#### **Seminar**

Reporter: Lichuang Huang

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Supervisor: Gang Cao

- 1 End of MCnebula
- 2 Next Research
- 3 END

#### **End of MCnebula**

## Pathway enrichment ACs

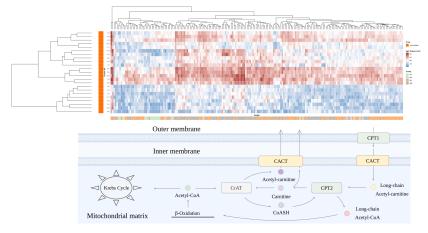


Figure 1: ACs

## Pathway enrichment LPCs

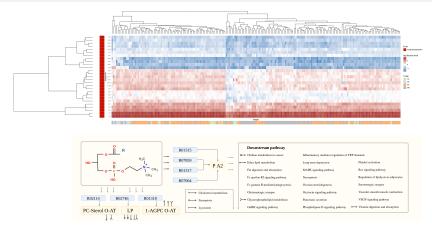


Figure 2: LPCs

#### Pathway enrichment BAs

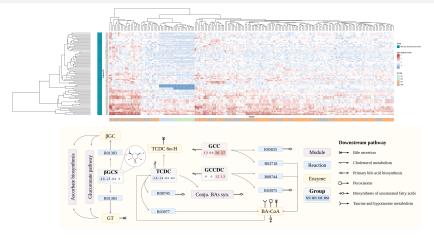


Figure 3: BAs

## MCnebula in github

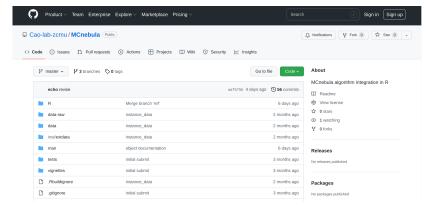


Figure 4: MCnebula

#### **Next Research**

#### Preliminary research route

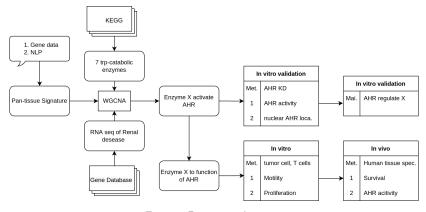


Figure 5: research route

# Microarray and RNA-seq analysis

#### limma:

Linear Models for Microarray and RNA-Seq Data User's Guide

Gordon K. Smyth, Matthew Ritchie, Natalie Thorne, James Wettenhall, Wei Shi and Yifang Hu Bioinformatics Division, The Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia

> First edition 2 December 2002 Last revised 14 November 2021

Figure 6: limma

## **Experimental design**

**Table 1:** In vivo experiment with rats

No.	group	drug	n	low	medium	high
1	control	-	15	-	-	-
2	model	-	15	-	-	-
3	raw.eu	raw.eu	15	5	10	20
4	pro.eu	pro.eu	15	5	10	20
5	positive	pos.drug	15	-	-	-
6	extra	MTA	15	-	-	-

## Processing and extracting of *E. ulmoides*

Known Variables

$$\begin{split} D_{base} &= 15 \; (g) \\ w_{rat.weight} &= 400 \; (g) \\ w_{hum.weight} &= 60,000 \; (g) \\ C_{cofficient} &= 6 \\ T_{times} &= 28 \; (day) \\ n_{group.rat.number} &= 15 \\ M_{group.h.m.l} &= 2 \times (5 + 10 + 20) \\ &= 70 \; (multiple) \end{split}$$

Require E. ulmoides  $(W_{eu})$ :

$$\begin{aligned} W_{eu} &= D \times \frac{w_{rat.}}{w_{hum.}} \times C \times T \times n \times M \\ &= 17640 \ (g) \\ &= 17.640 \ (kq) \end{aligned}$$

#### Figure 7: Material



**END**