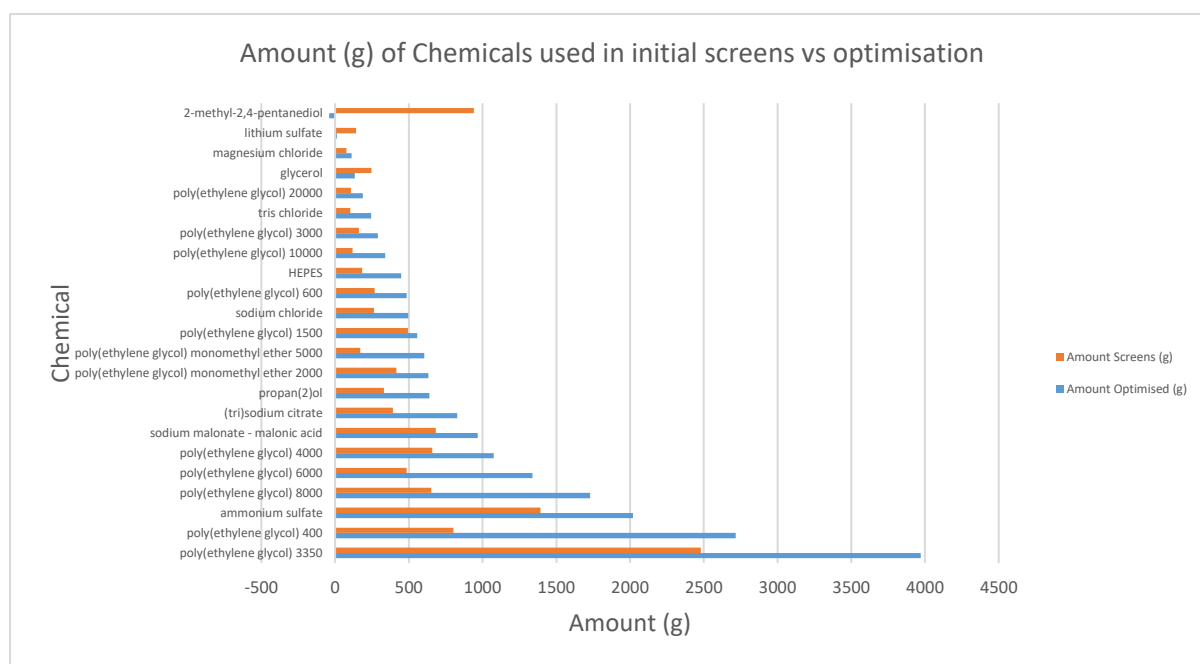


# C3 Annual Report - 2018

## Things of note from the C3 Huddles:

- Updated our imaging of chemical stocks for Tecan blocks (ADB)
- Ongoing quality control of PhoenixII
- New wash protocols for the PhoenixII (periodic long wash and overnight zymit)
- Mosquito LCP/Crystal broke and repaired, service contract signed
- New website designed and implemented
- Analysed and refactored C3 set
- Microscope repaired
- PlateLoc broken
- Tecan Tip4 still dripping
- Upgraded the Oryx to four bore tip
- Renewed Access Agreements
- Recalibration of pipettes
- Stock stocktake



## Software and infrastructure

- GPSamplr was created
- Development of Dossier/Meta4C3 program
- Development of ROI selection within See3
- CrystalMeth/C3PO updated for automatic selection
- Moved to digital management (Quartz) for chemicals on 10 August 2017

- Updated functionality of See3 (Multiscoring, plate count, filtering indicator, date collected, Remove score and colours)
- Cinder App updated to 2.1 for CinderSolo
- pHUEristic updated to handle 24 well plates and standard curve updated
- SDS-Gel Excel sheet created
- Updated C6 vendor screens
- C6 being refactored
- Migrated 'Lime' to a new machine and virtualised our servers
- Booking software mini software sprint
- New MilliQ Unit
- Server was broken
  - Latency issues regarding state firewalls discovered
  - Downtime

## Complaints/Feedback

- No other complaints, some minor grumbles
  - Some missed inspections from downtime
  - Furry plates and ugly drops

## iQC analysis

- 2680 reports (up 61% from last year)
- 7.5% Excellent (down 27% from last year)
- 67.9% Good (up 22% from last year)
- 15.1% Fair (Up 4% from last year)
- 9.5% Poor (48% weren't poor, but were labelled as such after failure of DropLit)

## Students and Training

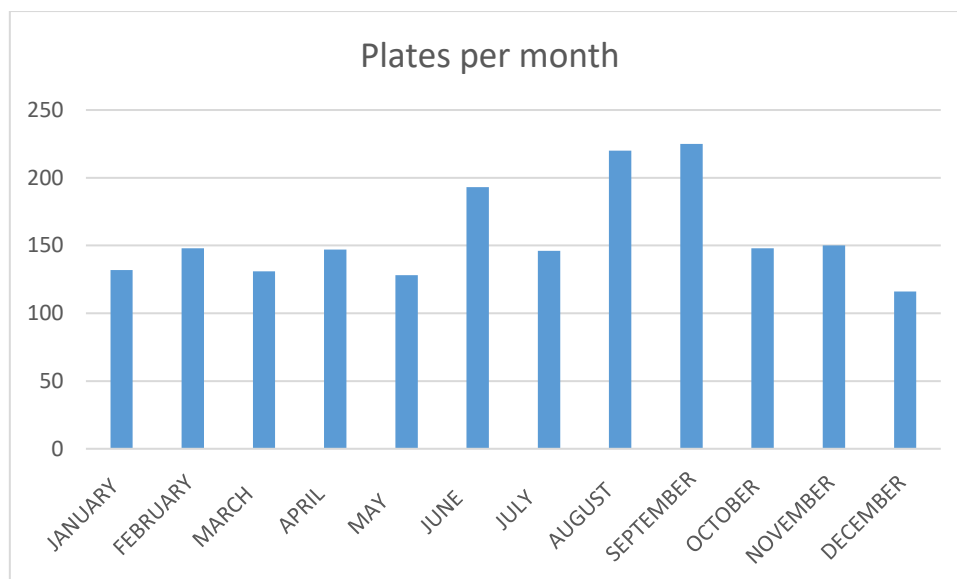
- Continued active involvement in the Biomed Vic UROP program including hosting of 11 students to date

## Other items to be raised

- What tools do we have and does everyone know about them/how to use them?
- This report at the annual C3 User Meeting

## Other

- 39 papers acknowledging C3
- 10 papers directly from C3 work
- Retained computer scientists until December
- 1581 M plates
- 149 Z blocks



## Facility Director's Report

### Medium/Long Term Goals:

- Improve autoscoring – online learning
- Develop and implement QC on stock solutions
  - Possibility of using refractometry and osmometry
- To continue to develop C3PO optimisation and make it available to users
- Bring DLS and T<sub>agg</sub> into the C3 as robust analyses
- Datamining using auto-scored images
- Bring online Dossier/Meta4C3
- Replace C3 set
- Streamline stocks

### Funding

- No changes in funding at present
- Seeking partnership opportunities through competitively awarded local and international grants

### IT Infrastructure

- Investigate normalising our databases
- Refactor C6 to include C6 local database as part of CM
- Investigate deployment of a redundant database to reduce server stress and increase speed

### Machines

- Incorporate basic mass spec
- Investigate the inclusion of an X-ray generator for *in situ* screening (replacing PX scanner)
- Investigate Echo acoustic liquid dispensing technologies
- Replace Tecan

### Software

- Acquire and implement a robust autoscoring workflow
- Investigate replacement of CrystalTrak Software

- Evolution of C6 (both for ease of future development, ease of use, additional functionality)
- IQC replacement

#### **Internal Recommendations for Improvements**

- Improve sample management systems
- Streamline screen offering to users