# Selected Technologies Available for Licensing

National Institutes of Health

U.S. Department of Health and Human Services

# *Alzheimer's Disease*

Prepared by
Office of Technology Transfer
National Institutes of Health
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## Introduction

NIH has an extensive intellectual property portfolio of early-stage technologies and also invests substantially in their development. Roughly 10 percent of the annual NIH budget is dedicated to intramural research and development activities that result in medical inventions in the areas of medical devices, software, vaccines, diagnostics, therapeutics, and reagents. Commercial partners are needed to ensure that the long hours at the lab bench and the public investment in the development of these inventions pay off in the end in marketed products.

NIH believes that innovative companies can play a significant role in the future development of leading-edge research. While the increasingly consolidated pharmaceutical industry remains a steady customer of research reagents and clinical collaboration with the NIH, the more exciting therapeutic developments are increasing coming from NIH licenses signed with small and medium-sized life science companies early in their growth phase.

NIH affords creative treatment to small firms and tries to provide IP agreements that facilitate new areas of product development based upon NIH research to attract and help companies in the early-stages of their development. For examples, financially-burdened smaller companies can benefit from flexibility on paten costs and license execution fees in license agreements. Of particular note for venture-backed firms is that companies do not give up equity or management control nor are their future development or marketing rights compromised by signing NIH license agreements. Finally, once the product is in development, NIH has the capability to assist with clinical trials, conduct research collaborations, and eventually purchase the product as a customer.

We have compiled our technologies related to Alzheimer's that your company might be interested in for further discussion with our Licensing and Patenting Managers. Each entry has a link to our web abstract where you will find the contact information for a Licensing and Patenting Manager who can guide you on our licensing process.

Once you have picked the technology of interest, we urge you to apply for a License. A copy of the License Application template can be found at the NIH OTT website at:

Forms & Model Agreements

## Therapeutics

| Technology Title | LPM | Ref No. | Lead Inventor |
|---|---|---|---|
| The Use of Razoxane to Reduce Amyloid Beta Expression and Protein Aggregation in Alzheimer's Disease | Jaime M Greene | E-216-2007 | Nigel H. Greig |
| Agents Useful For Reducing Amyloid Precursor Protein | Jaime M Greene | E-141-2000 | Nigel H. Greig |
| Use Of Uric Acid And Analogs For Therapeutic Use In Ischemic Stroke And Related Neurodegenerate Conditions | Jaime M Greene | E-059-2006 | Nigel H. Greig |
| The Discovery of Novel Anti-inflammatory Compounds for the Treatment of Neurodegenerative Diseases | Jaime M Greene | E-130-2004 | Jau-Shyong Hong |
| Endothelial Barrier-permeable Adeno-associated Viruses for the Delivery of Nucleic Acids | Patrick P McCue | E-298-2004 | John A. Chiorini |
| Inhibition of Apoptosis by Receptor-mediated Uptake of a BCL-XL Fusion Protein | Sabarni K Chatterjee | E-073-1999 | Richard J. Youle |
| Biologically Active Macrolides for the Regulation of Lysosome Function in Neurological Disorders | Sabarni K Chatterjee | E-203-2000 | Michael R. Boyd |
| Fused Azepinones as Inhibitors of Cyclin Dependent Kinases and GSK-3 Beta | Sabarni K Chatterjee | E-025-1998 | Daniel W. Zaharevitz |
| Use Of Sterculic Acid to Modulate 7-Ketocholesterol-Induced Inflammation in Neurodegenerative Disease | Suryanarayana Vepa | E-092-2010 | Ignacio R. Rodriguez |
| A Novel Non-competitive Inhibitor of the Nicotinic Acetylcholine Receptor | Susan O Ano | E-158-2003 | Irving W. Wainer |
| Inhibition of Amyloid-beta Plaque Formation by Targeted Delivery of the Therapeutic Protein Transthyretin | Tara L Kirby | E-268-2009 | Juan J. Marugan |
| Regulation of Tau phosphorylation and Deposition with Inhibitors to DyrkIA | Tara L Kirby | E-230-2009 | Craig J. Thomas |
| Novel Analogues of Thalidomide with Enhanced TNF-alpha Inhibitory Activity | Whitney Hastings | E-189-2003 | Nigel H. Greig |

## Diagnostics

| Technology Title | LPM | Ref No. | Lead Inventor |
|---|---|---|---|
| Radiotracers For Imaging P-gp Function In Vivo | Edward (Tedd) A Fenn | E-318-2007 | Victor W. Pike |
| AxCaliber: A Non-invasive Method to Monitor the Central and Peripheral Nervous System | John Stansberry | E-079-2003 | Peter J. Basser |
| Beta-amyloid PET Imaging Agents Based On Thioether Derivatives | Michael A Shmilovich | E-156-2006 | Lisheng Cai |
| Small Molecules For Imaging Protein-protein Interactions In Alzheimer's Disease | Michael A Shmilovich | E-046-2006 | King C. Li |
| A Method for imaging Nicotinic Acetylcholinergic Receptors in the Brain | Michael A Shmilovich | E-030-1996 | Edythe D. London |

## Therapeutics/Research Materials

| Technology Title | LPM | Ref No. | Lead Inventor |
|---|---|---|---|
| A method for the Differentiation of Human Embryonic Stem Cells into Dopaminergic Nerve Cells | Jaime M Greene | E-176-2008 | William Freed |
| Phantasmidine as a Selective Beta-4 Containing Nicotinic Receptor Agonist | Tara L Kirby | E-125-2010 | Richard W. Fitch |

## Diagnostics/Research Materials

| Technology Title | LPM | Ref No. | Lead Inventor |
|---|---|---|---|
| Cell-based Assay To Screen Regulators Of Cyclin-dependent Kinase 5 (Cdk5/P35) Kinase Activity | Charlene A Sydnor | E-012-2009 | Ashok B. Kulkarni |

## Research Material

| Technology Title | LPM | Ref No. | Lead Inventor |
|---|---|---|---|
| Establishment Of MFPR2 Transgenic And Knockout Mice | Tara L Kirby | E-303-2006 | Ji Ming Wang |