

## **PROJECT SUMMARY**

### Neural Bases of Persuasion and Social Influence in the U.S. and the Middle East

Our nation's capacity for crafting persuasive messages that will successfully propagate strategically important ideas, beliefs, and value throughout countries resistant to our ideas and influence is limited at best and problematic at worst. Similarly, our ability to counter undesirable messages that spread virally is far from perfect. Our research team has engaged in a functional magnetic resonance imaging (fMRI) program of research to identify the neurocognitive predictors of the persuasiveness of non-controversial ideas demonstrating that neural predictors can significantly outperform traditional ways of assessing a message's likelihood of success (success measured in terms of individual behavior change and helping to propagate the message effectively to others). In the current proposal, we extend this work in multiple directions that will increase its practical application within several sensitive regions including the Middle East and North Africa. We will examine persuasion using topics that will and will not induce resistance and examine (along with manipulations designed to overcome resistance) using neuroimaging and behavioral assessments. We will examine the neural bases of successful persuasion and social influence in both the U.S. and Egypt. We will also examine how neural assessments of individuals in the U.S. can be used to predict social media trends in Cairo and to effectively insert persuasive messages into their social media. Finally, we will assess the utility of functional near infrared spectroscopy (fNIRS) as a relatively inexpensive and portable replacement for fMRI that can be shipped around the world to conduct operational neuroscience investigations in key places around the world.

MRI topic number: 1-A: Belief formation and influence

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