

Title

## **Abstract**

## **Impact statement**

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# 1 Introduction

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## 1.2 Cell polarity

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### **1.7.2 RINGs as dimerisation domains**

### **1.7.3 Discussion**

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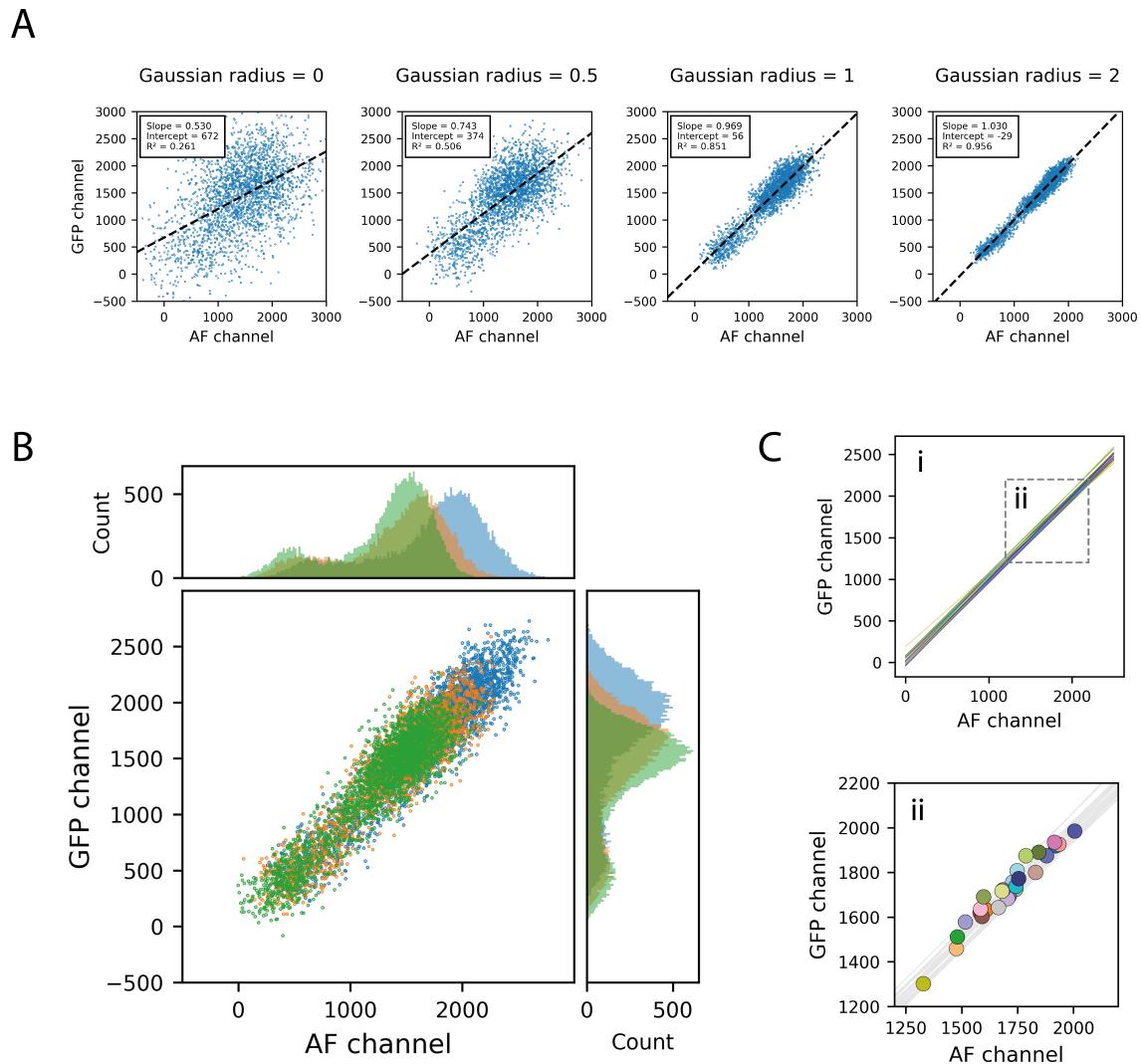
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### **2.1 Autofluorescence correction**

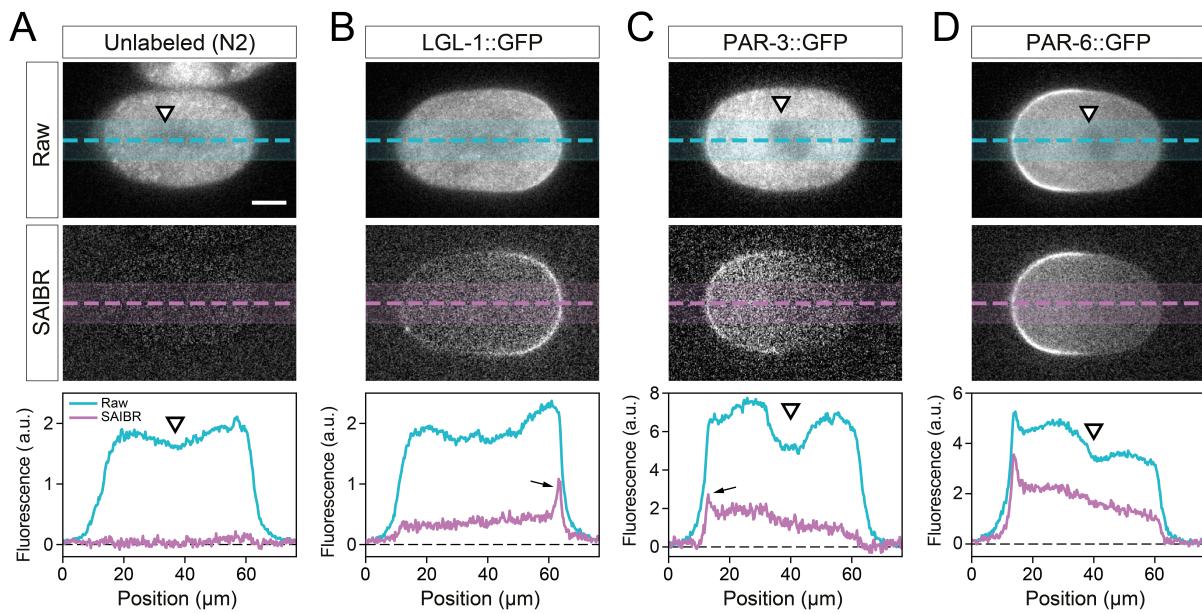
#### **2.1.1 Autofluorescence in C elegans**

#### **2.1.2 Spectral imaging for autofluorescence correction**

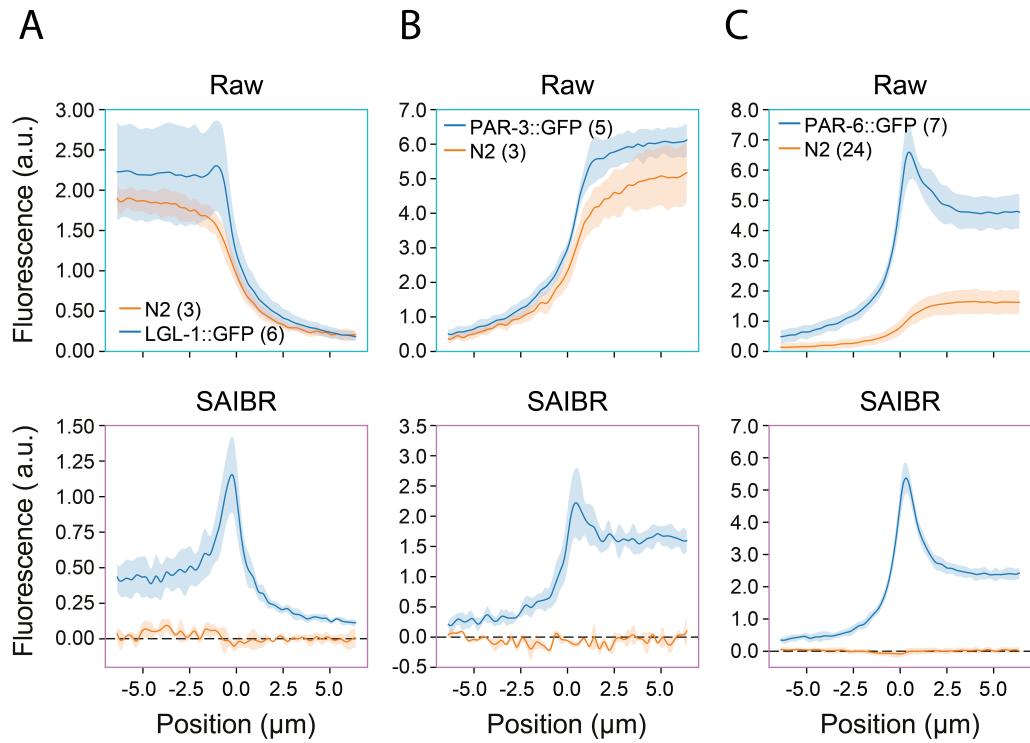
#### **2.1.3 SAIBR: a tool for spatial autofluorescence correction**



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**Figure 2.2:** Title. Caption



**Figure 2.3:** Title. Caption

## 2.1.4 Autofluorescence correction in two-colour samples

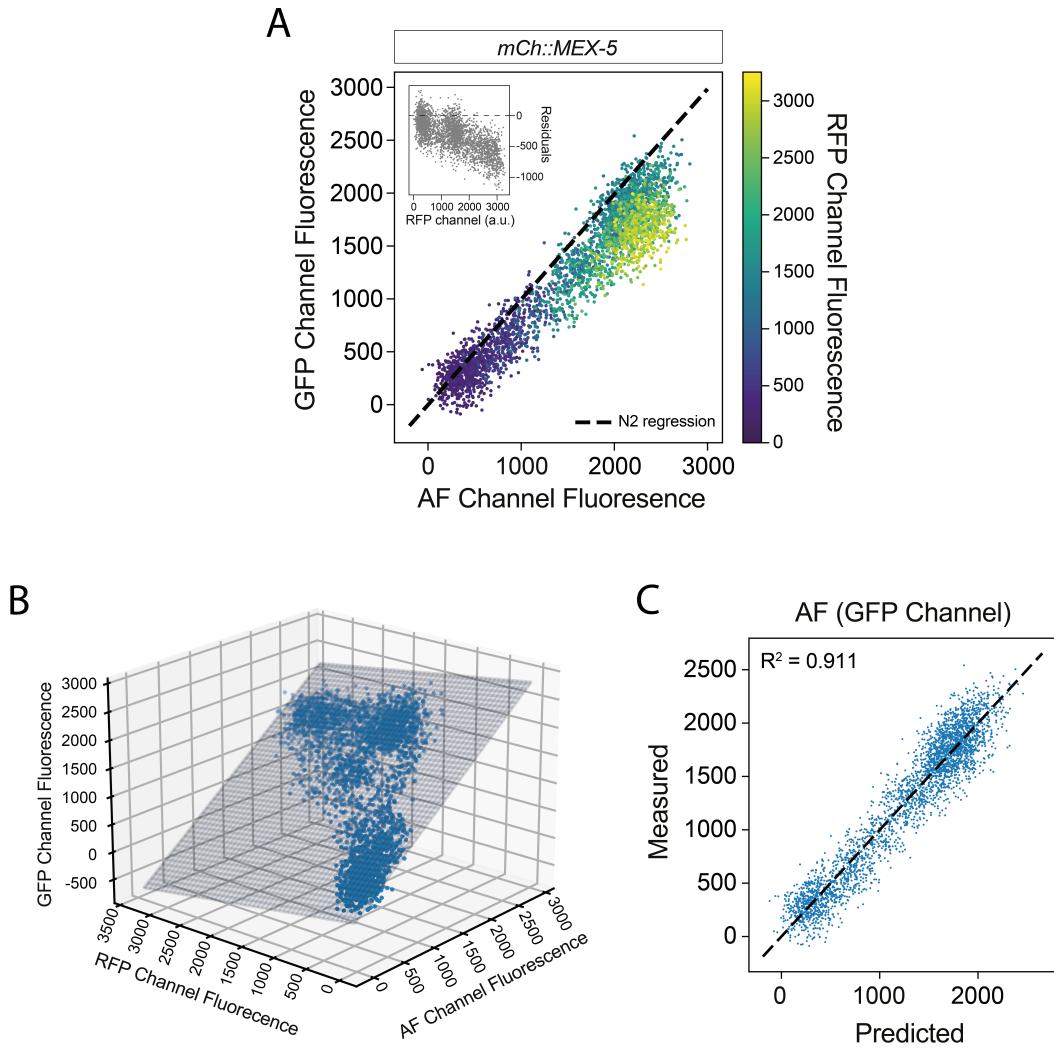
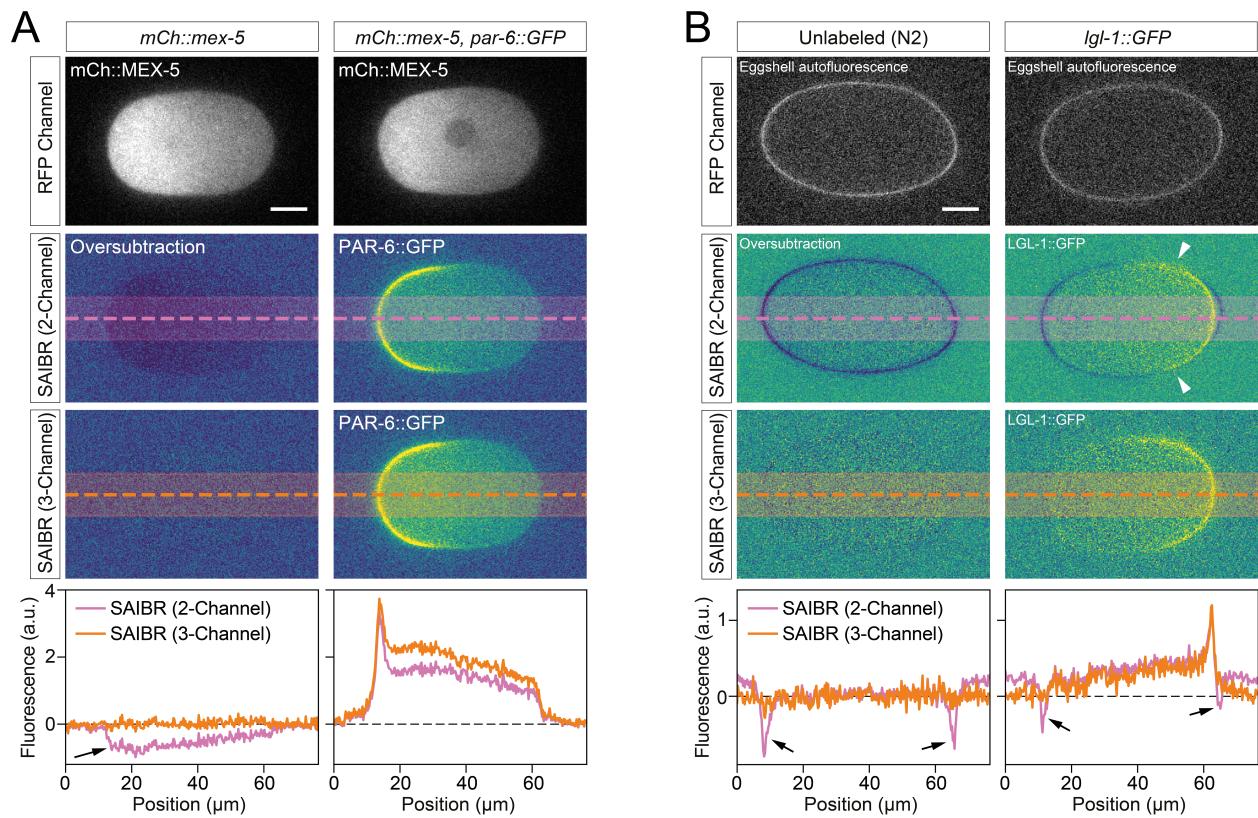


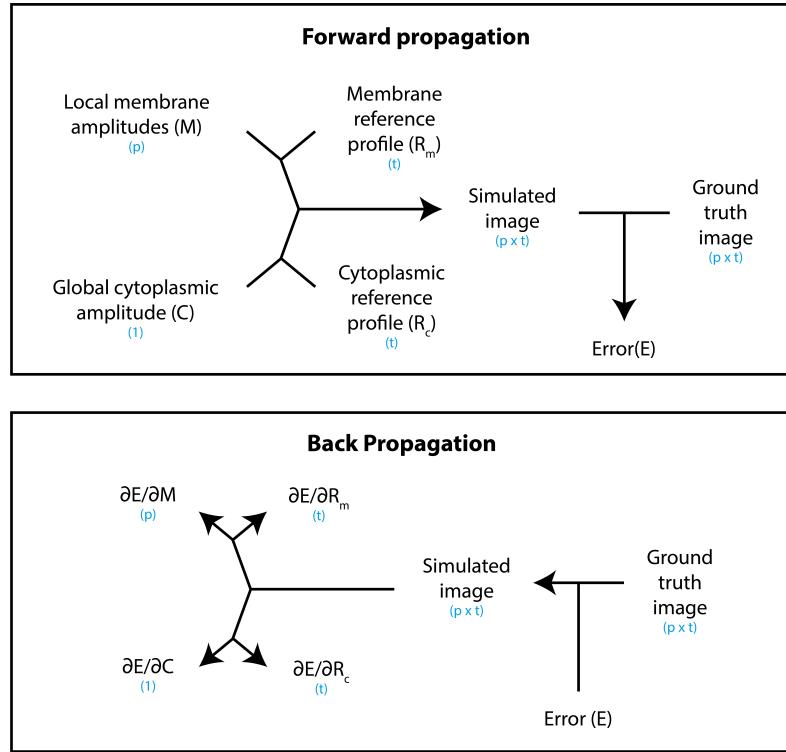
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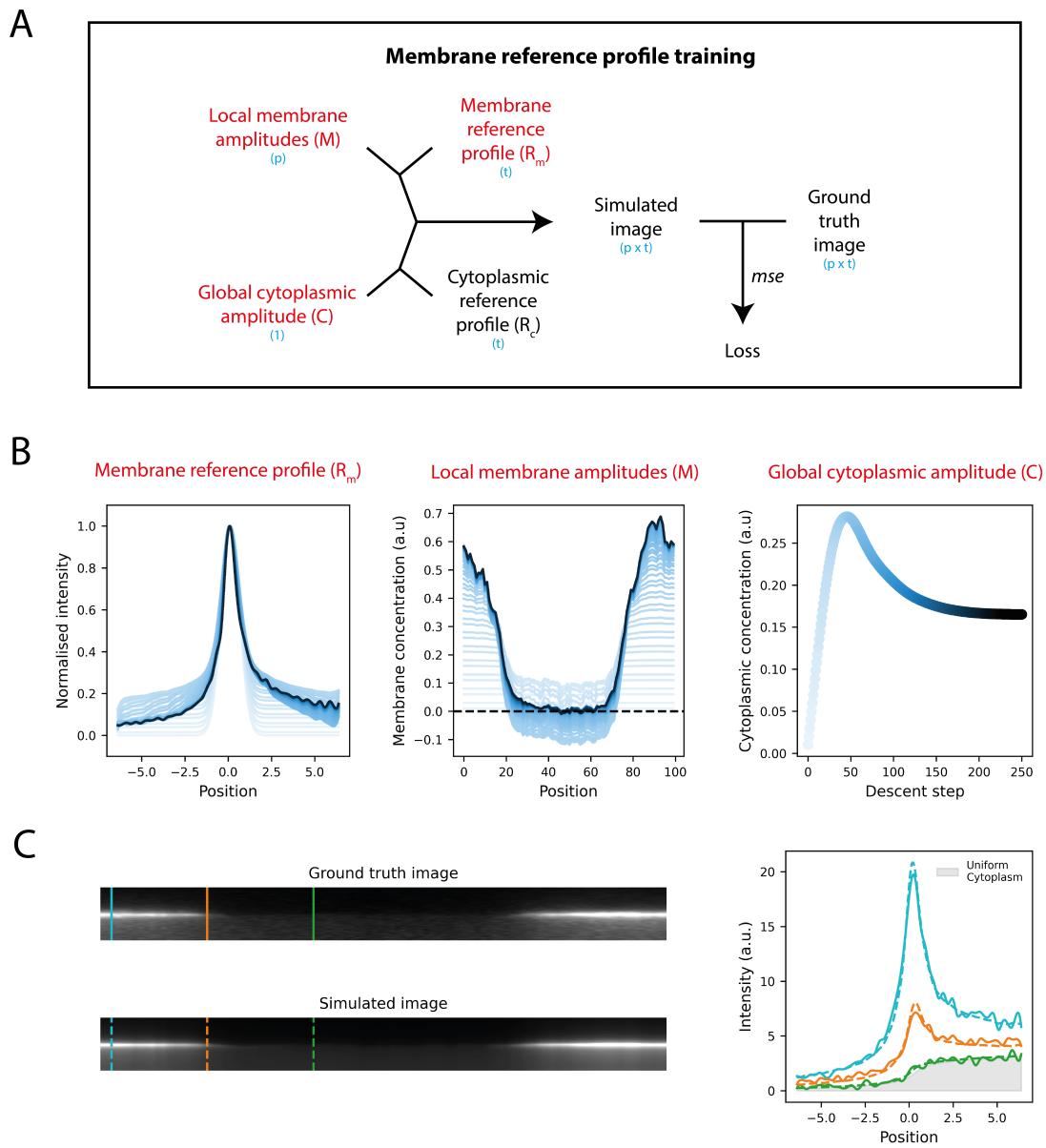
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**Figure 2.6:** Title. Caption



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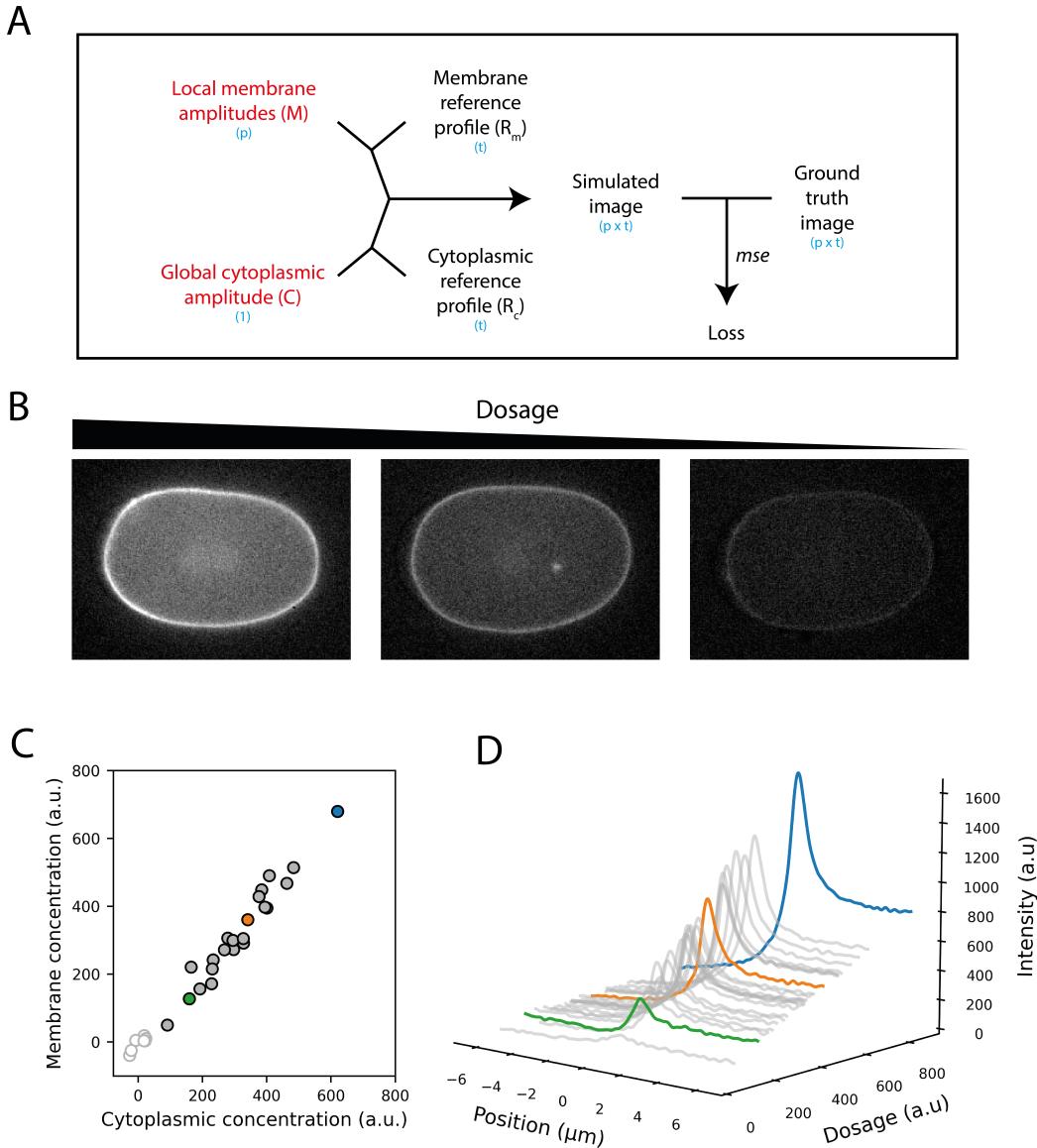
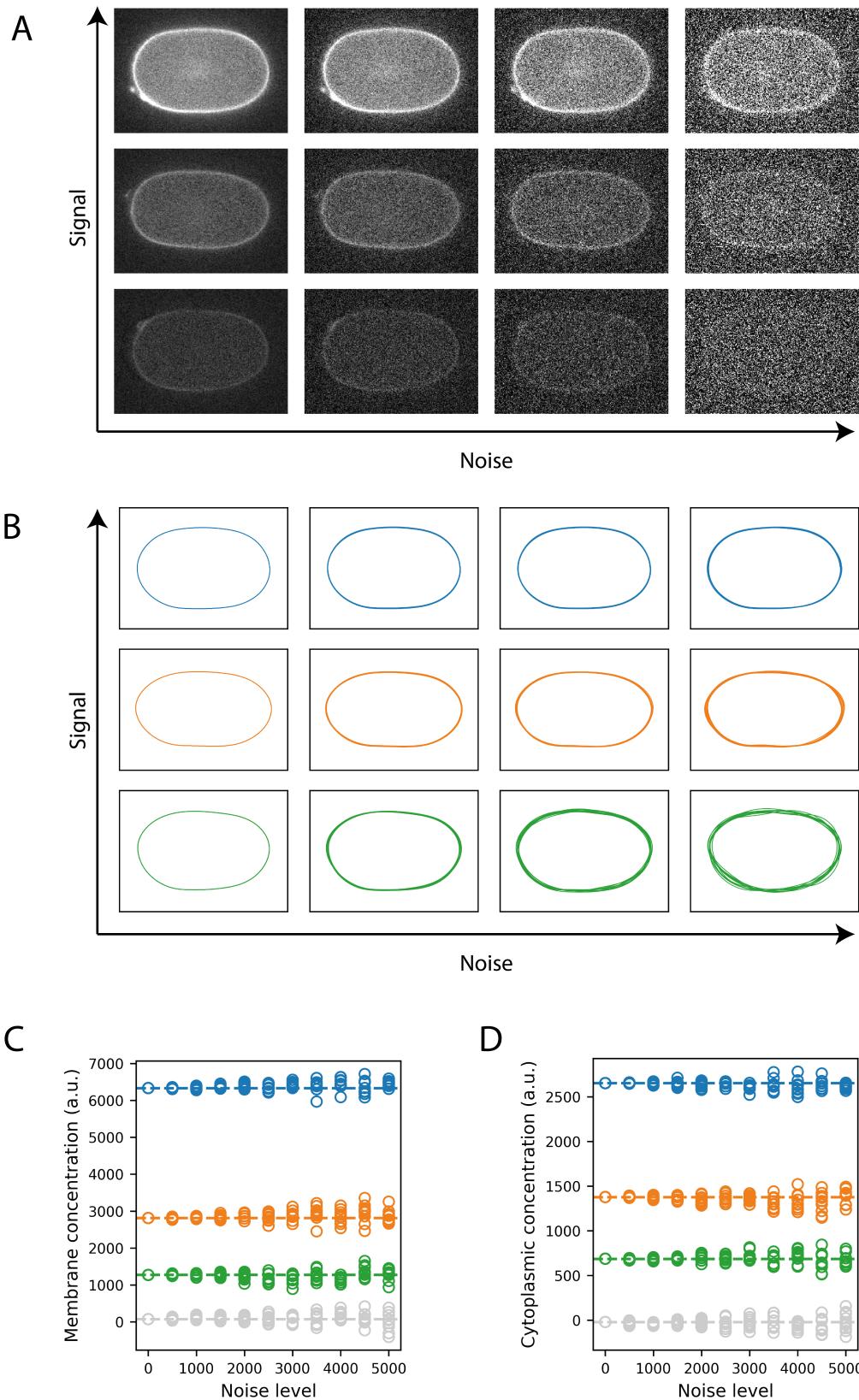


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### 2.2.3 Calibration of concentration units

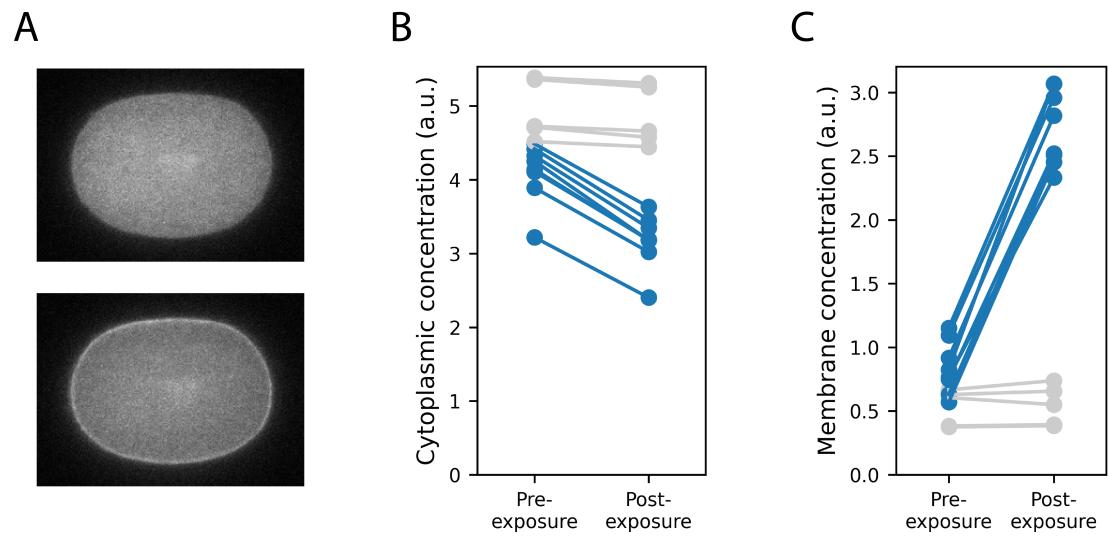


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#### **2.2.4 Discussion**

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### **4.1 Exploring a role for ubiquitination**

#### **4.1.1 PAR-2 purification and in vitro ubiquitination assays**

#### **4.1.2 Sequence analysis and targeted mutation of putative linchpin site**

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#### **4.2.1 Structure prediction**

#### **4.2.2 Characterising dimerisation in vitro**

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**5.1 Model description**

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## 6 Direct experimental manipulation of dimerisation

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## **7 Modelling dimerisation-driven positive feedback in the PAR network**

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## **9 Materials and methods**

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**9.1 Worm maintenance**

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**9.3 Microscopy**

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**9.5 Ubiquitination assays**

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