SUMMARY

Infrastructure 2-3: Increasing Competitive Grant Applications & Funding Opportunities
(Kwang Kim, Barbara St. Pierre Schneider, David Paul, Academic Health Center Rep, Research Council, Associate Deans)

- This group has prepared a comprehensive analysis of research funding and recommendations for increasing proposals presented in the Part B. Summary recommendations include:
  1. Provide the PIs with incentives to faculty (e.g., for proposals, directed toward research-active PIs)
  2. Form task forces and streamline processes for large grant applications and institution-limited (time sensitive) submissions
  3. Assist tenure-track faculty to win Young Investigator awards
  4. Improve Research Space Utilization (RSU)
  5. Evaluate “Entrepreneurial” ways for providing matching (or reallocating the existing resources) toward grant applications
  6. Encourage the UNLV faculty to serve as a program director of federal funding agencies
  7. Further effective utilization of “Centers of Excellence” to help secure external funding and recruit dynamic faculty and capable students
  8. “Distinguished professorships/Endowed professorships” will also help the PIs secure large volume-flagship programs.
  9. Help the PIs bringing “focused workshops” to the UNLV campus.
  10. Use external Input (or consultants) to UNLV’s Research Enhancement
  11. Place some strategical existence and/or collaborations in the DC and northern Virginia areas to have more connections with federal agencies?
  12. Look into a model to hire very capable RESEARCH ONLY FACULTY who can started with some initial investment (University of Central Florida model, most medical schools..?)
  13. Strategically place some “graduate fellowships” that can target upon “High-risk / High-pay-off research.”
  14. Give close attention to National Ranking(s) of UNLV units.
15. Help the faculty build their “informative” research website, research identification, etc… (marketing…)
16. Collect and publish grant/contract information for college/department/individual faculty (award, expenditure, F&A recovered) as many other institutions are doing routinely as part of their annual report.
17. Encourage the faculty (particularity TT faculty) to participate in grant writing clubs having a mock review element.
18. Come up with a flexible and executable course buy-out practice/procedure(s).
19. Help send the UNLV students internship at national laboratories and federal agencies (seeding process).
   o TTGRA competitive GA funding program roll-out in late spring ’16 for AY17-20.
   o GC Grad Rebel Success Center workshops on NSF Graduate fellowships. Bring in NSF officer for workshop in AY16-17.
TOP TIER RSC WORKING GROUP REPORT

Submitted By:

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
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<tbody>
<tr>
<td>Kwang Kim</td>
<td>Mechanical Eng.</td>
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Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

Name/Topic of Working Group | Goal #2-3

Working Group Members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
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<tbody>
<tr>
<td>Brian Hedlund</td>
<td>School of Biological Science</td>
</tr>
<tr>
<td>Barbara St. Pierre Schneider</td>
<td>School of Nursing</td>
</tr>
<tr>
<td>David Paul</td>
<td>Sponsored Project Office</td>
</tr>
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</table>

2015-2016 Accomplishments:

In consultation with Deans Rama Venkat (COE), Tim Porter (COS), and Carolyn Yucha (SON), this working group laid out a number of ideas regarding plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities. The group also collected some data related to recent UNLV’s research funding records including National Science Foundation.

Recommendations:
The committee feels that:
1) The faculty researchers probably need to find more time available to write nationally competitive proposals; and
2) To further encourage the faculty researchers in writing more proposals, meaningful incentives to them may be needed.

2016-2017 Goals (Where possible, specify who should be responsible for these next year):

The committee feels that the UNLV central administration in consultation with UNLV stakeholders, evaluates recommended ideas if i) they are useful and ii) are executables within the context of UNLV's current practice and/or policy.
Responsibility: the UNLV central administration/Deans?

Notes, Comments, & Feedback:

See attached.

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1 For an example, adaptation of UNR's policy on "Non-contractual days available for overload," [http://www.unr.edu/Documents/administration-finance/hr/hr-hiring-compensation/hr-liaison/OverloadCalendarFY15-16.pdf](http://www.unr.edu/Documents/administration-finance/hr/hr-hiring-compensation/hr-liaison/OverloadCalendarFY15-16.pdf), or similar ones might be useful and no-cost to UNLV??
Research, Scholarship, and Creative Activity (RSCA)
(FY 2016: Top Tier Subcommittee #2-3 Assignment)
“Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities”

A short report prepared by:

Kwang Kim (Engineering)
Barbara St. Pierre Schneider (Nursing and Allied Health)
Brian Hedlund (Sciences)

in consultation with
David Paul (Office of Sponsored Project)
Deans Rama Venkat (COE), Tim Porter (COS), and Carolyn Yucha (SON)

Submitted to:
Thomas Piechota and Kate Korgan, Chairs of RSCA

Presented to:
UNLV Research Council (on December 11, 2015)
UNLV Associate Deans’ Council (on December 18, 2015)
UNLV Research Cabinet (on January 19, 2016)
Some Background Information & Urgency of Needs

1. One of the major goals of the Top Tier initiative is for UNLV to achieve AT LEAST $150M (120M newly adjusted)/YEAR of research expenditure by 2025.

2. Where we are NOW?
   - FY15 Research expenditure of $31.6M.
   - FY15 Research awards of $32.1M.
   - FY15 Research proposals of $226.7M.
   - Note: Approximately 12% (in terms of $ volume) of the submitted proposals are materialized.

3. To achieve such a challenging goal, the RSCA Top Tier Subcommittee #2-3 strongly feels that the UNLV operation for research support, needs to become MORE RISK-TAKING, CREATIVE, AND BUSINESS-MINDED!

Considering the success rate at around 12%, UNLV needs to produce more proposal submissions!

- For example $500M/year proposal submission will produce about $60M.
### Some Naive Comparison (peer institutions?)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Fiscal Year 15</th>
<th>Fiscal Year 14</th>
<th>Conversion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNLV</td>
<td>$226.7M</td>
<td>$32.1M</td>
<td>14%</td>
</tr>
<tr>
<td>Univ. of Houston</td>
<td>$737.0M</td>
<td>$119.0M</td>
<td>16%</td>
</tr>
<tr>
<td>Univ. of Central Florida</td>
<td>$622.8M</td>
<td>$113.2M</td>
<td>18%</td>
</tr>
<tr>
<td>Univ. of New Mexico</td>
<td>$402.6M</td>
<td>$124.2M</td>
<td>30%</td>
</tr>
</tbody>
</table>

**Short-term: Some targeted goals?** – it could be very stiff goal(s)
- UNLV may need to write proposals at least $400M annually by 2020.
- UNLV need to improve the winning rate to at least 15% by 2020.

→ This will help UNLV produce about $60M research annually by 2020???
Some Naive Comparison (a peer institution)

**FY 15 # of Proposals Submitted**

<table>
<thead>
<tr>
<th>College</th>
<th>UNR</th>
<th><strong>TOTAL</strong></th>
<th>UNLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIENCE</td>
<td>234</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGINEERING</td>
<td>185 (163/156)</td>
<td>Average 168</td>
<td>Average 169 [178 (AY14) / 205 (AY13) / 143 (AY12) / 149 (AY11)]</td>
</tr>
<tr>
<td>SCHOOL OF MEDICINE</td>
<td>147</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGRICULTURE, BIOTECHNOLOGY..(CABNR)</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEALTH SCIENCES, VP</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NV COOPERATIVE EXTENSION</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLLEGE OF LIBERAL ARTS</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSINESS</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESEARCH &amp; INNOVATION, VP</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENROLLMENT SERVICES</td>
<td>9</td>
<td></td>
<td></td>
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<tr>
<td>GRADUATE SCHOOL</td>
<td>7</td>
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<td>POLICE SERVICES, UNIVERSITY</td>
<td>6</td>
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<tr>
<td>EXTENDED STUDIES</td>
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<td>FACILITIES SERVICES</td>
<td>4</td>
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<tr>
<td>LIBRARIES</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>OFFICE OF PROVOST</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAASIC</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDENT LIFE SERVICES</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDENT SERVICES, VP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,001</strong></td>
<td></td>
<td></td>
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</table>

F&A recovery for UNR’s FY 15: $14,922,203

**FYI: UNLV Award Data**

### UNLV AWARD DATA - FY15

<table>
<thead>
<tr>
<th>Funding by College/Unit</th>
<th>Awards</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciences</td>
<td>109</td>
<td>13,253,233</td>
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<tr>
<td>Student Life</td>
<td>20</td>
<td>11,163,804</td>
</tr>
<tr>
<td>Div Health Sciences</td>
<td>59</td>
<td>10,350,011</td>
</tr>
<tr>
<td>Engineering</td>
<td>103</td>
<td>9,266,658</td>
</tr>
<tr>
<td>Education</td>
<td>22</td>
<td>1,776,332</td>
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<tr>
<td>Urban Affairs</td>
<td>10</td>
<td>1,558,050</td>
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<tr>
<td>Liberal Arts</td>
<td>8</td>
<td>815,220</td>
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<tr>
<td>Provost</td>
<td>6</td>
<td>427,205</td>
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<td>VPRED</td>
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<td>419,500</td>
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<td>Business</td>
<td>10</td>
<td>362,335</td>
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<tr>
<td>President’s Office</td>
<td>2</td>
<td>337,605</td>
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<tr>
<td>Library</td>
<td>2</td>
<td>343,770</td>
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<tr>
<td>Fine Arts</td>
<td>6</td>
<td>253,837</td>
</tr>
<tr>
<td>Law School</td>
<td>4</td>
<td>202,780</td>
</tr>
<tr>
<td>Hotel Administration</td>
<td>2</td>
<td>116,000</td>
</tr>
<tr>
<td>VPEO</td>
<td>2</td>
<td>12,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>367</strong></td>
<td><strong>$50,658,340</strong></td>
</tr>
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</table>
Some Naive Comparison (continued...)
An Example: College of Engineering (UNLV vs. UNR)

Research Awards Data

<table>
<thead>
<tr>
<th>(FY)</th>
<th>UNR/COE</th>
<th>UNLV/COE</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>$0</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>13</td>
<td>$2,500,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>14</td>
<td>$5,000,000</td>
<td>$7,500,000</td>
</tr>
<tr>
<td>15</td>
<td>$7,500,000</td>
<td>$10,000,000</td>
</tr>
</tbody>
</table>

Collectively FY12-15 (4 Years) ~$20M

Data Sources:
http://www.unlv.edu/engineering/proposal-award-activities
http://www.unr.edu/sponsored-projects/reports
An Example: Status of College of Engineering’s Research Productivity: **What that means in 2025**

**Urgency of Needs**

1. **One of the major goals of the Top Tier initiative is for UNLV/COE to achieve approximately $37.5 M/year of research expenditure by 2025** (info provided by Dr. Rama Venkat/COE leadership).

2. Where COE/UNLV is NOW (@70 faculty)?
   - FY15 Research awards of $9.3M (~$130K / faculty).
   - FY15 Research proposals of $42.1M (~$600K/faculty).
   - FY15 the number of research proposals is 178 (~2.5 proposals/faculty).
   - Note: Approximately 19% (in terms of $ volume) of the submitted proposals are materialized.

UNLV/COE “MAY” need to submit approximately **500 proposals** of approximate amount $200M. That will potentially lead to approximately $40M awards in FY2026! This will be a challenging task for the UNLV/COE faculty!

**In summary (@100 faculty size) by 2025**
- Double the number of proposals/faculty
- $400K awards amount/faculty/year
- Triple the amount of awards/faculty
An Example Case: UH College of Engineering

Faculty: 110
**NAE members: 10**
Graduate Students: 1,210
Undergraduate Students: 3,282
Alumni: 18,045

**US News ranking #76** (2015)
Research Expenditures: $26M
(35% of faculty generates 80% of the research expenditure; $250K per faculty annually)

Degrees Awarded (FY 2014):
- B.S. 339
- M.S. 194
- Ph.D. 50
- Total 583

UNLV has no NAE or NAS member.
NSHE has one NAS member: Catherine Fowler of UNR (elected in 2011 in Anthropology).

Source: https://www.egr.uh.edu/our-college/facts
Another example comparison (UNLV/COE vs. one competing school)

UNLV/COE FY2014 Research Expenditure
Total $9,283,160
Average = $130,749/faculty
Median=$62,443/faculty

Top 20% generated 73% ($6,766,292) of the total research expenditure

One of our competing schools FY14 Res. Expenditure
Total $12,602,602
Average = $182,646/faculty
Median=$93,510/faculty

Top 20% generated 70% ($8,940,633) of the total research expenditure
Some Naive Findings / Question(s)

- At the moment, top 20% of the research active faculty carries high load/pressure in terms of grant/contract activities and, most likely, will be in a situation to carry much more increased pressure as UNLV wants to become a Top-Tier institution.
- Some operation flexibility or strategic investments are needed (Q: in where?) to bring the overall performance up?
  1. Spread them out (?), Bottom 20% (?), Top 20% (?)
  2. What are the associated cost and ROI?

Similarities are everywhere! : Initial investment on the top producers and then expand to others.. (make up the volume first!)


Vision: To become a “Top 50” Engineering Program, as defined by U.S. News and World Report, in support of the University of Houston’s Tier One initiative.

Increase Research Activity across the College: Currently, 35% of CCE faculty generates 80% of the research expenditures for the college. By 2020, “the CCE’s goal is not only to increase overall research activity, but to broaden research activity among faculty so that a substantial majority of faculty are contributing to the research enterprise.” To support this goal, the CCE will ensure......
AN EXAMPLE UNLV DATA for FY13-FY15: National Science Foundation

1. Number of NSF grant proposals “directly” submitted by UNLV annually is low.
2. Large volume (> $1M)/flagship grants “directly” submitted/received by UNLV is low.
   - 13 submissions/1 funded
   - Since 1976 (Fastlane data): 3 grants > $1M; 13 grants are between $500K and $1M
3. Number of NSF CAREER awards directly received by UNLV
   - The NSF/CAREER program is designed for TT faculty to build their academic career via research/education (5 yr. program)

### Number of NSF proposals Submitted by UNLV

<table>
<thead>
<tr>
<th>Zip Code</th>
<th>Institution</th>
<th># of Active NSF Grants</th>
<th># of Active CAREER Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>80309</td>
<td>UC Boulder</td>
<td>543</td>
<td>34</td>
</tr>
<tr>
<td>84112</td>
<td>U of Utah</td>
<td>278</td>
<td>23</td>
</tr>
<tr>
<td>77204</td>
<td>University of Houston</td>
<td>174</td>
<td>20</td>
</tr>
<tr>
<td>97403</td>
<td>University of Oregon (no Engineering)</td>
<td>141</td>
<td>4</td>
</tr>
<tr>
<td>32816</td>
<td>University of Central Florida</td>
<td>134</td>
<td>10</td>
</tr>
<tr>
<td>89557</td>
<td>UNR</td>
<td>81</td>
<td>4</td>
</tr>
<tr>
<td>92182</td>
<td>San Diego State University</td>
<td>76</td>
<td>1</td>
</tr>
<tr>
<td>89154</td>
<td>UNLV</td>
<td>47</td>
<td>0</td>
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</table>

(NSF Fastlane data as of August 7, 2015)
NSF funding means to each faculty?

Need to quickly broaden the exposure to NSF to become a mature institution.

Need to try large/flagship grants (>1M)
SWOT ANALYSIS

• **Strengths** in:
  1. Small but a number of strong areas of faculty research,
  2. Not enough but good support for faculty grant applications, and
  3. Good investment/intension for faculty grant applications from the administration

• **Weaknesses** in:
  1. Number of grant proposals is low.
  2. Number of large volume/flagship grants is low.
  3. Number of “Young Investigator” awardees is low. → **Questions (Recruiting? Mentoring?)**

• **Opportunities** in:
  1. UNLV Uniqueness: EPSCoR, MSI, KF, others...
  2. Growing interest in UNLV medical school and health care research
  3. Slowly but growing faculty-participation in campus research initiatives (FOA, limited submission, etc..)

• **Threats** in:
  1. Federal budget cut in fundamental research (except FY16)
  2. Increasing competition in grant applications as more universities pursue research funding
  3. Limited research infrastructure at UNLV
  4. **UNLV Campus culture on research** (need attention from the central leadership*)
  5. Difficulty in recruitment of high caliber researchers (resource, student quality, location..?)
Urgency: The TT subcommittee #2-3 noticed that the UNLV’s proposal output for FY2015 actually went down!

Thus, for UNLV to achieve $150M (or $120M)/year research expenditure and write more proposals, it is so obvious that UNLV needs to provide the research active PIs with:

1. More TIME,
2. Meaningful INCENTIVES, and
3. Effective SUPPORT

A few naive recommendations/ideas to The RSCA Committee for consideration to address (1) low number of grant proposals; (2) low number of large volume/flagship grants; and (3) low number of “Young Investigator” awards

1. Provide the PIs with incentives to submit more proposals.
   - Identify any faculty without federal funding in the last 5 years and help them submit proposal(s) to NSF?

2. Provide some creative and meaningful incentives to research-active PIs.
   - For 9 Mon. salary faculty: (1) Allow summer/over-load up to 48% of their salary (UNR model?); (2) Allow summer salary saving for rainy days (Penn State model?); (3) Matching (U of Florida model?)
   - For 12 Mon. salary faculty (for example Nursing/Dental faculty & B-contract administrators): Create a mechanism for teaching release or other financial incentives.
3. For **large grant applications** and **institution-limited** (time sensitive) submissions
   - Form a task force (VPR/Deans/other research leaderships) to strategize so the campus infrastructure will support large funded grant applications in an unfragmented and efficient way.
   - Streamline the institution-limited submission process to allow the PI to have enough time to prepare the proposal (if necessary, the executive decisions by the leaderships are needed for decision making.)

4. To help TT faculty to win **Young Investigator awards**: very critical!
   - Providing early-career researchers with seed investment and mentorship support to help them effectively launch their research and prepare to apply for early career or selected research awards (for example, NSF CAREER, DoD/DoE/NASA Young Investigator, and other programs).
     - Host NSF CAREER workshop(s) at the UNLV campus.
     - Send TT faculty to “NSF supported” NSF CAREER workshop(s).
     - Help TT faculty have proposal reviewing opportunities.
     - Help TT faculty have “NETWORKING” and “BRENDING” (setting up informative websites, etc).
     - **Special support programs for TT faculty**: mini-sabbatical, appropriate teaching load, first grant program, mentoring...? TT → **help them being/becoming PERSISTENT!**

5. Some “**Improved**” **Research Space Utilization (RSU)?**
   - The current level of RSU is sitting at approximately **$150/SF annual expenditure**. This number is expected to go up as UNLV will bring more research $. A short-term solution to deal with such an increased demand rather than adding more research space, could be more centrally controlled management (similar to class-rooms that are centrally managed)? This will create more inter-changeable space utilization (and provide the chairs/deans with some tools?)?
   - **An example scenario**: Suppose a PI/team wants to make a bid to bring a federally funded Center of Excellence, one usual evaluation criteria is “availability of space/location of the proposed center.” With the current research space management practice, it is extremely challenging for a PI to propose a convincing Space Management Plan. **Thus, the proposal will be less favored by the reviewers.**
6. **“Entrepreneurial”** ways for providing matching (or reallocating the existing resources) toward grant applications (we recognize that it is a tough issue for resource-poor institutions including UNLV)
   - Often times, grant applications require MATCHING (in particular DOE)! In this regard, the UNLV communities at all levels (central administration/VPR/Graduate School/Deans/Chairs/PIs) may need to look for some aggressive but creative matching mechanisms to overcome this huddle?
   - **Properly packaged matching plan(s) included in grant proposals will greatly help the PIs win more grants/contacts – in particular for large/flagship grants.**

7. Encourage the UNLV faculty to serve as a **program director of federal funding agencies** (or provide the faculty with some incentives - via IPA / in connection with sabbatical or development leave).

8. Further effective utilization of **“Centers of Excellence”** to help secure external funding and recruit dynamic faculty and capable students
   - College of Eng. and College of Sci.: a targeted volume of $1.5M expenditure/year
   - Centrally administrative → needs some investment (?) (administrative support ?)

9. **“Distinguished professorships/Endowed professorships”** will also help the PIs secure large volume-flagship programs.
10. Help the PIs bringing “focused workshops” to the UNLV campus.

11. Some **External Input (or consultants)** to UNLV’s Research Enhancement
   - UNLV may need to bring some “external advisor groups” from our comparative schools and/or agencies & consultants (some from our targeted schools and agencies and national labs.. consultants??) and look for their advice and wisdom regarding research-enhancement decision-making?

12. Place some strategical existence and/or collaborations **in the DC and northern Virginia areas** to have more connections with federal agencies?

13. Look into a model to hire **very capable RESEARCH ONLY FACULTY** who can started with some initial investment (University of Central Florida model, most medical schools..?)

14. Strategically place some “graduate fellowships” that can target upon “*High-risk / High-pay-off* research.”

15. Give close attention to **National Ranking(s)** of UNLV units.

16. Help the faculty build their “**informative**” research website, research identification, etc... (marketing...)

---

**RSCA Top Tier Subcommittee #2-3 Assignment**

Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities
RSCA Top Tier Subcommittee #2-3 Assignment
Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

17. Collect and publish grant/contract information for college/department/individual faculty (award, expenditure, F&A recovered) as many other institutions are doing routinely as part of their annual report.

18. Encourage the faculty (particularity TT faculty) to participate in grant writing clubs having a mock review element.

19. Come up with a flexible and executable course buy-out practice/procedure(s).

20. Help send the UNLV students internship at national laboratories and federal agencies (seeding process)

21. Many others
RSCA Top Tier Subcommittee #2-3 Assignment
Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

Concluding Remarks!

For UNLV to increase competitive grant applications and entrepreneurial funding opportunities, the UNLV’s research support/operation probably needs
1) to become more AGGRESSIVE, RISK-TAKING, CREATIVE, AND BUSINESS-MINDED.
2) to AGGRESSIVELY RECRUIT Outstanding/Top-Tier Students, Faculty, and Staff....!!

Many thanks for your attention!
Other info.

Appendix

Best Global Universities (BGU) Ranking
RSCA Top Tier Subcommittee #2-3 Assignment
Develop plans & strategies for increasing competitive grant applications & entrepreneurial funding opportunities

Best Global Universities (BGU) Ranking

<table>
<thead>
<tr>
<th>UNLV Referenced/Peer Institutions (?)</th>
<th># of Active NSF Grants</th>
<th>Best Global Universities Ranking</th>
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</thead>
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<td>UNLV</td>
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</tr>
</tbody>
</table>

(NSF Fastlane data as of August 7, 2015)

GU ranking is based upon global/regional research reputation, volume and quality of publications, citations, PhD awarded, etc, of each institution