

Summer Internship Opportunities

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Presentation Outline

What is the Vermont Biomedical Research Network (VBRN)?

Why do summer research?

Overview of the VBRN internship program

- Application process
- Timeline of events

Example internships

Q&A

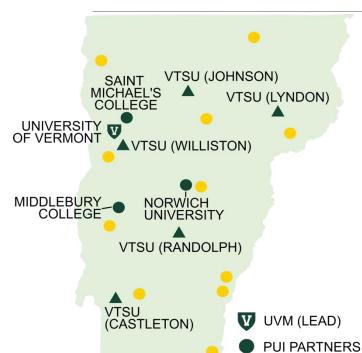


VBRN Mission Statement

The mission of VBRN is to build a culture to promote biomedical research infrastructure in Vermont. Our focus is on human health and behavior as broadly defined. The goal is to build and sustain a culture of research throughout the state by facilitating the research capacity of faculty members, and the education of undergraduates, at our baccalaureate partner institutions.



Vermont Biomedical Research Network (VBRN)



LANDMARK

- Program founded in 2001 (BRIN + INBRE)
- Funded by the National Institutes of Health, the largest public funder of biomedical research in the world (\$47+ billion annually)
- UVM is lead institution
- 5 baccalaureate partner institutions
- 2 network partners

PUI PARTNERS - VTSU

Vermont)

(Vermont State University) SRP PARTNERS - CCV (Community College of





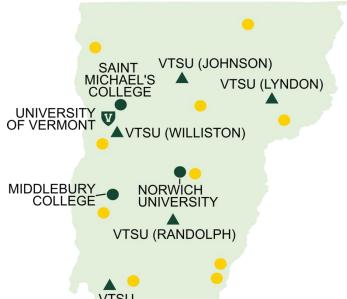




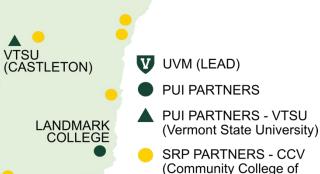




Vermont Biomedical Research Network (VBRN)



Expand biomedical research opportunities for students at all partner institutions!



Vermont)















Benefits of Undergraduate Research

Understand the research process

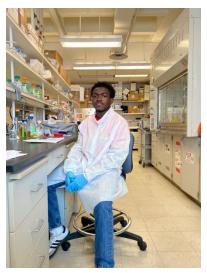
Understand how scientists work on problems

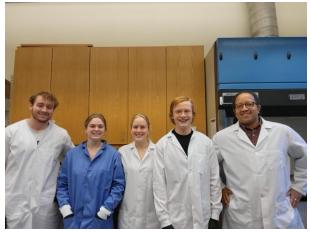
Learn lab techniques

Develop skills in the interpretation of results

Gain data analysis skills

Improve presentation skills





Benefits of Undergraduate Research

Having tolerance for obstacles

Learn to work independently and in a group

Understand how knowledge is constructed

Gain self confidence

Understand that assertions require supporting evidence

Clarification of a career path

VBRN Internship Program

Goal: Expand off-campus biomedical research opportunities for students at VBRN partner institutions

Open to undergraduate students in our network (at any partner institution) who will be enrolled as undergraduates in Fall 2025.

Conduct research <u>full-time this summer</u> in a variety of disciplines

- Public health
- Data Science
- Microbiology
- Nutrition & Food Science Neuroscience
- And more!

- Cell Biology
- Psychology
- Genomics

<u>Internship dates:</u>

Thursday, June 5 - Friday, August 1, 2025



VBRN Internship Locations







Local biotechnology industry partners in Colchester, Vermont









Regional INBRE Program Internship "Exchange" Program

Internship Program Benefits

\$5,400 salary (minus deductions)

\$1,000 for supplies and/or conference travel

Dormitory housing at UVM (or the host institution if intern is part of the Regional INBRE Exchange Program)



Internship Program Requirements

- Work 37.5 hours a week conducting research for the 8-week internship
- Present a poster on your research at VBRN Career Day (April 2026)
- Participate in surveys and annual and long-term career tracking



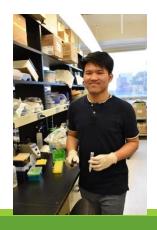
Application Process

Executed through the online VBRN application portal

- Create a username and password
 - You will receive a confirmation email once a VBRN employee approves your request

Application progress can be saved and edited. However, once submitted, no changes can be made.

Application due date: February 21, 2025 at 4:00 PM EST







Application Process (cont.)

Application materials include:

- Statement of purpose (no template, up to 500 words):
 - Student's interest in a biomedical research opportunity
 - Student's future career plans
 - Description of your prior research experience, including lab coursework
- Resume/Curriculum vitae (highlight prior research experience, if applicable)
- Unofficial transcript(s) from your institution
- Your top three research locations ranked in order of interest (1=first choice, 2=second choice, 3=third choice)





Application Process (cont.)

- Reference information (email address and phone number) for one faculty member who will provide a letter of recommendation.
 - The faculty member will receive an email from VBRN with instructions for submitting the reference. The letter must be received by vbrn@uvm.edu by the application due date.

As part of the selection process, students will be required to have a conversation (in person or via telephone or videoconferencing) with their lab mentor before being offered the internship.





Application Instructions (aka Request For Application)

VERMONT BIOMEDICAL RESEARCH NETWORK (VBRN) UNDERGRADUATE STUDENT SUMMER RESEARCH INTERNSHIP 2024

Application due by web submission on February 9, 2024, by 4:00 PM EST

Student Summer Research Internship applications are submitted online via the VBRN website (https://vbrn.org/vbrn-awards/). Students will need to create an account to apply. If a new account is being created, a confirmation email will be sent before the student can proceed with the application. Please note that the confirmation email will only be sent during regular VBRN business hours, which are Monday-Friday from 8:30AM-4:30PM. Students that have been previously funded by VBRN or who have applied for VBRN funding can click a link on the application site to have their login information emailed to them.

The VBRN **2024 Undergraduate Summer Research Internship** is for students who wish to work outside their home institution. Women, minorities, veterans, and individuals with disabilities are strongly encouraged to apply. Undergraduate students from the following institutions and programs are eligible to apply:

- Vermont State University: Castleton, Johnson, Lyndon, Randolph and Williston campuses (classified as a BPI)
- Champlain College
- Community College of Vermont (CCV)
- Delaware State University
- Landmark College
- Middlebury College (classified as a BPI)
- Norwich University (classified as a BPI)
- Saint Michael's College (classified as a BPI)
- Northeast Regional INBRE Program students (DE-INBRE, ME-INBRE, NH-INBRE, RI-INBRE) are eligible to apply for a research internship hosted in VT, either at UVM or a Corporate partner (described in more detail below)

Application Instructions (aka Request For Application)

RESEARCH LOCATION DESCRIPTIONS

Bia Diagnostics (Colchester, VT)

http://www.biadiagnostics.com/

Bia Diagnostics, an ISO 17025 accredited laboratory, is a world leader in food allergen analysis. In this internship, the student will gain experience working in a fast-paced contract testing laboratory, assisting in processing samples and lab cleaning, while also learning the science behind ELISA and PCR based food testing methodology. During this internship the student will be expected to complete a research project that demonstrates practical hands-on knowledge of these technologies, for example by validating a test kit to industry standards or by testing a variety of store-bought foods for unlabeled allergens or GMOs. At the start the student will be closely supervised. They will become more independent once they are comfortable with routine work. Interns will be working closely with a team throughout the internship and supervisors will be available to answer any questions.

Prolytix (Colchester, VT) https://www.goprolytix.com/

Founded in 1987 by Kenneth Mann, Ph.D., a prominent scientist in the fields of thrombosis and hemostasis, Prolytix (formerly Haematologic Technologies) quickly developed a reputation as a go-to research reagents company. With expertise in coagulation and hemostasis, we continue to provide highly purified plasma proteins and antibodies to research labs around the world. Recognizing our extensive protein chemistry expertise, biotech companies, pharmaceutical companies, and contract research organizations (CROs) turned to Prolytix for method validation and other analytical and bioanalytical services. To support these endeavors, the company added GMP/GCLP CLIA-certified facilities in 2011 and in 2020, the company added a high-resolution mass spectrometry (HRMS) lab.

With our roster of protein science experts and an integrative approach, we identify and solve complex issues that other CROs cannot. Using high-resolution mass spectrometry (HRMS) and other advanced techniques, Prolytix helps advance large molecule therapies from early development through commercial GMP release. We remain a premier solution for integrated large molecule analytical and bioanalytical services, method and process development, research reagents, custom tubes, and other collection devices. Owing to the diverse nature of our company's capabilities, we are pleased to offer

1. https://vbrn.org/vbrn-awards/#students

Student Internships

Call for Proposals for:

VBRN Undergraduate Student Summer Internships 2025

A paid internship to conduct summer research in UVM and Vermont area biotechnology industry labs in Summer 2025. **Application deadline:** Friday, February 21, 2025.

Two Scheduled Information Sessions will be scheduled for mid-late January (via Zoom)

<u>Drop-in virtual informational session for the 2025 VBRN Summer Internship Program</u>: Thursday, January 30, 2025 | 12:00-1:00 PM - Zoom link

Undergraduate students from these programs and institutions are eligible to apply: Vermont State University (Castleton, Lyndon, Johnson, Randolph, and Williston campuses), Champlain College, Community College of Vermont, Landmark College, Middlebury College, Norwich University, Saint Michael's College as well as Northeast Regional INBRE Programs (DE-INBRE, ME-INBRE, NH-INBRE, RI-INBRE, and the Biomedical Sciences Career Program (BSCP).

Click here for the Request for Application (2025–2026)
Click here for the Online Application Form
How to Access the Application Site

Two ways to access the application

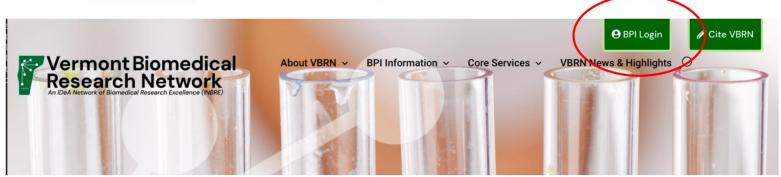


2. https://vbrn.org/

Two ways to access the application

Instructions for accessing the VBRN Student Award Applications

1. Go to https://vbrn.org. Click on "BPI Portal" in the upper right corner.





Welcome

Please identify yourself with a username and a password:

Username:	
Password:	
Login now	

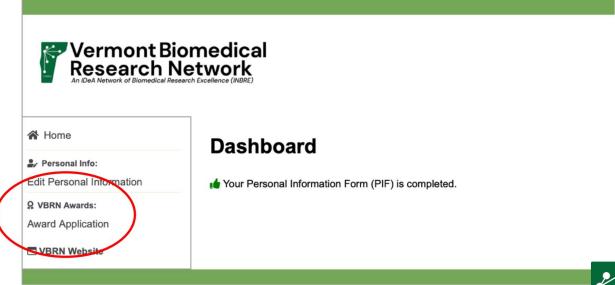
Forgot Password?

-OR-

Create New Account



On the new home screen, review the links at screen left. "Edit Personal Information" will take you to the Personal Information Form (PIF). VBRN requires that the PIF be completed before you can apply for an award. "Award Application" takes you to the applications page.









Personal Info:

Edit Personal Information

Q VBRN Awards:

Award Application

SVBRN Website

VBRN Awards Application

★ Your Personal Information Form (PIF) is completed.

Your current & past applications for funding are listed below. 2004-present:

Open Applications

Student Summer Research Support 2023





Personal Info:

Edit Personal Information

♀ VBRN Awards:

Award Application

☐ VBRN Website

VBRN Awards Application

Student Summer Research Support 2023

This is an invitation for proposals for 2021 Undergraduate Summer Research Support for students who wish to work with faculty members at the VBRN network colleges and universities

Application is due by 4:00:00 pm on February 21, 2023 EST

Instructions

Detailed instructions from the VBRN website are available click here to download

Desired Research Institution:



Supporting Documentation
Use these file upload boxes to upload the completed documents. The Browse button will allow you to select the file on your computer.
Statement of Purpose Choose File No file chosen
Resume/Curriculum Vitae Choose File No file chosen
Transcript (Can be unofficial) Choose File No file chosen •
Faculty Recommendation Please provide contact information for 1 faculty member who will submit a reference letter separately to vbrn@uvm.edu by the application due date.
Faculty Name:
Faculty Institution:
Faculty Phone Number:

Review Application



Faculty Email:

E-mail vbrn@uvm.edu

For technical questions E-mail vbrnwebstaff@list.uvm.edu



Timeline of Events

Application due date: Friday, February 21, 2025

Mentor-applicant interviews: March 2025

Acceptance letters sent to applicants: April 2025

Internship start and orientation: Thursday June 5, 2025

Internship ends: Friday August 1, 2025

Present research poster at Career Day in April 2026





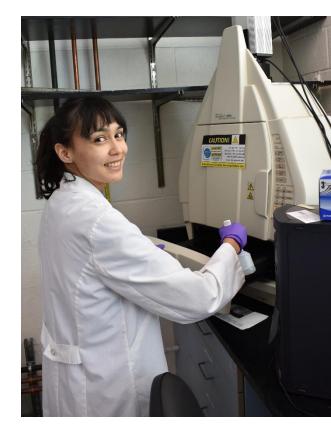
Former Intern-Anais Sidonia

Landmark College graduate in the Life Sciences

Interned in Dr. Jana Kraft's lab at UVM

Researched how long-term dietary fatty acid can affect insulin sensitivity in older individuals

"I don't think I could have gotten any more fortunate, honestly, because not only do I have an internship before I even have a degree, but it's extremely rare for an undergraduate to have a paid internship at a really good university."



Former Intern – Lauren Kenneally

Norwich University student in Nursing

Interned at the White River Junction Veterans Affairs Medical Center

Analyzed data retrospectively on reports of suicide in veterans after they were discharged from a drug treatment program

<u>J Dual Diagn.</u> 2019 Oct-Dec;15(4):217-225. doi: 10.1080/15504263.2019.1629053. Epub 2019 Jun 28.

Health Care Processes Contributing to Suicide Risk in Veterans During and After Residential Substance Abuse Treatment.

Riblet NB 1,2,3, Kenneally L4, Shiner B 1,2,3,5, Watts BV 2,6.

Former Intern-Damian Gauthney

Morgan State University (Delaware) student in Exercise Science

Interned in Dr. Sambit Mohapatra's lab at UVM

Assessed tools and tests used to study concussions. The goal of his project was to use his knowledge of psychological science to identify gaps in the existing methods of data collection and help develop more effective methods.



Questions?

Contact the VBRN Coordinator at your institution or

<u>Institution</u>	VBRN Institutional Coordinator	<u>Email</u>
Vermont State University		
(Castleton, Randolph and Williston)	Dr. Andrew Vermilyea	andrew.vermilyea@vermontstate.edu
Vermont State University	,	
(Johnson and Lyndon)	Dr. Greg Petrics	greg.petrics@vermontstate.edu
Norwich University	Dr. Darlene Olsen	dolsen1@norwich.edu
Middlebury University	Dr. Rick Bunt	rbunt@middlebury.edu
St. Michael's College	Dr. Mark Lubkowitz	mlubkowitz@smcvt.edu
Community College of Vermont (all campuses)	Ryan Joy	ryan.joy@ccv.edu
Landmark College	Lynn Arnold or Jan Copelan	JanCoplan@landmark.edu
Champlain College	Dr. Scott Stevens	stevens@champlain.edu
NE Regional INBRE Institutions (DE, ME, NH, RI)	VBRN Staff	vbrn@uvm.edu



Questions?

Contact one of us:

- Heather Driscoll: hdriscol@norwich.edu
- Jason Botten: jason.botten@med.uvm.edu
- VBRN Administrative Team: vbrn@uvm.edu

For technical questions about the VBRN student application portal: vbrnwebstaff@list.uvm.edu



