Research is an essential part of the mission for Shriners Hospitals for Children (SHC). As such, SHC funds and provides grants for both bench science studies and clinical research. In addition there are also allocated funds for infrastructural support (e.g. Special Shared Facilities). Each year questions arise regarding Research awards to SHC hospitals following the Research Advisory Board review of grant applications and funding approval by the Boards of Directors and Trustees. Many of these questions focus on how decisions are made with respect to the funding of individual grants.

For the 2015 grant year, we received a total of 92 new Basic Research grant applications, 30 new Clinical Research grant applications - all requiring review by members of the Research Advisory Board. These are in addition to the continuation projects. Applications are reviewed and scored using a system which parallels that of the NIH and is as follows: 1-Exceptional, 2-Outstanding, 3-Excellent, 4-Very Good, 5-Good, 6-Satisfactory, 7-Fair, 8-Marginal, and 9-Poor.

Below are graphs (Figures 1, 2, 3, & 4) that clearly show the occurrence of defined breaks which can be used as “cutoffs” for funding. The “cutoff” refers to a score which is used to identify the grants that will be funded (i.e., below the cutoff value) and those which will not be funded (i.e., above the cutoff value). This is not exactly a precise science, but in most cases a clearly discernible “break” may be observed. In other cases, parity across the areas and budget may also play a role in the funding decision.

Figure 1: Grant Scoring for Burn Grants:

![Figure 1: Grant Scoring for Burn Grants](image1)

Figure 2: Grant Scoring for Orthopaedic Grants:

![Figure 2: Grant Scoring for Orthopaedic Grants](image2)
The 2015 research budget will support and fund a total of 127 grants (new, renewal, revision and continuation grants): 71 bench science projects, 36 clinical research trials and 20 Special Shared Facilities, for a combined value of $17,519,250. Eleven of the SHC hospitals participate in one or more of the funded projects. In addition to research grants, support is also provided for Fellowships as a component of the education mission.

Figure 5 provides a depiction of the distribution of the funds associated with the funded peer-reviewed applications for Clinical Research projects. Figure 6 shows the distribution of the funds for the bench science reviewed projects.

The Division of Medical Research appreciates all of those who submitted their grant applications and continues to move the Shriners Hospitals for Children research forward. We look forward to another successful year.
As a reminder, your research could provide the opportunity for intellectual property. Review the information below about the Intellectual Property process.

### Intellectual Property

Before you publish that abstract or poster OR ask your colleague if your idea is worthwhile, ask yourself the following questions:

1. Have I created a new process or method?  
2. Is this a new device, machine or article of manufacture?  
3. Is this a novel molecule, animal model, or cell line, or an improvement to something that exists already?  
4. Is this non-obvious and useful?  
5. Is the subject matter novel?

*If you can answer “Yes” to any of these questions, you may be giving up a patent opportunity that could reap monetary rewards for your hard work as well as income for the Shrine philanthropy by publishing your poster or abstract or even conferring with your colleague.*

If you answered “Yes” to any of the above questions, you should contact your local Director of Research or the Vice President, Research for information on completing the Record of Medical Invention that can be found on the Shrine Intranet under Medical Research. The complete document should be submitted to the office of the Vice President, Research (rnovak@shrinenet.org) in Tampa, FL, for processing through legal.

Once the Record of Medical Invention has been reviewed, you will be contacted to explain all the steps to be followed, and you will be guided on publication and presentation of your findings. We do not foresee any time conflicts that will impede the publication of your work, if you contact us immediately with your idea. The process will allow us to get new technology into the hands of reputable individuals who can take new technology public to those who will benefit most, our patients. However, once the idea/project is discussed with anyone or presented in a public forum, you only have one year from the first disclosure of the idea/concept to obtain a patent.

Royalties are available to investigators who file application through the Shriners or conjointly through the Shriners and affiliated organization (e.g. university). As defined in section 1.4 of the SHC Intellectual Property Policy it states:

**“§1.4 Income from Biomedical Research Intellectual Property.** Any Annual Net Income received from Biomedical Inventions by Shriners Hospitals is presently allocated to the Shriners Hospitals Research Fund. Unless a different division of such Annual Net Income is determined appropriate by the Board of Directors and Board of Trustees, either prospectively or retroactively, Shriners Hospitals' creators of Biomedical Inventions collectively will receive, in the aggregate, 35% of the first $100,000.00 and 20% of the excess over $100,000.00 of such Annual Net Income or other payments as determined by the designee of the Committee, with the Committee's approval. Annually, the Committee will make a report to the Board of Directors and Board of Trustees, of all Income received from Intellectual Property in the current year, cumulative totals of such Income, and the allocation of Annual Net Income. “

The SHC Intellectual Property Policy and the Intellectual Property Agreement is attached to this document and can be found on the Shrine Intranet Medical Research Page under the Intellectual Properties link or contact Medical Research (jsoucie@shrinenet.org) for a copy.
**Intellectual Property Agreement**

"Hospital" means: Shriners Hospitals for Children, a Colorado corporation; or The Shriners’ Hospital for Children, a Massachusetts corporation; or Shriners Hospitals for Children, a Canadian corporation; or Shriners Hospital for Children (Quebec) Inc., a Quebec corporation; or Hospital Shriners Para Niños, A.C. (Shriners Hospital for Children, A.C.), a Mexican association; and each of their individual Hospitals, or the Shriners International Headquarters in Tampa, FL, and any related work sites.

"Covered Activities" mean: any activities that are conducted pursuant to an agreement between Hospital and any third party; or any activities that receive direct or indirect financial support from Hospital; or any activities that otherwise make use of any facilities, materials or other resources of the Hospital.

**Agreement**

I acknowledge that I have been furnished with a copy of the Shriners Hospitals Intellectual Property Policy from prior to execution of this agreement and that I have read and fully understand such document. I also acknowledge that the words and expressions in this Intellectual Property Agreement have the meaning ascribed to them in Shriners Hospitals Intellectual Property Policy.

As a condition of my appointment to the professional staff of, or employment by, Hospital, or my opportunity to participate in any Covered Activities, I hereby agree with Hospital as follows:

1. I shall comply fully with Shriners Hospitals for Children Intellectual Property Policy (including assigning to Hospital ownership of Inventions and other Intellectual Property), a copy of which is attached hereto, as this policy may be revised by the Hospital from time to time. I understand that any revision of the attached policies will be publicized in the Hospital community in a reasonable manner calculated to communicate such revisions to me on a timely basis.

2. I hereby acknowledge that all rights, titles and interests in the Inventions and any other Intellectual Property which I shall create or make, individually or jointly with others, during the course of my appointment or employment or participation in Covered Activities, are and shall remain, at all time, the sole and exclusive property of the Hospital. Without limiting the generality of the foregoing, I hereby assign, without limitation, geographic or otherwise, any and all right, title and interest which I may have in any of the aforementioned Inventions and other Intellectual Property for the term and any renewal thereof, of any such right, title and interest.

3. I understand, among my obligations under the Shriners Hospitals for Children Intellectual Property Policy, I must promptly disclose, by completing the Hospital’s disclosure form, every Invention that is or may be patentable which I shall conceive or reduce to practice, individually or jointly with others, during the course of my appointment or employment or participation in Covered Activities, if the Invention arises out of or is related to Covered Activities. I understand that I may have other disclosure obligations as well, as provided in the Intellectual Property Policy.

4. I agree to file with the Human Resources Department at Hospital within thirty (30) days of the date hereof, a complete and true copy of every agreement to which I am a party on the date hereof and in which I have agreed to provide consulting services to anyone.

5. I am attaching a list of Inventions, patented or unpatented, made or conceived, and reduced to practice, by me prior to my appointment to the professional staff or employment by the Hospital. In the event Shriners Hospitals for Children has no ownership interest therein, then I ask that they be excluded from this agreement.

6. I agree to comply fully with every obligation which shall apply to me or Hospital under any grant or agreement providing support for research.

7. I agree to execute at Hospital’s request any and all additional documents or instruments necessary to effectuate the purposes of this agreement or of the Shriners Hospitals Intellectual Property Policy. If I fail to execute any such document or instrument on a five-day written notice, I hereby appoint Hospital as my irrevocable attorney-in-fact with the right to execute and record such document or instrument in my name.

Signature: ___________________________ Date: ____________________

Witness: ___________________________ Date: ____________________