



Uživatelský manuál

JoVE Journal & Science Education

October 2016

Co je JoVE?

JoVE je první a jediný recenzovaný vědecký video časopis na světě, zároveň indexovaný v PubMed.

JoVE publikovalo více než **5000 video článků** významných vědeckých institucí jako je např. Harvard, Stanford, MIT a NIH.

Tyto video články přinášejí **nejnovější výsledky z více než tuctu vědeckých oborů** a sledují je miliony uživatelů z více než 900 institucí na celém světě.



Produkty JoVE



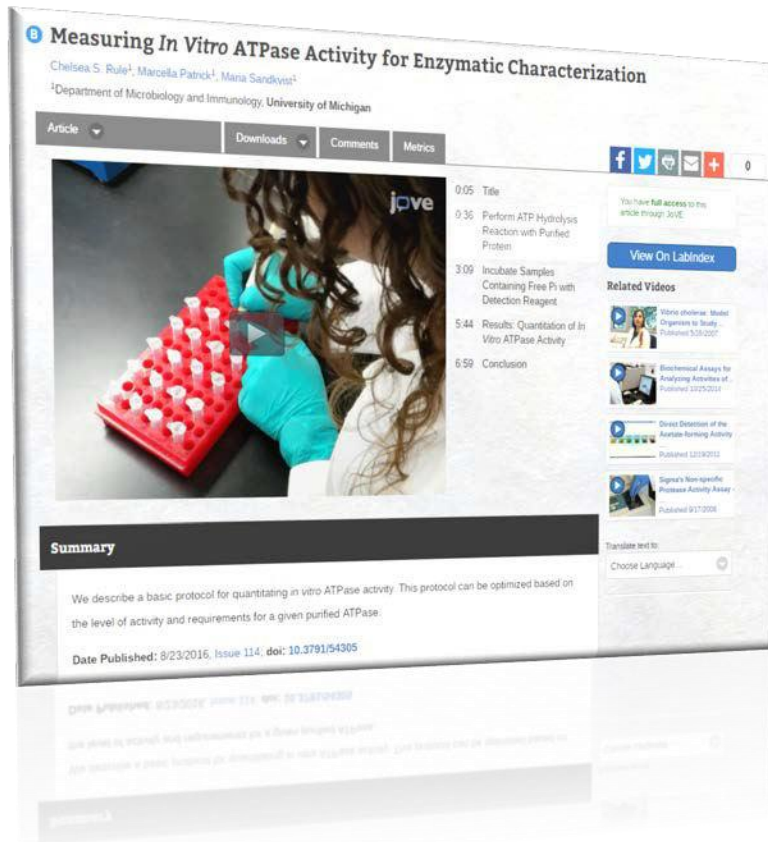
JoVE Journal

První odborný video časopis, který vědcům pomáhá rozvíjet jejich výzkum – zvyšuje produktivitu, efektivitu a reprodukovatelnost.

Science Education

Inovativní video databáze, která se věnuje výuce laboratorních základů pomocí jednoduchých a dobře srozumitelných video ukázek.

JoVE Journal



- **Recenzovaný** naší prestižní redakční radou
- **Indexovaný** v PubMed, Medline, SciFinder atd.
- Více než **5000 článků** – měsíčně 90 nových video článků
- Model **předplatného na míru** – dle sekcí (výběr ze 13 sekcí)
- Více než **16 000 publikovaných autorů** z nejvýznamnějších světových institucí

Jednotlivé sekce JoVE Journal



Biology



Immunology & Infection



Chemistry



Developmental Biology



Behavior



Biochemistry



Cancer Research



Medicine



Neuroscience



Bioengineering



Engineering

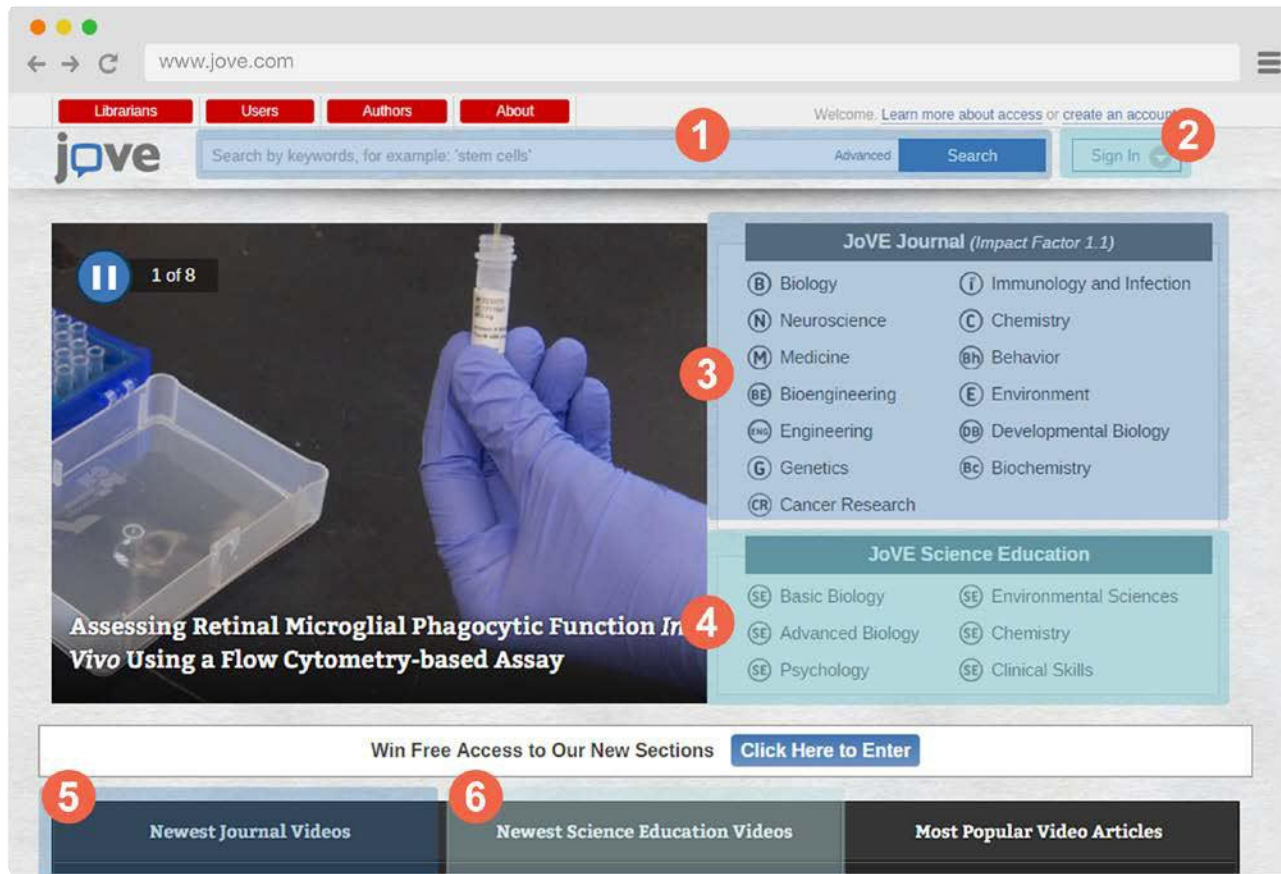


Environment



Genetics

Úvodní stránka & navigace



Vyhledávání & výsledky

The screenshot shows the JoVE website search results for the query 'stem cells'. The interface includes a navigation bar with links for Librarians, Users, Authors, and About. The search bar contains the text 'stem cells' and a 'Search' button. A 'Sign In' button is also visible. The search results are displayed in a list format, with the first result titled 'High Efficiency Differentiation of Human Pluripotent Stem Cells to Cardiomyocytes and Characterization by Flow Cytometry'. The second result is titled 'Isolation and Expansion of Mesenchymal Stem/Stromal Cells Derived from Human Placenta Tissue'. The search results are filtered by 'Containing Text' and 'Filter by author or institution'. The search results are also filtered by 'Filter by publication date'.

1 4149 Video Articles

2 1 2 3 4 5 6 7 8 9 ... 415

3 Refine your search:

4 CONTAINS stem cells

5 High Efficiency Differentiation of Human Pluripotent Stem Cells to Cardiomyocytes and Characterization by Flow Cytometry

Subarna Bhattacharya¹, Paul W. Burridge², Erin M. Kropp¹, Sandra L. Chuppa¹, Wai-Meng Kwok³, Joseph C. Wu², Kenneth R. Boheler^{4,5}, Rebekah L. Gundry^{1,6}

¹Department of Biochemistry, Medical College of Wisconsin, ²Stanford Cardiovascular Institute, Stanford University School of Medicine, ³Department of Anesthesiology, Medical College of Wisconsin, ⁴Stem Cell and Regenerative Medicine Consortium, LKS Faculty of Medicine, Hong Kong University, ⁵Division of Cardiology, Johns Hopkins University School of Medicine, ⁶Cardiovascular Research Center, Biotechnology and Bioengineering Center, Medical College of Wisconsin

Isolation and Expansion of Mesenchymal Stem/Stromal Cells Derived from Human Placenta Tissue

Rebecca A. Pelekanos¹, Varda S. Sardesai¹, Kathryn Futrega², William B. Lott², Michael Kuhn², Michael D. D'Amico^{2,3}

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

Stránka s článkem (první polovina)

The screenshot displays the JoVE website interface. At the top, there's 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 article title is "Eye-Tracking Control to Assess Cognitive Functions in Patients with Amyotrophic Lateral Sclerosis". Below the title, the authors are listed: Jürgen Keller¹, Martin Gorges², Helena E. A. Aho-Özhan³, Ingo Utner¹, Erich Schneider², Jan Kassubek¹, Elmar H. Pinkhardt¹, Albert C. Ludolph¹, and Dorothée Lulé¹. The affiliations are: ¹Department of Neurology, Ulm University; ²Institute of Medical Technology, Brandenburg University of Technology Cottbus-Senftenberg. The article has 0 downloads, 0 comments, and 0 metrics. A video player is embedded, showing a woman in a lab setting. The video has a table of contents with timestamps: 0:05 Title, 0:59 Setup of Testing Paradigm, 1:52 Eye-tracker Set-up & Calibration, 3:40 Eye-tracking Experiment: CPM & D2 Test, 5:46 Results: Development of a Reliable Oculomotor Based Neuropsychological Assessment for ALS Patients, and 6:18 Conclusion. A sidebar on the right shows "Related Videos" with thumbnails and titles.

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

Stránka s článkem (druhá polovina)

The screenshot shows the JoVE website interface. At the top, there's a navigation bar with links for Librarians, Users, Authors, and About. Below this is a search bar 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". To the right of the text is a video player showing a person in a lab coat performing a procedure. A red circle with the number "1" is placed over the text, and a red circle with the number "2" is placed over the video player.

Librarians Users Authors About Welcome, JoVE. Learn more about access.

Search by keywords, for example: "stem cells" Advanced Search Sign In

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

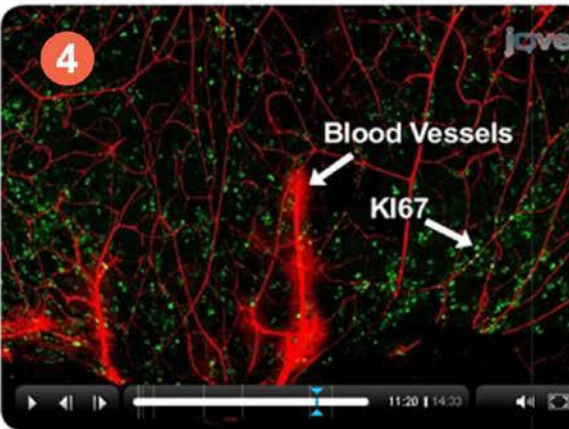
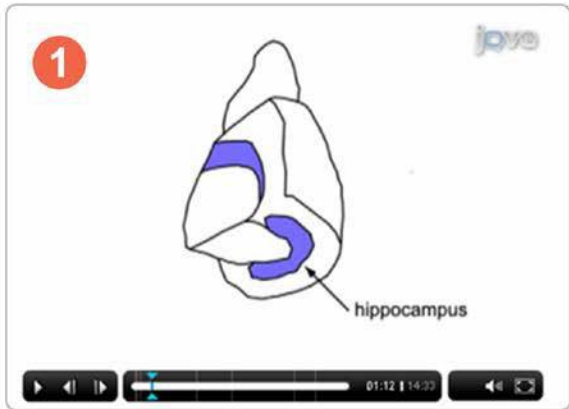
2 Article Video Sticks To The Right Of The Text For Easy Access

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

Struktura článku



1 Abstract

2 Introduction

3 Protocol

4 Results & Discussion

Publikační proces



Výhody JoVE Journal

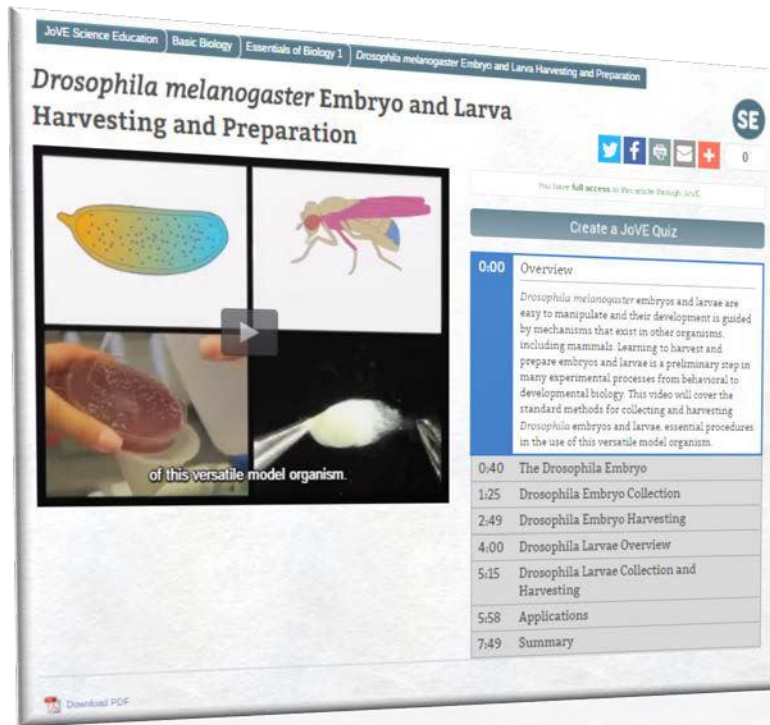
- Zvýšení **produktivity a reprodukovatelnosti výzkumu**
- **Rychlé zaškolení** nových pracovníků v laboratoři
- **Úspora peněz** (za laboratoře) a zdrojů
- Naučíte se **prověřené i nejnovější metody**

"Vědecké metody jsou komplexní a jen částečně je lze popsat slovy. Ale vidět na vlastní oči, jak je daná metoda realizována, je okamžitým a bohatým zdrojem informací. Snadno získáte přesnou představu o tom, jak je metoda prováděna a co je k tomu potřeba. Video pomáhá divákovi rozhodnout, jak postupovat."



*Dr. Michele Calos,
Stanford University*

Science Education (SE)



- Základy práce v laboratoři
- Jednoduché a snadno srozumitelné videoukázky
- Poutavé animace
- 300 profesionálně vytvořených základních videí s více než 40 hodinami výuky
- Video obsah mapovaný přímo do tříd
- Výuka metodou převrácené třídy
- Testovací nástroj JoVE Quiz

Science Education - obsah

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

Psychology

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

SE

Advanced Biology

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

SE

Environmental Sciences

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

SE

Clinical Skills

Essentials of Physical Examinations I
Essentials of Physical Examinations II

SE

Chemistry

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

Science Education - ukázka videa

The screenshot shows the JoVE Science Education website. The top navigation bar includes links for Librarians, Users, Authors, and About. A search bar is prominently displayed with the text "Search by keywords, for example: 'stem cells'". Below the search bar, there are language options: English, 中文 (Chinese), français (French), Deutsch (German), and 日本語 (Japanese). The main content area is titled "Introduction to the Bunsen Burner" and features a video player showing a hand lighting a Bunsen burner. A table of contents on the right side of the page lists the video segments: Overview (0:00), Bunsen Burner Components (0:36), and Bunsen Burner Operation and Types of Flames (2:08). The video player includes a play button and a progress bar. A "Download PDF" button is visible at the bottom left of the video player.

1 Search Bar

2 JoVE Quiz

3 Timeline And Overview

4 Closed Captioning

5 Printable PDF Transcript

SE - jak vytvořit kvíz (krok 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... *

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 - jak vytvořit kvíz (krok 2)

www.jove.com

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) *

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

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.

4 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).

Výhody Science Education

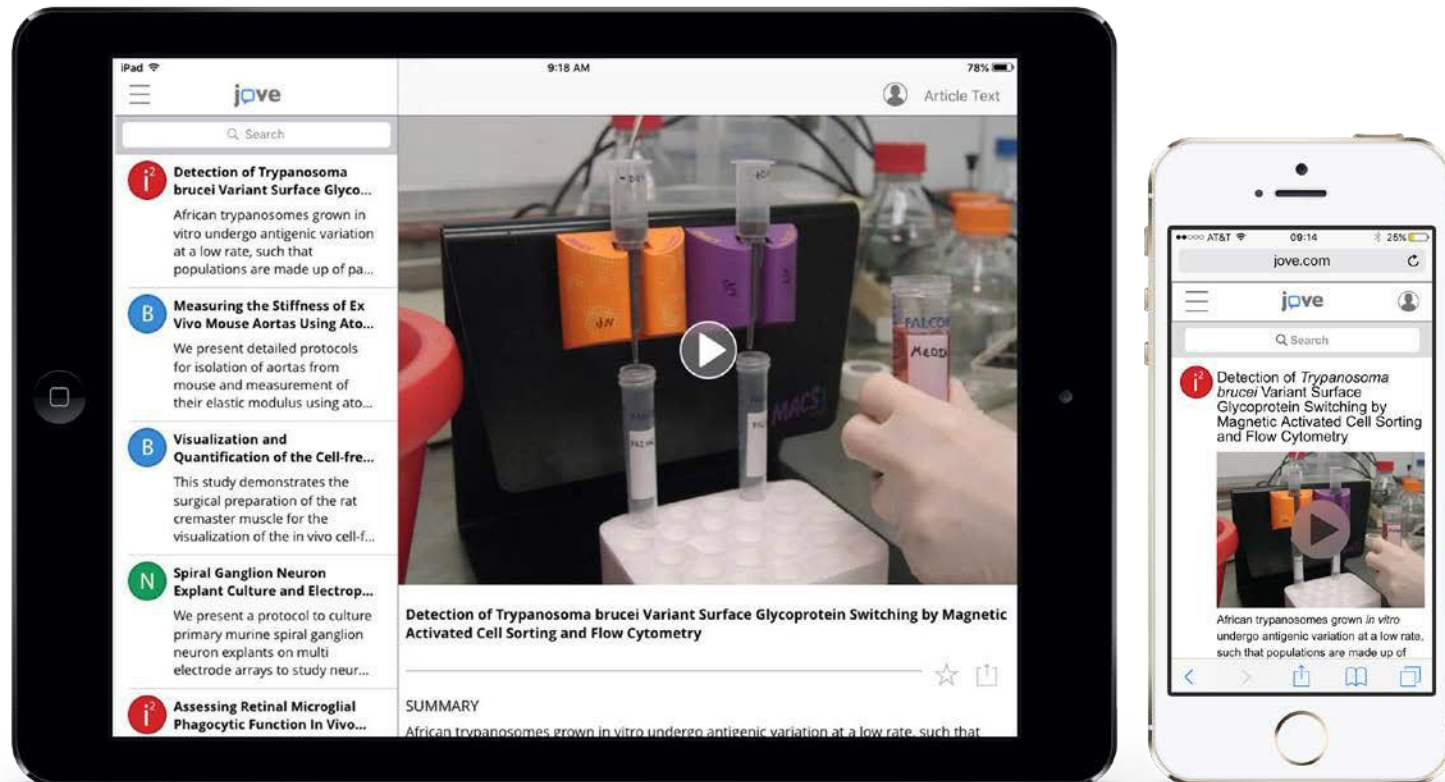
- **Rychlejší učení** v prostředí laboratoře i třídy
- **Úspora času a práce pro pedagogické fakulty**
- Zlepšující se **studijní výsledky** a úspora **prostoru a energie**
- Podpora pro vysokoškoláky i postgraduální studenty

"Dříve bylo potřeba pokusů více, dnes když tuto techniku vyučujeme a využíváme při tom videa JoVE, máme úspěšnost 90 až 100 procent."

Dr. Carrie Northcott
Michigan State University



Přístup z mobilních zařízení



Jak vytvořit uživatelský účet (přístup mimo instituci)

The screenshot shows the JoVE website's 'Create a JoVE account' page. On the left, a 'Sign In' modal is open, with a red circle '1' highlighting the 'Email' field. The main page has a header 'Create a JoVE account' and a sub-header 'Creating an account is easy and free.' Below this, there is a paragraph explaining the benefits of an account. To the right, a form titled 'Fields marked with an asterisk (*) are required.' contains fields for 'First Name', 'Last Name', 'Institutional Email', 'Password', and 'Verify Password'. A red circle '2' is next to the 'Institutional Email' field. Below the form, there is a section 'For the best experience using JoVE, please tell us a little more about yourself.' with fields for 'Research Area', 'Affiliation', 'Institution', 'Department', and 'Position'. A red circle '3' is next to the 'Affiliation' field. Below this, there is a CAPTCHA section with the text 'Please enter the text you see below.' and a red circle '4' next to the CAPTCHA image. At the bottom, there is a 'Create Account' button with a red circle '5' next to it. A disclaimer at the bottom states '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!

Kontaktujte nás

Podpora:

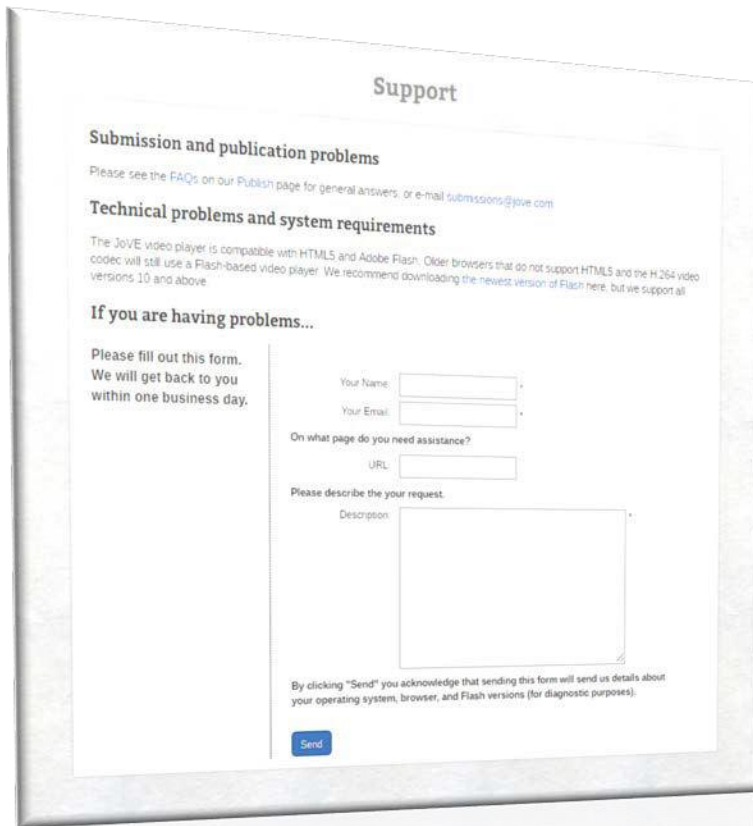
Michael Svoboda (ČR)
michael.svoboda@aip.cz

Ladislav Svršek (SR)
ladislav.svrsek@aib.sk

Prodej:

Jakub Petřík (ČR)
jakub.petrik@aip.cz

Miriam Suchoňová (SR)
miriam.suchonova@aib.sk



The image shows a screenshot of a web form titled "Support". The form is divided into sections: "Submission and publication problems" with a link to FAQs and a submission email; "Technical problems and system requirements" with information about video player compatibility; and "If you are having problems..." which contains a contact form. The contact form includes 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. A disclaimer at the bottom 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)."