

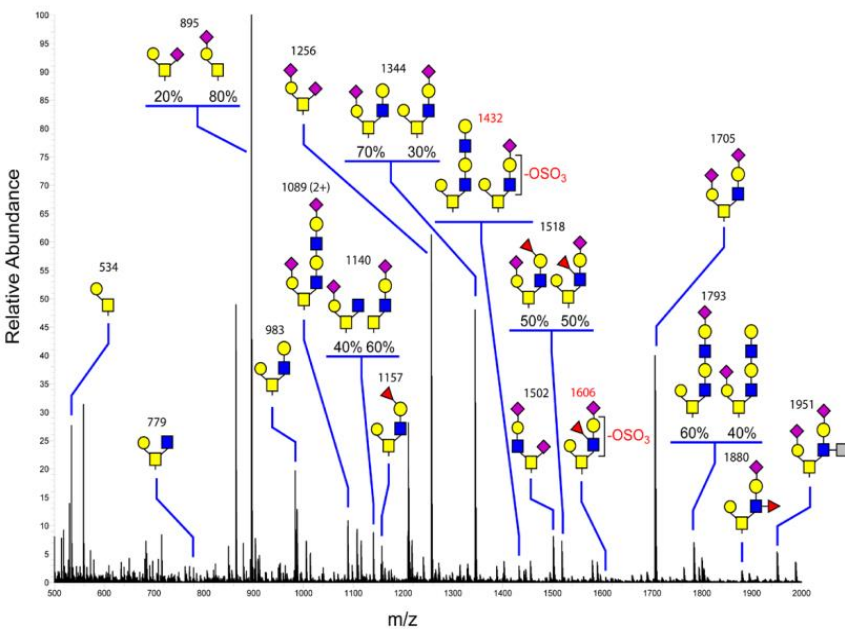
ANALYTICAL GLYCOBIOLOGY

Skills Development Training Workshop APRIL 22-24, 2013



COMPLEX CARBOHYDRATE RESEARCH CENTER (CCRC)

ATHENS, GA



Workshop Faculty:

Kazuhiro Aoki, Toshihiko Katoh, Tadahiro Kumagai, David Nix, Mindy Porterfield, Parastoo Azadi, Michael Tiemeyer

Schedule

Day 1, Proteomics (Toshihiko Kato, Mayumi Ishihara)

Identification of saliva glycoprotein from SDS gel

Day 2, Glycomics (Kazuhiro Aoki, David Nix, Tadahiro Kumagai)

Identification of saliva O-linked glycan from SDS gel

Day 3, Data analysis

Proteomics (Toshi & Mayumi)

Glycomics (Mindy Porterfield, Rene Ranzinger, Mike Tiemeyer)

Samples for this training

Saliva from Johns Hopkins(4), Scripps(1) and CCRC(1)

Sample 1

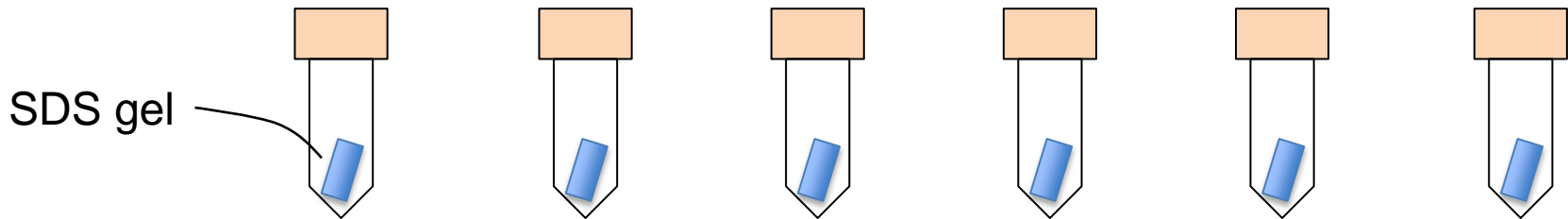
Sample 2

Sample 3

Sample 4

Sample 5

Sample 6



Day 1. Saliva protein identification

Day 2. Saliva O-glycan identification

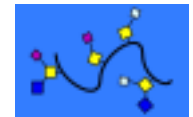
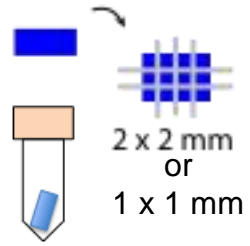
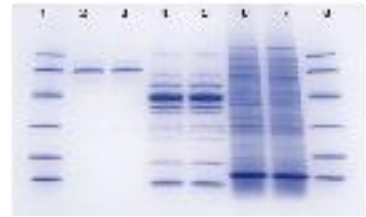
ABO blood type antigens in O-glycan of human saliva

LID-PEG training overview

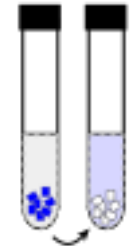
Glycoprotein
from
human saliva



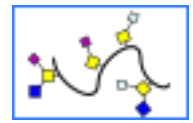
1. SDS-PAGE



2. Destaining

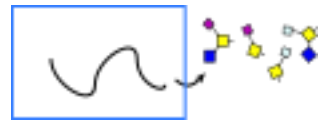


ACN / Water



Glycomics

3. Reductive β -elimination



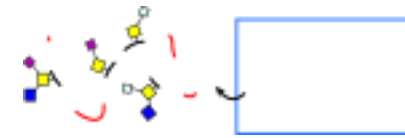
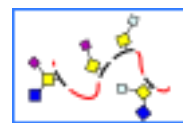
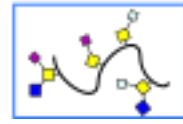
MS spec.



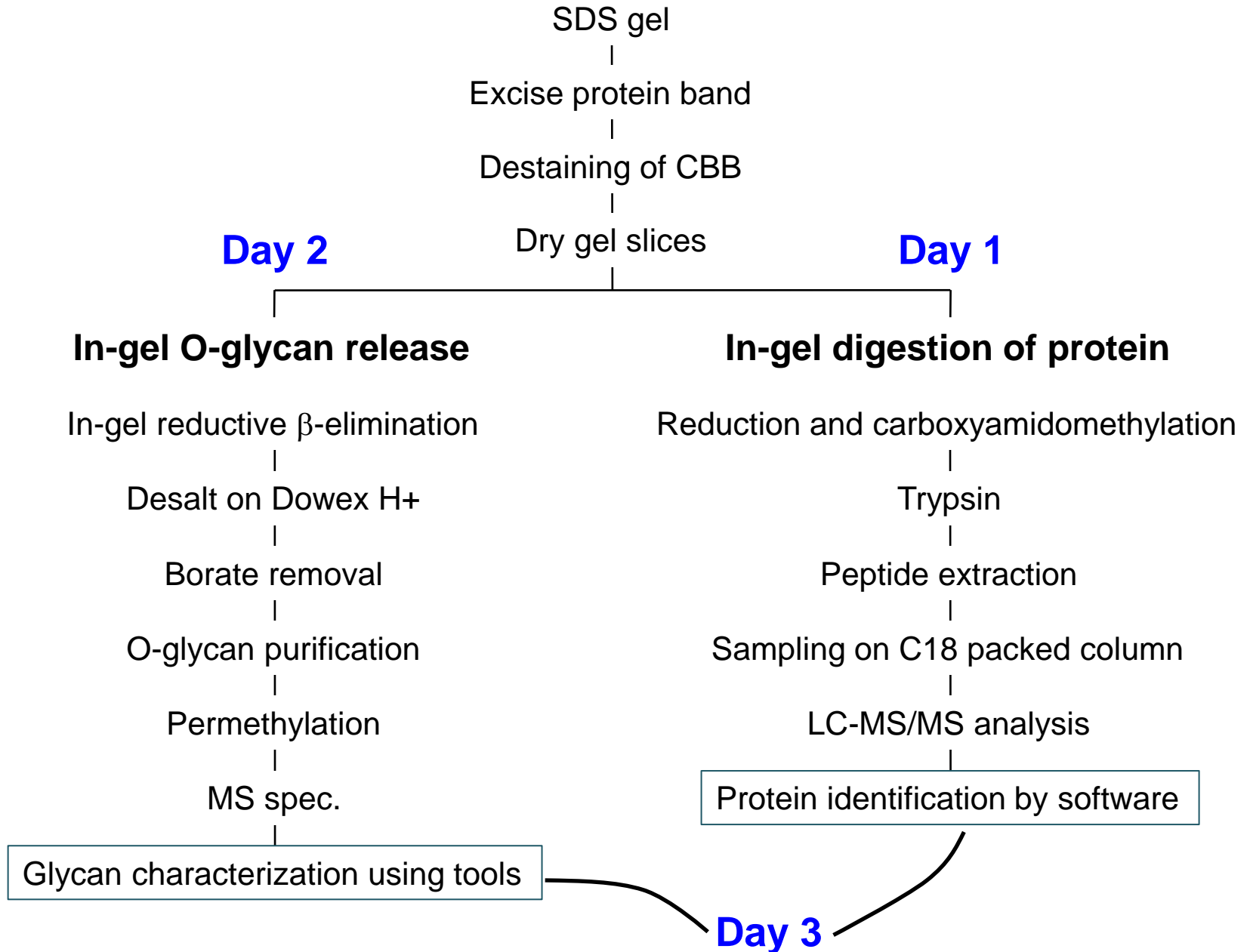
Data analysis

Proteomics

3. In-gel trypsin digestion

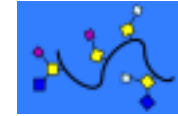
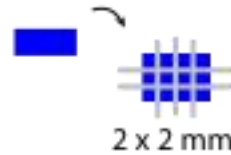
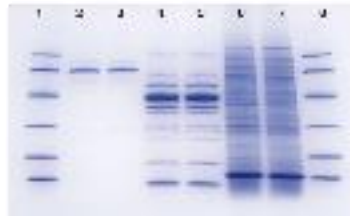


LID-PEG training overview

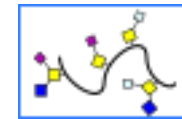
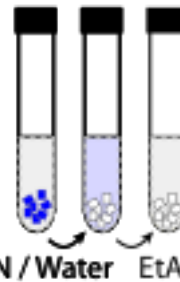


LID-PEG training overview

1. SDS-PAGE



2. Destaining



Glycomics

3. Reductive β -elimination



MS spec.



Data analysis

Proteomics

3. In-gel trypsin digestion

