

```
library(dplyr)  
  
r-ladies_global %>%  
  filter(city = 'Melbourne')
```



# | TWITTER | WORKSHOP

A blue Twitter bird icon is positioned above the word 'TWITTER' in the title.



# Little guide

## EDIT IN GOOGLE SLIDES

Go to the **File** menu and select **Make a copy**.

You will get a copy of this document on your Google Drive and will be able to edit, add or delete slides.

## COLOR PALETTE

#181818

#D3D3D3

#88398A

#FFFFFF

#562457



# Hello!



I am Anna Quagliari

I am PhD student at WEHI with a love for R and  
twitter. You can find me @annaquagli.



I am Saskia Freytag

I am post-doc at WEHI with a love for R and  
twitter. You can find me @trashystats.



1.

# Why twitter?



**“** - *it's as if they drove a clown car into a gold mine and fell in.*

—Mark Zuckerberg

*(on his rival social network twitter and the potential of their collected data)*



2.

## Getting started



apps.twitter.com

Saskia Freytag | Twitter Application Management

Application Management

# Saskia Freytag

Details    Settings    Keys and Access Tokens    Permissions

Test OAuth

# Become a twitter developer and get an API

## Application Details

**Name \***

Saskia Freytag

Your application name. This is used to attribute the source of a tweet and in user-facing authorization screens. 32 characters max.

**Description \***

Revealing what your fav ~~celp~~ is thinking with in-depth data analysis

Your application description, which will be shown in user-facing authorization screens. Between 10 and 200 characters max.

**Website \***

<http://www.remembertochange.com>

## Get a twitter account

Apply for your twitter application at <https://apps.twitter.com>

# Now get started!



apps.twitter.com

Saskia Freytag | Twitter Application Management

Application Management

## Saskia Freytag

Details Settings Keys and Access Tokens **Permissions**

Test OAuth

### Application Settings

Keep the "Consumer Secret" a secret. This key should never be human-readable in your application.

Consumer Key (API Key) [REDACTED]

Consumer Secret (API Secret) [REDACTED]

Access Level Read and write ([modify app permissions](#))

Owner trashystats

Owner ID 766200832140468224

### Application Actions

[Regenerate Consumer Key and Secret](#) [Change App Permissions](#)

### Your Access Token

This access token can be used to make API requests on your own account's behalf. Do not share your access token secret with anyone.

Access Token [REDACTED]

Access Token Secret [REDACTED]

Access Level Read-only

Owner trashystats

# Keys, secrets and access tokens

Note your consumer key and secret

Generate access token

Note your access token and secret



# Set up direct link between twitter and R

- Create and store twitter authenticated credentials

```
library(twitteR)
library(ROAuth)
library(RCurl)
library(RJSONIO)

api_key <- 'yourapikey'
api_secret <- 'yourapisecret'
token <- 'youraccesstoken'
token_secret <- 'yourtokensecret'

setup_twitter_oauth(api_key,
api_secret, token, token_secret)
```



3.

## Searching twitter



The screenshot shows the Twitter Advanced Search interface. The search query is set to find tweets containing either "#rupaulsdragrace" or "#rpdr9". The results are limited to English language tweets from March 1, 2017, onwards.

**Words**

- All of these words
- This exact phrase
- Any of these words
- None of these words
- These hashtags
- Written in

**People**

- From these accounts
- To these accounts
- Mentioning these accounts

**Places**

- Near this place Location disabled

**Dates**

From this date  to

**Search**

**Always search  
twitter first and  
then set up R  
query**

```
tweets <-  
searchTwitter( "#rupaulsdragrace  
OR #rpdr9" ,  
lang = "en" , since = "2017-03-01")  
  
tweetsDF <- twListToDF(tweets)
```



Operator	Behavior
RuPaul's Queens	will find tweets containing both "Queens" and "RuPaul's"; not case sensitive
'RuPaul's Queens'	will find tweets containing the exact phrase "RuPaul's Queens"; not case sensitive
rupaulsdragrace -rpdr9	will find tweets containing "rupaulsdragrace" but not "rpdr9"
#rpdr9	will find tweets containing the hashtag "rpdr9"
from:RuPaul	will find tweets sent from Ru Paul
to:RuPaul	will find tweets sent to Ru Paul
@RuPaul	will find tweets referencing Ru Paul's account
RuPaul since:2014-08-25	tweets containing "RuPaul" and sent since 2010-08-25 (year-month-day)
RuPaul until:2014-08-22	will find tweets containing "RuPaul" and sent before 2010-08-25

## More search options and other queries

retweets returns retweets or users who retweeted a tweet

getTrends allows you to interact with the trend portion of the Twitter API



# Get user information and combine

- Find user information
- Change encoding if necessary
- Make data frame
- Combine data frames by screen name

```
screen_names <- unique(  
  as.character(tweetsDF$screenName))  
  
user_infos <- lookupUsers(screen_names,  
  includeNA = FALSE)  
  
lapply(user_infos, function (x)  
  Encoding(x$lastStatus$text)  
  <- "latin1")  
  
user_infosToDF <-  
  twListToDF(user_infos)  
  
combined_data<-merge(x=tweetsDF ,  
  y=user_infosToDF, by="screenName")
```



4.

## RuPaul's Drag Race Analysis



# #rupaulsdragrace

# #rpdr9







So Ladies Start  
Your Engines  
And May the  
Best Woman Win!