



RStudio Connect

An Analytics Publishing Platform Service

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BASc

OREGON CLINICAL & TRANSLATIONAL
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A photograph of a man and a woman on a rocky coastline. The man is standing on the left, wearing a dark jacket, shorts, and a hat, looking out at the ocean. The woman is sitting on a large rock in the foreground, wearing a brown jacket and sunglasses, looking towards the right. She has a bright green backpack. The background shows a cloudy sky and the ocean.

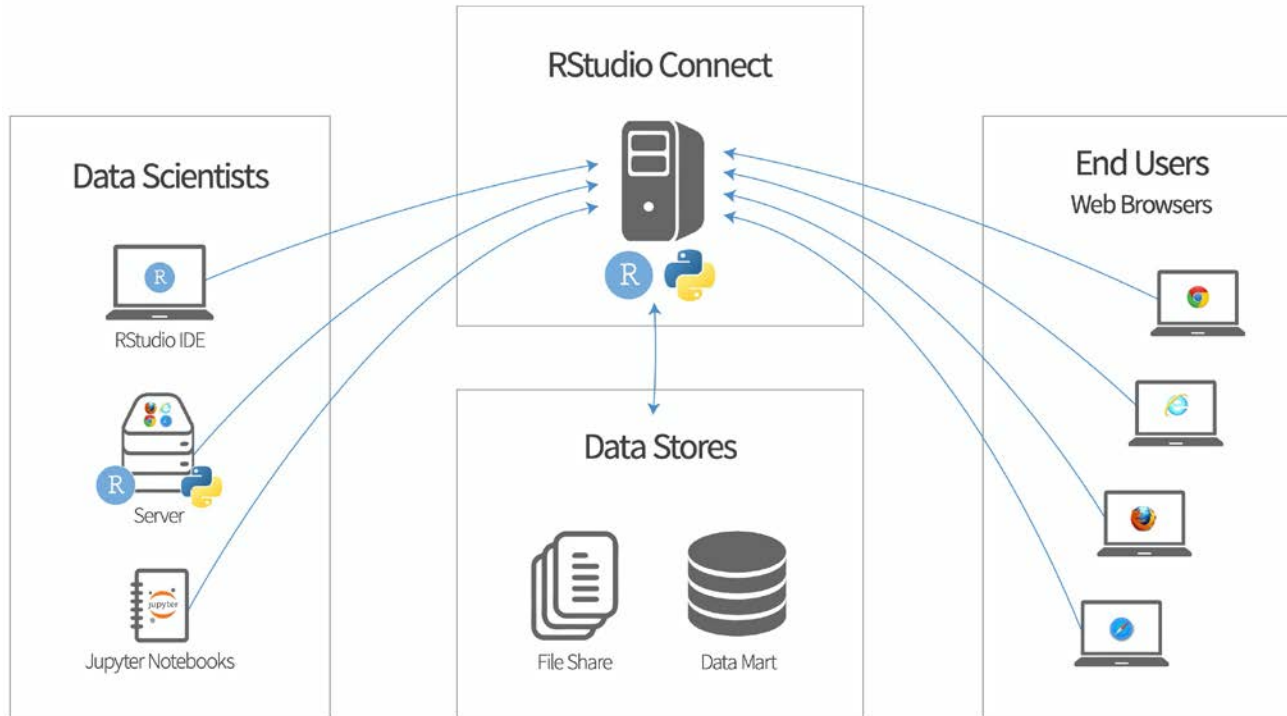
Agenda

- What is RStudio Connect (RSC)?
- What can you do with RSC?
- Examples and demonstration
- How to get RSC and support options
- Q & A

What is RStudio Connect?

- A self-service publishing platform for works created in R and Python
- Publish R-Scripts, RMarkdown Reports, Dashboards, Shiny Applications, Plumber APIs, Jupyter Notebooks, interactive Python content
- Publish directly from the RStudio IDE
- Permission levels include Anonymous, Viewer, Collaborator (e.g. Publisher)
- Content can be accessed without authenticating or can be secured by adding user accounts and assigning rights to the content

RStudio Connect Overview



OCTRI's RStudio Connect

- Hosted on OCTRI servers in data center west
- Available “on network” only
 - Citrix: viewing published content
 - On campus or VPN: required for publishing content
- 100 Licenses – “Named users”, not concurrent users

What can you do with RSC at OHSU?

- Publish reports, visualizations, and interactive dashboards using RMarkdown
- Schedule reports to run automatically
- Host Shiny Applications
- Publish datasets using the “pins” package
- Access internal databases (e.g. REDCap)

A misty forest scene with tall trees and a path, serving as a background for the title.

Examples and Demo

What we've been using at OCTRI

- COVID Studies Registry Dashboard
- REDCap Form Entry Completion Report
- OHSU/NIH Physician Scientist Dashboard
- Shiny Navigator Dashboard

COVID Studies Registry Dashboard

OHSU COVID-19 Studies

Reported By The Oregon Clinical and Translational Research Institute (OCTRI)
This report was last generated on: 14 October, 2020

This list is populated by researchers who have registered their studies using the [Covid19 Study Request Form](#).
If you have registered and don't see your study here, some additional information may be needed before it is published. Please note that this list does not indicate if a project is in development or

- The COVID-19 Review column indicates where the project is related to the COVID-19 Task Force review.
- EVP Status column indicates the status of the project related to Executive approval if needed.
- Projects still must obtain necessary approvals from regulatory offices prior to beginning work (IRB, IACUC, IBC, etc.).
- Note additional exception requests per the COVID-19 policies may also be needed. Please reference the special research review process [flowchart](#) to help guide you.
- Please note that grant submissions related to COVID-19 do not need any special approvals before submission.

If your project requires COVID-19 Task Force review and you have questions, you can contact Kathryn Goforth (goforth@ohsu.edu). If you have general questions about the data displayed here you can contact octri@ohsu.edu who can connect you to the appropriate person. For more information related to research during the COVID-19 outbreak please visit the O2 page: [OHSU Employee O2 Site](#)

Summary table of studies tracked to date (updated daily)

Number of Projects	Number of Investigators	Number of COVID-19 Clinical Trials
298	209	36

Detailed list of studies tracked to date (updated daily)

Searching and filtering by any term or keyword is available in the bar on the right-hand side of the table. To order the columns, click the column name.

● = Approved/Not necessary ● = Approval In Progress ● = Defer/Delay ● = Withdrawn By PI

PI/Primary Contact	Date Submitted	IRB Number	Title or Description	Developed of diagnostic testing for COVID-19 patients	Treatment of COVID-19 patients	Prevention of SARS-CoV2 infection	Natural history, observational, surveillance, epidemiologic	Basic science of SARS-CoV2	Study Type
Fialkowski, Elizabeth	2020-10-12	22166	Delays in Pediatric Inguinal Hernia Repair During the SARS-CoV-2 Pandemic	–	–	–	✓	–	Retrospective cohort
Thiele, Doria	2020-10-08	00022180	Implementing COVID-19 Testing Strategies in a Federally Qualified Health Center	–	–	–	–	–	N/A
Butler, Marilyn	2020-10-07	22164	A study to investigate the impact of the COVID-19 pandemic on paediatric cancer patients: an international, multicentre, observational cohort study (COVIDPaedsCancer)	–	–	–	✓	–	Prospective cohort

- Purpose: quickly needed to disseminate information about COVID research.
- Not very pretty – got the job done.
- Publicly available for all OHSU users on O2 as link.
- Connected to REDCap form.
- Internal version shared via e-mail with COVID task force members.

ON VPN or CITRIX: <https://octri-analytics.ohsu.edu/connect/#/apps/57/access>

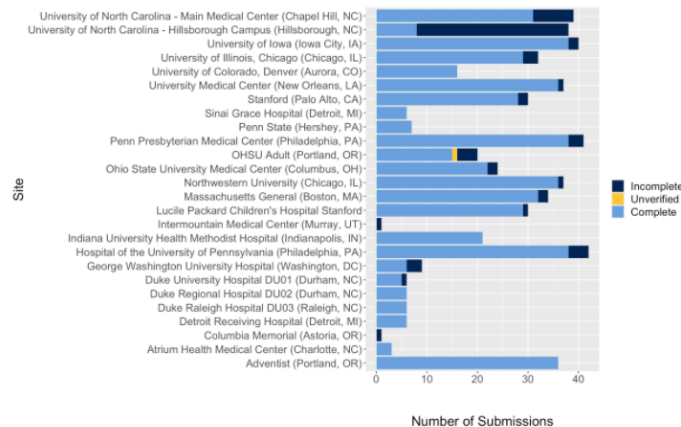
REDCap Form Entry Completion Report

COVID Site Response Completeness Report

This report was last updated:

07 October, 2020

Completion Status of Sites Entering Data



The chart above shows all the sites with data currently entered in the [Organization Responses to COVID-19 REDCap database](#). Sites absent from the figure above and table below are those that **have not entered any data into the database** as of the last updated date.

Details of Site Completion

The following table is searchable and sortable. Type in any phrase, word or status in the searchbar to the right to filter the data. Click the column names in order to sort by that column. Page sizing options are available at the bottom of the page. Details about dates and statuses are shown when the site dropdown is clicked.

Site	Responses by Date	Completeness
▶ Detroit Receiving Hospital (Detroit, MI) (6)	6	Complete (6)
▶ Massachusetts General (Boston, MA) (34)	34	Complete (32), Incomplete (2)
▶ University of Iowa (Iowa City, IA) (40)	40	Complete (38), Incomplete (2)
▶ University of North Carolina - Main Medical Center (Chapel Hill, NC) (39)	39	Incomplete (8), Complete (31)

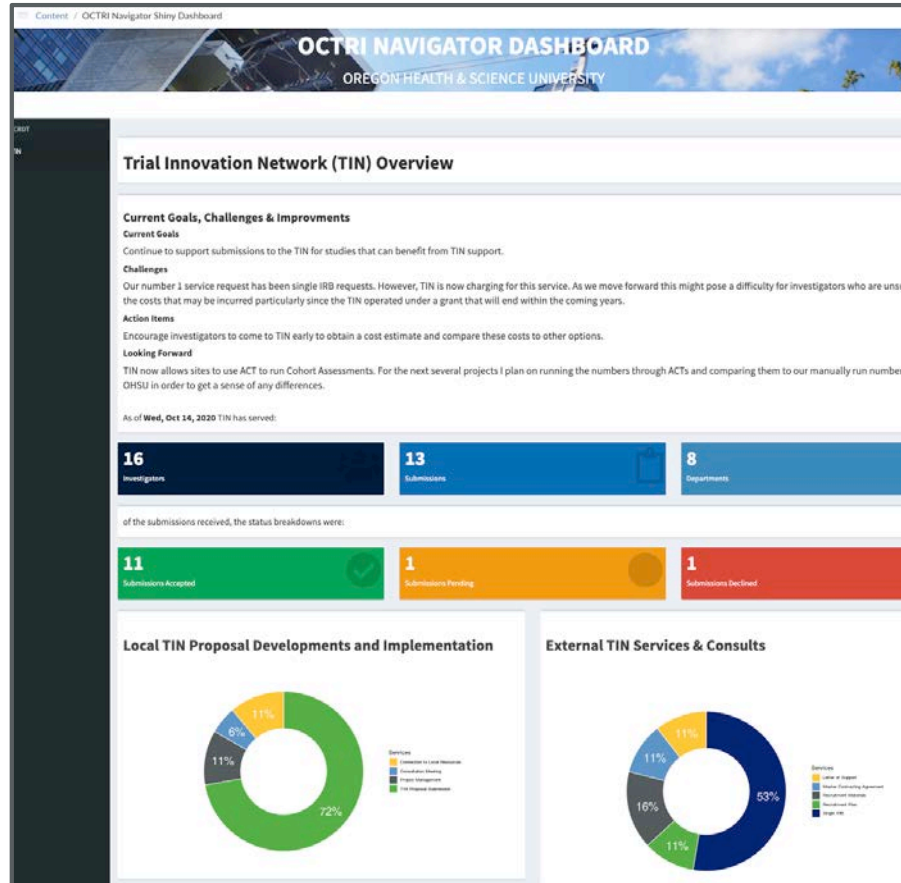
- Purpose: track the response of various hospitals to COVID-19 across the U.S.
- REDCap is not a reporting program.
- These tables pull in data from REDCap directly via the API.
- Shared as a link with team.
- Does not show any information other than what's been programmed.

OHSU/NIH Physician Scientist Dashboard



- Purpose: showcase figures from a publication in an streamlined way.
- Based on research published by Zell et. al., 2018
- “From bedside to benchmarks: A physician-scientist workforce dashboard for biomedical research institutions”
- Figures from that paper continue to be updated.
- Outlives the paper itself with continuing updated information.
- Easier to quickly get the gist of each figure and how the data was obtained.

Shiny Navigator Dashboard



- Purpose: Share information about projects and services in a database.
- OCTRI Navigators provide project guidance and support to investigators.
- Needed a way to keep track of services and projects constantly being added to their database.
- Presenting at standing meetings – share a link.
- Pretty and aggregated information

Live Demo

- Upload your RMD to RS Connect.
- Set the viewing permissions.
- Set the e-mail automation (or share the link).
- Work collaboratively on documents.

A photograph of a dense forest with tall, thin trees and a path leading through lush green undergrowth. A white rectangular box is overlaid in the center, containing the text "How to get all this goodness" in a blue, sans-serif font.

How to get all this goodness

How to access RStudio Connect

- Send an email request to octrihlp@ohsu.edu
 - Instructions will follow
 - CARS request is involved so allow some time
 - You can request two account types:
 - Viewer
 - Publisher

What Support is Available?

- OCTRI
 - Wiki space: <https://octri.ohsu.edu/wiki/display/ORC>
 - Basic support included with Publisher Account
 - 2 hrs consultation
 - Paid hourly support
- Peer to Peer
 - Microsoft Teams
- RStudio / Internet



Some Caveats to be Aware of

- Relatively new service, fairly complicated platform
 - Allow extra time for deployment issues
- External R package dependencies can be challenging and require consultation with OCTRI Informatics
- Minimize the need for multiple user accounts to save \$
- Support resources are somewhat limited, so allow time

“OCTRI Prime” Day (or FY)!

- New accounts fully subsidized for remainder of FY21
 - Annual account charges will apply beginning July 1, 2021
- Current Fee Schedule:
 - Basic/Viewer Account: \$217
 - Publisher Account: \$427



Thank You!

Questions?

OCTRI Informatics Research Support
octrihelp@ohsu.edu



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Extras

RStudio Connect Permissions

Category	Description	Anonymous Visitors	Viewers	Collaborators	Administrators
Content	View "Open Solo" Version	✓	✓	✓	✓
	View Content in Connect Dashboard		✓	✓	✓
	Change Access Controls*			✓	✓
	Assign Vanity URL				✓
	Change RunAs User				✓
Shiny Apps	Change Performance Settings			✓	✓
R Markdown Report	Have Content Emailed To Them	✓	✓	✓	✓
	Email Content to Themselves		✓	✓	✓
	View and Toggle Public Variants		✓	✓	✓
	View Parameters for Variants			✓	✓
	Change Parameters for Adhoc Reports			✓	✓
	Refresh Reports			✓	✓
	Save new Public Variants			✓	✓
	Save new Private Variants			✓	✓
	Schedule Variants			✓	✓
	Email Reports to Others			✓	✓
License	Count Against Named User License		✓	✓	✓