

# The CoreMarketplace:

What it is, and how it increases your core's visibility in the research environment

Nate Herzog

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# CoreMarketplace Purpose:

"To raise visibility of Cores, their capabilities, and their roles in research"

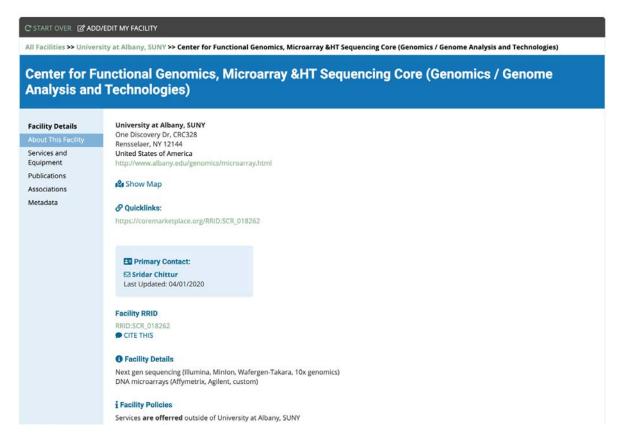


# CoreMarketplace Population:

719 Active Core Facilities Listed
201 Different Institutions Worldwide
12+ Countries



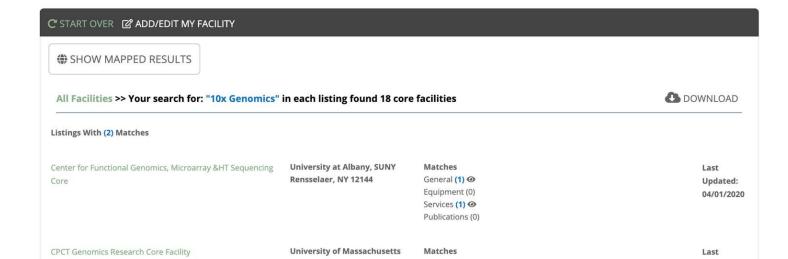
## WHAT DOES IT DO? (View)





## WHAT DOES IT DO? (Search)

2





## coremarketplace.org

## WHAT DOES IT DO? (Postings)

#### POSTINGS

Postings are requests for specific facility services or configurations to address research needs. Listed facilities may also post services offered to researchers.

Request or promote specific services, specializations, equipment, protocols, and more. Any requests will be forwarded to all matching facilities.



Service Offered: Example Offer (04/15/2021)	Contact: ☑ Nate Herzog	This is an example offer of facility services. If I had my email set as the contact information for a facility listing, this post would automatically (more)
Service Wanted: Example Posting (04/12/2021)	Contact: ☑ Anonymous	This is an example posting. This is for an example request for a genomics research inquiry. Beyond this description, I can assign specific services an (more)

Postings are active for two months after the date of posting



🗾 Nguyen NH, Driscoll HE, Specht CD (2008 jun). A molecular phylogeny of the wild onions (Allium; Alliaceae) with a focus on the western North Am



## WHAT DOES IT DO? (Edit)

C START OVER				
Editing: UVM-	Test Facility			
63 View Listing	Core Details	C START OVER  Editing: UVM-Test Facility		
General Information Core Details	Facility Type * Bioinformatics			
Contact Information Associated Profiles	Facility institution (If facility is a business, enter 'Private Company') * University of Vermorit	63 View Listing	Publications	
Facility Highlights Equipment Publications	Facility Name * UVM-Test Facility	General Information Core Details	Add publications to your facility listing. Publications are displayed on your listing and linked to PubMed. Added publications are included in search results.	
Services	It is recommended you predicate your name with your institution initials to keep it unique. (Ex: UIH-My Facility)  Facility Description*	Contact Information Associated Profiles	Add Publications  Add the names of persons whose publications you wish to include with this facility listing. This will link all publications in PubMed listing this person as an author.	
Metadata & Metrics Associations RRIDs & Identifiers Listing Metrics Marketplace Metrics	This is only a test  If this were a real facility, this section would contain a brief description of the facility and its capabilities.	Facility Highlights Equipment Publications	an author.  Names should appear as they are published. Usually this is last name, one space, and two initials.  Example: 'Lastname FM'  [Show Screenshot Example]	
Administrative Listing Settings	some stuff here  Are Services Offerred Outside of Your Institution? *	Services  Metadata & Metrics  Associations	Author Name (as listed in PubMed):  Show PubMed Publications	
	No Do you offer Consulting/Training Outside of Your Institution? *	RRIDs & Identifiers Listing Metrics Marketplace Metrics	Below are publications manually added to this listing	
	Yes	Administrative Listing Settings	Emerson SE, St Clair RM, Waldron AL, Bruno SR, Duong A, Driscoll HE, Ballif BA, McFarlane S, Ebert AM (2017 Jul). Identification of target genes do wnstream of semaphorin6A/PlexinA2 signaling in zebrafish. PMID: 28440030.	
			Ali S, Driscoll HE, Newton VL, Gardiner NJ (2014 Nov). Matrix metalloproteinase-2 is downregulated in sciatic nerve by streptozotocin induced dia betes and/or treatment with minorycline: implications for nerve regeneration. PMID: 25158309.	

erican center of diversity, PMID: 18226928.





### FINDING YOUR CORE

Multiple Doors To Your Listing



**SEARCH** 









Associated Websites







### MY CORE ISN'T AVAILABLE

Everything (and more) that wants to find your core listing



Research/ Researchers





Research/Science Websites











RRIDs, as well as creating visibility, are the tools for facility citations in publications

RRID = One tag that represents all your facility information, capabilities, and specialties

RRIDs more and more are required by publications to accurately cite research elements

RRID citations means it's much easier for your core to accurately get cited for participating in research

RRIDs create a link between an article and your core listing

## coremarketplace.org

Anatomy of the RRID syntax

Company or Service Provider



Vermont Advanced Computing Core (VACC),
Date Accessed, RRID:SCR 017762

<u>G</u>lobal <u>U</u>nique Persistent <u>Id</u>entifier



### WHAT CAN YOU DO?

- 1. List Your Facility
- 2. Keep Your Listing Updated
- 3. Join the ABRF CoreMarketplace working group.

Email: nsherzog@uvm.edu

# RRID syntax for a core facility



Vermont Advanced Computing Core (VACC), Date Accessed, RRID:SCR\_017762

Company or Service Provider

<u>G</u>lobal <u>U</u>nique Persistent <u>Id</u>entifier

Questions: abandrowski@ ucsd.edu

# RRID Author's Workflow

http://rrid.site

### SFARCH FOR RESOURCES



Home / Community Resources SEARCH Type in a keyword to search vermont core

Vermont University Vermont Advanced Computing Core Facility □

Cite this (Vermont University Vermont Advanced Computing Core Facility, RRID:SCR\_017762)

URL: http://www.uvm.edu/~vacc/

Resource Type: Resource, service resource, core facility, access service in Core provides access to com-Advanced Computing Core Facility, RRID:SCR\_017762 ■ SciCrunch: Registry (9) | Cite This | i View Source Information

### RRID portal includes:

Antibodies 2.5M Organisms 600K (>25 centers) Cell lines 120K Plasmids (Addgene) **BioSamples** Core facilities, software tools, instruments

Journal directs author to RRID portal



Author searches for a resource



Author copies "Cite This" text into manuscript



Paper is published



About 42 results (0.04 sec)

☆ 99 All 6 versions Import into BibTeX

RRID:SCR 014641

Erratum, GLP-1 Receptor in Pancreatic α-Cells Regulates Glua Glucose-Dependent Bidirectional Manner. Diabetes 2019; 68 Y Zhang, KR Parajuli, GE Fava, R Gupta, W Xu... - Diabetes, 2019 - Am Diabetes ... The following statement has been added to the Funding section to correct this: was performed with the support of the Network for Pancreatic Organ donors with RRID:SCR\_014641), a collaborative type 1 diabetes research project sponsored l

[HTML] Ectonucleoside triphosphate diphosphohydrolase-3 antib human pancreatic β cells for in vitro and in vivo analysis

DC Saunders, M Brissova, N Phillips, S Shrestha... - Cell metabolism, 2019 - Else JavaScript is disabled on your browser. Please enable JavaScript to use all the features on this page. Skip to main content Skip to article ...

☆ ワワ Cited by 24 Related articles All 10 versions Import into BibTeX

#### ACE2 and SARS-CoV-2 Expression in the Normal and COVID

I Kusmartseva, W Wu, F Syed, V Van Der Heide... - 2020 - papers.ssrn.com ... CEM), Imaging Core of NIH/NIDDK P30 DK097512 (CEM), gifts from the Sigm the Ball Brothers Foundation, and the George and Frances Ball Foundation (CEM for Pancreatic Organ donors with Diabetes (nPOD; RRID:SCR 014641) (5-SRA-2

☆ ワワ Cited by 5 Related articles All 7 versions Import into BibTeX



Recent content
About eLife
For authors

# Journal Workflow

eLife. 2016; 5: e14862.

doi: 10.7554/eLife.14862

The Jackson Laboratory

STOCK Erc 1 tm2.1Sud J

MOUSE STRAIN DATASHEET - 015830

TECHNICAL SUPPORT ~

▶ Email

PRICING & AVAILABILITY ~

Typically mice Service

# ELKS controls the pool of readily releasable synapses through its N-terminal coiled-coil

ELKS2, which are both present at limboliory active zones

In the long-term, it will be important to understand how the synapse-specific r control of RRP and P contribute to circuit function. Human genetic experimer mutations in *ERCI*/ELKS1 may contribute to autism spectrum disorders (Silva 2014), and it is possible that the pathophysiology arises from synapse-specific misregulation of neurotransmitter release.

#### Materials and methods

#### Mouse lines

All experiments using mice were performed according a conal guideline. Harvard University. Conditional double knockout and ce that remove the ELKS1α/2α proteins were generated by cross and conal knockout mice for ([Liu et al., 2014] RRID: IMSR JAX:015830) at a crc2 ([Kaeser et al., 2009] RRID: IMSR JAX:015831) genes. ELKS1α/2α cDKO mice were maintained at

#### Generation of antibodies

homozygote line.

(<sup>109</sup>LSHTDVLSYTDQ<sup>120</sup>). Peptides were synthesized and conjugated to keyh hemocynanin (KLH) via an N-terminal cysteine residue. Rabbits were inoculat Cocalico Biologicals with KLH-conjugated ELKS2 peptides and given booster every two weeks, and bleeds were collected every three weeks. Sera were scree protein samples harvested from cultured neurons, brain homogenate, and transf

ELKS2α specific antibodies were raised in rabbits using an ELKS2 peptide

Details

Detailed Description

DETAILS ~

**GENETICS** 

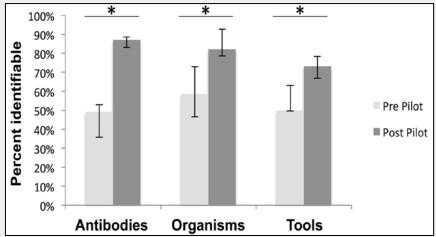
A 5'UTR exon and the first coding exon of the *Erc1* (ELKS/RAB6-interacting/CAST family member 1; ELKS1, Code these floxed mutant mice. Mice that are homozygous for this floxed allele are viable, fertile, normal in size and behavioral abnormalities. Normal expression of the targeted gene is demonstrated by the floxed allele.

DISEASE/PHENOTYPE ~

- Development
- Control Suggestions
- Selected References



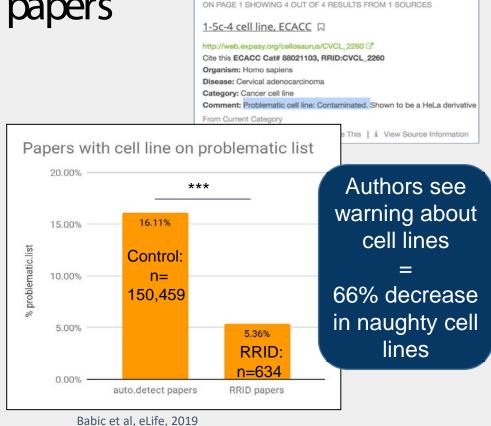
Using identifiers for resources makes
better (more reproducible) papers



Bandrowski et al, 2015a,b,c,d

Resource Identification Initiative

RRID = 40% increase in reagent findability



Resource Identification Portal

# **PUBLICATIONS**

American Association for Cancer Research

Home

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**Article Collections** 

For Authors

**Alerts** 

Search...

http://aacrjournals.org/improv-reprod

https://www.nature.com/nature-research/editorial-policies/reporting-standards

## Improving Reproducibility

To improve the reproducibility of published research articles, authors ar studies. These details include: identifiers for the reagents and tools use point in time, addition of this information is strongly encouraged, but no

### Research Resource Identifiers (RRIDs)

To uniquely identify critical biological reagents and software tools report AACR asks its authors to include unique searchable Research Resource Initiative. In addition to uniquely identifying each reagent and tool, these search engines to return all articles in which a resource was used. We I methods and providing critical data to help researchers identify suitable in their manuscripts.

### How to find an RRID

To obtain an RRID please visit the **Resource Identification Portal** and searching are provided below.

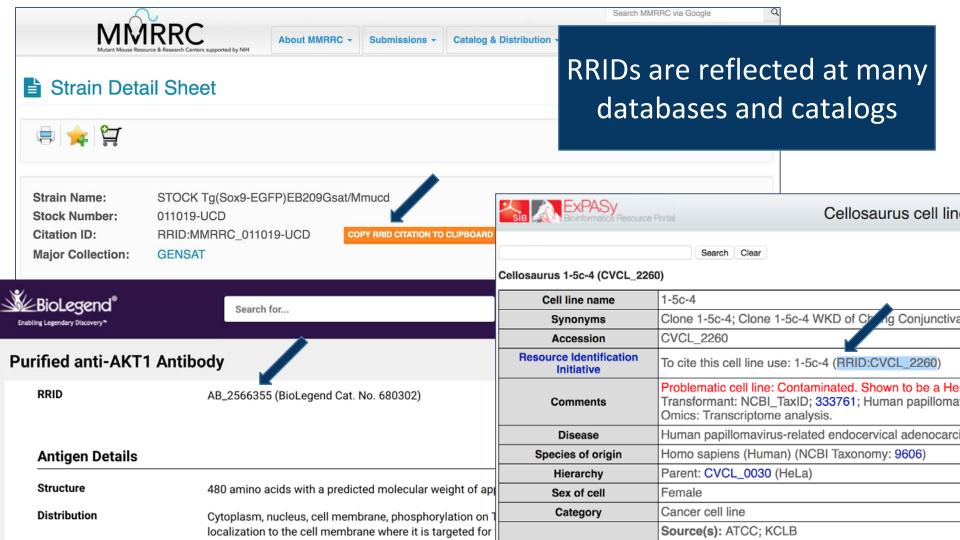


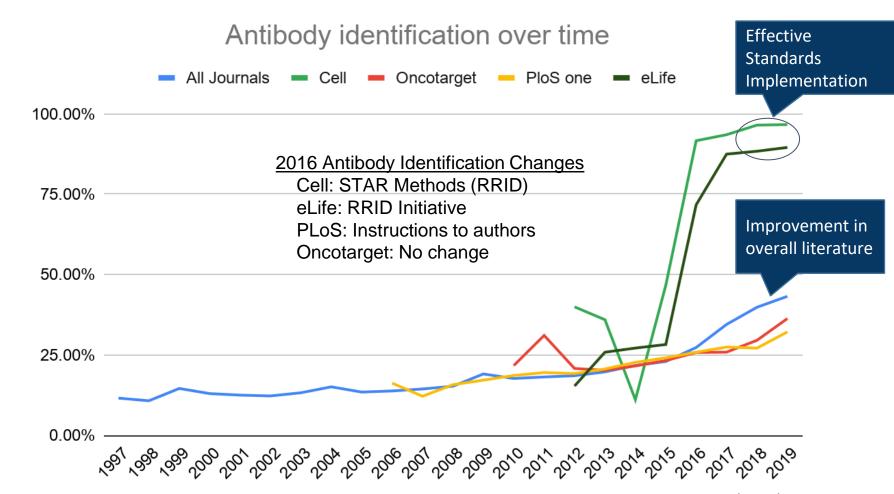
RRID found in >1200 journals Requested in >250, including: Nature, Science, Cell, & eLife

Nature Research supports the Resource Identification the aim of promoting unique, persistent identification key biological resources, including antibodies, cell line organisms and tools. We encourage authors to include identifiers provided by the Resource Identification Por example, Antibody: RRID:AB\_2140114; Organism:

how to include listed RRIDs or generate new RRIDs can the Resource Identification Portal.

RRID:MGI\_MGI:3840442), in the manuscript. More info





A story with data

So why would you want to use the RRID?

# Some facilities make the citation by RRID very



Browse Catalog -

Deposit -

Education

How to cite this plasmid

( Back to top ↑)

These plasmids were created by your colleagues. Please acknowledge the Principal Investigator, cite the article in which the plasmids were described, and include Addgene in the Materials and Methods of your future publications.

For your Materials & Methods section:

pMIG was a gift from William Hahn (Addgene plasmid # 9044 ; http://n2t.net/addgene:9044 | RRID:Addgene\_9044)

## nature

Explore Content > Journal Information > Publish With Us >

nature > articles > article

Article | Published: 11 November 2020

Article | Dublished: 11 Nevember 2020

Decoding myofibroblast origins in human kidney

Lentiviral overexpression of *NKD2* 

fibrosis

Christoph Kuppe, Mahmoud

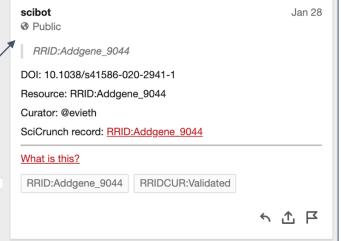
Nature 589, 281-286(2021)

16k Accesses 3 Citations

### **Abstract**

The human cDNA of *NKD2* was PCR amplified using the 3′ and 5′-CTAGGACGGGTGGAAGTGGT-3′. Restriction si into the PCR product using the primer 5′-CACTCGAGGCCACCATGTACCCATACGATGTTCCAGATACGGAATTCCTAGGACGGGTGGAAGTG-3′. Subsequent EcoRI and cloned into pMIG (pMIG was a gift from W. Hhttp://n2t.net/addgene:9044; RRID:Addgene\_9044). Rtransfection in combination with packaging plasmid pl plasmid 8449) and pseudotyping plasmid pMD2.G (pM

- 1. Author uses RRID
- 2. Paper is published
- RRID Robot "reads"
- PMID<>RRID Data is made public (available to use)





Plasmid Name ?



RRID:Addgene\_9044





### Plasmid Information ?

URL: http://www.addgene.org/9044

Proper Citation: RRID:Addgene\_

Bacterial Resistance: Ampicillin

**Comments:** Excised IRES hGFP-resistance gene (pac) in process. WRE element. The WRE element sequence reference.

**Expand All** 



### Usage and Citation Metrics ?

We found 2 mentions in open access literature.

View full usage report

#### Most recent articles:

Amir M, et al. (2018) REV-ERBα Regulates T17 Cell Development and Autoimmunity. Cell reports, 25(13), 3733-3749.e8. (PMID:30590045)

Braun CJ, et al. (2017) Coordinated Splicing of Regulatory Detained Introns within Oncogenic Transcripts Creates an Exploitable Vulnerability in Malignant Glioma. Cancer cell, 32(4), 411-426.e11. (PMID:28966034)

Check Google Scholar for all resource mentions.



# Addgene is fully registered with RRID syste

Addgene SCR 002037 Discussion: 1 Including twitter Resource Description Literature Mentions handle & ORCID **Fields** Status: Version 11 Up to date Curated Curated Rejected Reject resource s://www.facebook.com/addgene, l Social URLs -- Add new field --Addgene Resource Name Addgene Twitter A non-profit plasmid rei Description share high-quality plash Handle Addgene's mission is to accelerate research and d useful research materials and information. We fac-

## nature

Explore Content > Journal Information > Publish With Us >

nature > articles > article

RRID Robot tweets to Addgene and authors notified via AltMetrics

Facebook

Wikipedia

Re

Decoding fibrosis

Christoph Kuppe,

Nature **589**, 281–

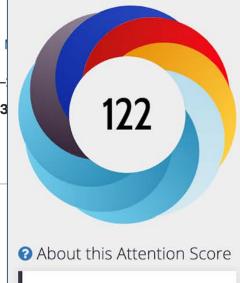
16k Accesses | 3

**Abstract** 

# Decoding myofibroblast origins in human kidney fibrosis Overview of attention for article published in Nature, November 2020

News

Blogs



In the top 5% of all research

RRID Robot
@RobotRrid

A paper using RRID:Addgene\_12259 (from @Addgene) was just published in Nature, see " in human kidney fib..." (https://t.co/8gBEvn6jHM): https://t.co/FGfvBw2C4p. Thank you for #ReproducibleResearch

Twitter

So far, Altmetric has seen 2/18 tweets from 168 users, with an upper bound of 2,561,502 followers

31 Jan 2021

SUMMARY

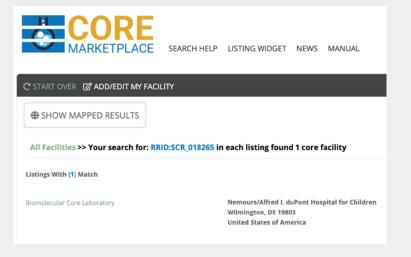
# Our goal for Core Facilities







We are or will be sharing information to reduce your workload (enter the data in one system and it populates relevant info in others)





Nemours Biomolecular (RRID:SCR_018265) http://nemours/essearch.org/cores/bol/	Core Facility	Login to edit this resou	rice or subscribe to new mentions.
researchers of University of Delaware and	Thomas Jefferson University. Resource	n molecular biology and genetics to Nemours clinicia for staff of Alfred I. duPont Hospital for Children, Ne erates according to policies set forth by federal CLIA	mours affiliates, COBRE / INBR
INFORMATION RELATIONSHIPS R	EFERENCED BY ANALYTICS S	DURCE	sta e
Keywords  Produitic genetics, molecular biology service, genetics, Next Generation Sequence (P.C., P.C., P.C	Resource ID SCIII_018265	Alternate IDs ABRF_117	Website Status Last checked up
Resource Type Pesource, service resource, core facility, access service resource	Availability Open	Synonym(s) Nemours Biomolecular Core Laboratory	Proper citation (Nemours Biomoiscular Core RRID:SCR_018265)

# Make citing your core easy! Sally,



Immunofluorescence staining protocol for co-staining of fetuin-A and GFAP in older human autopsy tissue via **Tyramide Signal Amplification** 

PLOS One

#### Miriam Heinen<sup>1</sup>

<sup>1</sup>RWTH Aachen University

1 Works for me



ABSTRACT

This staining was performed to sections (1 µm thickness) of for by a polyclonal rabbit-anti-huma a polyclonal goat-anti-rabbit Ale

...This protocol used the service of the Network for Pancreatic Organ Donors with Diabetes (RRID:SCR 014641)...

11070, RRID:AB\_2534114, dilution 1:300). Fetuin-A was detected by using a monoclonal IgG2a mouse-anti-human antibody (clone MAHS-1, dilution 1.0 µg/mL), raised against purified human fetuin-A in our laboratories. Antibody binding was detected by tyramide signal amplification using a secondary biotinylated polyclonal goat-anti-mouse antibody (Dako Cat# E0433, RRID:AB\_2687905, dilution 1:300) and a Tyramide Signal Amplification Kit (Life Technologies, Carlsbad, USA, T-20933). To minimize lipofuscin autofluorescence, sections were counterstained with Sudan Black (Sigma-Aldrich, Munich, Germany, 199664, dilution 0.3% in 70% ethanol, 5 minutes). Nuclei were stained with DAPI (Sigma-Aldrich, Munich, Germany D9542, dilution 0.25 µg/ml, 5 minutes). Sections were mounted with Immumount (Thermo Scientific, Waltham, USA, 9990402) and stored at 8°C in the dark.

EXTERNAL LINK

Blah blah blah Sincerely,



Using our core facility? Please cite Network for Pancreatic Organ Donors with Diabetes (RRID:SCR\_014641) in your manuscript.

Network for Pancreatic Organ Donors with Diabetes (RRID:SCR 014641)

A collaborative research project that supports nPQD approved diabetes investigators by freely providing rare and difficult-to-obtain tissues from Interested researchers are encouraged to apply to obtain nPOD tissues, or to request access to analyze cases in the nPOD Online Pathology si directly for more information.

REFERENCED BY

**ANALYTICS** 

39 high confidence out of 39 potential mentions found in the literature for this resource . Download all

The Polycomb-Dependent Epigenome Controls β Cell Dysfunction, Ded



Lu TT Cell metabolism 2018

betes\thttp://www.idrfnpod.org/; RRID:SCR 014641\nChemicals, Peptides, and Recomb

# Core Facilities in the Research Lifecycle

Research Ideas

Pre-award Data Collection

Proposal Preparation

Proposal Research Data Collection

Proposal Proposal Proposal Collection

Proposal Proposal Proposal Collection

- Resources for new opportunities
- Collaborate on equipment acquisition and management
- Faster training and research implementation
- Provide detailed methods section
- Help in new methods development and ideation

# How Can Cores Track Value in Research Lifecycle?



### **Shared Instrumentation Network**

RESEARCH AND INNOVATION OFFICE

Add Your Instrument Core Facilities

Core Facilities Grant Program Instruments: A - Z Instruments: by Dept/Institute/Campus

Contact Us

### **Core Facilities**

#### Filter by Department / Unit

- □ Biochemistry
- ☐ BioFrontiers Institute
- Chemistry
- College of Engineering and Applied Science
- CU Green Labs
- ☐ Department of Integrative Physiology (IPHY)
- Department of Mechanical Engineering
- Department of Psychology and Neuroscience
- ☐ Ecology and Evolutionary Biology (EBIO)
- Geological Sciences
- JILA
- Molecular, Cellular & Developmental Biology (MCDB)
- Renewable and Sustainable Energy Institute (RASEI)



**Biochemistry Cell Culture Facility** (RRID:SCR 018988)



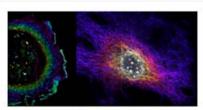
**BioFrontiers Sequencing Facility** (RRID:SCR 019308)



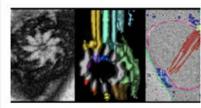
**BioCore: Shared Equipment** Program (RRID:SCR\_019302)



**BioKEM - BioChemistry Krios Electron Microscopy Facility** (RRID:SCR 019057)



**BioFrontiers Advanced Light** Microscopy Core (RRID: SCR\_018302)



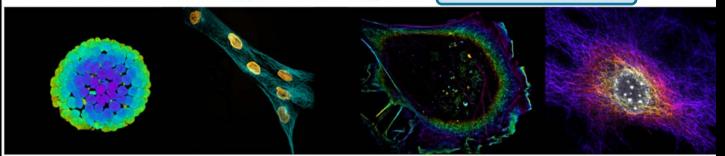
**Boulder Electron Microscopy** Services Core Facility (RRID:SCR\_001432)

### **Shared Instrumentation Network**

RESEARCH AND INNOVATION OFFICE

# Add Your Instrument Core Facilities Core Facilities Grant Program Instruments: A - Z Instruments: by Dept/Institute/Campus Contact Us

## BioFrontiers Advanced Light Microscopy Core (RRID: SCR\_018302)



The BioFrontiers Advanced Light Microscopy Core (BFALMC) is an open access user facility that serves the entire CU Boulder and local scientific community. BFALMC houses six different imaging systems that allow researchers to observe both microscopic and macroscopic objects, including 3D printed structures, tissues, organoids, cells and single particles. Beyond technology and data analysis, we focus on user education and assistance, guiding researchers along the entire investigation pipeline from concept to experimental design to data acquisition and analysis. We look forward to helping you with your research needs.



Joe Dragavon, PhD Director



Jian Tay, PhD Image Analysis Specialist

#### **Facility summary**

- \$ 303-735-6988 

  biof-imaging@colorado.edu 

  Website
- Location: JSCBB C350
- Technology focus: Optical microscopy
- Microscope equipment summary: Widefield, Confocal (laser scanning and spinning disc), Super Resolution (STORM), High Throughput Screening, FRET, TIRF, FRAP, Live and fixed cells
- Analytical tools summary: ImageJ/Fiji, MATLAB, Imaris, Cell Profiler, ICY
- Open to: CU Boulder, occasional external/industry use













SEARCH HELP LISTING WIDGET NEWS MANUAL

#### C START OVER ADD/EDIT MY FACILITY

All Facilities >> University of Colorado Boulder >> BioFrontiers Advanced Light Microscopy Core (Imaging (Cell, Molecular, PET, Translational))

### BioFrontiers Advanced Light Microscopy Core (Imaging (Cell, Molecular, PET, Translational))

#### **Facility Details**

#### About This Facility

Services and

Equipment

Publications

Associations Metadata University of Colorado Boulder

3415 Colorado Avenue Boulder, CO 80303

United States of America

https://bficores.colorado.edu/imaging-facility

**W** Hide Map

#### O Quicklinks:

https://coremarketplace.org/BFALMC

https://coremarketplace.org/RRID:SCR\_018302

E Primary Contact:

☑ Joe Dragavon

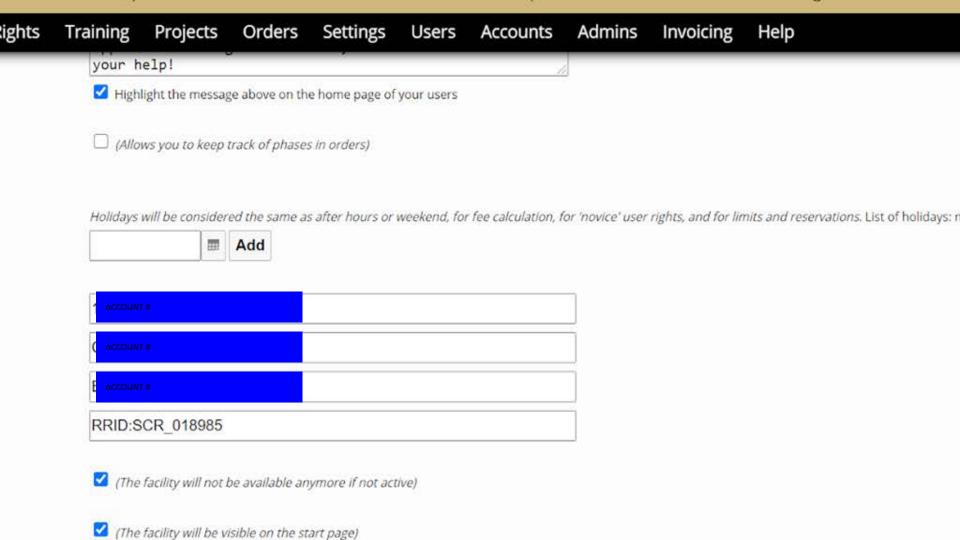
Last Updated: 10/22/2020

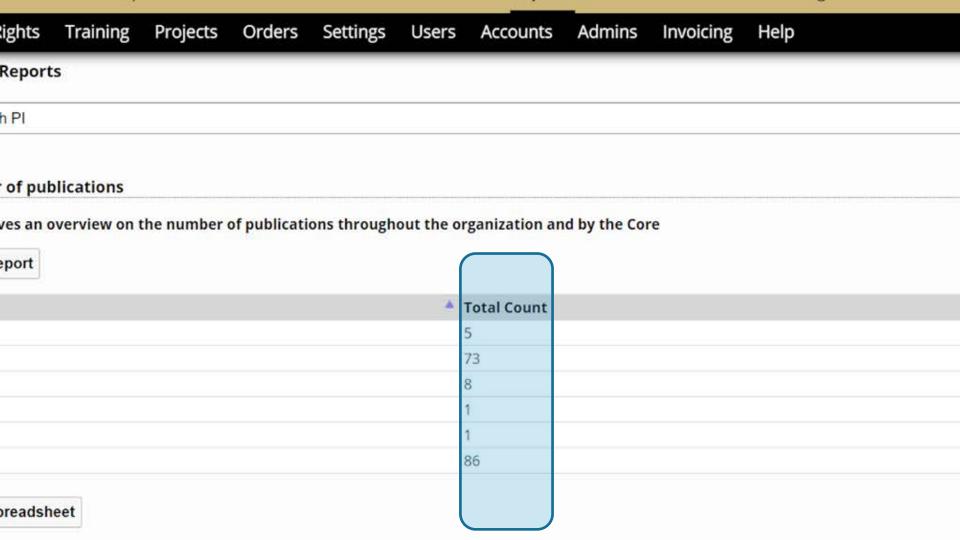


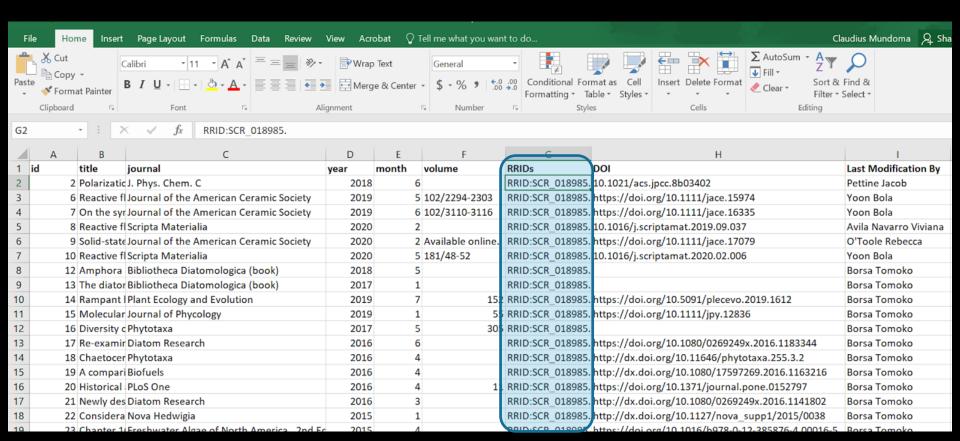
Map

Satellite



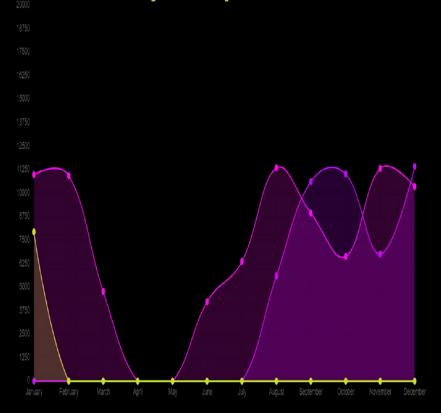








# Core Facility Reports Linked to RRIDs





# **Capturing ALL Metrics that Matter to Cores**

ORCID

ORCID Open Researcher and Contributor Identification
 Captures Researcher productivity

RRIDs

- **RRID** Research Resource Identifier
- Captures Productivity (publications) of the Core Facility

ORCID + RRID  Goal Captures all the metrics that matters to Core + researcher productivity in one place





To make it easy for your users to cite you properly!

To put RRIDs onto <u>your</u> webpage To put RRIDs into <u>your</u> protocols.io

To ask your users to add RRIDs to manuscripts

Comments / Thoughts: <u>abandrowski@ucsd.edu</u> nsherzog@uvm.edu