Summary of IGEP Third Year Review reporting data  
Compiled October 2015 for the period of fall 2012 through spring 2015

Four Interdisciplinary Graduate Education Programs (IGEPs) were funded in 2012, comprising the second cohort:

- Remote Sensing (RS) (PIs- Randy Wynn and Wayne Scales)
- Regenerative Medicine (RM) (PIs- Will Eyestone and Abby Whittington)
- Computational Tissue Engineering (CTE) (PI- Padma Rajagopalan)
- Translational Obesity Research (TOR) (PIs- Kevin Davy and Paul Estabrooks)

This report summarizes the outcome of the 3rd year review of the second cohort of IGEPs. IGEPs will continue to be reviewed every 3 years (3rd year review, 6th year review, etc.). Table 1 summarizes some of the quantitative measures of success in the second cohort of IGEPs:

Table 1: Summary of quantitative measures of success of first cohort of IGEPs at 3rd year review

<table>
<thead>
<tr>
<th></th>
<th>New VT doctoral students</th>
<th>Other affiliated students</th>
<th>Journal publications</th>
<th>Conference presentations</th>
<th>Number of external grants</th>
<th>Total external funding</th>
<th>Number of faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS</td>
<td>9</td>
<td>6</td>
<td>65</td>
<td>20</td>
<td>14</td>
<td>$5,112,427</td>
<td>13</td>
</tr>
<tr>
<td>RM</td>
<td>6</td>
<td>16</td>
<td>20</td>
<td>60</td>
<td>20</td>
<td>$2,080,595</td>
<td>14</td>
</tr>
<tr>
<td>CTE</td>
<td>10</td>
<td>8</td>
<td>56</td>
<td>37</td>
<td>17</td>
<td>$6,414,898</td>
<td>11</td>
</tr>
<tr>
<td>TOR</td>
<td>16</td>
<td>11</td>
<td>214</td>
<td>199</td>
<td>40</td>
<td>$25,073,475</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>41</td>
<td>355</td>
<td>316</td>
<td>91</td>
<td>$38,681,395</td>
<td>64</td>
</tr>
</tbody>
</table>

In addition to the solid metrics summarized in Table 1, it is worth noting that all four IGEPs completing the 3rd year review have a strong pipeline in place. RS currently has over $17 million in proposals currently in review; RM has $37 million in proposals currently in review; CTE has over $11 million in proposals currently in review; and TOR has over $12 million in proposals currently in review. All four programs are beginning to graduate students. RS has graduated one student, who is currently and Assistant Professor in Egypt; RM has graduated one student, CTE has graduated one student who is an Assistant Professor in Egypt; and TOR has graduated three students, one is a post-doc at VT, the second is at the Louis University School of Medicine, and the third is at the National University of Singapore. RM and CTE co-hosted a retreat that was felt to be highly successful for building community and galvanizing connections. Efforts are being made to attract large training grants, such as CTE and RM pursuing the National Science Foundation Research Traineeship Program (NRT) and TOR pursuing an NIGH Training Grant.

All four IGEPs were extended an additional three years of funding at the time of review.

The following sections summarize some common themes noted across the reviews:
IGEP Courses and Certificates

All four IGEPs have successfully developed and offered a GRAD 5134. RS is also formally organizing their seminar as a GRAD special topics course. RS has formally developed a Certificate program. RM, TOR and CTE are working on developing a certificate.

Recruiting

All four IGEPs are attracting high quality students, but each faced unique challenges with recruiting. In the case of RS, they initially attracted “too many” applicants to manage and many did not meet the qualifications of the admitting departments. The IGEPs are generally working to strike a balance in recruiting and working with Dannette Beane and Hobson’s to help attract diverse applicants.

Funding

Discussion centered on the use of the 10K-admin, 10K operating and 10K recruiting funds, plus 10K when teaching GRAD 5134. All four IGEPs expressed that flexibility in spending is very helpful. Those with administrative support (RM and TOR) have found it to be essential, while those without (CTE and RS) have struggled and are now prioritizing administrative support. There were also discussions about how to best use funding for student support best in a way that encourages faculty to go after grants. For example, extending funding into second year for active members may help. Some use of the admin/operating/recruiting funds for student support can be OK if needed.

General Suggestions

- Engage upper administration- invite Sands and Rikakis to IGEP social.
- Have mini-presentations by IGEPs at one of the socials. Maybe a slideshow?
- Social media, blogging/tweeting important for real-world impact and engaging community.
- Work to track Alumni. Cathy Smith can advise. “Following” LinkedIn Graduate School page is one way- reminder sent to IGEP PIs.
- Interdisciplinary workshop coming up that will feature IGEPs with posters and panel discussions. Ask their input on who audience is. Roanoke or Blacksburg- stay tuned.
- Interdisciplinary thinking survey underway across IGEPs.
- Administrative support appears especially critical to reduce burden on IGEP faculty.
- Suggested improvement to application format in which, when students apply to departments, they could select an IGEP program they are interested in affiliating with. Right now, they apply directly to IGEP programs, and the applications have to be manually forwarded to interested faculty and considered by the departments for admission.
- For recruiting, it may help for IGEP programs to update catalog in a way that makes it clear that they must meet admission requirements for one of the participating departments. Also, reminder to work with Dannette Beane for recruiting.
- Work towards developing graduate certificates for the IGEP programs that do not yet have them.