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THE LAW AND NEUROSCIENCE PROJECT

AT A GLANCE

- The goal of *The Law and Neuroscience Project* is to help create an evidence base about the brain and its underlying mechanisms of behavior and decision-making that reflects advances in neuroscience. It is designed to help inform the next generation of criminal law and justice policy.
- While the project brings together legal and neuroscience experts from more than a dozen universities, it is centered at the University of California, Santa Barbara, and guided by project director and neuroscientist Michael S. Gazzaniga.
- The project is focusing initially on the theme of criminal responsibility. Three working groups, or networks, of scholars and legal practitioners will each address an important aspect of the overall theme of criminal responsibility. The three networks are Differing Brains, Addiction and Antisocial Behavior, and Decision-making.
- In addition to the networks, the project is also sponsoring an education and outreach program to move the knowledge created by the research networks to judges, legislators, and other policy makers, catalyzing change for the public good.

BACKGROUND

Neuroscience is on the brink of discovering how human brains enable complex thoughts and actions, including planning, reasoning, regulation of emotion, and social behavior. Many people believe that the common understanding of life and human behavior will be affected deeply by developments in neuroscience, and that long-standing tenets in law will be brought into question as well, including why criminals commit their crimes and how society holds them responsible.

Scientists, legal scholars and others fear that the legal system will not use this new knowledge well, and that there may be harmful effects for people who come in contact with the legal system. At the same time, there is optimism that with

informed reform the justice system could have more accurate predictions, more effective interventions and less bias.

To help address the issues at the intersection of neuroscience and the law, the Foundation is supporting *The Law and Neuroscience Project* with a \$10 million grant. It brings together experts from both neuroscience and law to address the difficult legal questions that will inevitably and quickly arise as neuroscience progresses in its ability to understand and manipulate behavior. While more than a dozen universities are taking part in *The Law and Neuroscience Project*, the program is centered at the University of California, Santa Barbara and guided by principal investigator and neuroscientist Michael S. Gazzaniga, Director of the Sage Center for the Study

of the Mind. Dartmouth College philosopher Walter Sinnott-Armstrong is co-directing the initiative. Justice Sandra Day O'Connor is serving as honorary chair of the governing board.

PROJECT GOALS

The goal of *The Law and Neuroscience Project* is to help create an evidence base about the brain and its underlying mechanisms of behavior and decision-making that reflects advances in neuroscience. It is designed to help inform the next generation of criminal law and justice policy by:

- Seeking to understand and, where appropriate, demonstrate the value and utility of neuroscience in law by focusing on specific, urgent, or timely issues;

- Educating participants in the legal system about advances in neuroscience and their application to the law, as well as the risks of uninformed or premature use in the courtroom or other legal deliberations;
- Influencing basic neuroscience research to increase its focus on practical questions and issues in law;
- Constructing new theories around ethical, social, and legal notions of responsibility and agency based on neuroscience; and
- Creating a critical mass of activity that would give rise to greater visibility of the issues, providing impetus for the development of the new field of *neurolaw*.

PROJECT ACTIVITIES

Because so many issues fall within the realm of neuroscience and law, the initiative is focusing initially on the theme of criminal responsibility. This focus was chosen because criminal law has immense practical impact on criminals, victims, and society. In addition, new technologies in neuroscience, such as mobile brain

scanners that can be brought into prisons, have opened up possibilities for research in the area. Furthermore, criminal responsibility can be used as a vehicle to raise many related issues, such as civil responsibility, involuntary civil commitment, competence and personhood. Finally, criminal responsibility captures public attention and raises broad questions about human nature.

The project includes three working groups, or networks, of scholars and legal practitioners, each addressing an important aspect of the overall theme of criminal responsibility. The three networks are: Differing Brains, Addiction and Antisocial Behavior, and Decision-making. Each network is directed by a neuroscientist and a legal expert and includes up to 15 neuroscientists, legal scholars, philosophers and practitioners involved in the legal system, including a judge. The charge to each group is to review the current research and scholarship in neuroscience in the law, identify the gaps in knowledge and understanding, and develop specific research proposals

that address the issues in each area that contribute to improved law, policy, and legal proceedings.

In addition to the networks, the project is also sponsoring an education and outreach program. This program moves the knowledge created by the research networks to judges, legislators, and other policy makers, catalyzing change for the public good. This program is: (1) creating opportunities for judges and other legal experts to meet together with leading neuroscientists to discuss how neuroscience can shed light on problems of law, and (2) educating media and academic leaders on the intersection of neuroscience and the law and the research findings of the networks. To achieve these two goals, the program will organize an annual conference for judges, legislators, practicing lawyers, and the media. The goal of the conference is to educate legal professionals about the significance of neuroscience's relevance to the law and learn about each other's field as they continue their interdisciplinary dialog.

For more information

about *The Law and Neuroscience Project*

Michael S. Gazzaniga

Director, *The Law and Neuroscience Project*, University of California, Santa Barbara

Julia Stasch

Vice President, Program on Human and Community Development, MacArthur Foundation

Project website:

www.lawandneuroscienceproject.org

About the MacArthur Foundation

The John D. and Catherine T. MacArthur Foundation is a private, independent grantmaking institution helping to build a more just, sustainable and peaceful world. Through the support it provides, the Foundation fosters the development of knowledge, nurtures individual creativity, strengthens institutions, helps improve public policy, and provides information to the public, primarily through support for public interest media. With assets of \$6.8 billion, the Foundation makes approximately \$260 million in grants annually. More information is available at www.macfound.org.

The John D. and Catherine T. MacArthur Foundation

140 S. Dearborn Street
Chicago, IL 60603-5285

Phone: (312) 726-8000

Fax: (312) 920-6258

E-mail: 4answers@macfound.org

www.macfound.org