

# G-DOC Plus Launched a year ago

The next-generation research platform for translational research and precision medicine

- More than 1500 users
- > 10000 samples: patient samples and cell line data


## Data types in G-DOC Plus




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## Tools and workflows

Precision medicine




Explore medical images




Explore somatic mutations

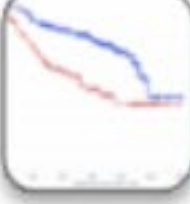
Translational research




Heat map viewer




Principal component analysis




KM plot using clinical data




KM plot using gene expression data



Group comparison




Plot single gene expression



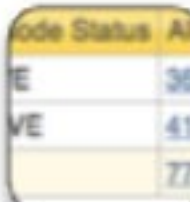
Chromosomal instability index analysis

Population Genetics




Explore 1000 genomes data


Other tools




Explore clinical data and create groups




Pathway Enrichment Using Reactome



Create Venn diagrams



Molecular target viewer



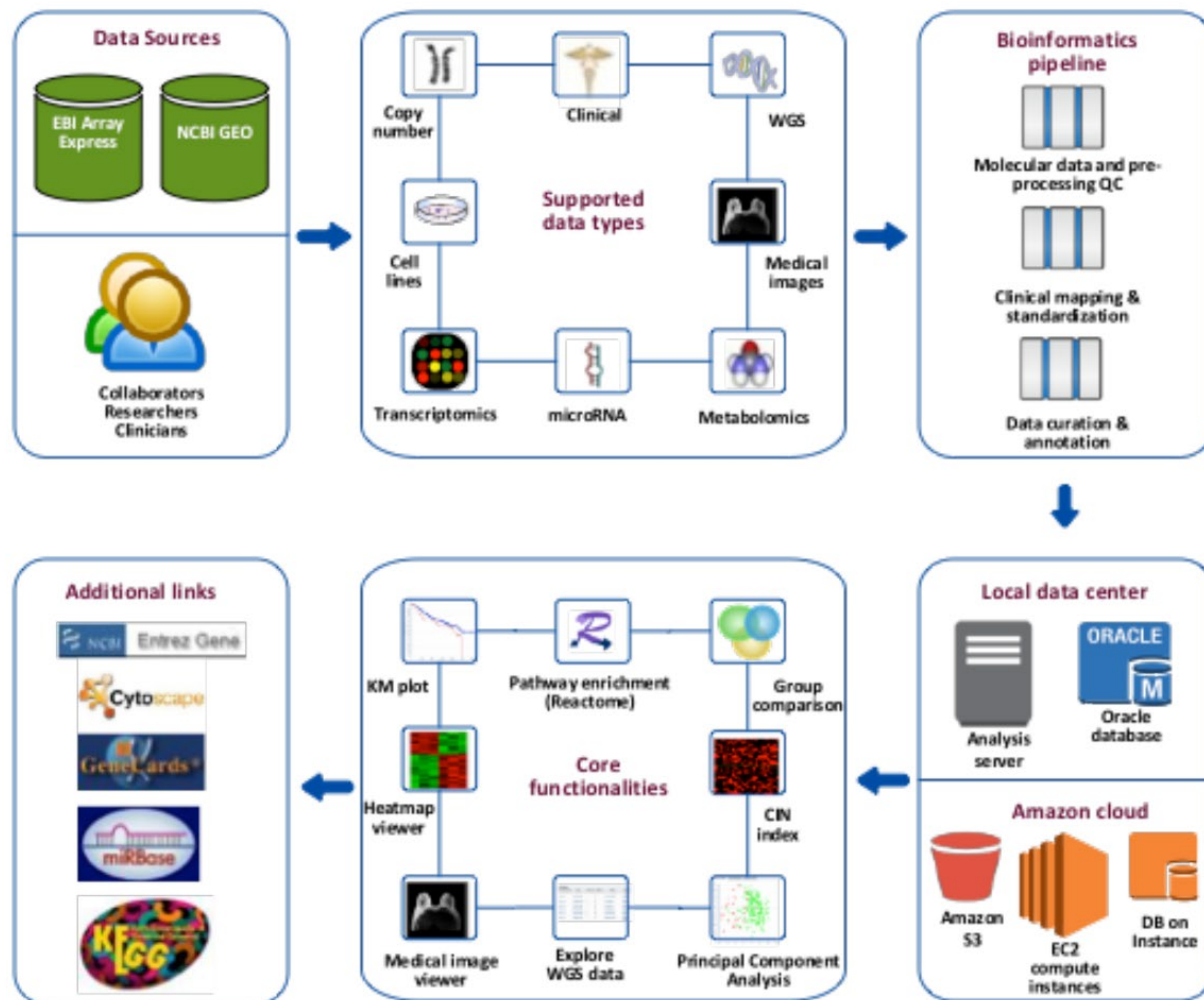
Genome browser

Ch	Gene	Functional Local
15	BRCA1	Coding sequence
15	BRCA1	Intronic
15	BRCA1	Coding sequence
15	BRCA1	Intronic
15	BRCA1	Coding sequence
15	BRCA1	Intronic
15	BRCA1	Coding sequence
15	BRCA1	Intronic

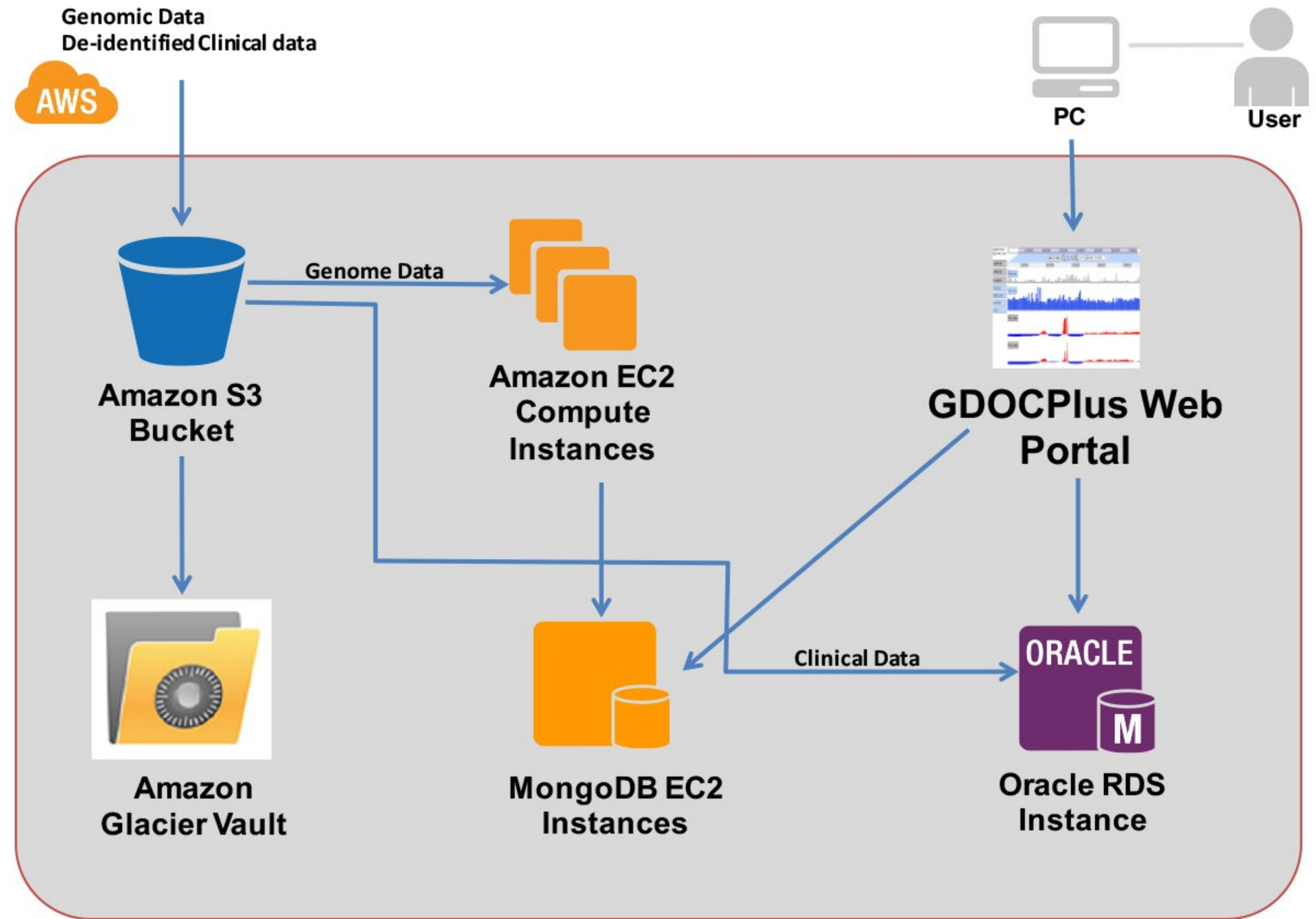
Start	Reference	Alleles	SN
23094	T	C	rs17999
4000	T	C	rs16942
4435	T	C	rs16943
4936	G	A	rs79992
1742	T	C	rs6503



# G-DOC Data Processing and Analysis workflow



# Next Generation Sequencing Big Data Analytics on the Cloud: powered by GDOC Plus



# What's next for GDOC?

New disease studies to be added to GDOC: Immunology

New Data Types: RNAseq

Additional Workflows: Precision Medicine

**IMPORTANT:** tutorials are available in public folder

<https://gdoc.georgetown.edu/tutorials>



# Next: Live demo session with G-DOC

Tutorials and webinar recordings are available in public Box folder:  
<https://gdoc.georgetown.edu/tutorials>

1. Register at login page:  
[gdoc.georgetown.edu](https://gdoc.georgetown.edu)
2. Log In with your username and password
3. Look around – become familiar with the G-DOC interface

The screenshot shows the G-DOC Plus Launch Pad interface. At the top is a dark blue navigation bar with the G-DOC Plus logo and links for Home, Studies, Lists, Analyses, Groups, Notifications, Study Options, and Help. A search bar is on the right. Below the navigation bar is a large blue header with the text "G-DOC Plus Launch Pad!". A light blue notification bar below the header says: "Welcome back, your last login was Mon Dec 1, 2014. You can check if you have been granted access to new lists or analyses since your last login". Below this is a welcome message: "Welcome! The G-DOC Plus Launch Pad is your one-stop resource for learning more about G-DOC and getting started on the platform." The main content area features six white boxes with icons and labels: "Studies" (red suitcase icon), "Lists" (open book icon), "Analyses" (chart icon), "Groups" (three people icon), "Notifications" (lightbulb icon with a "0" badge), and "Help me pick a study" (rocket icon). The footer contains copyright information: "Copyright © 2014 ICBI. All Rights Reserved | G-DOC Plus © 1.0 | RELEASE NOTES | powered by G-CODE | ICBI | G-DOC Plus © at LCCC" and social media icons for LinkedIn, Facebook, and Twitter.