Brain Function, Damage and Repair: Year 2

1) Project Organization:

<table>
<thead>
<tr>
<th>FAU Leadership Team Members</th>
<th>Research Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet Blanks, Director; Professor</td>
<td>Program Director</td>
</tr>
<tr>
<td>Rodney Murphey, Chairman; Professor</td>
<td>Program Director</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAU Primary Investigators</th>
<th>Affiliation</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Binninger</td>
<td>Biological Sciences</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Janet Blanks</td>
<td>Complex Systems</td>
<td>Director, Professor</td>
</tr>
<tr>
<td>Ken Dawson-Scully</td>
<td>Biological Sciences</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Tanja Godenschwege</td>
<td>Biological Sciences</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Xupei Huang</td>
<td>College of Medicine</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Kailiang Jia</td>
<td>Biological Sciences</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Paul Kirchman</td>
<td>Honors College</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Edward Large</td>
<td>Complex Systems</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Sarah Milton</td>
<td>Biological Sciences</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Rod Murphey</td>
<td>Biological Sciences</td>
<td>Chairman Professor</td>
</tr>
<tr>
<td>Mahyar Nouri-Shirazi</td>
<td>College of Medicine</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Howard Prentice</td>
<td>College of Medicine</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Wen Shen</td>
<td>College of Medicine</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Yoshimi Shibata</td>
<td>College of Medicine</td>
<td>Professor</td>
</tr>
<tr>
<td>Robert Stackman</td>
<td>Psychology Dept.</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Rui Tao</td>
<td>College of Medicine</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Robert Vertes</td>
<td>Complex Systems</td>
<td>Professor</td>
</tr>
<tr>
<td>Jenny Wei</td>
<td>College of Medicine</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Herb Weissbach</td>
<td>Biological Sciences</td>
<td>Director; Professor</td>
</tr>
<tr>
<td>John Wu</td>
<td>College of Medicine</td>
<td>Professor</td>
</tr>
</tbody>
</table>

Investigators who have requested continuation of their projects or have developed new projects (see Table 3) are shown in **bold**
2) Interdisciplinary Projects

Grant funds from previous years 1 and 2 enabled the inception of 11 interdisciplinary projects involving 14 team members from six Departments and Centers (Table 1). As indicated in Table 1, most projects will provide preliminary data for future proposals to federal or private foundations. The request for continuation of these projects or the development of new projects is described in Table 3.

3) Research Priority Seed Projects

An important aspect of this grant is the heightened level of interactions resulting from the relatively small amounts of seed funds that were spread between neuroscientists in the College of Science and the College of Medicine. We strengthened the culture of Neuroscience at FAU, both on the Boca campus as well as in Jupiter. For instance, 1/3 of the Seed Grants from the Division of Research were awarded to members of our team! Many of the proposals for Seed grants from the College of Science were submitted by members of our team or other cognitive neuroscientists on campus.

After recent discussions with Dr Rosson we have focused attention on the connections to Max Planck and Scripps. Our call for proposals for the final year of funding made explicit reference to building collaborations with investigators at these two campuses. The PIs heard the call and have responded with a number of collaborative projects - more than half of the proposals include a Jupiter connection. (See Table 3).

As a part of this expansion of FAU neuroscience Drs Murphey and Stackman are working closely with architects and contractors to plan the renovations for building MC19 on the MacArthur campus. This will accommodate the move of a group of six to eight neuroscientists from Boca to the MacArthur campus. The ultimate goal is to use the facilities at Jupiter and the potential for collaborations with the two adjacent research institutes. Our funding of collaborative projects is one of the steps in the development of the FAU Institute for Neuroscience (FINS).
### Table 1. Details of item 3: Seed Projects

<table>
<thead>
<tr>
<th>Primary Investigator</th>
<th>Project Title</th>
<th>Submission Date &amp; Funding Agency</th>
<th>Status (F-Funded; NF-Not funded; P-Pending)</th>
<th>Resubmission Plans</th>
<th>*Publications/Patents Associated with Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Binninger ($10,000: Grad Student)</td>
<td>Role of Protein Oxidation in Ageing and Neurodegenerative Disease</td>
<td>N/A N/A</td>
<td>none</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>NSF: 2/16/2012</td>
<td>Impact of nicotine on innate immune cells response to TLR agonists</td>
<td>NIH: 2/16/2012</td>
<td>NSF</td>
<td>NSF: resubmission 6/1/13</td>
<td>Joint with Ivan Baines of MPFI. Murphey is one of four subprojects.</td>
</tr>
<tr>
<td>James Esther King: on 10/1/2011</td>
<td>MRI: electron microscope purchase</td>
<td>DOD</td>
<td>NSF</td>
<td>NSF: resubmission 6/1/13</td>
<td>Joint with Ivan Baines of MPFI. Murphey is one of four subprojects.</td>
</tr>
<tr>
<td>James Esther King: on 10/1/2011</td>
<td>NIH: 2/16/2012</td>
<td>NSF</td>
<td>NSF: resubmission 6/1/13</td>
<td>Joint with Ivan Baines of MPFI. Murphey is one of four subprojects.</td>
<td>$428,828</td>
</tr>
<tr>
<td>James Esther King: on 10/1/2011</td>
<td>NIH: 2/16/2012</td>
<td>NSF</td>
<td>NSF: resubmission 6/1/13</td>
<td>Joint with Ivan Baines of MPFI. Murphey is one of four subprojects.</td>
<td>$428,828</td>
</tr>
<tr>
<td>Dr. Nouri-Shirazi ($3,000: Supplies)</td>
<td>Impact of nicotine on innate immune cells response to TLR agonists</td>
<td>NIH: 2/16/2012</td>
<td>NSF</td>
<td>NSF: resubmission 6/1/13</td>
<td>Joint with Ivan Baines of MPFI. Murphey is one of four subprojects.</td>
</tr>
<tr>
<td>James Esther King: on 10/1/2011</td>
<td>NIH: 2/16/2012</td>
<td>NSF</td>
<td>NSF: resubmission 6/1/13</td>
<td>Joint with Ivan Baines of MPFI. Murphey is one of four subprojects.</td>
<td>$428,828</td>
</tr>
<tr>
<td>DOD</td>
<td>NIH: 2/16/2012</td>
<td>NSF</td>
<td>NSF: resubmission 6/1/13</td>
<td>Joint with Ivan Baines of MPFI. Murphey is one of four subprojects.</td>
<td>$428,828</td>
</tr>
<tr>
<td>Project Title</td>
<td>Funding Information</td>
<td>Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory processing: NIH R15 proposal $415,691 on 2/24/2012</td>
<td>NIH: 6/5/2012, NSF: 8/2012, NIH: 10/25/12, FAU College of Science Seed grant: 1/30/12, FAU Seed grant on 11/2011</td>
<td>Drs. Weissbach, Baronas-Lowell, Prentice and Milton ($15,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Role of the midline thalamus in limbic forebrain function”: NSF Preliminary Proposal on 1/2012</td>
<td>NSF: 3 grants of which DBL was a collaborator</td>
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<tr>
<td>“Role of the midline thalamus in limbic forebrain function”: NSF on 7/2011</td>
<td>NF</td>
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<tr>
<td>“Regulation of GABA neurotransmission” : NIH R01 $1,806,000 on 2/25/2012</td>
<td>NIH: resubmission 10/2012 or 2/2013</td>
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</tr>
<tr>
<td>“DETC-MeSO as a therapeutic agent for stroke”: NIH R01 $1,806,000 on 10/25/2011</td>
<td>NIH: resubmission 10/2012 or 2/2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Book Chapters*


4) **Collaborations**

<table>
<thead>
<tr>
<th>New External Collaborators (PIs, Institute)</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murphey and Baines (Max Planck Florida Institute)</td>
<td>NSF-MRI Major Equipment purchase Electron microscope</td>
</tr>
<tr>
<td>Murphey and Young (MPFI)</td>
<td>Electrophysiology training lab</td>
</tr>
<tr>
<td>Dawson-Scully and William Ja (Scripps)</td>
<td>Effect of Methusala gene on acute oxidative stress</td>
</tr>
<tr>
<td>Dawson-Scully and Greg Mcloed (UTSan Antonio)</td>
<td>Glial &amp; neuronal calcium dynamics under acute oxidative stress</td>
</tr>
<tr>
<td>Dawson-Scully and Gabriel Haddad (UCSD)</td>
<td>Cost of hypoxia tolerance over several generations on acute oxidative stress</td>
</tr>
<tr>
<td>Prentice and Kenney (Scripps)</td>
<td>RNA in animal models of disease</td>
</tr>
<tr>
<td>Prentice and Neelakanta (College of Engineering, FAU)</td>
<td>Smart home-based healthcare systems for adult diabetic patients</td>
</tr>
</tbody>
</table>

**Continuing External Collaborators**

<table>
<thead>
<tr>
<th>Continuing External Collaborators</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collete Dooley, PhD</td>
<td>Torrey Pines Institute Molecular Science (Port St. Lucie, FL)</td>
</tr>
<tr>
<td>Peter Hodder, PhD</td>
<td>Scripps Florida (Jupiter, FL)</td>
</tr>
<tr>
<td>Christophe Bernard, PhD</td>
<td>INSERM Unit Epilepsy and Cognition (Marseille, France)</td>
</tr>
<tr>
<td>Kathy Dorey, PhD</td>
<td>Virginia Tech Carilion School of Medicine &amp; Research Institute (Roanoke, VA)</td>
</tr>
<tr>
<td>Anthony Farrell, PhD</td>
<td>University of British Columbia (Vancouver, BC)</td>
</tr>
<tr>
<td>Mel Robertson, PhD</td>
<td>Queen’s University (Kingston, ON)</td>
</tr>
<tr>
<td>Marla Sokolowski, PhD</td>
<td>University of Toronto (Toronto, ON)</td>
</tr>
</tbody>
</table>

5) **Self Sustainability Activities (see Table 1)**

This Research Priority grant supported data acquisition for the submission of 13 grants applications to federal agencies since July 1, 2011. Five of these applications, totally approximately $6 million, are either under review or pending decisions. In addition, approximately $2.8 million in grant applications was submitted by “team” members on related topics not directly funded by our grant (see page 8). (Dr. Milton recently received a grant from NOAA for $653,000!). At this time Dr. Dawson-Scully application from Pivotal Therapeutics is very likely to be funded ($1.5 million) and Nouri-Shirazi’s NIH grant is very likely to be funded. We are proud of the substantial grant writing efforts from our “team” and we anticipate that some of the proposals will be successful, if not this “round,” on resubmission!
6) Project changes
No scientific projects have changed since July, 2011. Grants Facilitator, Dr. Barbara Nambu has reduced her effort on the grant for personal reasons. She is a critical member of the project and continues to review grant applications and papers from team members on an “as needed” basis.

7) Budget Summary

Table 2. Research Priority Budget 2011 - 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>Fiscal Year 10-11 Expenditures to date</th>
<th>Fiscal Year 11-12 Expenditures to date</th>
<th>Fiscal Year 12-13 Anticipated Expenditures**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel (funds for students or postdoctoral fellows – no faculty salaries funded)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Barones-Lowell</td>
<td>$0</td>
<td>$0</td>
<td>$11,500</td>
</tr>
<tr>
<td>Dr. Dave Binninger</td>
<td>$0</td>
<td>$10,025</td>
<td>$0</td>
</tr>
<tr>
<td>Dr. Blanks</td>
<td>$0</td>
<td>$4,204</td>
<td>$0</td>
</tr>
<tr>
<td>Dr. Ken Dawson-Scully</td>
<td>$10,371</td>
<td>$2,154</td>
<td>$0</td>
</tr>
<tr>
<td>Dr. Kailiang Jia</td>
<td>$7,338</td>
<td>$9,261</td>
<td>$15,000</td>
</tr>
<tr>
<td>Dr. Ed Large</td>
<td>$0</td>
<td>$2,980</td>
<td>$2,000</td>
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<tr>
<td>Dr. Sarah Milton</td>
<td>$9,561</td>
<td>$12,180</td>
<td>$0</td>
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<tr>
<td>Dr. Rod Murphery</td>
<td>$5,692</td>
<td>$13,673</td>
<td>$14,000</td>
</tr>
<tr>
<td>Dr. B Nambu (Grant Facilitator)</td>
<td>$6,215 (11/2010-6/2011)</td>
<td>$19,997</td>
<td>$0</td>
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<tr>
<td>Dr. J Nambu</td>
<td>$0</td>
<td>$0</td>
<td>$15,000</td>
</tr>
<tr>
<td>Dr. Howard Prentice</td>
<td>$1,921</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Dr. Schmidt-Kastner</td>
<td>$0</td>
<td>$2,000</td>
<td>$0</td>
</tr>
<tr>
<td>Dr. Robert Stackman</td>
<td>$0</td>
<td>$0</td>
<td>$15,000</td>
</tr>
<tr>
<td>Dr. Rui Tao</td>
<td>$0</td>
<td>$2,000</td>
<td>$0</td>
</tr>
<tr>
<td>Dr. Robert Vertes</td>
<td>$0</td>
<td>$5,000</td>
<td>$7,500</td>
</tr>
<tr>
<td>Dr. Herb Weissbach</td>
<td>$6,709</td>
<td>$15,000</td>
<td>$0</td>
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<tr>
<td>Dr. John Wu</td>
<td>$7,893</td>
<td>$7,788</td>
<td>$7,000*</td>
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<tr>
<td>Supplies</td>
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<tr>
<td>Drs. Blanks/Prentice</td>
<td>$17,792</td>
<td>$19,780</td>
<td>$9,500</td>
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<tr>
<td>Dr. Kailiang Jia</td>
<td>$2,420</td>
<td>$7,956</td>
<td>$0</td>
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<tr>
<td>Dr. Sarah Milton</td>
<td>$304</td>
<td>$4,045</td>
<td>$3,000</td>
</tr>
<tr>
<td>Dr. Ken Dawson-Scully</td>
<td>$2,945</td>
<td>$962</td>
<td>$0</td>
</tr>
<tr>
<td>Dr. Nouri-Shiraz</td>
<td>$0</td>
<td>$3,054</td>
<td>$6,000*</td>
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<tr>
<td>Dr. Howard Prentice</td>
<td>$491</td>
<td>$3,500</td>
<td>$10,100</td>
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<tr>
<td>Dr. Wen Shen</td>
<td>$0</td>
<td>$0</td>
<td>$8,700</td>
</tr>
<tr>
<td>Dr. Herb Weissbach</td>
<td>$0</td>
<td>$0</td>
<td>$8,500</td>
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<tr>
<td>Additional Expenses</td>
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</tr>
<tr>
<td>Neuroscience Seminar Series</td>
<td>$6,859</td>
<td>$5,579</td>
<td>$8,000</td>
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<tr>
<td>Neuroscience Symposium FAU/MPFI</td>
<td>$5,970</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Travel Funds: Principal Investigators</td>
<td>$4,030</td>
<td>$1,140</td>
<td>$2,000</td>
</tr>
<tr>
<td>Travel Funds Germany: Blanks, Dawson-Scully, Murphy, Stackman</td>
<td>$3,605</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Travel funds: Dr. Edward Large + Student</td>
<td>$3,269</td>
<td>$8,605</td>
<td>$4,000</td>
</tr>
<tr>
<td>Travel Funds: Students</td>
<td>$2,130</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>Stipend Germany Program Abroad</td>
<td>$1,300</td>
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<tr>
<td>Computer equipment</td>
<td>$4,070</td>
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<tr>
<td>Miscellaneous/Contingency</td>
<td>$8,430</td>
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<td>$13,200</td>
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<tr>
<td>Total Budget</td>
<td>$166,667</td>
<td>$160,904</td>
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<td>Roll Over</td>
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<tr>
<td>$23,000***</td>
<td></td>
<td>$183,000</td>
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</tbody>
</table>

*Carry Forward not used on Year 2
**See Table 3 for Total Request for Year 3 for 14 proposed projects
***At the end of FY 2011-2012 $23,000 was available to cover appointments during the portion of Summer corresponding to the period between July 1 and August 10 when the new funds are released.
Table 3. Requests for Funding: Seed Projects for 2012-2013
(Total Request shown: see Table 2 for Proposed Funding)

<table>
<thead>
<tr>
<th>Primary Investigator</th>
<th>Project Title</th>
<th>Collaborators in Jupiter</th>
<th>Request for Personnel</th>
<th>Request for Supplies</th>
<th>TOTAL REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Baronas-Lowell</td>
<td>High Throughput Screening to Identify Activators of MsrA</td>
<td>Dr. Herbert Weissbach</td>
<td>$11,500</td>
<td>$0</td>
<td>$11,500</td>
</tr>
<tr>
<td>Dr. Binninger</td>
<td>Role of Protein Oxidation in Ageing and Neurodegenerative Disease</td>
<td>Dr. Herbert Weissbach</td>
<td>$7,500</td>
<td>$5,000</td>
<td>$12,500</td>
</tr>
<tr>
<td>Drs. Blanks and Prentice</td>
<td>Creation of a constant light animal model for testing drugs that target oxidative stress</td>
<td>Dr. Herbert Weissbach</td>
<td>$9,500 Includes $2,000 CF to cover Ting’s appointment</td>
<td>$12,000</td>
<td>$21,500</td>
</tr>
<tr>
<td>Drs. Dawson-Scully and Milton</td>
<td>Using PKG activator as a means of neural protection from stroke like injury in mammalian neuron cultures</td>
<td>N/A</td>
<td>$7,500</td>
<td>$3,000</td>
<td>$10,500</td>
</tr>
<tr>
<td>Dr. Jia</td>
<td>Characterize the role of MSR and a novel zinc-finger protein in protection against oxidative stress in C. elegans</td>
<td>Dr. Herbert Weissbach</td>
<td>$7,500</td>
<td></td>
<td>$7,500</td>
</tr>
<tr>
<td>Dr. Large</td>
<td>Rhythmic entrainment in Bonobo apes at the Jacksonville Zoo</td>
<td>N/A</td>
<td>$2,000</td>
<td>$8,000</td>
<td>$10,000</td>
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<tr>
<td>Dr. Murphey</td>
<td>Netrin regulation of synaptic strength through gap junctions</td>
<td>Dr. Sam Young at Max Planck</td>
<td>$14,000 RA support</td>
<td></td>
<td>$14,000</td>
</tr>
<tr>
<td>Dr. Nambu</td>
<td>Roles of GroupB Sox genes in generation of cell diversity in the adult Drosophila brain</td>
<td>Ron Davis, Ph.D. at Scripps</td>
<td>$15,000 RA support for Shweta Singh</td>
<td></td>
<td>$15,000</td>
</tr>
<tr>
<td>Dr. Nouri-Shirazi</td>
<td>Impact of nicotine on innate immune cells response to TLR agonists</td>
<td>N/A</td>
<td></td>
<td>$6,000</td>
<td>$6,000</td>
</tr>
<tr>
<td>Drs. Prentice &amp; Milton</td>
<td>Neuronal protection against oxidative stress via upregulation of MSrA</td>
<td>Drs. Herbert Weissbach &amp; Baronas-Lowell</td>
<td>$10,100</td>
<td></td>
<td>$10,100</td>
</tr>
<tr>
<td>Dr. Shen</td>
<td></td>
<td>N/A</td>
<td>$8,700</td>
<td></td>
<td>$8,700</td>
</tr>
<tr>
<td>Dr. Stackman</td>
<td>Selective manipulation of PKG pathway activity in the hippocampus of C57BL/6J mice to modulate memory processes</td>
<td>Dr. Dawson-Scully</td>
<td>$7,500</td>
<td>$3,000</td>
<td>$10,500</td>
</tr>
<tr>
<td>Dr. Vertes</td>
<td>Role of the midline thalamus in limbic seizures/epilepsy</td>
<td>Collaborators in France</td>
<td>$15,000</td>
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<td>$15,000</td>
</tr>
<tr>
<td>Dr. Weissbach,</td>
<td>High Throughput Screening to Identify Activators of MsrA</td>
<td>Dr. Hodder at Scripps</td>
<td>$8,500</td>
<td></td>
<td>$8,500</td>
</tr>
<tr>
<td>Drs. Wu, Prentice, Shen and Tao</td>
<td>G-CSF, DETC-MeSO and Sulindac Multi-drug Therapy for stroke - Mechanism &amp; Therapy</td>
<td>N/A</td>
<td>$0</td>
<td>$30,000</td>
<td>$30,000</td>
</tr>
</tbody>
</table>

**TOTAL REQUEST**  $191,300
8) Student Training

- This grant has supported stipends for 8 students and 3 postdocs as well as supplies for 5 other students. The request for Year 3 would support a similar number of graduate students, post-docs and supplies.

- A new electrophysiology laboratory graduate course was established by Drs. Murphey, Dawson-Scully, Stackman and Dr. Sam Young from MPFI during Spring semester 2012. Now, a select number of FAU graduate students have the opportunity to learn cutting edge technologies in neuroscience which are usually offered only at “tier one” research intensive universities or institutes like Cold Spring Harbor Laboratories or other Marine Biology laboratories.

- Dr. Blanks has a graduate student, Ms. Ulrike Leipscher, from the Georg August University in Goettingen, Germany doing research in her lab for 6 months. The project is in collaboration with Drs. Prentice (School of Medicine) and Dr. Weissbach (Director, CMBB) and is funded by a donation for Alzheimer’s disease research from an FAU donor. The research will be submitted in partial fulfillment for a Masters degree from the German university. This project is a direct result of the visit last year to Goettingen by Drs. Blanks and Murphey to meet some of the scientists at the Max Planck that are directly connected to MPFI.

9) National Prominence

- MPFI and the IBRO (International Brain Research Organization) together with FAU and Scripps sponsored a symposium entitled “Neural circuits, from molecules to behavior” held on March 6 and 7th at MPFI. This is an initial effort at reaching out to Latin America and South America, building bridges that should help in recruiting future graduate students and postdocs to the Jupiter/FAU neuroscience initiative. FAU students presented a poster session to highlight the activities at FAU.

- Our fourth annual symposium called “Flies on the Beach” representing the Drosophila neurobiology groups at FAU, University of Miami, and Scripps Institute was organized by Dr. Murphey and held at FAU-Boca on April 21, 2012.

- Numerous faculty and students attended the Society for Neuroscience annual meeting (Nov. 2011) in Washington DC. Some of these attendees were supported directly by this grant, others by grant funds of their supervisor.

- We developed a Neuroscience Seminar series with our partners in Jupiter, the MPFI. The theme of the seminar series is “Neural circuits at multiple scales.” The seminar series is supported by the Davimos Foundation, the McGinty Foundation, the College of Medicine and funds from this grant. We invite our seminar speakers to spend an extra day to visit the
new facilities at MPFI. We have experienced almost a doubling in attendance from last year, thus increasing the effectiveness of our partnership, as well successfully one of the main goals of this Priority grant.

• Dr. Murphey will chair a section at the Cold Spring Harbor Laboratory meeting called “Axon guidance, synapse formation and regeneration” (September 18-22, 2012).

10) Other Information

In addition to the projects fostered by Seed Funds in Table 1, there were a number of grant applications submitted by team members that the grant did not fund or on topics that the grant didn’t directly support. Examples are noted below:

• Dr. Kirchman (Honors College) has an NIH application pending on “Mitochondrial function and aging” with a total cost of $361,250.

• Dr Large submitted a subcontract entitled “Neuro-phonetics: A transformative approach to decoding brain responses to speech” to NIH through the University of Rochester on 1/12/2012 for a total of $466,370.

• Dr. Milton received a grant from NOAA for $653,279 entitled “ECOHAB: Brevetoxin metabolism and physiology – a freshwater model of morbidity in endangered sea turtles.”

• Dr. Prentice submitted a grant on diabetes with Dr. Neelakanta (College of Engineering, FAU) with a total cost of $380,857.

• Dr. Shibata submitted a grant to NIH in October, 2011 entitled “Mechanisms of anti-inflammatory macrophage activation in chronic inflammatory disease” with a total cost of $433,500.

• Dr. Stackman submitted an R-15 application to the NIH on “Activation of Seratonin 2A receptors to enhance cognition”: $375,000. He also submitted a subcontract for $244,573 over 5 years as a subcontract on an NIH proposal submitted by his colleague, Dr. John Adelman at Oregon Health Science University.

• Dr. Jenny Wei recently was awarded with the NIH grant on “Regulation of BimEL phosphorylation in pathogenesis of Huntington’s disease” for a total cost of $428,694.

• Dr. Xupei Huang recently was awarded with the NIH grant on “Restrictive Cardiomyopathy Caused by Troponin Mutations" for a total cost of $433,500.

• Dr. Weissbach submitted an R-15 application to the NIH entitled “Ischemic preconditioning agents sensitize cancer cells to oxidative stress” with a total cost of $433,500.