**INSTALLING RJDBC AND CONNECTING TO IRDB**

1. **Make sure dependencies for RJDBC are installed in R (RJava and DBI)**

$install.packages("DBI")

$install.packages("RJava")

Test success by calling library() on each of these packages.

\*In order to allow RJava to be installed and for the library to be called without errors, you might have to run the following shell command to allow RStudio to connect to Java Home with the help of a link:

sudo ln -f -s $(/usr/libexec/java\_home)/jre/lib/server/libjvm.dylib /usr/local/lib

1. **Download the Oracle Database JDBC driver**

Go to this link to download the driver: <http://www.oracle.com/technetwork/database/enterprise-edition/jdbc-112010-090769.html>

Accept the license agreement, save the ojdbc6.jar file to your machine, and know the location you’ve saved it to.

1. **Install the RJDBC package into R and call the library**

$install.packages("RJDBC")

$library("RJDBC")

1. **Create driver using the downloaded JAR file’s location on your system**

$driver <- JDBC("oracle.jdbc.OracleDriver", classPath = "/path/to/ojdbc6.jar")

1. **Create a connection to IRDB**

$conn <- dbConnect(driver, "jdbc:oracle:thin:@//flt-scan-irdb.era.nih.gov:1572/irdbprd", "link\_od\_pardi", "Yu8754$%$23jjKIB")

*\*General format for connecting to ANY oracle database:*

$conn <- dbConnect(driver, "jdbc:oracle:thin:@//hostname-or-ip:port/servicename-or-number", "username", "password")

1. **Run queries and use the database**

dbGetQuery(conn,'select \* from CG\_METADATA where SILVERCHAIR\_ID=36947')

Above is an example of using the dbGetQuery()function to pull all CG\_METADATA table fields for the row with Silverchair ID 36947.

dbListTables(conn)

The dbListTables() function will list all the tables in the specified database connection.