

연구데이터 분석과정 (R프로그래밍)

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Chapter 1 Introduction 강의 개요

- 장소: 코빅 3층 전산교육장(1304호)
- 강사: 한국생명공학연구원 바이오합성연구센터 김하성
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1.1 References books 참고 교제

- Using R for Introductory Statistics by John Verzani
 - Free version of 1st Edition
 - <https://cran.r-project.org/doc/contrib/Verzani-SimpleR.pdf>
 - Second edition
 - <https://www.crcpress.com/Using-R-for-Introductory-Statistics-Second-Edition/Verzani/p/book/9781466590731>
- R for Data Science (<https://r4ds.had.co.nz>, <https://github.com/hadley>)
- Bioinformatics Data Skills by Vince Buffalo
(<http://2.droppdf.com/files/5aTvl/bioinformatics-data-skills.pdf>)
- First Course in Statistical Programming with R by Braun and Murdoch
(<https://www.cambridge.org/core/books/first-course-in-statistical-programming-with-r/C9F088122AB40517B07FA77F2F0FDE2F>)
- Introductory Statistics with R by Dalgaard
(http://www.academia.dk/BiologiskAntropologi/Epidemiologi/PDF/Introductory_Statistics_with_R__2nd_ed.pdf)
- Modern Applied Statistics with S by Venables and Ripley
(http://www.bagualu.net/wordpress/wp-content/uploads/2015/10/Modern_Applied_Statistics_With_S.pdf)
- 일반통계학 (영지문화사, 김우철 외)

1.2 References 참고 자료

- R 홈페이지 <https://www.r-project.org/>
- Rstudio 홈페이지 <https://www.rstudio.com/>
- Packages for biologists <https://www.bioconductor.org/>
- R 기본 문서들 (소개, 사용, 설치, 운영) <https://cran.r-project.org/manuals.html>
- R ebooks <https://bookdown.org/>
- Cheat Sheets <https://www.rstudio.com/resources/cheatsheets/>
- <https://resources.rstudio.com/>
- <http://shiny.rstudio.com/tutorial/>

1.3 Schedule 강의 계획

- Day1 - R/Rstudio/Statistics/Sequence basics
- Day2 - Bioconductor
- Day3 - dplyr and ggplot2
- Day4 - Case study