

## The antimicrobial peptide aurein 1.2 disrupts model membranes via the carpet mechanism

David I. Fernandez, Anton P. Le Brun, Thomas C. Whitwell, Marc-Antoine Sani,  
Michael James and Frances Separovic

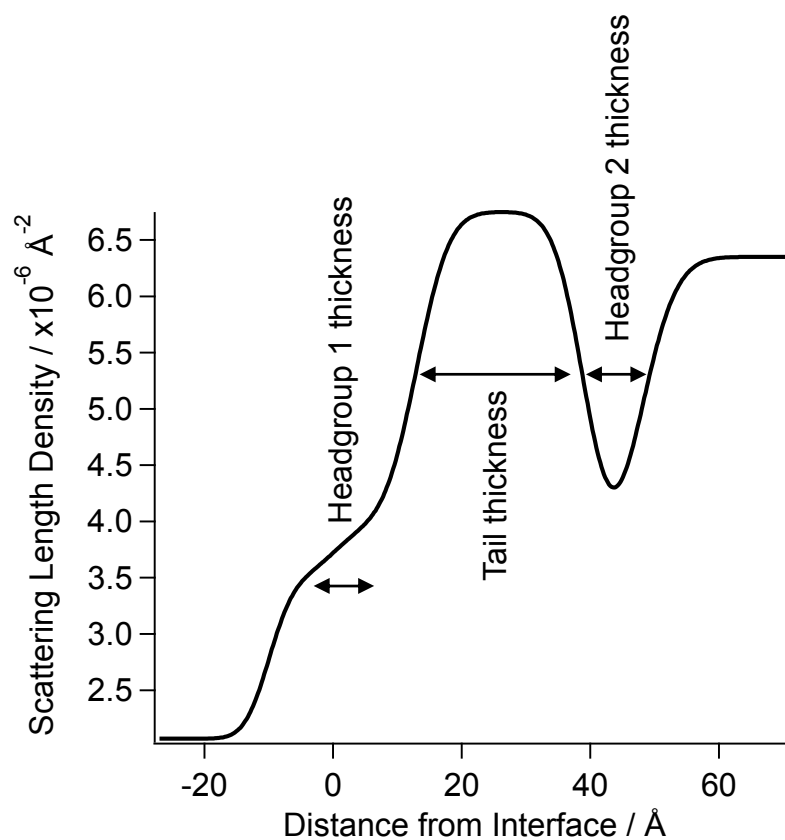
### SUPPLEMENTAL INFORMATION

**Table S1.** The effect of 10  $\mu\text{M}$  aurein 1.2 on thickness and nSLD of  $d_{54}$ -DMPC bilayers in  $\text{H}_2\text{O}$  and CM4 contrasts.

	Bilayer		+ 10 $\mu\text{M}$ aurein 1.2		
	Thickness ( $\text{\AA}$ )	nSLD in $\text{H}_2\text{O}$ ( $\times 10^{-6} \text{\AA}^{-2}$ )	Thickness ( $\text{\AA}$ )	nSLD in $\text{H}_2\text{O}$ ( $\times 10^{-6} \text{\AA}^{-2}$ )	nSLD in CM4 ( $\times 10^{-6} \text{\AA}^{-2}$ )
<b>Headgroup 1</b>	$13 \pm 1$	$0.81 \pm 0.06$	$12 \pm 1$	$0.13 \pm 0.01$	$3.21 \pm 0.04$
<b>Tails</b>	$27 \pm 1$	$5.88 \pm 0.45$	$27 \pm 1$	$5.39 \pm 0.03$	$5.43 \pm 0.03$
<b>Headgroup 2</b>	$6 \pm 1$	$1.88 \pm 0.14$	$8 \pm 1$	$1.49 \pm 0.03$	$2.30 \pm 0.05$

**Table S2.** The effect of 10  $\mu\text{M}$  aurein 1.2 on thickness and nSLD of  $d_{54}$ -DMPC/ $d_{54}$ -DMPG (4:1) bilayers in  $\text{H}_2\text{O}$  and CM4 contrasts.

	<b>Bilayer</b>		<b>+ 10 <math>\mu\text{M}</math> aurein 1.2</b>		
	<b>Thickness (<math>\text{\AA}</math>)</b>	<b>nSLD in <math>\text{H}_2\text{O}</math> (<math>\times 10^{-6} \text{\AA}^{-2}</math>)</b>	<b>Thickness (<math>\text{\AA}</math>)</b>	<b>nSLD in <math>\text{H}_2\text{O}</math> (<math>\times 10^{-6} \text{\AA}^{-2}</math>)</b>	<b>nSLD in CM4 (<math>\times 10^{-6} \text{\AA}^{-2}</math>)</b>
<b>Headgroup 1</b>	$14 \pm 1$	$0.91 \pm 0.04$	$14 \pm 1$	$0.74 \pm 0.01$	$3.72 \pm 0.05$
<b>Tails</b>	$26 \pm 1$	$5.66 \pm 0.28$	$23 \pm 1$	$4.64 \pm 0.04$	$5.32 \pm 0.03$
<b>Headgroup 2</b>	$6 \pm 1$	$2.00 \pm 0.08$	$9 \pm 1$	$1.90 \pm 0.04$	$2.79 \pm 0.06$



**Supplemental Figure S1.** An nSLD profile of a DMPC bilayer showing how the thickness of each layer is derived.