WELCOME TO CRIS

Clinical Records Interactive Search system

1. INTRODUCTION

What is CRIS?

The Clinical Record Interactive Search (CRIS) is a software development which allows interrogation of SLaM's electronic clinical records for research purposes. It combines search technology with processes for deidentifing the records to protect the legal and ethical rights of service users whose data are stored in the system. CRIS allows the user to extract output into database formats (STATA, Excel, etc.) commonly used by researchers for further analysis.

Source data - the electronic Patient Journey System (ePJS)

SLaM's electronic clinical records system (ePJS) and the equivalent system in the IAPTus services managed by SLaM are the data sources for CRIS. If you are not familiar with these systems, the CRIS team are happy to sit down with potential users to orientate them. SLaM has been 'paper-free' since 2007 so all records are on ePJS in various formats – tick-boxes, dates, drop-down options, free text, document attachments, etc. CRIS allows access to all information on ePJS and/or IAPTus in all formats, apart from the identifiers which have been removed to preserve anonymity.

When ePJS was introduced, some data from earlier systems were imported so there are records dating to earlier than 2007, but earlier information (particularly at times when paper records were still being used) will be more basic.

Carrying out a CRIS project

To use CRIS successfully, all researchers will need to:

- Meet the necessary security requirements of data access, analysis and publication

- Understand the source data and how they are likely to be recorded

There are a number of governance requirements which need to be in place before work on CRIS data can begin. This guide is designed to help you through the process of getting started with your project and act as a reference for key information you will need at all stages of the project.

If you would like further information or to arrange a meeting to discuss your project with the team, please contact us at cris.administrator@kcl.ac.uk or visit our website:

www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/.

2. CRIS PROJECT APPLICATION PROCEDURE

In order to use CRIS for your research you will need to submit a CRIS project application which is then reviewed by the CRIS Oversight Committee for approval.

To submit an application please complete the form at the following link:

http://www.SLaM.nhs.uk/research/cris/cris-project-application

(Please note that you cannot save your application once you have started it so you will have to complete it in one go.)

When completing the application form please be aware that the lay summary will appear on the BRC website and therefore you should ensure that you are happy for this to be published.

Once your application has been submitted it is then reviewed by the CRIS Oversight Committee for approval. Applications are circulated to the committee once a week and the approval process takes about 2-3 weeks. If the Oversight Committee has any questions or requires further clarifications for your project, the process can take longer.
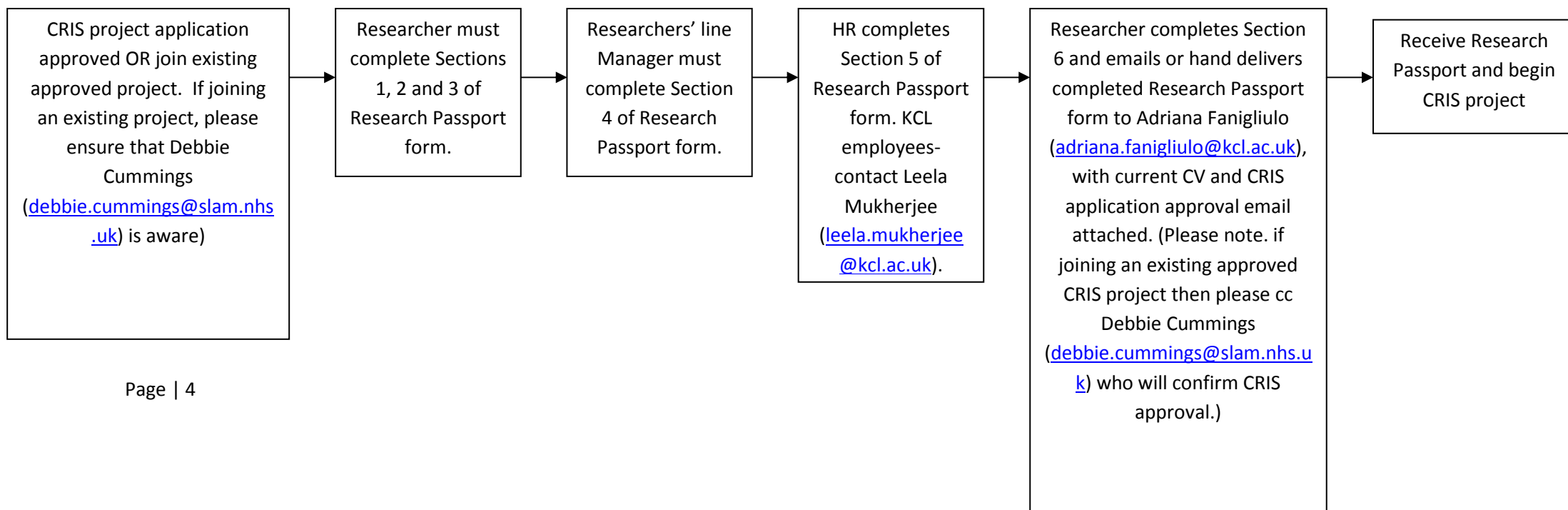
Once your project has been approved by the Oversight Committee you will receive an email from the CRIS Administrator confirming this.

3. SLAM CONTRACTS

The data within CRIS belongs to SLaM. In order to access CRIS every person on the project who will be involved in the data collection/ analysis will need a contract with SLaM (substantive or honorary), a research passport, or KHP Passport. What you need will depend on which data you are accessing (If you are planning on using data that has been linked with CRIS – please contact the CRIS administrator or CDLS Lead). A contract with SLaM ensures users are contractually obliged to adhere to relevant Trust policies regarding confidentiality and data protection. For those who require a Research Passport, please see the below process for obtaining one.
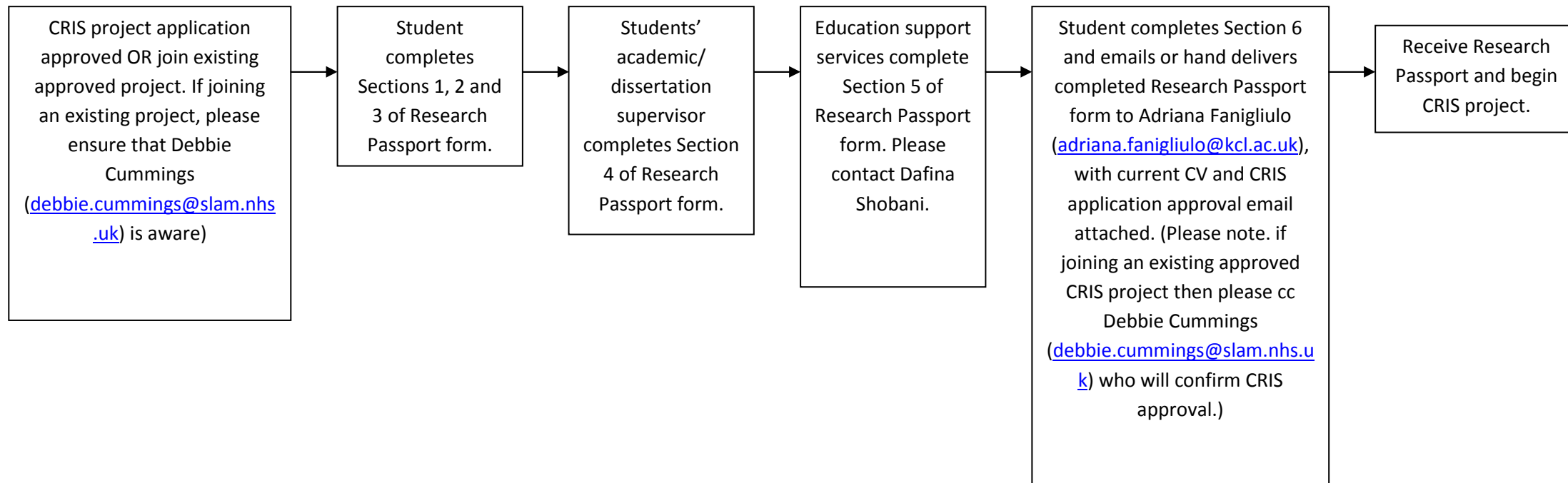
Researchers and Academics substantively employed by a UK university- Working on specific approved CRIS projects with **NO** linked data for a specified amount of time:

- Must have a Research Passport signed off by your university HR department (Leela Mukherjee in KCL HR for those employed by KCL) and issued by Adriana Fanigliulo in the R&D office.

- **DO NOT** require a current DBS check or occupational health clearance.

| CRIS project application approved OR join existing approved project. If joining an existing project, please ensure that Debbie Cummings (debbie.cummings@slam.nhs.uk) is aware) | → | Researcher must complete Sections 1, 2 and 3 of Research Passport form. | → | Researchers' line Manager must complete Section 4 of Research Passport form. | → | HR completes Section 5 of Research Passport form. KCL employees- contact Leela Mukherjee (leela.mukherjee@kcl.ac.uk). | → | Researcher completes Section 6 and emails or hand delivers completed Research Passport form to Adriana Fanigliulo (adriana.fanigliulo@kcl.ac.uk), with current CV and CRIS application approval email attached. (Please note. if joining an existing approved CRIS project then please cc Debbie Cummings (debbie.cummings@slam.nhs.uk) who will confirm CRIS approval.) | → | Receive Research Passport and begin CRIS project |

Postgraduate and PhD Students studying at KCL- Working on a specific approved CRIS project with **NO** linked data for a specified amount of time:

- Must have a Research Passport signed off by Dafina Shobani in Education Support Services and issued by Adriana Fanigliulo in the R&D office.

- **DO NOT** require a current DBS check or occupational health clearance.

| CRIS project application approved OR join existing approved project. If joining an existing project, please ensure that Debbie Cummings (debbie.cummings@slam.nhs.uk) is aware) | → | Student completes Sections 1, 2 and 3 of Research Passport form. | → | Students' academic/ dissertation supervisor completes Section 4 of Research Passport form. | → | Education support services complete Section 5 of Research Passport form. Please contact Dafina Shobani. | → | Student completes Section 6 and emails or hand delivers completed Research Passport form to Adriana Fanigliulo (adriana.fanigliulo@kcl.ac.uk), with current CV and CRIS application approval email attached. (Please note. if joining an existing approved CRIS project then please cc Debbie Cummings (debbie.cummings@slam.nhs.uk) who will confirm CRIS approval.) | → | Receive Research Passport and begin CRIS project. |

Linked Data - If you would like to access CRIS data linked to an external dataset, e.g. Hospital Episode Statistics (HES), Mortality data, etc., then please ensure that you have discussed this with the CRIS Administrator (debbie.cummings@slam.nhs.uk) before applying for a contract as the contract required can differ depending on the linked data you wish to access.

4. WHAT DO I NEED TO ACCESS CRIS?

Data within CRIS are subject to the same governance requirements as the identifiable data within the SLaM medical record (ePJS); therefore, data must remain within the SLaM firewall at all times. In order to access CRIS for your research you will need the following which should be obtained in the order presented:

A.   A SLaM username and log in

B.   Access to the CRIS specific T: drive

C.   An account with PJS CRIS front end/ IAPT CRIS front end/ SQL CRIS

The CRIS administrator is available Monday to Thursday 10-12 noon for assistance with:

- SLaM ID cards for BRC Nucleus access
- SLaM Network account set-up
- SLaM VPN Token application

Please contact Debbie Cummings – Debbie.cummings@slam.nhs.uk to arrange an appointment.

A.   SLAM Username and Log In

In order to obtain a SLaM log in you will need to send the CRIS Administrator debbie.cummings@slam.nhs.uk) a copy of your contract, i.e. KHP Passport, Research Passport, or SLaM Honorary contract. A copy will be sent to SLaM HR, for the purpose of their new profiling system, they will in turn give the SLaM service desk team the permission to issue you with a network account.

Once IT have created the new user account your SLaM username and log in details will be emailed to your SLaM manager who can then inform you of what these are.

B.   Access to the CRIS Specific T: Drive
The CRIS specific network drive (called "brc_cris") is a shared network drive where you will store all work related to your CRIS project.

When you begin your project, you can create your own folder within the T: drive to save your work in. You must make sure that all of your CRIS work is saved on the shared drive. This is to ensure that the data remains behind the SLaM firewall and is safe as the T: drive is backed up by SLaM IT.

To obtain access to this drive please email the CRIS administrator (debbie.cummings@slam.nhs.uk) with your SLaM username only, (not password).

Once access to this drive has been granted you can map the drive by doing the following:

1. Open My Computer (Start > Computer)
2. Click Map Network Drive
3. Under Drive select T:
4. In Folder type in \\achlys\shared\brc_cris
5. Make sure Reconnect at Login is checked and click Finish
6. You will need to map the drive on each new computer you use.

C.   CRIS Front End Account

To obtain a PJS CRIS/ IAPT CRIS front end account you will need to fill in a registration form on the respective site.

For PJS CRIS this is: http://cris.SLaM.nhs.uk

For IAPT CRIS this is: http://cris-iapt.SLaM.nhs.uk/login

Once you have completed the registration form, please email the CRIS administrator (debbie.cummings@slam.nhs.uk) who can authorise your account.

If you would prefer to work on CRIS through the SQL database please email the CRIS administrator (debbie.cummings@slam.nhs.uk) in order to obtain access.

5. WHAT DO I DO ONCE MY PROJECT IS APPROVED?

CRIS is a service and the team is available to answer any queries and offer guidance throughout your time using CRIS. As a first step once your project has been approved, please meet with Megan Pritchard, CRIS training and Development Lead (megan.pritchard@slam.nhs.uk), to discuss your search strategy.

Project Follow-up requirements

To ensure our record keeping and audit processes are up to date we require an update on the status of your project every 6 months. Our CRIS administrator will contact the named researcher on your project application via email for a brief summary of activity. **Please note, that this is a condition of project approval**. Failure to respond to these requests may result in your project approval being withdrawn and removal of your access to CRIS.

Hot Desks

When it comes to conducting your data collection and analysis there are 6 hot desks available at the BRC Nucleus for CRIS users. These desks are available on a first come first served basis - if possible the number of hot desks will be increased during busy periods.

Please note. If you would like to use a hot desk for your C4C project, Computer 5 and 6 both have telephones which are available to help with your recruitment. If you would like to use the phones then please ensure that you book one of these PC's.

Out of Hours Working

The BRC Nucleus is open from 9am until 5pm, Monday - Friday. If you would like to work at the Nucleus outside of these hours you will need to ensure that you have a SLaM ID card with access to the Nucleus and Mapother House, a SLaM network account and access to the T: drive, CRIS, etc. Please also refer to the BRC Security Policy which can be found on the notice board in the BRC kitchen area. **To arrange out of hours access, or if you plan to come in on the weekends please email the CRIS administrator** (debbie.cummings@slam.nhs.uk). If you are the last person to leave the Nucleus you will need to ensure that the office is secured (all windows closed, lights turned off, heating off).

CRIS Training

The team hold regular CRIS training. This is aimed at individuals who are starting projects and beginners at using the CRIS front end. To attend the training session you must already have an approved CRIS project as you will have the opportunity to ask questions tailored to your specific project. If you are interested in attending training please email the CRIS administrator (debbie.cummings@slam.nhs.uk) who will let you know of upcoming training sessions.

VPN Tokens

If you are based off-site you may wish to apply for a Virtual Private Network (VPN) token so that you can access the SLaM network through your personal computer. To apply for a VPN you will need to meet with the CRIS administrator to complete the application form on the SLaM Intranet, this will need to be approved by your budget holder.

There is an initial cost of £20 a VPN token. In order to apply for a token you will need a SLaM or KCL cost code, for further information about this please contact the CRIS administrator (debbie.cummings@slam.nhs.uk)

Amendments to existing projects

If you would like to make an amendment to your existing approved CRIS project please email the CRIS administrator (debbie.cummings@slam.nhs.uk) describing your amendment. Please be aware that if your amendment is significant it may need to be approved by the CRIS Oversight Committee again.

Adding new researchers to my project

CRIS approval is project specific and not person specific so new researchers (staff or students) can be added to the project at any point. The only stipulation is that they must have a contract with SLaM (please see Section 3). If you would like to add somebody to your project, please email the CRIS administrator (debbie.cummings@slam.nhs.uk) with the person's details.

6. DATA ANALYSIS TOOLS

The BRC Nucleus has a number of tools available for the analysis of CRIS data.

STATA

The Nucleus holds 5 concurrent STATA network licences for CRIS users. STATA is accessed through the Terminal Server, to access it follow these instructions:

1. Double click the "SLaM RDP (Terminal Services)" icon on the desktop. If you do not have this icon please go to Start > Programs > Accessories > 'Remote Desktop Connection' in the Computer box enter 10.16.32.183 and then click Connect.
2. Log in to the terminal server using your normal SLaM log in and password
3. Open up the folder "_Data Analysis Tools_" on the T: drive (NB. You may need to Map the T: drive the first time you do this).
4. Double click the STATAMP 12 icon.

If you need to access STATA for your data analysis please email the CRIS administrator (debbie.cummings@slam.nhs.uk) who can have you added to the list of approved users.

SPSS

The BRC nucleus does not hold any SPSS licences. However SLaM does hold an SPSS licence and this can be accessed through the terminal server. KCL licences, or licences held by any other institutions **CANNOT** be used. Access to the SLaM SPSS licence can be arranged through SLaM Digital Services, but incurs a cost (the 2018 cost is £240 for 6 months). You will need to provide the CRIS administrator with: justification, a KCL budget code, the budget holder's details, and a SLaM log in. For more information please contact the CRIS administrator (debbie.cummings@slam.nhs.uk).

R

R is installed on all of the Nucleus hot desks. If you have any issues with accessing this please contact the CRIS administrator (debbie.cummings@slam.nhs.uk).

7. PUBLICATIONS

If any of your CRIS work results in publications please do let us know as we are always keen to hear about them. We also list CRIS publications on our website which can be found at the following address: https://www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-publications/

Acknowledgments
If publications are produced the following entities need to be acknowledged as part of using CRIS:

"This [paper/study/poster etc.] represents independent research [part] funded by the National Institute for Health Research (NIHR) Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care."

If your publication has used the linkage with ONS Mortality data please include the below acknowledgement:

"We would like to acknowledge the Office for National Statistics (ONS) as the provider of the Mortality data; those who carried out the original collection and analysis of the data bear no responsibility for their further analysis or interpretation."

Qualitative Studies
If you intend to quote text from CRIS (whether for internal or external publication) in any of your output you must ensure that this is first checked by the CRIS Oversight Committee. Please email the CRIS administrator (debbie.cummings@slam.nhs.uk) clearly stating the contents of the text and also the context of where the text will be used (i.e. presentation slide, journal article, or other audit publications).

8. ADDITIONAL INFORMATION

SLaM Digital Services
If you have any IT issues whilst working on your CRIS project in the BRC Nucleus please contact SLaM Digital Services helpdesk on 020 3228 8888.

SLaM Webmail
To access your SLaM email via webmail, please use the following link: https://webmail.slam.nhs.uk/owa/. The required format for Domain\username is: SLaM\username.

CRIS Website
The CRIS website can be accessed at the following link:
https://www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/.

On the website you can find more information about the projects currently being conducted using CRIS, as well as publications that have resulted from CRIS and detailed information on the CRIS Linkages that have been conducted.

Consent for Contact (C4C)
If you are using CRIS for recruitment purposes then please ensure you have read the C4C guidance notes which are available on the Maudsley BRC website at the following link:
https://www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-training/

If you would like further guidance for your C4C project, please email Megan Pritchard, CRIS Training and Development Lead (megan.pritchard@slam.nhs.uk).

The CRIS Security Model
The CRIS security model is available to read on the Maudsley BRC website at the following link:
https://www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-training/

Disposal of data
Once your project has been completed, the CRIS team will store your dataset in a secure SLaM network location for a period of 10 years. During this time your data can still be accessed. Please contact the nucleus administrator for more information. After 10 years your dataset will be destroyed according to the SLaM data destruction policy.

BRC Nucleus Monthly Seminar

We hold a monthly seminar series at the BRC Nucleus to showcase research relevant to individuals using CRIS; these are generally held on the second Thursday of the month from 10am until 11.30am in the BRC Nucleus. For more information on upcoming presentations see our website: https://www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-news-events/.

CRIS Drop In

If you are using CRIS for a research study and would value advice and support, or simply want to find out more about CRIS and the study support we offer, then come along to the BRC Nucleus on the first Tuesday of each month 1-2pm.

BRC Nucleus Address

The address for the BRC Nucleus is:

      PO Box 92

      Institute of Psychiatry, Psychology & Neuroscience at King's College London

      16 De Crespigny Park

      London

      SE5 8AF

9. TROUBLESHOOTING

Issue	Solution
My SLaM network account has expired	Contact your manager in SLaM; they will need to send an email to SLaM Digital Services requesting that your account is reactivated. Once the email has been sent you can call the SLaM Digital Services helpdesk (020 3228 8888 or 88888 from an internal phone) to ask them to reactivate your account.
I've forgotten my SLaM account password	Contact your manager in SLaM; they will need to send an email to SLaM Digital Services requesting that your password is reset. Once the email has been sent you can call the SLaM Digital Services helpdesk (020 3228 8888 or 88888 from an internal phone) to ask them to reset your password. Remember, SLaM passwords are now required to be a passphrase which should be over 16 characters long.
My SLaM ID card is not working or has expired	Email the CRIS Administrator (Debbie.cummings@slam.nhs.uk) who will arrange for your card to be reactivated.
My VPN token is not working	Contact the SLaM Digital Services helpdesk on 0203 228 8888.
I have a new mobile phone and can't access my VPN anymore	The SLaM VPN token is linked to your mobile phone. If you change your mobile phone the VPN token will require reinstallation. Please contact IT service desk to arrange this 0203 228 8888.
I can't access STATA on the terminal server	Check that you have been given access to STATA by emailing the CRIS Administrator (Debbie.cummings@slam.nhs.uk), if you have already been given access then please contact the SLaM Digital Services helpdesk on 0203 228 8888.
STATA isn't working correctly or I am receiving an error message	Contact the SLaM Digital Services helpdesk on 0203 228 8888.
I want to download some software on to a PC in the BRC Nucleus	Check what licence is required for the software. Email the CRIS administrator detailing what software you need and whether or not it requires a licence. If a licence is required you will need to provide funding for this.
I've registered for the CRIS front end but I can't log in.	Send an email to the CRIS Administrator (Debbie.cummings@slam.nhs.uk), include details of the error message that you are receiving.

I would like to do a new CRIS linkage with an external database.	Contact the Clinical Data Linkage Service (CDLS) Lead to discuss your linkage project (Amelia.jewell@slam.nhs.uk).
I am new to CRIS and would like some advice about whether or not my project is feasible.	Email the CRIS Training and Development Lead (megan.pritchard@slam.nhs.uk) to arrange an appointment to discuss your project.
I submitted a CRIS project but I haven't heard back from the Oversight Committee.	If it has been over 3 weeks since you submitted your application then please email the CRIS administrator for an update (Debbie.cummings@slam.nhs.uk). If it has been less than 3 weeks then your application will still be being reviewed by the Oversight Committee.
I have received my data but I don't understand it.	Email the CRIS Training and Development Lead (megan.pritchard@slam.nhs.uk) to arrange an appointment to discuss your extraction.
My publication isn't on the CRIS website.	Email your publication to the CRIS Administrator (Debbie.cummings@slam.nhs.uk) and we will add it to the website.
I would like a basic introduction to CRIS.	Watch the Introduction video on our website: https://www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-training/.
I have an idea for a project but I'm not sure if anybody is already researching this area.	Try searching our CRIS Project database https://www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-projects/ to see what projects are currently active.
My analysis has produced small numbers.	The general rule of thumb is that cell sizes of less than 10 should be supressed. The CRIS Oversight Committee is happy to review your tables if you have small numbers, please send a copy to the CRIS Administrator (Debbie.cummings@slam.nhs.uk). If you are using HES and/ or ONS Mortality data than please refer to NHS Digital's guidance on small numbers available in the HES analysis guidance on the NHS Digital website: https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/hospital-episode-statistics/users-uses-and-access-to-hospital-episode-statistics.

10. CONTACT DETAILS

CRIS Administrator - Debbie Cummings
Email: Debbie.cummings@slam.nhs.uk
Phone: 020 3228 8553

CRIS Training and Development Lead - Megan Pritchard
Email: Megan.pritchard@slam.nhs.uk

Clinical Data Linkage Service (CDLS) Lead - Amelia Jewell
Email: Amelia.jewell@slam.nhs.uk

Natural Language Processing (NLP) Lead - Jyoti Sanyal
Email: jyoti.jyoti@slam.nhs.uk

SLaM Digital Services Helpdesk
Phone: 020 3228 8888

For full list of staff that support CRIS infrastructure, development, and training, please see: https://www.maudsleybrc.nihr.ac.uk/facilities/clinical-record-interactive-search-cris/cris-team/.