



User Guide

JoVE Journal & Science Education

October 2016

What is JoVE?

[JoVE](#) is the world's first and only peer reviewed and PubMed Indexed scientific video journal.

JoVE has published over 5,000 video articles from institutions including Harvard, Stanford, MIT, and the NIH.

These video articles present cutting-edge research in over a dozen fields of scientific study and are viewed by millions of users in over 900 institutions around the globe.



JoVE's Solutions



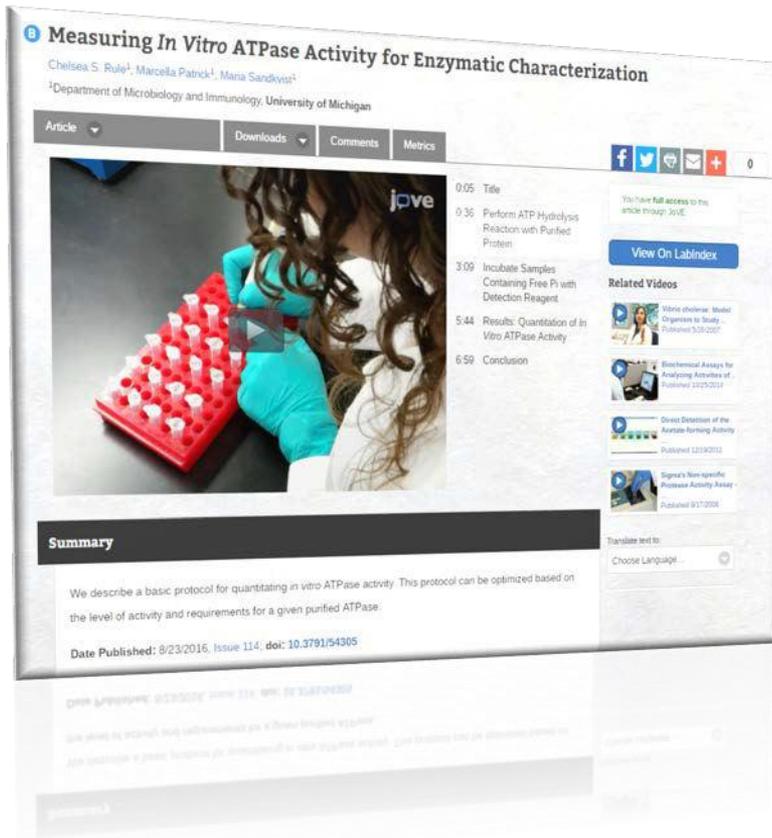
JoVE Journal

The first scientific video journal dedicated to help scientists advance their research by increasing productivity, efficiency, and reproducibility.

Science Education

An innovative video database that is dedicated to teaching laboratory fundamentals through simple, easy-to-understand video demonstrations.

JoVE Journal



- Peer-reviewed by our prestigious editorial board
- Indexed in PubMed, Medline, SciFinder, etc.
- Over 5000 articles – 90 new video articles published each month
- Customized subscription model by section (13 sections)
- Over 16,000 published authors from top institutions worldwide

Journal Sections



Biology



Immunology & Infection



Chemistry



Developmental Biology



Behavior



Biochemistry



Cancer Research



Medicine



Neuroscience



Bioengineering



Engineering



Environment



Genetics

JoVE Home Page & Navigation

The screenshot shows the JoVE website home page with the following elements and callouts:

- 1**: Navigation menu (Librarians, Users, Authors, About) and the search bar.
- 2**: The "Sign In" button.
- 3**: The "JoVE Journal (Impact Factor 1.1)" section, which lists various scientific fields such as Biology, Neuroscience, Medicine, Bioengineering, Engineering, Genetics, Cancer Research, Immunology and Infection, Chemistry, Behavior, Environment, Developmental Biology, and Biochemistry.
- 4**: The "JoVE Science Education" section, which lists fields like Basic Biology, Advanced Biology, Psychology, Environmental Sciences, Chemistry, and Clinical Skills.
- 5**: The "Newest Journal Videos" section.
- 6**: The "Newest Science Education Videos" section.

A video player is visible on the left side of the page, showing a video titled "Assessing Retinal Microglial Phagocytic Function In Vivo Using a Flow Cytometry-based Assay". The video player includes a play/pause button and a progress indicator showing "1 of 8".

At the bottom of the page, there is a banner that says "Win Free Access to Our New Sections" with a "Click Here to Enter" button.

1 Keyword Search

2 Sign In or Create An Account

3 JoVE Journal

4 Science Education

5 Newest Journal Videos

6 Recent Science Education Video

Journal Search & Results

The screenshot shows the JoVE website search results for the query 'stem cells'. The page features a search bar at the top with the query 'stem cells' and a 'Search' button. Below the search bar, there are navigation tabs for 'Librarians', 'Users', 'Authors', and 'About'. The search results are displayed in a list format, with the first result being 'High Efficiency Differentiation of Human Pluripotent Stem Cells to Cardiomyocytes and Characterization by Flow Cytometry'. The second result is 'Isolation and Expansion of Mesenchymal Stem/Stromal Cells Derived from Human Placenta Tissue'. The page includes a 'Refine your search' sidebar on the left with options for 'Containing Text', 'Filter by author or institution', and 'Filter by publication date'. A 'CONTAINS' filter is also visible above the search results. The page number '415' is shown at the top right of the results area.

1 Number Of Produced Video

2 Page Buttons (Current And All)

3 Advanced Search Options

4 Search Query

5 Search Results By Order Of Relevance

Filter Search Result:

- Filter By Section
- Filter By Publish Date
- Filter By Authors or Institutions
- Search For Videos By Keywords

Journal Article Page (top of article)

The screenshot shows the top of a JoVE journal article page. The browser address bar displays 'www.jove.com'. The page header includes navigation links for 'Librarians', 'Users', 'Authors', and 'About', along with a welcome message and a 'Sign Out' button. A search bar is present with the text 'Search by keywords, for example: 'stem cells''. The main article title is 'Eye-Tracking Control to Assess Cognitive Functions in Patients with Amyotrophic Lateral Sclerosis'. Below the title, the authors' names and affiliations are listed. A navigation bar contains 'Article', 'Downloads', 'Comments', and 'Metrics' tabs. A video player is embedded on the left, showing a woman in a lab setting. A table of contents is on the right, listing sections like 'Title', 'Setup of Testing Paradigm', 'Eye-tracker Set-up & Calibration', 'Eye-tracking Experiment: CPM & D2 Test', 'Results: Development of a Reliable Oculomotor Based Neuropsychological Assessment for ALS Patients', and 'Conclusion'. A 'Related Videos' section is also visible. Five red numbered callouts (1-5) point to specific elements: 1. Author name, 2. Article tab, 3. Downloads tab, 4. Table of contents, and 5. Related Videos section.

1 Clicking On The Name Displays The Author's Publication History

2 Click Here To Jump To Different Sections Of The Article

3 Download The Article Or Materials List As PDF

4 Article Chapter Selection

5 List Of Related Videos

Journal Article Page (scroll down page)

The screenshot shows a web browser displaying the JoVE website. The page features a navigation bar with links for Librarians, Users, Authors, and About. A search bar is present with the text "Search by keywords, for example: 'stem cells'". The main content area is titled "Protocol" and contains an ethics statement and a section titled "1. Embryo Collection". A video player is embedded on the right side of the page, showing a person performing a procedure in a laboratory. A table of contents is visible below the video player.

tailored for and tested on mouse preimplantation embryos and ESCs; nevertheless its performance on other systems with high nuclear density, although yet untested, is expected to be equivalent.

Protocol

Ethics statement: All animal work, including husbandry, breeding and sacrifice was approved by Memorial Sloan Kettering Cancer Center's Institutional Animal Care and Use Committee (IACUC), protocol #03-12-017.

1. Embryo Collection

Note: All animal work must have been approved by institutional and local authorities and conform to local and institutional rules.

1. Mate a virgin female mouse with a fertile stud male of the desired genotypes.
Note: If setting up natural matings, selecting females in the estrus phase of the estral cycle increases the chances of copulation on the desired date. If inducing superovulation, please refer to the protocols described in ²⁰.
2. Check the presence of a vaginal plug in the morning using a blunt probe. Ideally, do this before noon (12:00 pm), as copulation plugs are lost throughout the day. Consider noon of detection of the vaginal plug embryonic day (E)0.5.
3. On the desired day and time of embryonic development, warm up M2 or flushing holding medium (FHM) to RT or, preferably, 37 °C. Note: Either M2 or FHM can be used for flushing and handling embryos. When not in use, store these media at 4 °C. Estimate the use of ~2 ml of medium for each uterus.

Translate text to:
Choose Language...

0:05 Title
0:41 Embryo Collection
3:25 Confocal Imaging
4:47 Image Analysis and Data Pre-processing
8:44 Results: Lineage Specification Analysis in Mouse Preimplantation Embryos
10:30 Conclusion

1 Scroll Down To Read The Full Length Article Text

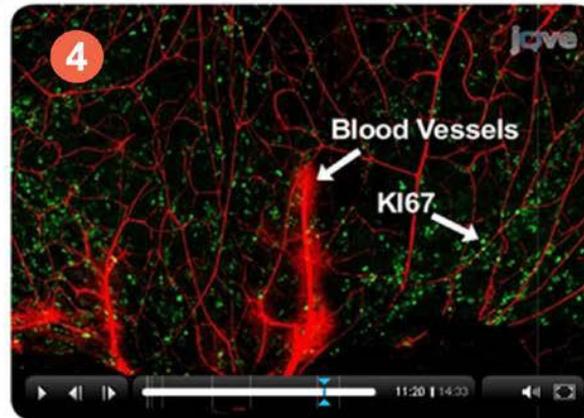
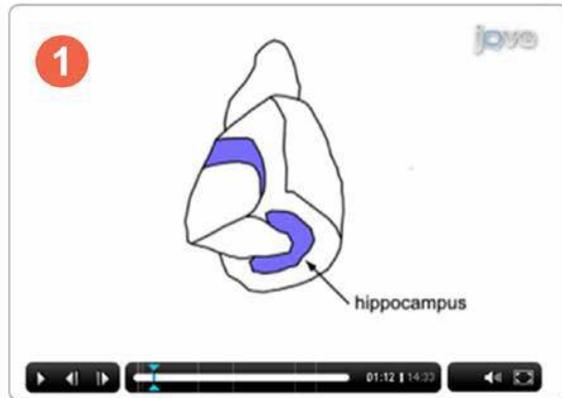
2 Article Video Sticks To The Right Of The Text For Easy Access

The text article is made up of various sections including:

- Cite this Article
- Abstract
- Introduction
- Protocol
- Results
- Discussion
- Materials List
- References

* You can download a PDF of the text article

Journal Article Structure



1 Abstract

2 Introduction

3 Protocol

4 Results & Discussion

Journal Publication Process



Journal Benefits

- Increase **research productivity** and **reproducibility**
- **Quickly onboard** new lab trainees
- **Save money and resources** for labs
- Learn **gold-standard and newest methods**

“Methods are complex and can only partially be described in words. Seeing the method performed immediately provides a wealth of information to the viewer. This information conveys a realistic idea of how the method is done, what is needed to do it, and helps the viewer analyze how they should proceed.”



*Dr. Michele Calos,
Stanford University*

Science Education (SE)

The screenshot shows a video player interface for a JoVE Science Education video. The title is "Drosophila melanogaster Embryo and Larva Harvesting and Preparation". The video player shows a sequence of images: a Drosophila embryo, a Drosophila larva, and a Drosophila adult. Below the video player is a table of contents with the following entries:

0:00	Overview
0:40	The Drosophila Embryo
1:25	Drosophila Embryo Collection
2:49	Drosophila Embryo Harvesting
4:00	Drosophila Larvae Overview
5:15	Drosophila Larvae Collection and Harvesting
5:58	Applications
7:49	Summary

- Laboratory Fundamentals
- Simple, Easy to Understand Video Demonstrations
- Engaging Animations
- 300 professionally produced core videos with over 40 hours of tutorial content
- Video content maps directly to classes
- Flipped Classroom Tool
- JoVE Quiz Testing Tool

SE Volumes & Collections

SE Basic Biology

General Laboratory Techniques
Basic Methods in Cellular and Molecular Biology
Essentials of Biology 1: yeast, *Drosophila* and *C. elegans*
Essentials of Biology 2: Mouse, Zebrafish, and Chick

SE Advanced Biology

Essentials of Neuroscience
Essentials of Developmental Biology
Essentials of Genetics
Essentials of Cell Biology

SE Clinical Skills

Essentials of Physical Examinations I
Essentials of Physical Examinations II

SE Psychology

Essentials of Behavioral Science
Essentials of Experimental Psychology
Essentials of Cognitive Psychology
Essentials of Developmental Psychology

SE Environmental Sciences

Essentials of Environmental Science
Essentials of Environmental Microbiology
Essentials of Earth Science

SE Chemistry

Essentials of General Chemistry
Essentials of Organic Chemistry
Essentials of Analytical Chemistry

SE Video Demonstration Page

www.jove.com

Librarians Users Authors About

Welcome, JoVE. [Learn more about access](#)

Search by keywords, for example: 'stem cells' **1** Advanced Search Sign In

English 中文 (Chinese) français (French) Deutsch (German) 日本語 (Japanese)

JoVE Science Education Basic Biology General Laboratory Techniques Introduction to the Bunsen Burner

Introduction to the Bunsen Burner

SE

Twitter Facebook Email Print + 0

You have full access to this article through JoVE.

2 Create a JoVE Quiz

0:00	Overview 3
0:36	Bunsen Burner Components
2:08	Bunsen Burner Operation and Types of Flames

To use a Bunsen burner, first make sure the collar is closed.

To ensure that you have the hottest, cleanest flame possible, make sure your rubber tubing is securely connected to the gas jet and to the gas inlet valve.

A heatproof mat can be placed under the Bunsen burner as an extra safety precaution to prevent damage to your bench top and to catch stray sparks.

Before lighting, place the Bunsen burner at least 12 inches in front of any overhead shelving or equipment and be mindful of loose hats or clothing.

4 Use a spark lighter to light the

5 Download PDF

1 Search Bar

2 JoVE Quiz

3 Timeline And Overview

4 Closed Captioning

5 Printable PDF Transcript

SE Quiz Creation (step 1)

www.jove.com

Manage your JoVE Quizzes

Welcome!
Use this page to create quizzes for your students about JoVE videos, as well as see results.

Your Existing Quizzes

Quiz Name	Article ID	Results	Actions
You have not issued any quizzes. Use the "Create a New Quiz" section below to create a new quiz.			

Create a New Quiz

1 Collection: Select... *

Create a New Quiz

Collection: Essentials of Biology 1: yeast, Drosophila and C. elegans *

Article: An Introduction to Saccharomyces... *

Quiz Name: 5081_Question_Set_V1

Email Addresses: (comma separated) 2

1 Select the collection you wish to create a quiz for and then select the article title.

2 Enter the email addresses or listserv address of the quiz taker(s).

SE Quiz Creation (Step 2)

Questions may be ordered however you would like just drag and drop them where you would like them to be.

Create a New Quiz

Collection: Essentials of Biology 1: yeast, Drosophila and C. elegans *

Article: An Introduction to Saccharomyces... *

Quiz Name: 5081_Question_Set_V1 *

Email Addresses: (comma separated) *

Question 1: What characteristic of *S. cerevisiae* classifies it to the Kingdom Fungi?

Answers:

- It has membrane-bound nuclei.
- It has a cell wall made of chitin.
- It is unicellular.
- It is multicellular.

Image: Choose File No file chosen

Add Question Review Quiz

3 These are preset questions written by our in-house scientists who have put together the collections. You can add, edit, or remove these questions here. Select the correct answer if you are customizing the quiz.

4 You may also include an image for reference by clicking "Choose File" and selecting your image.

5 Confirm and preview your quiz before sending it out to the recipients in (2).

SE Benefits

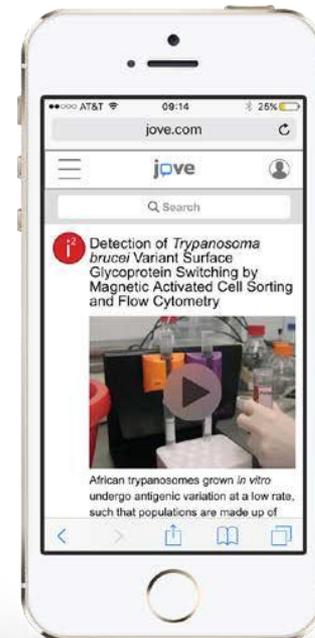
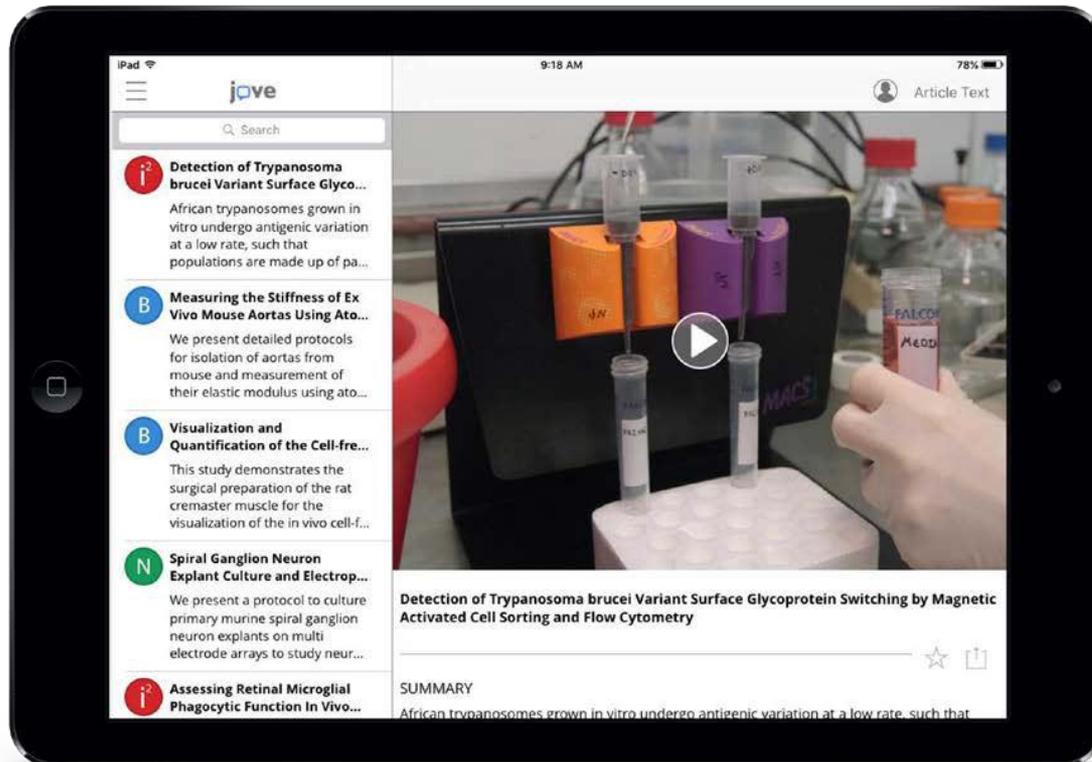
- **Increased speed of learning** in laboratory and classroom environments
- **Saved time and work for teaching faculty**
- Consistent **growth in student success**, learning outcomes, and **STEM retention**
- Support both undergraduate and graduate instruction

“
Initially it took multiple tries, whereas now when we teach this technique with the JoVE video we have a success rate between 90 to 100 percent.”

Dr. Carrie Northcott
Michigan State University



JoVE Access Anywhere



JoVE Account Creation (Off-Campus Access)

The screenshot shows the JoVE website's account creation interface. A navigation menu on the left includes 'Sign In' (1) and 'Create an Account'. The main heading is 'Create a JoVE account'. The page is divided into two columns. The left column contains text explaining that account creation is free and that institutional email is preferred. The right column contains a form with the following fields: 'First Name', 'Last Name', 'Institutional Email' (2), 'Password', and 'Verify Password'. Below these are optional fields: 'Research Area', 'Affiliation' (3), 'Institution', 'Department', and 'Position'. A CAPTCHA challenge (4) is presented with the instruction 'Please enter the text you see below.' At the bottom, there is a 'Create Account' button (5) and a note: 'By clicking "Create Account", you agree to our policies.'

1 Sign in with your institutional email OR create an account.

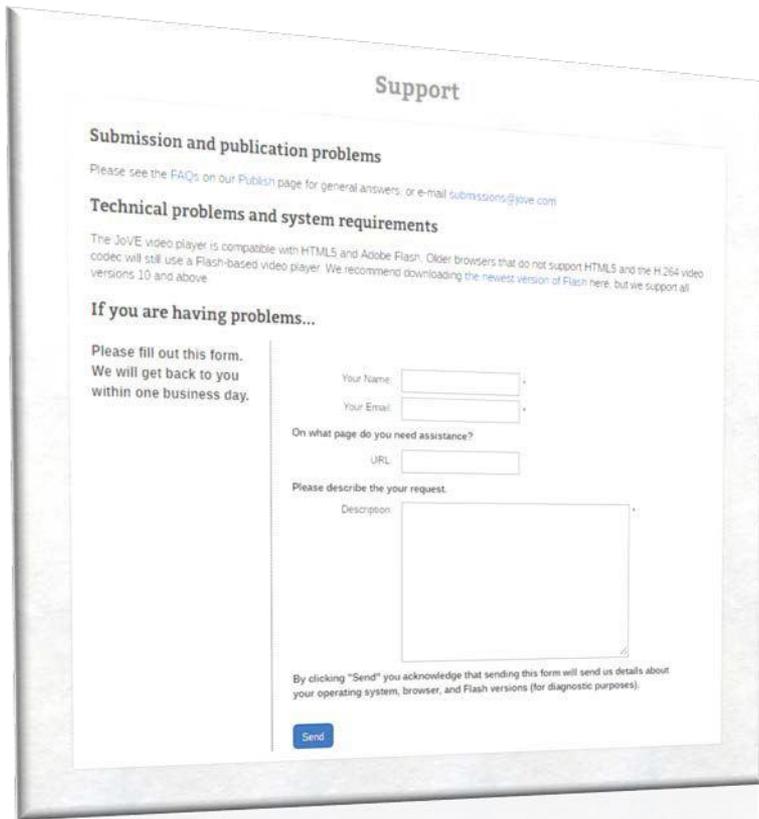
2 Fill out mandatory fields.

3 Optional fields that maximize your JoVE experience.

4 Enter the CAPTCHA

5 Click "Create Account" and you're done!

Contact JoVE



The screenshot shows a web page titled "Support" with a contact form. The form is divided into sections: "Submission and publication problems" with a link to FAQs and an email address; "Technical problems and system requirements" with browser compatibility information; and "If you are having problems..." which contains a form with fields for "Your Name", "Your Email", "On what page do you need assistance?" (with a URL field), and "Please describe the your request." (with a description field). A "Send" button is at the bottom of the form. A disclaimer at the bottom of the form states: "By clicking 'Send' you acknowledge that sending this form will send us details about your operating system, browser, and Flash versions (for diagnostic purposes)."

Technical Questions:

Contact Support via our website at www.jove.com/about/contact

Subscription Questions:

Contact Marco Stella
marco.stella@jove.com

Publication Questions:

Contact our Editorial team at submissions@jove.com