



# What Can Technology and Platforms do to Stem the Pirates' Call? Technology's Response to Piracy

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# Acting on Different Types of Piracy

Type Aspect	Scholarly Content Networks (Research Gate+)	Sci-Hub	Subscription Fraud	Unintentional, Informal, Unclassifiable
<b>Motivation</b>				
<b>Assessment</b>				
<b>Detection</b>				
<b>Prevention</b>				
<b>Mitigation</b>				

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<b>Mitigation</b>	<b>CASA, RA21 Unpaywall</b>	<b>CASA, RA21, Unpaywall</b>		

# ‘Mitigation’ – Reduce the need for piracy

- Make it easier to get legal access than pirate access
- Must place the “easier” access in the workflow
- Where to put the “easier” in the workflow?
  - Search
  - Display Abstract
  - Paywall / Login
- The solutions
  - Search – CASA
  - Display Abstract – Unpaywall
  - Paywall / Login – RA21

# Friction Points for Mobile People & Devices



- Off-campus use of campus-subscribed resources is ***hard***
- Off-campus use of campus-subscribed resources is ***frequent***
  
- *Solution:* CASA, RA21, Unpaywall

# CASA – “It just works”

- What it is
  - **Campus-Activated Subscriber Access**
  - Uses Google as an “affiliation server”
- What it does
  - “Right rail” links (aka “Subscriber Links”) that show up on-campus ***also show up off-campus!***
  - *No user action is needed*
  - COUNTER usage is correctly recorded
- How it works
  - The user uses a normal discovery workflow on campus, using Google Scholar
  - Scholar remembers their institutional affiliation
  - When off campus, the publisher platform & Scholar can vouch for user affiliation, invisible to the user



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## Hypothesis

1. In part, the ease of resource access within IP ranges makes off campus access so difficult
  2. In part, the difficulty of resource outside IP ranges encourages legitimate users to resort to illegitimate means of resource access
- ∴ It is time to move beyond IP-recognition as the main authentication system for scholarly content while making sure the alternative is as barrier free as possible**

## Alternative for STM

- User authentication and access to scholarly resources via academic or corporate credentials
  - Leverages each institution's process for validating individuals who are authorized to access campus or corporate resources



# Unpaywall

- Unpaywall.org, from ImpactStory
- A browser extension that finds legal free full text 50-85% of the time depending on topic and year of publication
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## $\Delta$ Np63 $\alpha$ is a common inhibitory target in oncogenic PI3K/Ras/Her2-induced cell motility and tumor metastasis

Linshan Hu<sup>a,1</sup>, Shan Liang<sup>a,b,1</sup>, Hu Chen<sup>a,1</sup>, Tao Lv<sup>a</sup>, Junfeng Wu<sup>c</sup>, Deshi Chen<sup>a</sup>, Min Wu<sup>a</sup>, Shengnan Sun<sup>a</sup>, Haibo Zhang<sup>a</sup>, Han You<sup>d</sup>, Hongbin Ji<sup>e</sup>, Yujun Zhang<sup>a</sup>, Johann Bergholz<sup>a</sup>, and Zhi-Xiong Jim Xiao<sup>a,c,2</sup>

Author Affiliations

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### Significance

Oncogenic hotspot mutations in *PIK3CA* or *RAS* and overexpression of Her2 are known as a driving force for human cancer development. We and others have shown that  $\Delta$ Np63 $\alpha$ , the major protein isoform of the p53-related p63 expressed in epithelial cells, functions as an important regulator for the cell adhesion program and is a critical inhibitor of cancer metastasis. In this study, we demonstrate that

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**Piracy: What is it? How pervasive is it and by whom? Why is it done and what can be done about it?**

