Working at a Research-Intensive University

While doing my part to make computing inclusive

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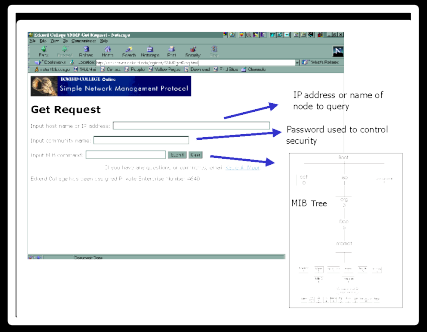
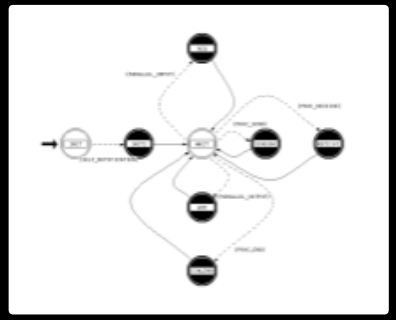
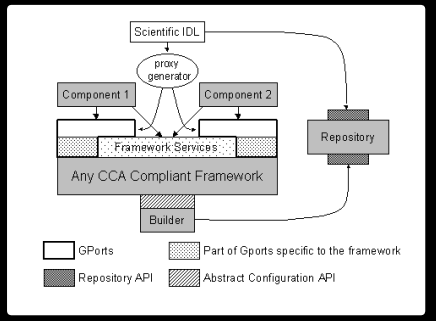
Photo Credit: Andreas Bueckle

Alt Text Presentation:
https://bit.ly/FutureSiek24

Searching for passion...*Experimenting with Research*





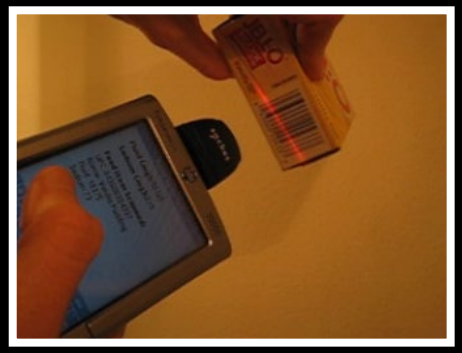
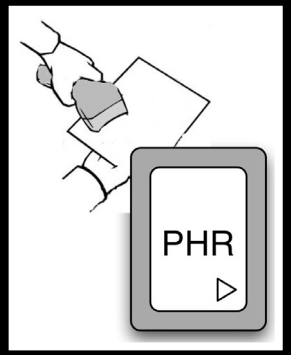


Eckerd College – SNMP

Notre Dame –Memory

IU - CCA

My Passion: Empowering Everyone

IU – Feeding Tube & DIMA

CU – CoCareTablet, Health Bridge

IU - Health Sense

Collaborate with people

Investigate challenges

Solve problems

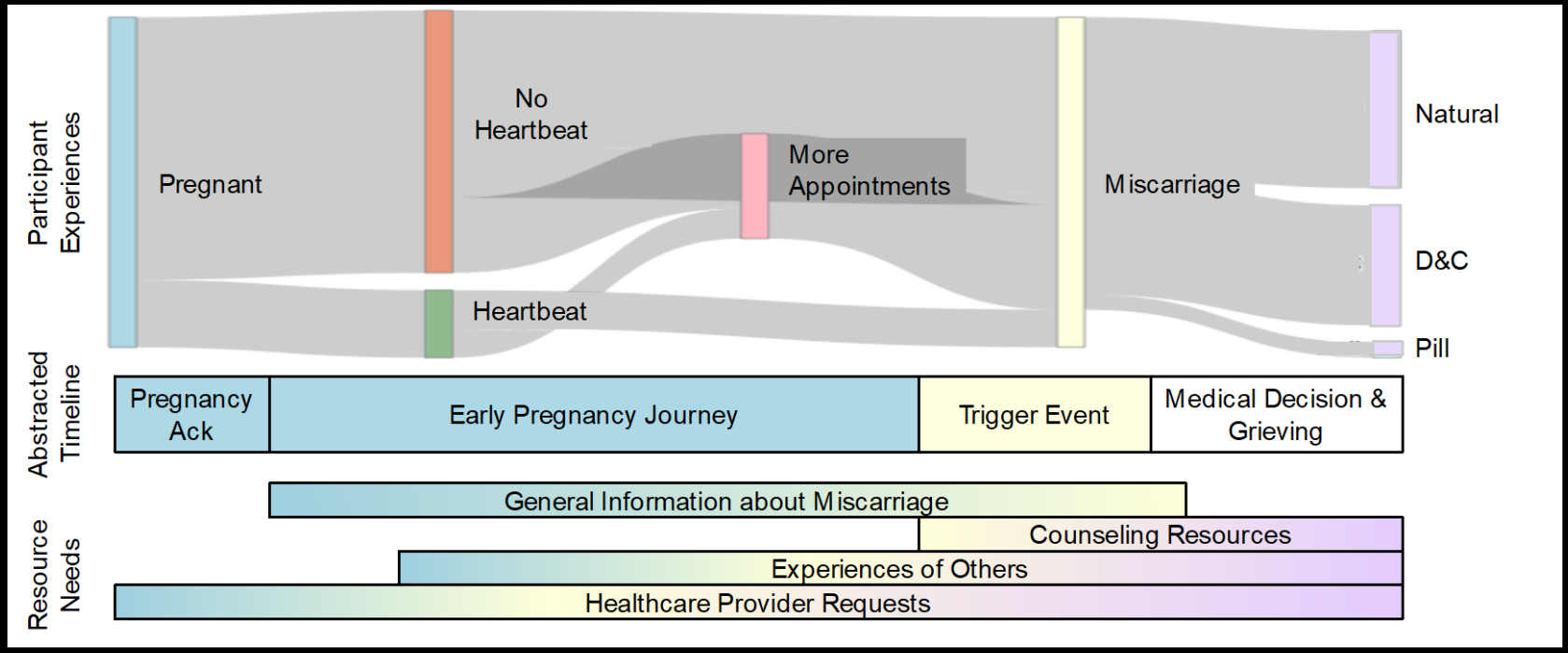
How can we help people who do not want to be pregnant?

"Today and everyday forward ***I want you to say the word 'abortion' out loud*** daily. Talk about abortion at the dinner table. Talk about abortion with your children. Talk about abortion with your parents. The best way we can ***remove shame and stigma*** is by ***saying the damn word***!"

Lead RA

Michaela Krawczyk
IU Ph.D. Student

How can we help people who lost their pregnancy?



Lucia Guerra-Reyes
Indiana University

Cassie Kresnye
IU Ph.D. (2023)
Data Scientist - Mars

Maria Wolters, Ph.D.
University of Edinburgh

Mona Alquassim
U. Edinburgh Ph.D. (2021)

K. Cassie Kresnye, Mona Y. Alqassim, Briana Hollins, Lucia Guerra-Reyes, Maria K. Wolters, and Katie A. Siek. 2021. What to Expect When You are No Longer Expecting: Information Needs of Women who Experienced a Miscarriage. In Proceedings of the 14th EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '20). Association for Computing Machinery, New York, NY, USA, 85–96. https://doi.org/10.1145/3421937.3421995

How can we identify who needs help?

Indiana University senior uses AI software to speed dyslexia detection

May 8, 2019 · by srountree · Leave a comment

Indiana University Bloomington senior Katie Spoon has been researching a way to speed up this process using artificial intelligence to analyze children's handwriting. Photo by Eric Rudd, Indiana University

David Crandall, Ph.D.
IU Computer Science

How can we help people age in place?

Ben Jelen
IU Ph.D. (2022)
Asst. Prof – Rose-Hulman

Amanda Lazar, Ph.D.
University of Maryland

Alisha Pradhan
U. MD PhD (2022)
Asst. Prof - NJIT

Madison Hallowell
Undergraduate Researcher

Adileah Smith
Undergraduate Researcher
Developer – Strategic Tech

Anne Freeman
Undergraduate Researcher
Data Engineer - Facebook

Mina Nararayan
Undergraduate Researcher
AI Assessor - CSET

Susan Monsey
Undergraduate Researcher
Developer – Northrup Grumman

Left: Stinne Aaløkke Ballegaard, Jonathan Bunde-Pedersen, and Jakob E. Bardram. 2006. Where to, Roberta?: reflecting on the role of technology in assisted living. In Proceedings of NordiCHI '06, 373-376.
Right: Example quilt from study participant (Ben Jelen and Katie Siek)

Be reflective

What happens if we analyze this data from different viewpoints?

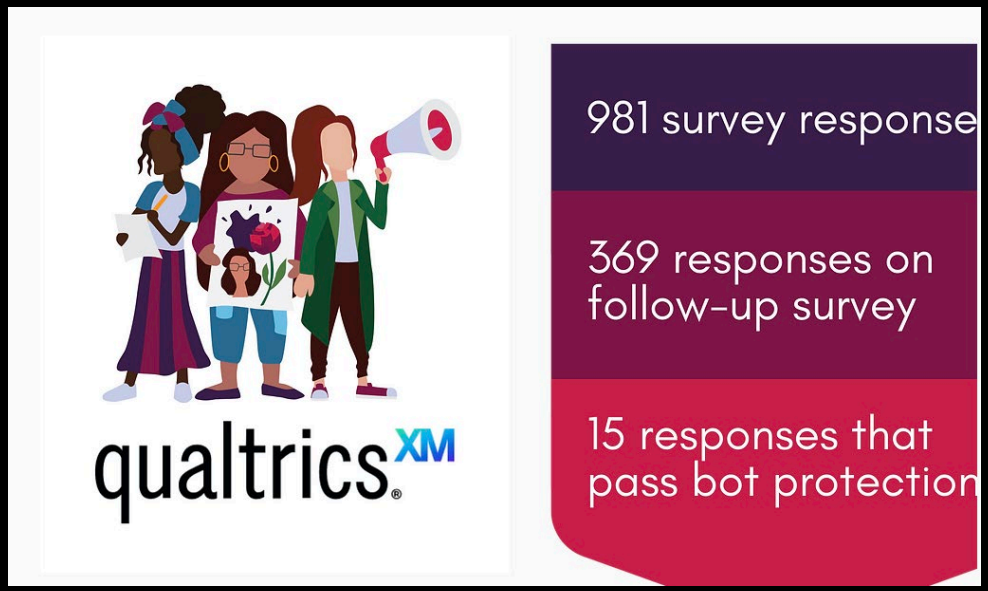
Ben Jelen
IU Ph.D. (2022)
Asst. Prof – Rose-Hulman

Amanda Lazar, Ph.D.
University of Maryland

Alisha Pradhan
U. MD PhD (2022)
Asst. Prof - NJIT

Amanda Lazar, Ben Jelen, Alisha Pradhan, and Katie A. Siek. 2021. Adopting Diffractive Reading to Advance HCI Research: A Case Study on Technology for Aging. ACM Trans. Comput.-Hum. Interact. 28, 5, Article 32 (October 2021), 29 pages. https://doi.org/10.1145/3462326

What happens if participants are not who they say they are?



Christina Chung, Ph.D.
UC Santa Cruz

Aswati Panicker
IU Ph.D. Student

Novia Nurain
IU Ph.D. (2023)
U. Michigan Post Doc

Zaidat Ibrahim
IU Ph.D. Student

Yuxing Wu
IU Ph.D. Student

Seung Wan Ha
UCSC Ph.D. Student

Ariel Wang
UCSC Ph.D. Student

Michaela Krawczyk
IU Ph.D. Student

Aswati Panicker, Novia Nuraine, Zaidat Ibrahim, Ariel Wang, Seung Wan Ha, Yuxing Wu, Kay Connelly, Katie Siek, Christina Chung. 2024. Understanding fraudulence in online qualitative studies: From the researcher's perspective. In Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24), May 11-16, 2024, Honolulu, HI, USA, 26 pages.

Michaela Krawczyk and Katie A. Siek. 2024. When Research Becomes All About the Bots: A Case Study on Fraud Prevention and Participant Validation in the Context of Abortion Storytelling. In Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '24), May 11–16, 2024, Honolulu, HI, USA. ACM, New York, NY, USA, 8 pages. https://doi.org/10.1145/3613905.3637109

How to inform STEM oriented funding and policy?

Request for Information: Developing Consent Language for Research Using Digital Health Technologies

Notice Number:
NOT-OD-24-002

Key Dates

Release Date:	October 11, 2023
Response Date:	December 12, 2023

Related Announcements

None

Issued by

Office of The Director, National Institutes of Health (OD)

National Heart, Lung, and Blood Institute (NHLBI)

National Institute of Biomedical Imaging and Bioengineering (NIBIB)

Eunice Kennedy Shriver National Institute of Child Health and Humar

CCC
Computing Community Consortium
Catalyst

CRA-I
Computing Research Association
Industry

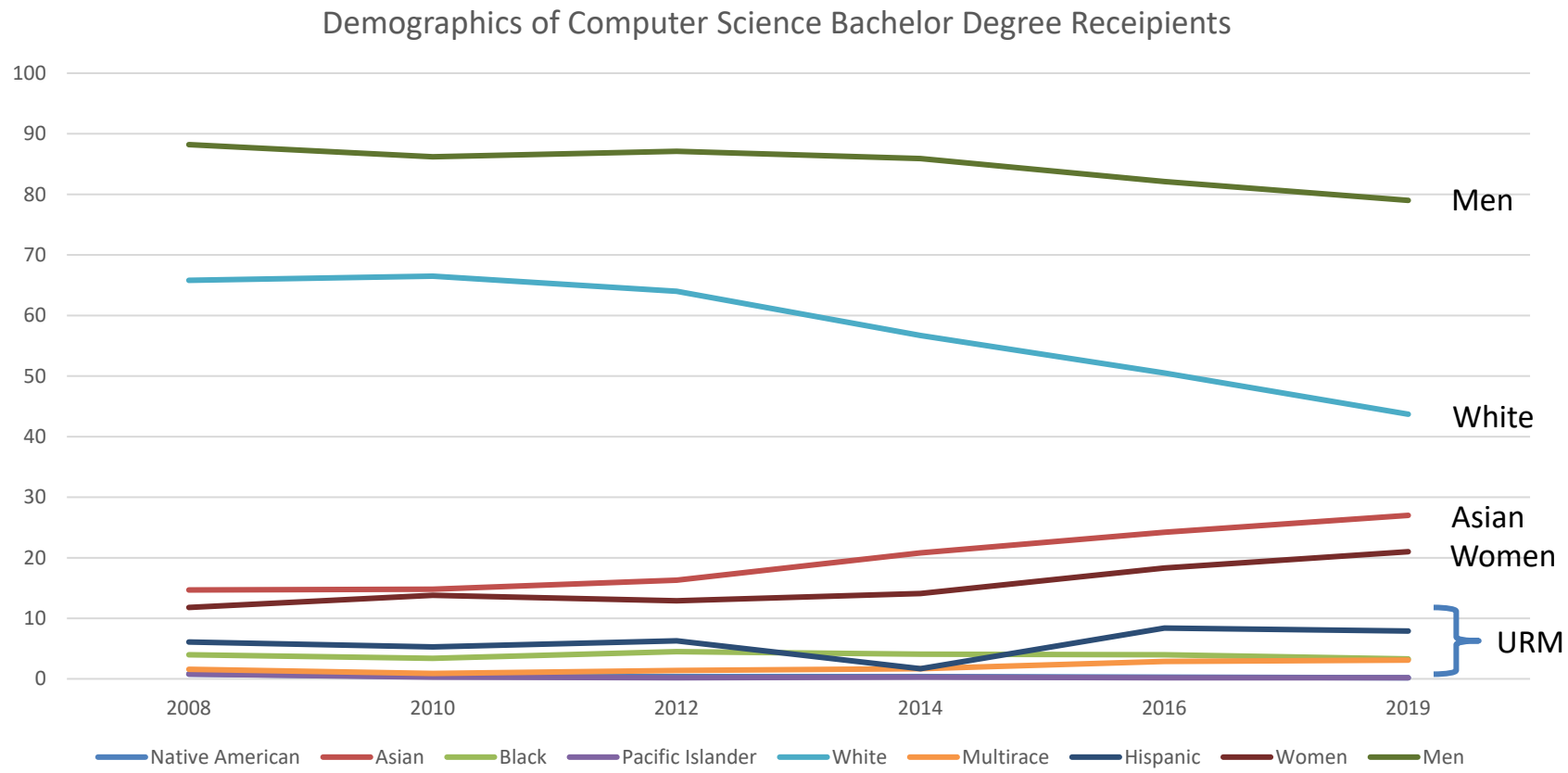
CRA
Computing Research Association

The Computing Research Association (CRA)'s Computing Community Consortium (CCC) and CRA-Industry (CRA-I) Response to the National Institutes of Health's Request for Information Developing Consent Language for Research Using Digital Health Technologies

December 12, 2023

Written by: David Danks (University of California, San Diego), Haley Griffin (Computing Community Consortium), Tammy Toscos (Parkview Health), Katie A. Siek (Indiana University), and Pamela Wisniewski (Vanderbilt University)

I can be a change maker…



Data from https://cra.org/resources/taulbee-survey/

ProHealth Indiana University develops diverse undergraduates into scholars

In 5 years, trained 48 site-funded and 60 affiliated REUs

87% from historically excluded groups

8 full conference papers

40% went to graduate school

Outreach to almost 400 children and 100 older adults

The ProHealth Site is by IIS-1852294 (2019-2021). The first SICE REU Site was supported by CNS-1560276 2016-2019.

ProHealth
Indiana University

#Hello Research!

3-day research-focused workshop for underrepresented groups in computing

- **92 women**
- **21 states**
- **33 low SES**
- **29 first generation college students**
- **6 people with disabilities**

Suzanne Menzel

David Crandall

Funding: Google, Oracle Academy, IU Diversity, Equity, & Multicultural Affairs, Beckman Coulter, Access Computing, SICE

Integrate diversity into a Gen Ed

Students learn about computing while creating a social media campaign and website about a historically excluded person in tech

The US Department of State used the student posts to celebrate Women's History Month

I would like to *help you,* but…

- Managing all the bits
- Finding someone who will act

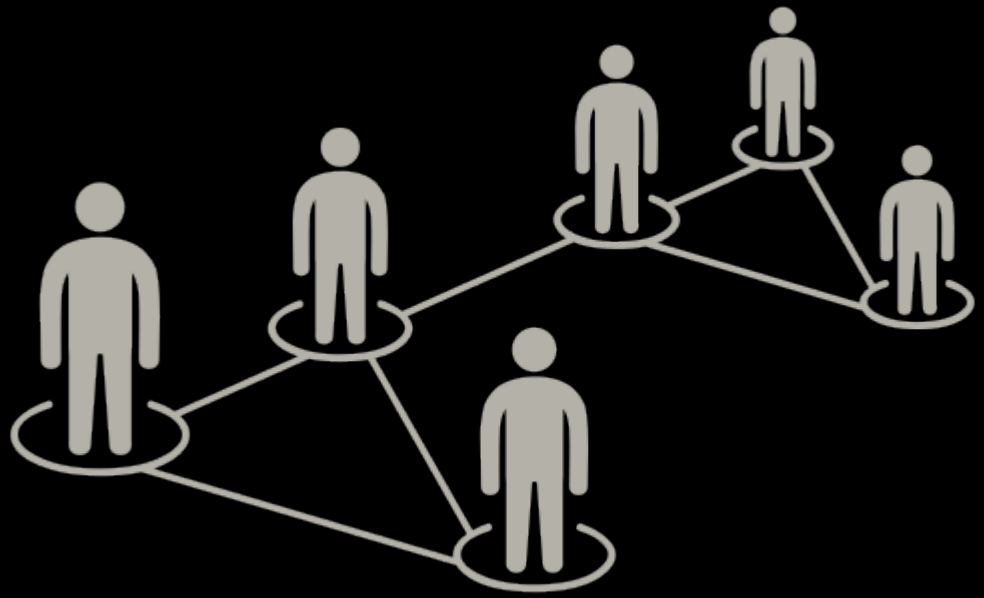
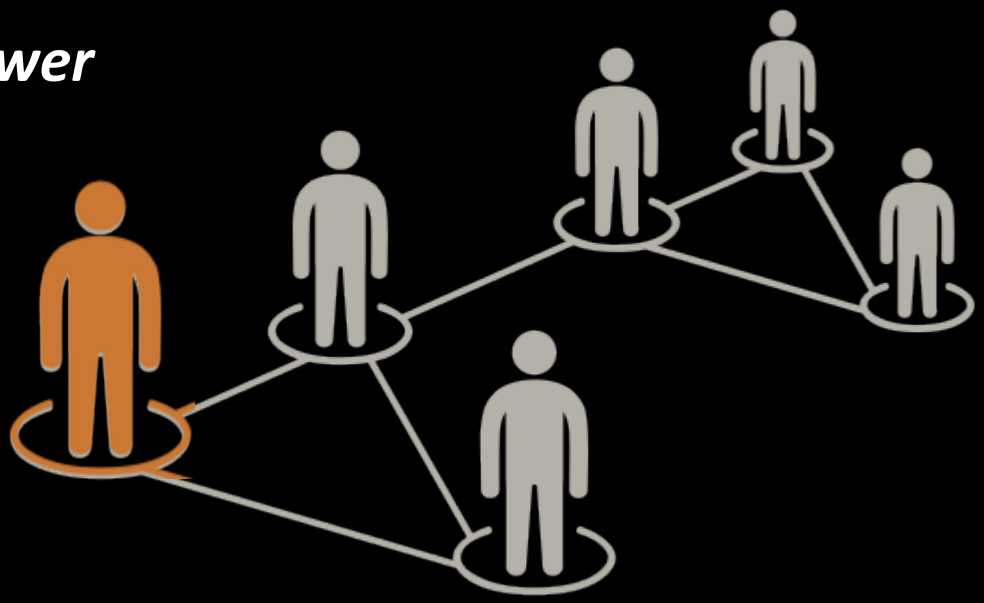


Image by pbig: Flaticon.com

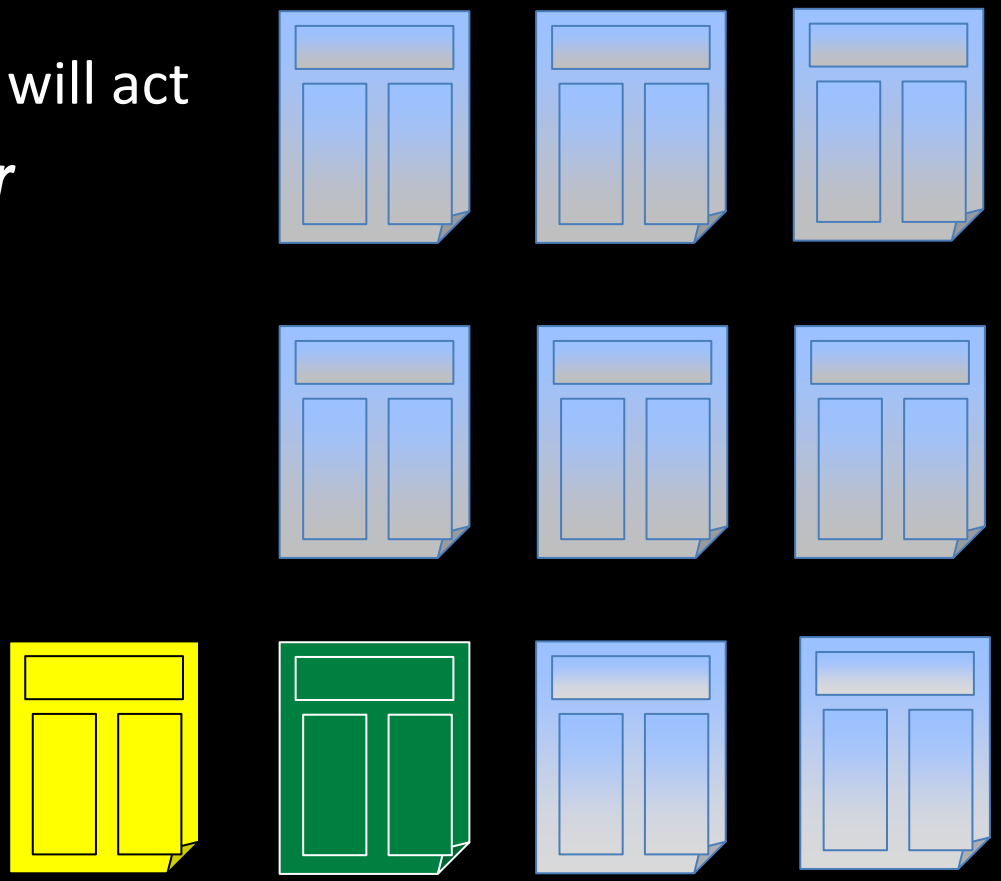
I would like to *help you,* but…

- Managing all the bits
- Finding someone who will act
- Identifying your ***power***



…nevertheless, they persisted…

- Managing all the bits
- Finding someone who will act
- Identifying your ***power***
- Dealing with rejection



Working at a Research-Intensive University

- Research topics you love
- Collaborate with brilliant people
- Enact change
- Hone non-existent management skills

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