SSEF, ATS & ISEF Briefing
25 Feb 2011
Important Dates

08 Mar 11 (Tue) 2pm – 5.30pm
Project Set-Up

09 Mar 11 (Wed) 8am – 6pm
Judging Day

31 Mar 11 (Thur)
ATS short-listing

26 Apr 11 (Tue)
ATS final judging

29 Apr 11 (Fri) 2pm – 6pm
ATS and SSEF Joint Award Presentation Ceremony

SSEF Winners

26 Apr 11 (Tue) 8am – 6pm
ATS and SSEF Joint Award Presentation Ceremony

ATS Winners

29 Apr 11 (Fri) 2pm – 6pm
ATS and SSEF Joint Award Presentation Ceremony

SSEF Winners

10 Mar 11 (Thu) 12pm – 5pm
Public Exhibition

8 – 13 May 11
2 individual + 1 team project selected to take part in ISEF (Los Angeles, California)
Project Set-Up
(8 Mar, 2pm – 5.30pm)

Report at Annexe Foyer to take attendance, and confirm booth number

**Items to Prepare:**

- Display materials (poster and exhibits)
- Bring your own *Velcro* tapes for mounting of poster
- Bring copies of abstract (for visitors)
- Bring copies of 2-pages summary (for judges)
Display Booth

One 5-amp electrical point will be provided at each booth.

No Internet Access

Log Book and supporting documents highly recommended

For Laptops, display of exhibits (not exceeding area of table)

Project ID/Booth Number (Will be provided)
(21cm wd x 11cm ht)

Poster to be kept within dimensions allowed

SSEF ATS ISEF
Items allowed at Display Booth

- Refer to list SSEF 2011 – Display and Safety Regulations (Items allowed / not allowed) for details
- Form 1C must be vertically displayed on the booth
- Continuation project must have continuation project Form 7 vertically displayed

Note that sounds, lights, odours, or any other display items must not be distracting.
Poster

- Reflects the current year’s work only
- Title of your project should be clearly displayed
- Use font sizes that could be read from at least 1m away
- All images, graphs, photos must be acknowledged
  e.g. “photograph taken by” , “all photographs are self-taken” or “Image taken from..”, “graph are self-drawn..”
- Small logo of school allowed
Poster

- Be organised – display follows a sequence and is logically presented and easy to read

- Title of Project, Abstract, Introduction, Aim, Hypothesis, Method, Results, Conclusion, Future Research, References should be properly and concisely displayed

- No references to H3 projects allowed (examination labels, candidate index, title of H3 programme and examining agency)
Investigation on effects of inter-ply weave orientation in bullet resistant fabric systems

EB05

Regulation of α-actinin Dynamics During Cytokinesis of Mammalian Cells

Ng Chang Zhi*, Low Shyen Huy*, Senthini Mahinur, and Mali Mona Devi

*Corresponding author

Department of Biomedical Engineering, National University of Singapore

Abstract: Actin-binding proteins have been identified as essential proteins in regulating cell movement, although the mechanism by which actin binds to these proteins is unknown. α-actinin is a cytoskeletal protein that binds to actin filaments and helps to organize the actin cytoskeleton. It is also known to have a role in cell division. In this study, we investigated the interaction between actin-binding proteins and α-actinin during cytokinesis. Our results showed that α-actinin is localized at the cleavage furrow and colocalizes with actin filaments, suggesting that it plays a role in regulating the actin cytoskeleton during cytokinesis. Further studies are needed to understand the exact mechanism by which α-actinin interacts with actin filaments during cytokinesis.
“All graphs are self drawn”
"All images are self drawn..."
Project Set-Up (08 Mar)

- Upon completion, tidy up immediate vicinity
- Get SSEF officials to inspect your display (poster / exhibits / laptops / log books before leaving)
- **Sticker labels** will be given for each item which are cleared for display
- After inspection, no change allowed without approval from SSEF official
- No valuables to be left behind

Science Centre reserves the right to keep the displays of winners
Judging Day (9 Mar)

- 0800 – 1800 hrs (All participants must be present)
- Report at Annexe Hall 3 by 0745 hrs
- Attire – School uniform with blazer
- Collect your SSEF ID tag & collar pin and wear them at all times
- Lunch provided (1300 – 1400 hrs, announcement will be made)
Judging Day (9 Mar)

- Remain at your booth until your project has been judged by all assigned judges. Judges will sign on students’ card (to be given to you on that day)
- Proceed to Registration Point with the card after your project has been judged by all assigned judges
- If you need to go to the restroom, inform participants next to your booth. Try not to take longer than 5 min
Judging Day (9 Mar)

- You may bring reading / self study materials but games, cards and expensive personal items are not allowed.
- Do not remove the display posters from the booth at the end of the day.
- Keep booth and area around tidy and clean. Do not block walkways or create traffic.
- Keep noise level down at all times. Be considerate for others.
- Number of judges may vary from project to project.
- Students with multiple projects.
# Judging Criteria for SSEF

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Individual</th>
<th>Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Ability</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Scientific Thought &amp; Engineering Goals</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Thoroughness</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Skill</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Clarity</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Teamwork</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Possible Score</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Exhibition (10 Mar)

- Register at Annexe Hall 3 by 1100 hrs
- Attire – School uniform with blazer
- Wear your SSEF ID Tag at all times
- Lunch will be provided
- Open to schools & the public from 1200 - 1700 hrs
- Be present at your booth at all times
- Attend to and explain your project to all visitors politely – You are an ambassador of your school!
Exhibition (10 Mar)

- You may bring reading / self study materials but games, cards and expensive personal items are not allowed
- Permission must be sought from SSEF officials before leaving your booth
- Encourage teachers and students from your school to visit the Fair – Free admission
Exhibition (10 Mar)

- Judges’ Sharing session (teachers and students)
  - Title: “The ISEF 2010 Experience & Judging at SSEF - Best Practices”
  - Date/Time: 10 March, 1.30-2.30pm
  - Venue: Maxwell Auditorium

- Results of SSEF 2011 will be announced only on the 10 March.

- All exhibition materials to be removed once announcement is made

- All to clear latest by 1800 hrs
ATS Short-listing (31 Mar)

- Only ATS participants who have won an SSEF award will be invited for short-listing
- You will receive an email notification by 18 Mar with the judging schedule and venue
- Short-listing will take the format of short 15 min interviews with a panel of judges
- Bring your project poster and log book to show to the judges
ATS Final Judging (26 Apr)

- If you have been short-listed as a finalist on 31 Mar, you will be invited to attend the final judging.
- You will receive an email notification by 8 Apr with the judging schedule and venue.
- The final judging will take the format of 30 min interview with a panel of judges.
- Prepare a 5 min PowerPoint presentation for the interview.
ATS Judging Criteria

Depth of understanding of project: 30%
Creative ability/Independent thinking: 30%
Potential to pursue R&D careers/Vision and goal: 20%
Scientific attitude/Motivation and interests: 20%

SSEF ATS ISEF
## ATS Awards 2011

<table>
<thead>
<tr>
<th>Award</th>
<th>Prize</th>
<th>Points allocated to school</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>Cash prize plus a sponsored trip to overseas conference worth S$5,000 in total + Trophy + Certificate</td>
<td>5</td>
</tr>
<tr>
<td>Second</td>
<td>S$3,000 + Trophy + Certificate</td>
<td>3</td>
</tr>
<tr>
<td>Third</td>
<td>S$2,000 + Trophy + Certificate</td>
<td>2</td>
</tr>
<tr>
<td>Commendation Prizes</td>
<td>S$1,000 + Certificate</td>
<td>1</td>
</tr>
</tbody>
</table>
## Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
<th>Email Address</th>
<th>Matters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Ryan Hong</td>
<td>64252593</td>
<td><a href="mailto:rlh_hong@science.edu.sg">rlh_hong@science.edu.sg</a></td>
<td>For SSEF</td>
</tr>
<tr>
<td>Ms Charlene Yeo</td>
<td>64252592</td>
<td><a href="mailto:ccx_yeo@science.edu.sg">ccx_yeo@science.edu.sg</a></td>
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<tr>
<td>Mr Lim Poh Yeong Daniel</td>
<td>68796581</td>
<td><a href="mailto:lim_poh_yeong@moe.gov.sg">lim_poh_yeong@moe.gov.sg</a></td>
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<tr>
<td>Mdm Tey Kah Hwee</td>
<td>68796756</td>
<td><a href="mailto:tey_kah_hwee@moe.gov.sg">tey_kah_hwee@moe.gov.sg</a></td>
<td>For SSEF</td>
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<tr>
<td>Mr Alfred Loo</td>
<td>68796761</td>
<td><a href="mailto:alfred_loo@moe.gov.sg">alfred_loo@moe.gov.sg</a></td>
<td></td>
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Q&A