

## Program Handbook

VCU School of Medicine Premedical Graduate Health Sciences Certificate (CERT; CPG-BHS program code)

### CERT Program Academics

The Premedical Graduate Health Sciences Certificate (CERT) program is a graduate-level post-baccalaureate training opportunity designed to provide opportunities for aspiring health professional (i.e., pre-medical and pre-dental) students to strengthen their academic record through rigorous graduate-level coursework in health-related basic science disciplines, academic advising that promotes an informed approach to the professional school application process, and preparation for standardized tests through both didactic coursework and an included MCAT or DAT test preparation course.

The Certificate is intended to be completed in **2 consecutive semesters**. Successful CERT students will commit **full-time effort** to their studies, manifest professional behavior, assess and enhance study and test-taking skills in varied course environments, and actively cultivate effective time management techniques. Mastering these fundamental competencies will help students establish a solid foundation for enhancing their preparedness to not only compete for admission into highly competitive professional schools but also to achieve academic excellence after matriculation and beyond.

The [CERT webpage](#) contains additional details and FAQs about the program and its curriculum, links to the application portal, program staff contact information, the CERT QuickLook form, dates and registration links for upcoming 'Get on Track with a VCU Health Sciences Post-Bac' webinars, descriptions of linked M.S. programs, and explanations of the guaranteed interview linkage agreements at partner medical and dental schools.

CERT Program Admissions and Degree Requirements are described in the VCU Bulletin:

<https://bulletin.vcu.edu/graduate/school-medicine/premedical-graduate-health-sciences-certificate/>

Students who matriculated into CERT in **Spring 2025 or earlier** must earn a minimum of 27 credits in graduate-level coursework with grades no lower than a C grade and a cumulative GPA = 3.0 or higher in order to complete the degree requirements for the Certificate. Required coursework includes BIOC 503 Biochemistry, Cell, and Molecular Biology (5 cr., Fall), BIOC 504 Biochemistry, Cell, and Molecular Biology (5 cr., Spring), and PHIS 501 Graduate Physiology (5 cr., Fall). An example path of study might also include ANAT 609 Human Gross Anatomy (3 cr., Fall) and ANAT 612 Embryology (2 cr., Spring), ANAT 611 Histology (5 cr., Spring), and one additional elective course (3 cr., Spring). Spring elective course options include ANAT 608 Neuroanatomy (3 cr., Spring), IBMS 635 Cellular Signaling (3 cr., Spring), PHIS 512 Cardiac Function in Health and Disease (3 cr., Spring), PHTX 548 Drug Dependence (3 cr., Spring), PHTX 5641 Clinical Pharmacology (3 cr., Spring). Options to enroll in additional electives, including Department Seminar (1 cr.) courses, Directed Research (variable credit), or courses offered by other SOM Departments or VCU Schools (including online courses) may be available on an as-needed basis with permission of the Program Director.

Students who matriculate into CERT in **Fall 2025 or later** must earn a minimum of 24 credits in graduate-level coursework with grades no lower than a C grade and a cumulative GPA = 3.0 or higher in order to complete the degree requirements for the Certificate. Required coursework includes: ANAT 609 Human Gross Anatomy (3 cr., Fall), ANAT 611 Histology (4 cr., Fall), ANAT 612 Embryology (2 cr., Fall), and PGHS 601 (3 cr., Fall); PGHS 505 Medical Biochemistry (4 cr., Spring), PGHS 510 Medical Physiology (4 cr., Spring), PGHS 602 (1 cr., Spring). One additional elective course (3 cr., Spring) must be completed; CERT students typically choose between ANAT 608 Neuroanatomy (3 cr., Spring) and PHTX 5641 Clinical Pharmacology (3 cr., Spring). In special circumstances and with **prior approval of the Program Director**, students may enroll in alternative elective courses, including Department Seminar (1 cr., typically graded S/U/F), Directed Research (variable credit, typically graded S/U/F), or courses offered by other SOM Departments or VCU Schools (including online courses).

### Fall 2025 CERT Curriculum Update

Beginning in Fall 2025, the CERT program will integrate a 'whole applicant' approach to advising and preparation into the formal design of the CERT curriculum. CERT has an established tradition of providing opportunities for students to develop competencies (e.g., effective study skills and efficient time management) that are not only essential for success in the professional school admissions process but also return valuable dividends after matriculation into medical or dental school. The revised CERT curriculum further meets the needs for today's aspiring pre-professional learner by offering a year-long **Professional Skills and Readiness** course in which students will:

- Practice professionalism, academic integrity, and ethical conduct.
- Learn and implement proven-effective study strategies and time management skills.
- Engage in team-based and guided inquiry learning.
- Create learning connections across academic disciplines.
- Explore current topics in medicine and dentistry (i.e., use of AI in the classroom and clinic, causes and solutions to rising healthcare costs, and social or structural contributors to healthcare disparities).
- Learn about current biomedical research advances with potential to transform healthcare practice and explore pre-professional and professional student research opportunities.
- Create a personalized professional school application strategy and timeline.
- Practice personal statement writing and participate in mock professional school interviews.

### **Typical course of study, Fall 2025 and beyond (\*required)**

#### Fall Semester (12 cr. total)

ANAT 609 Human Gross Anatomy (3 cr.)

ANAT 611\* Histology (4 cr.)

ANAT 612\* Embryology (2 cr.)

PGHS 601\* Professional Skills & Readiness (3 cr.)

#### Spring Semester (12 cr. total)

PGHS 505\* Medical Biochemistry (4 cr.)

PGHS 510\* Medical Physiology (4 cr.)

PGHS 602\* Professional Skills & Readiness (1 cr.)

ANAT 608 - Neuroanatomy (3 cr.) **OR**

PHTX 641 - Clinical Pharmacology (3 cr.)

Additional Spring elective options are possible with permission of the Program Director.

### **Student Success**

Our #1 priority is to provide aspiring medical and dental students an opportunity to strengthen their competitiveness for admission to professional school, and we strive to support our students however possible. In addition to offering comprehensive graduate-level didactic coursework in foundational health science disciplines, the CERT program supports student success by providing:

- Didactic coursework that strengthens foundational science knowledge and mimics the rigor of first-year professional school curricula.
- Prepares graduates to not only enhance their competitiveness for admission to medical and dental schools, but to excel after matriculation into professional school.
- Students cultivate an informed approach to the professional school admission process, strengthen time management practices, and develop effective study skills.
- Individualized professional school application Letter of Reference from a dedicated faculty CERT Advisor for all program graduates.
- Linkage to VCU School of Medicine (M.D. program), VCU School of Dentistry (D.D.S. program), and Edward Via College of Osteopathic Medicine (D.O. program) - guaranteed interviews for qualifying graduates. Networking

opportunities with Admissions in the VCU Schools of Medicine and Dentistry, recent CERT alumni who have matriculated into VCU Medical and Dental schools, and faculty who can write additional Letters of Recommendation.

- Subscription to a MCAT/DAT standardized test preparation course (e.g., Kaplan MCAT, DAT Booster, or DAT Bootcamp) included in tuition cost for all enrolled students (to be completed outside of normal coursework and on the student's individual schedule).
- Personalized academic advising, professional school application review, and mock interview practice sessions.
- Access to VCU Health Clinical Observer program – shadow in a nationally-ranked hospital adjacent to CERT educational spaces and research laboratories.
- Networking with local non-profit organizations that provide opportunities to gain non-clinical service with at-risk populations in the greater Richmond area.
- Student wellness and support resources including: VCU Recreation and Well-Being Center and sports/gym facilities (RecWell), VCU Counseling, VCU Division for Academic Success, VCU Student Health, VCU Libraries, and more.
- Program staff who are passionate about your success! CERT Coordinators, who are recent graduates that work for the program and during their medical or dental school application (or 'gap') year, provide invaluable real-world advice and near-peer mentoring to current CERT students.
- Linked M.S. degree options for students interested in gaining real-world research experience.

### **CERT Program Student Resources**

CERT employs several **Coordinators** who completed the program in the prior academic year to provide near-peer advising to current and prospective students, maintain open-door office hours, interface with alumni, guide Social Media activity, plan social events, and much more. The Coordinators are a valuable asset to current students and serve as a 'first stop' for questions, comments, or concerns about the program. Please feel free to contact the Coordinators by [email](#), [telephone](#), or in-person visit (Sanger 1-055E) during office hours. The CERT program also supports **Tutors** for all graduate students that are enrolled in selected large courses; students have access to Tutors through each supported course's Canvas page and a Canvas course [Tutors page](#).

Current CERT students are automatically subscribed to the program's continuous **Canvas course page**, which hosts CERT Orientation slides and recorded videos, information about CERT Courses and Tutors, Workshops and Application Preparedness activities, links to local volunteer opportunities, and more.

All CERT students are assigned a faculty **Advisor** whom they will have an opportunity to meet with individually and get to know during their student tenure. CERT Advisors are responsible for writing a personalized Letter of Support on behalf of the program that may be included in professional school applications. **Academic advising** is also provided to all CERT students through scheduled individual meetings with the Coordinators (i.e., to discuss application preparedness and professional school plans), regular Workshops during the academic year that cover a variety of topics relevant to pre-professional students, and individual appointments with the Program Director. Current CERT Advisors are:

[Jose M. Eltit, Ph.D.](#)

[Melissa J. McGinn, PhD.](#)

[Christina Sheerin, Ph.D.](#)

### **VCU Student Resources**

Current students are supported by a broad range of resources to facilitate and enhance their training experience, including:

[Go-To Resources](#) for VCU School of Medicine graduate students – Report a Concern; review Policies (including a description of the Graduate Historical Repeat process) and Forms; find Equity, Safety, and other Resources; get access to

Electronic Resources (email and passwords, ID cards, and academic systems like eServices, Canvas, and DegreeWorks, course lists and Schedule of Classes, etc.).

[Recreation and Well-Being](#) (RecWell) – Fitness centers and sports, leadership and employment opportunities, and 1-on-1 or small group coaching.

[Division for Academic Success](#) (DAS) – Offers disability and academic support services to students in VCU Health Sciences schools (including CERT). Academic accommodations (i.e., additional time or testing center use) must be obtained from DAS and presented directly to Course Directors. DAS also offers access to Academic Wellness resources, including mentorship and counseling in the use of the Let Me Learn Learning Connections Inventory (LCI).

[University Counseling Services](#) – Creates spaces for healing and growth by providing 24/7 access to mental health professionals, in-person counseling services at both MCV and Monroe Park campus locations, Survivor Support Services, and Rams in Recovery.

[Student Health Services](#) – University Student Health Services is a nationally accredited health care provider that offers primary care services to currently enrolled VCU students at clinics are located on the Monroe Park & MCV campuses. Vaccination services and information about health insurance are also available.

**Important Note:** *the VCU School of Medicine requires that all students in graduate academic programs (including CERT) hold [active health insurance coverage](#). CERT students are not currently eligible for the [student health insurance program](#), so please plan your healthcare needs accordingly.*

### Student Concerns and Appeals

The VCU School of Medicine Office of Graduate Education hosts a [Graduate Student Resources](#) webpage that includes valuable information that all CERT students should be familiar with, including the process for [reporting a concern or appealing an outcome](#). The CERT program does not have a separate appeal policy.

### Medical and Dental School Linkages

CERT graduates who demonstrate exceptional academic performance by completing CERT course requirements in two semesters with a 3.5 or higher GPA and earn a minimum standardized test score are eligible for a guaranteed interview at either the VCU School of Medicine (MCAT minimum: 508), VCU School of Dentistry (DAT minimum: 20), or Edward Via College of Osteopathic Medicine (MCAT minimum: 500). Additional eligibility criteria may apply; please contact the CERT office for more details.

### Concurrent Application to Medical School

For VCOM only, current CERT students who meet the eligibility criteria above may apply for admission after the end of their first (Fall) semester. If offered conditional admission to VCOM, students will be expected to complete CERT and maintain a minimum GPA in the second (Spring) semester. Doing so could allow a student to begin CERT in August 2025, complete CERT in May 2025, and begin Preclinical Education at VCOM in July 2025. Concurrent applicants to CERT will not have the opportunity to get a Letter of Recommendation from their CERT Advisor before the VCOM application deadline, so will need to be prepared to submit letters from other references. Concurrent applicants are also strongly encouraged to plan to take the MCAT exam either prior to beginning CERT or immediately after the end of the Fall semester. Please inquire for more details.

With the exception of VCOM noted above, CERT students are generally **discouraged†** from seeking to concurrently apply to medical school programs while in the CERT program. The reasons are several-fold:

- 1) Medical and dental school admissions offices/committees generally do not give credit for experiences that are in-progress and not yet complete, including CERT. To best leverage your success in CERT for increased competitiveness, it is therefore advisable to apply to professional schools only after you have completed the CERT program.

- 2) CERT graduates report that the program’s didactic coursework helps them prepare for the MCAT or DAT standardized admissions test. Two of the most salient courses, Medical Biochemistry and Medical Physiology, are offered in the Spring semester; we recommend taking MCAT/DAT only after having completed these courses.
- 3) CERT offers coursework (Professional Skills & Readiness), advising, and network opportunities that are intended to promote the development of skills that are necessary for success in the professional school admissions process and which are highly transferrable to the experience as a medical or dental student.
- 4) Adding impactful life experiences (including graduate education) to your CV is likely to be beneficial in the context of a holistic professional school application review process. Having experienced the challenge of graduate-level education allows CERT graduates an opportunity to reflect on the authentic benefit of the personal growth and maturity gained when applying to highly competitive professional schools.

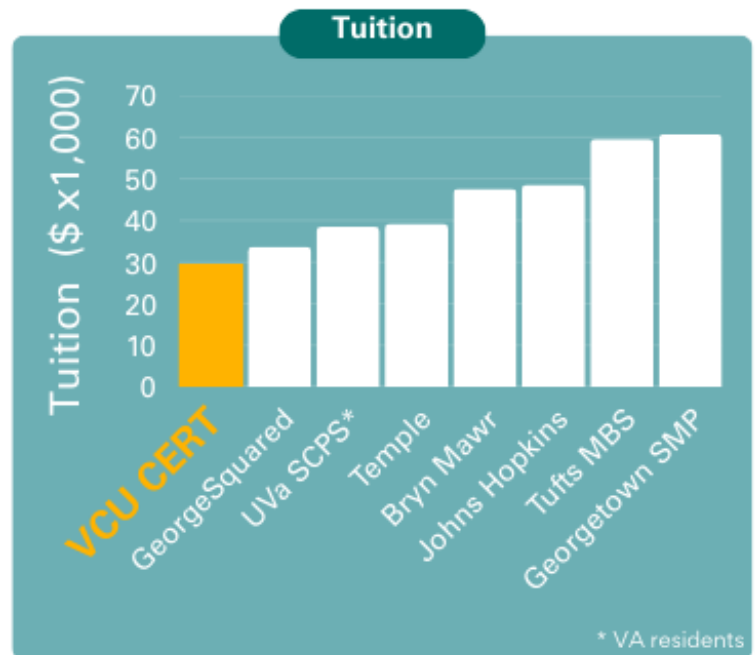
***If you feel that your circumstances strongly support a concurrent application to medical or dental school while currently enrolled as a CERT student, please contact the Program Director and/or CERT Coordinators to discuss your strategy before submitting a professional school application(s).***

### CERT Program Outcomes

The VCU CERT program has been preparing premedical and predental students for success since 2009, and therefore is one of the most well-established graduate postbac programs of its kind in the U.S. We believe that the outcomes data convincingly demonstrate that CERT are able to leverage the program’s strengths to achieve their professional school and career goals.

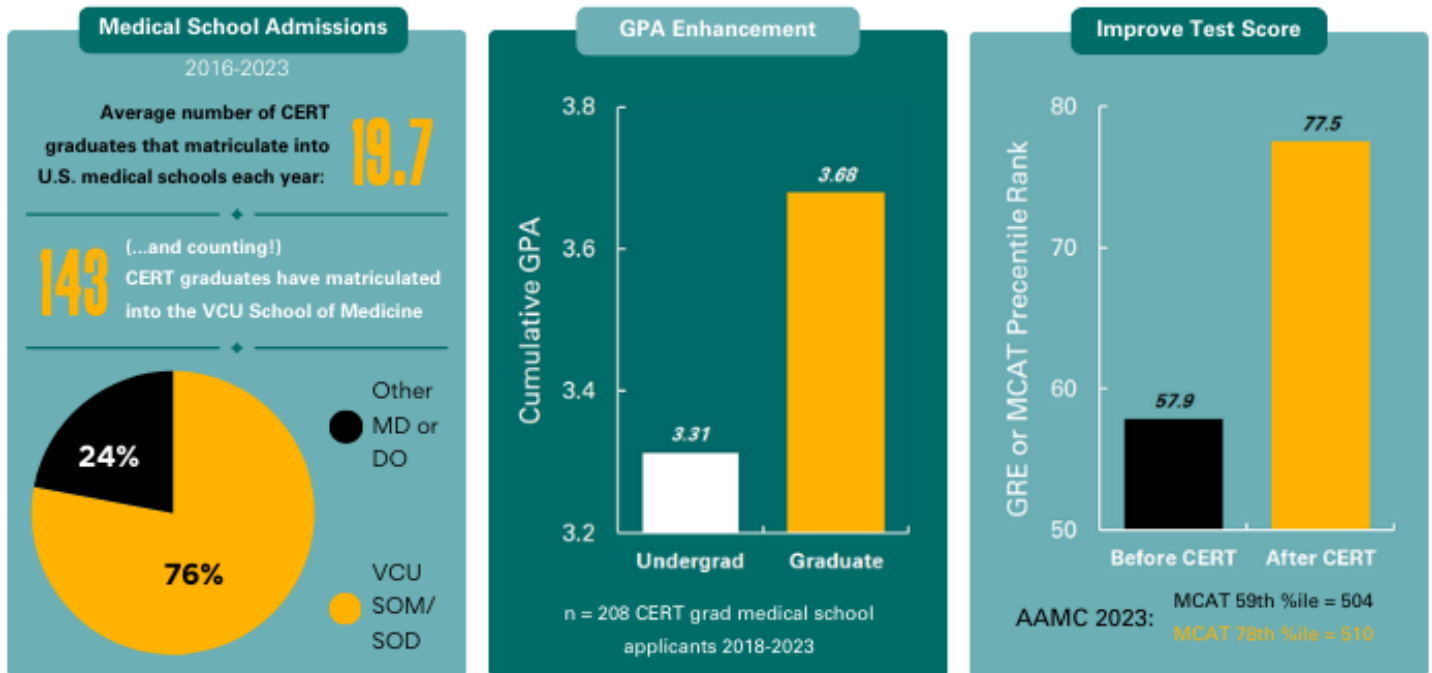
Consider the following outcomes data for premedical CERT students who were enrolled between 2016-2023:

- >170 (and counting) CERT premedical graduates have gone on to gain admission at >25 different medical schools.
- The majority (76% of all CERT-grad medical or dental school admits) of our graduates choose VCU School of Medicine or VCU School of Dentistry.



- Each year, 19.7 CERT graduates (average since 2016) matriculate into a U.S. medical school.
- The average graduate GPA of CERT alumni (3.68) is substantially higher than their average undergraduate GPA (3.31), demonstrating strong academic enhancement on their professional school applications. Because professional school application portals (e.g., AAMC, AACOMAS, and ADEA AADSAS) report undergraduate and graduate GPAs separately, their Admissions offices can clearly see when an applicant has successfully demonstrated a strong upward trajectory through graduate education.

- Average percentile scores for either the GRE or MCAT were nearly 20% higher after completing CERT than they were for the same cohort of student before CERT. Consistent with this result, CERT alumni commonly report that the coursework directly helped them prepare for standardized admissions tests.



### CERT Admission

All applicants must meet general admissions [requirements](#) for the VCU Graduate School.

Additional **program-specific requirements** include:

1. Hold a bachelor's degree from an accredited undergraduate educational institution.
2. Submit three (3) letters of recommendation from those who can speak to your character, academic preparedness, and/or aptitude for a career in health care.
3. Provide a Personal Statement of Intent (succinctly describe your journey toward professional school using real-world examples and following PostbacCAS application guidelines).
4. Provide GRE, MCAT, or DAT test score result (within the last five years).

Many factors influence an applicant's competitiveness, and we evaluate all elements of each application. Competitive CERT applications typically exhibit:

- Successful completion (C or higher grades) of medical or dental school-prerequisite courses (listed under "Prerequisite Courses" tab).
- Cumulative undergraduate GPA greater than or equal to 3.0 and undergraduate science GPA greater than or equal to 3.2.
- Evidence of achievement in a standardized test: MCAT: 501+, DAT: 18+, or GRE: >50 %ile (Verbal, Quantitative); >3.0 (Writing).
- Clinical shadowing experience (≥150 hours).
- Non-clinical community service/volunteering (≥150 hours).
- Demonstrated leadership experience.
- A well-written and compelling Personal Statement that articulates the applicant's motivation for pursuing their chosen career path, describes impactful experiences, and addresses how CERT program specifically can positively influence their career trajectory.
- Evidence of professionalism and a high level of competency in oral and written communication.

Applications that do not meet one or more admissions criteria requirements may be reviewed on an individual basis; please contact us if you are or may be unable to provide any of the requested application materials as early as possible

before the application deadline. Prospective applicants, including non-traditional students and those with a longer 'distance traveled' toward a health professions career, are encouraged to contact us in advance of application submission to learn more about their competitiveness for CERT and subsequent professional school admissions.

### **Tuition Costs**

Beginning in Fall 2025, tuition costs (per semester) will be \$14,781.50\*; including additional VCU fees of \$1,733\* per semester (\*subject to change) brings the total estimated program cost to \$33,028. Costs are similar or identical for both in-state and out-of-state students. An MCAT or DAT test preparation course (i.e., Kaplan, DAT Bootcamp, DAT Booster, etc.) is provided to each enrolled CERT student at no additional cost. We believe that CERT represents an excellent value proposition; please compare us to other programs and do not hesitate to inquire directly if you have additional questions about the cost of your education and what is included.

Educational cost can also be estimated using the VCU Graduate tuition [Calculator](#).

- Ensure that you are using the 'Post-undergraduate calculator' to estimate fees for Graduate and professional studies
- Select the anticipated semester of matriculation into CERT
- Select program: 'Certificate – Biomedical Sciences'
- Select appropriate Residency option
- Select Enrollment: Full-time
- Select housing: No housing
- Select meal plan: No meal plan

### **Financial Aid**

Eligibility for certain forms of financial aid requires that students maintain Satisfactory Academic Progress. The CERT program does not directly support academic study through scholarships or work-study programs. Questions about eligibility for financial aid and additional information about sources of financial aid should be directed to the VCU School of Medicine [Office of Financial Aid](#).

### **Test Scores and Transcripts**

Applicants may self-report standardized test scores and transcript info where indicated. However, official test scores and transcripts are required and must be submitted to the VCU Graduate School upon admission to the program. Failure to provide official test score results or transcripts may result in a hold on the student account that prevents course registration, receipt of final grades, or receipt of the Certification upon program completion. Please provide official documents as early as possible in the admissions process.

### **International Applicants**

VCU Graduate School admissions requirements for International students are described in detail [here](#).

### **Thesis-based Master of Science (M.S.) Degree Program Options**

[Master's Degree in Biomedical Research at VCU School of Medicine](#)

CERT graduates may apply to any of six different thesis-based M.S. programs administered by basic science departments in the VCU School of Medicine to gain additional pre-professional training conducting cutting edge biomedical research under the tutelage of a VCU School of Medicine faculty advisor. Basic science Departments in the VCU School of Medicine that offer thesis-based M.S. programs which allow credits earned in CERT coursework to be transferred to the M.S. degree completion requirements (allowing students to earn both the Certificate and M.S. in a minimum of 4 semesters) are listed below.

- [Anatomy and Neurobiology](#)
- [Biochemistry](#)
- [Microbiology and Immunology](#)
- [Microbiology and Immunology with a Concentration in Oral Biology](#)

- [Pharmacology and Toxicology](#)
- [Physiology and Biophysics](#)

### **Non-thesis Master of Science (M.S.) Degree option**

The Master of Interdisciplinary Studies program offered by the VCU Graduate School allows students to design a customized curriculum that satisfies both requirements for completion of the Premedical Graduate Health Science Certificate and, after completing additional requirements, a non-thesis M.S. Degree in Interdisciplinary Studies. The minimum time for completion of the CERT + MIS option is 3 semesters. Prior admission into the MIS program and approval of a course of study prior to CERT admission is required. Please contact us to discuss an individualized plan of study before you apply!

### **Clinical Training and non-clinical Community Service**

Admission into health professional schools requires exposure to and experience in both clinical environments and non-clinical volunteer community service settings. CERT program staff can assist students in identifying suitable opportunities to gain extracurricular experience through our network of local non-profit organizations and the VCUHealth Clinical Observership program.

### **Contact Us**

We're happy to advise current and prospective applicants about how to plan their journey to professional school and increase their competitiveness for CERT or professional school admission by discussing potential strengths and weaknesses of your application portfolio. Our goal is to help prospective applicants determine whether CERT is a good fit for your current individual readiness and professional school goals.

To start a conversation with the CERT Coordinators, please send us an [email](#), call 804-828-9501, or visit our [website](#) for more contact information or to submit a QuickLook form (CTRL+F on the main CERT web page, then search for "quick"). After receipt of your QuickLook form, we will follow up for an individual consultation. CERT also regularly hosts 'Get on Track with a VCU Health Sciences Post-Bac' webinars - see our [website](#) to register for the next event and have your questions answered live.