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Chronic exposure to antiseizure drugs impacts the gut microbiota community and function.

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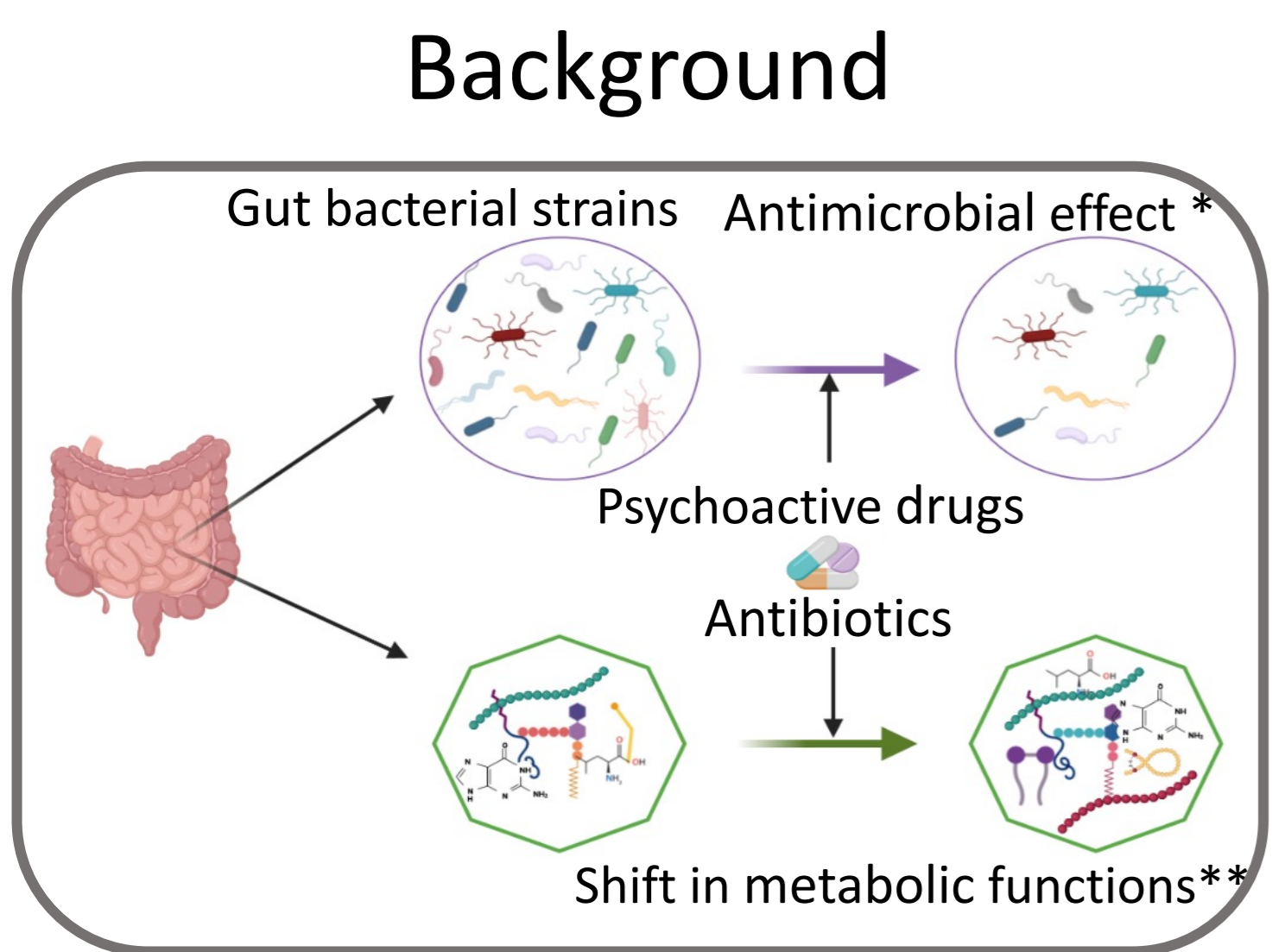
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Chronic exposure to antiseizure drugs impacts the gut microbiota community and function

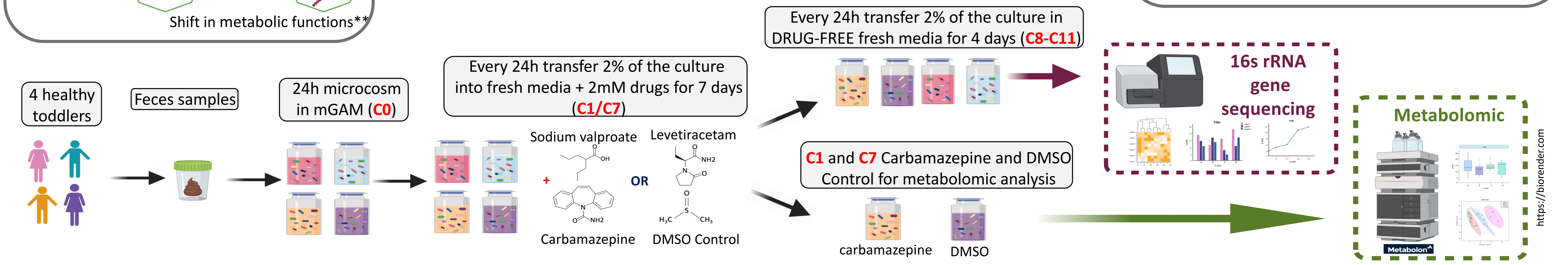


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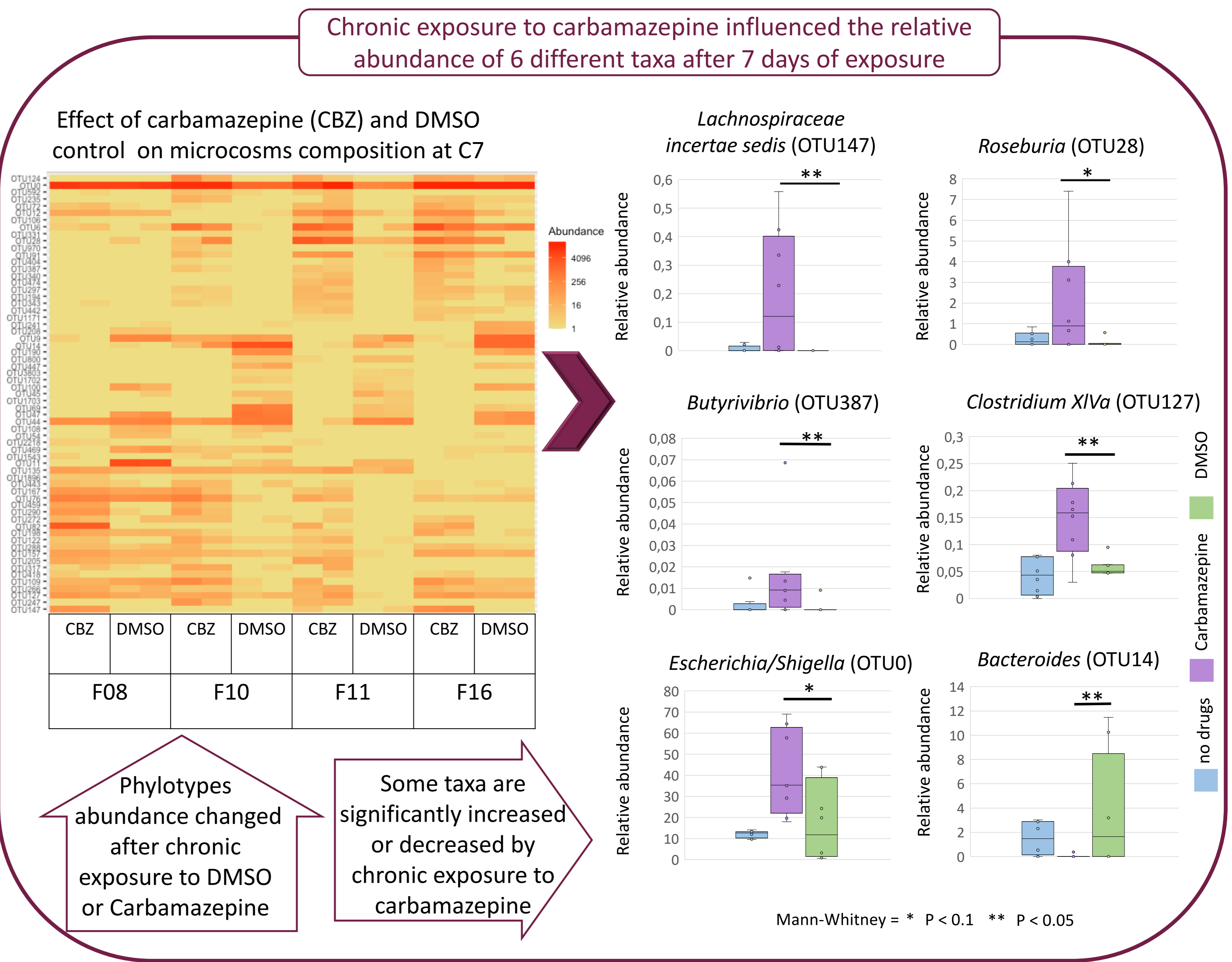
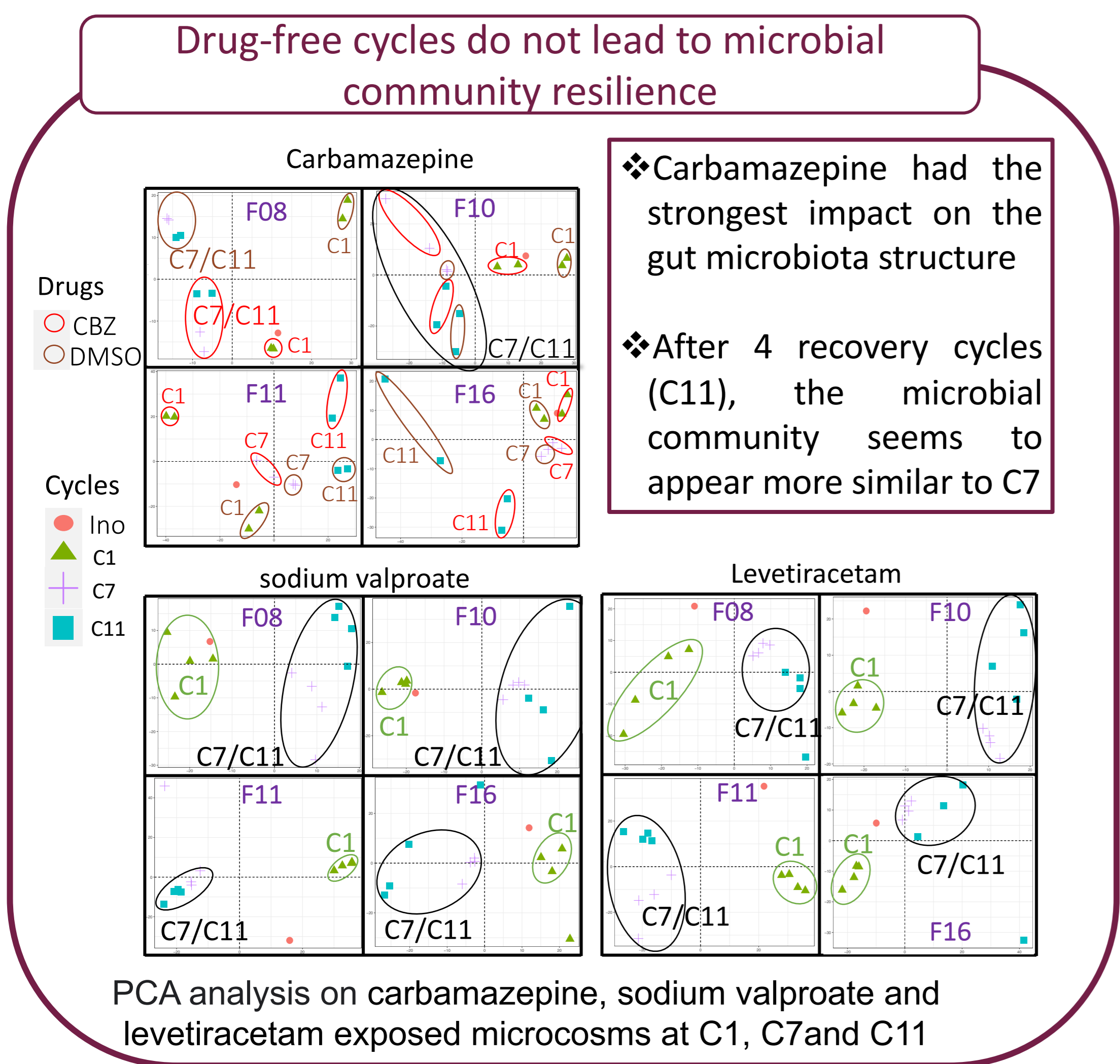
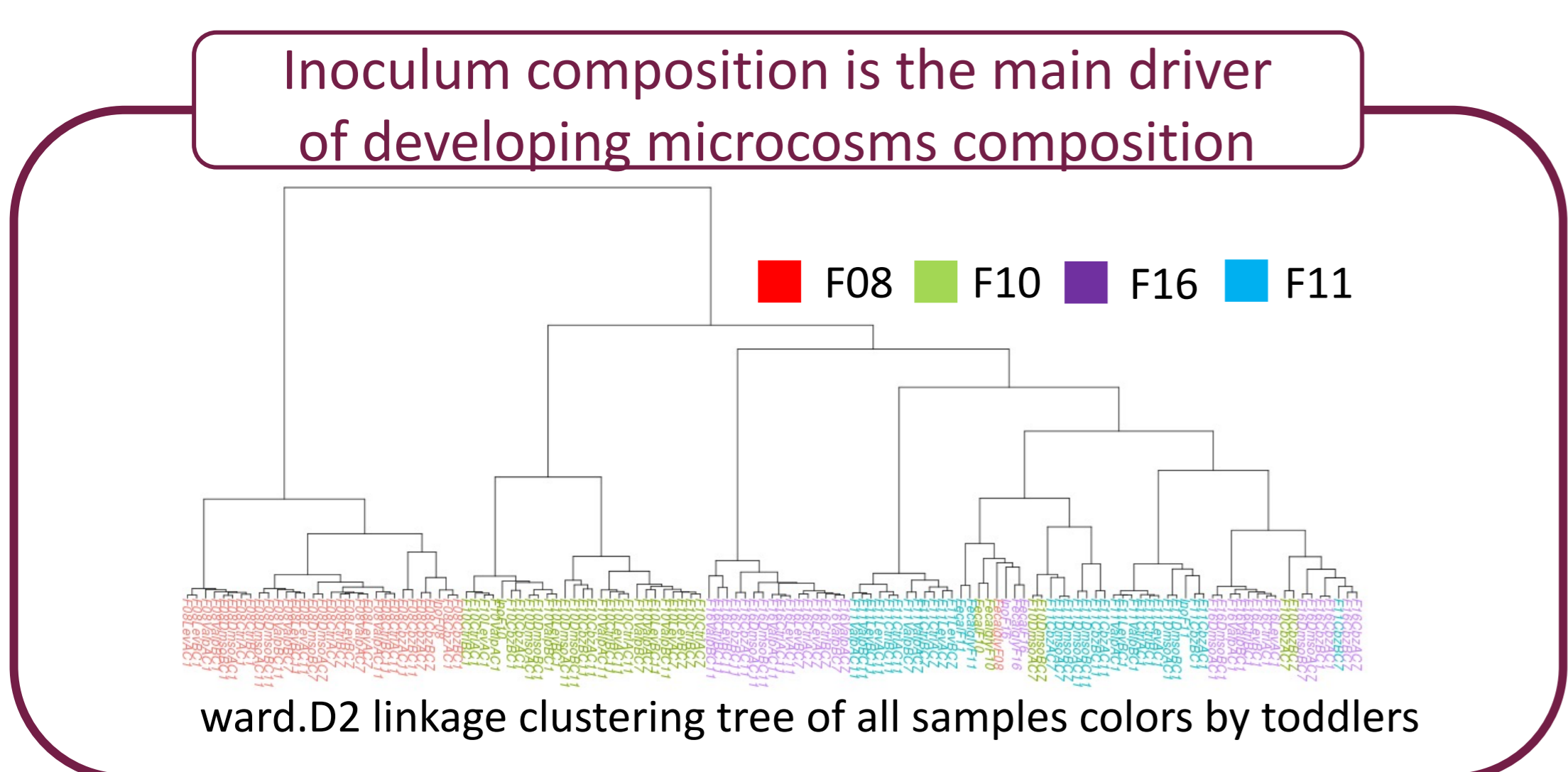
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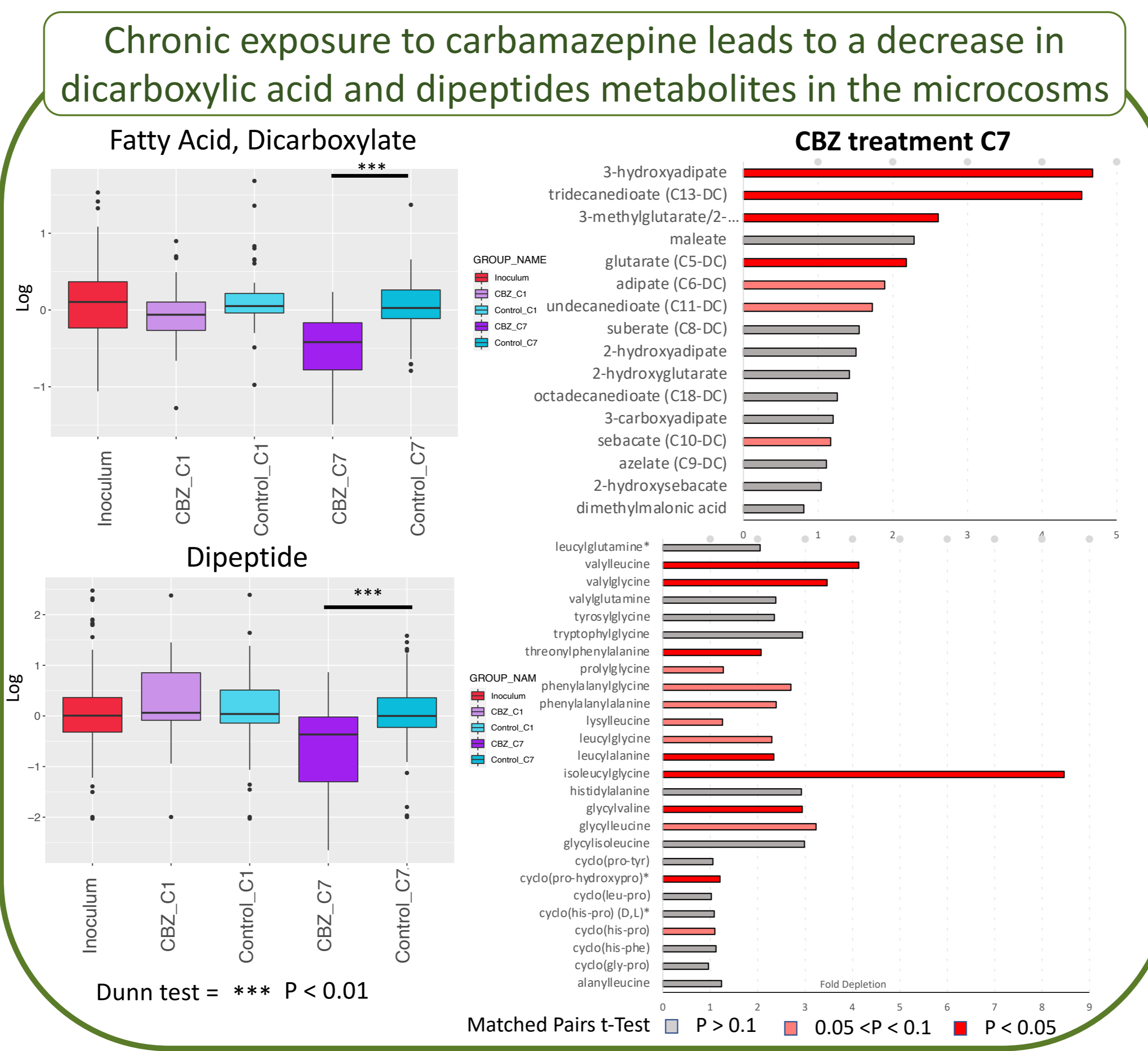
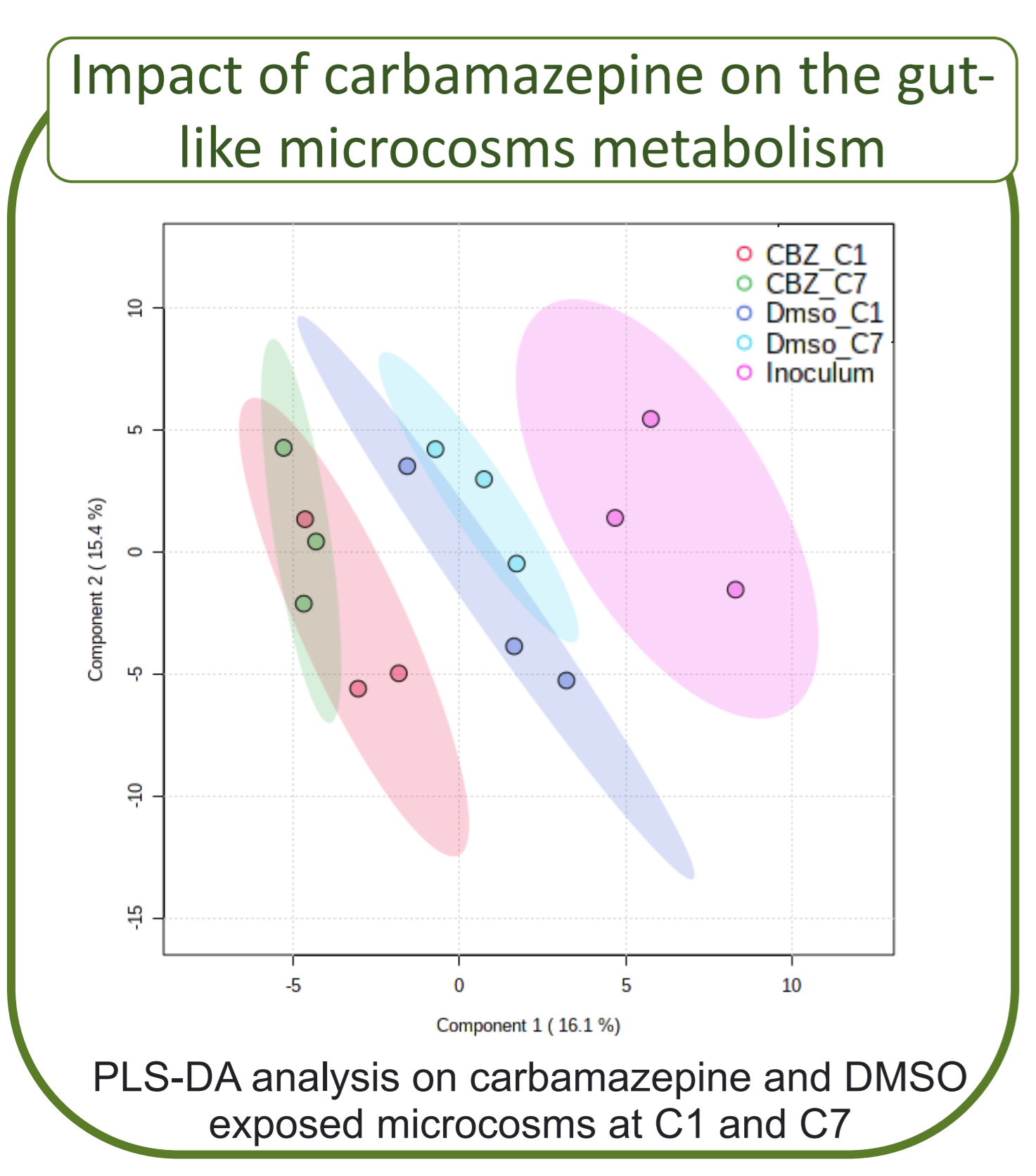
➤ How does chronic exposure to antiseizure drugs (carbamazepine, sodium valproate, and levetiracetam) impact gut bacterial communities and their metabolic functions?



Shift in the gut microbiome due to chronic antiseizure drugs



Shift in the microbiome metabolic function due to chronic exposure to Carbamazepine



Conclusion

- ❖ Inoculum composition is the main driver in gut-like microcosm composition
- ❖ Among the tested drugs, exposure to carbamazepine for 7 days impacted the relative abundance of 6 genus levels OTUs.
- ❖ Microbiome communities did not recover from chronic exposure after 4 drug-free cycles.
- ❖ Chronic exposure to carbamazepine altered the metabolic function of gut bacteria communities

Background reference :
* Maier et al., PMID: 29555994, 2018
** Cox & Blaser, PMID: 25488483, 2015