Request for Applications

2016
1. General

The National Network of Excellence in Neuroscience (hereinafter: "NNE") was initiated in 2013 by Teva Pharmaceutical Industries Ltd. (hereinafter: "Teva") in order to support and enhance Israeli neuroscience research, with relevance to human neurological and psychiatric illness and to further strengthen the capabilities of the Israeli Neuroscience research community.

The NNE focus is on research performed in academic and medical institutions in Israel. Within the scope of the competitive NNE 2016, Teva shall: (1) provide research support for selected research projects conducted by investigators (hereinafter: "Investigator") in Israeli Institutions (as defined below); (2) provide research support for selected research projects conducted by several Israeli investigators, whether from the same Institution or from several different Israeli Institutions (hereinafter: "Joint Teams"); (3) provide research grants to selected research projects conducted by Israeli pre-doctoral graduate students (hereinafter: "Pre-Doctoral"); and (4) provide research grants to selected research projects conducted by Israeli post-doctoral fellows that are within three (3) years of their doctorate (hereinafter: "Post-Doctoral").

Teva sees the importance of bridging the gap between academic research and its translation into potential clinical products and thus will encourage a dialog between its scientists and awardees as an important feature of the NNE program.

The purpose of this request for applications (hereinafter: "RFA") is to present the NNE 2016 program, process and criteria for selecting research projects (hereinafter: "Research Projects"), reflected in the applicant research proposal (hereinafter: "Research Proposal") to be supported by the NNE in 2016.

Investigators, Joint Teams, Pre-Doctoral students and Post-Doctoral fellows are hereby invited to submit Research Proposals for NNE 2016 (hereinafter: “Applications”) to receive a Research Support or Research Grant, as described in this RFA, in support of their Research Project.

2. Objectives

2.1. Encouraging Israeli academic innovation, translational research and treatment in the field of neuroscience;
2.2. Strengthening multi-institutional partnerships to advance neuroscience research in Israel;
2.3. Bridging a gap between academic research and drug development, particularly in neuroscience.
2.4. Strengthening neuroscience research in Israel and enhancing Israel's standing as a world leader in neuroscience research;
2.5. Promoting existing efforts to attract world-class Israeli neuroscience scientists back to Israel;
2.6. Creating a critical mass of excellence in neuroscience research by supporting it in academic and medical research institutions in Israel;
2.7. Promoting diversity in Israel by supporting the advancement of all sectors in the population of Israel that deals with neuroscience research;
The NNE’s objectives as stated above will serve as guidelines in the definition of criteria used during the evaluation and selection process of the NNE Recipients (as defined below).

3. Areas of Neuroscience Research

3.1. Therapeutics:

3.1.1. New therapeutic approaches for neurodegenerative diseases, movement disorders, multiple sclerosis, pain and migraine
3.1.2. New target, disease associated gene, signaling pathway related to the above diseases
3.1.3. New CNS activity for existing (approved) drug or drug combinations
3.1.4. Lead molecules (tool or therapeutic) for CNS target
3.1.5. Investigations on commonalities of mechanisms between different neurodegenerative diseases and/or other clinical adjacencies
3.1.6. Novel animal models for CNS diseases

3.2. Technologies:

3.2.1. Delivery technology, e.g. method for delivery across the BBB
3.2.2. New assays for target engagement, disease or effect biomarker, diagnostic assay
3.2.3. Novel screening assay or screening technology applicable to drug research
3.2.4. Novel methods to characterize and predict drug adverse reactions
3.2.5. Enabling technologies, e.g. pluripotent induced stem cells, phenotypic assays, molecular genomics methods
3.2.6. Novel disease subtyping and characterization (biomarker, clinical and cognitive parameters)
3.2.7. Novel exploratory biomarker types of potential clinical use

3.3. Digital Health in Neuroscience:

3.3.1. Big Data integration into insight generation for CNS: multi modal analytics
3.3.2. Digital sensors and patient reported outcome development in CNS diseases

4. Funding of Research Projects.

4.1 Research Support:

Teva shall support, by providing financial resources, in selected Research Projects to be conducted by Investigators and by Joint Teams (hereinafter: "Research Support").

4.1.1 Investigators may apply for competitive Research Support for a two-year Research Projects in one of the specified areas in Section 3. Each Investigator Research Project that is selected by Teva, will receive a Research Support in a total amount of up to
$200,000 for a period of two (2) years starting from the Agreement (as defined below) effective date. Payment schedules will be defined in the Agreement.

4.1.2 Joint Teams may apply for competitive Research Support for a two-year Research Projects in studies prioritized by Teva as identified in 3.1.1, 3.1.3, 3.2.1, 3.2.2, 3.3.2. Each Joint Team’s Research Project that is selected by Teva, will receive a Research Support in a total amount of up to $500,000, for a period of two (2) years starting from the Agreement effective date. Payment schedules will be defined in the Agreement. Each Joint Team should appoint one investigator to be the primary contact of the Joint Team. Such investigator will be the individual responsible for communication with Teva and his/her Institution (as defined below) will be the one accountable for the Joint Team’s research activities and use of the Research Support. Joint teams must be multidisciplinary, and their members may be based in one or several Institutions. The Joint Team must include the range of expertise and experience at diverse academic stages required to carry out the proposed Research Project. Joint Team members cannot be from the same department.

4.2 Research Grant:

Teva shall provide financial support to selected Research Projects to be conducted by Pre-Doctoral students and Pre-Doctoral fellows (hereinafter: "Research Grant").

Research Proposals for a Research Grant should be submitted by the Pre-Doctoral or Post-Doctorate applicant, as applicable, in the areas of neuroscience described in Section 3, and must include the endorsement of the relevant principal investigator and its Institution. Pre-Doctoral can apply for Research Grant, not to exceed $25,000 and Post-Doctoral can apply for Research Grants, not to exceed $35,000. Teva’s support will be for one year only starting from Agreement effective date.

5. Applications to the NNE Program

5.1. Applications for Research Support and for Research Grant will be submitted in accordance with the application form and guidelines attached hereto as APPENDIX A TO RFA – RESEARCH SUPPORT APPLICATION FORM ("Appendix A") and APPENDIX B TO THE RFA–PRE-DOCTORAL & POST-DOCTORAL RESEARCH GRANT APPLICATION FORM ("Appendix B"), respectively.

5.2. Applications can only be submitted by Investigators and Joint Teams (both, who are full time, senior academic faculty members (Senior Lecturer and above)) and by Pre-Doctoral or Post-Doctoral in academic or medical (e.g. hospitals, HMOs) institutions in Israel with research programs in neuroscience and/or digital health (hereinafter: "Institution").

5.3. Applications can only be submitted by Investigators, Joint Teams Pre-Doctoral or Post-Doctoral who are Israeli citizens and/or permanent residents or returning Israeli citizens with granted study and/or work positions at Institutions.

5.4. As applicable, the Institution will be responsible for obtaining any certificates of approval and/or authorizations required to conduct the Research Project and present such
certificates to Teva prior to the commencement of the Research Project and upon Teva's request at any time.

5.5. Applications must include a letter of endorsement of the Institution signed by the head of Research Authority or VP for Research and Development or equivalent.

5.6. The selection process of the Applications shall be based on an internal process which includes Teva's considerations in accordance with the process described in Section 7.

5.7. The selected Joint Teams and Investigators of any Research Support and the selected Pre-Doctoral students or Post-Doctoral fellows for Research Grant provided by Teva under this RFA (collectively, hereinafter: "Recipients") must openly disclose the fact that Teva is providing them with such Research Support or Research Grant, respectively.

5.8. Research Support and Research Grant will be provided in support of the Research Project as appears in details in Appendix A or B, respectively, and shall be used against the direct costs of such Research Project including the materials and personnel (part or full time) cost for conducting the Research Project. In addition, up to $5,000 of the Research Support or Research Grant, as applicable, may be used by the Recipient, as applicable, to attend a scientific conference in order to present the progress or the results of the Research Project. For clarity, any use of the Research Support or Research Grant, as applicable, for activities or expenses not directly related to the Research Project is strictly prohibited.

All payments made as part of a Research Support and Research Grant will be made to Institution and not to the selected Recipient. Research Support and Research Grants must be forward looking and may not compensate expenses already incurred by the Recipient's Institution.

5.9. Research Supports and/or Research Grants will not include support of educational programs (in Israel or abroad) except for the participation in a conference as mentioned above in Section 5.8.

6. Application Process and Guidelines

6.1 Guidelines for submission of Applications:

6.1.1. Applications for Research Support and Research Grant shall be submitted in English and shall include the information and documents requested in Appendix A and in Appendix B, respectively.

6.1.2. Teva will host a NNE 2016 Research Program Meeting ("Meeting") for the interested applicants. All applicants are highly encouraged to participate in such Meeting (physically or telephonically) before submission of their Applications. The Meeting shall be held on Monday, the 7th of March, 2016 at 13:00-15:00. For information on location and phone connectivity please contact Teva person listed in Section 6.3. Joint Teams can be represented by their accountable investigator.

6.1.3. Full Applications, and any requests for clarifications and/or questions throughout the application process, shall be sent by E-mail to the contact person listed in Section 6.3 below.

6.2. This RFA will be managed according to the following process and timeline:
<table>
<thead>
<tr>
<th>#</th>
<th>Phase</th>
<th>Details</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RFA Issuance</td>
<td>Issuance of this RFA to Institutions and in public communications</td>
<td>7 February 2016</td>
</tr>
<tr>
<td>2</td>
<td>Questions &amp; Clarifications</td>
<td>Teva's Meeting with interested scientists</td>
<td>7 March 2016 (13:00-15:00)</td>
</tr>
<tr>
<td>3</td>
<td>Application Submissions</td>
<td>Last date for applicants to submit Applications to Teva</td>
<td>25 March 2016 (12:00 noon)</td>
</tr>
<tr>
<td>4</td>
<td>Announcement</td>
<td>Teva will announce the Recipients and issue acceptance/rejection letters</td>
<td>20 April 2016</td>
</tr>
</tbody>
</table>

6.3. **Contact Person:**

Teva's contact person for all purposes regarding this RFA is:

<table>
<thead>
<tr>
<th>First and Last Name:</th>
<th>Dr. Guy Rosenthal</th>
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<tbody>
<tr>
<td>Position:</td>
<td>Manager, Global Academic Affairs and R&amp;D Networks</td>
</tr>
<tr>
<td>Direct Phone:</td>
<td>+972-3-9148534</td>
</tr>
<tr>
<td>Mobile:</td>
<td>+972-50-7581221</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:guy.rosenthal@teva.co.il">guy.rosenthal@teva.co.il</a></td>
</tr>
</tbody>
</table>

7. **Evaluation and Selection Process; Miscellaneous**

7.1. All Applications for will be reviewed, evaluated and selected by a committee nominated by Teva and chaired by the President of Teva Global R&D and CSO.

7.2. The following criteria will be considered while evaluating and selecting the Recipients:

- Degree of scientific excellence and coherence of the application;
- Degree of innovation and potential to lead to significant scientific and medical advances;
- Relevance to diagnostics and/or therapeutics;
- Credentials of the applicant(s);
- Development of highly qualified personnel;
- Degree of multi-Institutional collaboration and sharing of knowledge, expertise, and resources; number of institutions collaborating in a joint proposal;
- The expected contribution to the sustainable growth of neuroscience research in the State of Israel; and
- Degree of promoting diversity in Israel by supporting the advancement of all sectors of the population of Israel in neuroscience research and from various Institutions;
7.3. Notwithstanding anything to the contrary in this RFA, Teva shall have the sole discretion in selecting Applications and reserves the right to accept or reject any and all responses at its sole discretion. Accordingly, the criteria specified in this Section 7 are intended solely to provide certain information to the applicants as to the selection process of the Research Proposals but Teva shall have the right to assign any degree of importance to each such criteria and even deviate from such criteria, if it deems advisable.

7.4. The Research Support and the Research Grant shall be used in accordance with the terms and conditions of this RFA and subject to the terms of the Agreement for the NNE Research Support or Research Grant, as applicable (as further described below).

7.5. Recipients declare that, at all relevant times, whether prior, during or after the conduct of the Research Project, all necessary certification requirements will be met in accordance with policies and regulations on ethical conduct of Research Project.

7.6. A Final progress report will be submitted to Teva by the Recipients in accordance with instructions provided by Teva. The progress report should be up to 15 pages in length including:

- Research Project Information
- Research Project Overview
- Research Project Objectives
- Research Project Mile-Stones
- Research Project Progress Status
- Discussion
- Conclusions and Future Plans

7.7. All Recipients of the NNE 2016 Programs will participate in NNE events and/or meetings such as the annual meeting of the NNE to be organized by Teva. In 2016 it is expected that Recipients will be invited to 2-3 events. These events and the requested participation of the Recipients are required in order to promote the objectives of the NNE 2016.

8. The Agreement

8.1. Teva, the Recipients and their respective participating Institutions, and, where applicable, their respective principal investigators, shall sign the research agreements to cover the Research Support or Research Grant, as applicable (collectively hereinafter: "Agreement"), which shall be sent by Teva following the selection process.

8.2. The Agreement will be signed, in addition to the Recipient, by the Institution and, where applicable, the relevant principal investigator who are accountable for the conducting of the Research Project and to ensure that the Research Support or Research Grant, as applicable, is used in compliance with the Agreement and this RFA.

8.3. The Agreement will contain sections regarding Teva's right to request and review the progress of the research activities and Teva's right to request a reconciliation of the funds in case that the Recipient left the Institution (and in case of Joint Team – the relevant
principal investigator left the Joint Team or otherwise the Joint Team cease to collaborate) or stopped conducting the Research Project for any reason whatsoever.

8.4. By submitting an Application in accordance with this RFA, the Recipients and the Institutions are accepting all terms and conditions set forth in this RFA. Where there is a contradiction between this RFA and the Agreement, the Agreement shall prevail.
APPENDIX A TO THE RFA – RESEARCH SUPPORT APPLICATION FORM

PART I

<table>
<thead>
<tr>
<th>Research Project Title</th>
<th>(NNE will identify your project according to the Project Title)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Institution(s)</td>
<td>(Institution that will administer the funds for your project)</td>
</tr>
<tr>
<td>Investigator/ the Joint Team members</td>
<td></td>
</tr>
<tr>
<td>Summary of the Research Project (up to 300 words)</td>
<td></td>
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<tr>
<td>Therapeutic Area</td>
<td></td>
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</tbody>
</table>

PART II

Short description of the overall Research Project (up to 4 pages) which shall include the following information:

a. Scientific background and definition of the proposed Research Project including a short review of existing research in the field
b. Defined Research Project objectives
c. Rationale
d. Research Project description
e. Research Project methodology
f. Relevance to disease treatment
g. Significance
h. Collaboration with other Institutions

PART III

1. Schedule and work-plan (up to 1 page)

Outline of timetable (Research Project major milestones and expected completion dates for each), for accomplishing the Research Project objectives stated above. To include the following parameters:

a. Research Project Activity
b. Institution/s
c. Department/s
d. Research Project activity start date (month, year)
e. Research Project activity end date (month, year)

2. Detailed annual budget for the Research Project (up to 1 page):

a. The total grant request should not exceed the amount outlined in the respective NNE Program (section 4 in the RFA). Important: overhead expenses of up to 10% are to be included within the total support request and clearly indicated as such.
b. Budget activity and justification (breakdown by year):
   i. Personnel
ii. Expendables (shall include consumables, animal costs and other direct Research Project costs. It shall not include travel costs)

iii. Equipment

PART IV
Applicant's declaration of approval from relevant authorities:
Applicant must indicate which approvals are required for the proposed Research Project and which have already been obtained, and the status of those still pending. (There is no need to include the documentation in the application unless specifically requested by Teva.)

PART V
1. Curriculum Vitae of all participating applicants, which shall include the following:
   a. Name (Title, Last, First, Initial)
   b. Birth Year
   c. Proof of residence in Israel and/or Proof of Israeli citizenship
   d. Institution and Department
   e. Institution mail address
   f. Phone no (office)
   g. Fax
   h. E-mail
   i. Educational Background (years, institution, specialization, degree)
   j. Major Fields of Interest
   k. Employment History (years, institution, area of research, title)
   l. List of Publications by applicant (year of publication, title of publication, institution, field of publication)
   m. List of grants received by applicant in the past three (3) years (including the year(s), title of project, source, total grant amount in USD)
   n. List of awards received by applicant (year, title of award, source)

2. Institution
   a. Institution's administrative contact (name, E-mail, tel.)
   b. Institution's letter of endorsement as described in section 5.5 of the RFA.

3. Requirements for all attachments to the Application:
   a. Attachments must be uploaded in PDF format
   b. Margin of 2 cm (minimum) around the page
   c. Observe page limitations, additional pages may NOT be added unless specified
   d. Use only letter size (21.25 X 27.5 cm) white paper/background for all attachments
   e. Photo-reduce the supporting documents if the originals are larger than (21.25 X 27.5 cm)
   f. Use a font size of 12 point, black type. No condensed type or spacing.
APPENDIX B TO THE RFA – PRE-DOCTORAL & POST-DOCTORAL RESEARCH GRANT APPLICATION FORM

PART I

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</tr>
<tr>
<td>Principal Investigator</td>
<td></td>
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<tr>
<td>Name of Pre-Doctoral or Post-Doctoral Fellow</td>
<td></td>
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<tr>
<td>Summary of the Research Project (up to 300 words)</td>
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PART II

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   - Research Project Activity
   - Institution
   - Department
   - Beginning (month, year)
   - End (month, year)

2. Detailed annual budget for the Research Project (up to 1 page):
   - The total grant request should not exceed $25,000 for Pre-Doctoral and $35,000 for Post-Doctoral, as applicable.
   - Budget activity and justification – breakdown according to the following points:
i. Personnel
ii. Expendables (shall include consumables, animal costs and other direct Research Project costs. It shall not include travel costs)
iii. Equipment

PART IV
Applicant’s declaration of approval from relevant authorities:
Applicant must indicate which approvals are required for the proposed Research Project and which have already been obtained, and the status of those still pending. (There is no need to include the documentation in the application unless specifically requested by Teva.)

PART V
1. Curriculum Vitae of all participating applicants, which shall include the following:
   a. Name (Title, Last, First, Initial)
   b. Birth Year
   c. Proof of residence in Israel and/or Proof of Israeli citizenship
   d. Institution and Department
   e. Institution mail address
   f. Phone no (office)
   g. Fax
   h. E-mail
   i. Educational Background (years, institution, specialization, degree)
   j. Major Fields of Interest
   k. Employment History (years, institution, area of research, title)
   l. List of Publications by Applicant (year of publication, title of publication, institution, field of publication)
   m. List of grants received by applicant in the past three (3) years (including the year(s), title of project, source, total grant amount in USD)
   n. List of awards received by applicant (year, title of award, source)

2. Institution
   a. Institutions administrative contact (name, Email and tel.)
   b. Institution's letter of endorsement as described in section 4.2 and 5.5 of the RFA and the relevant principal investigator personal liability approval

3. Requirements for all attachments to the application:
   a. Attachments must be uploaded in PDF format
   b. Margin of 2 cm (minimum) around the page
   c. Observe page limitations, additional pages may NOT be added unless specified
   d. Use only letter size (21.25 X 27.5 cm) white paper/background for all attachments
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