

# The Future of News Intelligence: **Precision News**

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Penn State University, USA

**Dongwon Lee, Ph.D.**

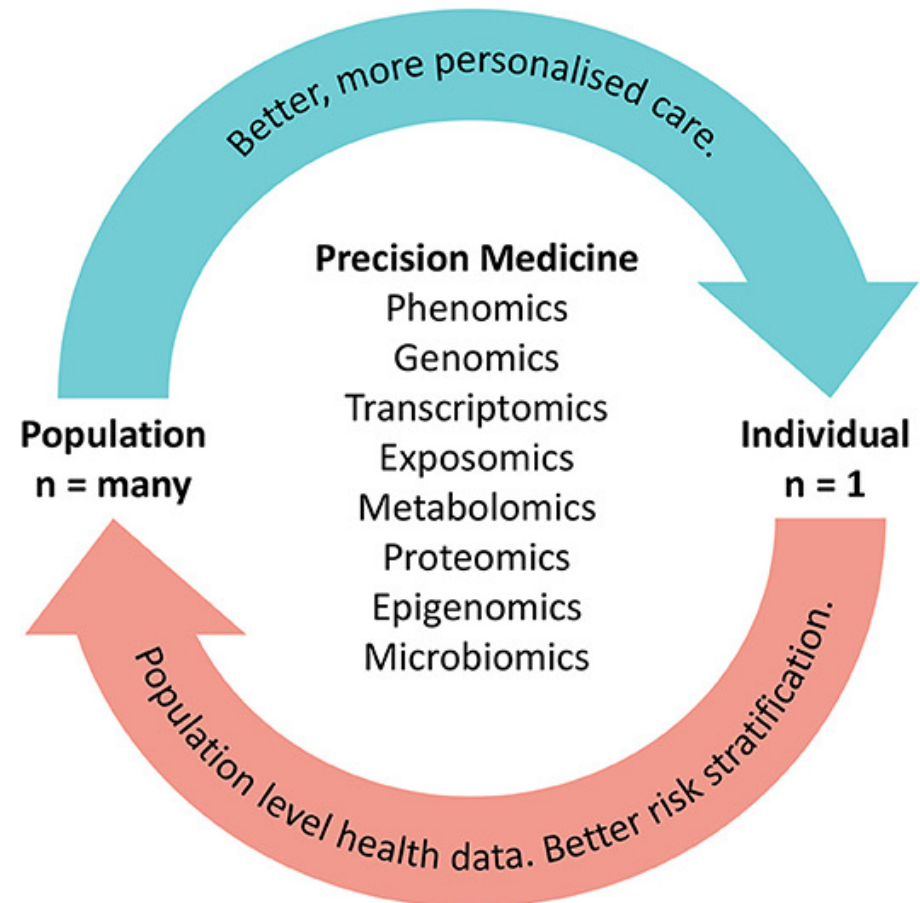
`dongwon@psu.edu`

Apr. 14, 2021 @ MIND Workshop



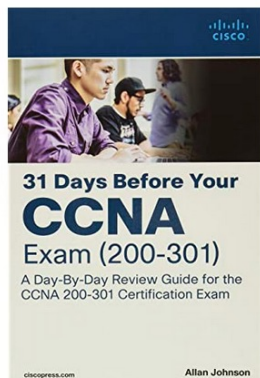
# Precision Medicine

- “Disease treatment and prevention that takes into account individual variability in genes, environment, and lifestyle for each person”
  - <https://medlineplus.gov/>



# Personalizing Products/Services

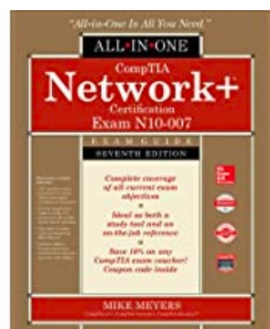
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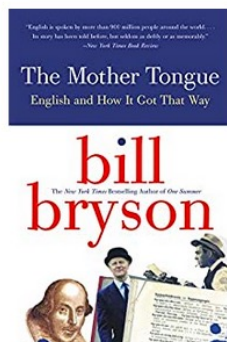
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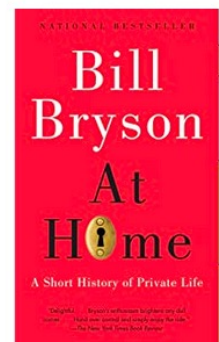


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# Personalizing News

- Little \$ to personalize **contents** of news

The collage consists of several overlapping screenshots of news websites:

- Penn State News:** The top section shows the "PENN STATE NEWS" header with navigation links for Home, Research, and Actions.
- The New York Times:** Below Penn State, there's a section from The New York Times with a "HOME" link and a search bar. It features several article teasers, including "For One Family in Houston, an Overwhelming Start...", "See Harvey's Path From a Helicopter", a "PAID POST: METLIFE" article about "Why Meaning at Work Matters", and a story about "In Beaumont, Tex., Hopscotching for Food, Water and Shelter".
- WESA 90.5:** On the left, there's a screenshot of the WESA 90.5 website, labeled "Pittsburgh's N", with a "Listen Live" button.
- Volkswagen Advertisement:** A large horizontal advertisement for the "2017 Volkswagen Golf GTI" is featured, highlighting "Volkswagen Car-Net® App-Connect" and "Apple CarPlay".
- U.S. News Section:** At the bottom, a section labeled "U.S." features a headline: "Professors Get \$300,000 Grant for Digital Fake-News Detector".

## Penn State Professors Want To Build Device That Recognizes Fake News

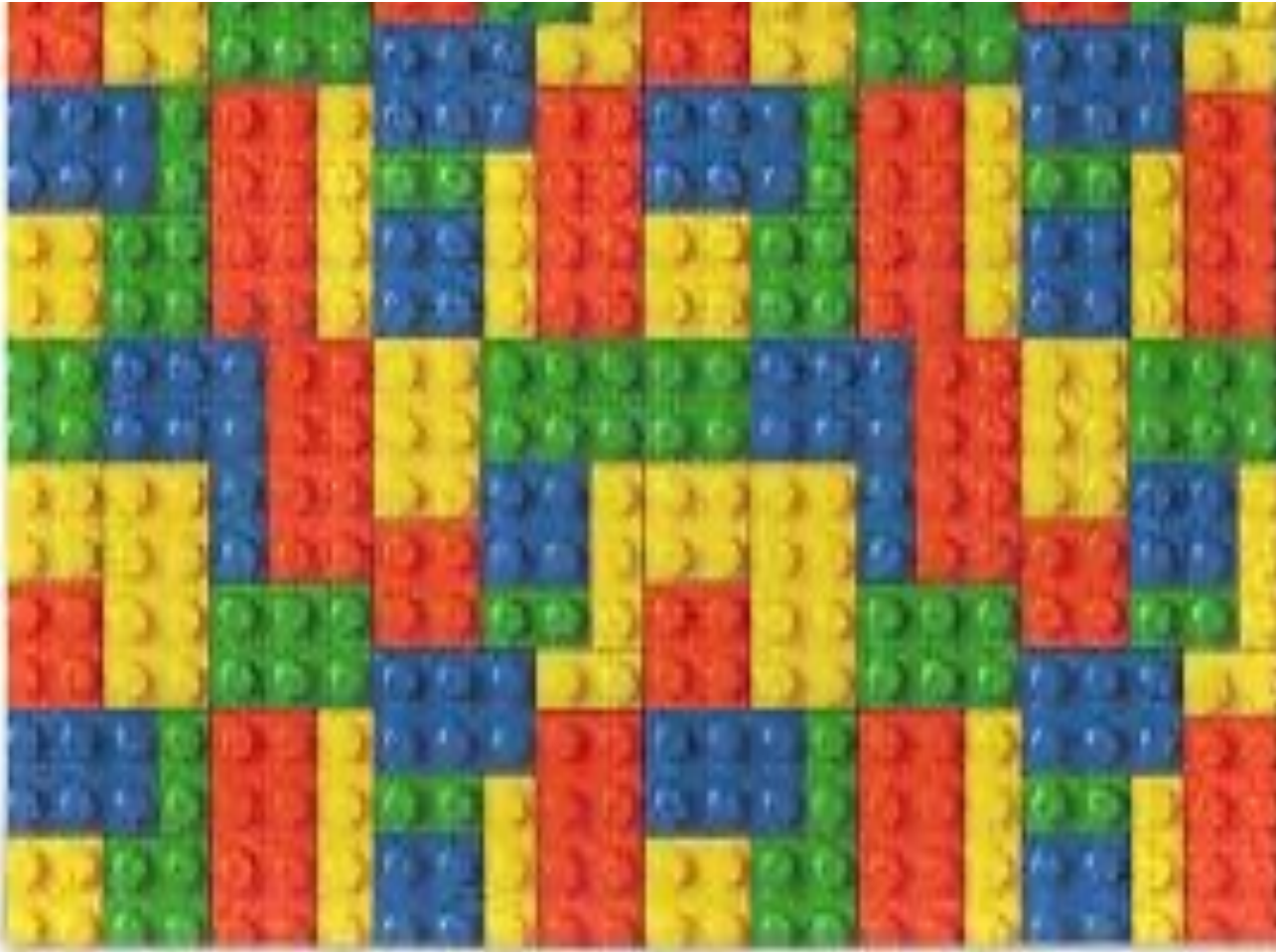
By ASSOCIATED PRESS • AUG 31, 2017



# Personalizing News “Contents”

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The New York Times



# “Precision News”

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- News (**contents**) that takes into account individual **variability** in demographics, environment, preference, and lifestyle for **each person**
- Hyper-personalized News (contents)
  - What/Who → Which/How
- AI-powered
  - RecSys, Correlation → NLG, GAN, Causation
- Online (news) platform + New profit model