



To: Faculty, Staff, and Students in the Artis College of Science and Technology
From: Steven M. Bachrach, Dean
Date: March 28, 2025
Subject: Annual Dean's report (March 23, 2024 – March 28, 2025)

Please find here my report for the 2024-2025 academic year. It is an honor to serve as Dean of the Artis College of Science and Technology.

My report highlights areas that I have worked on over the past year. As I wrote last year, none of these accomplishments are possible without an excellent team. I am grateful to the Department Chairs/Directors and the members of the Dean's staff for their hard work. The success of the Artis College is due to the dedicated efforts of its faculty and staff; I thank each of you for putting our students first.

1. College Initiatives

a. T&P expectations

The Artis College passed the tenure and promotion expectation comprised of two parts: Part A defines College-wide expectations and Part B defines specific expectations of the department, reflecting differences in the disciplines. I am pleased to report that all departments/schools have completed their tenure and promotion expectation documents, which have, in turn, all been approved by each department/school and by the Leadership Team and Dean.

b. Two-option plan

The two-option proposal allows tenured faculty to select into the (a) Teaching Option or the (b) Research Mentoring Option (RMO). (All tenure-track assistant professors are automatically placed in the RMO.) This proposal was approved by the College in the spring 2024. Implementation began in fall 2025 with many departments providing the opportunity for some faculty to move to the RMO. We will monitor the outcomes of the program every year and report to the College its progress.

c. Biotechnology at Roanoke

Pursuant to a request from President Danilowicz to explore a biotechnology degree program to be delivered in Roanoke, I have been working with a group of biology faculty, in

consultation with faculty from participating departments, to develop a two-year (junior and senior) program to prepare students for a variety of employment opportunities in the biotechnology area. After speaking with leaders of a few biotech companies in Roanoke, we learned that a background in regulations (safety, IRB and IACUC), best practices in laboratory operations, production, and health and safety, coupled with practical instrumentation experience could give our students a distinctive degree that will separate them from most other biotechnology graduates. We worked with colleagues in the College of Humanities and Behavioral Sciences and the Waldron College of Health and Human Services and in chemistry and computer science to find appropriate courses to populate the curriculum. We very much appreciate everyone's contributions.

The curriculum and 4-year plans (with the first two years either at RU main campus or VWCC biotechnology AS program) are completed and ready for moving through the University approval process. We are diligently working on the new course descriptions, with about half of the curriculum made up of currently existing courses. We hope to have the program approved through the University for the June 2025 BOV meeting and then submitted to SCHEV, with a start date of Fall 2027.

d. S-STEM grant with Virginia Tech

In February 2024, I contributed to an NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) proposal led by Virginia Tech. We were unsuccessful with this application. We had begun to develop a revised proposal in February 2025 when leadership at Virginia Tech decided that pursuing this proposal was not prudent in the current climate at NSF due to actions of the new federal administration.

e. Department reorganization

After almost a year of working with SCHEV and two full redrafts of the proposal, we learned in February that our request to combine the Department of Geology and the Department of Geospatial Science was approved. Our latest unit is now official: the Department of Geospatial and Earth Sciences. I want to especially thank Drs. Andrew Foy and Stockton Maxwell for their diligent work. We were assisted by Jessica Stowell and Mel Fox. Dr. Maxwell will serve as the chair of the department. He and I will work with the Provost's Office on combining budgets and other technical details.

f. Artis Residential Community and RISE

Associate Dean Christine Small continues to coordinate the Artis College's efforts with the Artis Residential Community (ARC) and our participation in the RISE initiative as part of the QEP. I refer to her report, but some highlights include another successful Science Expo, a fantastic tie-dye shirt event, an active Makerspace in Peery Hall supervised by Dr. Joby Kaufmann, the Friday Food for Thought program, and distribution of a weekly calendar of events.

g. Teaching evaluation

The ad hoc committee on teaching evaluation, led by Dr. Brett Taylor, presented a first draft proposal at a College Town Hall in October 2024. Hearing many concerns, a second draft was created, with contributions by myself and the Leadership team, and distributed to the College Faculty in February for further comment. Again, many excellent suggestions were received, and the committee intends to present a final proposal for adoption by the College before the end of the Spring Semester. This proposal will include peer observation, self-reflection as part of the FAR, and a rubric for chairs to employ when evaluating faculty.

h. Budget

The Leadership Team considered options for a possible 1% budget increase, and the Team decided to request a tenure track line in biology (microbiologist) to meet the increasing growth in the nursing program. The Team also solicited requests for next year's ETF program, which was submitted in mid-March 2025.

i. Chair reappointment proposal

The Leadership Team spent considerable time this year developing a proposal for chair reappointment. The T&R Handbook lacks guidance for this procedure. Our proposal is for a review to take place in the spring of the chair's/director's fourth year with defined roles for the department's faculty and staff. We also place a limit of two successive terms on a person serving as chair.

Before bringing the proposal to the College Faculty, the Leadership Team decided to obtain some clarification on the process, and submitted a Handbook revision that (a) moves the review into the fourth year of the chair term and (b) specifies that each College must define a procedure that needs to be approved by the College faculty. This Handbook revision is scheduled to be voted upon by the Faculty Senate in April. Following that vote, the Leadership Team will act according to that decision; if the revision is approved, we will bring our proposal for a faculty vote, and if the revision is not approved, the Leadership Team will modify the proposal to be fully compliant with the handbook.

j. Ad hoc committee on AI

With the growing use of AI tools such as ChatGPT, I approached Dr. David Anderson to chair an ad hoc College committee to explore appropriate use of AI tools by faculty and students, provide guidance to faculty on how to monitor its usage, and to look at the AI skills that we might teach to our students. The ad hoc committee is nearing completion of a proposal for AI Transparency Statements for consideration by the Leadership Team and the College faculty.

k. Environmental Science

I established an ad hoc working group, chaired by Dr. Christine Small, to create an Environmental Science bachelor's degree program. All departments are represented in this committee as we attempt to create an interdisciplinary degree that will be housed in the

College. The working group expects to put forward a curriculum for review in the near future.

2. High school outreach

a. BLAST (Virginia Space Grant Consortium) and Summer Bridge

We hosted our second BLAST program, a three-day camp for rising 9th and 10th graders interested in the STEM areas, through a grant from the Virginia Space Grant Consortium. David Horton organized the camp, and we will host a third program in summer 2025.

The Artis College hosted the annual Summer Bridge program in July 2024 for rising senior high school women. David Horton again organized the program, drawing upon many faculty. This program continues to be supported in large part from generous grants from American Electric and Power. New this past summer was additional funds from AEP to support Athena Smith, a Radford University junior physics major to engage in research and participate in the Summer Bridge Program. We intend to request support for two such students for the 2025 Summer Bridge.

3. Philanthropy

I continue to work with Jon Zeitz to increase philanthropy to the College. We have secured funding for computer science and cybersecurity students to have their fees waived to take certificate exams at the Hub, secured funds to help three students defray costs of participating on the RARE Amazon trip, and ran an online fundraiser for the Artis College Research Opportunity Fund. Additionally, we held an event on April 18, 2024 at Long Way Brewing to celebrate the Student Engagement Forum and raised funds for the Research Opportunity Fund. The second annual event will take place at Long Way on April 30, 2025.

Working with Laura Link, Jon Zeitz, and Penny White, we submitted a proposal to the Commonwealth Transfusion Foundation to double the size of the Medical Laboratory Science program. Unfortunately, that proposal was denied.

I continue to work closely with the Dean's Advisory Council. This year we added Scot Townshend to the Council.

4. Evaluation of Faculty and Staff

Over the year, I wrote the following evaluations or reviews:

- 70 Faculty annual evaluations
- 23 reappointment reviews
- 7 tenure and/or promotion recommendations
- 7 chair/director reviews
- 3 recommendations for Faculty Professional Development Leave
- 3 staff annual reviews

5. Hiring

Following an internal search process, I appointed Dr. Stockton Maxwell as chair of the Departments of Geology and Geospatial Science. He began this role in July 2024. I thank Drs. Jon Tso and Charles Manyara for their many years of service as chairs of their respective departments. With the approval of the merger of these two departments, Dr. Maxwell will continue as the chair of the Department of Geospatial and Earth Sciences.

With Dr. Urista and Dr. Sigman stepping down from the chair positions in anthropology and mathematics, respectively, I have interviewed candidates to become the next chairs. I have made recommendations for each chair position to the Provost and await her decision. Dr. Taylor recently announced that he will leave Radford University this summer. I have begun discussions with the Department of Physics concerning their next chair.

This spring, the Artis College conducted a search for two assistant professors in the School of Computing and Information Science and will shortly begin a search for an assistant professor of mathematics. I interviewed (or will interview) all candidates for these positions.

6. Committee Service

As Dean, I have represented the College on the following leadership committees:

- President's Leadership Council
- Academic Affairs Leadership Team
- Dean's Council
- Search Committee, Dean of Humanities and Behavioral Sciences (Chair)
- RU Roanoke Leadership Team
- Academic Program Review and Enhancement Committee
- University Planning and Budget Advisory Committee
- RUC Operations Committee

The Artis College Leadership, comprised of the Dean, Associate Dean, department chairs and directors, and program directors, meets every other week. I have a standing meeting with each chair/director once a month.

7. College Representation

I represented the College at the following events over the past year.

Highlander Day (Apr 13, 2024)
Employee Service Awards (Apr 25, 2024)
Graduation (May 3-4, 2024)
AALT Retreat (July 26, 2024)
New faculty Reception (Aug 19, 2024)
Convocation (Aug 23, 2024)
Science Expo (Sep 6, 2023)

Onward NRV dinner (Sep 12, 2024)
RU/VCOM Partnership Meeting (Oct 3, 2024)
Open House (Oct 19, 2024)
Truist Global Capitalism Lecture (Oct 24, 2024)
Day of Gratitude (Nov 15, 2024)
Open House (Nov 16, 2024)
RU/VCOM Partnership Meeting (Dec 2, 2024)
Season of Gratitude Reception (Dec 4, 2024)
MLS Advisory Board Meeting (Dec 12, 2024)
Graduation (Dec 13-14, 2022)
AALT Retreat (Jan 17, 2025)
Selu social (Feb 28, 2025)
33rd Annual Blue Ridge Highlands Regional Science Fair (Mar 8, 2025)
Highlander Day (Mar 22, 2025)

8. Scholarship

Work in progress

I have completed about two dozen chapters for my next book that features different chemical compounds as a jumping off point for discussing the art of chemistry for a lay audience.