

## Research Involvement, Motivation, and University Initiatives as Agents for Enhancing Research Culture and Quality

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### Abstract

This paper determined the research involvement and motivation of university faculty in research and research-related activities. It discusses the university research initiatives as agents in enhancing and promoting research culture and quality. Data from the university records and survey questionnaires were used to determine the research involvement of faculty. University research initiatives and other information needed in this study were generated from the university accreditation documents and from research and faculty manuals. There is increasing faculty research involvement for the last five years. Fifty percent were sampled from 179 faculty members to determine the faculty involvement in research-related activities and their motivation of involvement. The top five research-related activities involvement are: sat as a panel member in an oral defense; supervised undergraduate thesis; mentored undergraduate; enriched self on research methodologies, statistics, and research writing; and presented a paper in the national and international conferences. On the other hand, the factors that motivate University faculty to be involved in research are: utilization of research; personal satisfaction; build/expand network; research capability building programs of the University; and support of the administration. Research initiatives were created and implemented by the university and spearheaded by the University Research Center to enhance research culture and quality. The research initiatives were based on the goals articulated by National Higher Education Research Agenda (NHERA-2).

**Keywords:** *Research involvement, motivation, university initiatives, research culture, research quality*

### Introduction

The Philippines has achieved impressive gains in expanding access to higher education among Filipinos but there remains a need for suitable skills including research that will enable the nation's workforce to become more competitive and help bolster economic growth. There are challenges for the Philippine higher education system such as finding a good balance between demand and quality, and achieving a strengthened research, as the research output is low compared to ASEAN peer countries (Country Sheet Philippines, 2016).

The research carried out by Elsevier for the British Council and the Foreign and Commonwealth Office (2015) highlights research outputs for five selected ASEAN countries. It revealed that the Philippines' ability to attract talent and its research capability, indicated by the number of researchers per million population, are the lowest in the group. Spending on research and development (R&D) is also low compared to the ASEAN peer group. With these challenges, higher education institutions (HEIs) in the Philippines, including the Adventist University of the Philippines (AUP), are going an extra mile to improve their research capabilities so as to achieve parity with other HEIs in the ASEAN region.

To improve faculty research capabilities, HEIs' quality and the research culture must be enhanced. In view of these HEIs' concerns, this study was conducted to generate practical recommendations for a more enhanced capability building programs for faculty researchers in the Adventist University in the Philippines. With this aim, the research involvement, motivation, and the university's initiatives were examined as agents for enhancing research culture and quality of the HEI under study.

## **Review of Literature**

President Duterte's administration has a long-term vision for the Philippines, as articulated in the *Ambisyon Natin 2040*. This document represents the collective long-term vision and aspirations of the Filipino people for themselves and for the country in the next 25 years. Two aspirations were set: aspirations for the Filipino people, and aspirations for the country. In the aspiration for the country, the current administration aspires that Filipinos become smart and innovative. Formal education is the structured method of facilitating the acquisition of a select set of such knowledge, skills, values, beliefs, and habits. Research is an essential component of a higher education institution. It is a critical part of any university's role in the creation and dissemination of knowledge. There is an increasing emphasis on research performance and on the utilization of research outputs. With this challenge, the Philippine Commission on Higher Education (CHED) has been "pushing zealously for a stronger research orientation among HEIs." Hence the advent of the National Higher Education Research Agenda (NHERA) in 1996, which "articulated the goals of higher education research as well as its mechanics, and the concrete steps to realize its goals" (Salazar-Clemeña & Almonte-Acosta as cited in Dacles, Valtoribio, Del Rosario, Matias, & Saludarez, 2016).

## **Research Involvement**

Creating enthusiasm for conducting research begins with exposure to a simple inquiry during undergraduate and post graduate studies. To promote enthusiasm among future researchers, it requires an exposure to a wholesome research culture provided by the university. The benefits of this endeavor include a deeper understanding of research, an increased ability to critique research to inform clinical practice, and plant the seeds for the development of one's own professional research culture (Paterson, Rachfall & Colleen, 2013).

Research and publication have now become major tasks for academics in addition to teaching. New knowledge is being discovered or existing knowledge is further expanded through research. Research is not only a requirement for a degree but obligatory responsibility of a teacher in an educational institution, particularly in the higher education. Excellence in research and production of high quality publications enhance the reputation of an institution of higher learning (Zain et al., 2011). As research activity is the backbone of all areas in the academic community, conducting research within a profession is important for both the development of the profession and the development of the individuals working within that profession to expand their knowledge base (Munir & Bolderston as cited in D'Alimonte, 2016). Getting involved in research is just one part of a teachers' path toward life-long learning and professional inquiry. Ferguson as cited in Dacles et al. (2016) emphasized that:

"Research culture within an institution, then, may be summarized as the knowledge about research topics and processes which are sanctioned as appropriate and relevant; the values, beliefs, attitudes and norms which surround the research process within the institution; and the various material ways in which the institution supports or denies support to its researching individuals and groups. New values, beliefs and norms about research develop as individuals and groups attempt to carry out research projects and to "push the boundaries" of what the institution has previously approved." (pp. 439-440).

## **Motivation**

Research and publication have now become major tasks for academics in addition to teaching. New knowledge is being discovered, at the same time existing knowledge is developed through research. Excellence in research and production of high quality publications enhance the reputation of an institution of higher learning.

The seven most challenging factors that prevent faculty members from publishing enough or not publishing at all include the following: having limited time, lack of training on publication, fear of rejection, lack of interest, faculty laziness, limited funds, and lack of institutional support (Wa-

Mbaleka, 2015). Despite the consistent recommendations of accrediting bodies and the CHED that faculty member should publish, the issue of limited publications has persisted for years (Acar, 2012).

According to Salazar-Clemeña and Almonte-Acosta (2007), in order to increase the number of research publications, they proposed that the focus should be on improving the culture of research in the Philippines. The culture depends on several factors which may include: institutional research policies and agenda; developmental culture and working conditions; budget allocations for research; infrastructure; collaboration with and access to research professionals in other institutions; policies and guidelines about research benefits and incentives; research committees; and publications. The issue on publication will continue to persist because HEI faculty continue to be expected to produce and publish scholarly research.

### **CHED NHERA 2 Guidelines and Provisions and Institutional Initiatives**

The National Higher Education Research Agenda-2 (NHERA-2) of the Philippines, an agenda designed for the years 2009-2018, stipulates that knowledge creation, transmission and application are the lifeblood of the knowledge-based economy or k-economy. The main objective of NHERA-2 is to help the country “produce high quality research that will advance learning and national development, as well as international comparability of the Philippine higher education system” (CHED, 2009, p. ii). NHERA-2 set guidelines and provisions for these reasons. These statements only emphasize the role of research in the Philippine education system.

Salazar-Clemeña and Almonte-Acosta (2007) proposed a framework for understanding the research culture in Philippine HEIs, which was patterned after the nature and processes of educational and social inquiry developed by Keeves (1999). According to this framework, a research culture is concerned with the dynamics of the interrelationships among three domains. Domain 1 is the trifocal functions of the institution in cultivating a research culture among its faculty members. The Trifocal function comprises the university faculty’s trifocal task of teaching, research, and community service or extension. Domain 2 is the individual attributes and output which refers to the knowledge, skills, values, and attitudes that the faculty members possess relative to the conduct of research; moreover, it determines the readiness, capacity, and experience as regards research. Domain 3, the institutional attributes and policies, refers to the policies set by the institution for the purpose of developing a research orientation. This includes all other policies and measures concerning faculty members of the entire institution.

### **Methodology**

**Research Design:** The study utilized a descriptive survey, which is a combination of quantitative-qualitative research approaches. This paper determined the research involvement of AUP faculty, their motivation for being involved in research and research-related activities, and university research initiatives as agents in enhancing and promoting research culture and quality.

**Population:** This study was conducted in the AUP in Silang, Cavite, Philippines. The university is among the 1,710 private HEIs in the country, and one of the only 59 institutions with *Autonomous Status* granted by the Commission on Higher Education (CHED). In addition, it remains among the only 20 universities in the country awarded the highest merit of Institutional Accreditation by the Federation of Accrediting Agencies of the Philippines. The samples taken comprised 50% of the 179 faculty members to determine their involvement in research-related activities and their motivation of involvement.

**Instrumentation and Data Analysis:** A constructed questionnaire was used to determine the involvement of faculty in research and research-related activities and the information was enhanced by the data from the University Research Center (URC) and Accreditation Office (AO). The university’s research initiatives and other information needed in this study were also generated from the accreditation documents and from research and faculty manuals. Open-ended questions on the effect of research involvement were also requested from university faculty. The data were analyzed quantitatively using descriptive statistics and qualitatively using a thematic approach.

## Results and Discussion

### *Involvement of Faculty Members in Research and Research-Related Activities*

Based on URC and AO records, the involvement of faculty members was increasing from 2012 to 2016. The current faculty involvement (N=179) in poster and paper presentations, publications (books, popularized and research articles), commissioned research and patents reached up to 64.25% in 2016-2017. Other research-related activities were also surveyed. Table 1 reveals that the top five research-related activities involvement of faculty members were sat as a panel member in an oral defense; supervised undergraduate thesis; mentored undergraduate; enriched self on research methodologies, statistics, and research writing; and presented a paper in national and international conferences. In addition, the university faculty also served as research assistant, research teacher, and/or research coordinator, published research in local/international journals, supervised graduate research, performed research-based community extension services, and mentored faculty researchers. Overall, this study indicated that the university faculty were involved in research-related activities but the most important activity, which is publishing, was minimal.

**Table 1.** Involvement in Research and Research-Related Activities of University Faculty n= 90/179)

Nature of Contribution	Never	Once	Twice	Three
1. Presented a paper in the national and international conference	38.5	26.1	14.1	20.9
2. Enriched myself on research methodologies, statistics, and research writing	11.0	25.6	27.8	35.6
3. Collaboration in a commissioned research	71.3	21.8	2.3	4.6
4. Served as one of the research lecture	78.7	10.1	3.4	7.9
5. Sat as a panel member in an oral defense	14.3	8.9	8.9	67.8
6. Served as research assistant, teacher, and/or research coordinator	50.0	14.4	5.6	30.0
7. Supervised undergraduate thesis	16.5	11.0	15.4	57.1
8. Supervised graduate thesis	73.0	5.6	4.5	16.9
9. Sat as external examiner	83.1	11.2	1.1	4.5
10a. Mentored graduate research	14.3	11.0	12.1	37.4
10b. Mentored faculty research	76.3	2.5	7.5	13.8
10c. Mentored colleagues from other institutions	67.9	16.7	6.4	9.0
11. Published research in local refereed journals	64.4	13.8	9.2	12.6
12. Published research in international refereed journals	68.2	18.2	8.0	5.7
13. Participated in the inter-institutional research	73.0	12.4	7.9	6.7
14. Performed research-based community extension services	66.3	17.4	5.8	10.5
15. Active member of a research organization	71.6	14.8	6.8	6.8
16. An officer in research organization	90.9	5.7	2.3	1.1
17. Involved in the preparation of local and international conferences	68.2	21.6	4.5	5.7
18. Served as peer reviewer in local/international publications	86.5	5.6	3.4	4.5

Colbeck (as cited in American Council of Learned Societies, 2007) found that faculty members can successfully integrate teaching and research. On the average, the faculty observed in this study accomplished teaching and research goals simultaneously during one-fifth of their work time. Their opportunities to integrate those roles were shaped by the way expectations were defined by their disciplines and by university and departmental contexts. Colbeck cautioned against seeing research and teaching as mutually exclusive, noting that when policies and the institutional culture emphasized only one role rather than an integration of both, faculty engagement in the unsupported role diminished.

Moreover, Colbeck emphasized that when the institution is supportive of both research and teaching activities, there is a greater chance for the faculty members of higher education institutions

to engage in both areas for the benefit of themselves, their disciplines, and their undergraduate teaching.

### **Motivation of the University Faculty to Conduct Research**

Faculty members in HEIs conduct research for a purpose. Table 2 indicates what motivates university faculty to conduct research. Primary motivations are utilization of research output by disseminating the results to local and international conferences; personal satisfaction; build/expand my network; and research capability programs of the University. In addition to the factors identified in Table 2, assisting novice researchers and self-improvement were mentioned as motivation for research involvement. These research-related experiences contribute to enhancing university research culture and promoting research quality.

**Table 2.** Motivational Factors Involved in Conducting Research

<b>Motivational Factors Involved</b>	<b>Percentage</b>
1. Utilization of research output (dissemination in local/international conferences)	92.3
2. Personal satisfaction	90.1
3. Build/expand my network	89.0
4. Research capability programs of the University	87.9
5. Support of the administration	85.7
6. Inter and intra-institutional collaboration	83.5
7. Financial rewards and incentives	82.4
8. Opportunity to travel abroad	81.3
9. Research funding	81.3
10. Complying with institutional policies	79.1
11. Assistance of research consultants	78.0
12. Chance of promotion (Ranking system)	71.4
13. My research expertise	70.3

The qualitative response from the university faculty revealed some positive effects of their research involvement. The university faculty claimed that: they gained additional knowledge and skills through their involvement in research, it made them more competent in the field of research, and research kept them updated in the current issues/trends/discoveries related to the social concerns of the society, and research involvement enabled them to effectively assist undergraduate thesis students.

Research gives confidence in conceptualizing, writing, presenting, and publishing in national and international fora. Generally, research involvement helps university faculty grow professionally. However, they also experienced conflicting advice from mentors and a lack of informational support from advisers. There were also barriers experienced by the university faculty such as time constraints, since researchers need more time to investigate current issues/trends/discoveries. Nevertheless, it is perceived that research had positive benefits in their teaching activities.

In the study conducted by Zhang (2014), heavy teaching was mentioned as a major obstacle in being able to accommodate research for all university academic staff. Most respondents from the questionnaire survey and all the interviewees reported that they could not protect the periods of uninterrupted research time; moreover, the time spent on research was approximately one-third of the time spent on teaching. This finding was supported by a number of other researchers (Bland et al., 2005; Ma & Runyon, 2004; Toews & Yazedjian, 2007).

### **University Initiatives to Enhance Research Culture and Quality Complementarity to the CHED NHERA 2 Guidelines and Provisions**

After AUP acquired university status in 1998, its research was even given greater emphasis or equal priority with instruction and community extension compared to the previous research practices. The research culture in the university has been gradually improving. Research involvement of faculty became the urgent need in the university. Thus, the priority areas recommended by NHERA-2 were reviewed and included in the research agenda of the university.

The university created Research Initiatives to enhance the research culture and quality among the university faculty to compliment the Commission on Higher Education (CHED) National Higher Education Research Agenda (NHERA- 2) Guidelines and Provisions. These initiatives were needed for the government and accreditation requirement to maintain the vertical and horizontal typology for HEIs. The government and accreditation requirements that needed research included University status, Institutional Sustainability Assessment, Center of Excellence/Center of Development, and Level III/IV Accreditation. The research requirements were also articulated in CMO No. 46 S. 2012, p. 27.

The CHED has been promoting research among HEIs. The NHERA guidelines were articulated to guide researchers in private and public HEIs on the researchable areas recommended to improve the research capability of the faculty members. The agenda stipulated in NHERA-2 support the higher education sector's goals to develop a globally competitive workforce, generate and transfer knowledge and technology to enhance productivity, and further promote quality of life. The ultimate goal for this endeavor is to reduce poverty and ensure sustainable development in the country (NHERA 2, 2009-2018, p2).

***Agendum 1, "Improving research capability of Philippine HEIs to generate knowledge towards international competitiveness" through: (a) research capability programs; and (b) strengthening Graduate Education in Priority Disciplines."***

For the last five years, several capability programs in various forms were implemented in the university. These included conducting research enhancement seminars, inviting local and international speakers who are expert in research and related fields, assigning a research consultant per department to assist the faculty from conceptualization to presentation and publication, and a research seminar or paper presentations organized for the faculty during University Research Day. In addition, research colloquium and write-shops were conducted by colleges, which is now part of a program headed by the assigned Research Consultant, and budget allocation for presentations and publications were yearly allocated for faculty research and other research-related expenses. Furthermore, the university is promoting inter-college collaborative research with students coming from various colleges.

In addition to improving the research capability as stipulated in Agendum 1, there is a need to strengthen the Graduate Education in priority disciplines. A Thesis and Dissertation Handbook was made available for both graduate and undergraduate students for a more practical, understandable, and comprehensive reference guide to students through all stages of their thesis and dissertation writing. Research Agenda items were formulated for each college in line with the philosophy, mission, and vision of the University and the national research agenda for business, education, sciences, arts and humanities, allied health and other programs offered by the institution. In addition, there is a strong mentoring program for graduate students, panel members, and future advisers. The graduate students were provided with adviser, methodologist, statistician, and external examiner to ensure quality research that would hasten student's development in conducting research.

***Agendum 2, "Enhancing research productivity of the HEI in distinctive areas of competence (disciplinary studies)" through: (a) research funding; (b) institutionalization of a system of rewards and incentives; and (c) Journal Accreditation Services***

In terms of research funding, the university under study had allotted research funding for the faculty with approved research proposals. A proposal driven research funding, which is equivalent to at least 75,000 Philippine pesos (PhP) (US\$ 4,177) is awarded to each faculty member. The university has received grants from CHED on a study on *Jatropha*, Biogas project, DOST on Multi-heat pump drier, and Sensidol study from Biocostic, Inc. In terms of institutionalization of a system of rewards and incentives, the university, through the University Research Center, designed and has periodically reviewed financial incentive schemes for faculty depending on the type of research involvement (paper or poster presentation, research or book publication, etc.). Higher monetary incentives are given to a faculty who published in Scopus/ISI journal with a high impact factor. Research is also one

of the bases for giving a doctoral allowance. Doctoral allowance/professorial chair incentive are awarded to doctoral degree holders who meet the approved requirements. One of the requirements is research in terms of paper presentation at local and international conferences; book publication; production of patentable research; and research published in refereed journals. Research is also one of the major criteria included in the faculty ranking system.

The University is producing a multidisciplinary research with outputs published in refereed publications. Journal accreditation is established in the Philippines to ensure adoption of a fair and impartial refereeing system for all research journals in higher education in the country (NHERA-2 2009-2018, p4). The university is processing the requirements for journal accreditation of its publications.

***Agendum 3, “Generating new knowledge needed for the advancement of higher education as well as for national development”, through: (a) Dovetailing HEIs with R & D Initiatives of the DOST; (b) establishing external linkages; (c) establishment of zonal research laboratories with state-of-the-art facilities and equipment for cutting edge technology research; and (d) creation of visiting scholars and fellowship program***

The University has been a member of the Southern Tagalog Consortium for Industry and Technology (STCIERD), a regional partner under the Department of Science and Technology (DOST) since 2013. The benefit of being a member entails funding, training, technology transfer, industry partnership, and research collaborations with other HEIs. This 2017, the university was a recipient of a PhP 4.7 million (\$78,341.45) research grant from DOST. Research proposals in biology, chemistry, and electronics engineering and technology information have been submitted to DOST for possible research grants.

Linkage/s by program is one of the major requirements for government recognition. The CHED Memorandum Order 01 series of 2000 established the policies and guidelines on international linkages and twinning programs. These policies and guidelines aim to strengthen educational, cultural, social, economic and political bonds between the Philippine and foreign institutions of higher learning fostering cultural exchange in a global community (CHED Memorandum Order (CMO No. 01 Series of 2000, pp. 1-7). With these, the university has international linkages with HEIs in Asia and other parts of the world such as the USA, Ghana, Malaysia, Thailand, Vietnam, Cambodia, and Singapore. The University stays strong in its program offerings by having 28 programs accredited among the 34 programs in which nine programs are accredited Level IV, six are accredited Level III, one is accredited Level II, and 12 are accredited Level I. With these, many international students enroll in this university. Students represent 56 countries around the globe. The university avails itself of various categories of linkages, such as invitation for international speakers, exchange faculty/students, international visits and benchmarking, and on-the-job training. In line with ASEAN integration, the university is among the only 78 education institutions in the whole Southeast Asia which holds outstanding membership with *Passage to ASEAN* (or P2A) status. However, in terms of research, there is minimal international collaboration.

Tullao (as cited in Rosaroso, Dakay, & Sarmiento, 2015) identified activities that were originally in the spirit of internationalism, such as faculty exchange and development and international networking among others, and included research. However, based on the responses of the HEIs, not many linkages have been made for the purpose of research collaboration. The establishment of Zonal research laboratories has meant that their programs have benefited universities in the Region. Our university has had grants and benefits approved in the zonal office such as technical support, sharing of expertise through seminars and trainings; and sharing of laboratory equipment and facilities.

DOST has a continuous program called “Balik Scientist” that takes Filipino scientists abroad to return ultimately and share their knowledge in the country. Institutions can submit a proposal for the need of a Balik Scientist in the university; if granted DOST caters for all the financial obligations. In terms of scholarship and fellowship program, DOST may give travel grants for research paper presentation; our university has benefited recently through receiving such a grant.

**Agendum 4, “Promoting and facilitating dissemination and utilization of research outputs” through: a) Research dissemination and utilization; b) multi-disciplinary research; c) policy orientation; d) participation and networking; and e) balance attention given to Basic and Applied Researches**

The university faculty members have been continuously disseminating their research outputs through active participation, for the last five years, in poster and paper presentation in the conference sponsored by the National Academy of Science and Technology (NAST). The abstracts are published in *Transaction*, a peer reviewed journal by national scientists in their field of specialization. Some papers were also submitted to Philippine Psychological Association of the Philippines (PAP), the Department of Science and Technology CALABARZON Region (DOST-CALABARZON) on Regional Invention Contests and Exhibits (RICE), International Scholars’ Conference, a collaboration of four partner Adventist Institutions in Asia, and other international conferences.

Aside from publication, the university faculty members have produced modules, books, protocols, and guides for students and community residents as a by-product of research. Some were able to develop food and non-food products as a result of the student and faculty research.

Since the university is offering various programs in business, allied health, nursing, sciences and technology, social sciences, and education, the research produced by the students and university faculty is multidisciplinary. The URC and the Center for Graduate Studies ensure that the research produced among faculty and students is aligned with the national research agenda, philosophy, mission and vision of the university, and the faculty’s area of specialization.

The University Research Handbook was published, which specifies specific policy in the conduct of research, budget and incentives, policy of loading and de-loading, and priority areas as recommended by NHERA –2.

In the new strategic plans, which aim to improve institutional effectiveness, institutional research are imbedded in the strategic planning. Institutional studies are used as the basis for policy formulation and development. Various research designs are used according to the need and discipline of the researcher. Descriptive surveys, correlational, experimental, qualitative research, and mixed methods are useful to obtain feedback on the satisfaction, efficiency of services, and programs in the university. The university ensures that different designs are used in the conduct of research for students and faculty. There is a balance for the use of these designs although descriptive/exploratory and correlational designs are commonly used for social sciences, nursing, business, theology and education-related researches, while intervention studies or experimental research approaches are commonly used for areas like sciences and technology and allied health.

Guided by the research agenda, several research undertakings are given considerations in the university such as “generating new knowledge and advancing the frontiers in the various disciplines within the academe.” NHERA-2 emphasizes knowledge generation as one of the main purposes in conducting a research. The formulation of a research agenda is completed for each College. Research is made possible by providing research consultants per department, by providing financial support to research-related activities by faculty generating and advancing new knowledge.

The University Research Center, with the approval of academic administrative council, established seven research priorities to assist students and faculty in their research conceptualization. The Research Agenda of the university has focused on the seven research priorities namely, New and emerging areas on holistic health, Program/Curricular Studies, Policy Oriented Studies, Product Development, Quality and Standards, Model Building Studies and Theological Education. These issues are anchored in the research priorities of the Millennium Development Goals (MDGs), CHED, the Departments of Education and Health, and DOST.

*In terms of the NHERA 2, priority Disciplinary clusters consist of Science and Math, Environmental Science, Humanities, Social Sciences, Education and Training, Health and Health Profession, Information Technology, and other Disciplines.* The university faculty has conducted research in the area of science particularly in biology, agriculture and mathematics, allied health such as nursing and

public health, dentistry, social sciences, humanities, and education and training. The majority of these studies were from the field of social sciences and nursing.

*In terms of researches on quality and standards in the context of international rankings and global benchmarking; quality assurance systems; equivalency; redefining classifications of HEIs; technology and education; model building studies; institutional development studies; manpower demand and supply studies; and graduate tracer studies.* The researchable topics mentioned are utilized and integrated in the conceptualization of titles by all programs in the university. Tracer studies have been conducted to provide information to the university on employment and career options, the character of work and related competencies, and information on the professional orientation and experiences of their graduates.

*Other research topics considered by the Commission in response to emerging country needs include NHERA-2 multi-sectoral research on food safety and security, enhancing indigenous renewable energy source in the domestic energy mix, development of vaccines and diagnostic kits using indigenous materials, and disaster risk management. Further issues consist of pollution control, climate change, specifically on the issue of global warming, the future of ASEAN, and peace process and conflict resolution.* Studies on food safety and security, disaster risk management, pollution control, and climate change have been conducted for the last five years and are still on going. The research topics approved and conducted were aligned with the program offerings of the university. Since the College of Medicine is in its early years of existence, studies on development of drugs, vaccines and diagnostic kits are being considered. However, research on the initial phase of drug development have been conducted in the past five years up to the present. Plants have been studied as alternative to commercial drugs to determine their medicinal properties, as AUP is an Adventist institution that believes in the biblical principles of natural medicines.

## **Conclusion**

This study concludes that the faculty research involvement from 2012-2016 has increased from 37% to 64.24%. The primary research-related activities involvement among university faculty in this study were: sat as a panel member in an oral defense; mentored undergraduate; supervised undergraduate thesis; enriched self on research methodologies, statistics, and research writing; and presented a paper at national and international conference levels. The factors that motivate the university faculty to be involved in research were utilization of research; personal satisfaction; build/expand network; research capability programs of the University; and support of the administration. Research initiatives were created and implemented by the university to enhance research culture and quality. The research initiatives were based on the four goals articulated by the National Higher Education Research Agenda (NHERA-2). This study has helped raise awareness on addressing issues of limited research involvement and publishing scholarly research papers.

## **Recommendations**

The administration should continue motivating the university faculty to do research and be involved in research activities. URC may review the incentives policy to invite more researchers to publish and flourish rather than perish. It is also recommended that the capabilities of faculty should be regularly evaluated to help transform all colleges and universities in the country into research-intensive institutions of higher learning. The university also needs to assess the resources, particularly the laboratories needed, to the enhance research culture and improve research quality and to carefully study the incentive scheme, that is in accordance with the research performance of the faculty. These rewards may include money, promotion, recognition, and new responsibilities. Building and strengthening the teaching/learning-research nexus could be explored for different types of HEIs from teaching-only universities on one end to research-intensive universities on the other. Another

study of this kind is highly recommended to determine the effectiveness of University Initiatives in relation to the CHED NHERA 2 Guidelines and Provisions.

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