

# **BestPracticesSTBiocBook**

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# Welcome

**Package:** BestPracticesSTBiocBook **Authors:** First Last [aut, cre] **Compiled:** 2024-09-25  
**Package version:** 0.98.0 **R version:** R version 4.4.1 (2024-06-14) **BioC version:** 3.20  
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This is the website for the online book ‘**Best Practices for Spatial Transcriptomics Analysis with Bioconductor**’.

This book provides discussion and interactive examples on best practices for computational analysis workflows for spatial transcriptomics data, using the [Bioconductor](#) framework within R. The chapters contain details on individual analysis steps as well as complete example workflows, with interactive example datasets and R code.

The book is organized into several parts, including introductory materials, analysis steps, and example workflows.

Additional details on analysis workflows for non-spatial single-cell data as well as further introductory materials on R and Bioconductor can be found in the related book [Orchestrating Single-Cell Analysis with Bioconductor \(OSCA\)](#).

# Docker image

A Docker image built from this repository is available here:

[ghcr.io/lmweber/bestpracticesstbiocbook](https://ghcr.io/lmweber/bestpracticesstbiocbook)

## Get started now

You can get access to all the packages used in this book in < 1 minute, using this command in a terminal:

---

### Listing 0.1 bash

---

```
docker run -it ghcr.io/lmweber/bestpracticesstbiocbook:devel R
```

---

# RStudio Server

An RStudio Server instance can be initiated from the **Docker** image as follows:

---

**Listing 0.2** bash

---

```
docker run \  
  --volume <local_folder>:<destination_folder> \  
  -e PASSWORD=OHCA \  
  -p 8787:8787 \  
  ghcr.io/lmweber/bestpracticesstbiocbook:devel
```

---

The initiated RStudio Server instance will be available at <https://localhost:8787>.

## Session info

 Click to expand





# 1 Introduction

## 1.1 Overview

Bioconductor

## 1.2 Contents

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## 1.3 Scope and who this book is for

Preprocessing

Visium Data

## 1.4 Bioconductor

[Bioconductor](#)

## 1.5 Additional resources

- [Orchestrating Single-Cell Analysis with Bioconductor \(OSCA\)](#)
- [R for Data Science](#)
- [Data Carpentry](#)     [Software Carpentry](#)

- [detailed guide](#)  
[YouTube videos](#)
- [Visium Data Preprocessing](#)

## 1.6 Contributions

[GitHub issues](#)