

## AACP REPORTS

### The Report of the 2012-2013 Research and Graduate Affairs Committee

Robert Blouin, Chair,<sup>a</sup> Diana Brixner,<sup>b</sup> Stephen Cutler,<sup>c</sup> Hartmut C. Derendorf,<sup>d</sup> Samuel M. Poloyac,<sup>e</sup> Vicki L. Ellingrod Ringold,<sup>f</sup> Rick G. Schnellmann,<sup>g</sup> Peter Swaan,<sup>h</sup> and Yuen-Sum (Vincent) Lau<sup>i</sup>

<sup>a</sup>University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

<sup>b</sup>The University of Utah, Salt Lake City, Utah

<sup>c</sup>The University of Mississippi, University, Mississippi

<sup>d</sup>University of Florida, Gainesville, Florida

<sup>e</sup>University of Pittsburgh, Pittsburgh, Pennsylvania

<sup>f</sup>University of Michigan, Ann Arbor, Michigan

<sup>g</sup>South Carolina College of Pharmacy, Columbia, South Carolina

<sup>h</sup>University of Maryland, College Park, Maryland

<sup>i</sup>American Association of Colleges of Pharmacy, Alexandria, Virginia

The RGA Committee met on October 29-30, 2012, in Crystal City, VA. The Committee corresponded via e-mail throughout the year, and had a conference call on June 13, 2013. The charge for the RGA Committee was to develop strategies on how to get our members to the right tables and at the right time for advancing pharmacy research and graduate education.

The Committee members had examined the NIH Biomedical Research Workforce Working Group Report, NIH Diversity in the Biomedical Research Workforce report, and Ways to Manage NIH Grants from NIH Office of Extramural Grants.

The following topics were considered and discussed. Some action plans are recommended for implementation.

#### **GRADUATE STUDENT EDUCATION: MEETING THE NEEDS OF A RAPIDLY CHANGING MARKET**

The academy needs more Pharm.D.s to be adequately trained and engaged in pharmacy research. We also need more faculty research scientists, who have a pharmacy background.

##### **Possible Action Plans**

- Bring in more high school, undergraduate, and Pharm.D. students into pharmacy/pharmaceutical research teams.
- Increase contact and interaction between professional and graduate students.
- Identify and attract more scholarships for students in clinical sciences (e.g., pharmacy scholars).
- Clearly define differences in pharmacy disciplines as they relate to the ideal pool of graduate students.

- Develop marketing strategy to attract more U.S. trained students and Pharm.D. applicants to be interested in graduate school education. (VL is working on the PharmCAS concept for graduate programs)
- Train more leaders and mentors (e.g., ARFP), who will assume a role in enhancing their graduate degree programs.

The Committee agreed that it is time to transform graduate education (M.S. and Ph.D.) in pharmacy and pharmaceutical sciences.

##### **Possible Action Plans**

- This will be a topic of discussion for the Academic Research Fellows Program. (VL is working on this effort)
- Same discussion should occur with associate deans for research and graduate studies. (VL will work with this group). Views will be shared with Pharmacy Deans Research Group in January as well (RB).
- Following any input received from the above groups, we should articulate the need and identify the mechanisms for graduate training transformation.
- Emphasize interprofessional and interdisciplinary training rather than silo training approaches.
- Define and develop a set of required competency-based skills for all graduates to acquire (these days so many soft skills are important for career success, an integrated curriculum should include those skills in communication, writing, adaptability, etc.). Since there is no movement towards accreditation of graduate programs, we should perhaps look into a CAPE-like taskforce for graduate education.

- Use the NIH Workforce Document as a starting point to create a process that may lead to a white paper; seek input from key stakeholders (e.g. Pharma, FDA).

## **INDUSTRIAL AND FEDERAL RESEARCH FUNDING**

There has been a continuous evolution of the pharmaceutical industry. The industry is mostly interested in recruiting our graduates, but few are interested in investing in graduate training programs. Only a small number of schools still have ties to industry and receive graduate training grants from them.

### **Possible Action Plans**

- We should explore and identify unique company needs and opportunities, and seek out our alumni who are currently residing at pharmaceutical companies to advocate and assist in the development of sustainable relationships.

NIH funding has become extremely competitive. This situation affects not only junior faculty, but also faculty at all ranks. Furthermore, NIH plans to reevaluate its funding model including reducing salary recovery and F&A.

### **Possible Action Plans**

- A good mentoring program for junior, mid-career, and senior faculty might help funding sustainability. Providing our faculty with critical internal or external grant reviews prior to grant submission may enhance the quality and competitiveness of their submissions. We believe that the reviewers' time and effort should be financially compensated for this service.
- Institutional bridge funding is becoming increasingly more important in this current climate of single digit percentile pay-lines at the NIH. Institutions and Schools/Colleges will need to plan more strategically in order to fill critical funding gaps in support of its faculty.
- Faculty should be encouraged to use the sabbatical opportunity to retool or engage in new areas of contemporary research as part of faculty development.
- Faculty establishment of laboratories in a foreign country should be carefully studied within each institution to assess thoroughly conflicts of interest and commitment as well as impact and value to the School/College.

- Faculty mentoring is needed to better understand the funding areas and mechanisms such as from NCATS, COBRE, and other similar programs.
- Institutions need to reevaluate teaching and service loads for research-intensive tenured/tenure track faculty for them to better compete for NIH funding.
- We should consider all kinds of funding sources including non-federal agencies (VL is working on providing information on other funding opportunities).
- Institutional timeline and criteria for promotion and tenure may need to be reevaluated.

## **THE EVOLUTION OF THE RESEARCH-INTENSIVE UNIVERSITY: POSITIONING PHARMACY IN THIS NEW ENVIRONMENT**

It is well recognized that almost 35% of federal funding goes to 25 institutions and each of these institutions will likely continue to strengthen their competitive position. This trend is not likely to change and pharmacy needs to strategically position itself for this new reality.

### **Possible Action Plans**

- Schools should consider collaborations with other schools and universities for the purpose of enhancing mutual competitiveness in specific, targeted areas.
- Inter-institutional collaborations may be worthwhile particularly with graduate education; distance education may change everything.
- Large clinical trials are multi-institutional – schools should build on these opportunities.
- Academic Research Fellows could complement each other to create more competitive projects and consortia.

## **POLITICAL AND FEDERAL FUNDING ADVOCACY: WHAT SHOULD/CAN OUR ACADEMY DO TO ENSURE PHARMACY SCHOOLS/COLLEGES ARE WELL-POSITIONED FOR RESEARCH AND GRADUATE EDUCATION SUPPORT?**

### **Possible Action Plans**

- Develop consortium and agreements with partner organizations (e.g., AAPS, ACCP, ACCM, ISPOR, JCCP) that have high presence of pharmacists and pharmaceutical scientists for the purpose of

creating a single voice for pharmaceutical sciences research advocacy.

- Focus on a single strategy in translational research (i.e., NCATS, CTSAs).
- Identify additional partners (e.g., FDA, NPC, ASPET [Pharmacology], SOT, Critical Path Institute).
- AACP President, CEO and CSO will identify and initiate conversations with counterparts of other organizations.
- Emphasize the big picture of our research enterprise (i.e. our strength is making drug discovery more efficient).
- If not successful, AACP must reevaluate its strategy.