

A MOBILE HEALTH PLATFORM

SUMMARY

Researchers at the National Institute on Drug Abuse (NIDA) seek licensing or co-development of a mobile health technology that monitors and predicts a user's psychological status in order to deliver an automated intervention when needed.

REFERENCE NUMBER

E-049-2015

PRODUCT TYPE

- Software

KEYWORDS

- mental health
- mobile app
- intervention
- psychological status

COLLABORATION OPPORTUNITY

This invention is available for licensing and co-development.

CONTACT

Martha Lubet

NIDA - National Institute of Drug Abuse

240-276-5508

Martha.Lubet@nih.gov

DESCRIPTION OF TECHNOLOGY

Researchers at the [National Institute on Drug Abuse](#) developed a mobile health technology to monitor and predict a user's psychological status and to deliver an automated intervention when needed. The technology uses smartphones to monitor the user's location and ask questions about psychological status throughout the day. Continuously-collected ambulatory psychological data are fused with data on location and responses to questions. The mobile data are combined with geospatial risk maps to quantify exposure to risk and predict a future psychological state. The predictions are used to warn the user when he or she is at an especially high risk of experiencing a negative event that might lead to an unwanted outcome (e.g., lapse to drug use in a recovering addict).

An internally developed mobile app is being deployed to deliver an intervention in the context of drug addiction. The inventors also seek to test the technology for other health applications.

POTENTIAL COMMERCIAL APPLICATIONS

- Real time behavior monitoring
- Therapeutic delivery of an intervention via a mobile device

COMPETITIVE ADVANTAGES

- Mobile device
- Real time
- Exposure to risk

INVENTOR(S)

[K. L. Preston](#), D.H. Epstein, M.Tyburski, M.Vahabzadeh

DEVELOPMENT STAGE

- Prototype

PUBLICATIONS

Epstein DH, et al. Drug Alcohol Depend. 2014 Jan 1;134:22-9. [[PMID 24332365](#)]; Kennedy AP, et al. Drug Alcohol Depend. 2015 June 1;151:159-66. [[PMID 25920802](#)]

PATENT STATUS

- **U.S. Provisional:** U.S. Provisional Application 62/186,983 (30 June 2015)
- **Foreign Filed:** PCT/US2016/029553, filed April 27, 2016

THERAPEUTIC AREA

- Central Nervous System, Mental and Behavioral, Pain