

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



# | TWITTER | WORKSHOP

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



# Hello!



I am Anna Quagliieri

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 "All of these words" and contains the hashtags "#rupaulsdragrace" and "#rpdr9". The results are filtered by "Written in English (English)". There are sections for "People" (accounts) and "Places" (near this place), both of which have their location feature disabled. The "Dates" section shows a range from "From this date 2017-03-01" to an empty "to" field. A "Search" button is at the bottom.

**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!