

# Journal of Visualized Experiments (JoVE)

## How to use it for your research and teaching in the life sciences

**Aline Frank, subject librarian for biology, University Library Bern**

Coffee & Bit(e)s, 2<sup>nd</sup> June 2021, slides updated 25<sup>th</sup> January 2022



# Journal of Visualized Experiments (JoVE)

## What is it?

### Overview

- Producer and provider of multidisciplinary video method articles
- Funded in 2006
- Largest scientific video journal
- Peer-reviewed, indexed in PubMed, WoS, Scopus & more
- Initially OA, since 2009 subscription-based hybrid journal

### Numbers

- Currently >14,000 videos available, ~1,000 new videos per year
- ~10% Open Access
- On average 2,000 views per video

# Aim and purpose

## Why JoVE?

### Goal

Videos intend to improve scientific research and education:

- enhance transparency and reproducibility.
- save time and money in research.
- enhance visibility.

### Videos for two purposes

#### *Research*

filmed experiments, new research methods and technologies

→ [JoVE Video Journal](#): Video method articles

#### *Education*

science concepts and laboratory methods for students courses

→ [JoVE Science Education Library](#) & more:  
Educational videos

# What content is available at Uni Bern?

## Sections licensed by UB plus OA content

Focus on biomedical research and lab techniques

### JoVE Research

**Behavior**

Biochemistry

**Bioengineering**

**Biology**

Cancer Research

**Chemistry**

Developmental Biology

**Engineering**

**Environment**

Genetics

**Immunology and**

**Infection**

**Medicine**

**Neuroscience**

### JoVE Education

Basic Biology

**Advanced Biology**

Chemistry

Environmental Sciences

Physics

Engineering

Clinical Skills

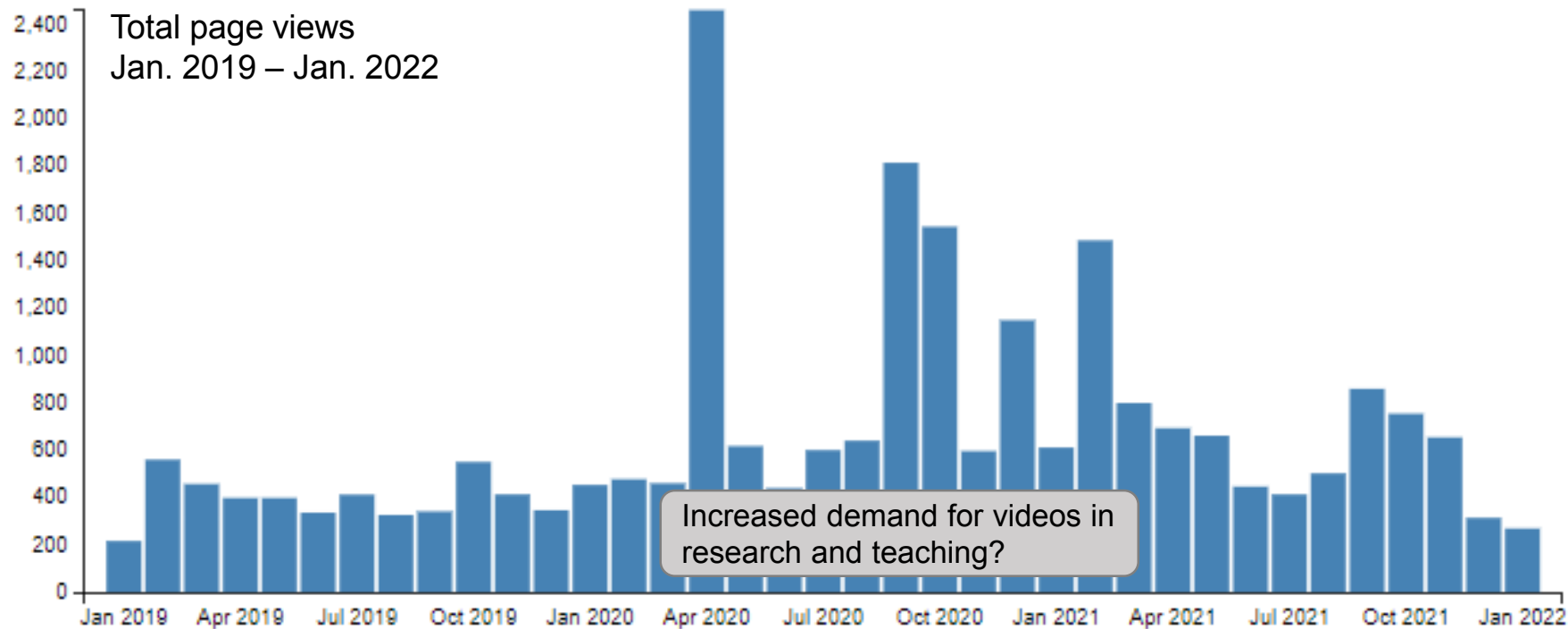
Psychology

**Open Access content: ~10%**

**Some OA [COVID-19 procedures](#)**

Check available content:  
[www.jove.com/access](http://www.jove.com/access)

# JoVE Usage at University of Bern



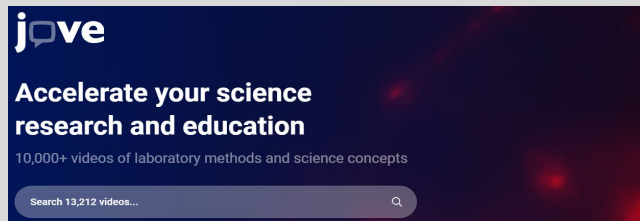
# Research

## How to access JoVE journal articles

### Via publisher's website

[www.jove.com/journal](http://www.jove.com/journal)

- Broad, rather imprecise search
- Useful to find educational videos



### Via Scopus

[www.scopus.com](http://www.scopus.com), search for topic and source title

- Specific search, filter options (e.g., for OA)

### Via Browzine

[www.browzine.org](http://www.browzine.org)

- Search for specific years and issues

# Research

## How does a JoVE video article look like?

video (~10')

plus

written article

The screenshot shows a JoVE video article page. At the top left, it says 'JoVE Journal Bioengineering'. A message states 'You have full access to this content through JoVE'. The video player shows a laboratory setting with a play button in the center. To the right of the video player, there are buttons for 'ARTICLE' (highlighted with a red circle), 'EMBED', 'ADD TO PLAYLIST', and 'USAGE STATS'. Below these are social media icons for Twitter, Facebook, LinkedIn, and YouTube, along with a star icon and '21,600 Views'. A 'Related Videos' section lists several other articles with video thumbnails and titles: 'Mesenchymal Stromal Cell Culture and Delivery in Autologous Conditions: A Smart...', 'Fabrication of Extracellular Matrix-derived Foams and Microcarriers as...', 'Combination of Microstereolithography and Electrospinning to Produce Membranes...', 'Two Methods for Decellularization of Plant Tissues for Tissue Engineering...', 'Stepwise Cell Seeding on Tesselated Scaffolds to Study Sprouting Blood Vessels', and 'Micropatterning and Assembly of 3D Microvessels'.

JoVE Journal  
Bioengineering

You have full access to this content through JoVE

ARTICLE

EMBED

ADD TO PLAYLIST

USAGE STATS

21,600 Views

Related Videos

Mesenchymal Stromal Cell Culture and Delivery in Autologous Conditions: A Smart ...

Fabrication of Extracellular Matrix-derived Foams and Microcarriers as...

Combination of Microstereolithography and Electrospinning to Produce Membranes...

Two Methods for Decellularization of Plant Tissues for Tissue Engineering...

Stepwise Cell Seeding on Tesselated Scaffolds to Study Sprouting Blood Vessels

Micropatterning and Assembly of 3D Microvessels

**Preparation of 3D Fibrin Scaffolds for Stem Cell Culture Applications**

DOI: 10.3791/3641

Kathleen Kolehmainen<sup>1</sup>, Stephanie M. Willerth<sup>2</sup>

<sup>1</sup>Department of Biology, University of Victoria, <sup>2</sup>Department of Mechanical Engineering, Division of Medical Sciences, University of Victoria

**Chapters**

0:05 Title

1:31 Day One: Making Fibrinogen Solutions and Overnight Dialysis

# Research

## How does a JoVE video article look like?

video (~10')

plus

written article

The screenshot shows a JoVE article page with the following elements:

- Navigation:** Abstract (selected), Protocol, Discussion, Materials, References. An "Automatic Translation" dropdown is visible in the top right.
- Category:** Bioengineering
- Title:** Preparation of 3D Fibrin Scaffolds for Stem Cell Culture Applications
- DOI:** 10.3791/3641 | **Published:** March 2, 2012
- Authors:** Kathleen Kolehmainen<sup>1</sup>, Stephanie M. Willerth<sup>2</sup>
- Affiliations:** <sup>1</sup>Department of Biology, University of Victoria, <sup>2</sup>Department of Mechanical Engineering, Division of Medical Sciences, University of Victoria
- Summary:** This work details the preparation of 3D fibrin scaffolds for culturing and differentiating pluripotent stem cells. Such scaffolds can be used to screen the effects of various biological compounds on stem cell behavior as well as modified to contain drug delivery systems.
- Abstract:** Stem cells are found in naturally occurring 3D microenvironments *in vivo*, which are often referred to as the stem cell niche<sup>1</sup>. Culturing stem cells inside of 3D biomaterial scaffolds provides a way to accurately mimic these microenvironments, providing an advantage over
- Video Player:** A video thumbnail with a "Play Video" button is shown on the right side.
- Share and Download Options:** Social media icons (Twitter, Facebook, LinkedIn, YouTube, Email, Star), "PDF", "DOI", and "DOWNLOAD MATERIALS LIST" buttons.
- Cite this Article:** Kolehmainen, K., Willerth, S. M... More. Options for "Copy Citation" and "Download Citation" are provided.



# Research

## How to publish with JoVE

[www.jove.com/authors/publication](http://www.jove.com/authors/publication)

### Publication process

Manuscript preparation and submission

Editorial review

Peer review



Video production

by JoVE videographers (or authors)



Publication and indexing

### Costs

Regular publication fee: \$1,400

(same for JoVE and author produced videos)

Additional costs for OA: + \$2,500



# Education

## JoVE educational contents at Uni Bern

Research +

Education -

All

Basic Biology

**Advanced Biology**

Chemistry

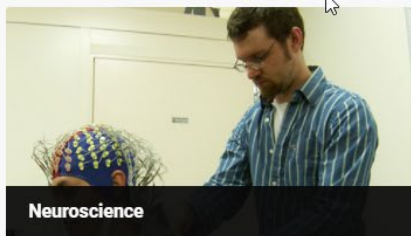
Environmental Sciences

Physics

Engineering

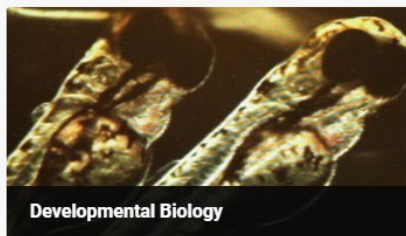
Clinical Skills

Psychology



**Neuroscience**

This collection provides an introduction to the field of neuroscience, exploring five major branches of study: neurophysiology; neuroanatomy; cell and molecular neuroscience; behavioral neuroscience; and developmental neuroscience.



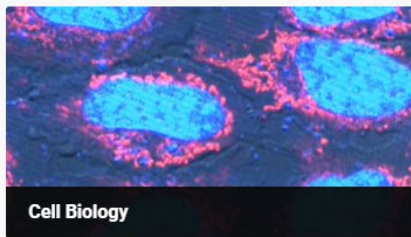
**Developmental Biology**

This collection introduces the field of developmental biology and cover five areas: developmental genetics; molecular developmental biology; stem cell biology; organogenesis; and aging and regeneration.



**Genetics**

This collection focuses on genetics and incorporates five broad subdisciplines: the genetics of individuals and populations; genetics and disease; gene expression; epigenetics; and genetic engineering.



**Cell Biology**

This collection provides a glimpse into the field of cell



**Immunology**

This collection covers many state-of-the-art techniques of



**Microbiology**

This collection demonstrates the key tools of

# Education

## Support for lecturers

### Faculty resource center

- Guides for setting up online courses and remote teaching with JoVE
- Assistance in finding the right videos for your courses:  
[customersuccess@jove.com](mailto:customersuccess@jove.com)

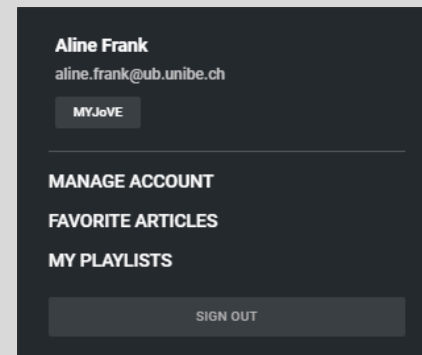
### Use a JoVE account

- Play lists
- Manage favorites

### JoVE Blog

News, tips and tricks, also for teaching

[www.jove.com/about/blog/](http://www.jove.com/about/blog/)



# Summary

## Pros and Cons

### Why to use JoVE?

- + Learn and/or share experimental techniques
- Save time and money
- Enhance reproducibility
- Enhance visibility of your research
- + High-quality video production
- + Useful videos for online teaching and training

### Why not to use JoVE?

- Limited search and filter options
  - Difficult to find educational content at the right level
  - Costs for authors & libraries (double dipping)
  - Unsolicited submission requests
- There's an ongoing debate whether or not JoVE may be seen as a predatory journal, e.g., on [Academia](#) and [ResearchGate](#).

# What else?

## Alternative sources for scientific videos

### Research

Several journals offer video formats:

- [Current Protocols](#)
- [Journal of Medical Insight](#)
- Nature Protocols: [Protocol Exchange](#)  
(preprint server for protocols, not peer-reviewed)

... and others

### Education

[flashMOOCs](#) (Massive Open Online Courses), interactive teaching videos  
→ cooperation with iLUB

YouTube channels, e.g.,  
[ProtocolExchange](#)

Scientists' and research institutions' homepages

# Thank you for your attention

**Aline Frank, subject librarian for biology, University Library Bern**

Coffee & Bit(e)s spring 2021

[www.unibe.ch/ub/sciencelibrary](http://www.unibe.ch/ub/sciencelibrary)

➔ see «Coffee & Bit(e)» for lecture notes and video (uploaded within 1-3 days)

