

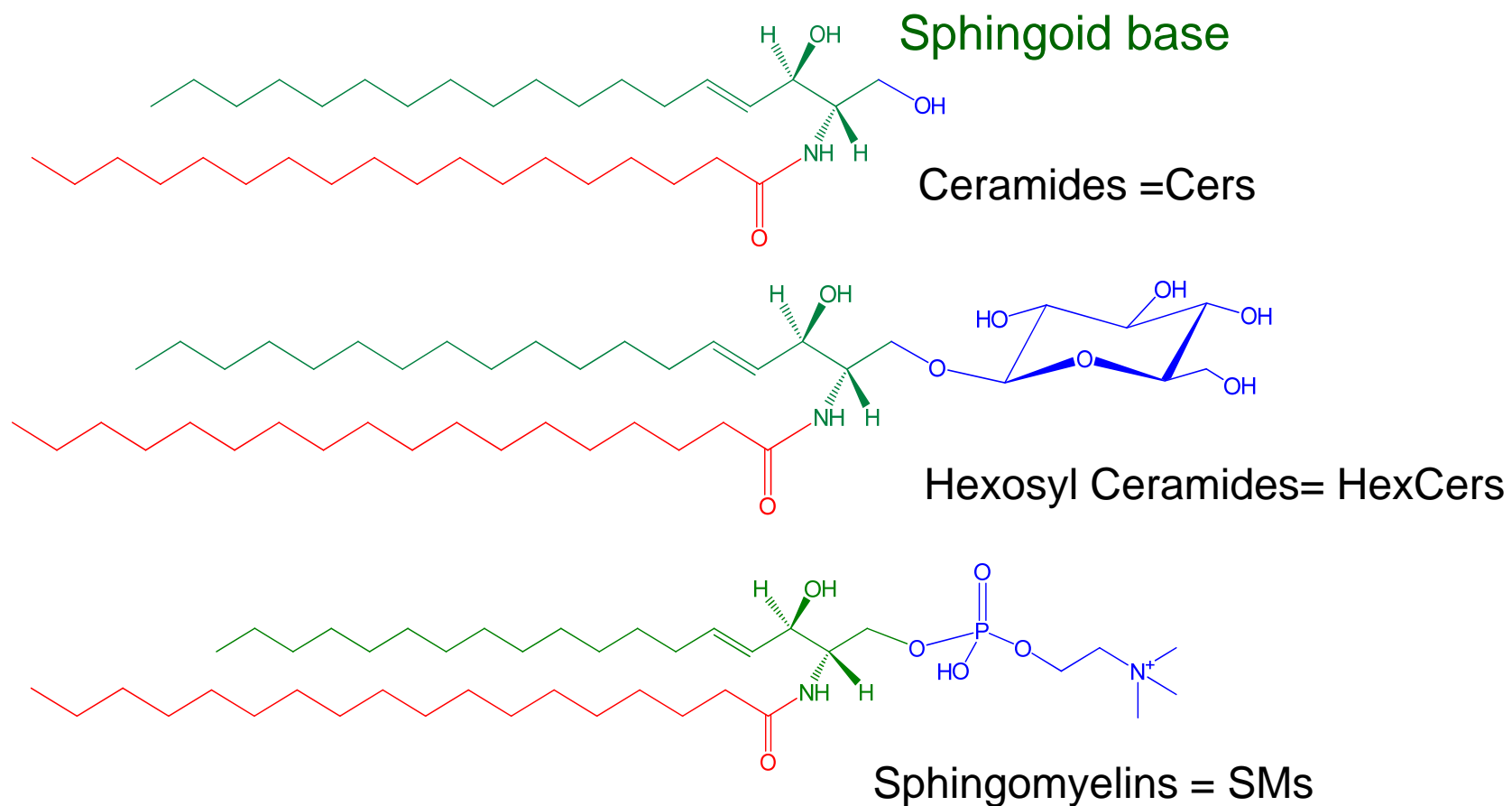
# ShotGun Sphingolipidomics

**Todd Williams, Ph.D.**

Director KU Mass Spectrometry and Analytical  
Proteomics Laboratory

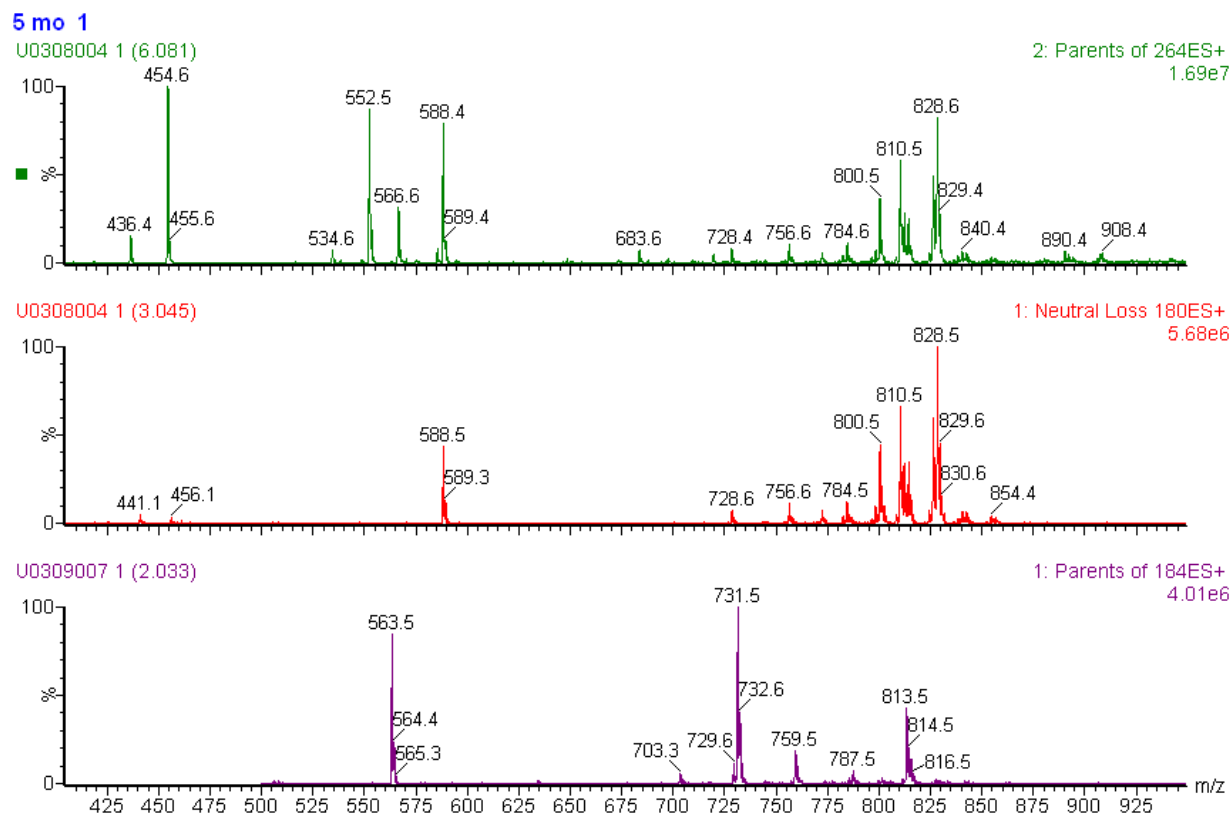
Prepared for and presented at ASMS 2010

# ShotGun Sphingolipidomics



## Slide explanation

# ShotGun Sphingolipidomics

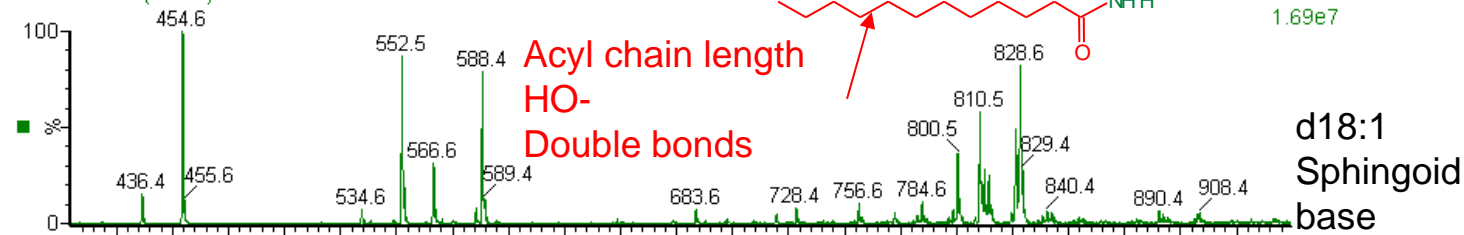


# Sphingolipids in Young Rat Brain

All Ceramides

5 mo 1

U0308004 1 (6.081)



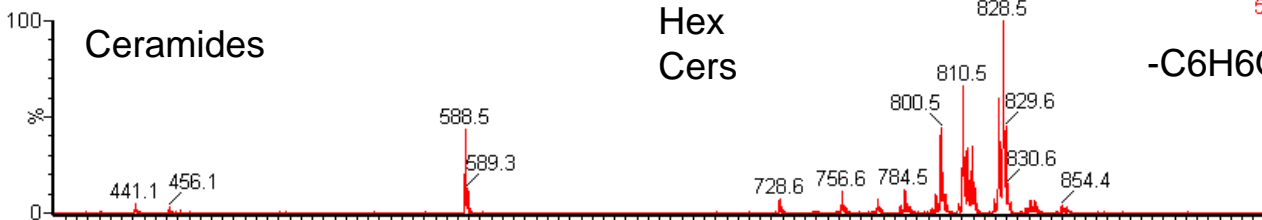
U0308004 1 (3.045)

Ceramides

Hex Cers

1: Neutral Loss 180ES+ 5.68e6

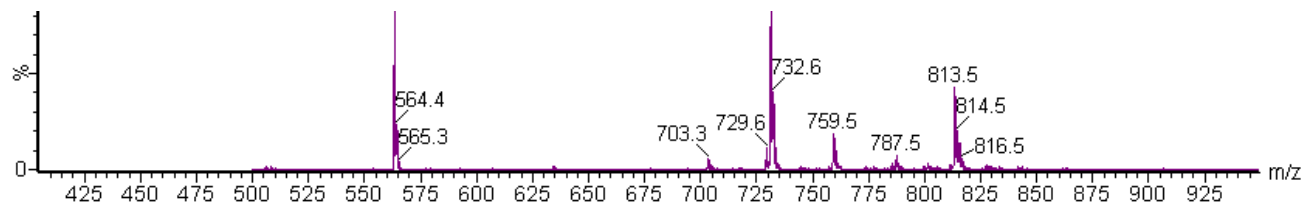
-C6H6O6



Sphingomyelins

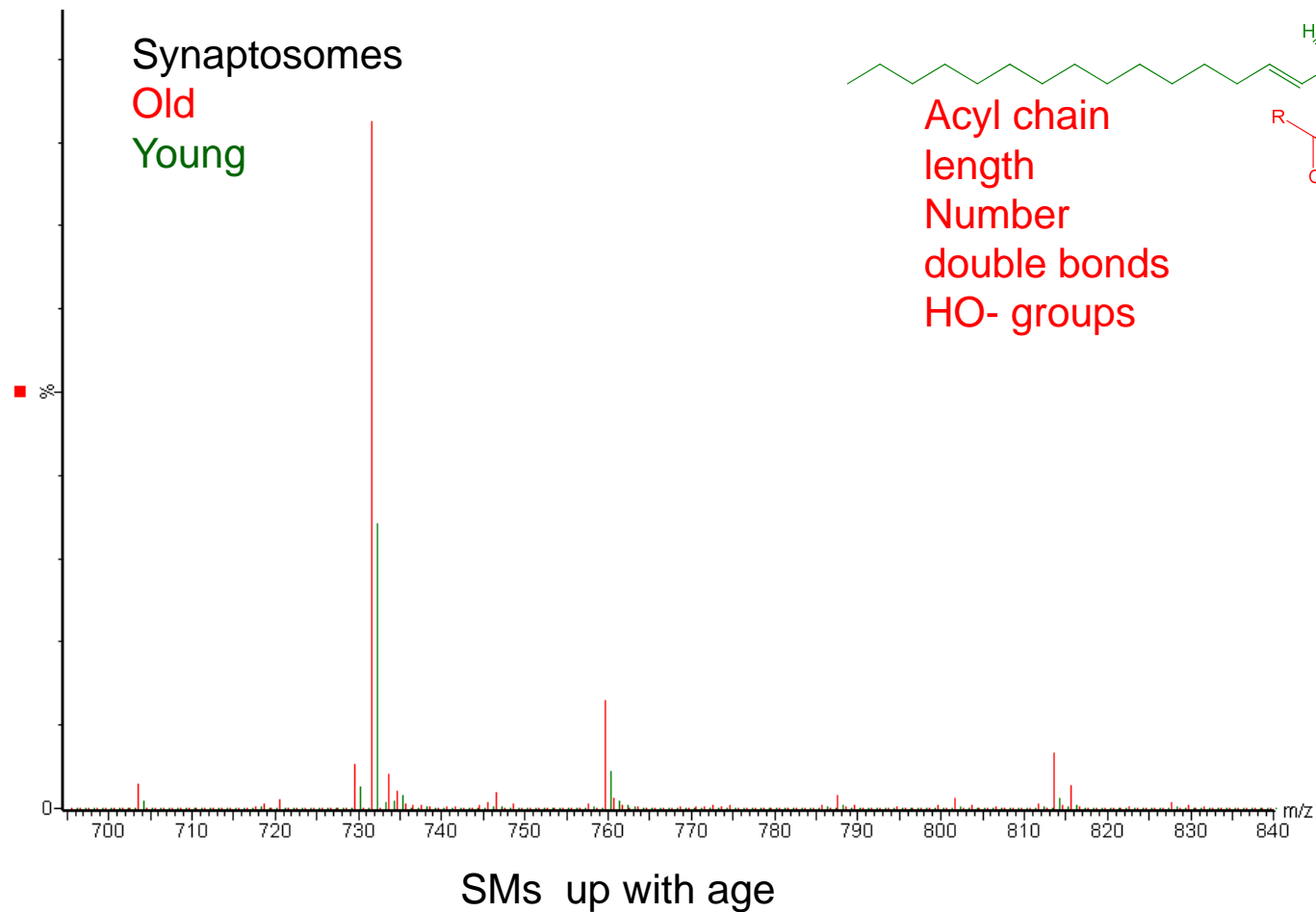
After saponification

Parents of 184ES+ 4.01e6

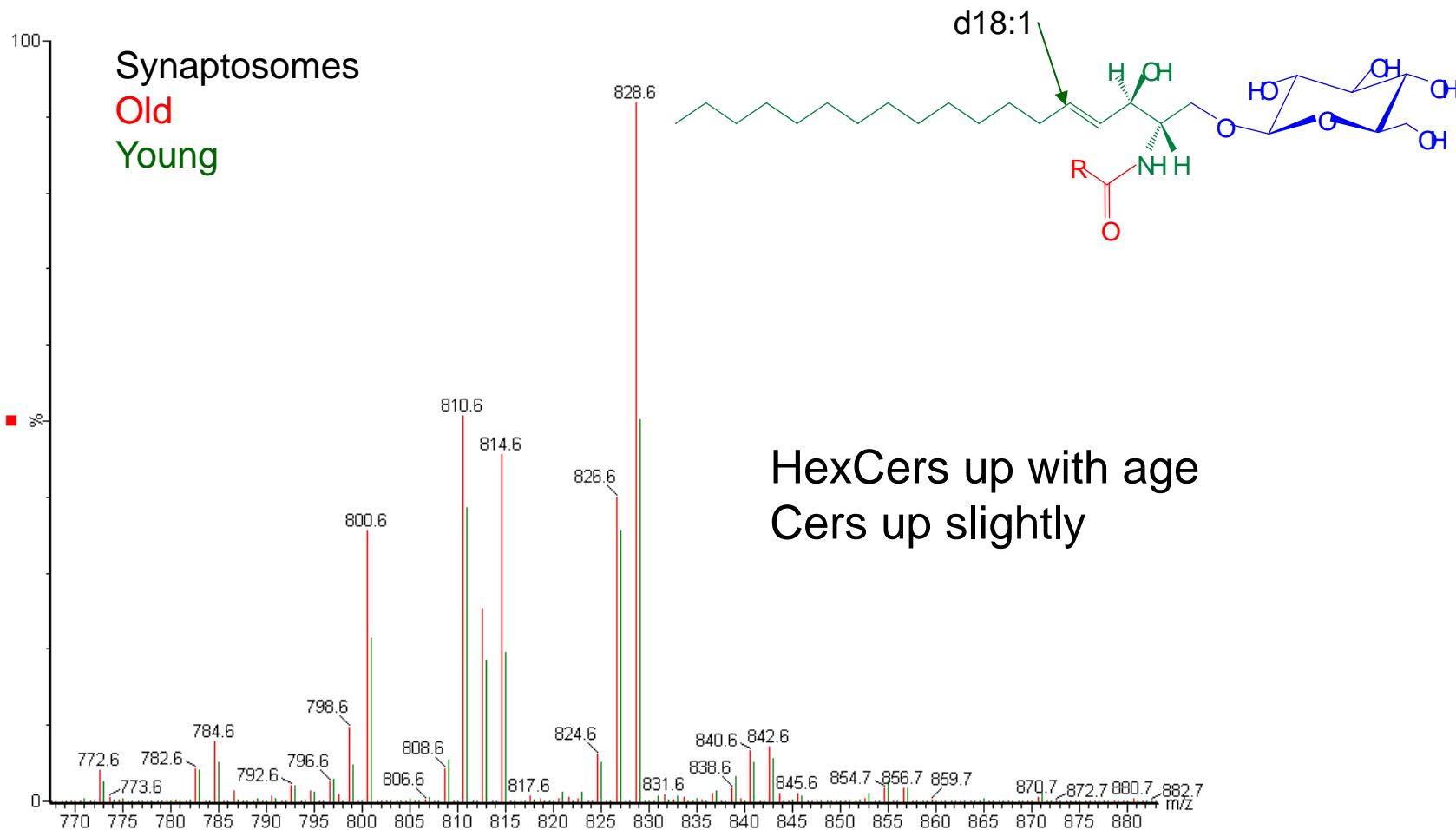


Discovery scans on QQQ instrument

# Sphingomyelins SMs

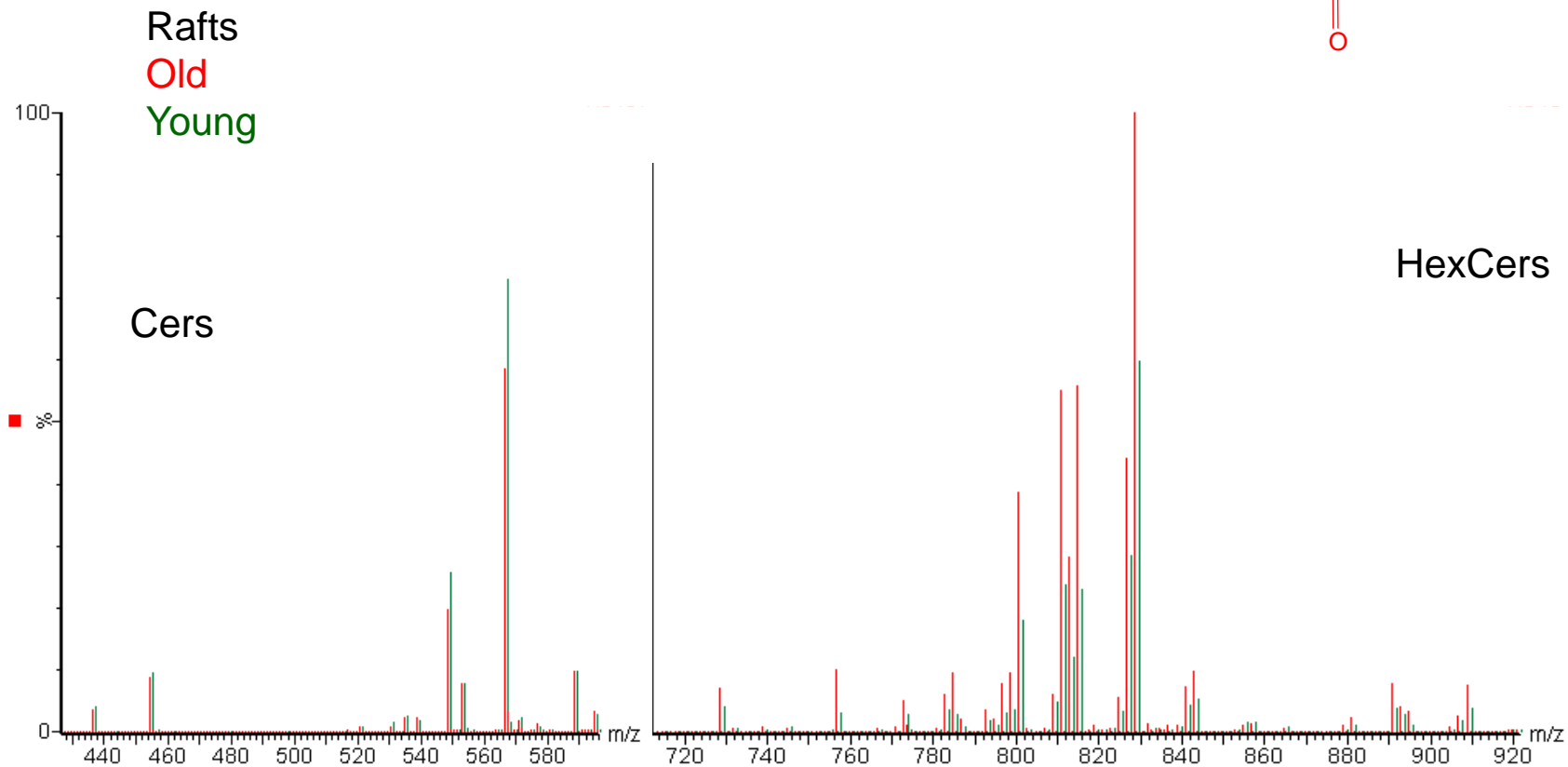
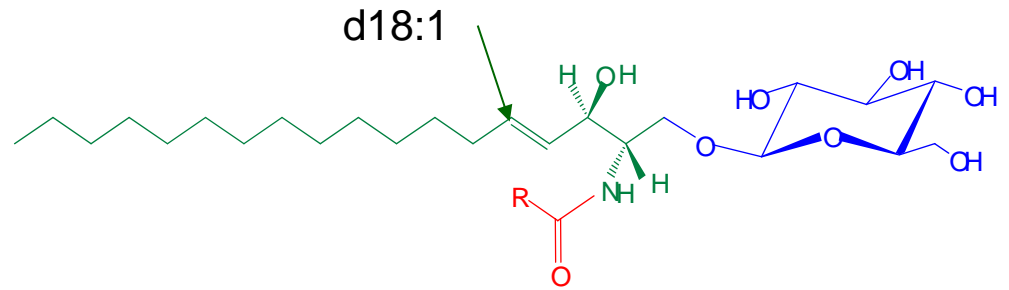


# Hexosyl Ceramides



# Hexosyl Ceramides

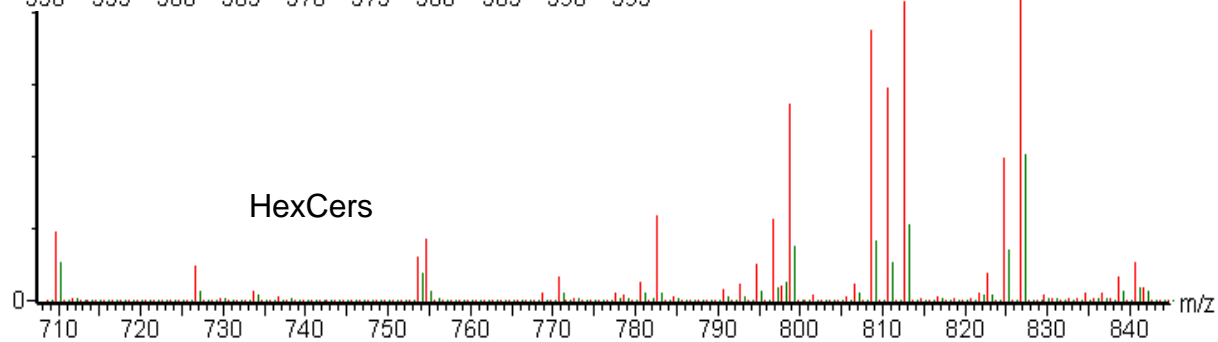
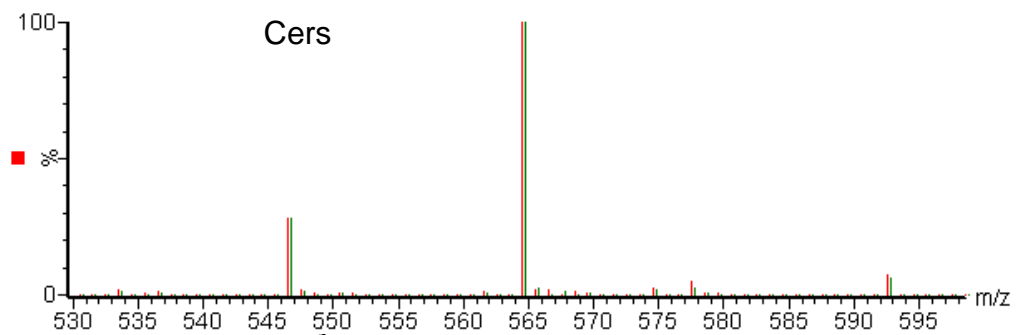
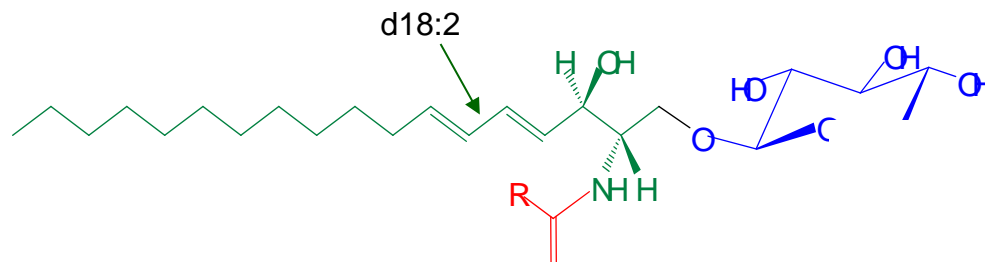
HexCer d18:1 up with age  
Cers down



Rafts  
Old  
Young

# Hexosyl Ceramides

HexCer d18:2 up with age  
Cers no change





# Contact Info

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