



jove

JoVE Videos for Research and Education



Accelerate your science research and education.

Introduction:



Dr Maaïke Pols, Scientific Advisor

Maaïke obtained a PhD in Cell Biology from Utrecht University where she was involved in teaching and research. She did a post doc at the University of Queensland and then moved to London as an editor for F1000Research before joining JoVE in 2017
maaike.pols@jove.com

- 
- A dark, artistic photograph of a microscope with a bright blue light source, serving as a background for the right side of the slide.
- What is JoVE?
 - What is JoVE?
 - Create a free JoVE account for remote access
 - JoVE Education products
 - Creating Playlists
 - Syllabus Mapping service
 - Embedding JoVE videos in LMS
 - Q&A





creates scientific videos
that make **Teaching,**
Learning, and
Practicing Science
more efficient, effective,
and engaging.



CEO Moshe Pritsker, Ph.D.
in 2006 at Princeton
University

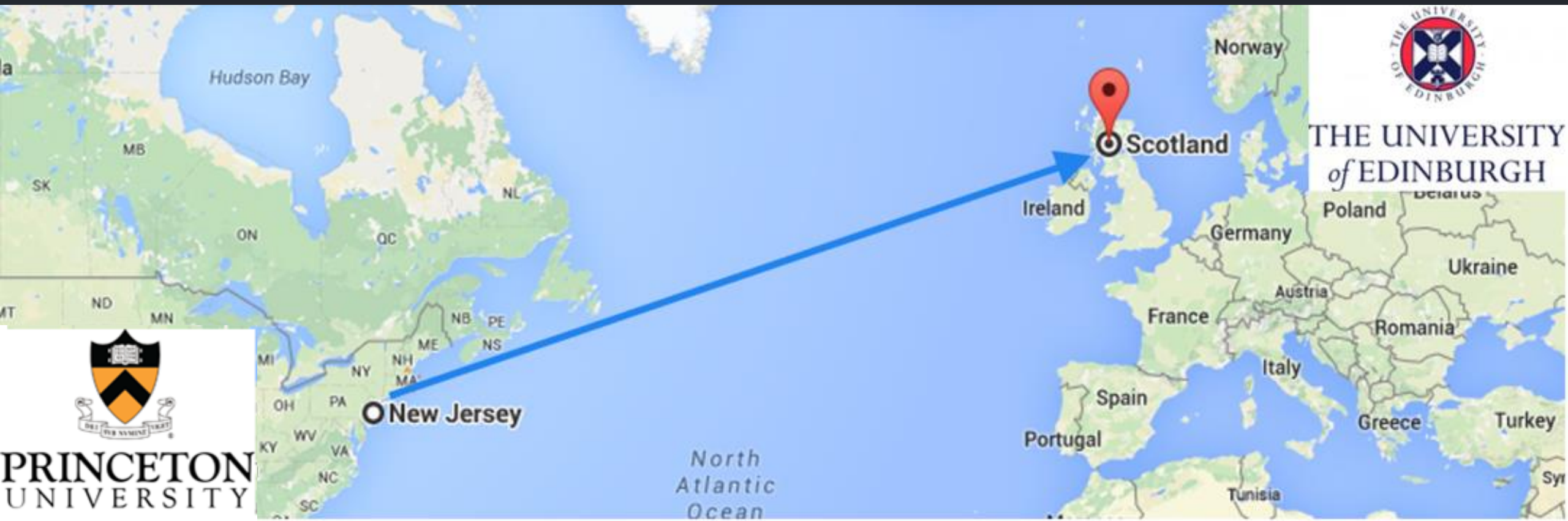
As a young researcher,
Moshe was unable to
complete a crucial
experiment using text
protocols.



How Much Did It Cost To Reproduce An Experiment?

2 months of travel and reagents

\$10,000 for 1 experiment

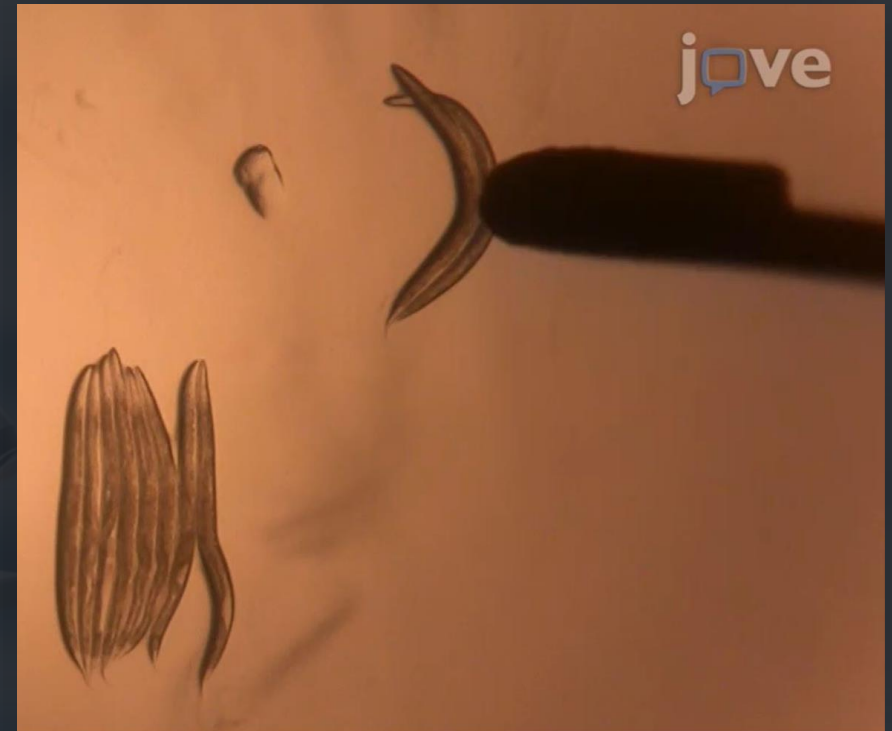


Visualizing > Reading

TEXT ARTICLE

“Once sodium azide has evaporated, line up animals to desired imaging setup. Move the animals side by side with anterior and posterior sides in the same orientation for all animals. Image animals immediately.”

REAL LIFE



Video Library

- **13,000+** videos in a growing library
- **1,200+** new videos published per year
- **1,000+** subscribers
- **8+ million** users worldwide

Video Features

- **24/7** access worldwide
- **10+** languages in translations and voice-overs
- **10,000+** downloadable protocols

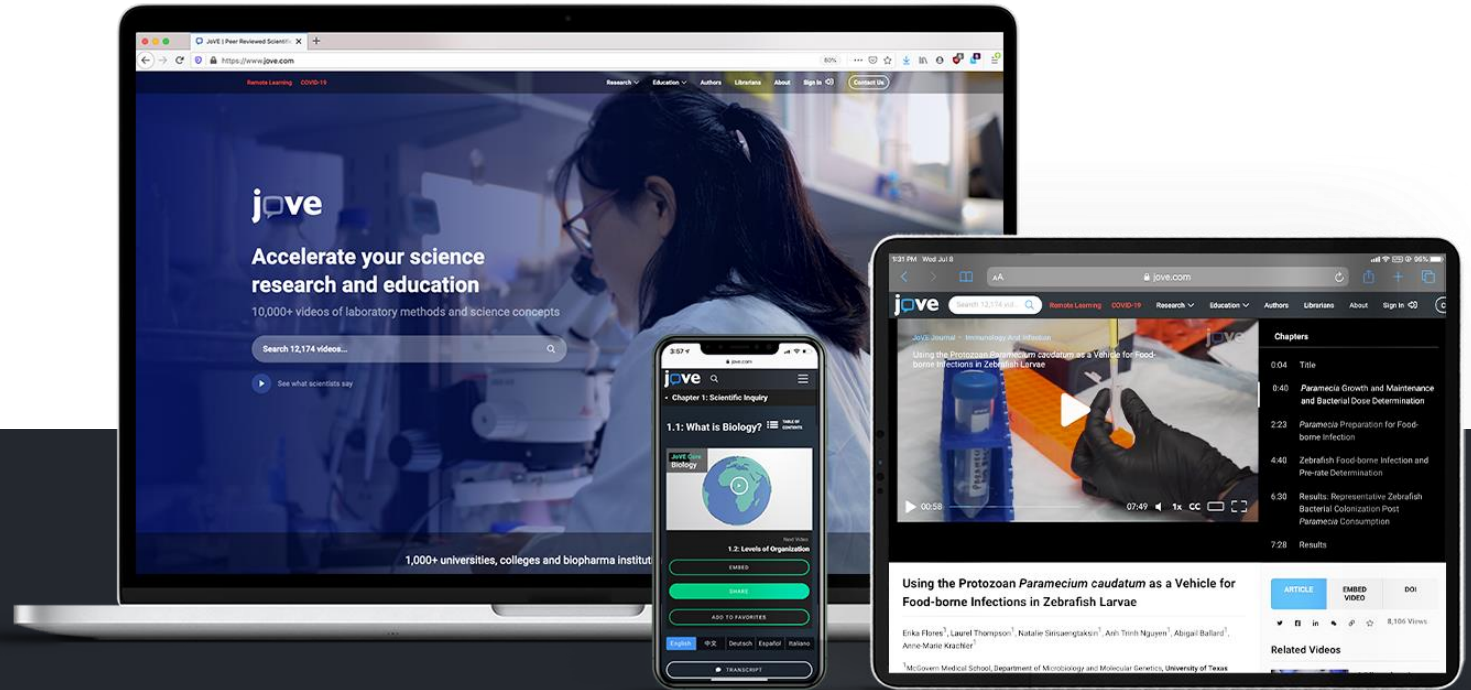
Accessing JoVE Videos

On Campus:

- ✓ IP Recognition; videos within subscription play instantly

Off Campus:

- ✓ Domain authentication
- ✓ OpenAthens and Shibboleth
- ✓ Authenticated remote access with EZProxy
- ✓ Embedded in your LMS (learning management system)



Accessing JoVE Videos Through a JoVE Account

On and Off Campus:

- ✓ Create a free JoVE account with an institutional email address to:

The screenshot shows the JoVE website's navigation bar with links for Research, Education, Authors, Librarians, About, Sign In (circled in orange), and Contact Us. Below the navigation bar, there are two main panels. The left panel is titled 'Create Your Account' and includes a form for 'Institutional Email Address', a captcha image with the text 'A9BB44' and 'JoVE', and a 'Create Account' button. The right panel is titled 'Sign In' and includes a form for 'Institutional Email' and 'Password', a 'Forgot Password?' link, and a 'Sign In' button. The 'Or Create an Account' link is circled in orange.

Check your JoVE access

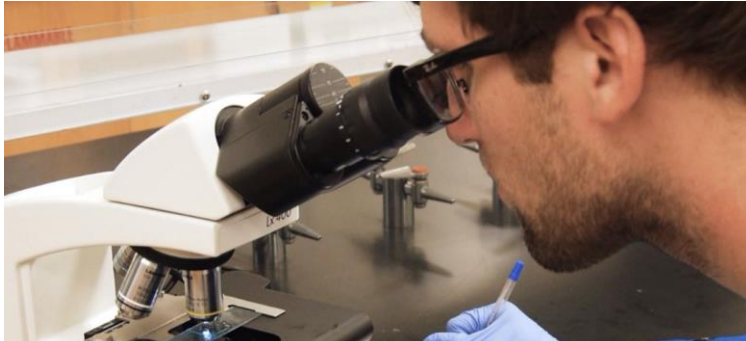
Watch videos even when off campus

Create embed codes to share videos with off-campus colleagues

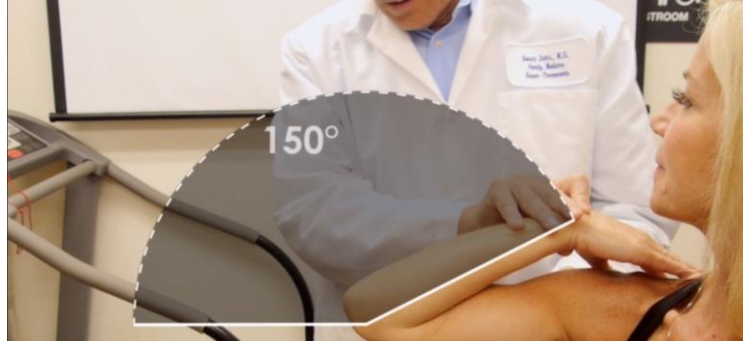
Create a playlist of your favorite videos

WHAT IS JoVE?

JoVE creates scientific videos for five unique resources:



Education



Training



Research

- **JoVE Core**

An animated text book. Foundational concepts are explained through high-impact animations and real-life experimentation.

- **JoVE Lab Manual**

Videos for both instructors and students in introductory biology and chemistry lab courses.

- **JoVE Science Education**

Teaching scientific fundamentals through simple easy-to-understand video demonstrations.

- **JoVE Video Journal**

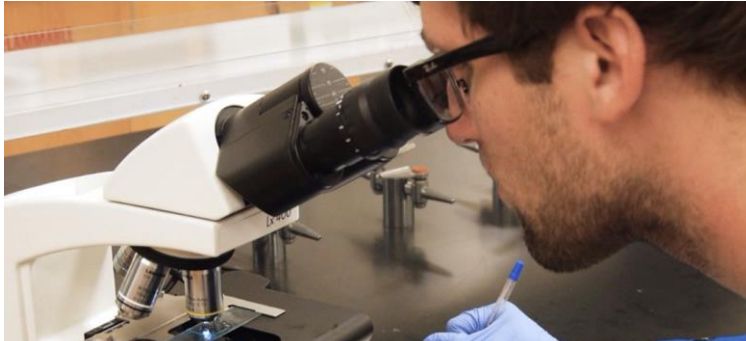
Publishes experimental techniques in visual format with detailed text protocols to increase scientific reproducibility and productivity.

- **JoVE Encyclopedia**

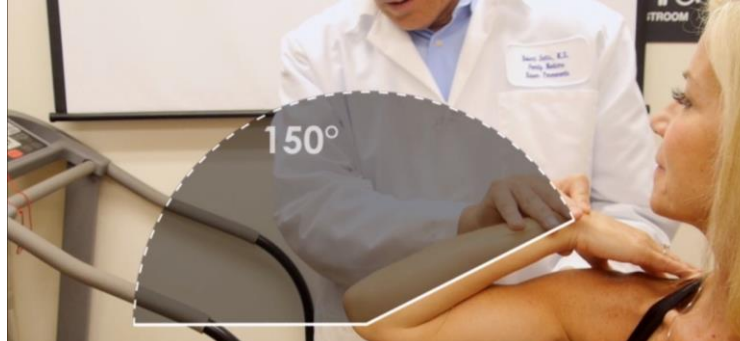
Collections of experimental techniques for specific model organisms

Your JoVE Access

JoVE creates scientific videos for five unique resources:



Education



Training



Research

- **JoVE Core**

Biology, Chemistry, Social Psychology, Molecular Biology

- **JoVE Lab Manual**

Biology and Chemistry.

- **JoVE Science Education**

Basic- and Advanced Biology, Chemistry, Physics, Psychology, Environmental Sciences, Engineering and Clinical Skills

- **JoVE Video Journal (unsubscribed)**

Biology, Bioengineering, Engineering, Chemistry, Biochemistry, Cancer Research, Developmental Biology, Environment, Behavior, Genetics, Immunology&Infection, Medicine and Neuroscience

- **JoVE Encyclopedia**

Collections of experimental techniques for specific model organisms and disease models

JoVE Core

Video textbooks that can serve as effective primary or supplementary teaching resources.

JoVE Core: Biology

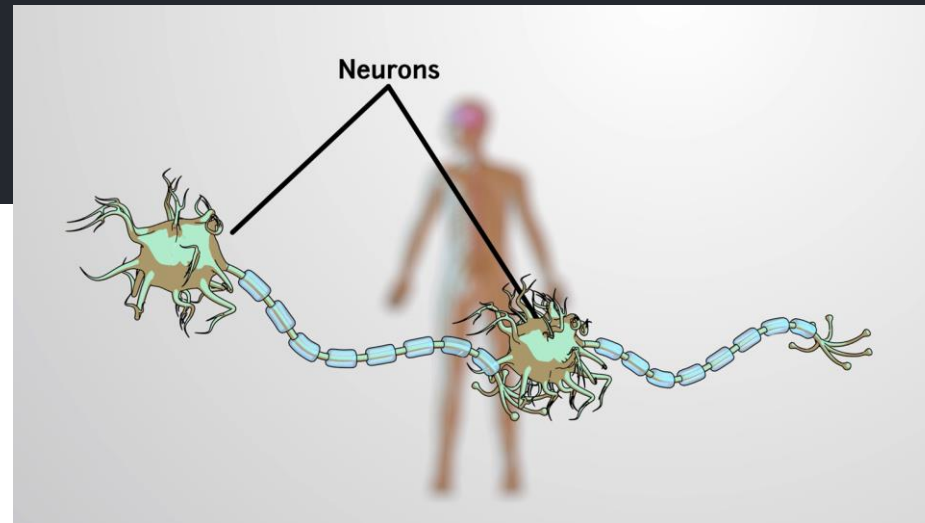
[Available in English, Chinese, German, Spanish, Italian, French, Russian, Dutch and Korean]

JoVE Core: Chemistry

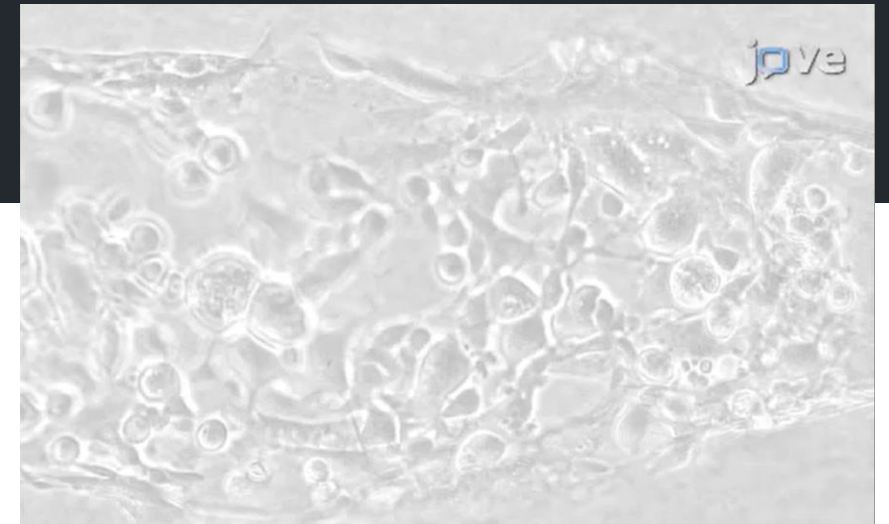
JoVE Core: Molecular Biology

JoVE Core: Social Psychology

Bring key introductory concepts to life through ...



High-impact Animations



Scientist-in-Action Videos of Experiments Conducted In Laboratory Settings

JoVE Core Overview



Search 12,833 video articles...



[Faculty Resource Center](#)

[COVID-19](#)

[Research](#) ▾

[Education](#) ▾

[Authors](#)

[Librarians](#)

[About](#)

[Maaiké Pols](#) ▾

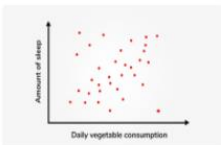
[Contact Us](#)

Social Psychology

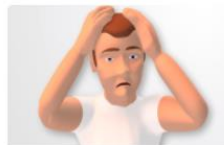
Search Videos



JoVE Core Social Psychology brings the foundations of our social world to life. Through 66 concise and easy-to-understand animated video lessons, we explain key concepts in the field. Plus, in another 25 scientist-in-action videos, we demonstrate classical and original research experiments performed in the laboratory.



Chapter 1
Research Methods



Chapter 2
The Social Self



Chapter 3
Social Judgment and Decision-Making



Chapter 4
Understanding and Influencing Others



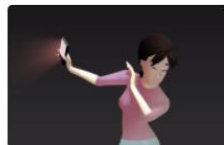
Chapter 5
Attitudes and Persuasion



Chapter 6
Close Relationships



Chapter 7
Stereotypes, Prejudice, and Discrimination



Chapter 8
Helping and Hurting



Chapter 9
Group Dynamics

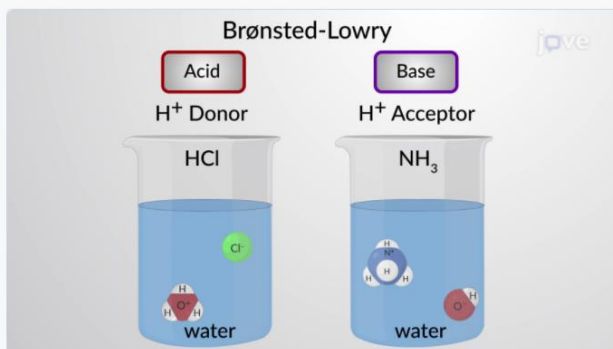
JoVE Core Chapter structure

CHAPTER 15

Acids and Bases

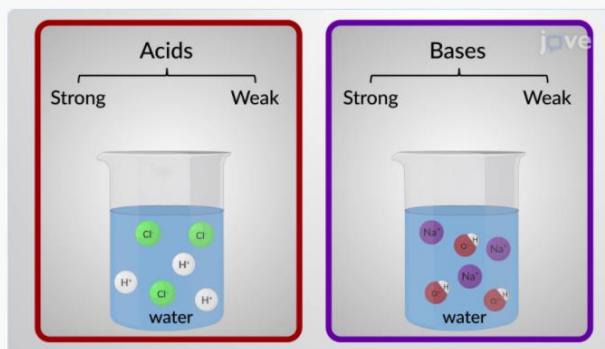
KEY TERMS AND CONCEPTS

SCIENTISTS IN ACTION



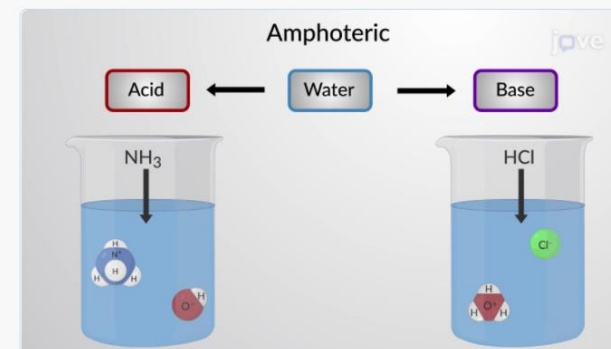
Bronsted-Lowry Acids and Bases

The acid-base reaction class has been studied for quite some time. In 1680, Robert Boyle reported traits of acid solutions that included their...



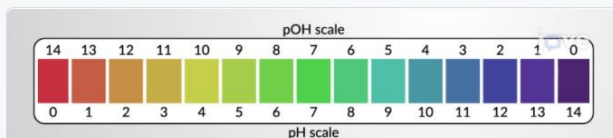
Acid/Base Strengths and Dissociation Constants

The relative strength of an acid or base is the extent to which it ionizes when dissolved in water. If the ionization reaction is essentially...



Water: A Bronsted-Lowry Acid and Base

The reaction between a Brønsted-Lowry acid and water is called acid ionization. For example, when hydrogen fluoride dissolves in water and...

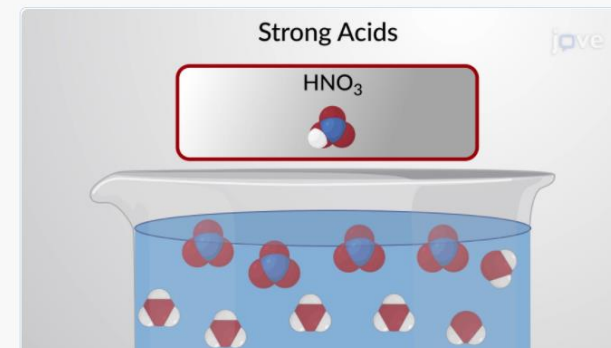


$$\text{pH} = -\log [\text{H}_3\text{O}^+]$$

pH Scale

$$K_a \times K_b = K_w$$

Relative Strengths of Coniugate Acid-Base Pairs



Strong Acid and Base Solutions

JoVE Core - Helpful Features for Instructors



The screenshot displays the JoVE Core website interface. At the top, there is a search bar with the text "Search 13,064 video articles..." and a navigation menu with links: Faculty Resource Center, COVID-19, Research, Education, Authors, Librarians, About, Eleonora Grinenko, and Contact Us. The main content area is titled "13.2: DNA Packaging" and features a video player with a play button. To the right of the video player, there is a language selection table and buttons for "TRANSCRIPT" and "CREATE QUIZ". Below the video player, there are buttons for "EMBED", "SHARE", and "ADD TO FAVORITES". At the bottom, there is a section titled "13.2: DNA Packaging" with an "Overview" tab and a brief description: "Eukaryotes have large genomes compared to prokaryotes. In order to fit their genomes into a cell,".

English	中文	Deutsch
Español	Русский	한국어
Français	Nederlands	

1 TRANSCRIPT

5 CREATE QUIZ

4 EMBED SHARE ADD TO FAVORITES

3 13.2: DNA Packaging Overview

Eukaryotes have large genomes compared to prokaryotes. In order to fit their genomes into a cell,

1

Video Transcript

2

Short Animated Video

3

Reading Material

4

Embed, Share, Add to Favorites buttons

5

Create Quiz

JoVE Core - Helpful Features for Students



The screenshot displays the JoVE Core website interface. At the top, there is a search bar with the text "Search 12,463 video articles..." and a navigation menu with links: Faculty Resource Center, COVID-19, Research, Education, Authors, Librarians, About, Eleonora Grinenko, and Contact Us. The main content area features a video player with a blue and orange background. A language selection menu is open, showing options in English, French, Portuguese, Arabic, Hebrew, Russian, Chinese, Italian, Spanish, Dutch, Japanese, Turkish, and German. A subtitle is visible: "per ospitare lo spazio limitato della cellula." Below the video player, there are buttons for "Previous Video", "Next Video", "13.1: The DNA Helix", and "13.3: Organization of Genes". At the bottom, there are buttons for "EMBED", "SHARE", and "ADD TO FAVORITES".

13.2: DNA Packaging

Overview

Eukaryotes have large genomes compared to prokaryotes. In order to fit their genomes into a cell, eukaryotes must pack their DNA tightly inside the nucleus. To do so, DNA is wound around proteins called histones to form nucleosomes, the main unit of DNA packaging. Nucleosomes then coil into compact fibers known as chromatin.

- 1 Voice-over Translations
- 2 Animations Illustrating Key Concepts
- 3 Subtitles and Closed Captions
- 4 Speed Regulation

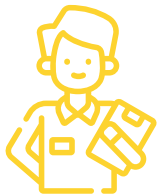
JoVE Lab Manual

Curriculum-focused video resources that support teaching and learning of commonly taught introductory labs.

JoVE Lab Manual:
Biology

JoVE Lab Manual:
Chemistry

Step-by-step instructions for each lab experiment from 3 perspectives ...



**Instructor
Preparation**



Concepts



**Student
Protocol**

[jove](#)
[Search 12,833 video articles...](#)
[Faculty Resource Center](#)
[COVID-19](#)
[Research](#)
[Education](#)
[Authors](#)
[Librarians](#)
[About](#)
[Maaikie Piele](#)
[Contact Us](#)

JoVE Lab Manual Biology

Search Videos

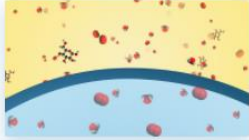
Comprehensive, curriculum-focused videos for both instructors and students in introductory biology lab courses.

[Fundamentals](#)
[Genetics](#)
[Cellular Processes](#)
[Ecology](#)
[Evolution](#)

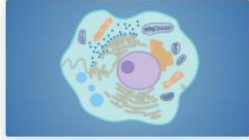
Fundamentals



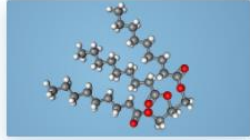
Scientific Method



Diffusion and Osmosis



Cell Structure



Macromolecules



Physiology of the Circulatory System

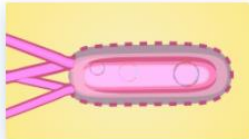
Genetics



Genetics of Organisms



DNA Isolation and Restriction Enzyme Analysis



Bacterial Transformation

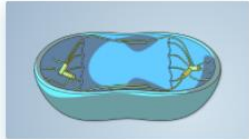
Cellular Processes



Photosynthesis



Cellular Respiration



Cell Division



Transpiration



Enzyme Activity

JoVE Lab Manual

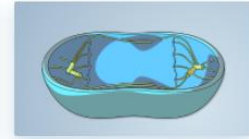
Cellular Processes



Photosynthesis



Cellular Respiration



Cell Division



Transpiration



Enzyme Activity

Ecology



Animal Behavior



Energy Dynamics



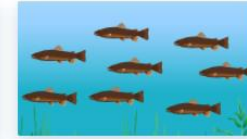
Measuring Biodiversity



Extinction



Species Distribution and Biogeography



Population Growth



Community Diversity



Climate Change



Group Behavior



Optimal Foraging



Sexual Selection and Mate Choice



Eusociality and Division of Labor

Evolution



Natural Selection



Artificial Selection



Hardy-Weinberg & Genetic Drift



Evolutionary Relationships



Plant Diversity



Animal Diversity



Microbial and Fungal Diversity

JoVE Lab Manual - Helpful Features for Instructors



The screenshot displays the JoVE Lab Manual interface for the 'Diffusion and Osmosis' video. The top navigation bar includes links for 'jove', 'Search 13,064 video articles...', 'Faculty Resource Center', 'COVID-19', 'Research', 'Education', 'Authors', 'Librarians', 'About', 'Eleonora Grinenko', and 'Contact Us'. The main content area features a video player with a cell diagram, a progress bar, and buttons for 'Previous Video', 'Next Video', 'TRANSCRIPT', 'CREATE QUIZ', 'EMBED', 'SHARE', and 'ADD TO FAVORITES'. Below the video player, there is a section titled 'Cell Membranes and Diffusion' with a paragraph of text and a section titled 'Cell Size and the Surface-Area to Volume Ratio'.

1

Instructor's Preparation and Concepts Videos

2

Transcript for Concept Video or Navigation for Preparation Video

3

Short Video

4

Reading Materials and Downloadable Materials List

5

Embed, Share, Add To Favorites Buttons

6

Create Quiz

JoVE Lab Manual - Helpful Features for Students



The screenshot displays the JoVE Lab Manual interface on a laptop. The top navigation bar includes the JoVE logo, a search bar, and links for Faculty Resource Center, COVID-19, Research, Education, Authors, Librarians, About, Eleonora Grinenko, and Contact Us. The main content area is titled 'Diffusion and Osmosis' and features a video player. The video player shows a table with columns for Length of side, Surface Area, Volume (cm³), and Surface Area: Volume. The table has three rows labeled Cell 1, Cell 2, and Cell 3. A play button is overlaid on the table. To the right of the video player is a 'PROCEDURE' section with a list of steps: Diffusion in Agar, Movement of Molecules Across a Semi-Permeable Membrane, and Results. Below the video player are buttons for EMBED, SHARE, and ADD TO FAVORITES. At the bottom of the screen, there is a 'PRINT PROCEDURE STEPS' button and a section titled '1. Diffusion in Agar' with a note: 'NOTE: In this exercise, you will be given agar containing an indicator chemical called phenolphthalein. When phenolphthalein'.

	Length of side	Surface Area (cm ²)	Volume (cm ³)	Surface Area: Volume
Cell 1	1			
Cell 2	2			
Cell 3	3			

1

Video Navigation

2

Student Protocol Video

3

Animations Illustrating Key Concepts

4

Subtitles And Closed Captions

5

Printed Procedures

JoVE Science Education

500+ videos

easy-to-understand
video demonstrations

key conceptual and methodological details
that are difficult to visualize using text alone

[Advanced Biology](#) [6 collections]

[Basic Biology](#) [6 collections]

[Chemistry](#) [6 collections]

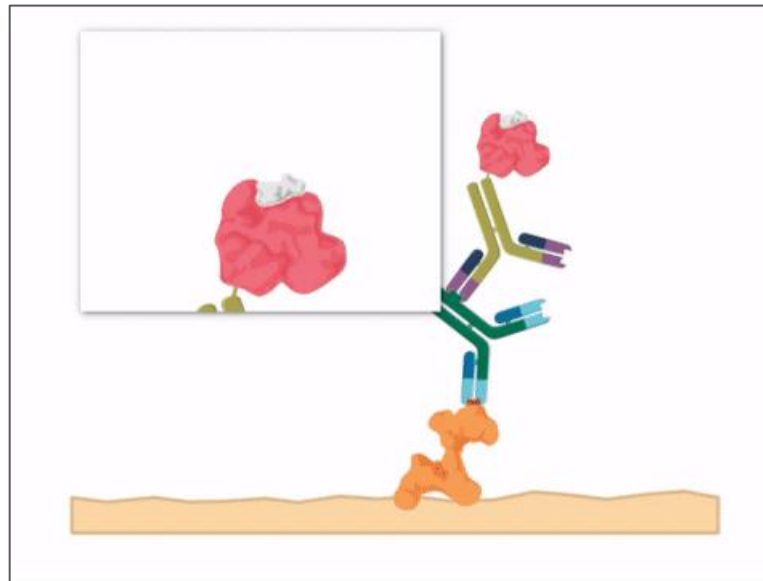
[Clinical Skills](#) [6 collections]

[Engineering](#) [8 collections]

[Environmental Sciences](#) [3 collections]

[Physics](#) [2 collections]

[Psychology](#) [7 collections]



Basic Biology - The
ELISA Method



Advanced Biology - An
Introduction to Neuroanatomy

JoVE Science Education - Helpful Features for Instructors



The screenshot displays the JoVE Science Education website. At the top is a navigation bar with the JoVE logo, a search bar, and links for Faculty Resource Center, COVID-19, Research, Education, Authors, Librarians, About, and Maaike Pols. Below the navigation bar, the main content area is divided into sections. On the left, there's a sidebar with 'JoVE Science Education' and 'Organic Chemistry' links. The central part of the page features a video player with a play button and a chemical equation: $k = Ae^{-E_a/RT}$. To the right of the video player is a 'Chapters' list with timestamps: 0:00 Overview, 1:17 Principles of Catalysis, 3:35 Preparation of Materials, 4:50 Catalytic Reduction of 4-Nitrophenol, 6:08 Applications, and 8:02 Summary. Below the video player, there's a 'Transcript' section with a 'Create Quiz' button. At the bottom right, there's a 'Usage Statistics' section showing 14,503 Views and social media sharing icons. Numbered callouts (1-5) are placed over the interface to highlight specific features: 1 points to the navigation bar, 2 points to the 'Create Quiz' button, 3 points to the 'Embed Video' button, 4 points to the 'Protocol' button, and 5 points to the 'Interactive Mode' button.

1 Navigation

2 Create Quiz

3 Embed Video

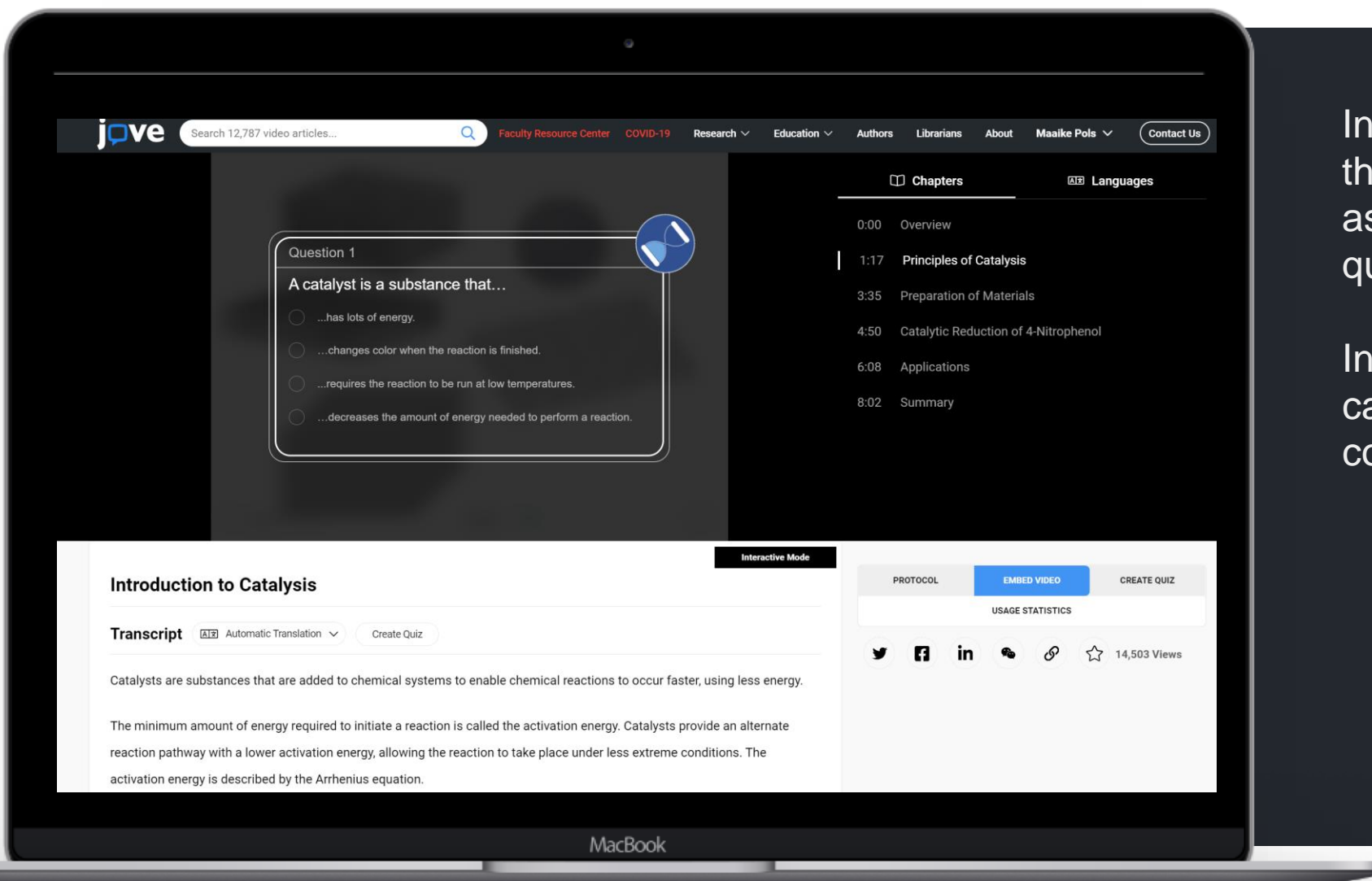
4 Protocol

5 Interactive Mode

- 1 Navigation
- 2 Create Quiz
- 3 Embed Video
- 4 Protocol
- 5 Interactive Mode



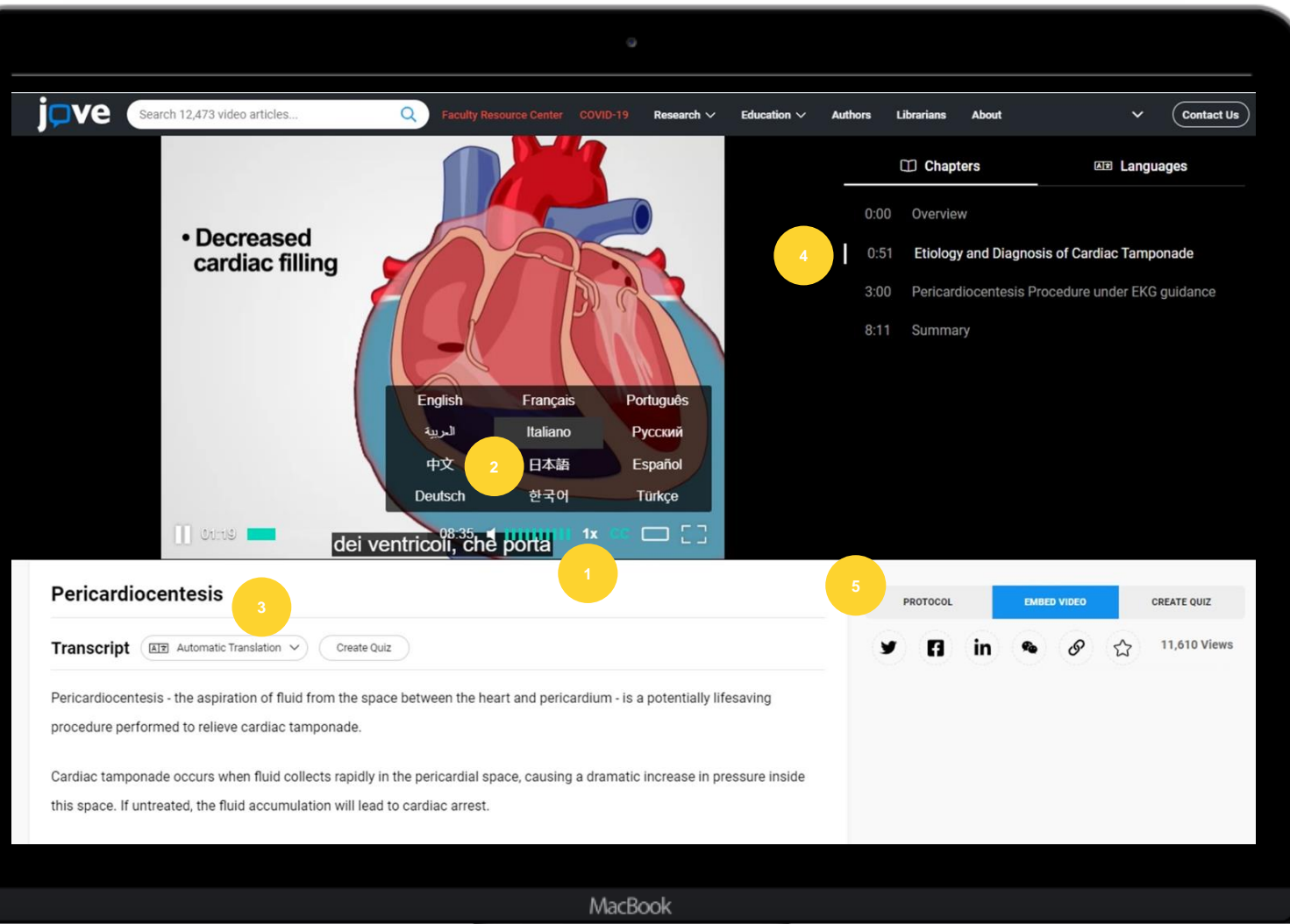
JoVE Science Education – NEW Interactive Mode



Interactive Mode pauses the video at intervals to ask a multiple choice question

Interactive mode videos can be embedded into a course LMS

JoVE Science Education - Helpful Features for Students



1

Speed Regulation

2

Subtitles and
Closed Captions

3

Video Transcript

4

Navigation

5

Protocol



Benefits of Using Videos in Instruction

Accessibility

- Available 24/7
- Subtitles and voice overs in up to 14 languages
- Keyboard-only controls

Student Preparedness

- Increased learning efficiency
- Decreased faculty intervention

Knowledge Retention

- Comprehension tested via available quizzes
- Remediation tool for at-risk students

Student Engagement

- Improves learning outcomes
- Engages students at different levels

Immediately Enhance STEM Understanding

A study conducted at DeSales University and Clemson University with undergraduate students shows:

2X BETTER

Students who watched a JoVE video before a lab class performed up to **two times better** than those who read only traditional text handouts

100% HIGHER

JoVE video watchers **scored 100% higher** on the pre-lab test and 76% higher on the post-lab test

EVEN 5 MINUTES MATTER

Watching a video for as little as 5 minutes had a **significant and lasting impact**





Living Library

More Content Coming Soon

- Continuous **JoVE Journal** article releases across 13 disciplines
- **JoVE Encyclopedia of Experiments**: Cancer Research | Neuroscience
- **JoVE Core**: Organic Chemistry | Physics

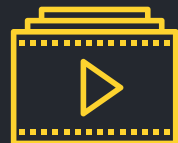


JoVE Playlists

Streamline Teaching	Train Lab Members	Accelerate Research
 Share playlists with others, including students, faculty, researchers and lab staff.	 Customize them to meet specific instruction or lab training needs.	
 Locate the videos saved in a playlist quickly and easily, whenever needed.	 Engage students by creating engaging class assignments or training programs	



Creating a JoVE Playlist



Create your very own JoVE playlists. Here are [instructions](#) and a quick [1 minute video](#) on how to create playlists



[Request a playlist](#) from our Customer Success Team or your Account Manager



[Browse available syllabus-mapped playlists:](#)
JoVE-curated playlists of videos mapped to course syllabi, lab training programs, and more.

Creating a JoVE Playlist

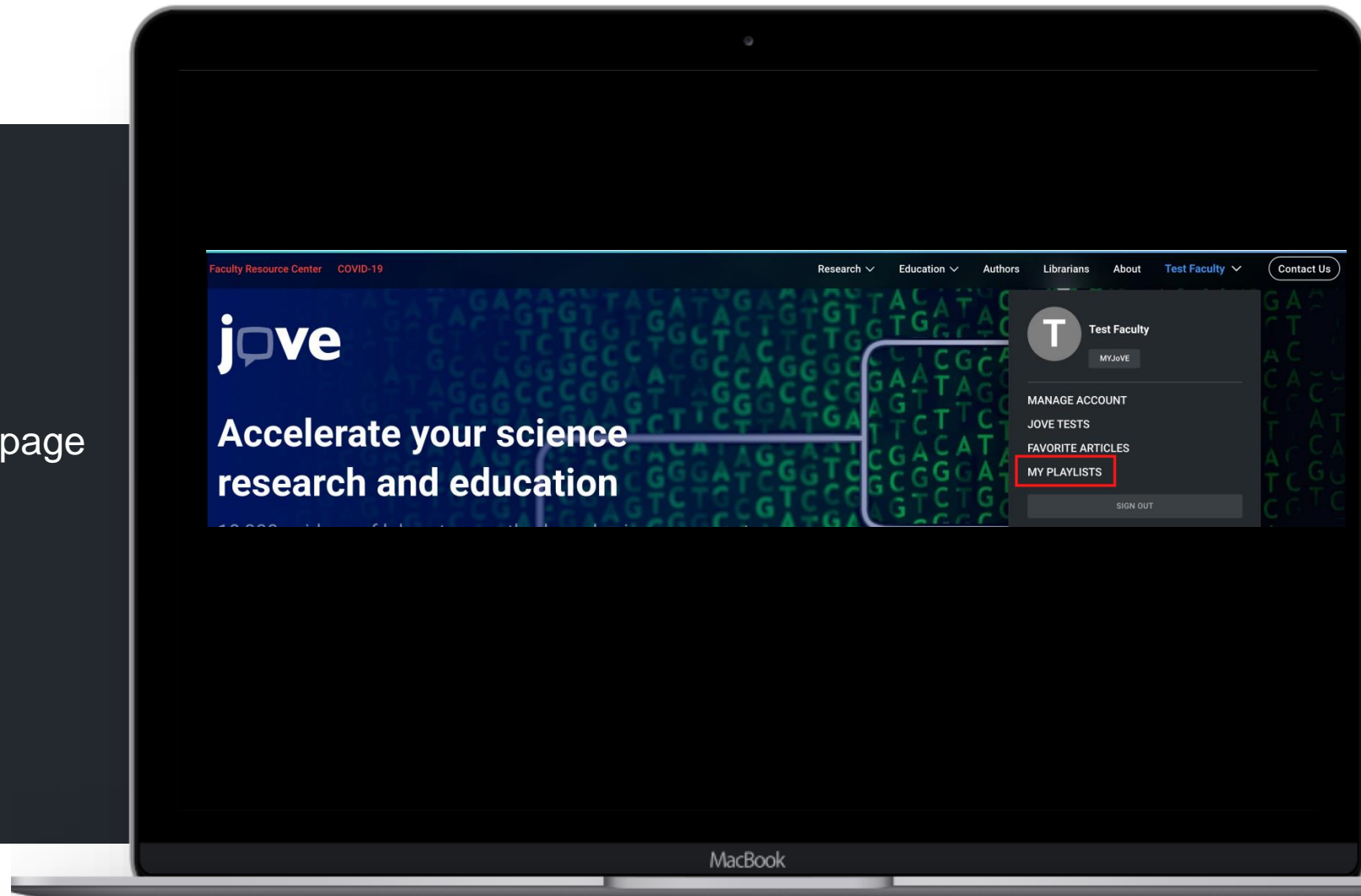
Log into your JoVE account



Navigate to My Playlists on your account page



Click on Create a New Playlist



Creating a JoVE Playlist

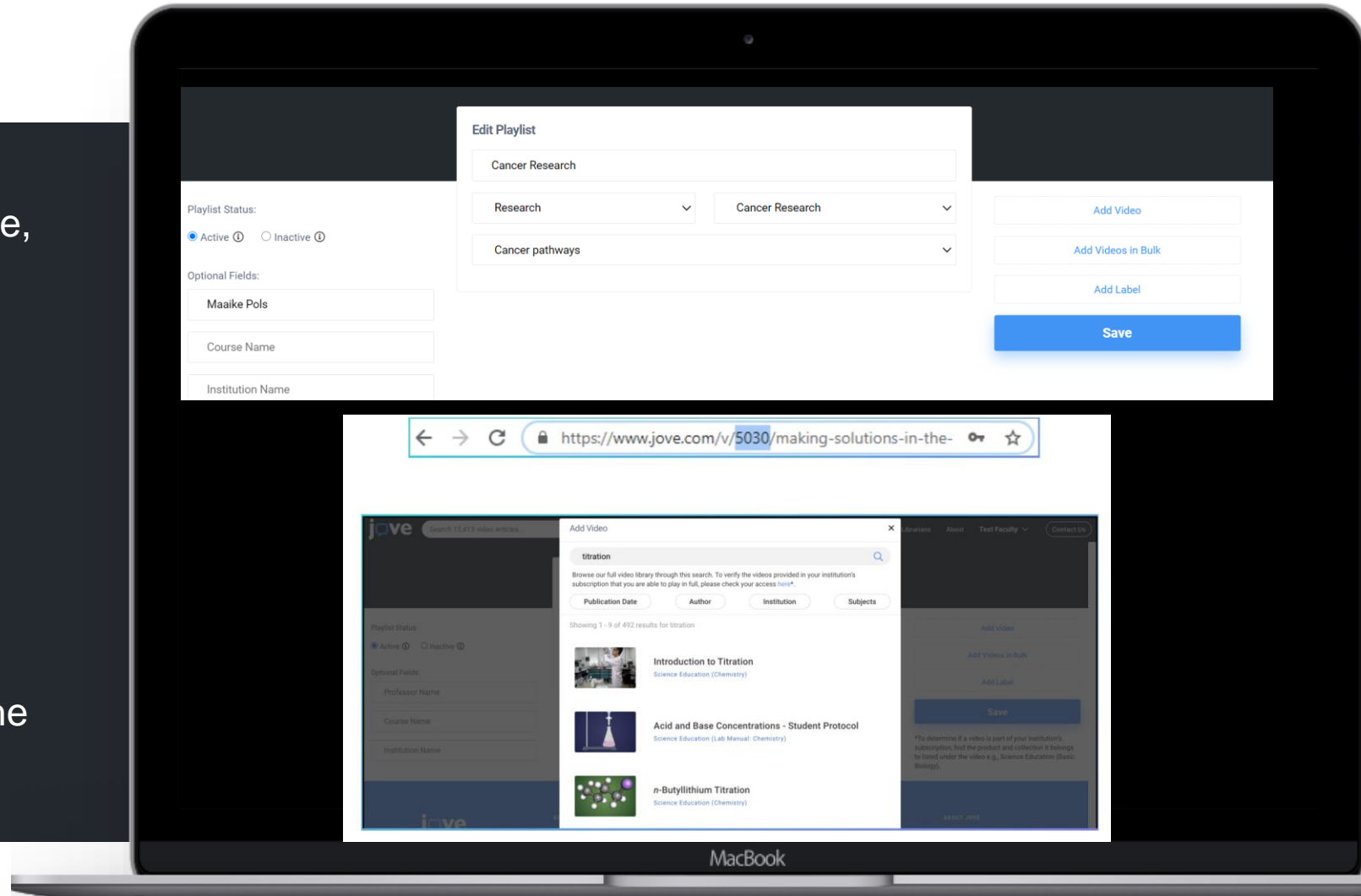
Name your Playlist and give it a purpose, topic and specialty



Find relevant articles for your research and add them to your playlist via “add video” or “add videos in bulk” using the article ID’s found in the url



or “add videos in bulk” using the article ID’s; a string of 4-5 numbers found in the url



Creating a JoVE Playlist

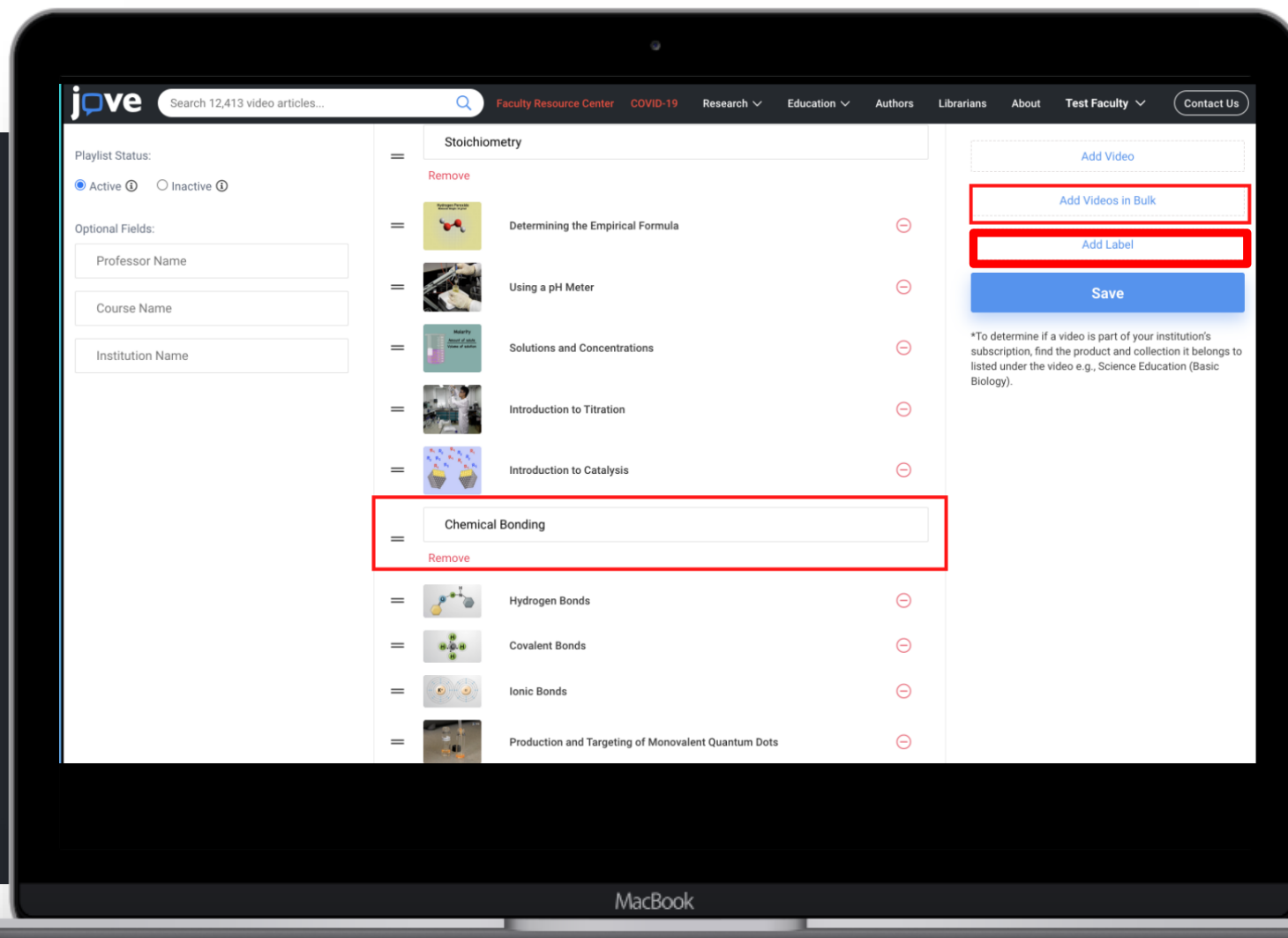
Use labels to organize videos into sections within your playlist



When relevant add a professor, course and institute name and click “Save” when your playlist is finished



Your playlist now appears in the My Playlists section of your account. Share your playlist with peers using the “Copy url” button. You can clone or edit your playlist at any time



Faculty Resource Center

Videos mapped to your courses and teaching labs

Don't see the course you teach here? Contact our [Customer Success](#) team to request a free syllabus mapping of JoVE videos to your course.

[Biology](#)

[Chemistry](#)

[Lab Courses](#)

[Clinical Medicine](#)

[Engineering](#)

[Psychology](#)

[Neuroscience](#)

[Environmental Sciences](#)

[K-12](#)

[Research Labs](#)

[Textbook Mapping](#)

[Featured Playlists](#)

Integration of JoVE videos into online courses and your LMS

[Browse](#)

Guides for teaching remotely with JoVE videos

[Browse](#)

Weekly training webinars

Join one of our weekly webinars to learn how JoVE can support your science instruction; learn how to access JoVE content seamlessly, integrate videos into your courses or labs, and keep students engaged.

Wednesdays

09:30 GMT

15:00 IST

18:30 JST

Thursdays

09:30 EST

14:30 GMT

15:30 CET

[Register](#)

Faculty Resource Center

Syllabus and Training Program Mapping

Save time on creating class curricula,
building lesson plans or establishing
laboratory training programs

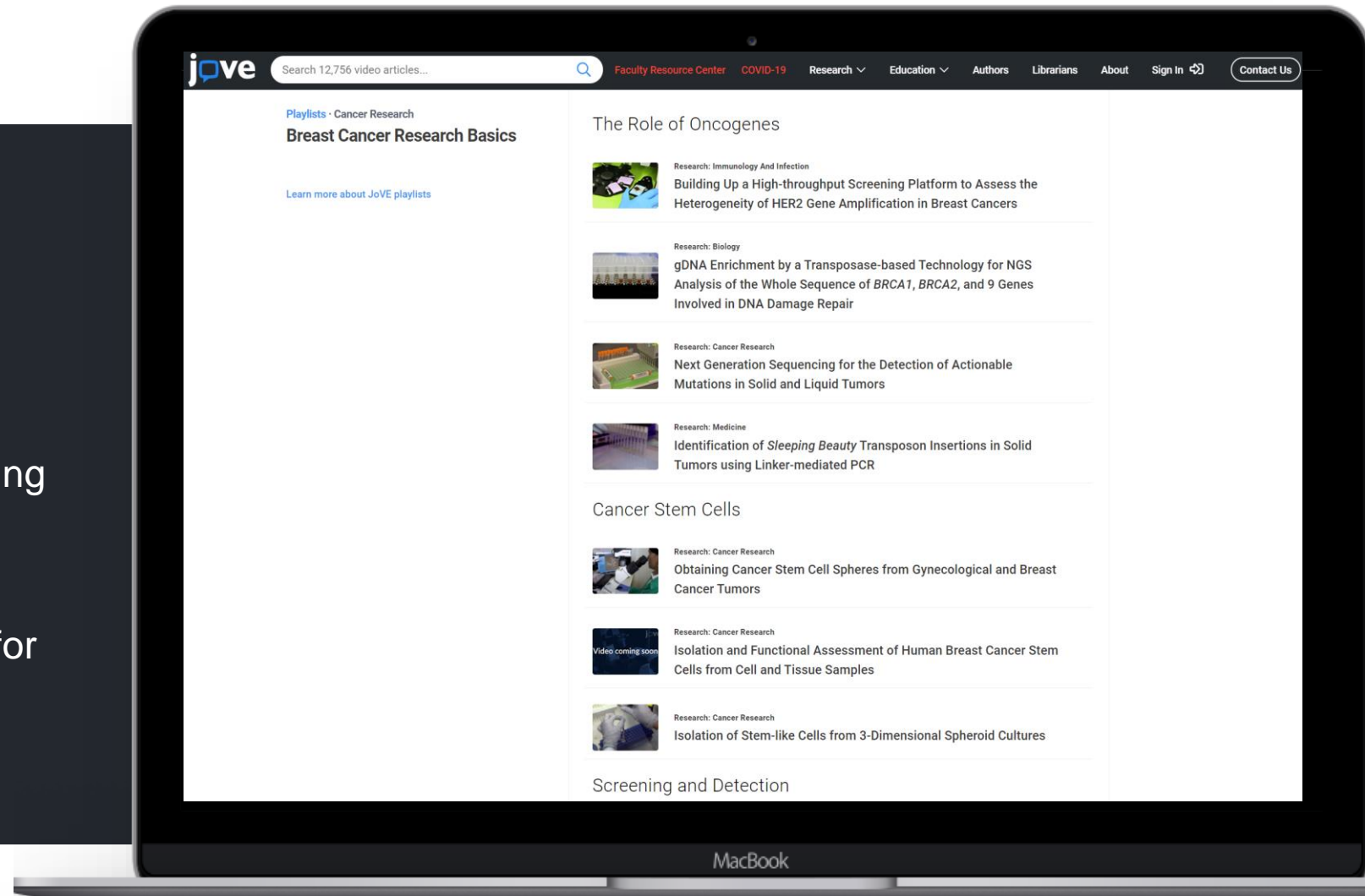


JoVE's subject matter experts will map
best fit content to your syllabus or training
program



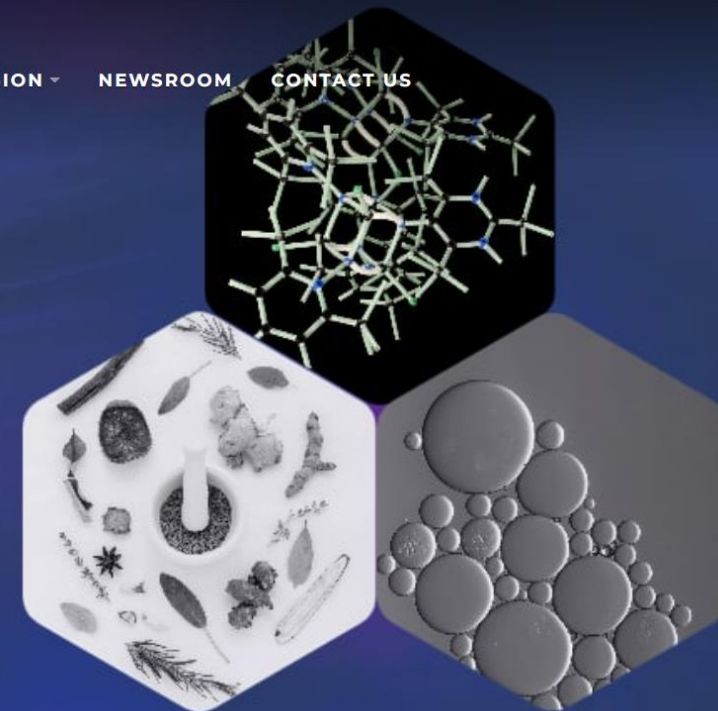
Receive a clickable list of suggestions for
content that best support your needs

Email manprit.kaur@jove.com



Getting Started with JoVE

Journal of Visualized Experiments



In an effort to support [remote instruction](#), UCF has renewed a one-year instructional subscription to JoVE Science Education for the 2021-2022 academic year.

- Videos covering research methods, lab manuals, clinical skills, and similar topics in STEM fields.
- Over 12,000 videos in disciplines such as biology, chemistry, engineering, medicine, physics, and psychology.
- Brief video demonstrations of labs and experiments to teach core scientific concepts.
- JoVE videos that can be viewed on their site or embedded into learning management systems

Webcourses@UCF Integration

JoVE content can be easily integrated into your Webcourses@UCF course in multiple ways by:

- Embedding content directly onto a Canvas page.
- Implementing JoVE curated curriculum in a common cartridge file or QTI file that can be imported into your Webcourses@UCF course.
- Linking content directly into a module through the JoVE External Tool.

Embedding a Video on a Page

When embedding content from JoVE into your Webcourses@UCF course, you will first want to create an account with JoVE if you have not already done so. (If you need to create an account, please refer to the steps in the above **Accessing JoVE** section.)

Once you are logged into JoVE with your personal JoVE account, you can then retrieve the embed code of the video(s) you would like to add into your Webcourses@UCF course. For assistance on how to add a JoVE embed code onto your Canvas page, refer to this video tutorial.

<https://youtu.be/qVv4BIJSnjg>

Once you have the embed code, you can also refer to this Canvas Guide [Canvas Guide on how to embed a video onto a Page: How do I embed a video in a page in a course?](#).

If you have multiple videos that you would like to have embedded into your course, you can also contact JoVE's [Customer Success](#) team and they will be able to provide you with a list of all of the embed codes of the videos you are requesting.

Importing Files into your Webcourses@UCF Course

If you work with JoVE to curate curriculum content specifically for your course, they may provide you the content through a Common Cartridge file.

You can refer to this [Canvas Guide on how to import Common](#)

Canvas

Free for Teacher

Account

Dashboard

Courses

Calendar

Inbox

Commons

Help

Biology > Modules

Home

Announcements

Assignments

Discussions

Grades

People

Pages

Files

Syllabus

Outcomes

Quizzes

Modules

Conferences

Collaborations

Attendance

Settings

JoVE Videos

0:42 / 1:20

Free Weekly Training sessions; Thursdays 9.30AM EST

Free Syllabus Mapping Service; Receive a clickable playlist of JoVE videos relevant to you and your research/courses

Customer success support faculty with embedding videos and quizzes

For more information about faculty support email maprit.kaur@jove.com

For sales related enquiries email [Trevor Schuck](mailto:trevor.schuck@jove.com)
trevor.schuck@jove.com

For webinar information and registration links email Maaike.pols@jove.com

Questions?