

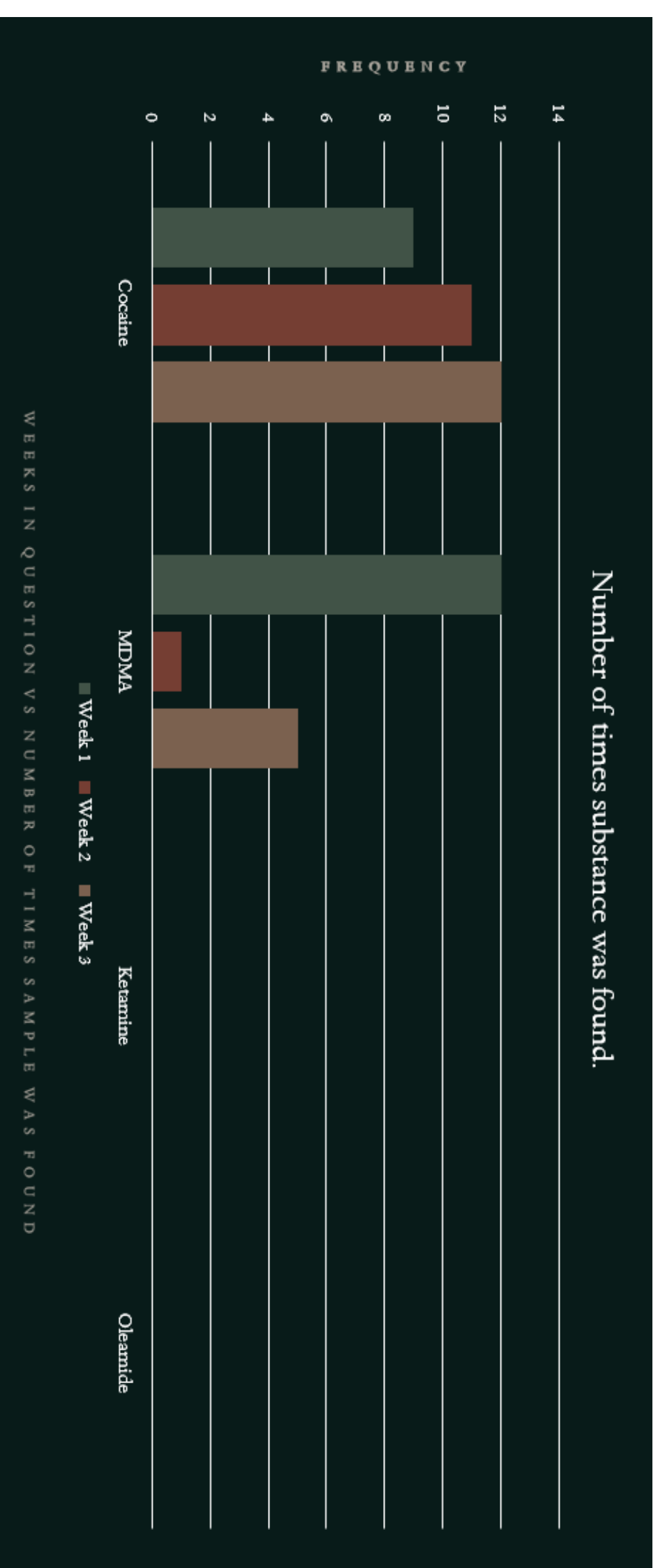
## Introduction

Galway is a vibrant city with a rich cultural heritage. Home to many students and a well known tourist attraction. The nightlife in Galway is lively however behind the scenes there's many narcotics prevalent within the community. Trace evidence was collected from both male and female bathrooms at six different venues within Galway city at night over three separate weeks using sterile swabs. The Swabs were collected using standard forensic trace evidence collection techniques and further analysed.

**Aim:** To determine how prolific drugs of abuse are within Galway.

**Objective:** to develop a method to collect trace evidence and use GC-MS to identify substance found

## Results



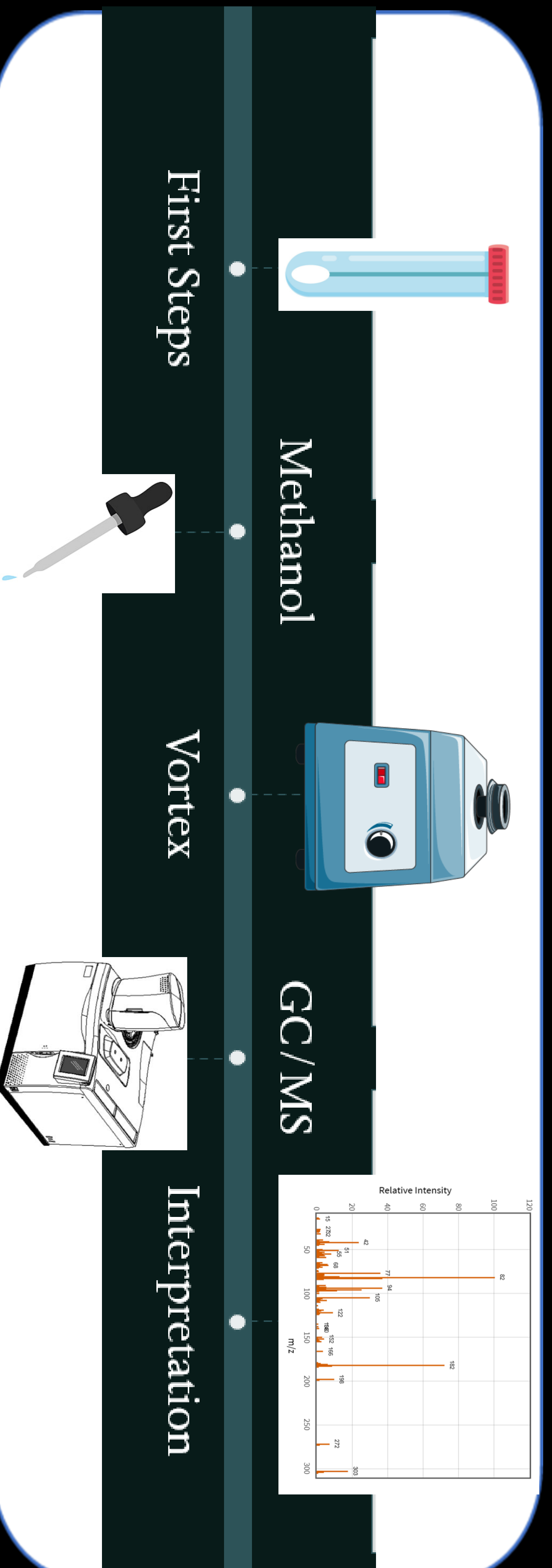
## Cocaine Scan results

|        | Pub A | Pub B | Pub C | Pub D | Pub E | Pub F |
|--------|-------|-------|-------|-------|-------|-------|
| F      | M     | F     | M     | F     | M     | F     |
| WEEK 1 | -     | X     | X     | X     | -     | X     |
| WEEK 2 | X     | X     | X     | -     | X     | X     |
| WEEK 3 | X     | X     | X     | X     | X     | X     |
| Total  | 2/3   | 3     | 3     | 3     | 1/3   | 3     |

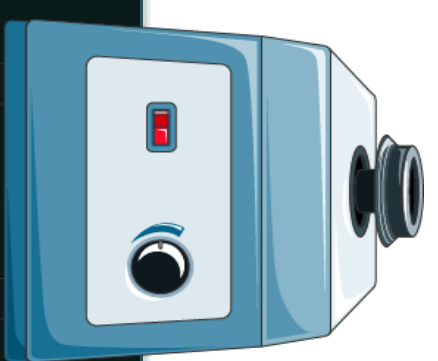
## Interesting Finds

- Herpes Antiviral
- Norvenlafaxine
- Tetramisole
- Methcathinone

## Method

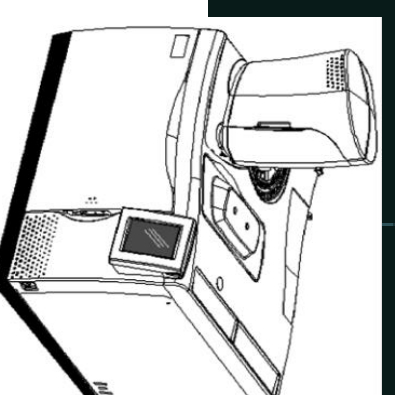


Methanol

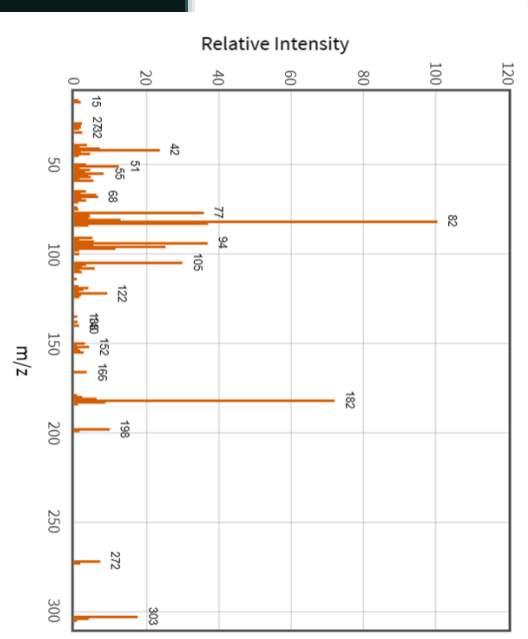


First Steps

Vortex

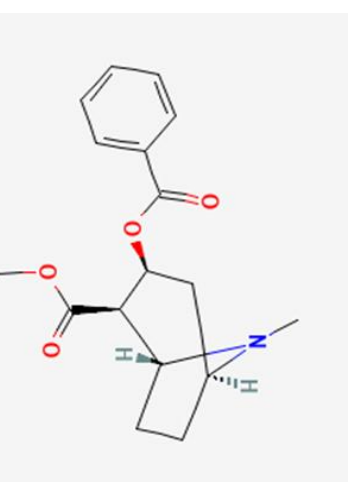


GC/MS



Interpretation

## Comment on Cocaine



- Cocaine consumption increased in female bathrooms from one week to the next.
- Was found in every male bathroom every week.
- Was found everywhere on St Patrick's day.
- Potential adulterants, benzocaine, ibuprofen and caffeine.

## Conclusion

Cocaine uptake increased in female bathrooms. MDMA was more prevalent in female bathrooms. 32/36 bathrooms tested positive for cocaine. Aim and objectives met. SIM week 1 should have been run again.

- Future work:
- Longer test period to see more trends.
- Quantification
- Larger pub database to see potential hubs.