland, M.A.**, & Hoane, M.R. Acute neuroprotection in the traumatically injured brain by nicotinamide treatment, 2006, SIU Neuroscience retreat, Shelbyville, IL.

- Hoane, M.R. Restorative Neuroscience Lab: Stem cells, SERMS and vita-nutrients for the treatment of brain injuries and diseases, 2006, SIU Neuroscience retreat, Shelbyville, IL.
- Pierce, J.L., Holland, M.A., Anderson, G.D., & Hoane, M.R. Nicotinamide treatment induces recovery when administered up to 4 hours post-tbi in the rat. Invited Student Oral Presentation, National Neurotrauma Symposium, 2006, St. Louis, MO.
- 41. **Pierce, J.L.**, & Hoane, M.R. The preclinical efficacy testing of COG1410 improves sensorimotor performance and reduces injury magnitude following cortical contusion injury, 2007, St. Louis Area Undergraduate Research Symposium, St. Louis, MO.
- 42. **Pierce, J.L.**, & Hoane, M.R. The novel apolipoprotein E-based peptide COG1410 in a rat model of traumatic brain injury, 2007, SIU Undergraduate Research Forum, Carbondale, IL.
- 43. Hoane, M.R. Nicotinamide and Traumatic Brain Injury. 2007, Illinoisy Data Conference, Normal, IL.
- 44. <u>Goffus, A.M.</u>, & Hoane, M.R. Chronic administration of nicotinamide dramatically improves and facilitates sensorimotor recovery in the traumatically injured brain. 2007, Illinoisy Data Conference, Normal, IL.
- 45. **Kuypers, N.** & Hoane, M.R. Investigation into the effectiveness of pyridoxine (vitamin B6) administration on behavioral and anatomical outcome following unilateral CCI, 2008, SIU Undergraduate Research Forum, Carbondale, IL.
- 46. **Birky, N.** & Hoane, M.R. Modeling PTSD in an animal model of TBI, 2008, SIU Undergraduate Research Forum, Carbondale, IL.
- 47. Hoane, M.R. The utilization of embryonic stem cell transplants to improve recovery of function in the traumatically injured brain, 2008, Illinoisy Data Conference, Carbondale, IL.
- 48. **Quigley, A.**, Tan, A.A., & Hoane, M.R. The effects of hypertonic saline and nicotinamide on behavioral and cognitive function following cortical contusion injury, 2008, Illinoisy Data Conference, Carbondale, IL.
- 49. Young, M.E., Clark, M.H., <u>Goffus, A.</u>, & Hoane, M.R. Mixed effects modeling of Morris water maze learning, 2008, Comparative Cognition and Learning, Chicago, IL.
- 50. <u>Carlson, J.M.</u>, Hoane, M.R., & Reinke, K. Sublimal fearful faces enhances contralateral occipital activity for visual targets within the spotlight of attention, 2008, Society for Neuroscience Annual Meeting. Washington, DC.
- 51. **Peruzzaro, S.T., Ward, P.R., Wood, R.K.**, Hoane, M.R., & Smith, J.S. The impact of enriched environment and transplantation of neuronal and glial precursors on recovery from controlled cortical contusion injury, November 2008, Faculty for Undergraduate Neuroscience Meeting, Washington, DC.
- 52. **Heck, S., &** Hoane, M.R. McTBI: Does a fast food diet worsen behavioral outcome following traumatic brain injury?, April 2009, 2009 REACH Undergraduate Research Forum, Carbondale, IL.
- 53. **Heck**, **S.**, & Hoane, M.R. McTBI: Does a fast food diet worsen behavioral outcome following traumatic brain injury?, April 2009, StLaurs 2009 Undergraduate Research Conference, St. Louis, MO.

- 54. <u>Swan, A.</u>, & Hoane, M.R., Aging and the Preclinical Efficacy of Nicotinamide in the Treatment of Traumatic Brain Injury. 2009, Illinoisy Data Conference, Edwardsville, IL.
- 55. Hoane, M.R. McTBI: A fast food diet worsens behavioral outcome following traumatic brain injury. 2009, Illinoisy Data Conference, Edwardsville, IL.
- 56. **Swan, A.**, & Hoane, M.R., Aging and the Preclinical Efficacy of Nicotinamide in the Treatment of Traumatic Brain Injury. 2009, Society for Neuroscience, Chicago, IL.
- 57. Hoane, M.R., <u>Hutsell, B.</u>, Birky, N., & Kaufman, N. Assessment of social aggression and PTSD following frontal cortical contusions in the rat. 2010, National Neurotrauma Symposium, Las Vegas, NV
- 58. Anderson, G.D., <u>Swan, A.</u>, Beyer, R.P., Farin, F.M., Bammler, T.K., Kantor, E.D., & Hoane, M.R. Effect of multiple dose progesterone treatment on gene expression in traumatic brain injury (TBI). 2010, National Neurotrauma Symposium, Las Vegas, NV
- 59. Martens, K.M., Vonder Haar, C., Hutsell, B., Swan, A., & Hoane, M.R. The evaluation of simple odor discrimination task as a novel method of testing cognitive outcome in rodent models of TBI. 2010, National Neurotrauma Symposium, Las Vegas, NV
- 60. **Vonder Haar, C.,** Anderson, G.D., & Hoane, M.R. The preclinical efficacy of nicotinamide: The use of continuous infusion to obtain a clinically relevant steady-state after TBI. 2010, National Neurotrauma Symposium, Las Vegas, NV
- 61. <u>Swan, A.A., Chandrashekar, Vonder Haar, C.,</u> & Hoane, M.R. The longitudinal assessment of nicotinamide, a novel neuroprotectant, on functional recovery following TBI. 2010, National Neurotrauma Symposium, Las Vegas, NV
- 62. Hoane, M.R. The evaluation of post traumatic stress disorder (PTSD) following traumatic brain injury in the rat. 2010, 5<sup>Th</sup> Biennial Southern Illinois Region Neuroscience Retreat, Collinsville, IL.
- 63. <u>Swan, A.A.</u>, & Hoane, M.R. Cognitive training in a middle-aged model of traumatic brain injury. 2010, 5<sup>Th</sup> Biennial Southern Illinois Region Neuroscience Retreat, Collinsville, IL.
- 64. **Vonder Haar, C.**, & Hoane, M.R. The effect of continuous nicotinimide administration on recovery from traumatic brain injury in rats. 2010, 5<sup>Th</sup> Biennial Southern Illinois Region Neuroscience Retreat, Collinsville, IL.
- 65. **Swan, A.A.**, & Hoane, M.R. Cognitive training and functional recovery in middle-aged animals following traumatic brain injury. 2010, Society for Neuroscience Meeting, San Diego, CA.
- 66. **Vonder Haar, C.**, & Hoane, M.R. Perseverance as a measure of search strategy in the Morris water maze following traumatic brain injury. 2010, Society for Neuroscience Meeting, San Diego, CA.
- 67. Clayton, E., & Hoane, M.R. The effects of a pre-treatment regimen of nicotinimide on functional recovery following TBI in the rat. 2011 REACH Undergraduate Research Forum, Carbondale, IL.
- 68. **Emery, M.**, & Hoane, M.R. The effects of folic acid on recovery of function following TBI in the rat. 2011 REACH Undergraduate Research Forum, Carbondale, IL.

- 69. **Peterson, T., Ward, J., Logue, M.,** Anderson, G.A., & Hoane, M.R. An evaluation of the neuroprotective effects of progesterone and nicotinamide on functional recovery following cortical contusion injury in the rat. 2011 National Neurotrauma Symposium, Ft. Lauderdale, FL.
- 70. <u>Bunton, A.M.</u>, Clayton, E.R., & Hoane, M.R. The functional recovery effects of nicotinimide treatment prior to traumatic brain injury. 2011 National Neurotrauma Symposium, Ft. Lauderdale, FL.
- 71. **Vonder Haar, C.**, **Emery, M.**, & Hoane, M.R. Chronic folic acid administration does not improve recovery of function in either a low or a high dose following unilateral controlled cortical impact injury. 2011 National Neurotrauma Symposium, Ft. Lauderdale, FL.
- 72. Martens, K.M., Vonder Haar, C., & Hoane, M.R. Additional options for behavioral testing in rodent models of TBI: A simple discrimination task used as a novel method of testing decision-making behavior. 2011 National Neurotrauma Symposium, Ft. Lauderdale, FL.
- 73. <u>Swan, A.A.</u>, & Hoane, M.R. Never too late to learn: Cognitive training improves functional recovery of cognitive behaviors following traumatic brain injury in the aged rats. 2011 National Neurotrauma Symposium, Ft. Lauderdale, FL.
- 74. Anderson, G.D., Beyer, R.P., Farin, F.M., Bammler, T.K., Kantor, E.D., & Hoane, M.R. Gene expression in brain and liver after nicotinimide treatment following traumatic brain injury (TBI). 2011 National Neurotrauma Symposium, Ft. Lauderdale, FL.
- 75. <u>Vonder Haar, C.</u>, Emery, M., & Hoane, M.R. Low dose folic acid administration does not contribute to recovery, while high dose administration causes larger deficits after TBI. 2011, Illinoisy Data Conference, Carbondale, IL.
- 76. <u>Martens, K.M.</u>, & Hoane, M.R. Additional options for behavioral testing in rodent models of TBI: A simple discrimination task used as a novel method of testing decision-making behavior. 2011, Illinoisy Data Conference, Carbondale, IL.
- 77. **Bunton, A.M.**, **Clayton, E.R.**, & Hoane, M.R. The functional recovery effects of nicotinimide treatment prior to TBI. Illinoisy Data Conference, Carbondale, IL.
- 78. Anderson, G.D., Farin, F.M., Bammler, TK, Beyer, R.P, & Hoane, M.R. Gene expression of hepatic metabolizing enzymes and transporters in a traumatic brain injury (TBI) rodent model. 2011, North American International Society for the Study of Xenobiotics meeting, Atlanta, GA.
- 79. Gallagher, J., Dunkerson, J., Fluharty, S., Mudd, D., Hoane, M.R., & Smith, J.S. The impact of enriched environment and transplantation of neuronal and glial precursors on recovery from controlled cortical contusion injury. 2011, Society for Neuroscience Meeting, Washington, DC.
- 80. Martens, K.M., Vonder Haar, C., Smith, T.R., & Hoane, M.R. Critically evaluating the use of scent discrimination following traumatic brain injury: Validation of a simple discrimination task for assessing decision-making behavior within an operant paradigm. 2011, Society for Neuroscience Meeting, Washington, DC.
- 81. **Vonder Haar, C., Martens, K.M.**., & Hoane, M.R. The initial beneficial effects conferred by nicotinimide treatment may be offset by aging: The results from a

- longitudinal assessment of frontal injury. 2011 Society for Neuroscience Meeting, Washington, DC.
- 82. Anderson, G.D., Kantor, E.D., & Hoane, M.R. Optimization of erythropoietin and anakinra dosing for a preclinical model of TBI. 2011, 65<sup>th</sup> Annual Meeting of the American Epilepsy Society, Baltimore, MD.
- 83. Vitek, M.P., Hoane, M.R., Laskowitz, D.T., Dawson, H.N., VanNostrand, W.E., Christensen, D., Li, F., & Colton, C.A. Neuroprotective and anti-inflammatory therapeutics for traumatic brain injury and Alzheimer's disease based upon apolipoprotein-E. 2012 Keystone Symposia on Molecular and Cellular Biology, Keystone, CO.
- 84. **Hann, D.**, & Hoane, M.R. Does PTSD worsen functional recovery after TBI? 2012 REACH Undergraduate Research Forum, Carbondale, IL.
- 85. <u>Martens, K.M.,</u> & Hoane, M.R. Behavioral tasks for assessing cognitive functioning after injury: A comparative study. 2012 National Neurotrauma Symposium, Phoenix, AZ.
- 86. <u>Peterson, T.C.</u>, Moore, L.H., & Hoane, M.R. Behavioral characterization of fluid percussion injury to the sensorimotor cortex. 2012 National Neurotrauma Symposium, Phoenix, AZ.
- 87. Vonder Haar, C., Peterson, T.C., Greeney, D., Jannings, A., Anderson, G.D., & Hoane, M.R. A comparison of two anti-inflammatory drugs, epoetin alpha and anakinra for treatment after TBI. 2012 National Neurotrauma Symposium, Phoenix, AZ.
- 88. <u>Martens, K.,</u> & Hoane, M.R. Behavioral tasks for assessing cognitive functioning after brain injury. 2012, SIU Neuroscience Retreat.
- 89. <u>Amanda, W.,</u> & Hoane, M.R. Assessment of cognitive rehabilitation following bilateral frontal traumatic brain injury in rats. 2012, SIU Neuroscience Retreat.
- 90. <u>Peterson, T.</u>, & Hoane, M.R. Behavioral and histological comparison of a fluid percussion injury or cortical contusion injury to the rat sensorimotor cortex. 2012, SIU Neuroscience Retreat.
- 91. <u>Vonder Haar, C.</u> & Hoane, M.R. Bilateral frontal brain injuries impair performance on simple tone discriminations in the rat. 2012, SIU Neuroscience Retreat.
- 92. Vonder Haar, C., Smith, T.R., French E.J., Martens, K.M., Jacobs, E.A., & Hoane, M.R. Deficits in two-choice discrimination following bilateral controlled cortical imact injury in the rat. 2012 Society for Neuroscience Meeting, New Orleans, LA.
- 93. <u>Peterson, T.C.</u>, Moore, L.H., Maass, W., & Hoane, M.R. Behavioral and histological comparison of fluid percussion injury and cortical contusion injury to the rat sensorimotor cortex. 2012 Society for Neuroscience Meeting, New Orleans, LA.
- 94. Anderson, G.D., <u>Vonder Haar, C.</u>, Farin, F.M., Bammler, T.K., Beyer, R.P., Kantor, E.D., & Hoane, M.R. Gene expression in brain after erythropoietin and anakinra treatment in a traumatic brain injury model. 2012, 66<sup>th</sup> Annual Meeting of the American Epilepsy Society, San Diego, CA.
- 95. <u>Peterson, T.C.</u>, McConomy, K.S., Moore, L.H., <u>Wright, A.M.</u>, Kantor, E.D., Anderson, G.D., Hoane, M.R. A combination therapy of nicotinamide and

- progesterone for functional recovery following traumatic brain injury. 2013. National Neurotrauma Symposium, Nashville, TN.
- 96. **Vonder Haar, C.**, **Maass, W.B.**, Jacobs, E.A. & Hoane, M.R. A characterization of cognitive impairments after frontal traumatic brain injury: Discrimination and motivation deficits can be improved by administration of nicotinamide. 2013 National Neurotrauma Symposium, Nashville, TN.
- 97. Wright, A.M. & Hoane, M.R. Assessment of Cognitive Rehabilitation Following Bilateral Frontal Traumatic Brain Injury in Rats. 2013 National Neurotrauma Society, Nashville, TN.
- 98. Elmore, B.E., Vonder Haar, C., Wright, A.M., Anderson, G.D., Moore, L.H., Farin, F.M., Bammler, T.K., Beyer, R.P., MacDonald, J.W., Kantor, E.D., Hoane, M.R. (2013). Preclinical treatments for traumatic brain injury: An evaluation of minocycline and simvastatin. 2013 National Neurotrauma Symposium, Nashville, TN.
- 99. **Vonder Haar, C.**, Jacobs, E.A. & Hoane, M.R. Deficits in visual discrimination following frontal traumatic brain injury are associated with deficits in motivation, but not motor ability. 2013 Society for Neuroscience meeting in, San Diego, CA.
- 100. Smith, T. R., Frye, C. C. J., Peterson, T., Elmore, B., Hoane, M., & Jacobs, E. A. (October, 2013). Effects of Lesions to the Core of the Nucleus Accumbens on Concurrent Schedule Performances. 2013 Mid-American Association for Behavioral Analysis Meeting, Milwaukee, WI.
- 101. Elmore, B.E., Anderson, G.D., Wright, A.M., Kantor, E.D., & Hoane, M.R. A comparative evaluation of memantine and topiramate: No evidence of functional recovery following TBI. 2014. National Neurotrauma Symposium, San Francisco, CA.
- 102. Elmore, B.E., Anderson, G.D., Kantor, E.D., Farin, F.M., Bammler, T., MacDonald, J.W., & Hoane, M.R. The effect of levetiracetam treatment on gene expression and functional behavior using a controlled cortical impact model of traumatic brain injury. 2014 Society for Neuroscience Meeting, Washington, DC.
- 103. Young, J.M., & Hoane, M.R. The use of the dig task to explore the effectiveness of magnesium on the recovery of function after traumatic brain injury. 2015 Society for Neuroscience Meeting, Chicago, IL.
- 104. Hoane, M.R. Functional Assessment of the Rodent Frontal Cortex Following TBI. Executive Function After Experimental and Clinical TBI session, 2015 National Neurotrauma Symposium, June, 2015, Sante Fe, NM.
- 105. **Young, J.M**., & Hoane, M.R., Examination of emotional regulation in rats with TBI using a conditioned suppression model, Society for Neuroscience, November 2016.
- 106. Young, J.M., & Hoane, M.R., The use of the dig task to explore the effectiveness of magnesium on recovery of function after traumatic brain injury, National Neurotrauma Symposium, July 2016
- 107. Hoane, M.R., The effects of age on functional recovery following TBI. APA convention, August, 2022.

#### **TEACHING EXPERIENCE**

#### Augusta University, Augusta, GA

Department of Psychological Sciences

Full Professor with tenure, 2018-present

#### Southern Illinois University, Carbondale, IL

Department of Psychology

Full Professor with tenure, Summer, 2012 to present

Associate Professor with tenure, Summer 2008 to Spring 2012

Assistant Professor, Fall 2004 to Summer 2008

Southern Illinois University School of Medicine

Department of Community and Family Medicine

Adjunct Assistant Professor, Fall 2004 to present

#### East Carolina University, Greenville, NC

Department of Psychology

Assistant Professor, Fall 2001 to Summer 2004

Visiting Assistant Professor, Fall 1999 to Summer 2001.

#### Texas Christian University, Fort Worth, TX

Department of Psychology

Lecturer, Laboratory Supervisor, and Teaching Assistant, (1992-1996)

#### **COURSES TAUGHT**

(Typical teaching load is 2 courses/semester)

#### **Graduate Courses**

PSYC 514 Principles of Behavior (Graduate Neuroscience)

PSYC 518 Psychopharmacology & Behavior

PSYC 489-001 Neuroglia

PSYC 489-003 Advanced Neuroscience

PSYC 489-003 Medical Neuroscience

PSYC 6412 Advanced Physiological Psychology

PSYC 6320 Behavioral Pharmacology Seminar

PSYC 6315 Behavioral Neuroscience: Lab and Literature (Team taught)

NEUR 5001 Integrative and Behavioral Neuroscience (Team taught)

NEUR 5000 Cellular and Molecular Neuroscience (Team taught)

PSYC 416 Recovery of Function

PSYC 6180 Behavioral Neuroscience

# **Undergraduate Courses**

PSYC 402	Psychology & Medicine
PSYC 302	Introduction to Neuroscience
PSYC 415	Psychopharmacology
PSYC 489	Neuroscience of Disease
PSYC 1000	Introduction to Psychology

PSYC 2101 Psychological Statistics w/Lab

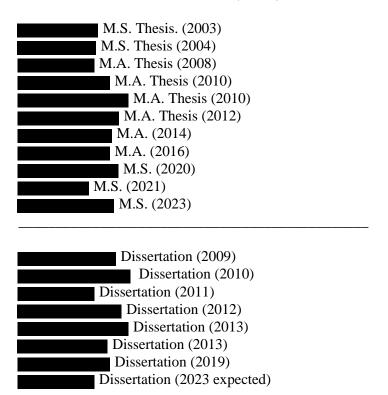
PSYC 3310 Introduction to Neuroscience

Hoane 26

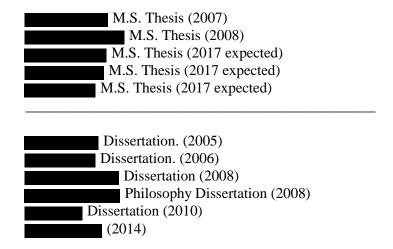
9.

```
PSYC 3225 Learning
PSYC 4340 Behavioral Pharmacology
PSYC 4315 Behavioral Neuroscience: Lab and Literature (Team taught)
PSYC 4180 Behavioral Neuroscience
PSYC 3180 Drugs and Society
```

#### **GRADUATE THESIS SUPERVISIONS (Chair)**

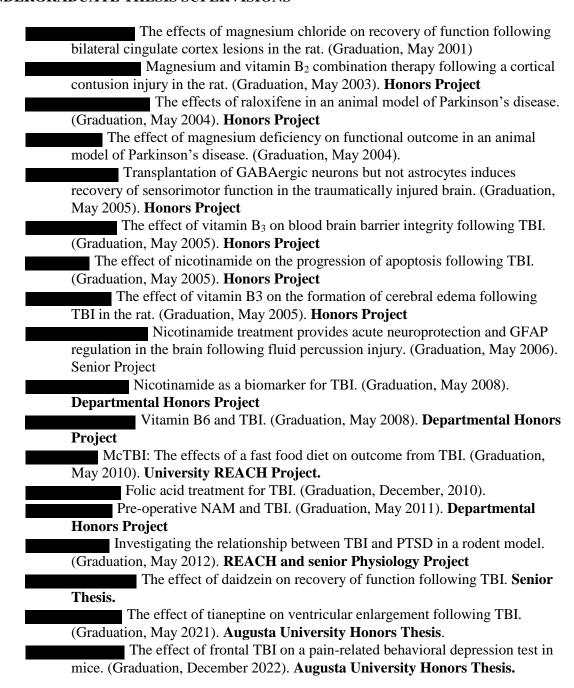


### **GRADUATE THESIS SUPERVISIONS (Committee Membership)**



(2022) (2022)

#### UNDERGRADUATE THESIS SUPERVISIONS



#### PROFESSIONAL AFFILIATIONS

Hoane 28

9.

National Neurotrauma Society
Society for Neuroscience
Sigma Xi
Midwest Psychological Association
International Behavioral Neuroscience Association
Faculty for Undergraduate Neuroscience

#### **HONOR SOCIETIES**

Psi Chi; Member since 1993 Sigma Xi; Member since 1993

#### STUDENT AWARDS

A graduate student ( was selected to be a finalist for the 2013 Goldberger Behavioral Neuroscience Prize Presented by the National Neurotrauma Society at their 2013 meeting.

An undergraduate student ( won 1st place in the poster competition at the

2007 St. Louis Area Undergraduate Research Symposium.

LaVonne A. Straub Annual Student Research Award. Awarded to Jeremy Pierce. October 2006.

An undergraduate student ( was selected as a finalist for the 2006 Goldberger Behavioral Neuroscience Prize Presented by the National Neurotrauma Society.

An undergraduate student ( was awarded the 2003 Goldberger Behavioral Neuroscience Prize Presented by the National Neurotrauma Society at their 2003 meeting.

#### PROFESSIONAL SERVICE

#### **Journal Editorship**

### **Editorial Advisory Boards**

The Open Critical Care Medicine Journal (2007 – present) Oxidative Medicine and Cellular Longevity (2008 – present) Open Journal of Neuroscience (2009 – present)

#### Ad hoc Journal Reviewer

Synapse

**Experimental Neurology** 

Experimental Brain Research

Physiology & Behavior

Brain Research

Brain Research Bulletin

Behavioural Brain Research

Journal of the American College of Nutrition

Neuroscience Letters

Journal of Neuroscience

Molecular Medicine

Journal of Neurotrauma

European Journal of Clinical Nutrition

**Nature Protocols** 

Stem Cell

Neuroscience Research

The Open Critical Care Medicine Journal

Neurotherapeutics

Neurorehabilitation and Neural Repair

**BMC** Neuroscience

Developmental Neuroscience

Journal of Neurological Sciences

Brazilian Journal of Medical and Biological Research

CNS Drugs

Journal of Medicinal Food

**PLoS ONE** 

Frontiers in Neurology - Neurotrauma

#### **Grant Review Service**

#### **Ad Hoc Chair**

USAMRMC PTSD and TBI Research Program, Nov., 2007 Rehabilitation and Cognitive Panel (subset)

#### **Study Section Membership**

USAMRMC PTSD and TBI Research Program, Nov., 2007

Rehabilitation and Cognitive Panel

USAMRMC PTSD and TBI Research Program, Dec., 2007

Advanced Technology-Therapeutic Development: Neuro Panel

Henry M. Jackson Foundation for Advancement of Military Science Blast Lethality Injury Research Program, Apr., 2008

**NYSTEM Program** 

Stem Cell Therapy Panel, Oct., 2008

DoD/CDMRP Deployment Related Medical Research Program

Psychological Health/TBI Program Dec., 2008

Brain, Biology, and Mind Initiate Program Review, Feb., 2009

New Jersey Brain Injury Research Commission, Feb., 2009

**USAMRMC Study Section** 

Traumatic Brain Injury Review, Feb., 2010

New Jersey Brain Injury Research Commission, Feb., 2010

2010 DMRDP Study Section

Diagnosis and Treatment Study Panel-2, Apr., 2010

VHA Rehabilitation Research & Development

Brain Injury: TBI & Stroke Review Panel, Aug., 2010

VHA Rehabilitation Research & Development

Brain Injury: TBI & Stroke Review Panel, Feb, 2011

**USAMRMC Study Section** 

Traumatic Brain Injury Review, Mar., 2012

VHA Rehabilitation Research & Development

Brain Injury: TBI & Stroke Review Panel, Mar, 2012

VHA Rehabilitation Research & Development

Brain Injury: TBI & Stroke Review Panel, Aug, 2013

New Jersey Brain Injury Research Commission, Jan., 2014

VHA Rehabilitation Research & Development

Brain Injury: TBI & Stroke Review Panel, Feb., 2015

DoD/CDMRP Deployment Related Medical Research Program

Psychological Health/TBI Program Dec., 2019-22

#### **Ad hoc Grant Reviewer**

MRC. Pathophysiology, Neuronal Loss and Outcome, May 2007

M.J. Murdock Charitable Trust. Stem cell, EE and TBI, Dec., 2007

US Army Medical Research and Material Command

DoD Intramural War Supplemental Program

PTSD/mTBI Panel, Nov., 2008.

DoD Military Operational Medical Research Program

PTSD Drug Development, Dec., 2009

USAMRMC, Preclinical TBI Treatment Review, Mar, 2010

USAMRMC, Preclinical TBI Treatment Review, Aug, 2010

USAMRMC, TBI Clinical Trial Review, Mar, 2011

US Army CERDEC NVESD, Clinical Trial Review, May, 2011

USAMRMC, Preclinical TBI Treatment Review, Aug, 2011

VHA Merit Review: Chronic Effects of Neurotrauma, Mar, 2012

Military Clinical Neuroscience Center of Excellence Grant Rev, Mar, 2012

USUHS, Center for Neuroscience and Regenerative Medicine, Mar, 2012

USUHS, Center for Neuroscience and Regenerative Medicine, Mar, 2014;

Oct, 2015; Mar, 2017; Mar 2017

#### **Departmental and University Service**

#### **Southern Illinois University**

Department of Psychology: Undergraduate Comm. (2004-pres)

Department of Psychology: Grad Admissions Comm. (2005-pres)

Department of Psychology: Research Comm. (2006-pres)

Institutional Animal Care and Use Committee (2006-pres)

Sigma Xi, Secretary (2008-2010)

REACH Advisory Committee (2008-pres)

Department of Psychology: BCS faculty search committee chair. (2009-pres)

CoLA Council (2011-pres)

CoLA Council Teaching and Learning Subcommittee (2011-pres)

OSPA Web Committee (requested participation by VCR). (2011-pres)

Secretary – Southern Illinois Chapter of Society for Neuroscience (2012-pres)

University MCAT Curriculum Review Committee (2012-pres)

Hoane 31

Faculty advisor for the Undergraduate Neuroscience Registered Student Organization

CoLA P&T Committee (2014)

Special assignment for the APAA (2014)

University Intellectual Property Committee (2015-pres)

Special assignment for the V. Chancellor of Research; chair of the laboratory animal program assessment committee (2015).

## Curriculum Vitae<sup>1</sup>

#### ANTHONY SKJELLUM, PhD

#### Expertise

High Performance Computing, Systems Software, and Scalable Simulation Systems Engineering and Cyber Security, Blockchain Technology, Scientific Computing

Development, Advancement, Leadership, and Management of Academic Units and Entrepreneurial Enterprises

#### **Education**

PhD: Chemical Engineering, Minor in Computer Science, California Institute of Technology, June 1990

Dissertation: Concurrent Dynamic Simulation: Multicomputer Algorithms Research
Applied to Ordinary Differential-Algebraic Process Systems in Chemical
Engineering

M.S.: Chemical Engineering, California Institute of Technology, June 1985

B.S.: Physics (Honors), California Institute of Technology, June 1984

#### **Employment**

University of Tennessee, Chattanooga August 2017–present Professor of Computer Science (Tenured) and Chair of Excellence, Director, SimCenter – Center of Excellence in Applied Computational Science and Engineering (A Tennessee Higher Education Commission-funded Center)

Auburn University, Department of Computer Science and Software Engineering

- Professor of Computer Science and Software Engineering (Tenured), June 2014 August 2017.
- McCrary Eminent Scholar Endowed Chair, August 2016 August 2017.
- Director of the Charles D. McCrary Institute for Critical Infrastructure Protection and Cyber Systems, August 2016 August 2017.
- COLSA Corporation Cyber Security and Information Assurance Endowed Professorship,

July 2014 – August 2016.

- Auburn Lead Scientist for Cyber Research, July 2014 August 2017.
- Director of the Auburn Cyber Research Center, July 2014 August 2017.

- 1 -

<sup>&</sup>lt;sup>1</sup> March 10, 2023 update

University of Alabama at Birmingham (UAB), Department of Computer and Information Sciences (now renamed to: Department of Computer Science)

- Professor and Chair, August 2003 June 2014
- Director of UAB University-wide Research Center CIA|JFR, 2011 June 2014

Mississippi State University, Dept. of Computer Science, January 1993 – July 2003

- Director, NSF ERC High Performance Computing Laboratory, January 1997-July 2003
- Tenured Associate Professor, 1997
- Associate Professor, 1996
- Assistant Professor (Tenure earning), 1993

Lawrence Livermore National Laboratory, 1990-1993

- Computer Scientist (Q-cleared fulltime employee)

Entrepreneurial efforts have included these additional outside activities:

- President, MPI Software Technology, Inc, 1996-2002 (Spin-off from Mississippi State University)
- Chief Technology Officer, MPI Software Technology, Inc, 2002-2004
- Chief Software Architect, Verari Systems Software (Formerly MPI Software Tech.), 2004-2009. Verari closed it doors in 2009 during the "Great Recession."
- Co-Founder, CTO of RunTime Computing Solutions, LLC, 2009-present.
   RunTime Computing acquired key software assets from Verari in 2009; it is a successful Chattanooga, TN embedded software, consulting, and services company with US and international customers, primarily in aerospace and government.

#### **Professional Activities**

External Advisory Board Member, Computer Science, Dept., Tennessee Technological University, 2022-present.

Editorial Board, Parallel Computing, March 1992-December 1995

Editorial Board, The International Journal of Supercomputer Applications and High Performance Computing, November 1993-2000

Editorial Board, *Concurrency & Communication: Practice & Experience*, 1994-present Working Group Chair, "Persistence," MPI-4 Standard, MPI Forum, 2013-present.

Working Group Co-chair, "Collective," MPI-4 Standard, MPI Forum, 2017-present. Sub-committee Chair, Message Processing Interface (MPI-3) Standards Committee,

2010-2013 (Persistent Communications Working Group),

Co-Chair, Real-Time Message Passing Interface (MPI/RT) Forum, 1997-2005.

Sub-committee Chair, BLAS Technical Forum (Lite BLAS/ BLAIS), 1995-98

Sub-committee Chair, Message Processing Interface (MPI) Standards Committee II, 1995-96 (Collective Chapter), 1995-97 (Real-Time), Persistence (2012-2019), Collective (2017-2019)

Sub-committee Chair, Message Processing Interface (MPI) Standards Committee, 1993-94

Newsletter Co-Editor (with Andrew Lumsdaine), Society of Industrial and Applied Mathematics (SIAM) Supercomputing Activity Group

Chair, MPIDC '99, Atlanta, GA, March 9-12, 1999

Organizing Committee of MPIDC '95 and MPIDC '96, Notre Dame, IN

Chair, 1997 Gordon Conference on HPC/II, Plymouth, NH, July 1997

Co-Chair, (Daniel Reed, Chair) 1995 Gordon Conference on HPC/II, Plymouth, NH, July 1995

Co-Chair, (Jack Dongarra, Chair; Co-Chair: David Walker), 1992 Gordon Conference on HPC/II (Previous name Software Tools and Libraries for HPC), Plymouth, NH, July 1992

Program Director, SIAM Supercomputing Activity Group, January 1994-December 1996 Editor, *Proceedings of MPIDC '99*, March 1999

Editor, Proceedings of the Scalable Libraries Conference, October 1994

Editor, Proceedings of the Scalable Libraries Conference, October 1993

Invited participant, Second Pasadena Workshop on System Software and Tools for High-Performance Computing Environments (Pasadena II), January 1995

#### **Awards and Honors**

ACM Senior Member, 2014

IEEE Senior Member, 2013

Mississippi Business Journal, "Top 40 Under 40 Award," January 21, 2002

2001 Tibbetts Award Winner (MPI Software Technology, Inc) – excellence in SBIR commercialization (National Award – State of Mississippi Winner)

College of Engineering Hearin Eminent Scholar, 2001-03

1999 College of Engineering Outstanding Engineering Research Award

MSU Alumni Association Research Award, May 1998

College of Engineering Hearin-Hess Distinguished Professor, 1996-97 and 1997-98

MSU ACM Student Chapter Computer Scientist of the Year Award, May 1994

Best Student Paper in Operating Systems Area (First Prize) "Zipcode: A Portable Multicomputer Communications Library atop the Reactive Kernel," Fifth Distributed Memory Computing Conference, Charleston, South Carolina, April 1990

Runner-Up Student Paper in Applications Area, A: LU Factorization of Sparse, Unsymmetric Jacobian Matrices on Multicomputers, Fifth Distributed Memory Computing Conference, Charleston, SC, April 1990.

IBM Tau Beta Pi Award (California Institute of Technology), writing competition, 1981

# Selected Administrative Achievements as UAB Chair of Computer and Information Sciences

- 1) Led successful ABET Accreditation for the Bachelor of Science Program (October 2005). Re-visit October 2012 (renewed as of September 2013).
- 2) Recruited, hired, and retained at total of seven professors during past ten years. Total faculty size was thirteen FTEs as of June 30, 2014, including one professor who started in August 2013.
- 3) Recruited two women assistant professors (among those seven mentioned), one is already tenured, the second is Hispanic. The tenured professor was promoted to full professor at UAB as of May, 2015.

- 4) Two of my assistant professor hires (T. Solorio, R. Hasan were awarded NSF EARLY CAREER funding (notified in December 2013, effective 2014). I later nominated one of these professors (T. Solorio) for the Denise Denton Award, which she won and received recognition in 2014.
- 5) Graduated a PhD student who is an African American Woman in 2010 (Dr. Vetria Byrd). She is currently working as an assistant professor on tenure track at Purdue University.
- 6) Recruited and hired Mr. Gary Warner, internationally renowned cybercrime expert in 2006. He is now the Director of the CIA|JFR that I inaugurated at UAB (see below).
- 7) Remodeled research labs and infrastructure, including winning three MRI grants (serving as PI) to enable CIS and HPC research.
- 8) Oversaw the regrowth in undergraduate population, and growth in PhD student graduations in the past nine years.
- 9) Obtained approval for the Master of Science in Computer Forensics and Security Management, program. Commenced operation in Fall 2011.
- 10) Introduced several types of continuous improvement processes for undergraduate and graduate education
- 11) Introduced supplemental instruction in CIS (tutoring for key undergraduate courses).
- 12) Designed and Introduced the Senior Capstone course (both for ABET and QEP requirements).
- 13) Introduced requirement for public speaking class for all computer science majors; Introduced public speaking requirements into the senior-level software engineering class as well as senior capstone.
- 14) Added ethics components to the software engineering and senior capstone classes.
- 15) I currently serve as founding chair of the "Research Capacity Building Committee," a faculty-led effort I proposed in 2009 for expanding research opportunities and improving efficiency (from a faculty viewpoint) of all aspects of funded R&D. Supported directly by UAB VP of Research.
- 16) Grew research space for CIS and other faculty significantly with a new laboratory spacein February 2010. This was based on a \$500,000 investment from our administration and Deans.
- 17) Approval of the Bachelor Science in Bioinformatics Degree at the University level. This has also been approved at the state level at the pre-proposal stage (NISP). We started developing the full proposal as of February 2014.

#### Selected Administrative Achievements as UAB Director of CIA|JFR UWIRC

- 1) Won approval for an Interdisciplinary Center for Forensics at UAB CIA|JFR. Was only one of three non-medical UWIRCs at UAB as of June 30, 2014.
- 2) Successfully developed the Center for Information Assurance and Joint Forensics Research (CIA|JFR) from its 2011 approval to full center status with 45 members across UAB and a high level of activity.
- 3) With Development, obtained \$250,000 gift in 2012 from Facebook for the CIA|JFR completion and leveraged that into a \$900,000 upgrade on the 4<sup>th</sup> Floor of UBOB with a state-of-the-art facility. This was completed February 2013, providing our UWIRC center with a permanent home. It currently houses additional faculty from CIS, Justice Sciences, and one faculty member from Anthropology, as well as upwards of 60 student/postdoc researchers at peak usage.

- 4) In 2012, recruited Dr. John Grimes from his previous role in Justice Sciences to the Center into a new position, a research professor working almost exclusively on the Center mission and business development as well as his area of pedagogy.
- 5) Developed and chaired a successful conference series Cyber Summit, first held at UAB in 2012 and at the BJCC (conference center) in 2013, and again at UAB in February 2014
- 6) Launched the UAB Big Data Conference Series, the first of which was held in May 2013, co-sponsored by Intel, Data Direct Networks, and Cray Computer. This conference, which was co-sponsored with CIS, brought big-data science visibility to UAB for the first time and include life sciences, business, and forensics areas.
- 7) Supported the successful spin-off of the first commercial entity from the CIA|JFR, *Malcovery*, in 2012. Housed in *Innovation Depot*, it its hired first CIS graduate as an early employee. Some years later, this company was acquired/merged.
- 8) In 2013 and 2014, served as Co-PI and co-lead on developing the proposal with two professors at UAH and USA on a \$20M NSF EPSCOR Track-1 Proposal unifying over 40 Cyber-related scientists in the state. NSF EPSCOR Track-1 first had to win approval from the state committee. EPSCOR Track-1 is applicable in states with historically lower federal funding (26 of 50 states qualify). In 2014, we resubmitted. (This effort was completed while Center Director at Auburn.)
- 9) In 2013, joined with Auburn University leaders, UAB colleagues and other colleagues from around the state to create the Alabama Cyber Research Consortium (ALCRC.ORG), which is now an effective, statewide collaborative forum for building capacity in cyber R&D.

# Selected Administrative Achievements as Auburn Cyber Center Director (July 1, 2014-August 2017):

- 1) Established a new research laboratory in "Internet of Things" and "Industrial Control Systems"
- 2) Recruited and supported a new group of 11 students (including 2 minority students and 1 female student) in cyber. Additionally, we had 7 undergraduate students involved as of Fall 2015.
- 3) Obtained significant new DOD-related cyber funding in Huntsville, AL (a major hub of DOD R&D) during my first year on faculty at Auburn for work on Cyber R&D (\$91K as PI, \$273K as co-PI); the majority of this funding continues in FY16.
- 4) Worked with Auburn development on closing a \$250,000 (+\$250,000 deferred) donation for the "Lt General Ronald Burgess, Jr, USA, Retired Cyber Research Laboratory," which is the new home of the Cyber Center. Occupancy was in November 2016.
- 5) Created a visible, viable Cyber Center, with internal University and growing external visibility.
- 6) Led efforts to ramp up funded R&D with over 10 proposals submitted in the first year in which I was either the PI or a co-PI. 17 awarded grants/contracts since starting at Auburn on July 1, 2014 with approximately \$3M of total funding (either as PI or co-PI).
- 7) Promoted to Inaugural Director of the *Charles D. McCrary Institute for Critical Infrastructure Protection and Cyber Systems* (starting 8/16/16). Currently building a new, campus-wide institute with endowed funding in CIP and Cyber security, systems engineering. Responsible for managing an annual base budget of approximately

\$350,000 and deploying annual income from the \$10M endowment for the Institute.

#### Selected Administrative Achievements as SimCenter Director (August 2017-present):

- 1) Led upgrade of the high-performance computing and storage systems and established SimCenter as UTC's "Research Computing Core Facility"
- 2) Organized and supported a new, research network capacity to support smart cities, IoT, and related R&D
- 3) Began "rebranding" of SimCenter as a holistic part of the UTC's research and experiential learning cores
- 4) Engaged over a dozen new faculty in SimCenter from multiple colleges across UTC
- 5) Held two retreats (December 2017, January 2019) for team building and establishing trust and new collaborations.
- 6) Hired new positions: Grants Administrator and Graphic Artist/Web designer to support SimCenter's support and outreach to campus faculty.
- 7) Dismissed probationary employee and rehired a superior Budget Coordinator (2018)
- 8) Converted temporary system administrator to fulltime position to provide long-term continuity and better support to students and professors working on high performance computing.
- 9) Upgraded and enhanced the research pilot award programs (CEACSE/THEC awards)—improved processes, improved peer review, and broader engagement of faculty across the UTC campus
- 10) Established strong working relationships with key Deans, chairs, and stakeholders to enhance faculty and student involvement in SimCenter programs and facilities
- 11) Began process of enhanced community engagement of SimCenter with Chattanooga.
- 12) Began process to engage regularly with Oak Ridge National Laboratory (ORNL)
- 13) Began the process of establishing meaningful international collaborations with University of Edinburgh and University of Cadiz.
- 14) Supported the submission of over 70 proposals in Fiscal Year 2018.
- 15) Obtained \$64,000 of NSF grant supplements to support undergraduate research in 2018.
- 16) PI on \$250,000 ReVV Economic Development funding to Support IMSA (A Chattanooga Startup)
- 17) PI at UTC for joint Boston University-UTC NSF Funding (\$450K is UTC portion) in 2019.
- 18) PI of NSF CC\*Compute Grant (approx. \$393K)—New Cluster Computing Facility (2019).
- 19) Co-PI on NSF CC\*Network Grant (approximately \$500K)---New 100Gbit/s Research Network for Campus. 2019. [Later PI on this grant.]
- 20) PI on UTC/TTU EHR: PEER proposal for total of \$100K for workshops on workforce development in Digital Twins.
- 21) Took lead role in development and submission of a large-scale, Department of Energy / NNSA High-Performance Center Proposal (continuing in Calendar 2019) with the University of Alabama at Birmingham, and University of New Mexico (Albuquerque)---PSAAP III "Center for Understandable Performance Exascale Communication Systems" ---funded. \$1.2M to UTC over 5 years.
- 22) Mentored more than 10 faculty on research capacity building and career strategy in 2018 and 2019.

23) Established new Research Thrusts in Cyber and High-Performance Computing, "Digital Twin, "Critical Infrastructure Protection," and "Extreme Systems" Research Thrusts for SimCenter.

#### **Grants and Contracts**

Collaborative Research: EAGER: Real-time Strategies and Synchronized Time Distribution Mechanisms for Enhanced Exascale Performance-Portability and Predictability; PI: Anthony Skjellum: 6/2022-5/2023; \$90,453.

Sandia National Laboratories Contracts (\$100K total, thus far) – Work on Software Engineering for HPC Systems Software Stacks, 2020-2023.

"CC\* Compute: Augmenting a 2,560-core EPYC2 Computational Cluster with GPUs for AI, Machine Learning, and other GPU-Accelerated HPC Applications," A. Skjellum (PI), Co-PIs: Eleni Panagiotou, Farah Kandah, Yingfeng Wang, Kidambi Sreenivas; \$415,868, 2022-2024,

"CC\* CRIA: Planning a Regional Cyber-Infrastructure-Research Consortium for Middle Tennessee," PI: Anthony Skjellum; Co-PIs: Ryan Otter, Gerald Gannod, Farah Kandah, Sheikh Ghafoor; 7/1/2020-6/30/2023; Award Amount: \$249,713.00;

DOE/NNSA PSAAP III Center for Understandable Performance – Exascale Communication Systems - subcontract from the University New Mexico (lead); other collaborating institution, University of Alabama; UTC Portion: \$1.2M over five years (UNM PI: Patrick Bridges, UA co-PI: Purushotham V. Bangalore)

LLNL/LLNS - MPI R&D for Fault Tolerance – \$60K. Skjellum, PI, 2020.

LLNL/LLNS - MPI R&D for Fault Tolerance – \$60K. Skjellum, PI, 2019.

"NSF Collaborative Research: Software Engineering Workforce Development in High Performance Computing for Digital Twins." A. Skjellum (PI) with two UTC co-PIs and two TTU co-PIs. UTC portion: \$57,635.

"NSF HDR DSC: Collaborative Research: Transforming Data Science Education through a Portable and Sustainable Anthropocentric Data Analytics for Community Enrichment Program." Yu Liang (Overall PI), A. Skjellum (co-PI), with three other co-PIs at UTC. \$723,644 (UTC portion). 2019

"NSF SPX: Collaborative Research: Intelligent Communication Fabrics to Facilitate Extreme Scale Computing," Boston University PI: Martin Herbordt; UTC PI: A. Skjellum, with C. Tanis (co-PI). \$450,097 (UTC portion). 2019.

ReVV Grant (IMSA), A. Skjellum (PI), with two UTC co-PIs. \$250,000. May 5, 2019 November 5, 2020.

"NSF CC\* Compute: A Cost-Effective, 2,048 Core InfiniBand Cluster at UTC for Campus Research and Education," Skjellum (PI), with 4 co-PIs at UTC. \$392,235. 2019.

"NSF CC\* Networking Infrastructure: Advancing High-speed Networking at UTC for Research and Education," F. Kandah (PI), A. Skjellum (co-PI), with 3 other co-PIs at UTC -\$515,663; 2019.

Sandia - MPI R&D— \$100K. A. Skjellum, PI, C. Tanis, co-PI. 2019-2020 (split funding over 2 fiscal years).

NSF CICI: Data Provenance: Collaborative Research: Provenance Assurance Using Currency Primitives (Supplement), A. Skjellum, PI, R. Brooks (Clemson), co-PI, \$39,000 (UTC Portion), January 1, 2016-December 31, 2019. [Supplement.]; Additional \$34,866 supplement to UTC only in 2019.

LLNL/LLNS - MPI R&D for Fault Tolerance - \$59K. Skjellum, PI, 2018.

IBM Faculty Award (Philanthropic Grant for R&D in Distributed Grid). A. Skjellum, \$20,000 (no indirect). 2018.

IBM Faculty Award (Philanthropic Grant for R&D in Machine Learning for Malware). A. Skjellum, \$40,000 (no indirect). 2016.

NSF-ACI-1642083 - CICI - SE Scientific Cybersecurity For University Research – Clemson, UAH, Auburn, Vorhees, JSU. Skjellum PI for Auburn. \$80,964 (Auburn budget). 10/1/16-9/30/18. [Transferred to UTC.]

NSF-ACI-1642133-CSSE – CICI - Data Integrity Assurance & Privacy Protection Solutions For Secure Interoperability Of Cloud Resources – Ku (PI), Skjellum (co-PI), \$467,028 (UAB has a separate budget in addition to this). 10/1/16 - 9/30/19.

SIT-2102659-01-TO65-RT165 - Cybersecurity For System Of Systems Architectures – Umphress (PI), Skjellum (co-PI), \$174,813. 8/9/16-8/8/17.

PROGENY-PSC-0342 –COTS Approach To Information Security – STTR subcontract – Umphress (PI), Skjellum (co-PI), \$120,000. exp. 11/9/16-6/27/18.

LLNL/LLNS - MPI R&D for Fault Tolerance - \$54,000. Skjellum, PI. 10/1/16- 9/30/17.

NSF SHF: Medium: Collaborative Research: Next-Generation Message Passing for Parallel Programming: Resiliency, Time-to-Solution, Scalability, and QoS. Collaborative with UAB. Auburn Portion proposed \$736,557. Funded at \$602,000. Total budget of approximately \$1M between the institutions. 6/1/16-5/31/20. [Transferred to UTC.]

NSF SHF: Small: Collaborative Research: Coupling computation and communication in FPGA-enhanced Clouds and Clusters. Joint with Boston University. \$249,063 (Auburn portion). Funded at \$225,000. 9/1/16-8/31/19. [Transferred to UTC.]

NSF CICI: Data Provenance: Collaborative Research: Provenance Assurance Using Currency Primitives, A. Skjellum, PI, R. Brooks (Clemson), co-PI, \$248,755 (Auburn portion), January 1, 2016-December 31, 2019. [Transferred to UTC.]

DOD/NSA: Using Data Mining to Detect Malware in the Internet of Things. A. Skjellum, PI, \$74,683, August 1, 2015-August 31, 2016.

NSF EAGER Cyber Manufacturing- Novel Process Data Analytics Framework For Iot-Enabled Cybermanufacturing, J. Wang, PI, A. Skjellum, Co-PI, \$244,942, September 1, 2015-August 31, 2018.

Ephemeral Security Overlay For GPS, SBIR, Integrated Solutions For Systems: Af-FA9453-15-M-0473, \$5,000, July 10, 2015-April 10, 2016 (co-PI with Drs. Alvin Lim and David Bevly).

BAE Subcontract from US Army ("Cyber Risk," "Kestrel Eye"), R. Summers, PI, A. Skjellum, Co-PI, \$273,870, September 29, 2014 – September 28, 2015 (with renewals in ~\$100K FY16 and FY17).

COLSA Professional Engineering Services (for AMDREC), subcontract to US Army, A. Skjellum PI, \$91,507, February 15, 2015 – September 23, 2015. (with no cost extension in 2016).

Sandia Funding for Exascale Storage System Research, A. Skjellum, PI, \$161,000, October 1-September 30, 2015. (with renewal year in FY16 at \$85,000).

Sandia Funding for Exascale Fault Tolerant MPI, A. Skjellum, PI, \$30,000, July 1-September 30, 2014.

Sandia Funding for Exascale Storage System Research, A. Skjellum, PI, \$64,000, July 1-September 30, 2014.

Sandia Funding for Exascale Storage System Research, A. Skjellum, PI, \$41,000, March 2014-June 30, 2014.

Sandia Funding for Exascale Fault Tolerant System Research, A. Skjellum, PI, \$100,000, March 2013.

"Alabama Innovation Fund," supported by Governor Bentley, A. Skjellum, PI, \$250,000 plus UAB match. 2012. This award recognizes and supports CIS and Center commercialization efforts, notably *Malcovery*, plus is partially supporting two postdoctoral fellows at CIS in 2013.

Sandia Funding for Exascale File System Research (Sirocco), A. Skjellum, PI, \$250,000, February 2013 (for October 1, 2012 start). Total funding yielded was nearly \$1M over time.

"EAGER Grant, Research in Fault Tolerant MPI," A. Skjellum, PI; \$100,000. National Science Foundation, 2012, no-cost extended through May 31, 2014.

"MRI: Development of a GPU-Enabled, Petascale Active Storage Architecture for Data-Intensive Applications in HPC and Cloud Environments," A. Skjellum PI: \$300,000 plus \$128,000 UAB Matching, National Science Foundation, 2012. [Switched to co-PI on move to Auburn in 2014.]

Sandia Funding for Exascale File System Research (Sirocco), A. Skjellum, PI, \$245,000, December 2011. Renewable for 4 more years – total expected support over \$1.2M. Renewals shown above at UAB and then at Auburn starting in 2014.

"NSF EAGER Grant, Research in Peer File System," A. Skjellum, PI; also joint funding with Clemson University, 2010-2011. UAB funding is \$67,000. Led to Sandia follow-on support.

Funding from Sandia National Laboratories for Work on Peer File System Research, 2009-2010 (on-going). Initial funding level: \$80,000. A. Skjellum, PI at UAB. Also funded are Clemson University and University of Minnesota on separate contracts.

"Cybercrime and Security: A Model State Partnership," United States Department of Justice, Bureau of Justice Assistance. (\$500K over 1 year). John J. Sloan, III and Anthony Skjellum (Co-Principal Investigators). Grant #2010-DD-BX-0603, 2010.

"UAB Anti-Cybercrime Computational Operation," Edward J. Byrne Memorial State and Local Justice Assistance Grant (\$447K over three years). John J. Sloan III and Anthony Skjellum (Co-Principal Investigators). Grant #2008-DD-BX-0407, 2008.

"Support for UAB Computer Forensics Laboratories Project," United States Department of Justice, Office of Community Oriented Policing Service (COPS), COPS Technology Grant. FY 2006 (\$987K over 3 years). John J. Sloan, III and Anthony Skjellum (Co-Principal Investigators). Grant #2006-CKWX-0582, 2006.

"MRI: Development of a GPU-Enabled Integrated Storage Computation Architecture and System," \$300,000 plus \$128,000 UAB Matching, National Science Foundation, 2008-12.

"MRI: Computer and Information Sciences Grid Node Research Facility," National Science Foundation, August 15, 2004-July 31, 2007. This is a \$250,000 equipment grant, with \$107,000 of matching to create the CIS Department's "Grid Node" or "Grid Cluster." Role: PI, with six co-PIs.

"Collaborative Research: A Systematic Approach to the Derivation, Representation, Analysis, and Correctness of Dense and Banded Linear Algebra Algorithms for HPC Architectures," National Science Foundation, July 1, 2003-June 30, 2006 [extended to June 30, 2007]. This project seeks to advance the understanding of how to gain more performance, predictability, and correctness from scalable and cache-memory oriented algorithms key to many scientific applications. Role: PI (at UAB), co-PI of the overall proposal.

- "ALGORITHMS: Collaborative Research: New Contributions to the Theory and Practice of Programming Linear Algebra Libraries," National Science Foundation. August 1, 2002-July 31, 2003, Role: PI at MSU, Co-PI of overall proposal.
- "NGS: Computational Vortals for Next-Generation Scalable Computing," National Science Foundation, December 1, 2001 December 1, 2004, This grant addresses the use of grid computing and portal-based computing in order to advance scientific problem solving environments. Role: Co-Principal Investigator
- "Integration of Fuzzy Data Mining with High Performance Scalable Computing: Intrusion Detection, Fault Detection, and Performance Monitoring," BMDO (DEPSCoR), \$623,963, April 2001 March 2004 (Other PIs: Rayford Vaughn and Susan Bridges).
- "A QOS-Based Approach to Clustering and Interclustering with a Unified Methodology for Scalability, Security, Performance, Fault-Handling, and Co-Scheduling," National Science Foundation, \$220,000, September 1, 2000 August 31, 2002, (other PI: Rayford Vaughn).
- "A Gigabit/s, VIA-Enabled Cluster Architecture for Research in High Performance Systems Software, Scalable Knowledge Discovery, Visualization, and Parallel Planning Under Uncertainty" National Science Foundation CISE Instrumentation Program, \$214,939, July 1, 1999 June 30, 2002 (Other PIs: Julia Hodges, Lois Boggess, Susan Bridges, Donna Reese, Raghu Machiraju, and Eric Hansen).
- "Distributed Intrusion Detection Using Fuzzy Data Mining Applied to High Performance Cluster Computation," U.S. Department of Army Research Laboratory, \$153,983, September 2000- September 2002 (Other PIs: Rayford Vaughn and Susan Bridges).
- "Parallelizing a FORTRAN90 SWAFS Code with MPI," Mississippi Research Consortium, \$42,500, October 1, 1998 February 28, 1999.
- "The Scalable Knowledge Discovery Initiative," Hearin Foundation, \$49,000, May 16, 1998 May 15, 1999 (Other PIs: Julia Hodges, Susan Bridges, and Raghu Machiraju).
- "Parallelizing a FORTRAN90 SWAFS Code for CRAY T3E with MPI," Lockheed-Stennis, \$14,000, December 1, 1997 February 28, 1998 (PI; co-PIs: Ioana Banicescu and Raghu Machiraju).
- "Heterogeneous Embedded Real-Time Systems Environment," Integrated Sensors, Inc. [DARPA BAA 9706 subcontract], \$400,000, July 1, 1997 June 30, 2000.
- "Parallel Mathematical Libraries Project II," DOE/USIC/LLNL, \$80,000, January 1, 1998 December 31, 1998.
- "MPICH Technology and Optimizations for the Cray T3E," CEWES MSRC focused effort, \$20,000, December 1, 1997 June 30, 1998.

- "Support for Scalable CFD and MPI," CEWES MSRC focused effort, \$60,000, April 1, 1997 March 30, 1998 (PI; Co-PI: Puri Bangalore).
- "Technical Computing on Intel Platforms and Scalable Interface for Evolving, Mass-Market PC Applications (supplement)," Intel Software Technology Laboratory, Amount: \$45,076, December 1, 1996.
- "Myrinet 4.1 Memory-Mapped Device Driver Development for Windows NT Systems," Myricom, Inc, \$10,000, December 1, 1996 January 31, 1997.
- "Intel Software Grant," Intel, \$18,000, October 1996.
- "Development of MPI and Myrinet Technologies for a Secure, Heterogeneous Application Runtime Environment for High Performance Computing (SHARE-HPSC)," Sanders (Lockheed-Martin), subcontract of DARPA contract, \$208,523, September 1995 November 1997.
- "Revolutionary Advances in Ubiquitous, Realtime, Multicomputers and Runtime Environments," DARPA/US Air Force Rome Laboratory, \$1,250,000, October 1996 June 1999 (joint project with University of Maryland).
- "Tactical Advanced Signal Processor Effort (TASP)," U.S. Navy, \$125,000, 1999.
- "Tactical Advanced Signal Processor Effort (TASP)," U.S. Navy, \$95,000, 1997.
- "Parallel Mathematical Libraries Project," DOE/USIC/LLNL, \$60,000, July 11, 1996 December 31, 1997.
- "Intel Paragon MPI and ATM Research," Intel, \$230,000, July 1996.
- "ATM-based Heterogeneous MPI for the P6 Paragon Multicomputer and 4-Way P6 Multiprocessor," Intel, \$31,000, January 1, 1996 December 31, 1998.
- "Embedded Message Passing Interface (eMPI) for the Advanced Common Processor," Sanders (Lockheed-Martin, Hudson, NH), \$33,000, August 1, 1996 December 20, 1996.
- "Dynamic Process Simulation on Computers with Parallel Architectures," National Science Foundation, \$11,000, 1995-1996 (no cost extension of original grant).
- "The Parallel Mathematical Libraries Project," United States Industry Coalition, Inc. (USIC; collaboration among LLNL (Dept. of Energy), the Russian Federal Nuclear Center, Arzamas-16 (VNIIEF/Sarov), Intel, and MSU), \$35,000, September 1995.
- "Technical Computing on Intel Platforms; Scalable Interfaces for Evolving, Mass-Market PC Applications," Intel, Inc., \$76,000 (approximate), September 1995.

"A Multi-Faceted Study of Scalable Parallelism for Computational Science and Engineering," Skjellum and Lumsdaine (Notre Dame), National Science Foundation, Co-PIs, period of performance: September 15, 1995-August 14, 1998, MSU part of budget: \$180,000, ND part of budget \$180,000 (both over three years). (Funded unsolicited proposal to CISE ASC Directorate).

"Innovative High Performance Distributed Computing Research and Education: Parallel Algorithms, Libraries, Computational Models, and Distributed Services," National Science Foundation **EARLY CAREER** Award, \$124,800, September 1, 1995 - August 31, 1998.

"High Performance Research and Technology for Parallel Programming based on Embedded and Real-time Extensions of the Message Passing Interface (MPI) and MsgWay Protocol," DARPA, \$1,386,847, September 1, 1995 - June 30, 1998.

"Collaborative Research and Development of MPI and Myrinet Technologies for Embedded High Performance Computing," Martin-Marietta Laboratories, \$57,656, March-December, 1995.

"National High Performance Distributed Computing Consortium," U.S. Army Corps of Engineers Waterways Experiment Station, \$75,000, September 1, 1995 - April 30, 1998.

"Parallel Solution, Grid Generation, and Visualization of Turbo-Machinery Grand Challenge Problems," Department of Energy, \$254,598, October 1, 1994 - September 30, 1996, in cooperation with Sandia National Laboratories (co-PIs: D. Reese, E. Luke, and D. Barnette).

"The Multicomputer Toolbox," Lawrence Livermore National Laboratory, \$670,000, 1991-92. LDRD internal funding.

#### **Publications**

#### Refereed Journal Papers

"Haghi, Pouya; Guo, Anqi; Xiong, Qingqing; Yang, Chen; Geng, Tong; Broaddus, Justin T; Marshall, Ryan; Schafer, Derek; Skjellum, Anthony; Herbordt, Martin C; "Reconfigurable switches for high performance and flexible MPI collectives," Concurrency and Computation: Practice and Experience, 34:6, e6769, 2022.

"Weerasena, Lakmali; Ebiefung, Aniekan; Skjellum, Anthony; ",Design of a heuristic algorithm for the generalized multi-objective set covering problem," Computational Optimization and Applications, pp. 1-35, 2022, Springer US.

"Nansamba, Grace; Altarawneh, Amani; Skjellum, Anthony; "A Fault-Model-Relevant Classification of Consensus Mechanisms for MPI and HPC," International Journal of Parallel Programming, pp. 1-22, 2022, Springer US.

Dosanjh, Matthew GF and Worley, Andrew and Schafer, Derek and Soundararajan, Prema

and Ghafoor, Sheikh and Skjellum, Anthony and Bangalore, Purushotham V and Grant, Ryan E, *Implementation and evaluation of MPI 4.0 partitioned communication libraries*, Parallel Computing, Vol. 108, page ID=102827, 2021.

Altarawneh, Amani and Sun, Fei and Brooks, Richard R and Hambolu, Owulakemi and Yu, Lu and Skjellum, Anthony, *Availability analysis of a permissioned blockchain with a lightweight consensus protocol*, Computers & Security, Vol. 202, page ID 102098, 2021

Sultana, Nawrin and Ruefenacht, Martin and Skjellum, Anthony and Bangalore, Purushotham and Laguna, Ignacio and Mohror, Kathryn, Understanding the use of Message Passing Interface in exascale proxy applications, *Concurrency and Computation: Practice and Experience*, Vol. 33., No. 14, pages ID e5901, 2021.

McCullough, JWS and Richardson, RA and Patronis, A and Halver, R and Marshall, R and Ruefenacht, M and Wylie, BJN and Odaker, T and Wiedemann, M and Lloyd, B and others, *Towards blood flow in the virtual human: efficient self-coupling of HemeLB, Interface focus*, Vol. 11, page ID=20190119, 2021.

Worley, Carl and Yu, Lu and Brooks, Richard and Oakley, Jon and Skjellum, Anthony and Altarawneh, Amani and Medury, Sai and Mukhopadhyay, Ujan, *Scrybe: A Second-Generation Blockchain Technology with Lightweight Mining for Secure Provenance and Related*, in *Blockchain Cybersecurity, Trust and Privacy*, Vol. 79, pages 51+, 2020.

Reising, Donald and Cancelleri, Joseph and Loveless, T Daniel and Kandah, Farah and Skjellum, Anthony, *Radio identity verification-based IoT security using RF-DNA fingerprints and SVM*, in IEEE Internet of Things Journal, Vol. 8, No. 10, pages 8356-8371,

Vincent, Nishani Edirisinghe and Skjellum, Anthony and Medury, Sai, *Blockchain architecture: A design that helps CPA firms leverage the technology*, International Journal of Accounting Information Systems, Vol. 38, Page ID 100466, 2020.

Kandah, Farah and Altarawneh, Amani and Huber, Brennan and Skjellum, Anthony and Medury, Sai, *A Human-Understandable, Behavior-based Trust Management Approach for IoT/CPS at Scale,* INTERNATIONAL JOURNAL OF COMPUTERS AND THEIR APPLICATIONS, pp. 172+, 2019.

Cui, Pinchen and Guin, Ujjwal and Skjellum, Anthony and Umphress, David, *Blockchain in IoT: current trends, challenges, and future roadmap,* Journal of Hardware and Systems Security, Vol. 3, No. 4, pages 338-364, 2019.

Nawrin Sultana, Martin Ruefenacht, Anthony Skjellum, Ignacio Laguna, Kathryn Mohror, *Failure recovery for bulk synchronous applications with MPI Stages*, Parallel Computing, Vol. 84, pp 1—14, 2019.

Daniel J. Holmes, Bradley Morgan, Anthony Skjellum and Purushotham V. Bangalore and Srinivas Sridharan: *Planning for performance: Enhancing achievable performance for MPI through persistent collective operations*, Parallel Computing, Volume 81, pp 32-57, 2019.

Mark Yampolskiy, Wayne E. King, Jacob Gatlin, Sofia Belikovetsky, Adam Brown, Anthony Skjellum and Yuval Elovici: *Security of Additive Manufacturing: Attack Taxonomy and Survey*, Additive Manufacturing, https://doi.org/10.1016/j.addma.2018.03.015, 2018.

Wang, Shuangbao Paul and Ali, Amjad and Guin, Ujjwal and Skjellum, Anthony, *IoTCP:* A Novel Trusted Computing, in Journal of The Colloquium for Information Systems Security Education, Vol 6., No. 1., pages 16+, 2018.

Mark Yampolskiy, Anthony Skjellum, Michael Kretzschmar, Ruel A. Overfelt, Kenneth R. Sloan, Alec Yasinsac, *Using 3D printers as weapons*, International Journal of Critical Infrastructure Protection (IJCIP), Volume 14, pp. 58-71. http://dx.doi.org/10.1016-/j.ijcip.2015.12.004; impact factor 1.351.

Zekai Demirezen, Murat M. Tanik, Mehmet Aksit, and Anthony Skjellum, *An Information-Theory-based Representation of Software Design*, Integrated Computer-Aided Engineering Journal (ICAE), Volume 21, Number 3, 2014, pp. 235-247, impact factor 3.370.

Joel P Tully, Aubrey E Hill, Hadia M Ahmed, Ryan Whitley, Anthony Skjellum and M Shahid Mukhtar. Expression-based network biology identifies immune-related functional modules involved in plant defense. BMC Genomics 2014, 15:421 doi:10.1186/1471-2164-15-421, impact factor 4.40.

Zhiwei Sun, Anthony Skjellum, Lee Ward, and Matthew L. Curry. 2014. *A Lightweight Data Location Service for Nondeterministic Exascale Storage Systems*. Trans. Storage 10, 3, Article 12 (August 2014), 22 pages. DOI=10.1145/2629451 http://doi.acm.org/10.1145/2629451.

Matthew L. Curry, Anthony Skjellum, H. Lee Ward, and Ron Brightwell, *Gibraltar: A Library for RAID-Like Reed-Solomon Coding on Programmable Graphics Processors*, Concurrency and Communication: Practice and Experience, December 2011, 23(18): 2477-2495.

Wardman, Bradley, Warner, Gary, McCalley, Heather, Turner, Sarah, Skjellum, Anthony *Reeling in Big Phish with a Deep MD5 Net*, Journal of Digital Forensics, Security and Law. 5(3), 2010.

Wei, Chun; Sprague, Alan; Warner, Gary; Skjellum, Anthony. The Journal of Digital Forensics, Security and Law: JDFSL 5.1 (2010): 21-47.

Suman Roychoudhury, Jeff Gray, Jing Zhang, Purushotham Bangalore, Anthony Skjellum: *A Program Transformation Technique to Support AOP within C++ Template*. Journal of Object Technology 9(1): 143-160, 2010.

Zekai Demirezen, Barrett Bryant, Anthony Skjellum, and Murat M. Tanik, *Design Space Analysis in Model-Driven Engineering*, Journal of Integrated Design & Process Science, Volume 14, Number 1, March 2010, pp. 1-15.

Chun Wei, Alan Sprague, Gary Warner, Anthony Skjellum: *Mining spam email to identify common origins for forensic application*. SAC 2008: 1433-1437

Zhijie Guan, Francisco Hernández, Purushotham Bangalore, Jeffrey G. Gray, Anthony Skjellum, Vijay Velusamy, Yin Liu: *Grid-Flow: a Grid-enabled scientific workflow system with a Petri-net-based interface*. Concurrency and Computation: Practice and Experience 18(10): 1115-1140 (2006).

Florez, G., Liu, Z, Bridges, S., Skjellum, A., and Vaughn, R. *Lightweight Monitoring of MPI Programs in Real-time*, Concurrency and Computation: Practice & Experience, 2005.

Vijay P. Shah, Nicolas H. Younan, Torey Alford, Anthony Skjellum: *A spectral estimation toolkit for Java applications*. Sci. Comput. Program. 54(1): 125-142 (2005)

Skjellum, A., A. Kanevsky, Y. Dandass, et al, *The MPI/RT 1.0 Real-Time Message Passing Standard*, Concurrency and Computation Practice and Experience *16*(S1): 0-322 (2004), pp. 0-322, December 2004.

Florez, G., Liu, Z, Bridges, S., Skjellum, A., and Vaughn, R., "Detecting Anomalies in High-Performance Parallel Programs" The Journal of Digital Information Management, vol 2, no 2, June 2004, pp. 44-47.

Rajanikanth Batchu Yoginder S. Dandass, Anthony Skjellum, Murali Beddhu: MPI/FT: A Model-Based Approach to Low-Overhead Fault Tolerant Message-Passing Middleware. Cluster Computing 7(4): 303-315 (2004

Valsalam, V, and A. Skjellum, "A Framework for High-Performance Matrix Multiplication Based on Hierarchical Abstractions, Algorithms and Optimized Low-level Kernels," *Concurrency and Computation: Practice & Experience, Vol 14(10), pp. 805-839.*Skjellum, A, R. Dimitrov, S. Angaluri, D. Lifka, G. Coulouris, P. Uthayopas, S. Scott, R. Eskicioglu, *Cluster Computing White Paper, "Operating Systems" paper, Mark Baker, ed, Spring 2001 issue of Int. Journal of High Performance Computing Applications.* 

Protopopov, B., and A. Skjellum, "A Multithreaded Message Passing Interface (MPI) Architecture: Performance and Program Issues," *Journal of Parallel and Distributed Computing*, Vol. 61, No. 4, April 2001, pp. 449-466. [52 citations on Google Scholar as of January 2019].

Skjellum, A., D.G. Wooley, Z. Lu, M. Wolf, P.V. Bangalore, A. Lumsdaine, J.M. Squyres, and B. McCandless, "Object-Oriented Analysis and Design of the Message Passing Interface," *Concurrency and Computation: Practice & Experience*, Vol. 13, No. 4, 10 April 2001, pp. 245-292.

Protopopov, B., and A. Skjellum, "Shared-Memory Communication Approaches for an MPI Message-Passing Library," *Concurrency: Practice & Experience*, Vol.12, No. 9, 2000, pp. 799-820.

Carpenter, B., V. Getov, G. Judd, A. Skjellum, and G. Fox, "MPJ: MPI-Like Message Passing for Java," *Concurrency: Practice & Experience*, Vol. 12, No. 11, 2000, pp. 1019-1038. [228 citations per Google Scholar as of December 2022].

Skjellum, A., and others, "MPI 2: A Message-Passing Interface Standard," *International Journal of Supercomputer Applications and High Performance Computing*, Vol. 12, No. 1/2, 1998, pp. 139-157.

Li, J., A. Skjellum, R.D. Falgout, "A Poly-Algorithm for Parallel Dense Matrix Multiplication on Two-Dimensional Process Grid Topologies," *Concurrency: Practice and Experience*, Vol. 9, No. 3, 1997.

Gropp, W., E. Lusk, N. Doss, and A. Skjellum, "A High-Performance, Portable Implementation of the MPI Message-Passing Interface Standard," *Parallel Computing*, Vol. 22(6), September 1996, pp. 789-828. [3,351 citations on Google Scholar as of December, 2022.]

Skjellum, A., E. Lusk, and W. Gropp, "Early Applications in the Message-Passing Interface," *International Journal of Supercomputing Applications*, June 1995 (invited paper).

Skjellum, A., S.G. Smith, N.E. Doss, A.P. Leung, M. Morari, *The Design and Evolution of Zipcode*, Parallel Computing, April 1994, pp. 565-96 (invited paper).

Skjellum, A., *MPI: A Message-Passing Interface Standard*, International Journal of Supercomputer Applications and High Performance Computing, Vol. 8, No. 3/4, 1994, pp. 311-356.

#### Refereed Conference Papers

"Chen, Po Hao; Haghi, Pouya; Chung, Jae Yoon; Geng, Tong; West, Richard; Skjellum, Anthony; Herbordt, Martin C; "The Viability of Using Online Prediction to Perform Extra Work while Executing BSP Applications," 2022 IEEE High Performance Extreme Computing Conference (HPEC), pp. 1-7, 2022, IEEE.

Marshall, Ryan J and Weerasena, Lakmali and Skjellum, Anthony, *A Parallel Meta-Solver* for the Multi-Objective Set Covering Problem, In 2021 IEEE International Parallel and Distributed Processing Symposium Workshops (IPDPSW), pages 529-538, 2021.

Gatlin, Jacob and Belikovetsky, Sofia and Elovici, Yuval and Skjellum, Anthony and Lubell, Joshua and Witherell, Paul and Yampolskiy, Mark, *Encryption is Futile: Reconstructing 3D-Printed Models Using the Power Side-Channel*, 24th International Symposium on Research in Attacks, Intrusions and Defenses, pages 135--147, 2021.

Yampolskiy, Mark and Graves, Lynne and Gatlin, Jacob and Skjellum, Anthony and Yung, Moti, What Did You Add to My Additive Manufacturing Data?: Steganographic Attacks on 3D Printing Files, 24th International Symposium on Research in Attacks, Intrusions and Defenses, pages= 266--281, 2021.

Medury, Sai and Altarawneh, Amani and Skjellum, Anthony, *Design and Evaluation of Cascading Cuckoo Filters for Zero-False-Positive Membership Services*, In 2021 IEEE 11th Annual Computing and Communication Workshop and Conference (CCWC), pages 1061--1065, 2021.

Ozcelik, Ilker and Skjellum, Anthony, *CryptoRevocate: A Cryptographic Accumulator based Distributed Certificate Revocation List*, In 2021 IEEE 11th Annual Computing and Communication Workshop and Conference (CCWC), pages 0865--0872, 2021

Altarawneh, Amani and Skjellum, Anthony, *The Security Ingredients for Correct and Byzantine Fault-tolerant Blockchain Consensus Algorithms*, In 2020 International Symposium on Networks, Computers and Communications (ISNCC), pages 1--9, 2020

Schafer, Derek and Laguna, Ignacio and Skjellum, Anthony and Sultana, Nawrin and Mohror, Kathryn, *Extending the MPI Stages Model of Fault Tolerance*, 2020 Workshop on Exascale MPI (ExaMPI), pages 52--61, 2020,

Holmes, Daniel J and Skjellum, Anthony and Schafer, Derek, *Why is MPI (perceived to be) so complex? Part 1—Does strong progress simplify MPI?*, In 27th European MPI Users' Group Meeting, pages 21--30, 2020.

Altarawneh, Amani and Herschberg, Tom and Medury, Sai and Kandah, Farah and Skjellum, Anthony, Buterin's scalability trilemma viewed through a state-change-based classification for common consensus algorithms, in 2020 10th Annual Computing and Communication Workshop and Conference (CCWC), pages 727--736, 2020.

Haghi, Pouya and Guo, Anqi and Geng, Tong and Broaddus, Justin and Schafer, Derek and Skjellum, Anthony and Herbordt, Martin, *A reconfigurable compute-in-the-network FPGA assistant for high-level collective support with distributed matrix multiply case study*, In 2020 International Conference on Field-Programmable Technology (ICFPT), pages 159--164, 2020.

Haghi, Pouya and Guo, Anqi and Xiong, Qingqing and Patel, Rushi and Yang, Chen and Geng, Tong and Broaddus, Justin T and Marshall, Ryan and Skjellum, Anthony and Herbordt, Martin C, *FPGAs in the network and novel communicator support accelerate MPI collectives*, in 2020 IEEE High Performance Extreme Computing Conference (HPEC), pages 1--10, 2020.

Xiong, Qingqing and Yang, Chen and Haghi, Pouya and Skjellum, Anthony and Herbordt, Martin, *Accelerating MPI collectives with FPGAs in the network and novel communicator support*, in 2020 IEEE 28th Annual International Symposium on Field-Programmable Custom Computing Machines (FCCM), pages 215--215, 2020.

Qingqing Xiong, Rushi Patel, Chen Yang, Tong Geng, Anthony Skjellum, Martin C. Herbordt: *GhostSZ: A Transparent FPGA-Accelerated Lossy Compression Framework*. FCCM 2019: 258-266

Walker Haddock, Purushotham V. Bangalore, Matthew L. Curry, Anthony Skjellum: *High Performance Erasure Coding for Very Large Stripe Sizes*. 2019 Spring Simulation Conference (SpringSim) 2019: 1-12

Ryan E. Grant, Matthew G. F. Dosanjh, Michael J. Levenhagen, Ron Brightwell, Anthony Skjellum: Finepoints: Partitioned Multithreaded MPI Communication. International Conference on Supercomputing (ISC) 2019: Vol. 11501, pages 330-350.

Alawneh, Heba and Umphress, David and Skjellum, Anthony, *Android Malware Detection using Neural Networks & Process Control Block Information*, in 2019 14th International Conference on Malicious and Unwanted Software (MALWARE), pages 3--12, 2019.

Hjelm, Nathan and Pritchard, Howard and Guti {\'e}rrez, Samuel K and Holmes, Daniel J and Castain, Ralph and Skjellum, Anthony, *MPI Sessions: Evaluation of an implementation in Open MPI, in Proc. of 2019 IEEE International Conference on Cluster Computing (CLUSTER)*, pages 1--11, 2019.

Kandah, Farah and Huber, Brennan and Skjellum, Anthony and Altarawneh, Amani, *A blockchain-based trust management approach for connected autonomous vehicles in smart cities*, in 2019 IEEE 9th Annual Computing and Communication Workshop and Conference (CCWC), pages 544--549, 2019.

Kandah, Farah and Huber, Brennan and Altarawneh, Amani and Medury, Sai and Skjellum, Anthony, Blast: Blockchain-based trust management in smart cities and connected

vehicles setup, in 2019 IEEE High Performance Extreme Computing Conference (HPEC), pages 1--7, 2019. (Not related to the BLAST application in Bioinformatics.)

Bangalore, Purushotham V and Rabenseifner, Rolf and Holmes, Daniel J and Jaeger, Julien and Mercier, Guillaume and Blaas-Schenner, Claudia and Skjellum, Anthony, *Exposition, clarification, and expansion of MPI semantic terms and conventions: is a nonblocking MPI function permitted to block?*, in Proceedings of the 26th European MPI Users' Group Meeting (EuroMPI 2019), pages 1--10, 2019.

Kandah, Farah and Cancelleri, Joseph and Reising, Donald and Altarawneh, Amani and Skjellum, Anthony, *A hardware-software codesign approach to identity, trust, and resilience for iot/cps at scale*, 2019 International Conference on Internet of Things (iThings) and IEEE Green Computing and Communications (GreenCom) and IEEE Cyber, Physical and Social Computing (CPSCom) and IEEE Smart Data (SmartData), pages 1125--1134, 2019.

Skjellum, Anthony and Ruefenacht, Martin and Sultana, Nawrin and Schafer, Derek and Laguna, Ignacio and Mohror, Kathryn, *ExaMPI: A Modern Design and Implementation to Accelerate Message Passing Interface Innovation*, Latin American High Performance Computing Conference (CARLA 2019), pages 153--169, 2019.

Schafer, Derek and Ghafoor, Sheikh and Holmes, Daniel and Ruefenacht, Martin and Skjellum, Anthony, *User-Level Scheduled Communications for MPI*, in 2019 IEEE 26th International Conference on High Performance Computing, Data, and Analytics (HiPC), pages 290--300, 2019.

Medury, Sai and Skjellum, Anthony and Brooks, Richard R and Yu, Lu, *Scraaps: X.509 certificate revocation using the blockchain-based scrybe secure provenance system,* in 2018 13th International Conference on Malicious and Unwanted Software (MALWARE), pages 145--152, 2018.

Sultana, Nawrin and Skjellum, Anthony and Bangalore, Purushotham and Laguna, Ignacio and Mohror, Kathryn, *Understanding the usage of MPI in exascale proxy applications*, in 2018 SC Conference ExaMPI Workshop, 2018.

Oakley, Jonathan and Worley, Carl and Yu, Lu and Brooks, Richard and Skjellum, Anthony, *Unmasking criminal enterprises: an analysis of Bitcoin transactions*, in 2018 13th International Conference on Malicious and Unwanted Software (MALWARE), pages 161--166, 2018.

Guin, Ujjwal and Singh, Adit and Alam, Mahabubul and Canedo, Janice and Skjellum, Anthony, *A secure low-cost edge device authentication scheme for the internet of things,* in 2018 31st International Conference on VLSI Design and 2018 17th International Conference on Embedded Systems (VLSID), pages 85--90, 2018.

Stern, Joshua and Xiong, Qingqing and Skjellum, Anthony and Herbordt, Martin, A novel approach to supporting communicators for in-switch processing of MPI collectives, in Proc. of Workshop on Exascale MPI at SC'18, 2018.

Qingqing Xiong, Anthony Skjellum, Martin C. Herbordt: Accelerating MPI Message Matching through FPGA Offload. FPL 2018: 191-195

Nawrin Sultana, Anthony Skjellum, et al. MPI Stages: Checkpointing MPI State for Bulk Synchronous Applications. EuroMPI 2018: 13:1-13:11.

Qingqing Xioing, Purushotham V. Bangalore, Martin Herbordt, and Anthony Skjellum, MPI Derived Datatypes: Performance and Portability Issues. EuroMPI 2018: 15:1-15:10.

Ujjwal Guin, Pinchen Cui, and Anthony Skjellum, Ensuring Proof-of-Authenticity of IoT edge devices using Blockchain technology, 2018, accepted for IEEE Blockchain 2018, Halifax, Canada.

Carl Worley and Anthony Skjellum, *Opportunities, Challenges, and Future Extensions for Smart-Contract Design Patterns*, 1st Workshop on Blockchain and Smart Contract Technologies, BIS (Workshops) 2018: 264-276, Berlin.

U. Guin, A. D. Singh, M. Alam, J. Canedo, and A. Skjellum, *A secure low-cost edge device authentication scheme for the Internet of Things*, in 31st International Conference on VLSI Design and 17th International Conference on Embedded Systems, VLSID 2018, Pune, India, January 6-10, 2018 EEE Computer Society, 2018, pp. 85–90.

Bradley Morgan, Daniel J. Holmes, Anthony Skjellum, Purushotham Bangalore, Srinivas Sridharan, *Planning for performance: persistent collective operations for* MPI, in The 24th European {MPI} Users' Group Meeting, EuroMPI/USA 2017, Chicago, IL, USA, Sept. 25-28, 2017, pp 4:1—4:11, 2017.

Hadia Ahmed, Anthony Skjellum, Purushotham Bangalore, Peter Pirkelbaue, *Transforming blocking MPI collectives to Non-blocking and persistent operations*. EuroMPI/USA 2017: 3:1-3:11.

Walker Haddock, Matthew L. Curry, Purushotham V. Bangalore, Anthony Skjellum: GPU Erasure Coding for Campaign Storage. ISC Workshops 2017: 145-159

Md. Mahmud Hossain, Ragib Hasan, and Anthony Skjellum: Securing the Internet of Things: A Meta-Study of Challenges, Approaches, and Open Problems, 37th IEEE International Conference on Distributed Computing Systems Workshops, ICDCS Workshops 2017, Atlanta, GA, USA, June 5-8, 2017, pp. 220-225.

Oluwakemi Hambolu, Lu Yu, Jon Oakley, Richard R. Brooks, Ujan Mukhopadhyay, Anthony Skjellum: *Provenance threat modeling*. PST 2016: 384-387, December 2016.

Ujan Mukhopadhyay, Anthony Skjellum, Oluwakemi Hambolu, Jon Oakley, Lu Yu, Richard R. Brooks: *A brief survey of Cryptocurrency systems*. PST 2016: 745-752. [299 Citations on Google Scholar as of December 2022.]

Carl Worley and Anthony Skjellum, Blockchain Tradeoffs and Challenges for Current and Emerging Applications: Generalization, Fragmentation, Sidechains, and Scalability. Symposium paper for IEEE Blockchain 2018, Halifax, Canada, pages 1582—1587, in 2018 IEEE International Conference on Internet of Things (iThings) and IEEE Green Computing and Communications (GreenCom) and IEEE Cyber, Physical and Social Computing (CPSCom) and IEEE Smart Data (SmartData), 2018.

Janice Cañedo, Anthony Skjellum. "Adding scalability to Internet of Things gateways using parallel computation of edge device data." HPEC 2016: pp. 1-5.

Benjamin Fogel, Shane Farmer, Hamza Alkofahi, Anthony Skjellum, Munawar Hafiz: POODLEs, More POODLEs, FREAK Attacks Too: How Server Administrators Responded to Three Serious Web Vulnerabilities. ESSoS 2016: 122-137.

Patrick G. Bridges, Matthew G. F. Dosanjh, Ryan E. Grant, Anthony Skjellum, Shane Farmer, Ron Brightwell: "Preparing for exascale: modeling MPI for many-core systems using fine-grain queues." ExaMPI@SC 2015: 5:1-5:8.

Amin Hassani, Anthony Skjellum, Purushotham Bangalore, Ron Brightwell: "Practical resilient cases for FA-MPI, a transactional fault-tolerant MPI." ExaMPI@SC 2015: 1:1-1:10.

Zawoad, S., R. Hasan, and A. Skjellum, 2015: OCF: An open cloud forensics model for reliable digital forensics. In 8th IEEE International Conference on Cloud Computing (CLOUD 15), New York, USA, June 2015, pp. 437-444.

Hadia Ahmed, Anthony Skjellum, Peter Pirkelbauer, 2015. Petal Tool for Analyzing and Transforming Legacy MPI Applications. Languages and Compilers for Parallel Computing - 28th International Workshop, LCPC 2015, Raleigh, NC, USA, September 9-11, 2015, Revised Selected Papers, pp. 156-170.

UDaaS: A Cloud-based URL-Deduplication-as-a-service for Big Data Sets, Shams Zawoad, Ragib Hasan, Gary Warner, Anthony Skjellum, Proc. of the 4th IEEE International Conference on Big Data and Cloud Computing (BDCloud), Sydney, Australia, December 3-5, 2014.

Amin Hassani, Anthony Skjellum, Ron Brightwell: Design and Evaluation of FA-MPI, a Transactional Resilience Scheme for Non-blocking MPI. DSN 2014: 750-755.

Amin Hassani, Anthony Skjellum, Ron Brightwell, Purushotham Bangalore: Comparing, Contrasting, Generalizing, and Integrating Two Current Designs for Fault-Tolerant MPI. EuroMPI/ASIA 2014.

Amin Hassani, Anthony Skjellum, Ron Brightwell, Brian W. Barrett: Design, Implementation, and Performance Evaluation of MPI 3.0 on Portals 4.0. EuroMPI 2013: 55-60, September 2013.

Brad Wardman, Tommy Stallings, Gary Warner, Anthony Skjellum: High-performance content-based phishing attack detection. eCrime Researchers Summit 2011: 1-9.

Matthew L. Curry, A. Skjellum, Lee Ward, Ron Brightwell. Accelerating Reed-Solomon coding in RAID systems with GPUs. IPDPS'2008. pp. 1-6.

B. Wardman, T. Stallings, G. Warner and A. Skjellum, "High-performance content-based phishing attack detection," *eCrime Researchers Summit (eCrime), 2011*, San Diego, CA, 2011, pp. 1-9. doi: 10.1109/eCrime.2011.6151977 URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6151977&isnumber=6151974

C Wei, A Sprague, G Warner, A Skjellum, *Identifying new spam domains by hosting IPs: improving domain blacklisting*, - Proc. of 7th CEAS, 2010.

Vijay Velusamy, Anthony Skjellum: Quality of Service support for Grid Storage Environments. GCA 2006: 134-140.

Vijay Velusamy, Changzheng Rao, Srigurunath Chakravarthi, Jothi P. Neelamegam, Weiyi Chen, Sanjay Verma, Anthony Skjellum: Programming the InfiniBand Network Architecture for High Performance Message Passing Systems. ISCA PDCS 2003: 391-398.

Rossen Dimitrov, Anthony Skjellum: Software Architecture and Performance Comparison of MPI/Pro and MPICH. International Conference on Computational Science 2003: 307-315.

Srigurunath Chakravarthi, C. R. Krishna Kumar, Anthony Skjellum, H. A. Prahalad, Bharath Seshadri: A Model for Performance Analysis of MPI Applications on Terascale Systems. PVM/MPI 2003: 81-87.

Rajanikanth Batchu, Anthony Skjellum, Zhenqian Cui, Murali Beddhu, Jothi P. Neelamegam, Yoginder S. Dandass, Manoj Apte: MPI/FT<sup>TM</sup>: Architecture and Taxonomies for Fault-Tolerant, Message-Passing Middleware for Performance-Portable Parallel Computing. CCGRID 2001: 26-33. [108 citations on Google Scholar as of December 2022].

Apte, Manoj, Srigurunath Chakravarthi, Jothi Padmanabhan, and Anthony Skjellum, "A Synchronized Real-Time Linux Based Myrinet Cluster for Deterministic High Performance Computing and MPI/RT," *Proceedings of the Workshop on Parallel and Distributed Real-Time Systems*, San Francisco, CA, April 2001 (available on CD-ROM).

Wooley, Bruce, Susan Bridges, Julia Hodges, and Anthony Skjellum, "Scaling the Data Mining Step in Knowledge Discovery Using Oceanographic Data," *Proceedings of IEA/AIE*, 2000, pp. 85-92.

Apte, Manoj, S. Chavravarthi, A. Pillai, A. Skjellum, X. Zan, "Time Based Linux for Real-Time NOWs and MPI/RT," *Proceedings of the IEEE Real-Time Systems Symposium*, 1999, pp. 220-222.

Wooley, Bruce, Yoginder Dandass, Susan Bridges, Julia Hodges, and Anthony Skjellum, "Scalable Knowledge Discovery from Oceanographic Data," *Proceedings of the Artificial Neural Networks in Engineering Conference (ANNIE '98)*, St. Louis, MO, November 1998.

Kanevsky, A., A. Skjellum, and A. Rounbehler, "MPI/RT - Emerging Standard for High-Performance Real-Time Systems," *Proceedings of the Hawaii International Conference on System Sciences (HICSS-31) Vol. III*, Maui, Hawaii, January 1998, pp. 157-164.

Geist, A., W. Gropp, S. Huss-Lederman, A. Lumsdaine, E. Lusk, W. Saphir, A. Skjellum, and M. Snir, "MPI-2: Extending the Message-Passing Interface," Euro-Par '96.

Skjellum, A., P. Vaughan, D. Reese, and F. Cheng, "Migrating from PVM to MPI, Part I: The Unify System," *Proceedings of the Fifth Symposium on the Frontiers of Massively Parallel Computation*, February 6-9, 1995.

Skjellum, A., A.P. Leung, S.G. Smith, R.D. Falgout, C.H. Still, and C.H. Baldwin, "The Multicomputer Toolbox--First Generation Scalable Libraries," *Proceedings of the Hawaii International Conference on Systems Sciences (HICSS-27)*, Maui, Hawaii, January 1994, pp. 644-654.

#### Non-Refereed Conference Papers

Jothi P. Neelamegam, Srigurunath Chakravarthi, Manoj Apte, Anthony Skjellum: PromisQoS: An Architecture for Delivering QoS to High-Performance Applications on Myrinet Clusters. LCN 2003: 510-517.

Skjellum, Anthony, Vijay Velusamy, Changzheng Rao, and Boris Protopopov, "Programmable NICs: What They Mean for Parallel Middleware (And Are They Here to Stay?)," *Proceedings of the 6<sup>th</sup> Gigabit Network Technology Workshop*, Washington University, St. Louis, MO, June 18, 2002.

Batchu, R., J.P. Neelamegam, Z. Cui, M. Beddhu, A. Skjellum, Y. Dandass, and M. Apte, "MPI/FT (TM): Architecture and Taxonomies for Fault-Tolerant, Message-Passing Middleware for Performance-Portable Parallel Computing," *DSM2001*, Brisbane, Australia, May 2001.

Skjellum, A., "High Performance MPI," Proceedings of PDPTA98, July 1998.

Kanevsky, A., A. Skjellum, and J. Watts, "Standardization of Communication Middleware for High-Performance Real-Time Systems," *Proceedings on Middleware for Distributed Real-Time Systems and Services*, San Francisco, December 1997, pp. 206-223.

Balducci, M., A. Choudary, A. Ganapathiraju, J. Hamaker, J. Picone, and A. Skjellum, "Benchmarking of Serial and Parallel FFT Algorithms," *Proceedings of IEEE Southeastcon*, Blacksburg, Virginia, April 1997, pp. 328-330.

Kanevsky, A., A. Skjellum, Z. Cui, and J. Li, "Design and Implementation of a Real-Time Message-Passing Interface," *Proceedings of International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA '97), Vol. 1,* July 1997, pp. 334-345.

Kanevsky, A., and A. Skjellum, "The Real-Time MPI Specification and its Prototype," *Proceedings of the 1st International Workshop on Embedded HPC Systems and Applications, 11th International Parallel Processing Symposium, April 1997.* 

Brightwell, R., and A. Skjellum, "MPICH on the T3D: A Case Study of High-Performance Message Passing," *Proceedings of the MPI Developers Conference*, University of Notre Dame, July 1996, pp. 2-9.

Skjellum, A., B. Protopopov, and L. S. Hebert, "A Thread Taxonomy for MPI," *Proceedings of MPI Developers Conference*, July 1996, pp. 50-57.

McMahon, T., and A. Skjellum, "eMPI/eMPICH: Embedding MPI," *Proceedings of MPI Developers Conference*, July 1996, pp. 180-184.

Skjellum, A., and P.V. Bangalore, "Driving Issues in Scalable Libraries," *Proceedings of SIAM Seventh Conference on Parallel Processing for Scientific Computing*, February 15, 1995.

Bangalore, P.V., N. Doss, and A. Skjellum, "MPI++: Issues and Features," *Proceedings of OONSKI '94*, 1994.

Skjellum, A., N.E. Doss, K. Viswanathan, A. Chowdappa, and P.V. Bangalore, "Extending the Message Passing Interface (MPI)," *Proceedings of the Scalable Libraries Conference II (SPLC94)*, 1994, pp. 106-118.

Skjellum, A., and B.K. Grant, "Message Passing in the 1990's: Performance, Safety, Correctness," *Proceedings of Supercomputing 1993*, 1993, pp. 767-768 (invited presentation).

Skjellum, A., "MPI: A Message Passing Interface," *Proceedings of Supercomputing 1993*, 1993, pp. 878-883.

Skjellum, A., "Document for a Standard Message-Passing Interface," *Proceedings of the Message Passing Interface Forum*, University of Tennessee, November 1993 (specifically, Chapter 5).

Skjellum, A., N.E. Doss, and P.V. Bangalore, "Writing Libraries in MPI," *Proceedings of the Scalable Parallel Libraries Conference (SPLC)*, October 1993, pp. 166-173. [53 Citations on Google Scholar as of June, 2015].

Skjellum, A., "The Multicomputer Toolbox: Current and Future Directions," *Proceedings of the Scalable Parallel Libraries Conference (SPLC)*, October 1993, pp. 94-103.

Smith, S.G., R.D. Falgout, C.H. Still, and A. Skjellum, "High-Level Message-Passing Constructs for Zipcode 1.0: Design and Implementation," *Proceedings of the Scalable Parallel Libraries Conference (SPLC)*, October 1993, pp. 150-159.

Bangalore, P.V., A. Skjellum, C.H. Baldwin, and S.G. Smith, "Dense and Iterative Concurrent Linear Algebra in the Multicomputer Toolbox," *Proceedings of the Scalable Parallel Libraries Conference (SPLC)*, October 1993, pp. 132-141.

Anupindi, K., A. Skjellum, P. Coddington, and G.C. Fox, "Parallel Differential-Algebraic Equation Solvers for Power System Transient Stability Analysis," *Proceedings of the Scalable Parallel Libraries Conference (SPLC)*, October 1993, pp. 240-244.

Leung, A.P., A. Skjellum, and G.C. Fox, "Concurrent DASSL: A Second-Generation DAE Solver Library," *Proceedings of the Scalable Parallel Libraries Conference (SPLC)*, October 1993, pp. 204-210.

Briley, W.R., D.G. Reese, A. Skjellum, and L. Turcotte, "NHPDCC--The National High Performance Distributed Computing Consortium," *Proceedings of the Scalable Parallel Libraries Conference (SPLC)*, October 1993, pp. 2-9.

Skjellum, A., "Scalable Libraries in a Heterogeneous Environment," *Proceedings of the Second High Performance Distributed Computing Conference (HPDC2)*, July 1993, pp. 13-20 (invited paper).

Falgout, Robert D., Anthony Skjellum, Steven G. Smith, and Charles H. Still, "The Multicomputer Toolbox Approach to Concurrent BLAS and LACS," *Proceedings of the Scalable High Performance Computing Conference (SHPCC)*, April 1992, pp. 121-128.

Skjellum, Anthony, and Charles H. Still, "Zipcode and the Reactive Kernel for the Caltech Intel Delta Prototype and nCUBE/2," *Proceedings of the Sixth Distributed Memory Computing Conference (DMCC6)*, April 1991.

Skjellum, A., and Alvin P. Leung, "Zipcode: A Portable Multicomputer Communications Library atop the Reactive Kernel," *Proceedings of the Fifth Distributed Memory Computing Conference*, 1990. [83 citations per Google Scholar as of December 2022].

Skjellum, A., and Alvin P. Leung, "LU Factorization of Sparse, Unsymmetric Jacobian Matrices on Multicomputers: Experience, Strategies, Performance," *Proceedings of the Fifth Distributed Memory Computing Conference*, 1990.

Skjellum, A., and M. Morari, "Concurrent DASSL Applied to Dynamic Distillation Column Simulation," *Proceedings of the Fifth Distributed Memory Computing Conference*, 1990.

Skjellum, A., M. Morari, S. Mattisson, and L. Peterson, "Concurrent DASSL: Structure, Application, and Performance," *Proceedings of the Fourth Conf. on Hypercubes, Concurrent Computers and Applications (HCCA4)*, Golden Gate Enterprises, 1989, pp. 1321-1328.

Skjellum, A., M. Morari, S. Mattisson, and L. Peterson, "Highly Concurrent Dynamic Simulation in Chemical Engineering II," *Proceedings of the AIChE Annual Meeting*, San Francisco, November 1989.

Skjellum, A., M. Morari, S. Mattisson, and L. Peterson, "Highly Concurrent Dynamic Simulation in Chemical Engineering: Issues, Methodologies, Model Problems, Progress," *Proceedings of the AIChE Annual Meeting*, Washington, DC, November 1988.

Skjellum, A., M. Morari, and S. Mattisson, "Concurrent Dynamic Simulation of Distillation Columns via Waveform Relaxation," *Proceedings of the Second International Conference on Vector and Parallel Computing*, Norway, June 1988.

Skjellum, A., M. Morari, and S. Mattisson, "Waveform Relaxation for Concurrent Dynamic Simulation of Distillation Columns," *Proceedings of the Third Conference on Hypercube Concurrent Computers and Applications*, Pasadena, January 1988, pp. 1062-1071.

Smith, R.S., J. Doyle, M. Morari, and A. Skjellum, "A Case Study Using Laboratory Process Control Problems," *Proceedings of the IFAC 10th World Congress on Automatic Control, Vol. 8*, Munich, July 1987.

Lewin, D.R., R.E. Heersink, A. Skjellum, D.L. Laughlin, and D.E. Rivera, "Robex: Robust Control Synthesis via Expert System," *Proceedings of the IFAC 10th World Congress on Automatic Control*, Munich, July 1987.

Morari, M., R.E. Heersink, and A. Skjellum, "Development of an Expert System for Computer-Aided Instruction in Process Control," *Proceedings of IBM AIS University AEP Conference*, 1986.

Skjellum, A., "Integration of Computational Elements into a Problem-Oriented Chemical Engineering Course," *Proceedings of IBM AIS University AEP Conference*, 1985.

#### **Books**

Gropp, William, Ewing Lusk, and Anthony Skjellum, *Using MPI: Portable Parallel Programming with the Message Passing Interface*, MIT Press, 3<sup>nd</sup> Edition, November 2014. [6,513 citations on Google Scholar as of December 2022. This reflects all 3 editions.]

Gropp, William, Ewing Lusk, and Anthony Skjellum, *Using MPI: Portable Parallel Programming with the Message Passing Interface*, MIT Press, October 1994.

# Chapters of Books

Bhat, Naazira B and Madurasinghe, Dulip and Ozcelik, Ilker and Brooks, Richard R and Venayagamoorthy, Ganesh Kumar and Skjellum, Anthony, *Evaluation and Design of Performable Distributed Systems*, In Handbook of Advanced Performability Engineering, pages 211--227, 2021

Skjellum, A., "Parallel Processing," *Lecture Notes in Computer Science Vol. 1/1123*, Spring Verlag, 1996, pp. 128-135.

Bangalore, P.V., N.E. Doss, Ziyang Lu, and A. Skjellum, "Explicit Parallel Programming in C++ based on the Message-Passing Interface (MPI)," Chapter in *Parallel Programming Using C++*, G. V. Wilson, Ed., MIT Press, 1995.

Chapter 16 and parts of chapter 9 of *Parallel Computing Works!* by Fox, Messina, and Smith, Morgan-Kaufmann, April 1994.

Skjellum, Anthony, Steven G. Smith, Charles H. Still, Alvin P. Leung, and Manfred Morari, "The Zipcode Message-Passing System," *Parallel Computing Works*, Geoffrey C. Fox, editor, 1993 (also as Lawrence Livermore National Laboratory Technical Report No. UCRL-JC-112022, 1992.)

#### Selected Volumes Edited

James H. Graham, Anthony Skjellum: 22nd International Conference on Parallel and Distributed Computing and Communication Systems, PDCCS 2009, September 24-26, 2009, Marriott Louisville Downtown, Louisville, Kentucky, USA ISCA 2009.

# Selected Reports

Steven Eliuk, Cameron Upright and Anthony Skjellum, "dMath: A Scalable Linear Algebra and Math Library for Heterogeneous GP-GPU Architectures," CoRR abs/1604.01416, 2016, http://arxiv.org/abs/1604.01416.

Skjellum, A., (co-chair and co-editor) "DRAFT Document for the Real-time Message Passing Interface (MPI/RT) Standard," Real-Time Message Passing Interface (MPI/RT) Forum, Revision of 1/16/98.

Dimitrov, R., B. Protopopov, and A. Skjellum, "How Data Transfer Modes and Synchronization Schemes Affect the Performance of a Communication System Based on Myrinet," Technical Report revision of 12/97, 1997.

Henley, G., N. Doss, and A. Skjellum, "BDT: A Thread Library for the Myricom LANai 4.x Communications Processor," Technical Report No. MSSU-EIRS-ERC-97-2, NSF Engineering Research Center, Mississippi State University, February 1997.

Henley, G., N. Doss, T. McMahon, and A. Skjellum, "BDM: A Multiprotocol Myrinet Control Program and Host Application Programmer Interface," Technical Report No. MSSU-EIRS-ERC-97-3, NSF Engineering Research Center, February 1997.

Doss, N., G. Henley, and A. Skjellum, "BDMD: A Debugger for Myrinet Control Programs," Technical Report No. MSSU-EIRS-ERC-97-4, NSF Engineering Research Center, February 1997.

Skjellum, A., S.G. Smith, C.H. Still, and R.D. Falgout, "The Multicomputer Toolbox," *Laboratory Directed Research and Development*, Technical Report No. UCRL-53689-92, Lawrence Livermore National Laboratory, University of California, February 1993.

Grant, Brian K., and Anthony Skjellum, "The PVM Systems: An In-Depth Analysis and Documenting Study: Concise Edition," Lawrence Livermore National Laboratory Technical Report NO. UCRL-JC-112016, August 1992.

Skjellum, Anthony, and Chuck Baldwin, "The Multicomputer Toolbox: Scalable Parallel Libraries for Large-Scale Concurrent Applications," Technical Report No. UCRL-JC-109251, Lawrence Livermore National Laboratory, University of California, December 1991.

Skjellum, A., and M. Morari, "Zipcode: A Portable Multicomputer Communications Library for High-Performance Computing: Practice and Experience," Technical Report, Lawrence Livermore National Laboratory, University of California, March 1991.

Crawford, G. III, Y. Dandass, and A. Skjellum, "The JMPI Commercial Message Passing Environment and Specification: Requirements, Design, Motivations, Strategies, and Target Users."

#### **Selected Presentations**

#### Workshops

Skjellum, A., R. Batchu, Y. Dandass, and M. Beddhu, "MPI/FT: A Model-Based Approach for Low-Overhead Fault-Tolerance," 1<sup>st</sup> Sandia/CSRI Fault Tolerance Workshop, Albuquerque, NM, June 10, 2002.

Skjellum, A., Hebert, S., A. Kanevsky, and Z. Cui, "MPIDC99 Tutorial on MPI/RT," Third MPI Developers and Users Conference, Atlanta, March 1999 (half-day tutorial).

Skjellum, A., and P. Bangalore, "MPIDC99 Tutorial on MPI-2," Third MPI Developers and Users Conference, Atlanta, March 1999, (half-day tutorial).

Skjellum, A., and P. Bangalore, "SIAM Tutorial on MPI-2," SIAM 9<sup>th</sup> Conference On Parallel Processing for Scientific Computing, San Antonio, March 1999, (half-day tutorial).

Skjellum, A., and P. Bangalore, "IPPS Tutorial on High Performance Computing," IPPS'97, Geneva, Switzerland, April 1997 (half-day tutorial).

Skjellum, A., and P. Bangalore, "IPPS Tutorial on MPI," IPPS'97, Geneva, Switzerland, April 1997 (half-day tutorial).

Skjellum, A., "Design and Development of Real-Time Message Passing Interface (MPI/RT) Standard," High Performance Embedded Computing Workshop, September 1997.

Skjellum, A., "A Second Talk about MPI," SCRI Cluster Workshop '93, Florida State University, December 8, 1993.

Skjellum, A., "Writing Parallel Libraries with MPI," AMPI: A Message Passing Interface Mini-Symposium, Supercomputing 1993, Portland, OR, November 19, 1993.

Skjellum, A., "Message Passing Systems: Portability, Capability, Performance, Standards," The First CRPC Workshop on Standards for Message Passing in a Distributed Memory Environment, Williamsburg, VA, April 1992 (invited presentation).

"The Reactive Kernel and Cosmic Environment: Native and Emulated Systems for Medium-Grain Multicomputers and Workstation Networks." The First CRPC Workshop on Standards for Message Passing in a Distributed Memory Environment, Williamsburg, VA, April, 1992 (invited presentation).

#### **Invited Lectures**

"MPI 4: An Exascale Message Passing Strawman Standard," Sandia National Laboratories, April, 2011.

"Gibraltar GPU RAID", EMC Technical Talk, co-presented with Matthew Curry, November 8, 2010, Cambridge, Mass.

"MPI-3: Evolution, Revolution, or Status Quo," Sandia National Laboratories, June 12, 2002.

"Efficient Implementations of MPI," Lawrence Livermore National Laboratory, February 16, 1995.

"The National High Performance Distributed Computing Consortium," Lawrence Livermore National Laboratory, October 21, 1993.

"MPI: An Effort to Standardize Multicomputer Message Passing," Los Alamos National Laboratory, CNLS Seminar, July 6, 1993 (also presented at NASA Ames, August 18, 1993; and Lawrence Livermore National Laboratory, August 19, 1993).

"Building Parallel Libraries and Applications in the MPP Environment," Lawrence Livermore National Laboratory, August 17, 1993.

"The Multicomputer Toolbox: First-and Second-Generation Scalable Libraries and Algorithms Research," Sandia National Laboratories, Massively Parallel Computing Research Laboratory, June 2, 1993 (also presented at Argonne National Laboratories, September 7, 1993).

# **University Service**

#### At UTC

Computer Science and Engineering, Search committee Chair, 2022-23

# At Auburn

Computer Science and Software T&P Committee, 2014-2017.

Computer Science and Software Engineering Recruitment Committee, 2016-2017.

#### At UAB

Chair, University-wide Committee, "Research Capacity Building Committee," 2009-2014.

Organized and Led Training sessions for NSF Career Award Submissions: provided inservice workshops for Professors seeking NSF CAREER awards, 2008-2014.

#### At Mississippi State

Computer Science Department/Research Center Liaison Committee, 2001-02

- Chairman, 2001-02

Computer Science Faculty Search Committee, 1997-98, 1999-00

Computer Science Facilities Committee, 1998-02

- Chairman, 1998-99, 2000-01

Computer Science Ad Hoc Committee on Graduate Student Concerns, 2001-02

Computer Science Affiliation Agreements Committee, 1999-00

Computer Science Ad Hoc Committee on Target Schools, 2000-01

Computer Science Strategic Planning Committee, 2000-01

# **Courses Taught**

#### At Auburn

COMP 5350/6350/6356 – Digital Forensics

COMP 5370/6370/6376 – Computer and Network Security

# At UAB

CS 306 Object-oriented Perl Programming

CS 420/520 Software Engineering

CS 436/636 Computer Security

CS 434/634 Parallel Computing

CS 620/630 Bioinformatics I/II (Coordinator)

CS 499 Senior Capstone

CS 591/691 Virtualization

CS 680/780 Foundations of Numerical Computing

CS 334/534 Introduction to TCP/IP

# At Mississippi State University

CS 9133 Parallel Scientific Computing

CS 8733 Advanced Systems Programming

CS 4992/6992 Advanced Programming Using C++

CS 3183 Systems Programming

CS 4812/6812 Computer Systems Laboratory I

CS 4743/6743 Operating Systems II

CS 4192/6192 Computer Systems Laboratory II

CS 4163/6163 Design of Parallel Algorithms

CS 4153/6153 Data Communications and Networking

CS 1213 Fortran for Scientists and Engineers

# **Students Advised or on Committee (Currently)**

UTC Ph.D. students [advisor]:



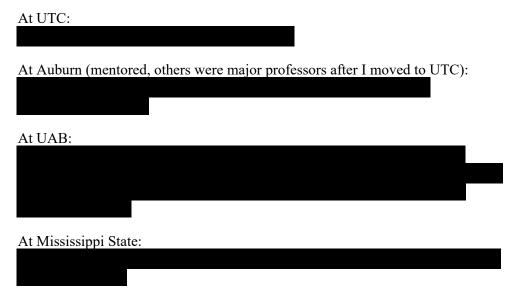
**Auburn** Ph.D. students [co-advisor or committee]:



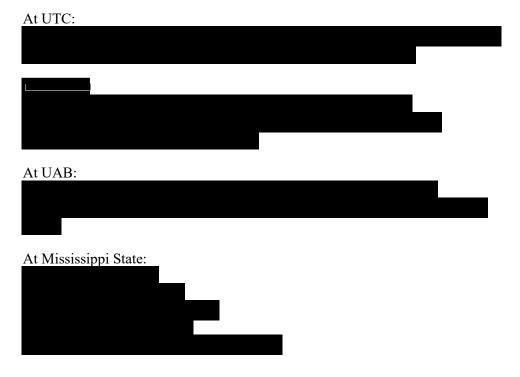
# **Students Advised (Graduated)**

Postdoctoral Fellow at UAB (2013-14):
Postdoctoral Fellow at UTC (2018-19):

Ph.D. students advised (with degrees granted):



Master's students advised:





#### **Curriculum vitae**

#### Zhanjiang (John) Liu

Professor of Biology, Syracuse University, Syracuse NY 13244

#### **EDUCATION**

Ph.D. 1989	Cell and Developmental Biology, University of Minnesota, St. Paul, MN
M.S. 1985	Plant Pathology, University of Minnesota, St. Paul, MN
B.S. 1981	Plant Protection, Northwestern Agricultural University, Shaanxi Province, China

#### **APPOINTMENTS**

ADDIA A LOCAL AD C. CDI L. C. TILL MA	2022
<ul> <li>VP-International Strategy, and Professor of Biology, Syracuse University</li> </ul>	2022-present
<ul> <li>Interim Provost, and Professor of Biology, Syracuse University</li> </ul>	2020-2021
• Vice President for Research, and Professor of Biology, Syracuse University	2017-2019
• Associate Provost and Associate Vice President for Research, and	2013-2017
Distinguished Alumni Professor of Aquaculture, Auburn University	
• Associate Dean for Research, College of Agriculture and Distinguished	2007-2013
Alumni Professor of Aquaculture, Auburn University	
• Distinguished Alumni Professor of Aquaculture and Cell and Molecular	2003-2007
Biosciences, Auburn University	
• Associate Professor of Aquaculture, Auburn University	1999-2003
Assistant Professor of Aquaculture, Auburn University	1995-1999
R&D Director, National Biosciences, Inc., Plymouth, Minnesota	1994-1995
• Research Associate, Institute of Human Genetics, University of Minnesota	1991-1994
<ul> <li>Postdoctoral Fellow, USDA-ARS Cereal Disease Laboratory, St. Paul, MN</li> </ul>	1990-1991
Graduate Research and Teaching Assistant, University of Minnesota	1983-1989

#### **SIGNIFICANT AWARDS**

•	USDA National Institute of Food and Agriculture Hall of Fame	Inducted in 2022
•	Fellow, American Association for the Advancement of Science (AAAS)	Inducted in 2007
•	Fellow, World Aquaculture Society (WAS)	Inducted in 2017
•	Chancellor's Medal, Outstanding Leadership, Syracuse University	2021
•	Outstanding Achievement Award, University of Minnesota	2022
•	Significant Contribution to National Animal Genome Program, USDA CSREE	S 2009
•	Creative Research & Scholarship Award	2007

#### **GRANT ACTIVITY**

Research and academic efforts were continuously funded from 1995 through 2023, with a total of over 80 grants, totaling more than \$50 million, awarded by NIST, NSF, USDA, USAID, and various other federal and state funding agencies and industries.

#### **SYNERGISTIC ACTIVITIES**

- 1. Teaching and education: Taught *Molecular Genetics & Biotechnology*, and *Fish Genetics and Genetic Improvement*. Edited four books, two of which have been used as textbooks in aquaculture classes.
- 2. Student mentoring: Mentored 39 Ph.D. students, 10 master students, and 63 postdoctoral fellows or scholars serving as major professor, and additional 34 graduate students as committee member.

- 3. Editorial: Editor-in-Chief: Marine Biotechnology; Associate Editor: BMC Genomics; Aquaculture.
- 4. National leadership: USDA National Aquaculture Genome Coordinator, 2000-2017; Advisory Panel, Oceans and Human Health Initiative, NOAA, 2006-2012.
- 5. Published 349 journal articles and book chapters that have had over 19,000 citations.

#### **SELECTED PUBLICATIONS**

- Wang W, Yang Y, Tan S, Zhou T, Liu Y, Tian C, Bao L, Xing D, Su B, Wang J, Zhang Y, Liu S, Shi H, Gao D, Dunham R, Liu ZJ. 2022. Genomic imprinting-like monoallelic paternal expression determines sex of channel catfish. Science Advances 8: eadc8786. DOI: 10.1126/sciadv.adc8786
- 2. Liu ZJ, Liu S, Yao J, Bao L, Zhang J, Li Y, Jiang C, Sun L, Zhang Y, Zhou T, Zeng Q, Fu Q, Gao S, Li N, Wang R, Koren S, Jiang Y, Zimin A, Xu P, Phillippy AM, Geng X, Song L, Sun F, Li C, Wang X, Chen A, Jin Y, Yuan Z, Yang Y, Tan S, Peatman E, Lu J, Qin Z, Dunham R, Li Z, Sonstegard T, Feng J, Danzmann RG, Schroeder S, Scheffler B, Duke MV, Ballard L, Kucuktas H, Kaltenboeck L, Liu H, Armbruster J, Xie Y, Kirby ML, Tian Y, Flanagan ME, Mu W, and Waldbieser GC. 2016. The channel catfish genome sequence provides insights into evolution of scale formation in teleosts. Nature Communications 7:11757.
- 3. Zhang X, Yuan J, Sun Y, Li S, Gao Y, Yu Y, Liu C, Wang Q, Lv X, Zhang X, Ma KY, Wang X, Lin W, Wang L, Zhu X, Zhang C, Zhang J, Jin S, Yu K, Kong J, Xu P, Chen N, Zhang H-B, Sorgeloos P, Sagi A, Warren A, **Liu ZJ**, Wang L, Ruan J, Chu K, Liu B, Li F, and Xiang J. 2019. Penaeid shrimp genome provides insights into benthic adaptation and frequent molting. Nature Communications 10:356.
- 4. Zhou T, Li N, Jin Y, Zeng Q, Prabowo W, Liu Y, Tian C, Bao L, Liu S, Yuan Z, Fu Q, Gao S, Gao D, Dunham R, Shubin NH, and **Liu ZJ**. 2018. Chemokine C-C motif ligand 33 is a key regulator of teleost fish barbel development. Proceedings of the National Academy of Sciences 115 (22): e5018-e5027.
- 5. Waldbieser G, Liu S, Yuan Z, Older C, Gao D, Shi C, Bosworth B, Li N, Bao L, Kirby M, Jin Y, Wood M, Scheffler B, Simpson S, Youngblood R, Duke M, Phillippy A, Koren S, and **Liu ZJ**. 2023. Reference genomes of channel catfish and blue catfish reveal multiple pericentric chromosome inversions. BMC Biology 21: 67.
- 6. Bao L, Tian C, Liu S, Zhang Y, Elaswad A, Yuan Z, Khalil K, Sun F, Yang Y, Zhou T, Li Ning, Tan S, Zeng Q, Liu Y, Li Y, Gao D, Dunham R, Davis K, Waldbieser G, and **Liu ZJ**. 2019. The Y chromosome sequence of the channel catfish suggests novel sex determination mechanisms in teleost fish. BMC Biology 17: 6.
- 7. Xu P, Zhang X, Wang X, Li J, Liu G, Kuang Y, Xu J, Zheng X, Ren L, Wang G, Zhang Y, Huo L, Zhao Z, Cao D, Lu C, Li C, Zhou Y, **Liu ZJ**, Fan Z, Shan G, Li X, Wu S, Song L, Hou G, Jiang Y, Jeney Z, Yu D, Wang L, Shao C, Song L, Sun J, Ji P, Wang J, Li Q, Xu L, Sun F, Feng J, Wang C, Wang S, Wang B, Li Y, Zhu Y, Xue W, Zhao L, Wang J, Gu Y, Lv W, Wu K, Xiao J, Wu J, Zhang Z, Yu J, and Sun X. 2014. Genome sequence and genetic diversity of the common carp, Cyprinus carpio. Nature Genetics 6(11):1212-1219.
- 8. Wang S, Abernathy J, Waldbieser G, Lindquist E, Richardson P, Lucas S, Wang M, Li P, Thimmapuram J, Liu L, Vullaganti D, Kucuktas H, Murdock C, Small B, Wilson M, Liu H, Jiang Y, Lee Y, Chen F, Lu J, Wang W, Peatman E, Xu P, Somridhivej B, Baoprasertkul P, Quilang J, Sha Z, Bao B, Wang Y, Wang Q, Takano T, Nandi S, Liu S, Wong L, Kaltenboeck L, Quiniou S, Bengten E, Miller N, Trant J, Rokhsar D, Liu ZJ. 2010. Assembly of 500,000 inter-specific catfish expressed sequence tags and large scale gene-associated marker development for whole genome association studies. Genome Biology 11 (1): R8.
- 9. Li Y, Liu S, Qin Z, Waldbieser G, Wang R, Sun L, Bao L, Danzmann R, Dunham R, and **Liu ZJ**. 2015. Construction of a high-density high-resolution genetic map and its integration with BAC-based physical map in channel catfish. DNA Research 22:39-52.

- 10. Xu P, Wang S, Liu L, Thorsen J, Kucuktas H, and **Liu ZJ**. 2007. A BAC-based physical map of the channel catfish genome. Genomics 90:380-388.
- 11. Zeng Q, Fu Q, Li Y, Waldbieser G, Bosworth B, Liu S, Yang Y, Bao L, Yuan Z, Li N, and **Liu ZJ**. 2017. Development of a 690K SNP array in catfish and its application for genetic mapping of 250,000 markers and validation of the reference genome sequence. Scientific Reports 7: 40347.
- 12. Geng X, Sha J, Liu S, Bao L, Zhang J, Wang R, Yao J, Li C, Feng J, Sun F, Sun L, Jiang C, Dunham R, Zhi D, and **Liu ZJ**. 2015. A genome-wide association study in catfish reveals the presence of functional hubs of related genes within QTLs for columnaris disease resistance. BMC Genomics 16:196.



# **Agenda Item Summary**

Agenda Item: Policy 217 (Student Academic Misconduct)  Review Action No action required	Date: S	September 28, 2023	}			
Review Action No action required	Agenda	Item: Policy 217 (	Student Academ	ic Misconduct)		
		Review	Action	N	o action required	

PRESENTER(S): Provost Lori Bruce

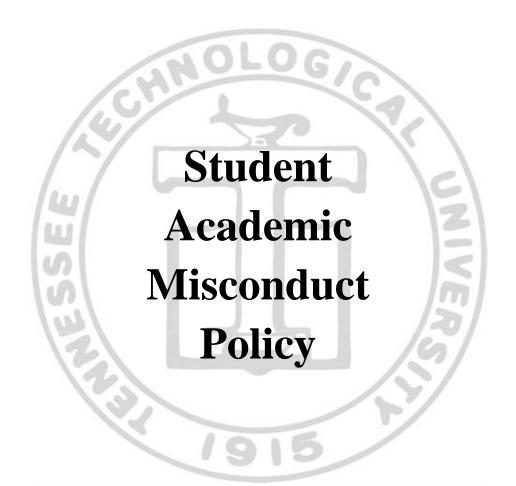
#### **PURPOSE & KEY POINTS:**

Recently there have been significant advances in Generative Artificial Intelligence (AI) platforms such as ChatGPT, Bing, Google's Bard, Microsoft Designer and Dall-E 2. Considering the substantive impact of these AI platforms on higher education, the Provost tasked two groups of faculty and students to examine the AI impact at Tennessee Tech. These two groups were the standing University Academic Misconduct Committee (composed of faculty representatives from each College, student representatives, and the Senior Associate Provost) and an ad hoc AI Task Force (composed of nine faculty representatives from the colleges, an Associate Provost, an Associate Dean, the university's Chief Information Officer, and multiple undergraduate and graduate students).

In the summer of 2023, these two committees jointly recommended an immediate revision to Policy 217 – Student Academic Misconduct, so that language concerning academic integrity with regards to the use of Generative AI platforms could be included in the policy prior to the start of the Fall 2023 semester. Thus, there was a need for an out-of-cycle approval of revisions to Policy 217. Per Policy 101, the President approved the revisions to Policy 217 during the summer of 2023 with the contingency that these revisions would be brought before the Board of Trustees in the September 2023 Board meeting.

This academic year, a comprehensive review of Policy 217 is being undertaken, with all current and proposed revisions to be taken through the normal shared governance processes.

# Tennessee Technological University Policy No. 217



Effective Date: August 17, 2017

Date(s) Revised: July 31, 2023

Policy No: 217

Policy Name: Student Academic Misconduct Policy

# I. Purpose

This policy establishes the policies and procedures for addressing Academic Misconduct at Tennessee Tech.

#### II. Review

This policy will be reviewed every four years or whenever circumstances require review, whichever is earlier, by the Senior Associate Provost with recommendations for revision presented to the Academic Council, University Assembly, and the Board of Trustees.

#### III. Guiding Principles in Developing this Policy

**A.** Academic integrity is at the foundation of the educational process.

Maintaining high standards of academic integrity in every class at Tennessee Tech is critical to the reputation of Tennessee Tech, its students, alumni, and the employers of Tennessee Tech graduates.

- **B.** All Students have the right to due process as described in this policy when charged with Academic Misconduct and may not be penalized with respect to grades or other means without being informed of the right to due process.
- **C.** Throughout this document the Instructor of the course has the final say in approving or not approving the sources used for course assignments, including generative artificial intelligence (AI).

# IV. <sup>1</sup>Definitions and Examples of Academic Misconduct

**A.** "Academic Misconduct" – any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community. This includes a wide variety of behaviors such as cheating,

<sup>&</sup>lt;sup>1</sup> The definitions of Academic Misconduct in this section are from "Definitions & Examples of Academic Misconduct," Center for Student Conduct, Division of Student Affairs, University of California, Berkeley and are used with permission.

plagiarism, creating unapproved content using generative artificial intelligence (AI), altering academic documents or transcripts, gaining access to materials before they are intended to be available, and helping a friend to gain an unfair academic advantage. Individual departments at Tennessee Technological University may have differing expectations for Students, so Students are responsible for seeking out information when unsure of what is expected.

Below are some basic definitions and examples of academic misconduct.

Please note that this list is not exhaustive.

# 1. Cheating

Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question, such as:

- **a.** Copying or attempting to copy from others during an exam or on an assignment.
- **b.** Communicating answers with another person during an exam.
- **c.** Preprogramming a calculator to contain answers or other unauthorized information for exams.
- **d.** Using unauthorized materials, prepared answers, written notes, or concealed information during an exam.
- **e.** Allowing another person or an unapproved resource, including generative artificial intelligence (AI), to do an assignment or portion of an assignment for oneself, including the use of a commercial term-paper service.
- **f.** Submitting the same assignment or a substantial portion of the assignment without prior approval of all the Instructors involved, i.e., self plagiarism.
- **g.** Collaborating on an exam or assignment with any other person without prior approval from the Instructor.
- **h.** Taking an exam for another person or having someone take an exam for oneself.

#### 2. Plagiarism

Plagiarism is defined as use of intellectual material produced by another person or an unapproved resource without acknowledging its source, for example:

**a.** Wholesale copying of passages from works of others into one self's homework, essay, term paper, or dissertation without acknowledgment.

- **b.** Use of the views, opinions, or insights of another without acknowledgment.
- **c.** Paraphrasing of another person's characteristic or original phraseology, metaphor, or other literary device without acknowledgment.
- d. The unapproved use of generative artificial intelligence (AI) to create content that is submitted as one's own.

#### 3. Class Materials

- **a.** Removing, defacing, or deliberately keeping from other Students library materials that are on reserve for specific classes.
- **b.** Contaminating laboratory samples or altering indicators during a practical exam, such as moving a pin in a dissection specimen for an anatomy class.
- **c.** Selling, distributing, website posting, or publishing class lecture notes, handouts, readers, recordings, or other information provided by an Instructor, or using them for any commercial purpose without the express permission of the Instructor.
- 4. False Information and Representation, Fabrication or Alteration of Information
  - **a.** Furnishing false information in the context of an academic assignment.
  - **b.** Failing to identify oneself honestly in the context of an academic obligation.
  - **c.** Fabricating or altering information or data and presenting it as legitimate.
  - **d.** Providing false or misleading information to an Instructor or any other University official.
  - e. Submitting an assignment prepared by another person or resource other than the student responsible for the assignment.
  - f. Creating content utilizing an unapproved resource, including generative artificial intelligence (AI).

#### 5. Theft or Damage of Intellectual Property

- **a.** Sabotaging or stealing another person's assignment, book, paper, notes, experiment, project, electronic hardware or software.
- **b.** Improper access to, or electronically interfering with, the property of another person or the University via computer or other means.
- **c.** Obtaining a copy of an exam or assignment prior to its approved release by the Instructor.

- **6.** Alteration of University Documents
  - **a.** Forgery of an Instructor's signature on a letter of recommendation or any other document.
  - **b.** Submitting an altered transcript of grades to or from another institution or employer.
  - **c.** Putting one's name on another person's exam or assignment.
  - **d.** Altering a previously graded exam or assignment for purposes of a grade appeal or of gaining points in a re-grading process.
- **B.** "Provost" the Provost of Tennessee Tech University (or the Provost's designated representative).
- C. "Dean" the Dean (or the Dean's designated representative) of the College (or School) offering the class in which the academic misconduct is charged to have occurred.
- **D.** "Dean of Major" the Dean (or the Dean's designated representative) of the College (or School) in which the Student is majoring.
- **E.** "Department Chair" Chair of the Student's major department.
- **F.** "Instructor" the person listed as the 'Instructor of Record' for the class. The instructor has the final say in approving or not approving the sources used for course assignments, including generative artificial intelligence (AI).
- **G.** "Student" for the purposes of this policy, any person who is admitted and/or registered for study at Tennessee Tech for any academic period. This shall also include any period of time that the student may be completing the Class Requirements to clear an "Incomplete" grade, but not otherwise registered for classes.
- **H.** "Chairperson" or "Chair" Chairperson of the College or University Academic Misconduct Committee, as applicable.

- **I.** "Member" Faculty or Student appointed as a member or alternate member of a College or the University Academic Misconduct Committee.
- **J.** "Class Requirement" Any assignment, project, exam, quiz, or assessment tool regardless of its name, that is used in determining the Student's grade in the class.
- **K.** "Business Days" Days in which the University is open, including the Fall, Spring, and Summer terms, and any intersession days.
- L. "Official TTU Email" An email sent from an official Tennessee Tech email account to a student's official Tennessee Tech email account. The subject line should bear the inscription (in capital letters): "ACADEMIC MISCONDUCT CHARGE. TIME SENSITIVE RESPONSE REQUIRED."
- M. "College Committee" The Academic Misconduct Committee of the College (or School) in which the class is offered.
- **N.** "University Committee" The Academic Misconduct Committee of the University
- **O.** "Reprimand" A formal warning to the student issued by the Provost upon the recommendation of the University Academic Misconduct Committee.
- **P.** "Probation" Placement of the student in a "warning status" that can lead to automatic suspension or expulsion if additional academic misconduct occurs.
- **Q.** "Suspension" Suspension of the student from the University for a specified number of academic terms (Fall and Spring), after which the student may apply for readmission to the University.
- **R.** "Expulsion" Permanent dismissal from the University.
- **S.** "Class-level Sanction" Sanctions that are related to the grade that a student is awarded in a specific class. Examples include, but are not limited to: Reduced grade for the Class Requirement, "F" or Zero for the Class Requirement, and/or an "F" grade for the class.

**T.** "University-level Sanction" – Sanctions that potentially affect a student's standing at the University. These are: Reprimand, Probation, Suspension, and Expulsion.

# V. Responsibilities

#### A. Instructor Responsibility

- 1. The Instructor has the primary responsibility for maintenance of academic integrity, including filing a charge of Academic Misconduct when s/he reasonably believes such has occurred.
- 2. The Instructor shall provide in the class syllabus a definition of what resources are allowed and/or what resources are not allowed for completion of Class Requirements, including any differences between resources for in-class and outside-of-class Requirements. It is particularly important to include items on the list in which uncertainty on the part of the students might reasonably exist.
- **3.** The Instructor may impose additional restrictions/allowances during the class for a specific Class Requirement, but must clearly communicate any changes to the Students.
- **4.** Before penalizing a Student for Academic Misconduct, the Instructor must file a charge of Academic Misconduct as per this policy to ensure that the student is given the due process right to appeal. The University's Grade Appeal Policy is not to be used in lieu of the Academic Misconduct Policy.
- 5. In cases where an Instructor reasonably believes that the integrity of a Class Requirement has been compromised, but is unable establish by a preponderance of the evidence the parties involved in the matter, the Instructor may discard the results of the original assignment; but only if the Instructor readministers the exam or assignment to the entire class.
- 6. The Instructor has the final say in approving or not approving the sources used for course assignments, including generative artificial intelligence (AI).

# **B.** Student Responsibilities

- 1. The Student is responsible for understanding and abiding by this policy, including reading Academic Conduct information provided in the class syllabus and asking for clarification if unclear about what is and is not allowed in the production of all Class Requirements.
- 2. The Student is responsible for following any instructions related to additional restrictions/allowances for a specific Class Requirement provided by the Instructor and asking for clarification if necessary. In the event of a class absence, the burden is on the Student to ask the Instructor what, if any, restrictions/allowances for a specific Class Requirement were provided during the missed class.

#### VI. Procedures for Filing a Charge of Academic Misconduct

- **A.** An Instructor must follow the procedures outlined in this policy if s/he believes a charge of Academic Misconduct is warranted. The Instructor cannot impose a grade penalty for academic misconduct without filing a formal charge of academic misconduct.
- **B.** Step 1 The Instructor shall document in writing the charge, including details of the evidence of Academic Misconduct, a recommendation related to the appropriate penalty and the Student's right to a hearing <u>217 Academic Misconduct Charging Document Template</u>
- C. Step 2 The Instructor must send the Charging Document via Official TTU Email to the Student, the Department Chair, Dean, the Provost's Office, the Registrar, the Dean of Major and to the Office of International Education, when applicable. The Charging Document must be sent within five (5) Business Days of the Instructor's determination that Academic Misconduct has occurred, absent good cause.
  - 1. For the purposes of this policy, an "Official TTU Email" means an email sent from an official Tennessee Tech email account to a student's official Tennessee Tech email account. The subject line should bear the inscription (in capital letters): "ACADEMIC MISCONDUCT CHARGE. TIME SENSITIVE RESPONSE REQUIRED."

- **2.** Possible sanctions by the Instructor as a penalty for academic misconduct may include, but are not limited to, the following class-level sanctions:
  - a. Reduced grade for the Class Requirement,
  - **b.** "F" or Zero for the Class Requirement,
  - **c.** "F" grade for the class,
- **3.** In addition, the Instructor may also recommend that a University-level sanction be imposed, which include:
  - a. Reprimand,
  - **b.** Probation,
  - c. Suspension,
  - d. Expulsion.
- **4.** If the Instructor recommends a University-level sanction as part of the penalty, the College Academic Misconduct Committee must review and support the recommendation in order for it to proceed to the University Academic Misconduct Committee. Step 7.
- 5. Once an Instructor files a charge of Academic Misconduct, the Registrar will place a "no-drop" hold on the Student's registration in the class so that the Student cannot withdraw from the class as an attempt to avoid the charge of Academic Misconduct. If the deadline for submission of grades to the Registrar occurs prior to the resolution of the charge of Academic Misconduct, the Instructor shall enter a grade of "I", which will be updated when the final outcome of the appeal process is known.
- **D.** Step 3 The Student's Options after a Charge of Misconduct is Filed
  - **6.** Option 1: Student Does Not Dispute the Charge
    - a. If the Student does not file an <u>217 Academic Misconduct Request for Hearing Form</u> within five (5) Business Days of receipt of the Charging Document, absent good cause, the Dean's Office shall inform the Instructor, the Provost, the Dean of Major, the Department Chair, and the

Office of International Education, when applicable that the Charge of Academic Misconduct has not been appealed and the Instructor's class-level sanctions stand.

- i. Non-appeal of the Academic Misconduct Charge by the Student does not prevent further review by the College Committee, the College Committee of the Student's Major, or the Provost, for evidence of repeat or particularly egregious cases of academic misconduct. Requests for additional sanctions will be sent to the Provost's Office for possible referral to the University Academic Misconduct Committee for the imposition of University-level sanctions. Likewise, if the Instructor has recommended University-level sanctions in the Charging document, these will be considered by the College Committee (see Step 6), whether or not the student appeals the charge.
- **b.** A Student who does not file a timely appeal of a Charge of Academic Misconduct will not be allowed to use the TTU Grade Appeal policy to appeal a reduced class grade.
- **c.** The process either ends here or proceeds either to Step 6 or 7, as previously indicated.
- 7. Option 2: The Student Disputes the Charge
  - a. The Student must file an appeal with the Dean using a <u>Academic Misconduct Request for Hearing Form</u> within five (5) Business Days after receipt of the Charging Document, absent good cause.
  - **b.** For the purposes of this policy, "receipt" means the date the Instructor sent the Charging Document via Official TTU Email to the Student's Tennessee Tech email account.
  - **c.** The Process continues to Step 4.
- **E.** Step 4 College Academic Misconduct Committee Procedures If the Student files a timely Request for Hearing, the Dean shall notify the College Academic Misconduct Committee of the need to meet to hear the appeal.

- **F.** Step 5 The Dean (or the College Committee Chairperson) shall select a suitable date, time, and location for the hearing and then notify the Committee Members, Instructor, and Student of the time and place of the hearing. Whenever possible, a date and time should be selected that enable the Instructor and Student to attend the hearing in person.
- **G.** Step 6 The appeal hearing shall be held within eight (8) Business Days after the Request for an Appeal Hearing is received, dependent on the availability of the Instructor and the Student, and absent other good cause. A timely hearing is important to the due process of the Student and the Instructor.
  - 1. The Instructor and Student shall appear before the College Committee in person to present their cases. In the event one or the other cannot attend, the Instructor and/or Student may present their cases in writing.
  - 2. The decision of the College Committee is to be communicated by the Dean's Office via Official TTU Email to the Student, Instructor, Provost, Registrar, Department Chair, and Dean of Major (if not the same as the Dean), as soon as practical, but not later than two (2) Business Days of the hearing, absent good cause.
  - 3. In the case that the College Committee finds the preponderance of evidence does not support the charge of academic misconduct, the Registrar removes the "no-drop" hold from the course, and the student may withdraw from the course at that point, if the Student so chooses. If the College Committee supports the Instructor's Charge, the Student may not withdraw from the class.
  - 4. If the College Committee finds that the preponderance of evidence supports the charge, the College Committee may then either (1) support the sanctions as originally imposed by the Instructor, or (2) recommend reduced sanctions to the Instructor. In addition, in the case of repeat or particularly egregious misconduct, the College Committee can also recommend that a University-level sanction be added to the charge. The College Committee must include recommendations for reduced or additional sanctions are to be added to the written documentation sent forward to the Provost.
  - **5.** If the College Committee supports the Instructor's Charge, the Student may not use the TTU Grade Appeal Process to appeal the Charge. If the

Committee does not support the Charge but the Instructor persists, then the Student may appeal the grade using the Grade Appeal Policy.

- **6.** For Class-level sanctions, the decision of the College Committee is final; these cannot be appealed to the University Academic Misconduct Committee.
- **7.** The process ends here or moves to the University Academic Misconduct Committee as described in Step 7, if:
  - **a.** If the Instructor's recommendation includes a University-level sanction (e.g., reprimand, probation, suspension, or expulsion) and the College Committee supports that recommendation, or
  - **b.** The College Committee elects to recommend a University-level sanction in addition to the Instructor's class-level sanction.
- **8.** If the College Committee finds the preponderance of evidence does not support the charge of academic misconduct, the College Committee shall recommend to the Instructor that the charge of academic misconduct be withdrawn, and that s/he determine the Student's grade in accordance with the stated class policy without prejudice or penalty associated with the alleged misconduct.

If the Instructor declines to accept the Committee's recommendation, then:

- a. The Student may appeal the Charge to the University Committee; and/or
- **b.** The Student may elect to withdraw from the class at this time. The withdrawal date will be effective at the date the original hold was placed by the Registrar; and/or
- **c.** The Student may appeal the Instructor's final grade according to the Grade Appeal Procedure.

#### **H.** Step 7 - University Academic Misconduct Procedures

**1.** The University Academic Misconduct Committee ("University Committee") is the sole committee designated to adjudicate University-level sanctions

(reprimand, probation, suspension, or expulsion) related to charges of Academic Misconduct.

- 2. Based on the recommendation of the College Academic Misconduct Committee, the Academic Misconduct Committee of the College of the Student's Major (if different than the college in which the charge is filed), or the Provost, an academic misconduct case can be referred to the University Committee via the Provost's Office for University-level sanctions. In cases where the Charging Document does not include information related to additional penalties, the Student must receive written notification of the additional sanctions being recommended to the University Committee.
- **I.** Step 8 The Provost shall notify the Student via Official TTU Email of any recommendation to seek additional Penalties, whether from a College Committee or the Provost. The student will also be advised of his/her right of appeal.
- **J.** Step 9 A Student who contests the Charge of Academic Misconduct before the University Committee has two options (1 or 2, below):
  - 1. In cases where the penalty sought is suspension or expulsion, the Student may elect to have the case disposed of under the Uniform Administrative Procedures Act (UAPA) in accordance with applicable contested case procedures. The Tennessee Tech process ends and the UAPA process begins.
  - **2.** In cases to be heard by the University Academic Misconduct Committee, the process will proceed as per Steps 10-13 below.
  - **3.** A Student charged with Academic Misconduct who elects to have the case disposed of under Tennessee Tech Procedures must execute a written waiver of his/her right to a disposition of the case under the Uniform Administrative Procedures Act and send it via Tennessee Tech email to the Provost. <a href="https://doi.org/10.150/217">217</a>
    Academic Misconduct Waiver of UAPA Hearing
- **K.** Step 10 The Office of the Provost shall notify the Chairperson of the University Academic Misconduct Committee of the need for the University Committee to meet to hear the appeal.
- L. Step 11 The Provost shall, after consultation with the

University Committee Chairperson, notify the Student, the Instructor, the Department Chair, the Dean, the Dean of Major, and University Committee members of the date, time and place of the hearing. Whenever possible, a date and time should be selected that enable the Instructor and Student to attend the hearing in person. In cases where the charge is being brought forward by a College other than the Student's Major, the Dean of the College of Major may elect to attend the University Committee Hearing as an observer.

- M. Step 12 The University Committee hearing shall be held within ten (10) Business Days from the receipt of the request for an appeal by the Provost's Office, dependent on the availability of the Instructor and the Student, and absent other good cause. A timely hearing is important to the due process of the Student and the Instructor.
  - **4.** The University Committee shall require the parties to appear in person, absent good cause, to present their cases. In the event one or more parties cannot attend, the party may present their cases in writing.
  - **5.** The Dean shall present the charge of Academic Misconduct to the University Committee.
  - **6.** If the University Committee finds that the preponderance of the evidence, including any prior incidents of Academic Misconduct, warrants additional penalties, the University Committee may then impose a University-level sanction (reprimand, probation, suspension, or expulsion).
  - 7. If the University Committee finds that the preponderance of evidence, including consideration of any prior incidents of Academic Misconduct, does not support additional penalties, the recommendation of the College Committee still stands, but additional penalties are not imposed.
  - **8.** The decision of the University Committee is final.
- N. Step 13 The University Committee shall communicate its decision via Official TTU Email to the Student, the Instructor, the Provost, the Department Chair, the Dean, the Dean of Major, and the Provost's Office, as soon as possible, but no later than two (2) Business Days of the hearing, absent good cause.

#### VII. Committee Structure

#### A. College Academic Misconduct Committee

- **1.** A college-level Academic Misconduct Committee shall be established in each of the following academic units:
  - a. College of Agriculture and Human Ecology;
  - b. College of Arts and Sciences;
  - c. College of Business Administration;
  - **d.** College of Education (including ROTC and Crafts Center);
  - e. College of Engineering;
  - **f.** College of Fine Arts;
  - g. College of Interdisciplinary Studies; and
  - **h.** School of Nursing.

## 2. Membership

- **a.** The College Academic Misconduct Committee of each College/School, with the exception of the School of Nursing, and the College of Agriculture and Human Ecology, shall consist of
  - i One (1) Faculty Member and one (1) Faculty Alternate from each department within the College, elected for a three (3) year term by the department, and
  - ii One (1) Student Member and at least one (1) Student Alternate majoring within the College. The Student Members and Alternates are nominated by the President of the Student Government Association (SGA) and appointed by the President of the University for a one (1) year term. At least one Student of the nominated Students should be available during the Summer and/or between terms in case it is necessary to hold meetings of the College Committee during these periods. The Student Members must sign a Confidentiality Agreement indicating that they will abide by FERPA regulations regarding the confidentiality of the academic misconduct proceedings and information provided to them as part of the proceedings.

- **b.** The College Academic Misconduct Committees for the School of Nursing shall consist of
  - i Three (3) Faculty members elected for three (3) year terms, and
  - **ii** One (1) Student Member and at least one (1) Student Alternate as described in Section VII.A.2.ii above.
- **c.** The College Academic Misconduct Committee for the College of Agriculture and Human Ecology shall consist of
  - i Four (4) Faculty Members and two (2) Alternates elected for three (3) year terms, and
    - ii One (1) Student Member and at least one (1) Student Alternate as described in Section VII.A.2.ii above.

#### **3.** Administrative Procedures

- **a.** The College Academic Misconduct Committee Chairperson and Alternate Chairperson shall be elected annually by the Committee members.
- b. The required quorum depends on whether or not a University-level sanction is being considered as part of the sanction. (1) If a University-level sanction is being considered, a quorum requires a majority of members on the Committee. (2) If only class-level sanctions are being considered, a quorum requires three members of the Committee. In both cases, the quorum must include a Student Member (or Student Alternate), and the Committee Chair (or Alternate).
- **c.** In cases where a Faculty Member of the College Academic Misconduct Committee is the Instructor charging the Student with academic misconduct, the Faculty member recuses her/him-self from the Committee.
- **d.** In cases where the Chairperson of the College Academic Misconduct Committee is the Instructor charging the Student with academic misconduct, the Chairperson recuses her/him-self and the Alternate Chairperson serves as the Chair.

**e.** The College Dean shall provide the support services for the College Academic Misconduct Committee.

#### B. University Academic Misconduct Committee

#### 1. Membership

The University Academic Misconduct Committee shall consist of:

- **a.** The Chairperson or Alternate Chairperson of each College Academic Misconduct Committee, and
- b. One (1) Student Member and at least one (1) Student Alternate majoring within the associated College. The Student Members and Alternates are nominated by the President of the Student Government Association (SGA) and appointed by the President of the University for a one (1) year term. At least one Student of the nominated Students should be available during the Summer and/or intersession terms in case it is necessary to hold meetings of the College Committee during these periods. The Student Members must sign a Confidentiality Agreement indicating that they will abide by FERPA regulations regarding the confidentiality of the academic misconduct proceedings and information provided to them as part of the proceedings.

#### **2.** Administrative Procedures

- **a.** The Chairperson and the Alternate Chairperson of the University Academic Misconduct Committee shall be elected annually by the Committee.
- **b.** A quorum shall consist of five (5) members, including the Chairperson or Alternate Chairperson, the representative (or alternate) from the College in which the alleged offense occurred, and the Student Member or the Student Alternate.
- **c.** In cases where the College Chairperson is making the charge against the Student, the Alternate College Chairperson shall serve on the University Academic Misconduct Committee.
- **d.** In cases where the Chairperson of the University Academic Misconduct Committee is making the charge against the Student, the Alternate

Chairperson of the University Academic Misconduct Committee shall serve as Chairperson.

**e.** The Provost shall provide the support services for the University Academic Misconduct Committee.

# **VIII. Citation of Authority**

T.C.A. § 49-8-203(a)(1)(D); Tenn. Comp. R. & Reg. 0240-09-01 et seq.

# Approved by:

Administrative Council: February 22, 2017; will be submitted to Fall 2023 meeting

University Assembly: April 19, 2017; will be submitted to Fall 2023 meeting

TTU Board of Trustees: August 17, 2017; pending Board approval

President on July 20, 2023, pursuant to Policy 101, Section VII.A.

# Tennessee Technological University Policy No. 217



Effective Date: August 17, 2017

Policy No: 217

**Policy Name:** Student Academic Misconduct Policy

#### I. Purpose

This policy establishes the policies and procedures for addressing Academic Misconduct at Tennessee Tech.

#### II. Review

This policy will be reviewed every four years or whenever circumstances require review, whichever is earlier, by the Senior Associate Provost with recommendations for revision presented to the Academic Council and University Assembly.

#### III. Guiding Principles in Developing this Policy

**A.** Academic integrity is at the foundation of the educational process.

Maintaining high standards of academic integrity in every class at Tennessee Tech is critical to the reputation of Tennessee Tech, its students, alumni, and the employers of Tennessee Tech graduates.

- **B.** All Students have the right to due process as described in this policy when charged with Academic Misconduct and may not be penalized with respect to grades or other means without being informed of the right to due process.
- C. Throughout this document the instructor of the course has the final say in approving or not approving the sources used for course assignments, including generative artificial intelligence (AI).

# IV. <sup>1</sup>Definitions and Examples of Academic Misconduct

**A.** "Academic Misconduct" – any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community. This includes a wide variety of behaviors such as cheating,

<sup>&</sup>lt;sup>1</sup> The definitions of Academic Misconduct in this section are from "Definitions & Examples of Academic Misconduct," Center for Student Conduct, Division of Student Affairs, University of California, Berkeley and are used with permission.

plagiarism, creating unapproved content using generative artificial intelligence (AI), altering academic documents or transcripts, gaining access to materials before they are intended to be available, and helping a friend to gain an unfair academic advantage. Individual departments at Tennessee Technological University may have differing expectations for Students, so Students are responsible for seeking out information when unsure of what is expected.

Below are some basic definitions and examples of academic misconduct.

Please note that this list is not exhaustive.

#### 1. Cheating

Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question, such as:

- **a.** Copying or attempting to copy from others during an exam or on an assignment.
- **b.** Communicating answers with another person during an exam.
- **c.** Preprogramming a calculator to contain answers or other unauthorized information for exams.
- **d.** Using unauthorized materials, prepared answers, written notes, or concealed information during an exam.
- **e.** Allowing <u>another person or an unapproved resource</u>, <u>including generative artificial intelligence (AI)</u>, <u>others</u> to do an assignment or portion of an assignment for oneself, including the use of a commercial term-paper service.
- **f.** Submittingssion of the same assignment for more than one class or a substantial portion of the assignment without prior approval of all the instructors involved, i.e., self plagiarism.
- **g.** Collaborating on an exam or assignment with any other person without prior approval from the instructor.
- **h.** Taking an exam for another person or having someone take an exam for oneself.

# 2. Plagiarism

Plagiarism is defined as use of intellectual material produced by another person <u>or an unapproved resource</u> without acknowledging its source, for example:

- **a.** Wholesale copying of passages from works of others into one self's homework, essay, term paper, or dissertation without acknowledgment.
- **b.** Use of the views, opinions, or insights of another without acknowledgment.
- **c.** Paraphrasing of another person's characteristic or original phraseology, metaphor, or other literary device without acknowledgment.
- d. The unapproved use of generative artificial intelligence (AI) to create content that is submitted as one's own.

#### 3. Class Materials

- **a.** Removing, defacing, or deliberately keeping from other Students library materials that are on reserve for specific classes.
- **b.** Contaminating laboratory samples or altering indicators during a practical exam, such as moving a pin in a dissection specimen for an anatomy class.
- **c.** Selling, distributing, website posting, or publishing class lecture notes, handouts, readers, recordings, or other information provided by an instructor, or using them for any commercial purpose without the express permission of the instructor.
- **4.** False Information and Representation, Fabrication or Alteration of Information
  - a. Furnishing false information in the context of an academic assignment.
  - **b.** Failing to identify oneself honestly in the context of an academic obligation.
  - **c.** Fabricating or altering information or data and presenting it as legitimate.
  - **d.** Providing false or misleading information to an instructor or any other University official.
  - e. Submitting an assignment prepared by another person or resource other than the student responsible for the assignment.
  - f. Creating content utilizing an unapproved resource, including generative artificial intelligence (AI).

# **5.** Theft or Damage of Intellectual Property

- **a.** Sabotaging or stealing another person's assignment, book, paper, notes, experiment, project, electronic hardware or software.
- **b.** Improper access to, or electronically interfering with, the property of another person or the University via computer or other means.

- **c.** Obtaining a copy of an exam or assignment prior to its approved release by the instructor.
- **6.** Alteration of University Documents
  - **a.** Forgery of an instructor's signature on a letter of recommendation or any other document.
  - **b.** Submitting an altered transcript of grades to or from another institution or employer.
  - **c.** Putting one's name on another person's exam or assignment.
  - **d.** Altering a previously graded exam or assignment for purposes of a grade appeal or of gaining points in a re-grading process.
- **B.** "Provost" the Provost of Tennessee Tech University (or the Provost's designated representative).
- C. "Dean" the Dean (or the Dean's designated representative) of the College (or School) offering the class in which the academic misconduct is charged to have occurred.
- **D.** "Dean of Major" the Dean (or the Dean's designated representative) of the College (or School) in which the Student is majoring.
- **E.** "Department Chair" Chair of the Student's major department.
- **F.** "Instructor" the person listed as the 'Instructor of Record' for the class. <u>The instructor has the final say in approving or not approving the sources used for course assignments, including generative artificial intelligence (AI).</u>
- **G.** "Student" for the purposes of this policy, any person who is admitted and/or registered for study at Tennessee Tech for any academic period. This shall also include any period of time that the student may be completing the Class Requirements to clear an "Incomplete" grade, but not otherwise registered for classes.
- **H.** "Chairperson" or "Chair" Chairperson of the College or University Academic Misconduct Committee, as applicable.

- **I.** "Member" Faculty or Student appointed as a member or alternate member of a College or the University Academic Misconduct Committee.
- **J.** "Class Requirement" Any assignment, project, exam, quiz, or assessment tool regardless of its name, that is used in determining the Student's grade in the class.
- **K.** "Business Days" Days in which the University is open, including the Fall, Spring, and Summer terms, and any intersession days.
- L. "Official TTU Email" An email sent from an official Tennessee Tech email account to a student's official Tennessee Tech email account. The subject line should bear the inscription (in capital letters): "ACADEMIC MISCONDUCT CHARGE. TIME SENSITIVE RESPONSE REQUIRED."
- M. "College Committee" The Academic Misconduct Committee of the College (or School) in which the class is offered.
- **N.** "University Committee" The Academic Misconduct Committee of the University
- **O.** "Reprimand" A formal warning to the student issued by the Provost upon the recommendation of the University Academic Misconduct Committee.
- **P.** "Probation" Placement of the student in a "warning status" that can lead to automatic suspension or expulsion if additional academic misconduct occurs.
- **Q.** "Suspension" Suspension of the student from the University for a specified number of academic terms (Fall and Spring), after which the student may apply for readmission to the University.
- **R.** "Expulsion" Permanent dismissal from the University.
- **S.** "Class-level Sanction" Sanctions that are related to the grade that a student is awarded in a specific class. Examples include, but are not limited to: Reduced grade for the Class Requirement, "F" or Zero for the Class Requirement, and/or an "F" grade for the class.

**T.** "University-level Sanction" – Sanctions that potentially affect a student's standing at the University. These are: Reprimand, Probation, Suspension, and Expulsion.

#### V. Responsibilities

# A. Instructor Responsibility

- 1. The Instructor has the primary responsibility for maintenance of academic integrity, including filing a charge of Academic Misconduct when s/he reasonably believes such has occurred.
- 2. The Instructor shall provide in the class syllabus a definition of what resources are allowed and/or what resources are not allowed for completion of Class Requirements, including any differences between resources for in-class and outside-of-class Requirements. It is particularly important to include items on the list in which uncertainty on the part of the students might reasonably exist.
- **3.** The Instructor may impose additional restrictions/allowances during the class for a specific Class Requirement, but must clearly communicate any changes to the Students.
- **4.** Before penalizing a Student for Academic Misconduct, the Instructor must file a charge of Academic Misconduct as per this policy to ensure that the student is given the due process right to appeal. The University's Grade Appeal Policy is not to be used in lieu of the Academic Misconduct Policy.
- 5. In cases where an Instructor reasonably believes that the integrity of a Class Requirement has been compromised, but is unable establish by a preponderance of the evidence the parties involved in the matter, the Instructor may discard the results of the original assignment; but only if the Instructor readministers the exam or assignment to the entire class.
- 6. The instructor has the final say in approving or not approving the sources used for course assignments, including generative artificial intelligence (AI).

#### **B.** Student Responsibilities

- 1. The Student is responsible for understanding and abiding by this policy, including reading Academic Conduct information provided in the class syllabus and asking for clarification if unclear about what is and is not allowed in the production of all Class Requirements.
- 2. The Student is responsible for following any instructions related to additional restrictions/allowances for a specific Class Requirement provided by the instructor and asking for clarification if necessary. In the event of a class absence, the burden is on the Student to ask the Instructor what, if any, restrictions/allowances for a specific Class Requirement were provided during the missed class.

## VI. Procedures for Filing a Charge of Academic Misconduct

- **A.** An Instructor must follow the procedures outlined in this policy if s/he believes a charge of Academic Misconduct is warranted. The Instructor cannot impose a grade penalty for academic misconduct without filing a formal charge of academic misconduct.
- **B.** Step 1 The Instructor shall document in writing the charge, including details of the evidence of Academic Misconduct, a recommendation related to the appropriate penalty and the Student's right to a hearing <u>217 Academic Misconduct</u> Charging Document Template
- C. Step 2 The Instructor must send the Charging Document via Official TTU Email to the Student, the Department Chair, Dean, the Provost's Office, the Registrar, the Dean of Major and to the Office of International Education, when applicable. The Charging Document must be sent within five (5) Business Days of the Instructor's determination that Academic Misconduct has occurred, absent good cause.
  - 1. For the purposes of this policy, an "Official TTU Email" means an email sent from an official Tennessee Tech email account to a student's official Tennessee Tech email account. The subject line should bear the inscription (in capital letters): "ACADEMIC MISCONDUCT CHARGE. TIME SENSITIVE RESPONSE REQUIRED."
  - **2.** Possible sanctions by the Instructor as a penalty for academic misconduct may include, but are not limited to, the following class-level sanctions:
    - a. Reduced grade for the Class Requirement,

- **b.** "F" or Zero for the Class Requirement,
- c. "F" grade for the class,
- **3.** In addition, the Instructor may also recommend that a University-level sanction be imposed, which include:
  - a. Reprimand,
  - **b.** Probation,
  - c. Suspension,
  - d. Expulsion.
- **4.** If the Instructor recommends a University-level sanction as part of the penalty, the College Academic Misconduct Committee must review and support the recommendation in order for it to proceed to the University Academic Misconduct Committee. Step 7.
- 5. Once an Instructor files a charge of Academic Misconduct, the Registrar will place a "no-drop" hold on the Student's registration in the class so that the Student cannot withdraw from the class as an attempt to avoid the charge of Academic Misconduct. If the deadline for submission of grades to the Registrar occurs prior to the resolution of the charge of Academic Misconduct, the Instructor shall enter a grade of "I", which will be updated when the final outcome of the appeal process is known.
- **D.** Step 3 The Student's Options after a Charge of Misconduct is Filed
  - **6.** Option 1: Student Does Not Dispute the Charge
    - **a.** If the Student does not file an 217 Academic Misconduct Request for Hearing Form within five (5) Business Days of receipt of the Charging Document, absent good cause, the Dean's Office shall inform the Instructor, the Provost, the Dean of Major, the Department Chair, and the Office of International Education, when applicable that the Charge of Academic Misconduct has not been appealed and the instructor's class-level sanctions stand.
      - i. Non-appeal of the Academic Misconduct Charge by the Student does not prevent further review by the College Committee, the College

Committee of the Student's Major, or the Provost, for evidence of repeat or particularly egregious cases of academic misconduct. Requests for additional sanctions will be sent to the Provost's Office for possible referral to the University Academic Misconduct Committee for the imposition of University-level sanctions. Likewise, if the Instructor has recommended University-level sanctions in the Charging document, these will be considered by the College Committee (see Step 6), whether or not the student appeals the charge.

- **b.** A Student who does not file a timely appeal of a Charge of Academic Misconduct will not be allowed to use the TTU Grade Appeal policy to appeal a reduced class grade.
- **c.** The process either ends here or proceeds either to Step 6 or 7, as previously indicated.
- 7. Option 2: The Student Disputes the Charge
  - a. The Student must file an appeal with the Dean using a <u>Academic Misconduct Request for Hearing Form</u> within five (5) Business Days after receipt of the Charging Document, absent good cause.
  - **b.** For the purposes of this policy, "receipt" means the date the Instructor sent the Charging Document via Official TTU Email to the Student's Tennessee Tech email account.
  - c. The Process continues to Step 4.
- **E.** Step 4 College Academic Misconduct Committee Procedures If the Student files a timely Request for Hearing, the Dean shall notify the College Academic Misconduct Committee of the need to meet to hear the appeal.
- **F.** Step 5 The Dean (or the College Committee Chairperson) shall select a suitable date, time, and location for the hearing and then notify the Committee Members, Instructor, and Student of the time and place of the hearing. Whenever possible, a date and time should be selected that enable the Instructor and Student to attend the hearing in person.

- **G.** Step 6 The appeal hearing shall be held within eight (8) Business Days after the Request for an Appeal Hearing is received, dependent on the availability of the Instructor and the Student, and absent other good cause. A timely hearing is important to the due process of the Student and the Instructor.
  - 1. The Instructor and Student shall appear before the College Committee in person to present their cases. In the event one or the other cannot attend, the Instructor and/or Student may present their cases in writing.
  - 2. The decision of the College Committee is to be communicated by the Dean's Office via Official TTU Email to the Student, Instructor, Provost, Registrar, Department Chair, and Dean of Major (if not the same as the Dean), as soon as practical, but not later than two (2) Business Days of the hearing, absent good cause.
  - **3.** In the case that the College Committee finds the preponderance of evidence does not support the charge of academic misconduct, the Registrar removes the "no-drop" hold from the course, and the student may withdraw from the course at that point, if the Student so chooses. If the College Committee supports the Instructor's Charge, the Student may not withdraw from the class.
  - **4.** If the College Committee finds that the preponderance of evidence supports the charge, the College Committee may then either (1) support the sanctions as originally imposed by the instructor, or (2) recommend reduced sanctions to the instructor. In addition, in the case of repeat or particularly egregious misconduct, the College Committee can also recommend that a University-level sanction be added to the charge. The College Committee must include recommendations for reduced or additional sanctions are to be added to the written documentation sent forward to the Provost.
  - 5. If the College Committee supports the Instructor's Charge, the Student may not use the TTU Grade Appeal Process to appeal the Charge. If the Committee does not support the Charge but the Instructor persists, then the Student may appeal the grade using the Grade Appeal Policy.
  - **6.** For Class-level sanctions, the decision of the College Committee is final; these cannot be appealed to the University Academic Misconduct Committee.

- **7.** The process ends here or moves to the University Academic Misconduct Committee as described in Step 7, if:
  - **a.** If the Instructor's recommendation includes a University-level sanction (e.g., reprimand, probation, suspension, or expulsion) and the College Committee supports that recommendation, or
  - **b.** The College Committee elects to recommend a University-level sanction in addition to the Instructor's class-level sanction.
- **8.** If the College Committee finds the preponderance of evidence does not support the charge of academic misconduct, the College Committee shall recommend to the Instructor that the charge of academic misconduct be withdrawn, and that s/he determine the Student's grade in accordance with the stated class policy without prejudice or penalty associated with the alleged misconduct.

If the Instructor declines to accept the Committee's recommendation, then:

- a. The Student may appeal the Charge to the University Committee; and/or
- **b.** The Student may elect to withdraw from the class at this time. The withdrawal date will be effective at the date the original hold was placed by the Registrar; and/or
- **c.** The Student may appeal the Instructor's final grade according to the Grade Appeal Procedure.

#### **H.** Step 7 - University Academic Misconduct Procedures

- 1. The University Academic Misconduct Committee ("University Committee") is the sole committee designated to adjudicate University-level sanctions (reprimand, probation, suspension, or expulsion) related to charges of Academic Misconduct.
- 2. Based on the recommendation of the College Academic Misconduct Committee, the Academic Misconduct Committee of the College of the Student's Major (if different than the college in which the charge is filed), or

the Provost, an academic misconduct case can be referred to the University Committee via the Provost's Office for University-level sanctions. In cases where the Charging Document does not include information related to additional penalties, the Student must receive written notification of the additional sanctions being recommended to the University Committee.

- **I.** Step 8 The Provost shall notify the Student via Official TTU Email of any recommendation to seek additional Penalties, whether from a College Committee or the Provost. The student will also be advised of his/her right of appeal.
- **J.** Step 9 A Student who contests the Charge of Academic Misconduct before the University Committee has two options (1 or 2, below):
  - 1. In cases where the penalty sought is suspension or expulsion, the Student may elect to have the case disposed of under the Uniform Administrative Procedures Act (UAPA) in accordance with applicable contested case procedures. The Tennessee Tech process ends and the UAPA process begins.
  - **2.** In cases to be heard by the University Academic Misconduct Committee, the process will proceed as per Steps 10-13 below.
  - 3. A Student charged with Academic Misconduct who elects to have the case disposed of under Tennessee Tech Procedures must execute a written waiver of his/her right to a disposition of the case under the Uniform Administrative Procedures Act and send it via Tennessee Tech email to the Provost. 217
    Academic Misconduct Waiver of UAPA Hearing
- **K.** Step 10 The Office of the Provost shall notify the Chairperson of the University Academic Misconduct Committee of the need for the University Committee to meet to hear the appeal.
- L. Step 11 The Provost shall, after consultation with the
  University Committee Chairperson, notify the Student, the Instructor, the
  Department Chair, the Dean, the Dean of Major, and University Committee
  members of the date, time and place of the hearing. Whenever possible, a date
  and time should be selected that enable the Instructor and Student to attend the
  hearing in person. In cases where the charge is being brought forward by a

College other than the Student's Major, the Dean of the College of Major may elect to attend the University Committee Hearing as an observer.

- M. Step 12 The University Committee hearing shall be held within ten (10) Business Days from the receipt of the request for an appeal by the Provost's Office, dependent on the availability of the Instructor and the Student, and absent other good cause. A timely hearing is important to the due process of the Student and the Instructor.
  - **4.** The University Committee shall require the parties to appear in person, absent good cause, to present their cases. In the event one or more parties cannot attend, the party may present their cases in writing.
  - **5.** The Dean shall present the charge of Academic Misconduct to the University Committee.
  - **6.** If the University Committee finds that the preponderance of the evidence, including any prior incidents of Academic Misconduct, warrants additional penalties, the University Committee may then impose a University-level sanction (reprimand, probation, suspension, or expulsion).
  - 7. If the University Committee finds that the preponderance of evidence, including consideration of any prior incidents of Academic Misconduct, does not support additional penalties, the recommendation of the College Committee still stands, but additional penalties are not imposed.
  - **8.** The decision of the University Committee is final.
- N. Step 13 The University Committee shall communicate its decision via Official TTU Email to the Student, the Instructor, the Provost, the Department Chair, the Dean, the Dean of Major, and the Provost's Office, as soon as possible, but no later than two (2) Business Days of the hearing, absent good cause.

#### VII. Committee Structure

A. College Academic Misconduct Committee

- **1.** A college-level Academic Misconduct Committee shall be established in each of the following academic units:
  - **a.** College of Agriculture and Human Ecology;
  - **b.** College of Arts and Sciences;
  - **c.** College of Business Administration;
  - **d.** College of Education (including ROTC and Crafts Center);
  - **e.** College of Engineering;
  - f. College of Fine Arts;
  - **g.** College of Interdisciplinary Studies; and
  - **h.** School of Nursing.

# 2. Membership

- **a.** The College Academic Misconduct Committee of each College/School, with the exception of the School of Nursing, and the College of Agriculture and Human Ecology, shall consist of
  - i One (1) Faculty Member and one (1) Faculty Alternate from each department within the College, elected for a three (3) year term by the department, and
  - ii One (1) Student Member and at least one (1) Student Alternate majoring within the College. The Student Members and Alternates are nominated by the President of the Student Government Association (SGA) and appointed by the President of the University for a one (1) year term. At least one Student of the nominated Students should be available during the Summer and/or between terms in case it is necessary to hold meetings of the College Committee during these periods. The Student Members must sign a Confidentiality Agreement indicating that they will abide by FERPA regulations regarding the confidentiality of the academic misconduct proceedings and information provided to them as part of the proceedings.
- **b.** The College Academic Misconduct Committees for the School of Nursing shall consist of
  - i Three (3) Faculty members elected for three (3) year terms, and

- **ii** One (1) Student Member and at least one (1) Student Alternate as described in Section VII.A.2.ii above.
- **c.** The College Academic Misconduct Committee for the College of Agriculture and Human Ecology shall consist of
  - i Four (4) Faculty Members and two (2) Alternates elected for three (3) year terms, and
    - **ii** One (1) Student Member and at least one (1) Student Alternate as described in Section VII.A.2.ii above.

#### **3.** Administrative Procedures

- **a.** The College Academic Misconduct Committee Chairperson and Alternate Chairperson shall be elected annually by the Committee members.
- b. The required quorum depends on whether or not a University-level sanction is being considered as part of the sanction. (1) If a University-level sanction is being considered, a quorum requires a majority of members on the Committee. (2) If only class-level sanctions are being considered, a quorum requires three members of the Committee. In both cases, the quorum must include a Student Member (or Student Alternate), and the Committee Chair (or Alternate).
- c. In cases where a Faculty Member of the College Academic Misconduct Committee is the Instructor charging the Student with academic misconduct, the Faculty member recuses her/him-self from the Committee.
- **d.** In cases where the Chairperson of the College Academic Misconduct Committee is the Instructor charging the Student with academic misconduct, the Chairperson recuses her/him-self and the Alternate Chairperson serves as the Chair.
- **e.** The College Dean shall provide the support services for the College Academic Misconduct Committee.

#### B. University Academic Misconduct Committee

# 1. Membership

The University Academic Misconduct Committee shall consist of:

- **a.** The Chairperson or Alternate Chairperson of each College Academic Misconduct Committee, and
- b. One (1) Student Member and at least one (1) Student Alternate majoring within the associated College. The Student Members and Alternates are nominated by the President of the Student Government Association (SGA) and appointed by the President of the University for a one (1) year term. At least one Student of the nominated Students should be available during the Summer and/or intersession terms in case it is necessary to hold meetings of the College Committee during these periods. The Student Members must sign a Confidentiality Agreement indicating that they will abide by FERPA regulations regarding the confidentiality of the academic misconduct proceedings and information provided to them as part of the proceedings.

#### 2. Administrative Procedures

- **a.** The Chairperson and the Alternate Chairperson of the University Academic Misconduct Committee shall be elected annually by the Committee.
- **b.** A quorum shall consist of five (5) members, including the Chairperson or Alternate Chairperson, the representative (or alternate) from the College in which the alleged offense occurred, and the Student Member or the Student Alternate.
- **c.** In cases where the College Chairperson is making the charge against the Student, the Alternate College Chairperson shall serve on the University Academic Misconduct Committee.
- **d.** In cases where the Chairperson of the University Academic Misconduct Committee is making the charge against the Student, the Alternate Chairperson of the University Academic Misconduct Committee shall serve as Chairperson.
- **e.** The Provost shall provide the support services for the University Academic Misconduct Committee.

# **VIII. Citation of Authority**

T.C.A. § 49-8-203(a)(1)(D); Tenn. Comp. R. & Reg. 0240-09-01 et seq.

# Approved by:

Administrative Council: February 22, 2017

University Assembly: April 19, 2017

TTU Board of Trustees: August 17, 2017



# Agenda Item Summary

Date: September	28, 2023		
<b>Agenda Item:</b> Pre	sident's Compensation		
Review	Action	No action required	

**PRESENTERS:** Chair Harper

**PURPOSE & KEY POINTS:** At the conclusion of the President's evaluation, the Executive Committee is responsible for making a recommendation to the Board on the President's compensation.



# Agenda Item Summary

Date: September 28, 2023							
Agenda Item: Disclosed Projects FY2023-24							
	Review	Action		No action required			
PRESENTER(S): Dr. Claire Stinson, Vice President for Planning & Finance							
PURPOSE & KEY POINTS: Review and approval of disclosed projects for:							
F	Y2023-24						
	1.	Headhouse (Greenhouse	e) Renovatio	on			
	2.	Baseball Hitting and Pitc	hing Facility				

Disclosed Projects 23-24
--------------------------

					Funding Source					
	Project	Project Description	Project Cost	New Sq. Ft.	TSSBA	Gifts	Grants	Auxiliary	Gift-in- Place	Plant Funds*
1	Baseball Hitting and Pitching Facility	Demolish the existing batting cage and construct a new hitting and pitching facility on the same site.	\$ 1,150,000	8,000						\$ 1,150,000
2	Headhouse (Greenhouse) Renovation	The renovation will reconfigure the interior spaces to provide for current program functions and will include upgrades to the interior finishes and services.	\$ 500,000				\$ 200,000			\$ 300,000



# Agenda Item Summary

Date: September 28, 2023								
Agenda Item: Meeting Dates								
R	Review	Action	$\boxtimes$	No action required				
PRESENTERS: Chair Harper								
PURPOSE	& KEY POINT	<b>rs:</b> Announce the up	pcoming Board o	of Trustees' meeting dates:				
	Next Me	eeting: November 3	0, 2023					
	Calenda	r Year 2024:						
	Ŋ	March 7						
	J	lune 20						
	9	September 26						
	[	December 5						