Tommy Cedervall

Biochemistry and Structural Biology

NanoLund

Lunds University

NANOLUND
AT THE FOREFRONT OF NANOSCIENCE

BEKOGR
Beställargrupp konstgräs

Mistra Environmental NanoSafety Phase II

Forskningsrådet Formas
Formas främjar framstående forskning för hållbar utveckling

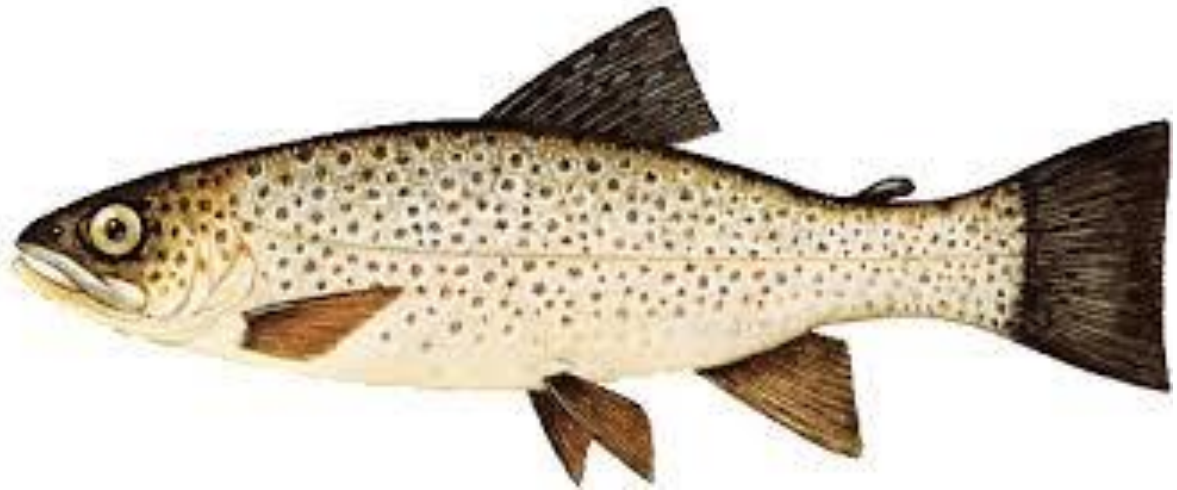
NATUR VÅRDS VERKET

Plastics in water; why nano

Micro vs Nanoplastics in vatten

Micro < 5 millimeter

Nano < 1 mikrometer
< 100 nanomater



Size dependency?

Different exposure routes!!

Different biological effects as:

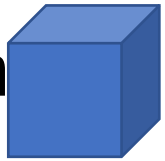
Clogged gills

Distribution in organisms and cells

Biochemical effects

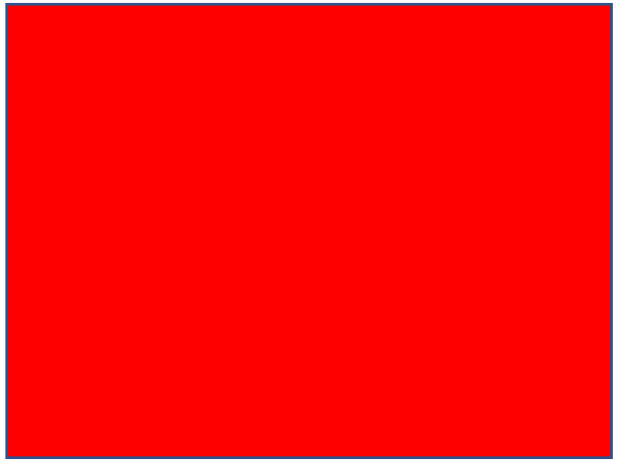
Toxicity

Large area to mass rario

2 cm 

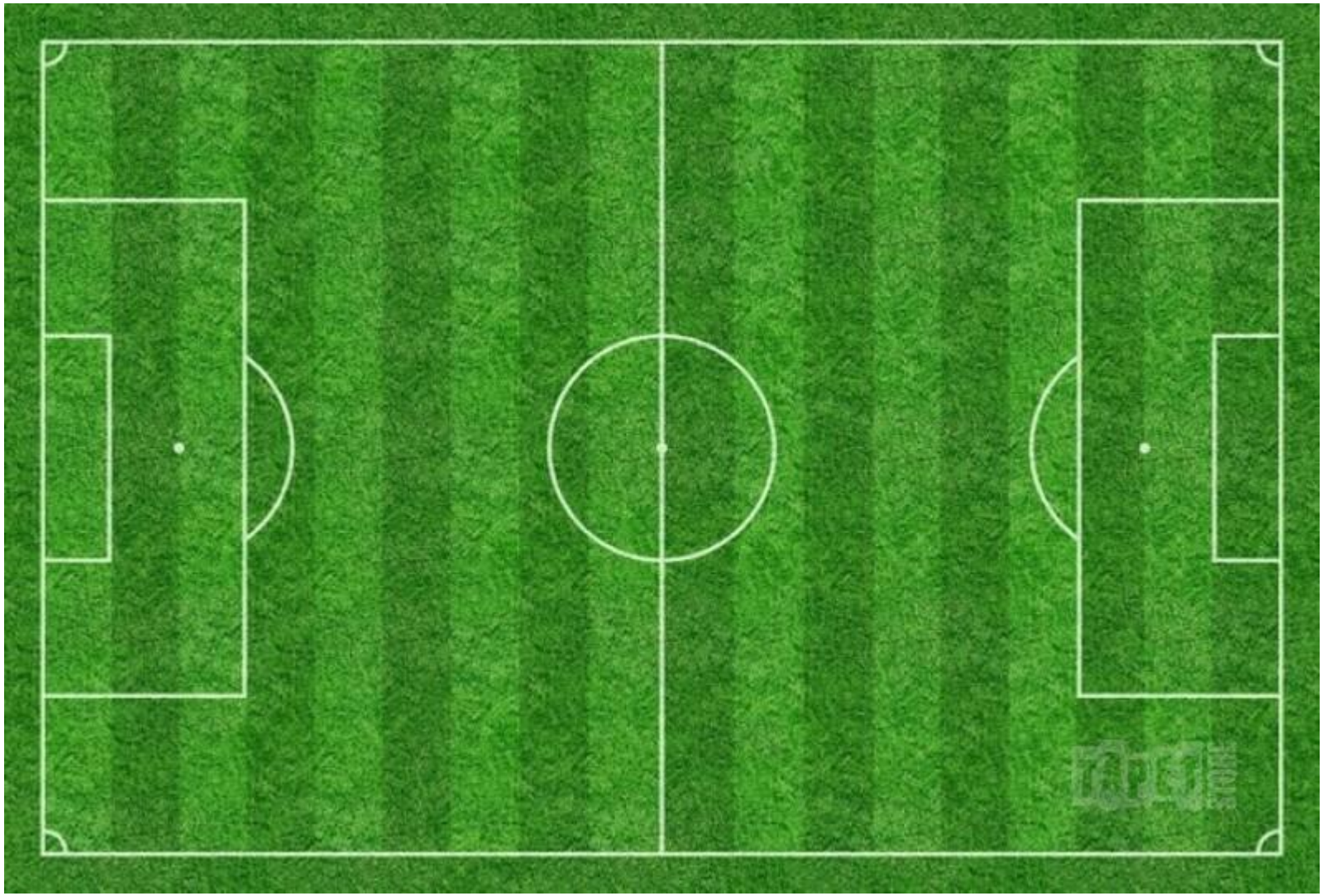
area

1 cm X 8

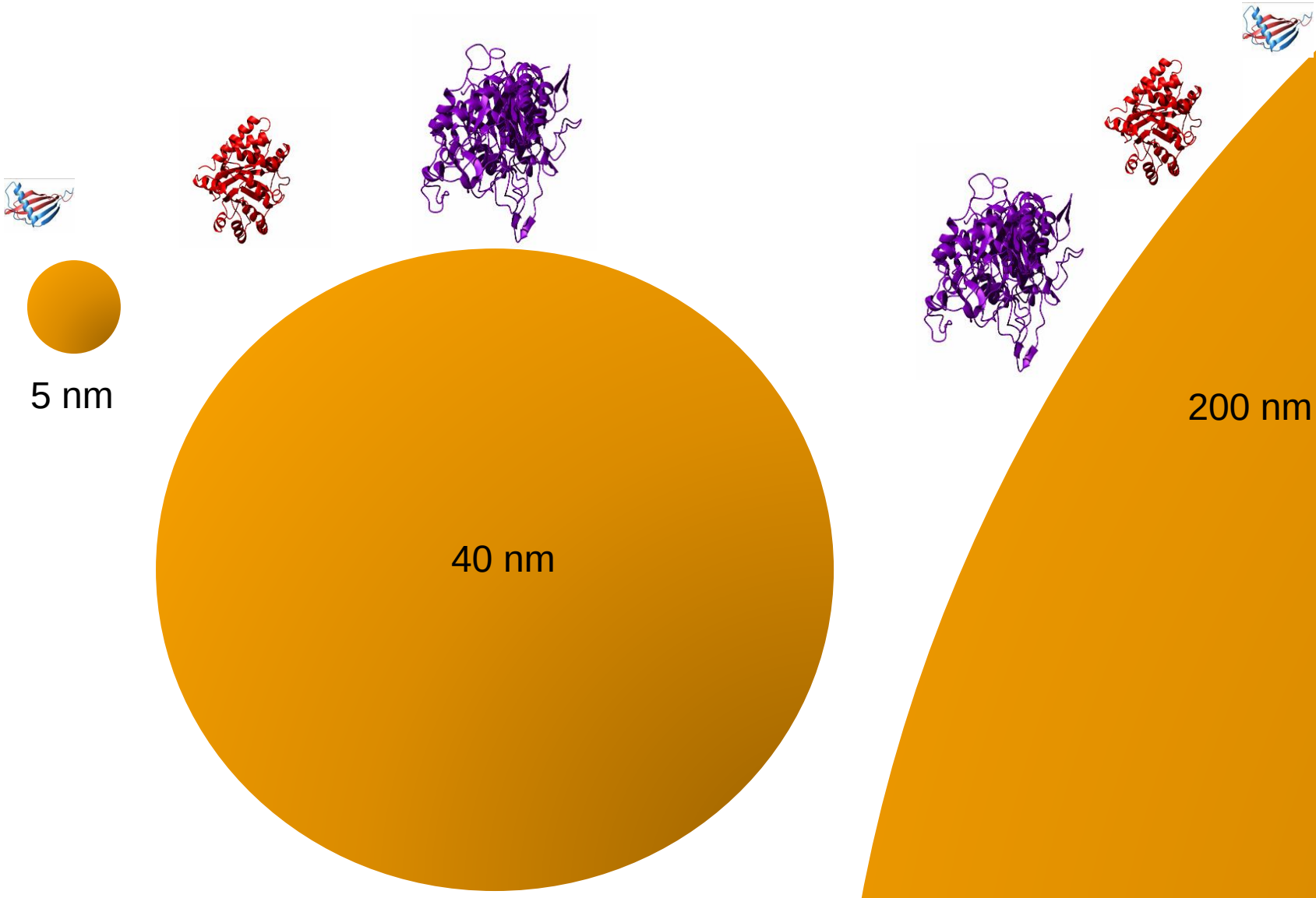


10 nm X 8×10^{8}

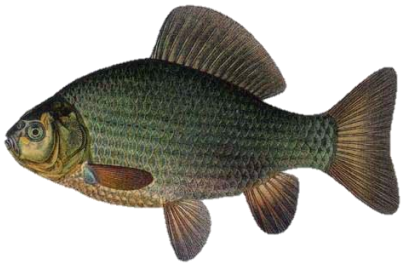
4800 m^2



Nano is size



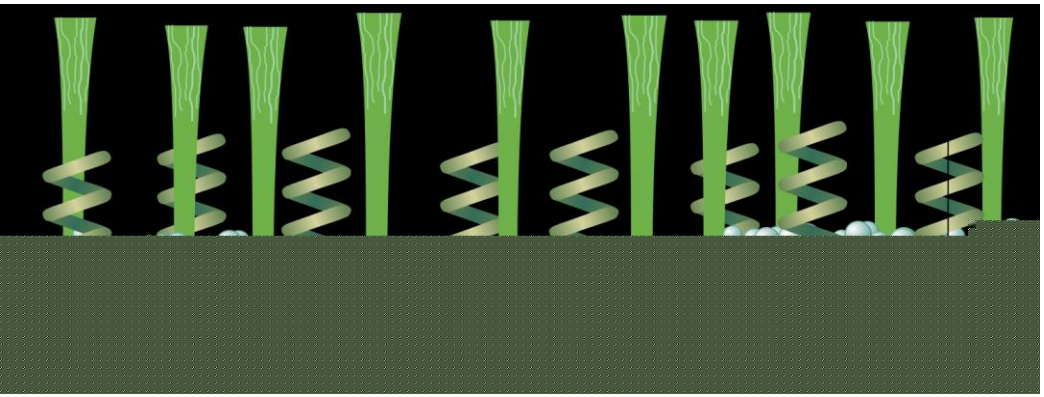
Our experimental Food chain



Fisk

Zooplankton

Alger

Partiklar

Nanoplastics from football fields?