

# Introducing BioC Asia

Kozo Nishida

You can download this slide from

[https://github.com/AsiaR-community/2022-bioCasia\\_targets](https://github.com/AsiaR-community/2022-bioCasia_targets)

## (My message / the purpose) of this talk

- There is also an all-Asian level (bioinformatics) R conference / community (called BioC Asia).
- The situation for BioC Asia and AsiaR are very similar.
  - Is there anything AsiaR can learn from BioC Asia?
- If you get an idea, share it with AsiaR community!
  - And you should organize an event for it!

# What is BioC Asia?

- BioC Asia is **Bioconductor's** annual conference in Asia.
- BioC Asia 2020 received R consortium support.

[An R Consortium blog article](#)  
(Interview with a BioC Asia organizer)

## Bioconductor Asia Membership Increasing Due to Going Virtual

By R Consortium | May 28, 2021 | [Blog, Events](#)

R Consortium talked to Bioconductor Asia co-organizer Matt Ritchie about the upcoming conference (BioC Asia 2021), how COVID has affected attendance at the conference, and how they deal with multilingualism at their meetings.



# What is Bioconductor?

## Bioconductor

- is an **R** package repository (/project) for the **analysis of biological data**.
- has it's own R package repository **different from CRAN**.
- is a **grassroots** project.
- is trying to build a **diverse, collaborative, and welcoming** community.



### About Bioconductor

The mission of the *Bioconductor* project is to develop, support, and disseminate free open source software that facilitates rigorous and reproducible analysis of data from current and emerging biological assays. We are dedicated to building a diverse, collaborative, and welcoming community of developers and data scientists.

*Bioconductor* uses the R statistical programming language, and is open source and open development. It has two releases each year, and an active user community. *Bioconductor* is also available as [Docker](#) images.

### News

- *Bioconductor* [Bioc 3.15](#) Released.
- Nominations for [2022 BiocAward](#) now open. Deadline May 20th.
- *Bioconductor* [browsable code base](#) now available.
- See our [google calendar](#) for events,

### Bioc2022 Conference»

This is a hybrid in-person and virtual conference.

[Registration](#) Now Open! Limited in-person tickets available.

Scholarships to attend the conference are available. To apply please see [Regis](#)

Become a Bioconductor [Sponsor](#)

Nominate a Candidate for [Bioc2022 BiocAward](#)

See [Bioc2022 Conference Website](#) for more details

Abstract Submissions are now closed.

### Install »

- Discover [2140 software packages](#) available in *Bioconductor* release 3.15.

Get started with *Bioconductor*

- [Install Bioconductor](#)
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### Learn »

Master *Bioconductor* tools

- [Courses](#)
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- [Common work flows](#)
- [FAQ](#)
- [Community resources](#)
- [Videos](#)

<https://www.bioconductor.org/>

Bioconductor has its  
Slack, GitHub, events,  
learning materials, ...  
(all the links to them are in [bioconductor.org](https://bioconductor.org))

### community-bloc ▾

- Threads
- All DMs
- Mentions & reactions
- Drafts
- Saved items
- Slack Connect
- More
- Channels
  - # anvill
  - # bioc\_git
  - # bioc-builds
  - # bioc2021
  - # biocasia
  - # biocasia2020
  - # biocasia2021
  - # biocasia2021\_private
  - # biochubs
  - # biocverse
  - # biocwebsite
  - # biocworkshops
  - # calendar-events
  - # community-advisory-board

**#general** ▾ Link to join the slack team - <https://bioc-community.herokuapp.com/>

**SoniaGR** 7:35 PM  
 joined #general along with 7 others.

Wednesday, April 20th ▾

Thursday, April 28th ▾

**Lori Shepherd** 4:32 AM  
 Bioconductor 3.15 is released! See full release announcement: [https://bioconductor.org/news/bioc\\_3\\_15\\_release/](https://bioconductor.org/news/bioc_3_15_release/)  

👍 9
💡 10
🗨️ 21
🔖

5 replies Last reply 7 days ago

Monday, May 2nd ▾

**James Ward** 4:13 AM  
 joined #general along with Laura Marcos-Zambrano.


Yesterday ▾

**Krithika Bhuvanesh** 7:57 AM  
 I'm looking to pick someone's brain on how to factor strand information . Backstory : I have some processed genotype data from a very old SNP array. I'm trying to make it into a VCF file. Example in image. Should I simply get the rsID anno from the SNPLocs.Hsapiens.dbSNP144.GRCh37 BioC package , and factor in the strand information into the INFO column ?  
 Screen Shot 2022-05-04 at 6:38:59 PM.png ▾
 

GRCh37_pos	dbomp_rsid	array_probe_id	snp	lmm_strand
1:2076262089	rs12081383	rs12081383	(T/G)	BOT
1:2076264195	rs2764189	gga7627187	(T/C)	BOT
1:2076264918	rs20182006	kgp12805054	(A/G)	TOP
1:207628514	rs111303	kgp0905593	(A/G)	TOP

**Laurent Gatto** 4:39 PM  
 I just saw a new package submission, [goSenesen](#) , and I first thought it was a tribute to @Charlotte Soneson .  

👍 4
🔖




## Bioconductor

Software for the analysis and comprehension of high-throughput genomic data



<https://bioconductor.org>


[Overview](#) [Repositories](#) **253** [Projects](#) [Packages](#) [People](#) **2**

### Pinned




 **Contributions** Public


Contribute Packages to Bioconductor

 109  32




 **BIOCStickers** Public


Stickers for some Bioconductor packages - feel free to contribute and/or modify.

  109  74




 **bioconductor\_docker** Public


Docker Containers for Bioconductor - NEW!

 Shell  44  15



 **bioconductor.org** Public

Source code for the Bioconductor website

 HTML  14  33

 **BBS** Public

The Bioconductor Build System

 **Learn** 

### Events

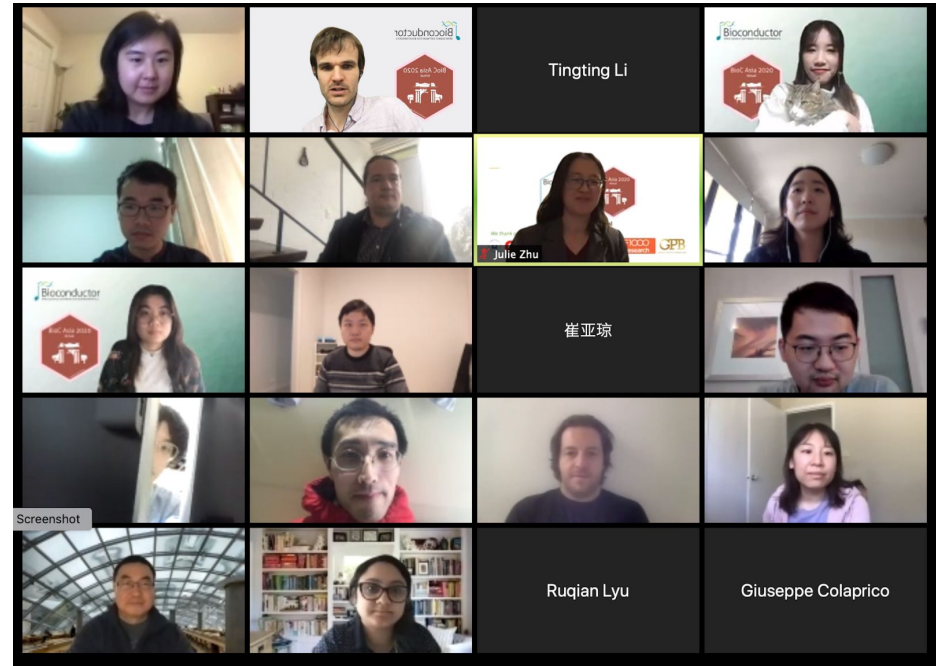
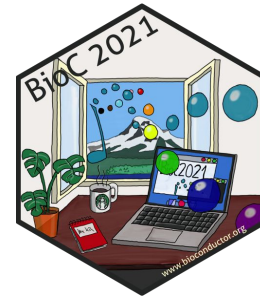
#### [single-cell RNA-seq analysis with R/Bioconductor](#)

06 - 10 June 2022 — virtual

- [Courses](#)
- [Education and Training](#)
- [Support site](#)
- [Package vignettes](#)
- [Literature citations](#)
- [Common work flows](#)
- [FAQ](#)
- [Community resources](#)
- [Videos](#)

# What is BioC [Asia]? (More details)

- BioC is held in three world regions (America [BioC], Europe [EuroBioC], Asia [BioC Asia])
- BioC Asia is relatively new and small group compared to other regions.
- Due to the pandemic, BioC has been held virtually in the last few years.



# Contents of BioC [Asia]

- Talks (about methodology, statistics, special interest group, ...)
- Package demo / Workshop (with R / Bioconductor packages)

A YouTube video player interface showing a video titled "Strategies to build a strong diverse AsiaR community". The video is from the channel "Bioconductor" and has 30 views as of Dec 3, 2021. The video content shows a black screen with white text that reads "Strategies to build a strong diverse AsiaR community" and yellow text that reads "#day3\_2-janani BioC Asia 2021". The video player includes standard controls like play, pause, and volume, and a "SUBSCRIBED" button.

A YouTube video player interface showing a video titled "Dimension Reduction for Beginners: Hitchhiker's Guide to Matrix Factorization and PCA". The video is from the channel "Bioconductor" and has 151 views as of Dec 3, 2021. The video content shows a webpage for a workshop titled "PCWorkshop". The webpage includes sections for "Instructor(s) name(s) and contact information", "Description", "Pre-requisites", "Workshop Participation", and "R / Bioconductor packages used". The video player includes standard controls like play, pause, and volume, and a "SUBSCRIBED" button.



# Who can organize BioC [Asia]?

- Anyone can be the BioC [Asia] organizer.
- If you want to be an BioC organizer, you can say so on the Bioconductor Slack workspace.

## ORGANIZERS

### Organizing committee



Jianqiang Sun



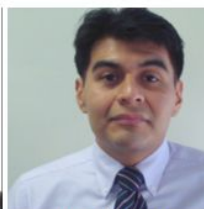
Koki Tsuyuzaki



Kozo Nishida



Mahmoud Ahmed



Marcel Ramos



Matt Ritchie



Peter Hickey



Satoshi Kume



Tom Kelly



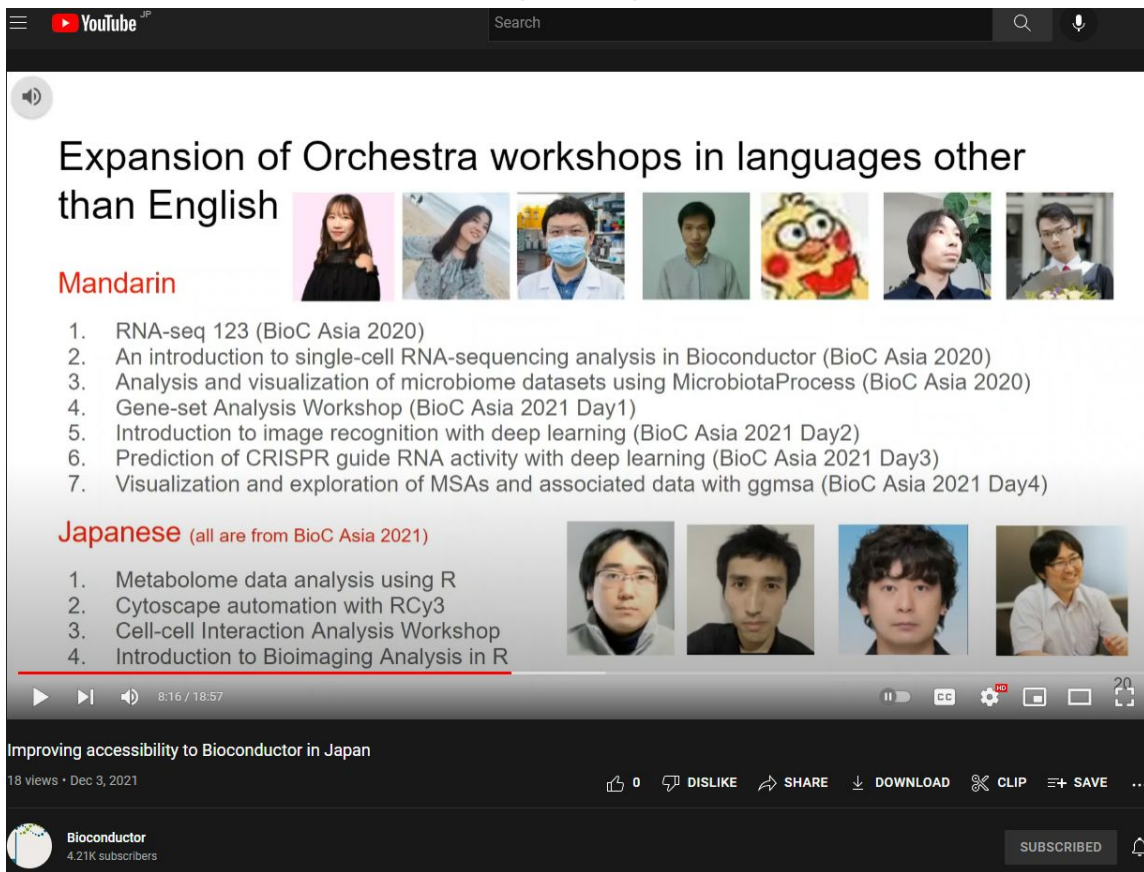
Xueyi Dong

<https://biocasia2021.bioconductor.org/organizers/>



# BioC Asia's challenge to overcome language barriers

- Asia has more diverse languages than other regions.
- It is difficult to expect everyone to use English.
- BioC Asia has been holding workshops in languages other than English (since 2020).



The image shows a YouTube video player interface. The video title is "Expansion of Orchestra workshops in languages other than English". The video is in the "Mandarin" language. The video content lists seven topics: 1. RNA-seq 123 (BioC Asia 2020), 2. An introduction to single-cell RNA-sequencing analysis in Bioconductor (BioC Asia 2020), 3. Analysis and visualization of microbiome datasets using MicrobiotaProcess (BioC Asia 2020), 4. Gene-set Analysis Workshop (BioC Asia 2021 Day1), 5. Introduction to image recognition with deep learning (BioC Asia 2021 Day2), 6. Prediction of CRISPR guide RNA activity with deep learning (BioC Asia 2021 Day3), and 7. Visualization and exploration of MSAs and associated data with ggmSa (BioC Asia 2021 Day4). Below the Mandarin section, there is a "Japanese" section, noting that all are from BioC Asia 2021. It lists four topics: 1. Metabolome data analysis using R, 2. Cytoscape automation with Rcy3, 3. Cell-cell Interaction Analysis Workshop, and 4. Introduction to Bioimaging Analysis in R. The video player shows a progress bar at 8:16 / 18:57. The video is from the channel "Bioconductor" with 4.21K subscribers. The video has 18 views and was uploaded on Dec 3, 2021. The video is marked as "CC BY-NC". The video is also marked as "SUBSCRIBED".

YouTube

Search

Expansion of Orchestra workshops in languages other than English

Mandarin

1. RNA-seq 123 (BioC Asia 2020)
2. An introduction to single-cell RNA-sequencing analysis in Bioconductor (BioC Asia 2020)
3. Analysis and visualization of microbiome datasets using MicrobiotaProcess (BioC Asia 2020)
4. Gene-set Analysis Workshop (BioC Asia 2021 Day1)
5. Introduction to image recognition with deep learning (BioC Asia 2021 Day2)
6. Prediction of CRISPR guide RNA activity with deep learning (BioC Asia 2021 Day3)
7. Visualization and exploration of MSAs and associated data with ggmSa (BioC Asia 2021 Day4)

Japanese (all are from BioC Asia 2021)

1. Metabolome data analysis using R
2. Cytoscape automation with Rcy3
3. Cell-cell Interaction Analysis Workshop
4. Introduction to Bioimaging Analysis in R

Improving accessibility to Bioconductor in Japan

18 views • Dec 3, 2021

Bioconductor  
4.21K subscribers

0 DISLIKE SHARE DOWNLOAD CLIP SAVE

SUBSCRIBED

# The situations for BioC Asia and AsiaR are very similar

- Both are all-Asia level conference / community .
- Both are communities that use the R language as the common language.
- Both are still new and small groups compared to the other world regions.
- Both need to overcome language barriers.

So, Is there anything AsiaR can learn from BioC Asia?

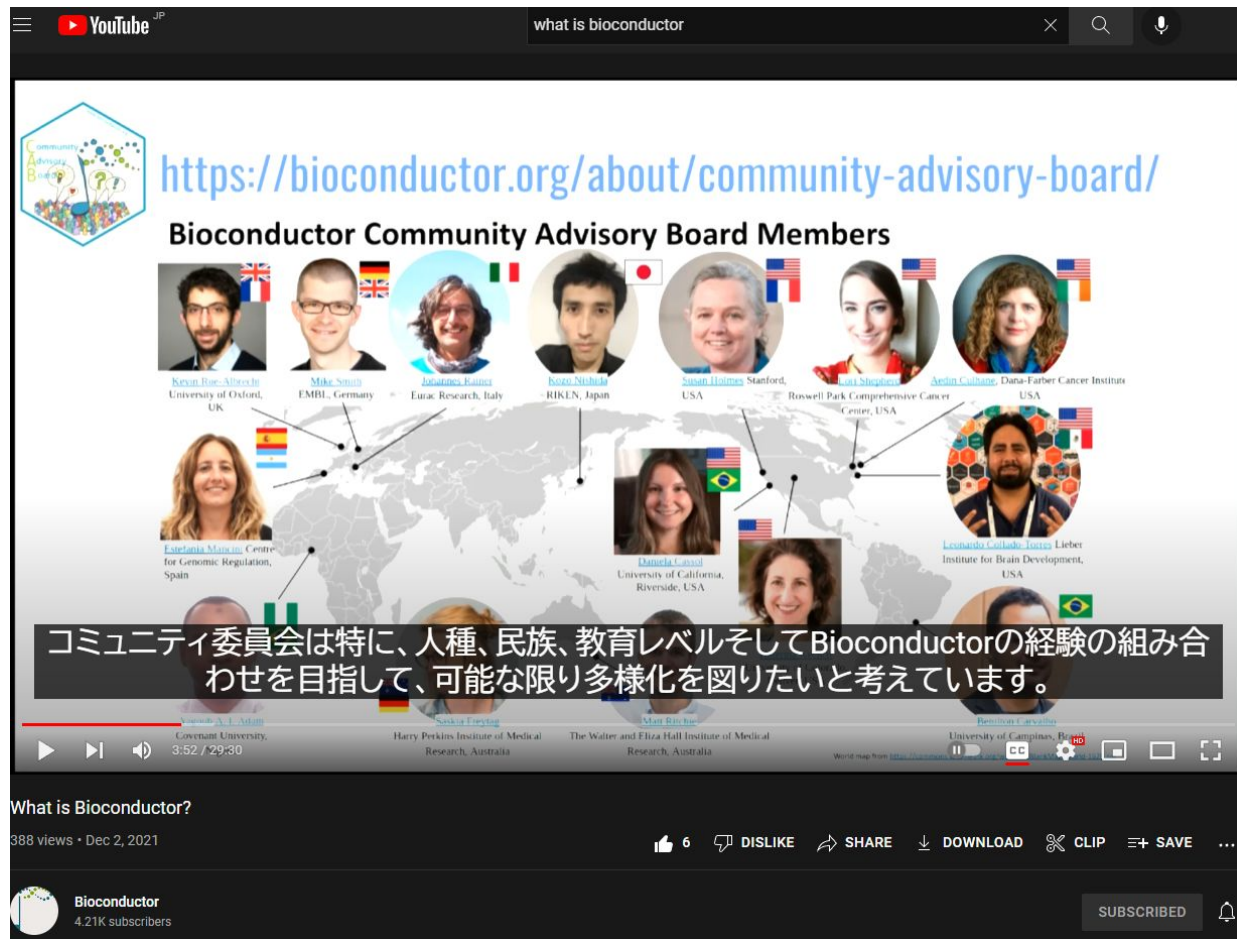
# Adding subtitles to AsiaR videos (an idea from BioC Asia)

1. Hold a workshop using some R package[s].
2. Record and share the workshop on YouTube.
3. Add subtitles in various Asian languages to the YouTube video.

YouTube JP what is bioconductor

<https://bioconductor.org/about/community-advisory-board/>

**Bioconductor Community Advisory Board Members**



キラン・ボット・アシュワシ University of Oxford, UK

マイク・スミス EMBL, Germany

ジュゼッペ・カッセル Euzac Research, Italy

イサオ・ニシハラ RIKEN, Japan

スザンナ・ホームズ Stanford, USA

レイ・シグナル Roswell Park Comprehensive Cancer Center, USA

アデル・カッセル Dana-Farber Cancer Institute, USA

エステル・マヌエル Centre for Genomic Regulation, Spain

ダニエル・カッセル University of California, Riverside, USA

レオナルド・カッセル Lieber Institute for Brain Development, USA

サビーナ・フレイザン Harry Perkins Institute of Medical Research, Australia

マン・ブー・ハック The Walter and Eliza Hall Institute of Medical Research, Australia

ベニチオ・カッセル University of Campinas, Brazil

コミュニティ委員会は特に、人種、民族、教育レベルそしてBioconductorの経験の組み合わせを目指して、可能な限り多様化を図りたいと考えています。

What is Bioconductor?

388 views · Dec 2, 2021

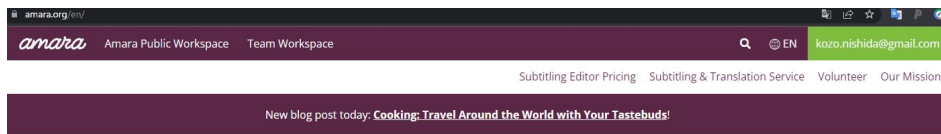
6 DISLIKE SHARE DOWNLOAD CLIP SAVE ...

Bioconductor 4.21K subscribers

SUBSCRIBED

# Amara helping to add subtitles to YouTube

- [amara.org](https://amara.org)
- Amara Public plan is free.
- Amara is easy to use.  
Anyone can use Amara to translate YouTube videos.
- I will try Amara to translate the recording of Joel's live-coding (after this talk) into Japanese.



## Easily Add Subtitles to Your Videos Online

**Subtitle Editor**  
Create video captions and subtitles, individually or as a team, using the online Amara Editor.

START SUBTITLING FOR FREE

**Subtitle Service**  
Order from our professional subtitle service, Amara On Demand.

GET STARTED

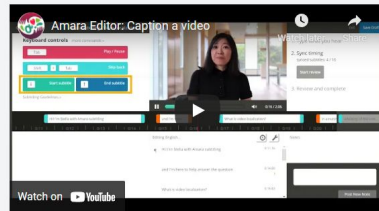


## Amara Subtitle Editor

Create and Edit Subtitles Online

The [multi-award winning Amara Editor](#), a cloud-based do-it-yourself solution with state of the art subtitling features, is the heart of the Amara subtitling platform.

Whether you work by yourself, as part of a team, manage a group of volunteers or external vendors, the Amara Editor combined with project and team management tools can help you to coordinate subtitle projects of all sizes.



Beep! Boop! I  
RA, but you c

# Summary of this talk

- Introduced Bioconductor and the conference / community (BioC) and its Asian region version (BioC Asia).
- The situation for BioC Asia and AsiaR is very similar.
  - Both have R as common language.
  - Both are still small but those development is expected.
  - Both need to overcome language barriers.
- Spreading the translation of AsiaR videos using Amara may be effective in promoting AsiaR.

# Do you have any ideas? Share it with AsiaR!

- Slack [https://bit.ly/join\\_asiaR\\_slack](https://bit.ly/join_asiaR_slack)
- Twitter [https://twitter.com/AsiaR\\_comm](https://twitter.com/AsiaR_comm)
- GitHub <https://github.com/asiar-community>

## Join us

- To get updates add your details [here](#).
- To join our active slack community click [AsiaR Slack](#). New member? Join the slack [here](#).
- To host future events update this [sheet](#).
- Sometimes we are on twitter follow us [there](#).