Artis College of Science and Technology Annual Report for 2020-2021

The College of Science and Technology (CSAT) at Radford University (RU) was formed on July 1, 2007 by combining the Departments of Biology, Chemistry and Physics, Geology, and Mathematics and Statistics from the former College of Arts and Sciences with the Department of Information Technology from the former College of Information Science and Technology. On July 1, 2009, the Anthropology and Geography programs from the College of Humanities and Behavioral Science joined the CSAT, and on November 11, 2011, independent departments of Anthropological Sciences, Geology, Geospatial Science and Physics were formed. Anthropology was approved by SCHEV to become the Anthropological Sciences program on May 10, 2010, and Geography was approved by SCHEV to become the Geospatial Science program on May 17, 2011. On April 28, 2017, the CSAT was renamed the Artis College of Science and Technology (ACSAT) in honor of Dr. Pat and Mrs. Nancy Artis '73, who donated \$5 million to establish the Artis Endowed Scholarship Fund to provide scholarships to ACSAT majors. On July 10, 2019, Jefferson College of Health Sciences merged with Radford University to create Radford University Carilion in Roanoke, Virginia. As a result of the merger, twelve full-time colleagues in Biology, Chemistry and Mathematics and Statistics joined the Artis College faculty, and bachelor's degree programs in Biomedical Sciences and Medical Laboratory Science were added to the ACSAT curriculum.

MISSION

The Artis College of Science and Technology prepares students with skills and expertise essential to the Commonwealth and the nation. The College emphasizes the theory and applications of science, mathematics, and technology. The College develops students' creative and critical thinking skills and teaches students to analyze problems and implement solutions to a vast array of challenges in our local, national and global communities. Students will be prepared to bring creative and socially responsible innovations to the workplace and to society.

DEGREES AND CONCENTRATIONS IN 2020-21

- B.A. and B.S. in Anthropological Sciences with concentrations in General Anthropology, Archaeology, Bioarchaeology and Forensic Anthropology
- · B.S. in Biology with concentrations in General Biology
- · B.S. in Biomedical Sciences
- B.S. in Medical Laboratory Science
- B.S. in Chemistry with concentrations in Professional Chemist, Advanced Professional Chemist, Biochemistry: Life Sciences and Pre-Health, Advanced Biochemistry, Forensics and Teaching Licensure
- B.S. in Computer Science and Technology with concentrations in Computer Science, Database, Software Engineering, Networks and Secure Software Development
- B.S. in Cybersecurity
- M.S. in Data and Information Management
- B.A. and B.S. in Geology with concentrations in General Geology, Engineering and Environmental Science and Earth Sciences
- B.A. and B.S. in Geospatial Science with concentrations in Environmental Studies, and GIS, Remote Sensing and Data Analytics
- B.S. in Information Science and Systems with concentrations in Healthcare Information Systems,
 Information Systems and Decision Analysis, Information Systems and Web Development and Information Systems Security
- B.A. and B.S. in Mathematics with concentrations in Applied Mathematics, Statistics and Traditional Mathematics
- B.S. in Physics with concentrations in Experimental and Theoretical Physics, Biophysics, Astrophysics, Physics Education and Teaching Licensure

GOALS AND ACCOMPLISHMENTS FOR 2020-2021

These goals are based on the roles and responsibilities of deans as described in section 4.1.3.1 on page 69 of the Radford University Teaching and Research Faculty Handbook.

- to lead the faculty and staff of the college in developing and delivering educational opportunities of the highest quality possible for students, consistent with the mission of the College,

<u>Goal:</u> Support the Office of Admissions, Artis College and departmental efforts to enhance recruitment and diversity of new students and transfer students

Status: Efforts continued in 2020-21 to enhance student recruitment despite the challenges of the COVID-19 pandemic. Examples of collaborations with the Office of Admissions include participating in Transfer Thursday on April 16, 2020 and virtual Highlander Day and Open House events on May 21, 2020 and February 25, 2021 as well as creating virtual tours to provide specific information about opportunities in the Artis College. Additional college events in 2020-21 that recruited new students include the virtual Blue Ridge Highlands Regional Science Fair, the hybrid Summer Bridge Women in STEM Program with one student on campus and the others virtual, and virtual Cyber Camps. Dr. Christine Hermann, Chair of the Department of Chemistry, took a leadership role in formalizing partnerships with community colleges that have resulted in articulation agreements being signed with Dabney S. Lancaster Community College on March 16, 2021 and with discussions continuing with Virginia Highlands Community College and J. Sargeant Reynolds Community College to recruit transfer students to Radford University as Chemistry majors. Artis College department chairs continue to work diligently with the Transfer Virginia initiative to establish Phase 1 included Biology, Chemistry, Geology, Information partnerships with the VCCS. Technology and Mathematics, phase 2 includes Computer Science, Geospatial Science, Social Sciences and Physics, and phase 3 will include environmental science. Radford University was awarded \$17.3 million in funding over the next 20 years from the Tech Talent Investment Program (TTIP), and Dr. Art Carter, Director of the School of Computing and Information Sciences and Associate Dean of the ACSAT, is directing this project that targets community college transfer and place-bound students for the exclusively online Secure Software Development concentration in the Computer Science degree. On April 24, 2020 I participated in a conference call with Hanover Research to explore recruitment options for the Tech Talent Investment Program. I am grateful to Dr. Jon Tso, David Horton and the faculty and students of the Geology Department for creating and posting a virtual tour of the Geology Department laboratories and facilities for our prospective Geology majors and their families on February 11, 2021.

<u>Goal:</u> Support the REALISE program and other partnerships, including the Artis Mentor Collective, to enhance retention of new students, transfer students and continuing students

<u>Status:</u> Artis College faculty and staff members are dedicated to enhancing retention efforts. REALISE continues to be a significant retention effort through the work of faculty who are creating an environment that is student-ready, welcoming and inclusive as well as developing curriculum with inclusive pedagogy. Components of the REALISE program include virtual faculty development in the summer of 2020 as Faculty Learning Community cohorts #5 and #6 to support redesign of Biology, Chemistry and Physics introductory laboratory courses as well as workshops and training on inclusive pedagogy. The REALISE Students are contributing to retention efforts by supporting

Artis College majors socially and academically. Additional REALISE efforts to enhance retention include administering a survey to students enrolled in Artis College courses to assess social psychology constructs that include sense of belonging, ability uncertainty, science identity and institutional commitment. The survey was authored by Dr. Jeanne Mekolichick, Associate Provost, Dr. Sarah Kennedy, Assistant Professor of Chemistry, and Dr. Anna Curtis, Postdoctoral Teaching Fellow in Chemistry during 2018-19, and the survey continues to be administered and its results analyzed by Dr. Sarah Kennedy, Dr. Milcah Jackson and Dr. Jamie Lau.

The Artis College department chairs and faculty invested significant time to retain students in spring 2020 who had not registered for the fall 2020 semester by calling them to offer support so their obstacles to registration could be removed. Radford University is partnering with Ruffalo Noel Levitz (RNL) to develop strategies at the university level for enhancing retention. I have participated in RNL briefings and met with the Artis College departments and school during October and November of 2020 to provide them RNL Student Retention Predictor data and College Student Inventory data for each of their new freshman majors as well as Student Retention Predictor data for their sophomore majors.

An additional strategy for enhancing retention of Artis College new freshmen and transfer students was implemented in fall 2020 and continues into spring 2021. This strategy uses Mentor Collective to establish a system of virtual mentoring with upper-level Artis College majors serving as mentors for Artis College majors who enrolled in August of 2020 as new freshmen and transfer students. The virtual mentoring is through a Mentor Collect smartphone application for texting, and data is provided as a dashboard to analyze trends and understand the needs of new freshmen majors in the Artis College so that new strategies for enhancing retention can be developed. Results reveal that the fall semester of 2020 was a very successful start for the Artis Mentor Collective program with 117 mentors and mentees matched who logged 645 conversations and exchanged 2,462 SMS text messages. An *Initial Learnings* report submitted by Mentor Collective staff on December 7, 2020 to the Artis College Dean's Office indicated the following data for the fall 2020 semester.

- "Engagement in Artis Mentor Collective is above the Mentor Collective benchmarks with:
 - 1.) 86.21% pairs reporting at least one conversation, compared to the Mentor Collective benchmark of 69.95%
 - 2.) 62.07% pairs reporting at least three conversations, compared to the Mentor Collective benchmark of 39.81%
- Artis College program mentees participation (% of mentees ever matched from offer) is 39.53% (117/296) which is above the Mentor Collective benchmark of 30.45%"

The *Initial Learnings* report also indicated that "Students have questions for mentors about a range of topics, the most common being getting to know one another, academics, and school life" and "This semester, Mentors have flagged that students are struggling with COVID-19, academic struggles, and depression." "When asking mentors if they are enjoying their experience as a mentor, their average response is 6.81/7. When asking mentees how likely it is that they would recommend this program to a peer/friend, their average response is 6.22/7."

The Mentor Collective project has been expanded in the spring of 2021 to include an alumni component as a pilot program where 22 Artis College alumni and supporters have agreed to serve as mentors for currently enrolled upper-level Artis College majors who are their mentees. One alumnus mentor has four mentees and 22 conversations so far. We are hopeful this successful pilot

program can be expanded, and the Office of University Advancement is diligently exploring opportunities for prospective donors to support the Artis Alumni Mentor Collective program.

<u>Goal:</u> Support the REALISE program and other partnerships to promote diversity, inclusion, inclusive pedagogy and inclusive excellence

Status: The HHMI funded REALISE IE program provides professional development opportunities for faculty that includes diversity, equity and inclusion training as well as inclusive pedagogy. We are fortunate in the Artis College to have Dr. Sharon Jones provide reading groups for the books Waking Up White and Blindspot as well as a physically distanced Cultural Competency Workshop on October 2, 2020. The Cultural Competency Workshops are scheduled for three years, with 2019-20 as year one with the theme of Awareness. Year two focuses on Knowledge in 2020-21, and the theme for year three during 2021-22 will be Skills. Funds were also provided from the Artis College to support faculty efforts in the Department of Biology to redesign the curriculum in Biology 310 and Biology 311 during the summer of 2020. Significant efforts are also being made to provide faculty development in inclusive pedagogy to faculty learning community cohort members and other interested faculty members. These efforts include workshops on group work, team building and microaggressions as well as the STEM Ed reading groups.

A document developed with the Artis College Leadership Team and the REALISE Leadership Team to promote diversity, inclusion and inclusive pedagogy in 2020-21 was the Artis College of Science and Technology Diversity, Equity and Inclusive Excellence Statement that was provided to Artis College faculty on August 21, 2020. The statement is below.

RADFORD UNIVERSITY

Artis College of Science and Technology

Diversity, Equity and Inclusive Excellence Statement

The faculty, staff and administrators of the Artis College of Science and Technology are dedicated to facilitating the academic success of all students and to establishing a culture that values all individuals, embraces diversity, ensures equity and enhances inclusive excellence. Our vision aligns with President Hemphill's statement to the campus community on June 2, 2020 as we recommit ourselves, our actions and our thoughts to love, hope, acceptance and understanding. https://www.radford.edu/content/president/home/president-speeches/keep-moving-forward.html

On June 7, 2017 Radford University was awarded a Howard Hughes Medical Institute Inclusive Excellence grant for our REALizing Inclusive Science Excellence (REALISE) program. The goals of REALISE include developing a culture of inclusive excellence at Radford University. We consider inclusive excellence an aspiration that integrates equitable access and experiences for all students with rigorous student achievement. Retention and graduation are minimum standards of student achievement along with students leaving Radford as confident professional scientists ready to step into any STEM challenge. https://www.radford.edu/content/csat/home/realise.html

We are committed to facilitating the academic success of all students through these actions.

- Acquire awareness, knowledge and skills in cultural competency

- Develop engaging curriculum that demonstrates best practices of inclusive pedagogy
- Create a welcoming, student-ready culture where faculty believe that all students can succeed
- Promote sense of belonging, science identity and institutional commitment among our students
- Identify and remove institutional barriers to students' academic success
- Promote institutional change by sharing our inclusive excellence practices across campus
- Commit to increasing the diversity and retention of the faculty and staff in the college
- Interrogate practices, policies and procedures with an equity-minded lens

We are dedicated to seeking demonstrable, objective truth in the natural world, to applying the knowledge created from the sciences, technology and mathematics to solving problems and improving society and to modeling professionalism for our students as natural and computational scientists. We encourage a culture of respect among students, faculty and staff where all students, faculty and staff feel valued and supported. We are committed to embracing diversity, promoting mutual respect, ensuring equality and fairness and enhancing equity and inclusion among all of our students, faculty, staff and administrators. We are passionate about creating safe and welcoming environments for all of our students, faculty and staff to learn and grow personally and academically as they develop the confidence to seek challenges and opportunities throughout their lives and to contribute to society as engaged and informed citizens.

Actions to Support Diversity, Equity and Inclusive Excellence for All Students

- Acquire awareness, knowledge and skills in cultural competency
 - Faculty in the ACSAT have committed to a three-year program of cultural competency training to explore their own biases, recognize microaggressions and develop skills to stop discrimination. https://www.radford.edu/content/academic-programs/home/resources.html?cq_ck=1573655703611
- Develop engaging curriculum that demonstrates best practices of inclusive pedagogy

 The Biology, Chemistry and Physics Departments are revising their introductory laboratory courses to implement more inclusive practices, and all Artis College departments incorporate team work and project-based learning into their teaching. CSAT 121 and CSAT 122 have been developed as Scientific Problem Solving I and II for new students to build their confidence and enhance equity in their quantitative reasoning skills.
- Create a welcoming, student-ready culture where faculty believe that all students can succeed
 Faculty partner with REALISE students to meet and to mentor new students informally as well as to
 build sense of belonging, science identity and a culture of inclusivity through events such as Faculty Student Mixers, Tie-Dye events and Fresh Fruit Fridays.
 https://www.radford.edu/content/csat/home/realise-students.html
- Promote sense of belonging, science identity and institutional commitment among our students
 BIOL 160, UNIV 100 for Chemistry majors and PHYS 201 are designed for first year students to develop sense of belonging, science identity and academic support communities.
 Artis Mentor Collective commences in fall 2020 to engage students in peer-to-peer mentoring.
- Identify and remove institutional barriers to students' academic success

 The Academic Policies and Procedures Committee revised the academic suspension policy and the academic renewal policy for readmitted students who did not achieve academic success initially.

 An Artis College Student Emergency Fund exists to assist majors in the Artis College with short-term financial obstacles.
- Promote institutional change by sharing our inclusive excellence practices across campus

Faculty members from the College of Humanities and Behavioral Sciences as well as the College of Education and Human Development have conducted workshops in team building and microaggressions for Faculty Learning Community cohorts in REALISE.

The REALISE Leadership Team was invited to present information at the Institutional Effectiveness Day program on August 19, 2019 and partners with numerous offices on campus.

https://www.radford.edu/content/dam/departments/administrative/academic-programs/APPROVED-

DEI-Statement-for-Academic-Programs-6-29-2020.pdf

https://www.radford.edu/content/diversity/home.html

- Commit to increasing the diversity and retention of the faculty and staff in the college

 Focused recruitment was used to advertise an open position to minoritized faculty candidates. A

 diversity statement is required in applications for faculty positions.
- Interrogate practices, policies and procedures with an equity-minded lens

Resources are utilized for examining unconscious bias and conducting inclusive searches.

Online: http://www.awis.org/?Implicit_bias, http://maa.org/sites/default/files/pdf/ABOUTMAA/avoiding implicit bias.pdf

Print: Sotello, C. & V. Turner. 2002. Diversifying the Faculty: A Guidebook for Search Committees. Washington, D.C. Association of American Colleges & Universities.

Departmental data such as course DFW rate, retention rate, persistence rate and graduation rate for minoritized, first generation and Pell eligible students are examined to identify opportunities for utilizing inclusive pedagogical practices and for enhancing a culture of inclusive excellence.

I am also an appointed member of the Diversity and Equity Action Committee (DEAC), and DEAC has authored a draft Radford University Diversity, Equity, and Inclusion Action Plan that is currently being reviewed by the Teaching and Research Faculty Senate and Administrative and Professional Faculty Senate. This draft Action Plan has received support from the Staff Senate and Student Government Association.

<u>Goal</u>: Support efforts to promote new affiliation agreements with other institutions to create educational and professional opportunities for our students

Status: An Accelerated Undergraduate-Graduate Degree Articulation Agreement was created in consultation with the Virginia Tech Department of Computer Science and fully signed on July 27, 2020. The goal of the accelerated undergraduate/graduate program in Computer Science is to enable Radford University undergraduate students, including non-Computer Science majors, to take courses toward a Virginia Tech Master of Engineering degree in the Department of Computer Science before completing their B.S. degree at Radford.

A Memorandum of Understanding (MOU) between Southwest Virginia Governor's School and Radford University established a partnership for the high school students at Southwest Virginia Governor's School to receive dual enrollment college credit for ASTR 151, ASTR 152 and MATH 132 taken at the Southwest Virginia Governor's School campus. This MOU was fully signed on December 21, 2020, and it will serve as a recruiting tool for new majors in the Artis College as well as science and mathematics education outreach to Southwest Virginia Governor's School students.

A Clinical Education Affiliation Agreement with the Sentara Rockingham Memorial Hospital (RMH) School of Histotechnology was fully approved and signed on January 5, 2021. The agreement with Sentara RMH will enable Biology majors to gain admission to a 12-month didactic and practical Histotechnology Program at Sentara RMH.

Discussions have been ongoing with NCI Information Systems, Inc. in Reston, Virginia in

collaboration with Dr. Angela Joyner since December of 2019. This collaboration has resulted in a Teaming Agreement that was signed on February 19, 2020 and a Memorandum of Understanding that was signed on January 5, 2021. We are hopeful for a successful partnership with NCI as they await news on a proposal submitted to PD Acquisition, Logistics, and Technology Enterprise Systems and Services (PD ALTESS) for a multi-year contract with the Radford Army Ammunition Plant. We continue to pursue opportunities with NCI through a virtual meeting on March 5, 2021 to explore opportunities for an NCI CREATE Lab on the Radford University campus.

As already stated, a recruitment effort that resulted in an articulation agreement being signed with Dabney S. Lancaster Community College on March 16, 2021 was initiated by Dr. Christine Hermann, Chair of the Department of Chemistry. Discussions continue with Virginia Highlands Community College and J. Sargeant Reynolds Community College to develop similar curriculum pathway articulation agreements to recruit transfer students to Radford University as Chemistry majors.

Discussions are also in progress to finalize a draft articulation agreement with Appalachian College of Pharmacy and Radford University that would provide Radford University pre-pharmacy students the opportunity to earn a B.S in Biology, B.S. in Biomedical Sciences or B.S. in Chemistry degree through three academic years of work at Radford University and a Doctor of Pharmacy degree from Appalachian College of Pharmacy after three years. This articulation agreement would save a student one year of undergraduate tuition and one year of pharmacy school tuition.

- to lead the College in procuring and managing fiscal, human, and physical resources necessary to accomplish these goals,

<u>Goal:</u> Pursue new relationships with corporate partners and individuals to solicit gifts and donations to the ACSAT

Status: New relationships with corporate partners have been developed during 2020-21 to benefit the Artis College students, faculty and programs. In collaboration with the Office of University Advancement and the Artis College Major Gifts Officer, Ms. Vanessa Conner, a proposal was submitted to Appalachian Electric Power (AEP) Foundation to support the Summer Bridge Program: Women in STEM that was funded for \$100,000 for three years of support from 2020 until 2022. Through the diligent efforts of Director David Horton, Dr. Rhett Herman and Dr. Sandra Liss in Physics, the Summer Bridge Program: Women in STEM experience was conducted as Mission to Mars in person for one student and virtually for 23 students from July 20-24, 2020. In addition to the AEP Foundation gift, \$21,675 was raised for Summer Bridge: Women in STEM Program in 2020 from donors including BAE Systems and TORC Robotics.

The Summer Bridge Cyber Camp program was conducted virtually from July 27-31, 2020 as a partnership with Lancaster County, Virginia Educational Foundation and the Radford University Department of Information Technology. Due to the COVID 19 pandemic, the program was moved online for 2020 with three events: a Capture the Flag (CTF) contest, programming with Python, and microbits.

Dr. Ann S. Ferren served Radford University as the Vice President for Academic Affairs from 1996-2001, and she has been an extremely generous contributor to numerous causes at Radford University to support our students and academic programs. In July of 2020, Dr. Ferren endowed the Ann S. Ferren Student Research Fund with a very generous gift of \$50,000 that will allow the Department of

Chemistry to select a chemistry major annually who is provided a stipend of \$1,000 and \$1,000 for research supplies and materials to conduct original research. Dr. Ferren's continued commitments to the success of Radford University students, faculty and programs are sincerely appreciated.

A new partnership has been developed with Commonwealth Transfusion Foundation thanks to the diligent efforts of Professor Laura Link and Professor Krystina Angellini in the Medical Laboratory Science program at RUC and Vanessa Conner, Major Gifts Officer for the Artis College. A grant of \$25,000 was received from Commonwealth Transfusion Foundation on October 1, 2019. Another proposal was submitted to the Commonwealth Transfusion Foundation on December 9, 2020, and an award of \$160,000 will be received from that proposal on March 31, 2021.

Another effort that supported Artis College students, faculty and programs in 2020-21 was the Highlander 10 Challenge for the Biology Department Greenhouse that raised \$2,060 to provide funds for greenhouse signage. The Blue Ridge Highlands Regional Science Fair also raises funds to support the students who receive cash awards and travel to the International Science and Engineering Fair. In 2020-21, a total of \$6,275 was raised with \$2,025 from four donors and \$4,250 from seven sponsors.

An Artis College of Science and Technology Student Emergency Fund has been established thanks to the generosity of donors. The purpose of the fund is to provide financial support to students in the Artis College who need assistance with emergency expenses that are not directly related to their tuition and fees and the goal of this fund is to help students remain enrolled and to accomplish their academic goals when faced with unexpected financial challenges. To date \$4,465 has been raised and \$475 has been approved to provide emergency financial assistance from the Artis College of Science and Technology Student Emergency Fund.

I also met with Ling Jie Gu, a student who is an Art majors and an extraordinary artist on August 26, 2020 to thank her for her gift in kind *Velociraptor mongoliensis* sculpture/model that she created and donated to the Radford University Museum of The Earth Sciences. Since that time, she has also created an *Archaeopteryx* model that she has also donated to the Museum of the Earth Sciences. I met with Dr. Pat Mikesell, a generous donor and Professor Emeritus of Biology, on July 30, 2020 to provide him a tour of the Biology Department Greenhouse.

Thanks to the efforts of Vanessa Conner, I had a virtual meeting with Mary Sandy, Radford alumnus and Director of the Virginia Space Grant Consortium, and provided her a presentation on the Artis College on January 22, 2021 to explore potential collaborations with Artis College Physics Department faculty and the Virginia Space Grant Consortium.

In summary, a total of \$160,271 was received by the Artis College from March 2020 through March 24, 2021, and 24 new donors have made donations to the Artis College since March 2020.

Goal: Support the efforts to achieve the University and college goals in the Capital Campaign

Status: I am working closely with the University Advancement senior leadership team and Vanessa on the Artis College participation in the Capital Campaign. Vanessa and I met with the Artis College Together Capital Campaign subcommittee on January 14, 2021 to solicit their advice and support. As of March 25, 2021, the Artis College has received \$2,424,358 towards our Capital Campaign goal.

- to represent the college, its goals and needs to other external as well as internal constituencies, and

<u>Goal:</u> Communicate through the ACSAT newsletter, ACSAT website, ACSAT Facebook page and by meeting with students, faculty, staff, alumni and donors

<u>Status</u>: A new communications strategy this year in Academic Affairs is the *Office of the Provost Newsletter* that is edited by Ms. Rhonda Conner in the Office of the Provost. David Horton writes articles every week that I submit to the *Office of the Provost Newsletter* to communicate Artis College news and events. David also maintains the ACSAT Facebook page and website with frequent updates that feature articles, videos, photographs and links to ACSAT faculty and student activities. David also devoted a significant amount of time developing virtual tours of Reed Hall, Curie Hall and the Center for the Sciences to use in our virtual events and tours for prospective students.

In collaboration with Dr. Angela Joyner and Dr. Matthew Dunleavy, Dr. Art Carter and I met virtually with a representative from Ennoble First on March 9, 2021 to explore potential part-time and internship opportunities for our School of Computing and Information Sciences students.

I meet with faculty and students virtually and in person at their request, and I conduct an open-door policy for listening to input and for hearing faculty and student concerns.

Goal: Support efforts to engage alumni in the work of the ACSAT

<u>Status</u>: Artis College of Science and Technology alumni events during the 2020-21 academic year included the annual meeting of the ACSAT Advisory Council that was conducted virtually on October 16, 2020 as well as a virtual Homecoming presentation on October 17, 2020. I also had a telephone conversation with Radford University alumna and prospective donor Dr. Charlene Lutes, Professor Emerita of Biology to update her on the recent successes of the Artis College.

The Artis Alumni Mentor Collective is a pilot program in spring 2021 that have engaged 22 alumni and supporters of the Artis College as professional mentors for our Artis College majors. Discussions are also ongoing to form an affinity group of Artis College alumni who are medical professionals.

- to promote the overall excellence and welfare of the University

<u>Goal:</u> Support positive morale among faculty and staff across the ACSAT by listening to faculty concerns and soliciting faculty input in decisions affecting the ACSAT

<u>Status</u>: I met with ACSAT faculty to discuss issues ranging from individuals with specific requests to department level issues, such as retention, during 2020-21. The meeting agendas included requests for resources, concerns raised by students and parents and COVID-19 issues. I also write many letters of support for faculty members to assist in their applications for grant proposals and Faculty Professional Development Leave as well as nominations for awards. I accepted an invitation to provide remarks at the virtual Celebrate Seniors program sponsored by the Chemistry Department on Friday, May 8, 2020.

I consult the ACSAT Leadership Team frequently to discuss issues affecting the ACSAT faculty, staff and students, and I highly value and respect the input of the ACSAT Leadership Team in arriving at decisions through collaborative leadership. For example, I asked for input from chairs on the budget on July 8, 2020.

Goal: Support efforts to enhance the academic reputation of the ACSAT and Radford University

Status: The academic reputation of the ACSAT is enhanced by the ACSAT faculty and students accomplishing our teaching, research and service missions. Teaching successes include inclusive pedagogical innovations and assessment strategies that enhance our teaching effectiveness. Research successes include faculty members who mentor student research and supervise their research presentations at national conferences and meetings. Service and outreach successes include all the science, technology and mathematics education and outreach events that are possible through the work of the ACSAT faculty and staff. A very successful outreach event in 2021 that enhances the academic reputation of Radford University was the Blue Ridge Highlands Regional Science Fair virtual awards ceremony March 13 that is co-directed by Dr. Christine Hermann and Dr. Kimberly Lane in the Department of Chemistry.

The Department of Information Technology was approved by the State Council of Higher Education for Virginia (SCHEV) to be renamed the School of Computing and Information Sciences as of August 5, 2020. This new designation reflects the multiple undergraduate degrees and M.S. in Data and Information Management as well as the new Secure Software Development concentration that is entire online to serve more students.

Dr. Chester "Skip" Watts, Professor of Geology at Radford University, was awarded the prestigious 2020 Karl and Ruth Terzaghi Outstanding Mentor Award by the Association of Environmental and Engineering Geologists (AEG) during the awards ceremony of their annual meeting on September 18, 2020. The AEG national meeting would have been held in Portland, Oregon, but it was conducted virtually.

Dr. Wei-Chi Yang, Professor of Mathematics and Statistics, was named a recipient of the Radford University Dalton Eminent Scholar Award for 2020-21. Dr. Yang founded the Asian Technology Conference in Mathematics (ATCM) in 1995, and the ATCM was conducted virtually on December 14-16, 2020 with Radford University as a host site.

Dr. Jeremy Wojdak, Professor of Biology, is one of 12 recipients of the 2020 State Council of Higher Education for Virginia (SCHEV) Outstanding Faculty Award. These awards recognize faculty at Virginia's institutions of higher learning who exemplify the highest standards of teaching, scholarship and service.

Dr. Amy Balija, Assistant Professor of Chemistry, has recently been named Chair of the Women Chemists Committee (WCC) of the American Chemical Society, the world's largest scientific society and the home of professional chemists with more than 155,000 members in over 130 countries.

On March 23, 2021, David Horton and I served as panelists for the national webinar "Mentorship Masterclass: Building a Culture of Mentorship" that was sponsored by Mentor Collective. We were invited to serve as panelists to describe our success with Mentor Collective in the Artis College.

Perhaps the greatest achievement in 2020-21 was the extraordinary commitment of the Artis College faculty and staff to provide exceptional learning opportunities and support to our students during the COVID-19 pandemic. ACSAT faculty accepted the numerous challenges that ranged from teaching online exclusively in late March through Summer II of 2020 to mastering instructional formats with

Zoom and blended learning in the fall of 2020 and spring of 2021. ACSAT faculty are exemplary role models of professionalism whose dedication to excellence in teaching, research and service transforms the lives of our students.

Professional Development for 2020-21

I participated in online webinars on teaching anatomy and physiology online on May 26 and 28, 2020 to enhance my professional development during 2020-21 as well as attended the Freedom of Information Act Training on October 16, 2020. I also taught BIOL 310-07 during the fall semester of 2020 as my annual contribution to the teaching mission of Radford University.