Strategy 2. Improve global representation within the society (membership and leadership), especially from underrepresented groups

Strategy 5. Recognize and reward excellence in aquaculture service, technology and innovation

Action Plan Update:

Please update this table which is extracted from the Strategic Plan. The updated table will be pasted back into an updated version of the plan following the Board meeting. Complete the Performance Achievement and Status columns for each Output. Consider also any modifications to outputs and actions, or the addition of new outputs. Existing outputs should not be removed.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Strategic outcome</th>
<th>Target output (including date)</th>
<th>Specific Action</th>
<th>Indicator</th>
<th>Performance – Achievements</th>
<th>Status</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>5</td>
<td>Recognize student achievement</td>
<td>Awards presented for best abstract (3), 1st and 2nd place awards for best poster and oral</td>
<td>• Review options for revamping student abstract/presentation awards</td>
<td>WAS-SAC mid-year and annual reports</td>
<td>• A spotlight competition and mentoring program has been coordinated and ongoing conference centered operations</td>
<td>Ongoing</td>
<td>Student Affairs Committee (with Honors)</td>
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|          |                   | presentations at World Aquaculture 2014 | • Organize and implement judging for all WAS awards.  
• Coordinate judging of chapter awards at annual WAS conference.  
• Submit awardee information to WA magazine for publication  
• Provide awardee information to Home Office for publication on WAS website. | Home Office reports | was completed at the opening plenary session for WA14  
• Coordination of Pre- and during conferences awards at annual meetings continues.  
• WA magazine again devoted a large amount of space to WAS and USAS student awards from the previous triennial meeting | Ongoing  
conference centered operations  
and Awards Committee) |          |
| 2        | Greater global student membership & participation in WAS | Annually increase by 10% the number of student members (World Aquaculture 2012)  
Increase by 3 countries annually | • Work with educational institutions to promote WAS and WAS-Chapter membership among students.  
• Work with Promotion and Membership committee to | Annual Home office reports to Board (monitor student | • Between 2012 and 2013 there was a 16% increase in student members from 286 to 344. | Ongoing  
Student Affairs Committee (with Promotions and membership |          |
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<tr>
<td>Committees &amp; Board</td>
<td>the number of countries with student members (by WA 2012)</td>
<td>A student liaison (representative) to promote student activities in each chapter.</td>
<td>put a WAS poster in every significant aquaculture school</td>
<td></td>
<td>• From 2013 to 2014 student member numbers have decreased approximately 30% from 344 to 219.</td>
<td></td>
<td>committee)</td>
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<td>2</td>
<td>Each chapter with one student representative on the WAS-SAC</td>
<td>• Assist each chapter in evaluating the development of a SAC.</td>
<td></td>
<td></td>
<td>• WAS SAC has coordinated with USAS and other chapters on conference centered operations</td>
<td>Student participatio with non conference activities needs to occur</td>
<td>Student Affairs Committee (with P&amp;M Committee)</td>
</tr>
<tr>
<td>2</td>
<td>Student reception held at each WAS &amp; Chapter conference.</td>
<td>Organize student receptions at Annual WAS Conference to increase interaction with WAS and Chapter Boards and to</td>
<td></td>
<td></td>
<td>• The reception and student social for WA14 has been coordinated by the host students in Australia. It</td>
<td></td>
<td>Student Affairs Committee (with Promotions and membership)</td>
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| 2        | Student professional development | Seminar and workshop centered on international student professional development at WAS annual conferences | • Identify student organizers to organize seminar and workshops.  
• Workshop topics could include: resume building, interview process, publication preparation, etc.  
• Seminar topics could include: career seminars, women in aquaculture, and other student centered issues within aquaculture.  
• Look at USAS chapter model  
• Link to visit to in-country institute  
• Opportunity to co-moderate  
• Mentor group | Students attending successful seminar and workshops at WAS annual conference. | • A logo contest was carried out for the WA15 meeting that coordinated the WA15 steering committee and WAS SAC.  
• Over 20 entries from all over the world were received and the winner and two runners up were selected.  
• Entries for a WA17 logo contest are being collected till May 2015. | Ongoing conference centered operations | Student Affairs Committee (with Promotions and membership committee) |
The chair of parent committee should complete that above table together with the chairs of the sub-committees. The chair should also complete the table below either for the whole strategy or submit a series of reports, in the same format, from the parent committee and the sub-committees.

**Narrative Report:**

**World Aquaculture 2014 activities:**

We were able to provide two rooms for WAS students through a room lottery for WA14. There was a large number of people entered to receive these rooms and were able to designate 2 females and 2 males for each of the two rooms. There were 45 judges that evaluated WAS student presentations throughout the conference for the 1st and 2nd place oral and poster presentation awards. The student Social and Quiz Bowl was a pretty good success and provided a great opportunity for students and other professionals socialize.

**Abstract award winners** and selected Spotlight Competitors were:

Flavio Ribeiro  
Flinders University, Adelaide, Australia  
PREY SIZE PREFERENCE AND CANNIBALISTIC BEHAVIOUR IN BARRAMUNDI *Lates calcarifer*

Mahmoud Dawood  
Kagoshima University, Kagoshima, Japan  
EFFECTS OF THE PARTIAL SUBSTITUTION OF FISH MEAL BY SOYBEAN MEAL WITH OR WITHOUT HEAT-KILLED Lactobacillus plantarum (LP20) ON GROWTH PERFORMANCE, STRESS RESISTANCE AND IMMUNE RESPONSE OF AMBERJACK *Seriola dumerili* JUVENILES

Fletcher Warren-Myers  
University of Melbourne, Victoria, Australia  
OTOLITH FINGERPRINT SIGNATURES: A MASS MARKING TECHNIQUE FOR FARMED ATLANTIC SALMON *Salmo salar*

**Spotlight competition:**

These three WAS students with the highest abstract scores each presented a three and a half minute abbreviated version of their full presentation at the highly attended plenary session. Ballots were distributed to the plenary session audience in order to determine the winner. Determined by audience rankings, all three presenters were awarded cash prizes at the President’s Social.

The winner of the Student Spotlight Competition was Fletcher Warren-Myers, who is working on his Ph.D. at the University of Melbourne, Australia. Fletcher’s talk was titled “Otolith fingerprint signatures: A mass marking technique for farmed Atlantic salmon *Salmo salar***.
The other two presenters were Mahmoud A.O. Dawood from Kagoshima University in Kagoshima, Japan and Flavio Ribeiro from Flinders University in the host city of Adelaide, Australia. Mahmoud’s presentation was titled “Effects of the partial substitution of fish meal by soybean meal with or without heat-killed LP20 on growth performance, stress resistance and immune response of amberjack juveniles”. Flavio’s talk was titled “Prey size preference and cannibalistic behavior in barramundi *lates calcarifer*”.

**Aquaculture 2013 WAS presentation winners**

First Place Poster:
Keng Ming Wu’s poster titled “Evaluation of using microwave treatments to sterilize marine microalgae cultural media” received the first place award for poster presentations. Keng-Ming Wu received his B.E. degree in June of 2013 from the department of Bio-industrial Mechatronics Engineering at the National Chung Hsing University, Taiwan, and is now working on a Master’s degree within the same program under the advisement of Professor Chung-Chyi Yu. His research in the field of aquaculture engineering is focused on microalgae cultivation and developing a microwave system to sterilize microalgae culture media. In the future, he plans to continue research on live food production within the field of aquaculture.

Second Place Poster:
Yu-An Ma was awarded the second place award for his presentation titled “Effects of light quality change on the density, lipid and eicosapentaenoic acid production of the marine microalgae *Nannochloropsis oculata*”. He received his B.E. degree in electrical engineering from the National Kaohsiung University of Applied Sciences, Taiwan, in 2007, and M.E. degree in Bio-industrial Mechatronics Engineering from the National Chung Hsing University, Taiwan, in 2009. Yu-An is currently working on a Ph.D. under the advisement of Chung-Chyi Yu. His research interests are focused on the automatic cultivation of live aquaculture feeds which includes microalgae and rotifer cultivation via the development of biosensor, bio-processing design, and integrated control systems. After completing his degree he plans to continue working the live food production through research within the field of aquaculture engineering.

First Place Oral:
Nicole Rhody is part of the Directorate of Fisheries & Aquaculture research team at Mote Marine Laboratory and received the first place oral presentation award for her talk titled “Influence of tidal cycles on the control of reproductive activity in common snook *Centropomus undecimalis*”. Her primary research focus has been to develop culture technologies for a variety of economically important temperate and tropical fish species. She is currently working on her doctorate in fish reproductive biology and physiology and scheduled to graduate from the Institute of Aquaculture, University of Stirling, Scotland in November of this year. Afterward, Nicole plans to continue her research at Mote with a focus in both basic and applied aspects of fish reproductive physiology including optimization of broodstock management techniques.

Second Place Oral:
Matthew Wylie is currently pursuing his Ph.D., investigating the reproductive physiology and aquaculture of a wreckfish, known locally in New Zealand as hapuku (*Polyprion oxygeneios*). His presentation was titled “Hapuku *Polyprion oxygeneios* aquaculture in New Zealand – Growth
and gonadal development of F1 broodstock under two difference temperature regimes”. This work is a collaborative project supervised by Dr Mark Lokman (University of Otago), Professor Abigail Elizur (University of the Sunshine Coast) and Dr Jane Symonds (National Institute of Water and Atmospheric Research (NIWA), New Zealand). When Matt completes this degree, he wishes to pursue a career in the field of finfish reproductive physiology and aquaculture — with a particular interest in oocyte development, induction of spawning and egg quality of cultured species. In addition to strong interests in tropical marine ornamental aquaculture, his is excited to continue collaborations with New Zealand research institutes and abroad.

**World Aquaculture 2015:**
Pre-Conference judging of student abstracts has begun with winners and spotlight competitors planed for announcement in mid-March. Of the 89 Student submissions only 5 were from current WAS student members so an email was sent to each student allowing them the entire month of February to join WAS and have their abstract eligible for a WAS award.

Conference centered activities like the student social are being coordinated by the APC Student Representative and Dr. Sukgeun Jung. Announcements for the student room lottery have been sent to student WAS members this month.

**World Aquaculture 2017 Logo contest:**
This contest had an original final deadline in December and unfortunately has only received 4 submissions. They are very good submissions, however, it would be best to extend the deadline to the beginning of May. This will allow enough time for judging and a decision on the winner for the WA15 meeting in Jeju, Korea.

**Points for Board Discussion:**
There are three points of discussion for the board during this February WAS Board meeting. The following topics will be accompanied by printed information provided at the meeting:

1. Proposed increases to WAS Student Awards
2. WAS and Chapter involvement in the Altech Young Scientist Program
3. Possible support for Student Activities coordinator at future WA meetings

**Recommendations:** *(List here specific recommendations from the committee to the Board. Please include specific wording of any proposed motions)*