NAME OF SPECIALTY SECTION: Reproductive and Developmental Toxicology

ANNUAL REPORT: 2010-2011
May 1, 2010 to April 30, 2011

I. Officers/Committees:

Officers: 2009-2010 2010-2011
President: Alan Hoberman Ed Caney
Vice President: Ed Carney Barry McIntyre
Vice President-elect: Barry McIntyre Jodie Flaws
Secretary/Treasurer: Warren Foster Warren Foster
Councilors: Robert Parker Kamin Johnson
Kamin Johnson Jeffrey Moffet
New Career Councilor: Jeffery Moffet Winnie Jeng
Student Councilor: Nick Heger Nick Heger
Past-President: Mark Hurtt Alan Hoberman
Post-Doctoral Assembly Representative: Miyun Tsai Turton Mindy Tsai-Turton
Newsletter Editor: Ron Hood Ron Hood
Website Liaison: -- Jeffrey Moffit

II. Activities

Student Presentation Awards: In 2010 the RDTSS continued the format for the student presentation awards implemented in 2006. Vice President-elect Barry McIntyre and New Career Councilor Winnie Jeng coordinated the selection of the best Student Presentation Awards. A panel of judges (below) reviewed the students’ presentations during a special poster session on Monday afternoon of the SOT annual meeting in Washington DC. There were 25 entries this year, the highest in recent memory.

- Judges:
  - Katie Turner (RTI International)
  - Kamin Johnson (dePont Hospital for Children)
  - Bob Chapin (Pfizer)
  - Winnie Jeng (sanofi-aventis)
  - Barry McIntyre (National Toxicology Program)

- Postdoctoral Winner - $300
  Joshua Robinson

- Student Winners
  First Place - $300
  Madisa Macon
  Second Place - $200 ea
  Gregory Weber
  Kian Mechant-Borna
Student Travel Awards: A total of 21 $100 travel awards were presented.

“Travel Award” recipients:

Connie J Kappeler  
Ayelet Ziv-Gal  
Nick Heger  
Jessica LaRocca  
Solange S. Lewis  
Benjamin Moyer  
Wei Wang  
Zelieann R. Craig  
Tessie Paulose  
Natasha Catlin  
Mallikarjuna (Arjun) Basaravajappa

Jackye Peretz  
Jason Blum  
Ranjan Banerjee  
Crystal Usenko  
Agnes Forgacs  
Franck Booc  
Jeremy Larson  
Sumith Jayasinghe  
Ahmed M Taiyeb Ridha  
Adam Filgo

Scientific Achievement Award: Kamin Johnson, coordinated nominations solicited from members. The committee selected from among the member nominations. The award can be presented for lifetime contribution to the field of reproductive and developmental toxicology, or for contribution of a particularly influential body of work. This award recipient this year was Dr. Rochelle Tyl. Dr. Tyl accepted the award at the meeting.

50th Anniversary Activities

Nick Heger developed and presented a poster representing the RDTSS which had its 30th anniversary this year.

A contribution of a malformed fetus mounted in plastic was placed in the time capsule.

The following message from RDTSS was provided for the SOT Newsletter

“On behalf of the members of the Reproductive and Developmental Toxicology Specialty Section (RDTSS), we congratulate SOT on its 50th anniversary. The RDTSS celebrates its 30th anniversary at this year’s meeting. Founded to promote research in the special area of Reproductive and Developmental Toxicity, the RDTSS has helped to advance the science needed to understand and prevent adverse effects of drug/chemical exposure on reproduction and development. The fetus represents a special population that can never give its consent. Therefore the evaluation of drugs prior to marketing and the assessment of hazard from exposure to chemicals can only be done in non-human models. Drugs are usually approved based only on animal data, making it even more important that the most appropriate and sensitive techniques are used to assess hazard and allow drugs and chemicals to be used safely or in some cases exclude exposure of pregnant women or women of child bearing age from exposure. Reproductive and developmental toxicology also continues to be an active area for basic science research,
as evidenced by recent discoveries regarding embryonic stem cells, epigenetics, and endocrine-mediated toxicity, among others.

RDTSS has strived to promote this special area of toxicology through continuing education courses, sponsoring symposia and workshops at the annual meeting, supporting interest in the field by recognition of best papers in Toxicological Sciences, awards for the best student posters and student travel awards. In the last several years we have added a Lifetime Achievement Award to recognize members of our specialty section who have expanded our knowledge base and promoted our specialty area.

We look forward to the 50th annual meeting to the future of the SOT and the RDTSS.”

Award for 2010 Best Paper on Reproductive and Developmental Toxicology published in Toxicological Sciences: Senior Councilor Robert Parkers managed the selection of the Best Paper Award. We had 9 to 12 Judges for each of the two rounds and the finals. A plaque was awarded to the first author. Other “top 3 finalist” certificates were also given to finalists.

First place:


Second Place:


Third Place:

G Wang et al. Hormonal Suppression Restores Fertility in Irradiated Mice from both Endogenous and Donor-Derived Stem Spermatogonia.

Fourth Place:

R Divi et al. Progressive Mitochondrial Compromise in Brains and Livers of Primates Exposed In Utero to Nucleoside Reverse Transcriptase
Inhibitors (NRTIs). 4

**Student/Post-Doc Mixer:** Junior Councilor Kamin Johnson attended and presented the RDTSS poster for display at this function. Give away will need to be re-ordered next year if the SS decides to continue this tradition.

**The RDTSS Officers Meeting** was held Monday, March 7, 6:30-7:45 AM in the Washington DC Convention Center

**The 2010 Annual Specialty Section Business Meeting** was held Wednesday, March 9, at the Washington DC Convention Center. Specialty section President Alan Hoberman presided.

**2010 RDTSS Annual General Membership Business Meeting Agenda**

**Call to Order and Welcome:** Alan Hoberman

**New Officers/Elections:** Alan Hoberman welcomed new officers and acknowledged the contributions of outgoing officers:

**Incoming and continuing executive committee members:**
Incoming President: Ed Carney
Vice President: Barry McIntyre
Vice President Elect: Jodi Flaws
Secretary/Treasurer: Warren Foster
Senior Councilor: Karim Johnson
Junior Councilor: Jeffrey Moffit
New Career Councilor: Winnie Jeng
Student Councilor (appointed): Nick Heger
Post-doc representative (appointed): Mindy Tsai-Turton

**Outgoing Officers:**
President: Alan Hoberman
Past President: Mark Hurtt
Senior Councilor: Robert Parker

**Student Awards:** Barry McIntyre recognized the winners of the top presentations and the other students presenting at the special session (listed above).

**2010 Toxicological Sciences: Best Paper in Reproductive and Developmental Tox:**
Presented by Robert Parker. See details above.

**Scientific Achievement Award:** The 2011 RDTSS scientific achievement award was presented to Rochelle Tyl by Karim Johnson.

**Secretary/Treasurer’s Report:** Discussed by Warren Foster
We currently have 226 full members, 40 associate, 4 retired, 46 students and 11 postdocs for a total of 327 members.

<table>
<thead>
<tr>
<th>Income</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCOME</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributions</td>
<td>0</td>
<td>2500</td>
<td>2500</td>
</tr>
<tr>
<td>Dues</td>
<td>4005</td>
<td>4125</td>
<td>4575</td>
</tr>
<tr>
<td>Registration</td>
<td>3460</td>
<td>3200</td>
<td>3155</td>
</tr>
<tr>
<td>Interest</td>
<td>80</td>
<td>80</td>
<td>153</td>
</tr>
<tr>
<td>Total</td>
<td>7545</td>
<td>9905</td>
<td>10382</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awards/Plaques</td>
<td>3502</td>
<td>2105</td>
<td>2000</td>
</tr>
<tr>
<td>Executive Meeting</td>
<td>160</td>
<td>103</td>
<td>91</td>
</tr>
<tr>
<td>Reception</td>
<td>5976</td>
<td>6348</td>
<td>6776</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9738</td>
<td>8556</td>
<td>8867</td>
</tr>
<tr>
<td>Net Assets Jul-1</td>
<td>3884</td>
<td>1691</td>
<td>3203</td>
</tr>
<tr>
<td>Net Assets Jun-30</td>
<td>1691</td>
<td>3040</td>
<td>1515</td>
</tr>
</tbody>
</table>

There was a brief presentation about opportunities for specialty sections to develop endowment funds within the SOT Endowment. The RDTSS has an endowment valued at $12,000. We have approximately three years to either increase this endowment to the SOT minimum of $25,000 or make a decision to end the fund and distribute the funds.
Ideas for the 2012 SOT annual meeting RDTSS-sponsored programs: Vice President Ed Carney described these and moderated the discussion.

Scientific Program Themes
- Aberrant Gene Expression in Toxicity and Disease - Epigenetics and MicroRNAs
- Characterizing Toxic Modes of Action and Pathways to Toxicity
- Influence of Global Climate Change on Environmental Health Issues
- Clinical Toxicology from Bedside to the Bench and Back
- Regulatory Science: Bridging the Gap between Discovery and Product Availability

CE Target Areas
- Advances in Assessment of Peripheral Nervous System Neurotoxicity
- Noncoding RNAs and their Role in Biology and Toxicology
- Drug Metabolism

Submission Process
- Need to prepare proposals ASAP
- Submit via SOT online (Abstract Central site for 2012 meeting)
- RDTSS Program Committee will review, rank and submit rankings to SOT Program Committee
- Program Committee available as a resource – we want RDTSS to be well represented with high quality programs!

Submissions by RDTSS for the 2010 Annual Meeting
(Bolded titles were presented at the meeting)

Proposals Directly Submitted to RDTSS:
- Mammary Gland Assessment in Toxicity Testing: Developmental Abnormalities Associated with Later Life Consequences
- Advancing Childhood Neurodevelopmental Research to Support Regulatory Decision-Making
- Developmental Exposure to Perfluorinated Chemicals and Associated Latent Health Outcomes in Mice and Men
- Bisphenol A: An update and lookback
- Vascular Developmental Toxicity: Identification, Prioritization, and Application
- Toxicological Considerations of Pharmacotherapy During Pregnancy
- Predictive models of reproductive, endocrine, and developmental toxicity: Application to chemical prioritization and integrated testing
- Endocrine Disrupting Chemicals and Children’s Health: Translating Research to Policy.
- Hisotrical Highlights Session: Thalidomide Tragedy 50 years of Regulation and Science: what have be learned
- 50 years of the "Pill": Risk Reduction and Discovery of Benefits Beyond Contraception

Co-Sponsorship
Autism: Genetic, Epigenetic, and Environmental Factors Influencing Neural Networks
Using early biological signals to assess chemical toxicity
Developmental Origins of Adult Disease: The Effects of Low Dose Lead
Emerging Issues at the Intersection of Reproductive and Mixtures Toxicology

Endorsements

Pregnancy in the Workplace: Managing Occupational Safety for a Unique Subpopulation
Autophagy in Toxicology: Essential Process, Adaptive Process, Disease Process
Uncovering the Role of Non-coding RNAs in Toxicology
Developmental Exposure to Environmental Toxicants: From Persistent Toxicities to Diseases

Continuing Education Course

The Biology and Toxicology of Per- and Post Natal Development
  Coordinated by Greg Cappon and Gary Chellman