

# An automated feedback system with the hybrid model of scoring and classification for solving over-segmentation problems in RNAi high content screening

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## Key words.

## Summary

### Background:

Background text describing the context of the study, including the challenges of over-segmentation in RNAi high content screening and the motivation for developing an automated feedback system.

### Methods:

Methods text describing the hybrid model of scoring and classification used for solving over-segmentation problems.

### Results:

Results text showing the performance of the system, including metrics such as accuracy and precision. For example, the system achieved a 2% improvement in accuracy over the baseline.

## Conclusions:

Conclusions text summarizing the findings of the study and the implications of the automated feedback system.

## 1. Introduction

Introduction text providing an overview of the field of RNAi high content screening and the specific problem of over-segmentation. It also introduces the hybrid model of scoring and classification and the automated feedback system.



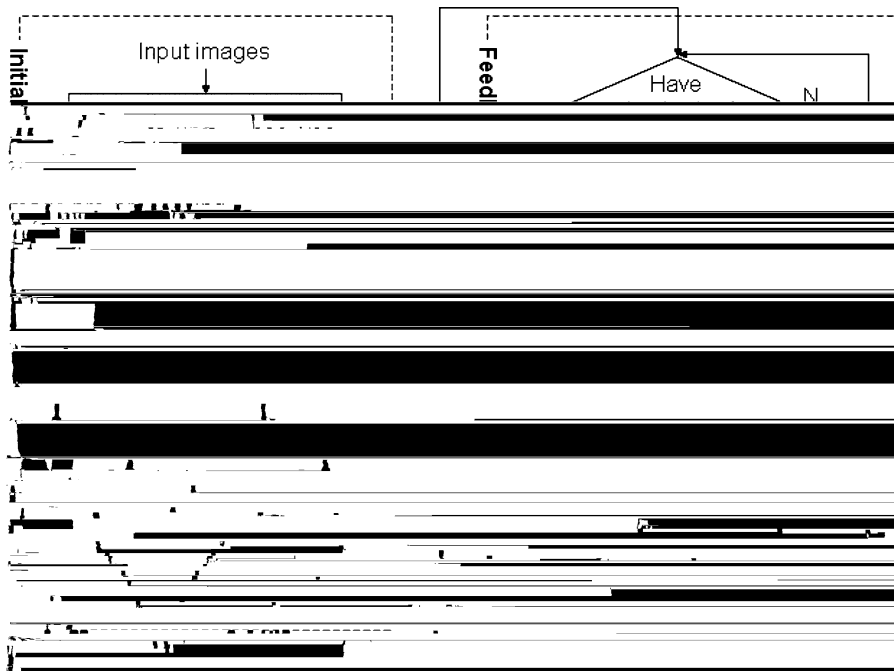
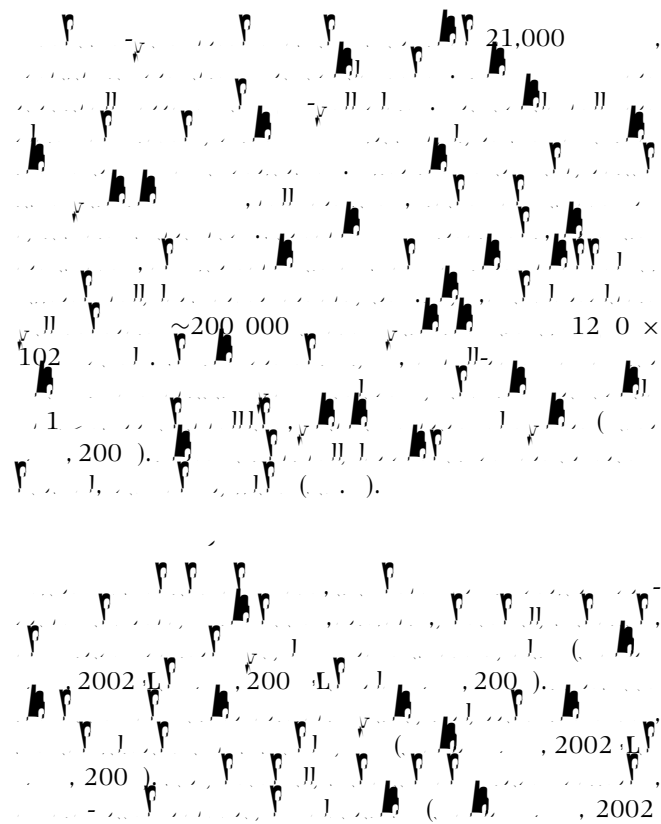
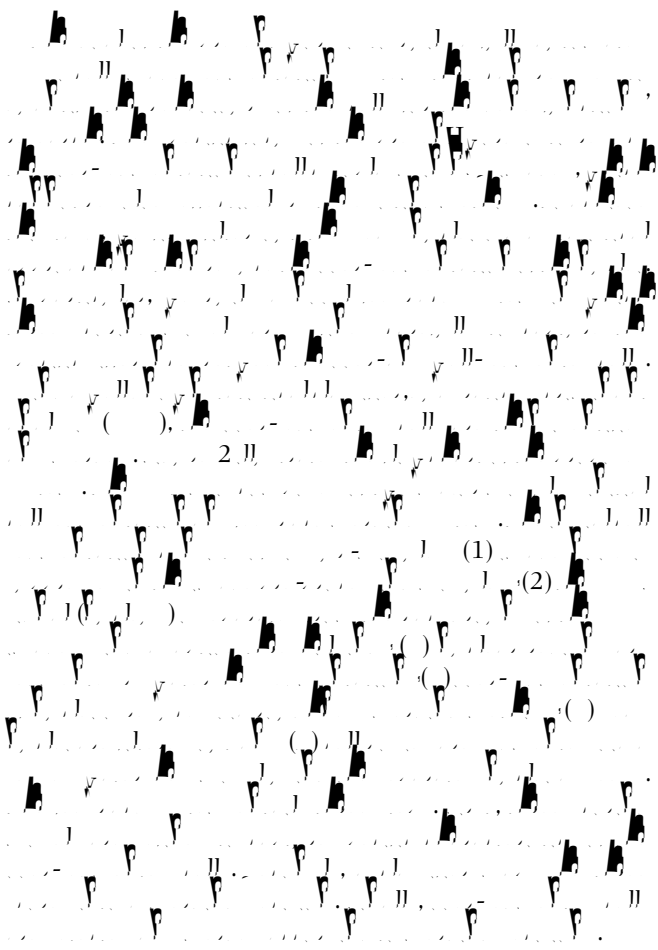


Fig. 2.

## 2. Materials and methods



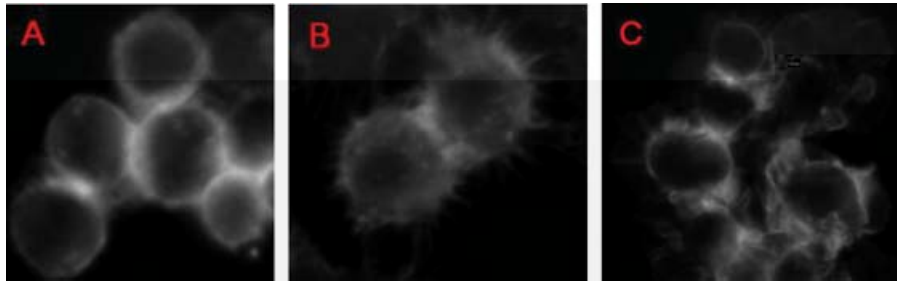
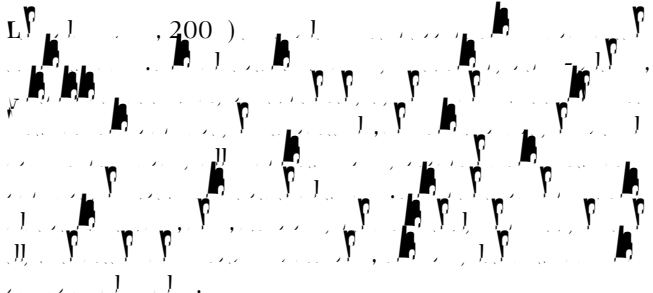
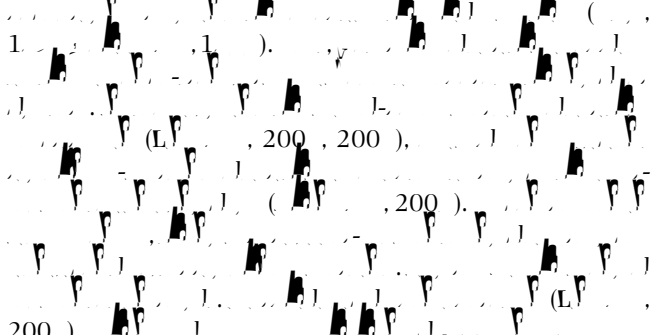


Fig. 3. (A) Original image, (B) image after thresholding, (C) image after morphological operations.



**Nuclear segmentation.**



**Removal of dead nuclei.**

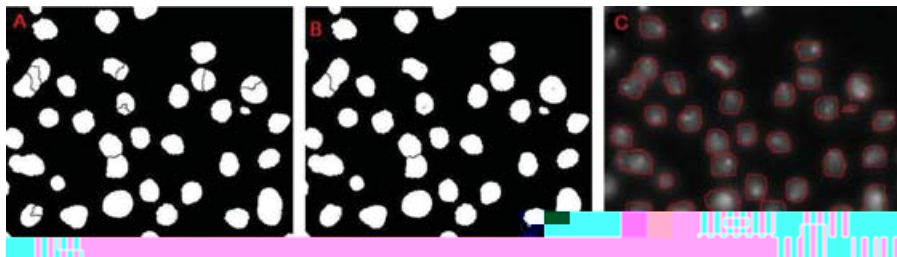
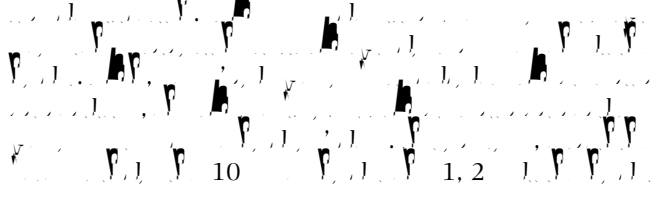
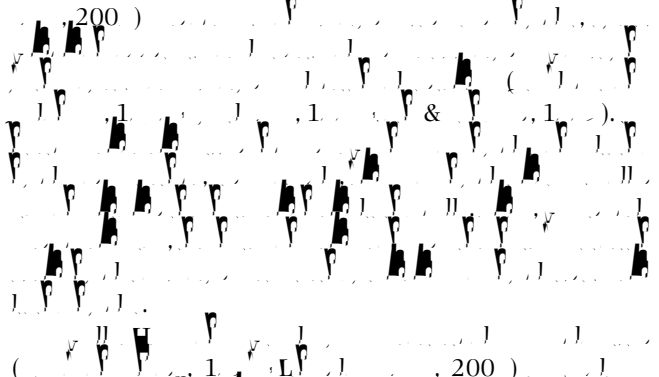
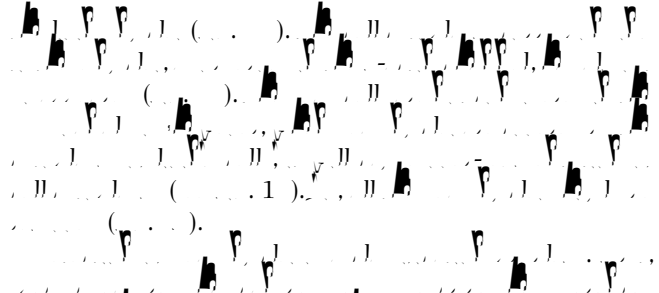


Fig. 4. (A) Original image, (B) image after thresholding, (C) image after morphological operations.





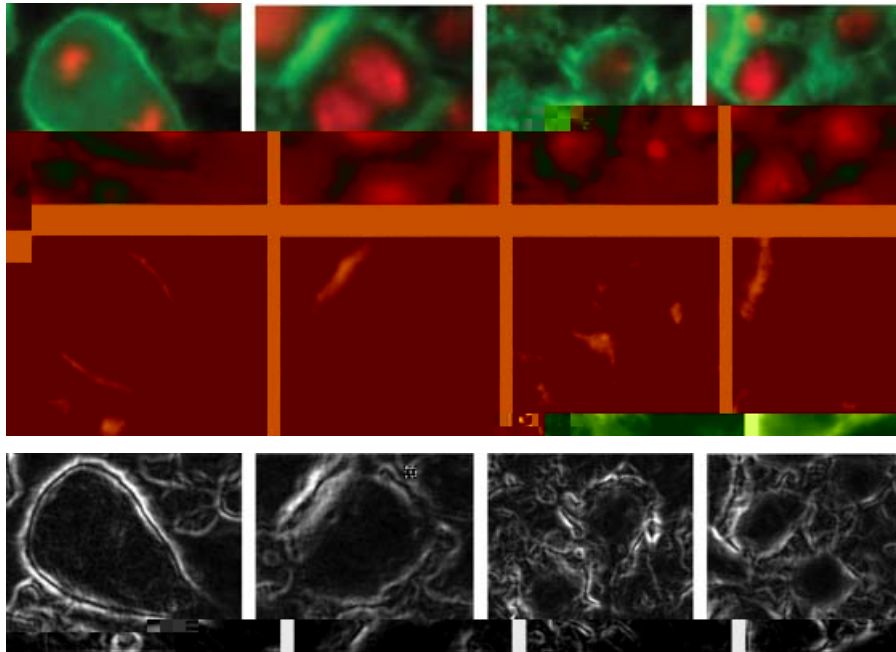


Fig. 7

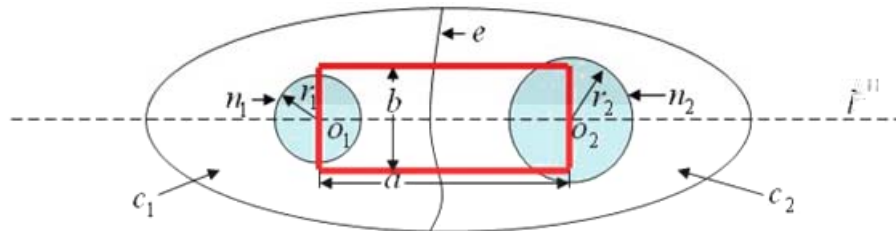


Fig. 8

$E$

**EI model and EI score.**

$$= \{ (1), \dots (2) \}$$







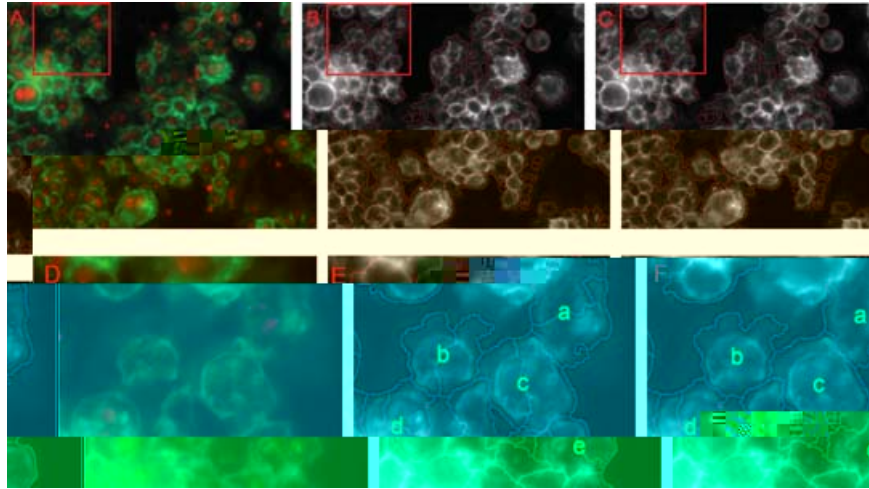


Fig. 11.

20%

4. Conclusion and discussion

Table 5.

	V				J
#	2		0		1
#	2			1	12 ( 1. 0%)
#					1 (2. 0%)
#	1	1	1	1	

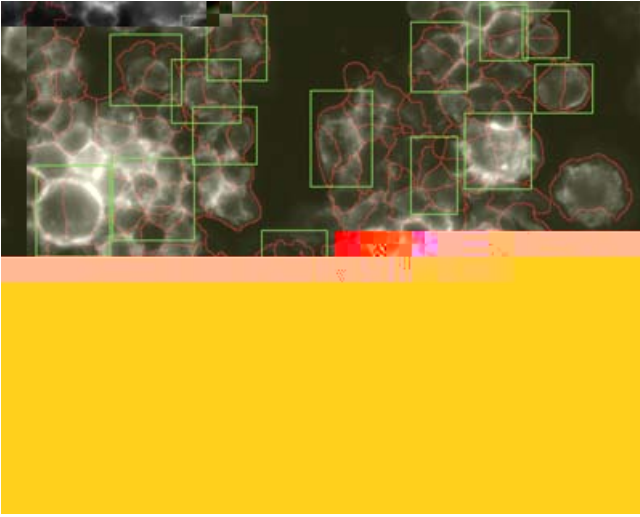
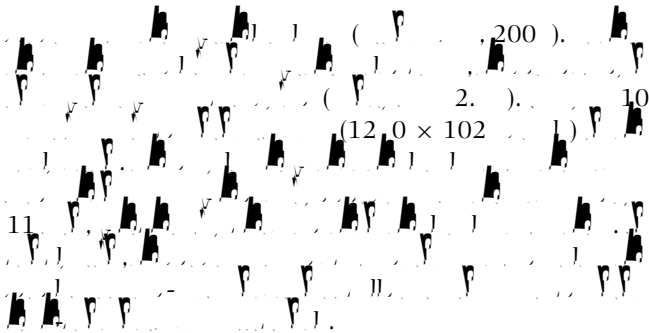


Fig. 12.



Acknowledgments

This work was supported by the National Natural Science Foundation of China (Grant No. 81273086) and the National Key Research and Development Program of China (Grant No. 2016YFC0100500).

References

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& V. L. (2001) *IEEE* 10, 2-2. (200) *IEEE* 53, 2 (1-2) 45, 0. (1-1) *IEEE* 67, 0. (1-1) *EEE* 19, 1-1. (200) V. (2001) *E* 2, 1, 21-1. (200) 2(), 2. (1-1) 32, 1-2. (200) 56, 2. (200) 63, 20 (200) 57, 22 (1-1) *EEE* 210, 0, 1. (1-1) *EEE* 18, 2. (200) 3. (1-1) *EEE* 8, 2. (200) L. & J. (200) 306, 11-11. (200) 20, 21-21. (1-1) 15, 111-112. (1-1) 41, 2-2 0.

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24, 101 111.

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... EEE 23, 1, 0 1

... & ... (200 ) ...

... EEE 23, ... 2.