FAES Academic Programs Information Session September 9, 2025

-Bioinformatics Education Opportunities with FAES-

Morgan Merriman, M.S. Program and Curriculum Manager at FAES

Morgan.Merriman@nih.gov



Session Outline

-Quality and Innovative Education Within Reach-

3:30pm Program Overview

- FAES Academic Programs
- Workshops (non-credit)
- Learning Labs
- Academic Courses (credit bearing)
- Microcredentials and Digital Badges
- Fall 2025 Courses + Spring 2026 Preview
- University Partnerships and Credit Transfer
- Upcoming Free Events and Live Sessions
- Scholarship
- Pathways to Teaching with FAES
- How to Contact Us

3:55pm Q&A + FAES Interests Survey



FAES Academic Programs

- Foundation for Advanced Education in the Sciences (FAES) was founded by NIH scientists in 1959
- Non-profit organization located within the Clinical Center (building 10) at the NIH, Bethesda Campus
- Programs complement work of the NIH in accomplishing its mission of seeking and applying fundamental knowledge about the biomedical sciences
- FAES offers credit bearing courses and non-credit workshops in subject areas that support research and career development of the NIH community
- Our educational programs are also open to the public



Our Academic Programs

Workshops (non-credit)

Live online or In-person

- 1 or 2 5 consecutive days (full-day)
- 1-2 sessions / week held over 3-4 weeks
- Academic Courses (credit-bearing)

Offered asynchronously to students located on different NIH campuses in the U.S., as well as students located in countries around the world

- 7-week, 1 or 2-credit courses
- 14-week, 1 or 2-credit courses



Academic Terms

- Workshops
 - Year-round
- Academic Courses
 - Fall (2 sessions, 7 weeks each)
 - Spring (2 sessions, 7 weeks each) ←
 - Summer (7 weeks)

Fall Session B Registration Open

Spring Registration opens **November 26th**



Workshops: ONLINE, SYNCHRONOUS (LIVE)

Highlights

- Live lectures and hands-on practices via Zoom meetings
- Acquire new skills immediately applicable to research and professional needs
- Active participation essential
- Most lectures are recorded
- Weekdays, some evenings and weekend workshops (check schedule at education.faes.org)
- Non-credit; CEUs are indicated on certificate of completion
- Workshop pricing is \$565 per day for online workshops, including the technology fees
 - NIH and government receive a \$200 discount to the total cost of a workshop
- Pricing for in-person workshops varies on content and materials costs



Workshops: Fall 2025 and Spring 2026

	_		
Dates	Course Number	Course Title	NIH Price
November 6 - 20, 2025	BIOF 050	Introduction to Deep Learning	\$765
November 12, 2025	IMMU 022	Flow Cytometry Experiment Design*	\$365; Bundle: \$840 (total)
November 18-20	IMMU 023	IN PERSON – Hands-On Flow Cytometry	\$885
November 18-20	BIOF 097	Practical Scientific Statistics	\$765
December 3-6, 2025	BIOF 043	For True BeginRs: Hands-On R Training	\$1045
December 8-12, 2025	BIOF 039	IN PERSON - Epigenetics	\$1205
December 10-12, 2025	IMMU 024	Flow Cytometry Data and Visualization*	\$565; Bundle: \$840 (total)
December 11-16, 2025	BIOF 095	Protein Structure Prediction Using AI and Visualization	\$565
January 15-29, 2026	BIOF 053	Introduction to Generative AI	\$765
January 28-29, 2026	STAT 014	Statistics in GraphPad Prism	\$365
February-April 2026	BIOF 017, 018, 019*	R Basics Bootcamp, Advanced Beginners, Designing Effective Data Visualizations with R	\$365 each; Bundle: \$915



*Offered as Bundle



Academic Courses: ONLINE, ASYNCHRONOUS

FAES instructors are dedicated to engaging with YOU!

"Nothing compares to seeing the spark of interest in a student and then trying to foster that interest."

-- FAES Instructor

Tuition price improvement starting Fall 2025! \$175 per credit for members of the NIH, .gov, .mil, and .edu. Overall reduction on workshop tuition!

- Engaged and readily available faculty
- Online classroom community with a learning cohort (usually 10-30 students)
- Instructor-led with weekly benchmarks; learners log in to their course web site to access each week's material throughout the 7-week term.
- Learners can navigate content freely within each module and can pause or repeat video content as needed.
- Assignments to be completed by deadline, usually on a weekly basis (<u>NOT</u> self-paced).
- Asynchronous format means no required live sessions to attend.



Areas of Study

- Bioinformatics and Data Science:
 - Bioinformatics, Math, and Statistics
- Biomedical Sciences:
 - Immunology and Microbiology
 - Biology, Neuroscience, Genetics and Medicine
- MCAT Preparation with Princeton Review
- Career Transition and Professional Development:
 - Project Management and Leadership
 - Public Health and Science Communication
- English and Spanish Language



Documenting Achievements: Microcredentials and Digital Badges

Biomedical Sciences



FAES

Cancer Biolog\

Advanced Cancer Biology

Leadership



Spanish for Healthcare Providers

Bioinformatics



FAES
Biomedical
Translation and
Commercialization
Endeavor

Biomedical
Translation and
Commercialization

Project
Management:
Health Sciences

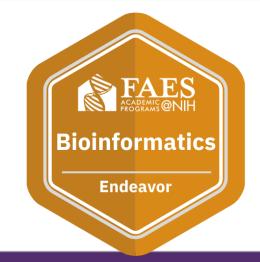




AI in Medicine

Bioinformatics, Math and Statistics Bundled and Individual Courses Session B begins Oct 22; Registration for Spring opens November 26, 2025

SESSION B	Course Title	
BIOF 395	Introduction to Text Mining	
BIOF 475	Introduction to Data Science	
BIOF 510	Advanced Applications of Artificial Intelligence	
BIOF 521	Bioinformatics for Analysis of Data Generated by	
	Next Generation Sequencing	
BIOF 539	Data Visualization in R	
BIOF 540	Gene Expression Analysis	
BIOF 549	Introduction to Omics and Data Integration	
BIOF 556	Advanced Topics in Single Cell Analyses	
STAT 515	Statistics for Biomedical Researchers	



SPRING 2026 (Preview)	Course Title
BIOF 395	Introduction to Text Mining
BIOF 450	Concepts and Methods in Computational Genomics
STAT 323	Epidemiology: A Practical Approach to Research
BIOF 549	Introduction to Omics and Data Integration
BIOF 556	Advanced Topics in Single Cell Analyses
STAT 515	Statistics for Biomedical Researchers
Bundles (A – B)	Description
BIOF 309 - BIOF 475	Introduction to Python and Introduction to Data Science
BIOF 501 – BIOF 539	Introduction to R and Data Visualization
BIOF 509 - BIOF 510	Applied Machine Learning & Advanced Applications of Artificial Intelligence
BIOF 521 – BIOF 544	Next Generation Sequencing Data Analysis and High Resolution Transcriptome Analysis
BIOF 555 - BIOF 556	Foundations for Practical Single Cell RNA-seq Analyses and Advanced Topics in Single Cell Analyses
STAT 101- STAT 515	Introduction to Statistics & Statistics for Biomedical Researchers



University Partnerships & Credit Transfer

- FAES has partnerships with area universities where credits earned at FAES can count toward earning a degree. education.faes.org > Students > University Partnerships
- Credits may also be accepted at other universities depending on university's policy. FAES provides official academic transcripts, course syllabi and other supporting documentation upon request.



Virtual Info Session:

Translate Your FAES Coursework into a Hood College Graduate Degree

Tuesday, October 7, 2025, 12:00-12:30 PM ET

Register Now:





Dr. April Boulton, Associate Provost and Dean of the Graduate School at Hood College in Frederick, Maryland

Learn about flexible graduate degrees at Hood College and how your FAES coursework can count toward a Hood College degree or certificate. Upon acceptance to Hood College's master's or certificate programs in bioinformatics, health informatics, project management and other areas, students may submit their official FAES transcript for course-transfer review by the program director. Approved FAES courses can be combined to meet Hood College requirements.



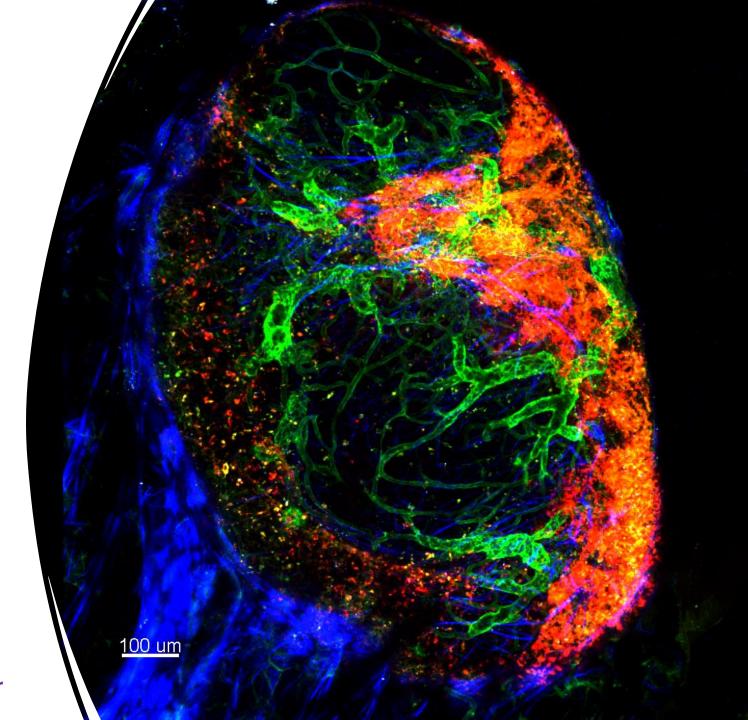
Educational Webinar Series:
Through the looking glass:
choosing optimal imaging
strategy for animal models of
infectious diseases

September 18, 2025, 12:00-12:30 PM ET





Dr. Olena Kamenyeva, FAES | BIOC 036 Instructor







Located in the Building 10 B1 Learning Labs

Next Talks:

- October 2, 2025 Mitchell Ho, Ph.D.; "Antibody Engineering in Medicine: Phage Display and Nanobodies"
- ❖ November 13, 2025 Elise Marsan, Ph.D.; "Organoids and Organotypic Slice Cultures: A New Way to Tackle Human-Specific Pathology in AD/ADRD









ANNOUNCING OUR PARTERSHIP WITH THE PRINCETON REVIEW®

MCAT, GRE & DAT TEST PREP

In partnership with The Princeton Review®, FAES is offering discounted graduate test prep! Register now for MCAT, GRE & DAT. Discounted LSAT, GMAT, and NCLEX test prep are available upon request.











Virtual Information Session
October 1, 2025

12PM - 12:30 PM



Scholarship Information

- Scholarship for credit-bearing courses and non-credit workshops
 - Available to self-funding students (NIH and non-NIH)
 - Up to \$350 tuition credit toward a qualifying course or workshop
- Fall 2025 Application Period:
 - Session A: Deadline August 15
 - Session B: Deadline October 10
 - Workshops: Two weeks prior to workshop's start date





Requesting Funds for Education and Training

- Some labs and institutes may have specific funds set aside for trainees to continue their education and professional development.
- FAES has created a guide intended to help trainees request funds that may be available and, if they are available, request use of the training funds for continued professional development.
- Visit the <u>Guide for Requesting Training Funds</u>
 page on our site for full details and templates.





Teach with FAES and Advance Your Career

FAES instructors enjoy:

- sharing knowledge with others
- being inspired by learners
- learning best practices

Learn best practices for teaching in an online environment and prepare to develop your own course or take over an existing course.

- ✓ Take EDUC 600: Best Teaching Practices in Higher Education

 Next cohort begins Fall 2025 Session B (October 22, 2025) and runs for 7 weeks.
- ✓ Earn your EDUC 600 digital badge in Best Practices: Learner-Centered Teaching.



Complete the FAES teaching interest form!





Faculty Engagement and Support

We aim to model the approach that we want our faculty to adopt with FAES students. We seek to build **trusting relationships** and offer multiple ways to engage in their professional growth as educators.





Seeking Instructors!

- BIOF 518-519: Theoretical and Applied Bioinformatics I + II
 - From DNA and Proteins to Genomics and Metagenomics, this course series focuses on:
 - Search and retrieval from biological databases to utilize tools like BLAST,
 - Generate pairwise sequence and multiple sequence alignments,
 - Perform basic phylogenetic analyses,
 - And use gene prediction and genome assembly methods







Contact Us!

Website: education.faes.org

Email: registrar@faes.org

Phone: 301-496-7976

Visit: NIH, Building 10, Suite 1N241



Q&A + FAES Interests Survey

Please fill out the FAES Interests Survey so that we can better serve you! This data helps us refine our course offerings and ensure that we are offering what the NIH needs most at the right time.

FAES Interests Survey



