

PRO FUTURIS AND THE GRADUATE SCHOOL: 2015

We begin another year with new leadership (a new provost, three new deans, two new interim deans), new facilities (most notably, the beautiful Paul Foster Campus), new graduate programs (including PhDs in Environmental Science and Entrepreneurship, a DScPA in General Surgery, and an EdD in K-12 Leadership), and a record number of graduate students (1707). Still, one thing that hasn't changed is the influence of *Pro Futuris* on Baylor's strategic planning, including its emphasis on **"academic excellence," "compelling scholarship,"** and **"judicious stewardship."** In fact, all the changes in personnel, programs, and facilities listed above reflect our *Pro Futuris* goals. The continuing importance of *Pro Futuris* produced one other thing that has not changed: the layout of this newsletter. Just as with the three previous reports, the data describing the Graduate School are organized around the goals and aspirations of *Pro Futuris*.

The report also resembles the previous versions in another way: including so many charts and tables, displaying more metrics about more aspects of graduate education, that few beyond a graduate dean will appreciate all of them. Thus, as a shortcut, the following links will take the reader to those aspects of *"Pro Futuris* and the Graduate School" deemed more important or interesting.

- A Research University with Very High Research Activities
- Where Should We Grow?
- Recruiting and Retaining
 Excellent Students
- Retention and Diversity

- Graduate Student Research
- Integration of Faith and Learning
- Outstanding Teaching
- Community-Building
- Transformative Education

- Judicious Stewardship
- Graduate Student Insurance
- Time to Degree and Debt
- Placement of Doctoral Graduates
- Scholarly Profile of Our Faculty

A Research University with Very High Research Activities

For the Graduate School, the most specific and challenging *Pro Futuris* goal calls for Baylor **"to approach the profile of Carnegie's Research Universities with Very High Research Activities."** As the classification system moves from the Carnegie Foundation to the University of Indiana, the criteria and weights may change. However, a key criterion for Very High Research (VHR) status is and will likely continue to be production of research doctorates in three academic areas: STEM (Science, Technology, Engineering, and Math), the Humanities, and the Social Sciences. While Carnegie does not establish thresholds for doctoral production, comparing Baylor to three VHR universities – Oregon, Notre Dame, and Rice – with similar faculty counts (and without medical schools) shows that <u>our production of research</u> <u>doctorates must grow</u> in all three categories.



 Table 1. Doctoral Graduates

 for Baylor and Selected "VHR" Institutions

Exactly which doctoral degrees count toward VHR status is determined by the Carnegie Foundation. The PhD is included, of course, as well as the DSc, the EdD, and the PsyD. While Baylor doctoral degrees such as the DPT, DNP, and DMin are important parts of our educational offerings, it appears that they do not include the research emphasis required for VHR status.

We have a recent history of growth in research doctoral production, and that level of growth must be maintained to achieve this ambitious *Pro Futuris* goal of "very high research." Moreover, when *Pro Futuris* calls for a quantitative increase in doctoral education and research it presupposes a fundamentally qualitative change in graduate education at Baylor as well. In order to have research doctoral output similar to Rice, Oregon, or Notre Dame, graduate education <u>must do more than get bigger; it should also get better</u>. Nothing less than transformational efforts with faculty scholarship and external funding are required for graduate education at Baylor, or as *Pro Futuris* concludes in a bit of an understatement: **"Still, much work remains in order to position Baylor as a Carnegie-classified Research University with Very High Research Activity."**

Where Should We Grow?

We need to increase PhD production in all three disciplinary categories, STEM, the Social Sciences, and the Humanities. Table 2 shows the three-year rolling annual average of doctoral production at Baylor as well as projections based on enrollment trends for near term growth. These projections indicate that most of the growth in Baylor's PhD production over the next five years will be driven by STEM. This growth in the STEM fields should bode well for another criterion on which we must improve to achieve VHR status: external funding for research. <u>By 2019, doctoral production in STEM programs should grow from 32 to 44 per year</u>. Additionally, new PhD programs are being proposed in STEM fields. If they are added to our doctoral offerings, they too will eventually drive our STEM PhD production upward.



Doctoral Program		Annual Doctoral Graduates		Annual Doctoral Grads
		Current ¹	2020 ²	Per Program/Area
	Biology (PhD)	5.0	5	
	Biomedical Studies (PhD)	3.3	4	
	Chemistry (PhD)	4.3	5	
	Ecological, Earth, and Env. Science (PhD)	1.7	2	
	Electrical & Comp. Engineering (PhD) ³	0.7	4	
STEM	Environmental Science (PhD) ³	0.0	2	Current ¹ : 32
STE	Geology (PhD)	3.0	5	Projected ² : 44
	Information Systems (PhD) ³	0.7	1	
	Mathematics (PhD)	4.3	5	
	Mechanical Engineering (PhD) ³	0.0	2	
	Physics (PhD)	4.0	4	
	Statistical Science (PhD)	5.0	5	
	Church Music (PhD) ³	0.0	1	
S	Church State Studies (PhD) ⁴	1.0	0	
itie	English (PhD)	6.7	9	Cumantl. 24
an	History (PhD)	0.0	2	Current ¹ : 24 Projected ² : 24
Humanities	Philosophy (PhD)	4.3	4	
エ	Religion (PhD)	8.0	8	
	Religion, Politics, and Society (PhD) ⁴	3.7	0	
S	Educational Psychology (PhD)	4.3	3	
cial	Political Science (PhD)	3.0	3	Current ¹ : 14
Social Sciences	Psychology and Neuroscience (PhD)	2.7	3	Projected ² : 12
Ň	Sociology (PhD)	3.7	3	
	Clinical Psychology (PsyD)	7.0	6	
	Curriculum & Instruction (EdD)	2.7	2	
Other	Curriculum & Teaching (PhD)	1.7	2	
	Education Administration (EdD)	0.3	2	
	ENPH/KENPH (PhD)	1.3	3	Current ¹ : 36
	Health Services Research (PhD) ³	0.0	0	
	Higher Education Studies & Leadership (PhD) ³	0.0	2	Projected ² : 50
	Occupational Therapy (DSc)	6.7	3	
	Physician Assistant (DSc)	13.0	23	
	Physical Therapy (DSc)	3.0	3	
	Social Work (PhD) ³	0.0	4	
GRAND T	OTAL	105	130	

Table 2. Carnegie Doctoral Production at BaylorCurrent Counts and Five-Year Projections

¹Three year annual average (Summer 2012 – Spring 2015) ²Projected for 2019-20

³New program ⁴Program has been phased out

Given *Pro Futuris*'s desire to **"emphasize health-related professional programs"** and **"increase our funding and support of academic programs in science and engineering,"** those Humanities, Social Science, and especially STEM programs that engage in externally funded health-related research funding would seem well situated to fulfill *Pro Futuris*'s goals.



Even with the growing emphasis on research doctorates, it remains important to remember and recognize <u>the growing</u> <u>significance of successful master's programs</u> at Baylor, especially those in the professions. Table 3 shows that six of the ten largest graduate programs are at the master's or professional level, and they continue to grow in size. Note also that two of our largest graduate programs are both highly rated health care programs that we offer through the U.S. Military: the MHA ranked #7, and the DPT ranked #5, respectively, according to *U.S. News & World Report*.

Health Care Administration (MHA)	
Business Administration (EMBA)	
Business Administration (MBA)	
English (PHD)	65
Chemistry (PHD)	64
Religion (PHD)	57
Physical Therapy (DPT)	51
Physics (PHD)	38
Performance (MM)	
Sports Management (MSED)	

Table 3. Enrollment in Largest Graduate Degree Programs

Recruiting and Retaining Academically Excellent Students

Pro Futuris states that Baylor will recruit an **"academically excellent student body."** Even though we increased the application fee, Table 4 shows that the number of students applying to graduate programs at Baylor has grown dramatically, while the number of new graduate students admitted and enrolled have grown by lesser amounts. While I would like to see a greater increase in the number of new graduate students, there are visibility and quality benefits from the current situation.



Table 4. Graduate Applications and Enrollment



The increase in applications reflects a growing national reputation for our graduate programs. When coupled with our limited growth in overall graduate admissions, the result is <u>an increasingly selective Graduate School</u>. Table 5 shows that we have over twice as many applications as acceptances and over twice as many accepted applicants enrolling as those who declined.





Although Baylor offers almost one hundred graduate degree options, <u>a small number of professional programs</u> <u>generate a significant proportion of our applications</u>. Table 6 shows that those highly visible programs are maintaining their popularity, and with the new online degree option, the MBA has greatly increased its number of applications.

Program	2012-13	2013-14	2014-15
Business Administration (MBA)	240	216	420
Communication Sciences and Disorders (MS)	247	249	306
Clinical Psychology (PSYD)	222	222	271
Accounting (MACC)	109	123	125
Religion (PhD)	89	89	87
Performance (MM)	64	68	86
Health, Human Performance and Recreation (MSED)	138	104	82
Business Administration (EMBA)	92	79	70
Physics (PhD)	94	75	70
Statistical Science (PhD)	74	85	66

The growing number of applications has typically produced greater selectivity and higher GREs. Still, we lose out more often with the strongest applicants than I would like. Accordingly, we are developing support packages that will improve our offers to applicants likely to receive acceptances from several strong programs, in addition to Baylor.





Table 7. Mean GRE Percentiles

As we might expect, students planning for graduate studies in the humanities score higher on the verbal section than those planning to study in STEM fields. The <u>verbal GRE percentiles for our humanities doctoral programs are exceptionally</u> <u>strong</u>, with the mean percentiles in the high 90s. Not surprisingly, the highest quantitative percentiles are in our STEM programs.



Table 8. Top Mean GRE Verbal Percentiles by Doctoral Program

Table 9. Top Mean GRE Quantitative Percentiles by Doctoral Program





Another way of identifying high-performing doctoral programs is through comparison to global disciplinary means. For example, we can compare Clinical Psychology doctoral students at Baylor with Psychology graduate program applicants around the world. As we see from the Verbal percentiles in Table 10, Baylor Clinical Psychology graduate students globally by 34 percentage points. Similarly, in Table 11, History students at Baylor score 37 percentage points higher on the Quantitative section. Thus, <u>our graduate students in Clinical Psychology are considerably more skilled verbally</u> than Psychology graduate students globally, and the same is true for PhD students in Social Work, Information Systems, and Curriculum & Teaching. <u>Our History graduate students are exceptionally strong mathematically</u> in comparison to other History students as are our students in Clinical Psychology, Educational Psychology, and Sociology in comparison to their disciplines.



Table 10. Margin by Which Baylor Mean Verbal GRE PercentilesExceed Global Mean Verbal GRE Percentiles

Table 11. Margin by Which Baylor Mean Quantitative GRE PercentilesExceed Global Mean Quantitative GRE Percentiles



Retention and Diversity

Pro Futuris calls for Baylor to be effective in the **"retention of a diverse student body."** Nationally, retention is a serious problem for graduate schools. The Council of Graduate Schools estimates that, seven years after enrollment, national PhD graduation rates are only 40%. Fortunately, <u>Baylor's retention and graduation rates are much better than</u> the national norms. Most recently, 60% of our PhD students have graduated within seven years.

At the graduate level disagreement exists concerning whether or not international students should be included in the diversity count. If they are, Baylor's diversity measures will increase as we grow our STEM programs, and our need to provide English and cultural skills will grow accordingly. The overall minority percentage is 30%, but if we focus only on U.S. citizens for our racial and ethnic diversity measures, <u>our Black and Hispanic percentages</u>, while growing, still <u>total only 15%</u> and suggest a strong need for improvement. A positive note for gender diversity: The Baylor proportion of males to females is 54/46 at the graduate level, considerably more balanced than most undergraduate ratios.



<u>Language Support for International Graduate Students</u> – The Graduate School offers a <u>course</u> focusing on improving speaking and listening skills, for all international teaching assistants, lab assistants, visiting scholars and post-docs. Classroom activities are divided equally between English language training and the communication skills required in an academic setting. Two sections of the course are offered each semester, with another intensive section taught during the summer.

Opportunities for Graduate Student Research

Pro Futuris aspires for us to **"produce research and creative work at the highest levels,"** and **"increase opportunities for students to engage in research with faculty."** These aspirations are fundamental for graduate education. One measure of how successful we are in these regards is the degree to which our students present their research at professional meetings in their discipline. With over 500 presentations last year, <u>our graduate students are producing research and engaging within their disciplinary guilds</u>. This is a remarkable achievement and I can think of no other measure that indicates more clearly the exceptional skill and dedication of our graduate students and their faculty mentors.



Table 12. Presentations by Graduate Students at Professional Meetings



Doctoral Program	2014-15 Total Student Presentations	Per Capita
HHPR	42	3.50
Educational Psychology	48	3.20
History	17	1.70
Clinical Psychology	47	1.52
Sociology	24	1.14

Table 14. Top Master's Programs for Graduate Student Presentations at Professional Meetings

Master's Program	2014-15 Total Student Presentations	Per Capita
Theatre Arts	9	1.13
School Psychology	18	0.86
Educational Psychology	15	0.83
Geology	6	0.33
Spanish	3	0.33



Another and even more rigorous sign of our students' research prowess is their growing ability to publish their research in peer-reviewed, professional journals while they are still in our graduate programs. We published over 350 such articles this year. Table 16 lists those doctoral programs that are leaders in graduate student publications.



Table 15. Peer-Reviewed Publications by Graduate Students in Professional Journals

Table 16. Top Doctoral Programs for Annual Student Publications

Doctoral Program	2014-15 Total Student Publications	Per Capita
Educational Psychology	36	2.40
Religion	102	1.73
Information Systems	13	1.63
Geology	23	1.10
HHPR	12	1.00

Integration of Faith and Learning

Pro Futuris includes a list of "Core Convictions" and first among them is that Baylor will **"encourage the integration of Christian faith and the intellectual life."** Table 17 reports on a survey we give to all new graduate students and while it shows that financial considerations matter, a lot, <u>we recruit and enroll students who value both our strong academics and our strong faith commitment</u>.







In addition to the Christian role models provided by their mentors, the Graduate School offers a number of programs that help students grow spiritually.

- <u>BCU Scholars</u> A program co-sponsored by the International Association for Baptist Colleges and Universities for PhD and MFA students from Baptist universities who wish to teach in a Baptist college or university upon graduation.
- <u>Convers Scholars</u> Sponsored by the Graduate School and the Institute for Faith and Learning, this program encourages and supports doctoral students interested in connections between faith, learning, and vocation. The program convenes dinners and seminars monthly.
- <u>Spiritual Life Events</u> The Graduate School and the staff at the Bobo Spiritual Life Center work together to support students' spiritual development during graduate school. The fruits of these efforts seem promising: Between 2013 and 2015, 90% of students rated their spiritual experiences at Baylor as good, very good, or excellent an increase of 4% over the similar reporting period four years earlier. In addition, 61% of graduating students reported gaining a deeper understanding of their faith while at Baylor.



 Table 18. Percentage of Graduates Reporting Quality Spiritual Experiences

• <u>Graduate Seminars on Science and Religion</u> – A program for STEM doctoral students to explore the relationship between science and religion. Participants meet five times over the course of the semester to discuss common readings relevant to the topic.



STEM doctoral students in discussion with Professors Ferraro and Kearney.



Outstanding, Excellent Teaching

That Baylor possesses a **"rich tradition of outstanding teaching"** and that we remain **"committed to excellence in teaching"** are among the least surprising statements in *Pro Futuris*. Baylor's commitment to the highest quality teaching creates two related challenges for the Graduate School. First, we must ensure that undergraduates taught by graduate students in the classroom or laboratory receive instruction equivalent to the high standards maintained by Baylor faculty. Second, since many of our graduate students plan to teach in their discipline, we must help them develop pedagogical as well as disciplinary knowledge. Accordingly, the Graduate School has developed several programs providing pedagogical training.

- <u>Preparing Our Future Faculty (PROFF)</u> The Graduate School offers ten free, interrelated workshops each academic year designed to assist our students with the processes of academic job searches and entering the ranks of higher education professionals.
- <u>Teaching Capstone in Higher Education (TeaCHE)</u> A self-paced training for students wishing to teach in higher education. With an increasingly tight and competitive job market, this capstone is intended to enhance students' readiness to teach in higher education, thereby increasing their marketability.
- <u>New TOR Orientation</u> Required training for new teachers of record and lab instructors covering the Family Educational Rights and Privacy Act (FERPA), Title IX, responses to students of concern, and other related issues.
- <u>Seminars for Excellence in Teaching (SET)</u> A series of free seminars on various aspects of teaching offered by Baylor's Academy for Teaching and Learning. SET seminars facilitate the sharing of ideas and insights about teaching and learning.
- <u>Teaching Awards</u> Awards that recognize excellence in teaching among graduate students. Recipients are given the opportunity to attend a teaching conference, as well as a plaque commemorating their achievement.
- <u>Guest Teaching Program</u> In partnership with the Academy for Teaching and Learning, this program provides college teaching experience by coordinating graduate student substitutes for faculty teaching introductory-level courses.

One important measure of the success of these programs is Baylor's student assessments of teaching. Our goal is always to aim for the high levels of teaching quality provided by Baylor's faculty. Table 19 shows that, on average, <u>undergraduates in classes taught by graduate students are equally likely to agree that they "learned a great deal from this course</u>" when compared to sections taught by our faculty.



Table 19. Graduate Student and Faculty Teaching Assessments* (past three years)



^{*}Measured by answers to question 14, "I learned a great deal from this course." Response items include: strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree.



^{*}Based on programs having at least three sections taught by Teachers of Record and measured by response to "I learned a great deal from this course." Response items include: strongly disagree, slightly disagree, slightly agree, agree, and strongly agree.





*Measured by response to "I learned a great deal from this course." Response items include: strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree.

Representative of our commitment to quality teaching, each year the Provost honors graduate students who, by a rigorous selection process, have done an exceptional job of undergraduate teaching. The 2014 honorees are shown below.



Todd Ferguson (Sociology), Huy Nguyen (Math), Jeremy Leatham (English), Courtney Bailey Parker (English), Nathan Warf (Political Science), and Dr. Laine Scales. Not pictured, Tom Carpenter (Psychology)



Community-Building

Pro Futuris states that **"we will provide additional community-building opportunities for graduate and professional students."** Much of this is done well at the program level. However, the Graduate School offers unique <u>venues</u> for interdisciplinary community.

- <u>Graduate Student Association</u> A student organization that strives to enrich the academic and social life for graduate students as well as advocate for the rights of these students and voice their concerns.
- <u>Graduate Student Orientation</u> Half-day orientation for incoming graduate students that provides a general introduction to University traditions, services, and life as a Baylor graduate student.
- <u>SIC 'EM (Student Intellectual Community Enhancement Money)</u> Funding for student-initiated events to build intellectual community. SIC 'EM projects contribute to a vibrant intellectual community at Baylor and provide a means for informal discussion and presentation of academic work.
- <u>Community Garden</u> The Baylor Community Garden provides educational opportunities to the university and local organizations on how to maintain gardens and encourage healthy lifestyles. A special focus is placed on integrating sustainable water-use technologies and urban garden training.
- <u>Life on the Grad Line</u> A series of free 60 minute workshops designed to assist students in their adjustment to graduate school. The workshops cover topics such as stress management, handling finances in graduate school, and preparation for thesis and dissertation writing.
- <u>Graduate Student Leadership Council</u> A group of student leaders from departmental graduate student organizations. The leaders of these groups meet with the Graduate School each semester in order to increase dialogue among the departments and with the Graduate School.
- <u>Graduate Student Housing Communities</u> at The Quadrangle and Browning Square These communities offer accommodations within walking distance of campus for singles and students with families. Through student-led programming, these communities foster relationships across academic disciplines.





Students enjoying the community garden at Browning Square and a meal at the Quadrangle

Transformative Education

Arguably the most important and ambitious goal from *Pro Futuris* is directed toward transforming our students. *Pro Futuris* calls for Baylor to provide **"a transformative educational experience"** and claims that these **"few short years on the Baylor campus … should be a source of pride and benefit throughout their lives**." This extremely worthy goal is also extremely difficult to measure. However, we do ask each graduate student when they file for graduation, "Knowing what you know now, would you recommend Baylor to prospective students in your field?" Exit survey (taken the semester of graduation) responses include: (1) definitely not, (2) probably not, (3) maybe, (4) probably and (5) definitely. It's not exactly measuring transformation, but this is the closest indicator we have. <u>Overall, our graduate programs score well on student satisfaction</u> – a little higher than "probably" but below "definitely," with a mean of 4.1. Some programs do exceptionally well (a mean of 4.5 or higher) in graduating satisfied students, and they are listed below. For our master's programs, it is worth noting that the top ranked programs are closely tied to specific occupations and are especially well represented by the School of Education.





Table 22. Exit Survey: Most Satisfied Master's Students*

*Measured by response to "Would you recommend Baylor to prospective students in your field?" Response items include: definitely not, probably not, maybe, probably, and definitely.



Table 23. Exit Survey: Most Satisfied Doctoral Students*

Still, one could argue that our soon-to-graduate students cannot possibly know if their Baylor education will be, in the words of *Pro Futuris*, a "**benefit throughout their lives**" until they have lived more of their lives. Maybe they just thought they were transformed when responding to the exit survey. In terms of measurement, the best we can do here is our alumni survey, administered to all PhD students one year after graduation, asking them the same "would you recommend" question. Those responses indicate that graduates from our doctoral programs in Statistical Science, Political Science, Mathematics, Educational Psychology, and Curriculum & Instruction are most likely to believe their program was beneficial, all scoring between "probably" and "definitely" on the "recommend Baylor" question.





*Measured by response to "Would you recommend Baylor to prospective students in your field?" Response items include: definitely not, probably not, maybe, probably, and definitely. (Three year rolling average for programs with five or more responses.)



^{*}Measured by response to "Would you recommend Baylor to prospective students in your field?" Response items include: definitely not, probably not, maybe, probably, and definitely.

Judicious Stewardship

Judicious Stewardship is an increasingly important *Pro Futuris* aspiration, including calls to be **"ever-vigilant about monitoring ... tuition (and) fees,"** and to **"discover new sources of program support and revenues."** Graduate education is expensive; research intensive PhD programs are especially so. Yet graduate research is one of the important characteristics that is distinctive about Baylor, as a Christian university, and like other important characteristics of this university—high quality undergraduate education, strong student support services, winning athletic programs—it costs money. Exactly how much depends on complex assumptions such as how to allocate the costs of faculty and facilities that support both graduate and undergraduate students. Still, we can **"monitor tuition and fees"** with some precision and we are seeking to **"discover new sources of program support and revenue."**

All Baylor graduate students pay student fees and most pay tuition at some stages of their study. In total, Baylor graduate students paid \$3.77M in fees and \$18.99M in net tuition to the university for FY 2015. Moreover, last year, they taught courses that would have conservatively cost Baylor \$3.42M in part-time faculty costs, assuming we could find those faculty in Waco. By these calculations, in excess of \$26M in total revenue to Baylor was provided by our graduate students. In return for this revenue, many receive stipends and/or tuition discounts, all receive mentoring from Baylor scholars who are among the best in their disciplines and gain access to an increasingly robust, increasingly expensive research infrastructure. It is a good exchange for our graduate students; their education is highly subsidized. Yet, it is hardly a "free ride." Many students graduate with levels of debt that will prove difficult to repay. According to our exit surveys, one in three Baylor doctoral graduates will owe more than \$30K.





So, it is incumbent on us to develop those **"new sources of program support and revenues"** associated with judicious stewardship if we aim to enhance graduate education. Last year, our faculty generated \$1.7M in external research grants to pay for graduate students. That is an all-time high in external funding for graduate stipends, but we can and will do better. Another source of support comes from our professional masters' programs. As we add new programs that directly translate into high-demand professional jobs, the income they generate can assist the larger graduate initiative. Perhaps the least known examples of this are our eight professional health care programs that the Graduate School offers through the U.S. military. Together, they net approximately \$1M annually to Baylor. The financial impact of our other professional master's programs depends upon cost and benefit assumptions, but in any case, they are much friendlier to the "bottom line" than our research doctorates. We are developing proposals for new professional programs that, if successfully implemented, should demonstrate the judicious stewardship and high quality to which we aspire.

Graduate Student Insurance

In recent years we became increasingly aware of the number of doctoral students on our campus who received no financial help in purchasing health insurance—this despite the fact that we have offered insurance subsidies for over a decade. At the same time, the cost of health insurance continued to rise. With input from graduate students, Graduate Program Directors, and close attention to national trends, we designed a new policy to reallocate existing resources in a way that expanded the number of eligible students. Today, all incoming fulltime, fully-funded doctoral students and some qualifying master's students receive an 80% subsidy for their individual insurance premiums. The primary goal in making these changes was to increase the number of subsidies offered, a goal toward which we have made considerable progress in just the first year. This fall the number of graduate students eligible for Baylor assistance rose by 51%.







Time to Degree and Debt

The National Science Foundation's Survey of Earned Doctorates reports that <u>Baylor's median time to doctoral degree (7.3 years) significantly outperforms the national average</u> at High Research Universities (8.7 years). This relatively quick time to degree helps provide the **"judicious stewardship"** called for by *Pro Futuris*. However, <u>our PhDs graduate with more debt</u> than the national average. For Baylor, only 39% report no debt, compared to 47% nationally; 34% report debt of \$30,000 or more, compared to 31% nationally. Since these amounts include graduate and undergraduate totals, it is difficult to discern how much of this debt is accrued at Baylor, but regardless, our PhDs are graduating with more debt, and, as *Pro Futuris* points out, **"we must be ever-vigilant about monitoring...the educational debt our students accumulate."**

Placement of Doctoral Graduates

The latest NSF Survey of Earned Doctorates report offers good news about our PhD programs: The early employment rates for Baylor's alumni at the time of graduation (40%) are comparable to those at other High Research Institutions (41%) and exceed the overall national average (37%). These employment rates are low, but they are measured before graduation and the Baylor/national comparison is encouraging.

Further, according to our own recent survey of all PhD, EdD, and PsyD graduates (n=380, response rate=95%), the full-time employment rate of Baylor doctoral graduates over the past five years is at 90%. Although no reliable national data are available for comparison, these numbers appear healthy. Full-time employment by broad discipline is reported in the table below. The patterns are probably what most of us would expect: Doctoral graduates in the humanities are more likely to be employed in the academy; STEM graduates are the most likely to hold industry jobs; the social sciences are in between. The humanities data also reflect the challenges posed by the academic job market.







Scholarly Profile of Our Faculty

Pro Futuris aspires to **"raise the scholarly profile of our faculty, as evidenced by increased publications, citations, awards, and externally funded research."** Graduate programs, especially doctoral programs, cannot be successful without faculty who win grants and awards and who publish widely cited research. Our growing research prowess is clearly measured by the number of articles our faculty publish. We are approaching one thousand articles per year in the world-wide data base of major journals maintained in the Thomson Reuters Web of Science. More broadly, the Office of Institutional Effectiveness maintains the annual Academic Analytics (AA) database that counts the publications, citations, awards, and grant dollars of every graduate faculty member of every PhD program in the nation. We can use the Academic Analytics data to look at books which are, of course, the more widely regarded metric in the humanities. According to Academic Analytics, Baylor University is in the top ten for the most books published by "high research" universities, our current Carnegie Classification. For the number of <u>books published per faculty member, we are tied for first place</u> among universities in this category. For 2014, AA's most recent release, <u>eleven of our PhD programs are among the strongest in the nation in terms of faculty scholarship</u>. Our PhD program in Religion leads, with its faculty placing among the top 7% in the nation. As a point of temporal reference, in 2007, Baylor had four PhD programs ranked in the top half. In only seven years, <u>we have almost tripled the number of highly ranked doctoral programs measured by the scholarship of our faculty</u>.



Table 28. Graduate Faculty Science Publications

Table 29. Highest Academic Analytics Rankings for 2014

PhD Program	National Percentile
Religion	93
Kinesiology, Exercise Nutrition & Health Promotion	87
Educational Psychology	86
Biomedical Studies	76
Philosophy	75
Political Science	74
Information Systems	72
Sociology	68
Ecological, Earth, and Environmental Sciences	58
Higher Education Studies & Leadership	57
Mathematics	50

Early in this newsletter I observed that *Pro Futuris* requires **"nothing less than transformational efforts with faculty scholarship and external funding."** The growing number of articles tracked in Table 28 demonstrate that the transformation has begun. Moreover, the faculty in the eleven programs graphed in Table 29 are among the strongest scholars in the nation



by objective measures such as publications, citations, awards, and external funding. And, these scholars are all employed by an unapologetically Christian university. Not only *can* we achieve such a transformation, we *are* transforming Baylor into a nationally prominent, faith-based, research university. In fact, that is the compelling message embodied, collectively, in all our metrics. In and of itself, a ranking by Carnegie or Academic Analytics means little, but when combined with multiple measures of graduate student achievements, they describe a university that takes seriously its most distinctive characteristic: Baylor's identity as **"a research university with a strong Christian commitment."**

Larry Lyon Vice Provost and Dean of the Graduate School November 2015

