Reproductive and Developmental Toxicology
ANNUAL REPORT: 2015-2016
May 1, 2015 to April 30, 2016

I. Officers/Committees:

<table>
<thead>
<tr>
<th>Position</th>
<th>2015-2016</th>
<th>2016-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Jeffrey Moffit</td>
<td>Christopher Bowman</td>
</tr>
<tr>
<td>Vice President</td>
<td>Christopher Bowman</td>
<td>Kary Thompson</td>
</tr>
<tr>
<td>Vice President-Elect</td>
<td>Kary Thompson</td>
<td>Vicki Sutherland</td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Chad Blystone</td>
<td>Nancy Denslow</td>
</tr>
<tr>
<td>Past President</td>
<td>Raymond G York</td>
<td>Jeffrey Moffit</td>
</tr>
<tr>
<td>Senior Councilor</td>
<td>Judith Zelikoff</td>
<td>Sarah Campion</td>
</tr>
<tr>
<td>Junior Councilor</td>
<td>Sarah Campion</td>
<td>Jason Blum</td>
</tr>
<tr>
<td>New Career Councilor</td>
<td>Aileen Keating</td>
<td>Bethany Hannas</td>
</tr>
<tr>
<td>PDA Representative</td>
<td>Natasha Catlin</td>
<td>Natasha Catlin</td>
</tr>
<tr>
<td>GSCLC Representative</td>
<td>Kirstin Bircsak</td>
<td>John Szilagyi</td>
</tr>
</tbody>
</table>

II. Activities:

The 2016 SOT Annual Meeting RDTSS Reception was held in New Orleans, LA on March 14th, and approximately 180 people were in attendance. Following a reception from 6:00-6:30 PM, the RDTSS President called the business meeting to order at 6:20 PM.

President’s Report (Jeff Moffit):

Ed Carney Award Overview
Dr. Moffit provided an overview of the Inaugural Ed Carney Award explaining that the Award is organized as a joint award between RDTSS and the Teratology Society. This was the first distribution as two separate awards (2016 Fall & 2017 Spring). The Fall award received 17 graduate and 5 post-doctoral submissions requesting travel to either SOT or the Experimental Biology Meeting. Judging criteria were based upon the applicant’s meeting abstract, letter of recommendation, and personal statement about career objectives. The judges included a balanced panel of SOT and Teratology Society Members: Chris Bowman, Kary Thompson, Ray York, Jeff Moffit, and Tacey White. Both Jeff Moffit & Mary Alice Smith (Past President of the Teratology Society) jointly presented the award to Kristin Bircsak of the University of Pennsylvania for travel to the 2016 SOT Annual Meeting. The 2017 Spring Award will be primarily handed by the Teratology Society, with RDTSS input.
2016 Annual Meeting Scientific Sessions

Dr. Moffit summarized the efforts of the RDTSS to contribute scientific sessions to the 2016 meeting. A total of 15 scientific session proposals were submitted for endorsement and 8 were accepted by the PRC for the Annual Meeting. The following proposals were organized and/or sponsored by RDTSS and presented at the 2016 annual meeting:

<table>
<thead>
<tr>
<th>Title</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Future of Developmental and Reproductive Toxicology—Building a Bridge to the Animal Free Zone</td>
<td>Continuing Education</td>
</tr>
<tr>
<td>Zebrafish as a Tool in Toxicology and Drug Discovery Screening</td>
<td>Continuing Education</td>
</tr>
<tr>
<td>Trichloroethylene Exposures Resulting from Vapor Intrusion: What Do the Data Tell About Potential Health Risks to Pregnant Women</td>
<td>Roundtable</td>
</tr>
<tr>
<td>Using Multi- and Transgenerational Effects of Environmental Exposures in Diverse Animal Models for Assessment of Human Health Risks</td>
<td>Symposia</td>
</tr>
<tr>
<td>Opening the Black Box: understanding the molecular mechanisms of developmental toxicity</td>
<td>Symposia</td>
</tr>
<tr>
<td>Maternal Exposure to Nanoparticles – How does it affect the fetus? Status, Mechanisms, and Future Directions</td>
<td>Workshop</td>
</tr>
<tr>
<td>Using 21st Century Approaches to Evaluate Endocrine-Active Compounds</td>
<td>Workshop</td>
</tr>
<tr>
<td>An Update on Juvenile Animal Testing</td>
<td>Workshop</td>
</tr>
</tbody>
</table>

Past-Presidents Report (Ray York):

ToXchange and email was used to broadly canvas RDTSS membership for nominees for elected positions.

Election results:
Vice-President Elect: Vicki Sutherland
Secretary/Treasurer: Nancy Denslow
Junior Councilor: Jason Blum
New Career Councilor: Bethany Hannas
Graduate Student Representative: John Szilagyi

Vice-President’s Report (Chris Bowman):

Dr. Bowman instituted an aggressive outreach program to identify and encourage RDTSS-relevant proposals, in the hopes of increasing the number and quality of submissions. To this effort, Dr. Bowman led an RDTSS Program Committee that included RDTSS Officers and members. These activities resulted in the request for endorsement of 2 Basic CE Courses, 1 Roundtable, 7 Symposia, and 9 Workshops.
Each member of the RDTSS Program Committee received a copy of the proposals provided by SOT HQ, along with the instructions for providing scoring and comments. The members of the RDTSS Program Committee then emailed Dr. Bowman their scores and comments. Individual comments were consolidated for each proposal, along with a final RDTSS score. Dr. Bowman entered the final scores and comments on the SOT proposal ranking website.

Secretary/Treasurer’s Report (Chad Blystone):

Membership statistics from the current and previous year are shown below. Overall membership trends were essentially unchanged between 2015 and 2016.

<table>
<thead>
<tr>
<th>Member type</th>
<th>As of 7/12/2016</th>
<th>As of 6/30/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>272</td>
<td>275</td>
</tr>
<tr>
<td>Associate</td>
<td>31</td>
<td>37</td>
</tr>
<tr>
<td>Emeritus</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Student</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>Postdoctoral fellow</td>
<td>31</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>395</td>
<td>400</td>
</tr>
</tbody>
</table>

A summary of RDTSS finances as of financial year July 1st, 2015 through June 30th, 2016:

<table>
<thead>
<tr>
<th>Income</th>
<th>2015 Balance</th>
<th>$21,564</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donations</td>
<td>$4,000</td>
<td></td>
</tr>
<tr>
<td>Membership/Meeting</td>
<td>$8,000</td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>$1,000</td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>Awards</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>Reception</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>Net assets at end of year</td>
<td>$21,564</td>
<td></td>
</tr>
</tbody>
</table>

A summary of the RDTSS Endowment funds that include the Angelo Furgiuele and Edward Carney Award, ending March 31, 2016 is presented below.

The Edward Carney Award reached Permanently Restricted Net Asset Fund status in 2016.

<table>
<thead>
<tr>
<th>Net Assets Beginning of Year</th>
<th>$39,300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary Income/Expenses</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>Contributions</td>
<td>20,900</td>
</tr>
<tr>
<td>Employer Matching Funds</td>
<td>750</td>
</tr>
<tr>
<td>SOT 50th Anniversary Matching</td>
<td>21,650</td>
</tr>
<tr>
<td>Total Income</td>
<td>43,300</td>
</tr>
<tr>
<td>Gain (loss) on Investments</td>
<td></td>
</tr>
<tr>
<td>Interest &amp; Dividends</td>
<td>$1,672</td>
</tr>
<tr>
<td>Expense</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Awards</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>Total Expense</strong></td>
<td>$1,000</td>
</tr>
<tr>
<td>Excess (Deficiency) of Revenue over Expenses</td>
<td>$42,300</td>
</tr>
<tr>
<td><strong>Net Assets End of Year</strong></td>
<td><strong>$81,600</strong></td>
</tr>
</tbody>
</table>

The Angelo Furgiuele Fund has lapsed on June 30th, 2014, such that matching funds from SOT are not be available.

<table>
<thead>
<tr>
<th>Net Assets Beginning of Year</th>
<th>$17,231</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordinary Income/Expenses</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
</tr>
<tr>
<td>Contributions</td>
<td>-</td>
</tr>
<tr>
<td>Employer Matching Funds</td>
<td>-</td>
</tr>
<tr>
<td>SOT 50th Anniversary Matching</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Gain (loss) on Investments</strong></td>
<td></td>
</tr>
<tr>
<td>Interest &amp; Dividends</td>
<td>$408</td>
</tr>
<tr>
<td><strong>Expense</strong></td>
<td></td>
</tr>
<tr>
<td>Awards</td>
<td>$5,500</td>
</tr>
<tr>
<td><strong>Total Expense</strong></td>
<td>$5,500</td>
</tr>
<tr>
<td>Excess (Deficiency) of Revenue over Expenses</td>
<td>$5,500</td>
</tr>
<tr>
<td><strong>Net Assets End of Year</strong></td>
<td><strong>$12,231</strong></td>
</tr>
</tbody>
</table>

**Vice-President-Elect’s Report (Kary Thompson)-Student/Postdoctoral Fellow Awards:**

In 2016 the RDTSS continued the student presentation award program, which was first implemented in 2006. There were 6 post-doctoral and 10 graduate student entries this year. The submission process required submission of the Annual Meeting abstract, a cover letter outlining the significance of the work to reproductive or developmental toxicology, and the applicant must be a RDTSS member or have applied for membership. The deadline for all supporting documents was February 15, 2015.
Judging took place on Monday March 14th. Each judge spent at least 5 min per candidate in their group and then each candidate ranked by each individual judge within their group. The total scores were then tallied and checks/certificates requested/obtained from SOT HQ prior to the RDTSS Annual Meeting Reception.

**Post-Doctoral Award winners:**

<table>
<thead>
<tr>
<th>Place</th>
<th>Poster Owner</th>
<th>Prize</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Karilyn Sant</td>
<td>$700</td>
</tr>
<tr>
<td>2nd</td>
<td>Hayley Furlong</td>
<td>$500</td>
</tr>
<tr>
<td>3rd</td>
<td>Samira Brooks</td>
<td>$300</td>
</tr>
</tbody>
</table>

**Graduate Student Award Winners:**

<table>
<thead>
<tr>
<th>Place</th>
<th>Poster Owner</th>
<th>Prize</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>John Szilagy</td>
<td>$700</td>
</tr>
<tr>
<td>2nd</td>
<td>Jordan Speidel</td>
<td>$500</td>
</tr>
<tr>
<td>3rd</td>
<td>Elyse Caron-Beaudoin</td>
<td>$300</td>
</tr>
</tbody>
</table>

The following judges were thanked for their efforts:

- Vicki Sutherland
- Jodi Flaws
- Aileen Keating
- Christina Carruthers
- Caren Villano
- Jedd Hillegass
- Kim Brannen
- Barbara Abbott
- Jennifer Foreman
- Chad Blystone

**Senior Councilor’s Report (Judy Zelikoff) - Best Paper Award:**

The judging process followed a new format used to select the Best Paper in the previous year: Papers published during the previous calendar year in *Toxicological Sciences*. Publication date is defined as the date the paper appears in the print form of *Toxicological Sciences*. Papers in the areas of reproductive or developmental toxicology are automatically eligible. Publication under the Reproductive and Developmental Toxicology Table of Contents subheading is not required. At least one author must be a member of RDTSS. A plaque was provided to the first author of the winning manuscript.

This year, given the number of judges and papers, judging was done in a matrix format where everyone received a different combination of papers in the first round to perform relative rankings. In the second round, another matrix was used such that at the end of the two rounds, each of the top papers was ranked by every judge on the list. Scores were then averaged and ranked.

**Third Place:**


**Second Place:**

The winning paper:

The following judges were recognized and thanked for their efforts:

Jason Blum
George Daston
Nancy Denslow
Lori Dostal
Reza Rasoulpour

Junior Councilor’s Report-Scientific Achievement Award (Sarah Campion):

Dr. Sarah Campion coordinated nominations for the Lifetime Scientific Achievement Award from the RDTSS membership. Nomination packages were reviewed by a 7-member RDTSS Subcommittee for overall ranking and selection of the awardee and presented for final approval to the RDTSS Executive Committee. The Scientific Achievement Award winner was selected based on five criteria including: lifetime contribution to the field of reproductive and developmental toxicology; training and mentorship, service to the reproductive/developmental field, in general and to the RDTSS, specifically; and influence of work on regulation and policy. The award recipient for 2016 was Dr. Paul Foster.

The members of the 2015 Achievement Award Sub-committee were:
Sarah Campion
Aileen Keating
Sue Makris
Jeff Moffit
John Richburg
Ray York
Judy Zelikoff

New Career Councilor’s Report- Angelo Furgiuele Young Investigator Technology Award Presentation and RDTSS website update (Aileen Keating):

Dr. Keating developed and implemented a process to evaluate and award the Angelo Furgiuele Young Investigator Technology Award. The Angelo Furgiele Young Investigator Technology Award Fund provides proceeds to be used for an award to be presented to a young investigator in the field of reproductive and developmental toxicology to purchase technological enhancements such as computer hardware, software or analytical equipment that will facilitate the conduct of research by the award recipient.

The award recipient shall be a young investigator working in a non-profit institution such as a college or university. A young investigator for this purpose is defined as an individual at an early stage of their career, including graduate students, and the individual is less than 10 years post-receipt of a doctoral degree. Recipient(s) of this award will be selected on the merits of the
applicants proposed use of the award funds to impact on the applicant’s research in reproductive and developmental toxicology.

Deadline for applications was November 15th, 2015. The first award was presented at the 2016 Society of Toxicology annual meeting to the value of $5,500.

**Our inaugural winner was Sangodele Janet Olayemi** of Bingham University, Nigeria for her work proposal entitled, “Evaluation of the toxic effects of oral and dermal exposure of 1,4 dinitrobenzene on key aspects of male reproduction, oxidative stress and fertility in male Wistar rats”. Equipment requested included a computer assisted semen analyzer (CASA), JH-9606 microplate reader, DNX-9620 computerized microplate washer, and centrifuge.

The New Career Councilor is also the RDTSS Website Liaison. Dr. Keating identified several ideas to update and modernize the RDTSS website, which will be pursued in 2016-17.

**The GSLC and PDA Reports were provided by Kristin Bircsak and Natasha Catlin, respectively.** Drs. Bircsak and Catlin described several funding opportunities and mechanisms of professional participation that are relevant to the RDTSS student/post-doctoral membership at the RDTSS Reception.