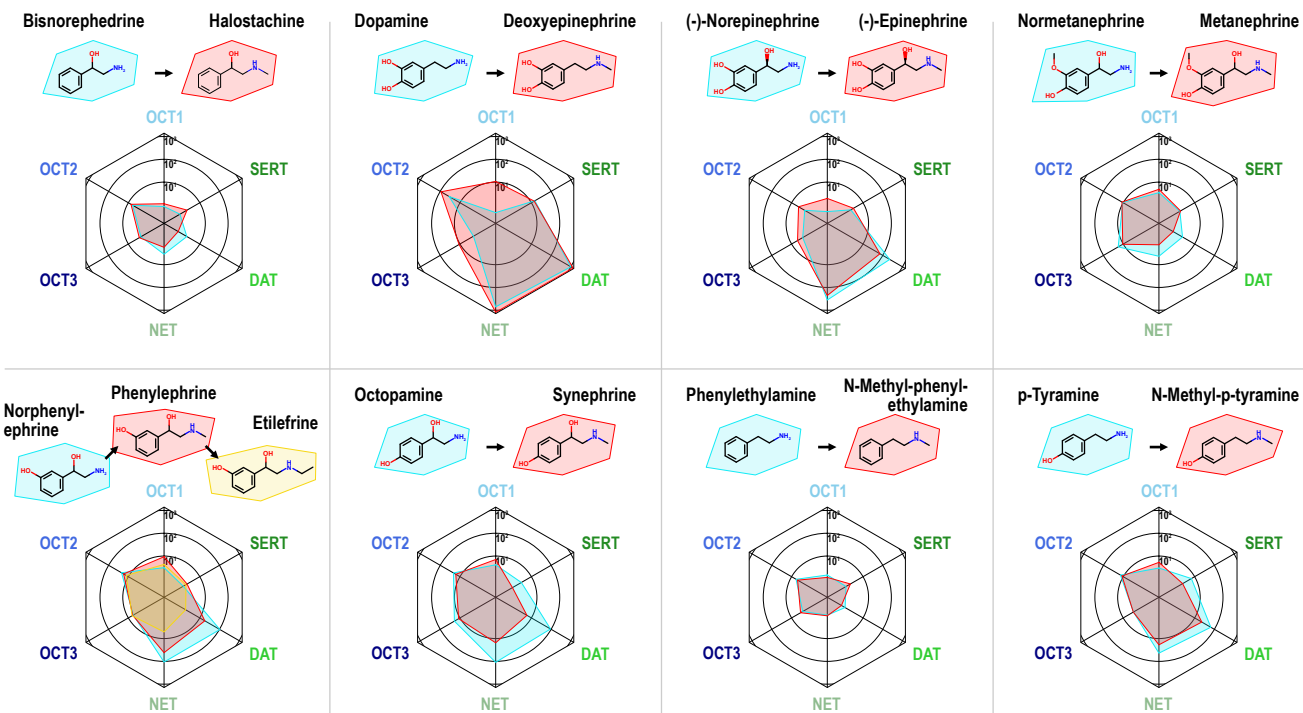
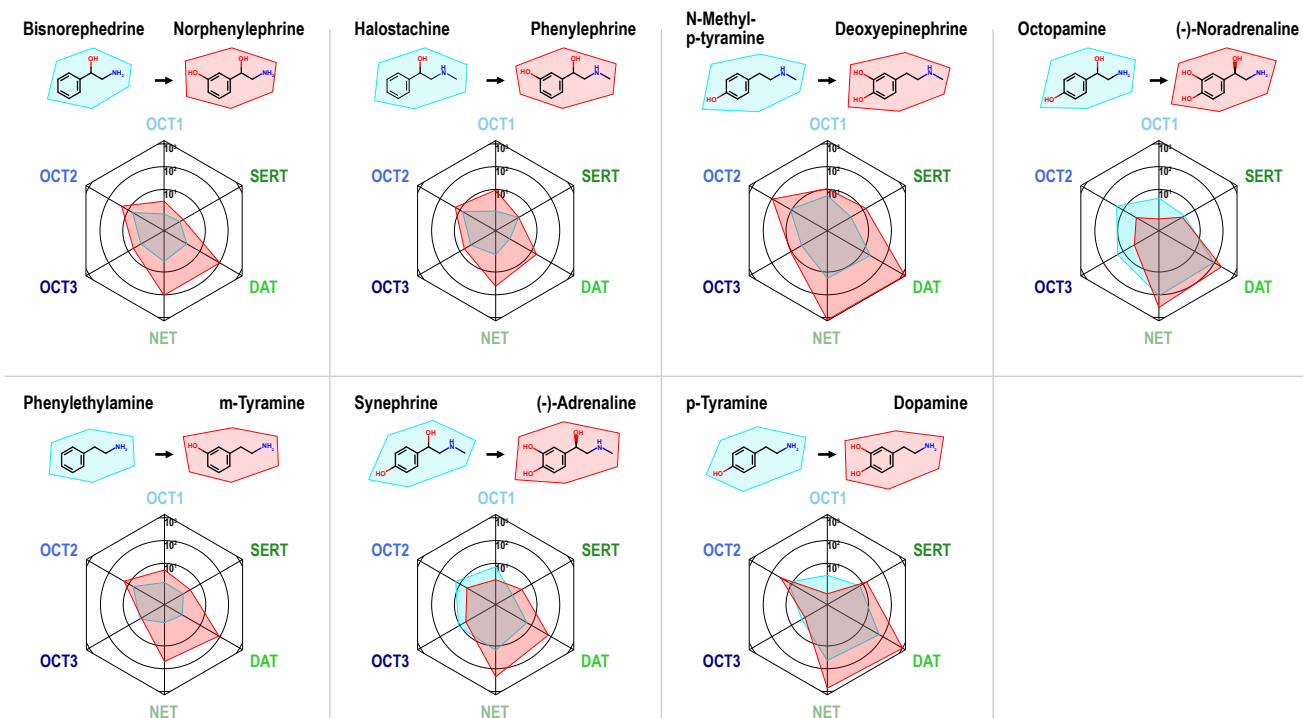


## N-Methylation

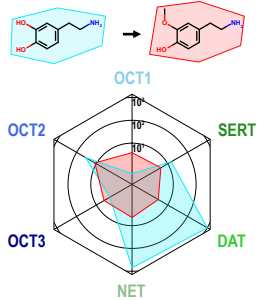


## Meta-Hydroxylation

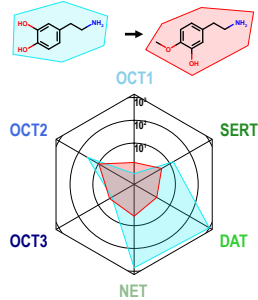


## O-Methylation

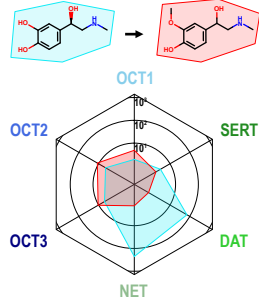
Dopamine 3-Methoxy-p-tyramine



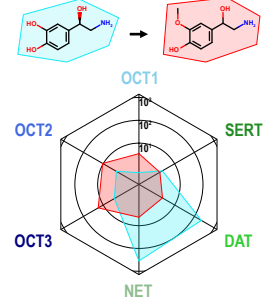
Dopamine 4-Methoxy-m-tyramine



(-)-Adrenaline Metanephrine

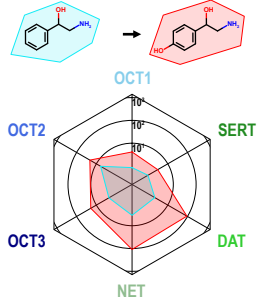


(-)-Noradrenaline Normetanephrine

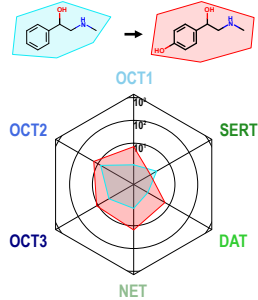


## Para-Hydroxylation

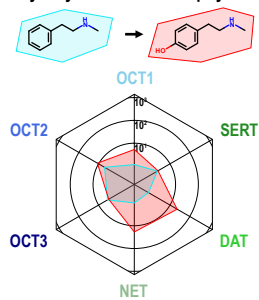
Bisnorephedrine Octopamine



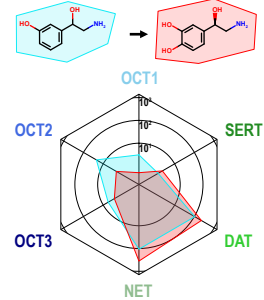
Halostachine Synephrine



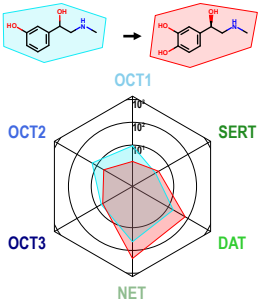
N-Methyl-phenylethylamine N-Methyl-p-tyramine



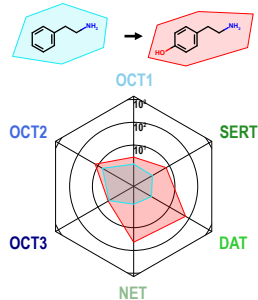
Norphenylephrine (-)-Noradrenaline



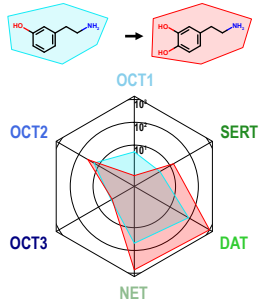
Phenylephrine (-)-Adrenaline



Phenylethylamine p-Tyramine

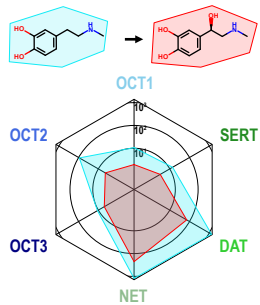


m-Tyramine Dopamine

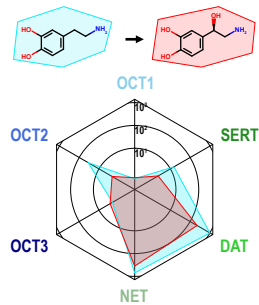


# Beta-Hydroxylation

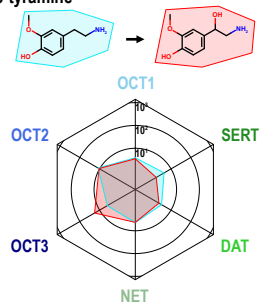
Deoxyepinephrine → (-)-Adrenaline



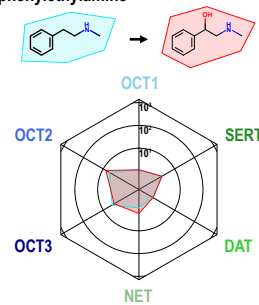
Dopamine → (-)-Noradrenaline



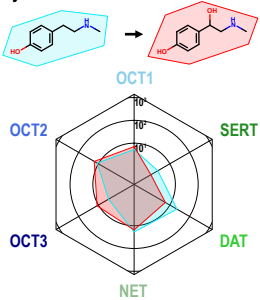
3-Methoxy-p-tyramine → Normetanephrine



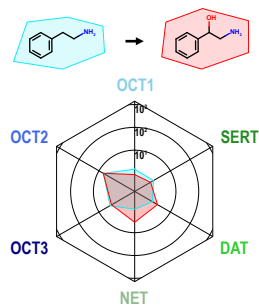
N-Methyl-phenylethylamine → Halostachine



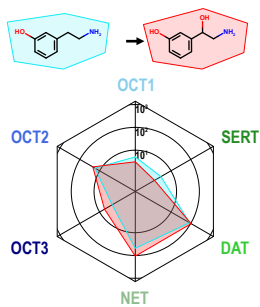
N-Methyl-p-tyramine → Synephrine



Phenylethylamine → Bisnorephedrine



m-Tyramine → Norphenylephrine



p-Tyramine → Octopamine

