#### NAME OF SPECIALTY SECTION: Reproductive and Developmental Toxicology

# ANNUAL REPORT: 2011-2012

May 1, 2011 to April 30, 2012

I. Officers/Committees:		
<u>Officers</u>	<u>2010-2011 (past year)</u>	2011-2012
President:	Alan Hoberman	Edward Carney
Vice President:	Edward Carney	Barry McIntyre
Vice President-Elect:	Barry McIntyre	Jodie Flaws
Secretary/Treasurer:	Warren Foster	Warren Foster
Past President	Mark Hurtt	Alan Hoberman
Councilors:	Jeffrey Moffit	Winnie Jeng
	Kamin Johnson	Kamin Johnson
	Robert Parker	Jeffrey Moffit
PDA Representative:	Winnie Jeng	Wei Wang
GSLC Representative:	Nicholas Heger	Nicholas Heger

#### II. Activities for the 2011-2011 Year

The key activities and accomplishments of RDTSS in 2011-2012 were summarized at the 2012 SOT Annual Meeting Reception, which was held in San Francisco on Wednesday, March 14. Approximately 150-175 people were in attendance. Following a reception from 6:00-6:45 PM, Dr. Carney called the business meeting to order.

## President's Report (Ed Carney):

Dr. Carney summarized RDTSS's efforts to contribute scientific sessions to the 2012 meeting. RDTSS submitted proposals for one Continuing Education (CE) course, four symposia and three workshops. Of the eight proposals submitted, four were accepted (indicated in bold type) and were presented at the 2012 annual meeting.

TITLE	
Basic Embryology and Developmental Toxicity Testing	CE Basic

An intelligent reproductive and developmental testing paradigm for the 21st century	Symposium
Considerations for Interpreting the Tier 1 EDSP Battery- Application of WoE Methodologies	Symposium
A healthy start lasts a lifetime: Toxicology models to predict neuroendocrine impacts on children's health associated with perinatal environmental exposures	Symposium

In vitro and in vivo alternative models of developmental toxicity of	Symposium	
pharmaceutical compounds		

Evolving the EPA Endocrine Disruptor Screening Program: From Using High-Throughput Screening Assays for Prioritization to Reducing Reliance on Whole-Animal Tests	Workshop
Placental transfer in toxicology: border patrol between Mom and unborn	Workshop
The epididymis, the forgotten target of toxicants	Workshop

The acceptance rate of 50% was as good as or slightly better than that of most other specialty sections. However, RDTSS Council felt that RDTSS could do even better in terms of success rate as well as by increasing the number of submissions. Toward this end, RDTSS Council made some changes to the 2013 proposal process, mainly by soliciting proposals earlier than in recent years, and by more actively encouraging proposal submission from our members. In addition, members were advised of the increasingly more competitive environment around proposal evaluation and selection by the SOT program committee. Some key elements of a successful proposal were discussed, and members were encouraged to read SOT guidance on how to make proposals more competitive.

In addition, RDTSS received requests to endorse 15 other sessions. RDTSS agree to endorse 11 of them, of which eight were accepted for presentation at the 2012 meeting.

In addition to standard recurring business items, RDTSS Council also addressed the following during the past year:

**By-Laws Revision.** SOT Headquarters asked all Specialty Sections to adopt a common format for their By-Laws. SOT provided the specialty sections with a standard template, and the content of the current RDTSS By-Laws are being transferred to the new template. The revisions to the RDTSS By-Laws are well underway and soon will be presented to RDTSS membership for approval.

*NICHD Vision Papers*. In response to a request by SOT President Jon Cook, RDTSS Council members provided written comments on each of six "Vision Papers" outlining the most promising scientific opportunities of the next decade. Our comments focused on the contributions which SOT and in particular, RDTSS scientists, could make to these areas. The six Vision Papers focused on the following topics: Behavior, Developmental Origins of Health and Disease, Development, Diagnostics and Therapeutics, Environment, Plasticity, Pregnancy and Pregnancy Outcomes, and Reproduction. Individual RDTSS members were also encouraged to comment.

*Awards - Process Improvements*. The process for selection of and Best Student Presentation Awards and the Best Paper Award were modified slightly. Details are provided below in the Vice-President's and Senior Councilor's reports, respectively.

*Newsletter* – With the new functionalities made possible through ToXchange and the retirement of long-time Newsletter Editor, Dr. Ron Hood, Council decided to idle the RDTSS Newsletter and instead issue member communications via ToXchange. Using the latter approach,

communications can be sent out more frequently, in a more timely manner, and with much greater ease relatively to the newsletter, which usually was issued once or twice per year and was a true labor of love for the editor.

*New process for appointing Student Representative* - To make the Student Representative selection process more open and egalitarian, ToXchange was used to invite all graduate student members of RDTSS to self-nominate for the Student Representative position. Interested students provided a brief statement summarizing their educational background to date, their research interests, and the name and contact information for their graduate advisor. The Student Representative was selected by RDTSS Council based on the information and input from the graduate advisor. The term of the Student Representative was set at two years. This change will be encoded into the new By-Laws.

# Past-President's Report (Alan Hoberman).

For the first time this year, ToXchange was used to broadly canvas RDTSS membership for nominees for elected positions, as well as for candidates to serve as student representative.

<u>Election results</u>: Vice President-Elect: Raymond York Junior Councilor: Linda Roberts Secretary-Treasurer: Kary Thompson New Career Councilor: Sarah Campion

<u>Student representative</u>: Jackson Nteeba (Iowa State University)

# Vice-President's Report (Barry McIntyre)

Dr. McIntyre reviewed the 2013 meeting proposals received to date, and also stressed the key attributes of a successful proposal.

# Secretary/Treasurer's Report (Warren Foster)

Membership statistics from the current and previous year are shown below. Overall membership trends were markedly positive, with an 18% increase in total members, driven largely by a 20% increase in Full members and a more than doubling in number of Postdocs in just one year.

Member type	As of July 29, 2012	Previous year
Full	272	226
Associate	41	40
Emeritus	2	4
Student	47	46
Postdoctoral fellow	25	11
Total	387	327

A summary of RDTSS finances as presented at the March 14, 2012 RDTSS reception is presented below.

Income	Contributions	\$2,500
	Dues	-
	Misc. Income	-
	Registration	-
	Interest	-
	Total Income	\$2,500
Expenses		-
Net assets beginning of year		\$3,710
Transfers from general fund		-
Net assets after transfers		\$3,710
Net assets at end of year		\$6,210

A summary of the RDTSS Endowment fund (Angelo Furgiuele YIT Awards) for the 11 months ending May 31, 2012 is presented below. We have approximately two 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.

Net Assets Beginning of Year	13,319
Ordinary Income/Expenses	
Income	
Contributions	-
Employer Matching Funds	-
SOT 50th Anniversay Matching	-
Total Income	-
Gain (loss) on Investments	
Interest & Dividends	331
Unrealized Gain or (loss)	(36)
Total Return	294

Expense	
Awards	-
Total Expense	-
Excess (Deficiency) of	
Revenue over Expenses	294
Net Assets End of Year	13,614

# Vice President-Elect's Report (Jodi Flaws) - Student/PostDoc Awards

In 2012 the RDTSS continued the student presentation award program, which was first implemented in 2006. There were 32 entries this year, the highest in recent memory. In response to the continuing increase in number of student presentations, a few improvements were made to the evaluation process. First, the deadline for submission was moved earlier to allow more time for assignment of judges and pre-reading of abstracts and cover letters. Second, a detailed evaluation sheet with specific criteria was created. Each judge reviewed 4-5 presentations, such that each presentation was evaluated by two judges. Lastly, separate categories for graduate students and post-docs were created.

Award winners:	1 <sup>st</sup> place poster (post-doc) Alicia Timme-Laragy 2 <sup>nd</sup> place poster (post-doc) Nisha Sipes 3 <sup>rd</sup> place poster (post-doc) Bethany Hannas	\$300 \$200 \$100
	1 <sup>st</sup> place poster (pre-doc) Cassandra Korte 2 <sup>nd</sup> place poster tie (pre-doc) Aaron Shapiro 2 <sup>nd</sup> place poster tie (pre-doc) Agnes Forgacs	\$300 \$200 \$200

The following judges were thanked for their efforts:

Ed Carney Sally Darney Jodi Flaws Warren Foster Thomas Garcia Barbara Hales Isabel Hernandez-Ochoa Marie Claude Hofmann Kembra Howdeshell

William Kelce Robert Moore Vasantha Padmanabhan Hernandez-Ochoa Wei Wang Ayelet Ziv-Gal

Student Travel Awards: Travel awards were not offered this year because RDTSS had limited funds to support a record number of applicants.

# Senior Councilor's Report (Kamin Johnson) - Best Paper Award

The judging process for the Best Paper Award was modified slightly to improve consistency and clarify ambiguities about eligibility. Eligibility is now defined as: 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.

In 2012, there were 35 eligible papers which were placed into three different groups for an initial evaluation. The top two ranked papers in each group were considered finalists.

## The winning paper:

**Bethany Hannas, Christy Lambright, Johnathan Furr, Kembra Howdeshell, Vickie Wilson, and Earl Gray.** Dose-Response Assessment of Fetal Testosterone Production and Gene Expression Levels in Rat Testes Following In Utero Exposure to Diethylhexyl Phthalate, Diisobutyl Phthalate, Diisoheptyl Phthalate, and Diisononyl Phthalate.

## Other finalists:

**Toby Cole, et al.** Repeated Developmental Exposure of Mice to Chlorpyrifos Oxon Is Associated with Paraoxonase 1 (PON1)-Modulated Effects on Cerebellar Gene Expression.

**Mary Gilbert.** Impact of Low-Level Thyroid Hormone Disruption Induced by Propylthiouracil on Brain Development and Function.

Måns Jergil, et al. Short-Time Gene Expression Response to Valproic Acid and Valproic Acid Analogs in Mouse Embryonic Stem Cells.

**Kamin Johnson, et al.** Species-Specific Dibutyl Phthalate Fetal Testis Endocrine Disruption Correlates with Inhibition of SREBP2-Dependent Gene Expression Pathways

**Steven Jones and Daniel Cyr.** Regulation and Characterization of the ATP-Binding Cassette Transporter-B1 in the Epididymis and Epididymal Spermatozoa of the Rat

The following judges were thanked for their efforts:

Murali Mallela Leah Zorrilla Ali Faqi Xiaozhong Yu Jerry Heindel Norbert Makori Yvonne Hoang Sarah Skolness Gerhard Weinbauer Kembra Howdeshell Shelley Tyl Kamin Johnson Eias Zahalka Patrick Allard Louise Saldutti David Dix Mary Giknis Chris Bowman Reinhold Hutz

## Jr. Council's Report - Scientific Achievement Award (Jeff Moffit)

Jeff Moffit, coordinated nominations solicited from officers. 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. Earl Gray**. Dr. Gray accepted the award at the meeting to a standing ovation.

The members of the Selection Committee were thanked for their efforts:

Ed Carney Barry McIntyre Jodi Flaws Warren Foster Nick Heger Alan Holberman Jeff Moffit Winnie Jeng Kamin Johnson Wei Wang

## Special Ackowledgements (Ed Carney)

The following individuals were recognized at the meeting for their outstanding contributions to RDTSS:

Alan Hoberman – Outgoing Past-President (four years of service in the Presidential chain).

Kamin Johnson – Outgoing Councilor (two years of service on Council)

Nick Heger – Outgoing Student Representative (three years of service)

**Ron Hood** – A special thank you was given (in abstentia) to Dr. Ron Hood for his 10 years of service as the RDTSS Newsletter Editor.