

STRATEGIC PLAN FOR THE RAY P. AUTHEMENT COLLEGE OF SCIENCES

BACKGROUND:

The University of Louisiana at Lafayette's Ray P. Authement College of Sciences consists of two schools (Computing and Informatics, and Geosciences) and four departments (Biology, Chemistry, Mathematics, and Physics). These units offer a total of eight B.S. degrees, six M.S. degrees, and four Ph.D. degrees (*see organizational chart below*). Total enrollment for Fall 2012 was 1729 undergraduate students, 131 M.S. students and 136 Ph.D. students. For comparison, Fall 2002 enrollment was 1265 undergraduates, 194 M.S. students and 121 Ph.D. students. The college attracts students from the Acadiana region and beyond; 2012 enrollment included students from 53 (out of 64) Louisiana parishes, 37 U.S. states, and 40 countries. The faculty consists of 41 full professors, 28 associate professors, 29 assistant professors and 25 instructors. While some faculty members' assignments have a large teaching component, other faculty members have a majority research function. Most of the professorial faculty (74%) hold both regular and graduate faculty appointments. Post-docs, research associates and technicians also contribute to the college's research mission. In 2012, external-funding awards totaled \$6,434,149. For comparison, this total was \$3,826,025 for 2002.

Ray P. Authement College of Sciences
Azmy Ackleh, Dean

School of Computing and Informatics

Hongyi Wu, Interim Director

Programs:

- BS in Computer Science
- BS in Informatics
- MS in Computer Engineering *
- MS in Computer Science
- PhD in Computer Engineering *
- PhD in Computer Science

School of Geosciences

David Borrok, Director

Programs:

- BS in Environmental Science
- BS in Geology
- MS in Geology

Department of Biology

Paul Leberg, Head

Programs:

- BS in Biology
- MS in Biology
- PhD in Environmental and Evolutionary Biology

Department of Chemistry

Thomas Junk, Head

Programs:

- BS in Chemistry
- Pre-Pharmacy

Department of Mathematics

Keng Deng, Head

Programs:

- BS in Mathematics
- MS in Mathematics
- PhD in Mathematics

Department of Physics

Natalia Sidorovskaia, Head

Programs:

- BS in Physics
- MS in Physics

Military Science (U.S. Army ROTC)

Major Diogo Tavares

**Offered jointly with College of Engineering*

THE VISION: The RPA College of Sciences will emerge as a preeminent college of sciences in the Southeast and Gulf Coast region of the United States. The College will be recognized nationally for its innovative education, scholarly research activities addressing our nation's grand challenges, and for its diverse student body with exemplary academic achievements, leadership abilities, and global perspectives.

OUR MISSION: "*Science for our students, community, and society*"

Our mission is to serve our students, the citizens of Louisiana, the nation, and the world, through innovative and stimulating educational experiences and compelling research initiatives that create knowledge, deepen our basic understanding of the world around us, further economic development, and enhance quality of life. In support of our mission, The College of Sciences seeks to:

- Develop broad-thinking students into mature, ethical professionals, scientists, and researchers with the necessary creativity, critical thinking, and problem solving skills required to make significant contributions to industry, government, and the academic sector.
- Recruit and support top-notch teaching and research faculty engaged in scientific endeavors that are recognized nationally for their relevance and impact.
- Enrich scientific research and education through on-campus collaborations, multidisciplinary programs, large-scale multi-institution initiatives, as well as partnerships with government and industry.
- Foster scientific literacy within the University, the citizens of Louisiana, and the nation by providing stimulating courses for our students and by partnering with educators at the K-12 and community college level.
- Provide leadership in the translation and application of research into practical solutions that will benefit our local community, the state of Louisiana, our natural environment, industries of the Gulf Coast region, and society as a whole.

TARGET AREAS:

- I. **Research Excellence**, with initiatives aimed at increasing research funding and publications. Initiatives are focused both directly on the research enterprise itself (e.g. by improving research infrastructure and enhancing collaborations across disciplines and institutions) and on the support provided by strengthening graduate education and enhancing undergraduate research.
- II. **Education Quality**, with initiatives focused on various aspects of undergraduate and graduate education, including enhancement of capstone activities for undergraduates, enhancing recruitment of strong students, strengthening existing graduate programs and creating new ones.
- III. **Visibility and Outreach**, with initiatives focused, among others, on strengthening ties with our alumni, increased focus on communication with our stakeholders, and on improving fundraising.

INITIATIVES IN SUPPORT OF THE TARGET AREAS, WITH ACTIONS FOR 2013-2018

TARGET I: ENHANCING RESEARCH EXCELLENCE

- 1. Increase external funding of research in the college.** Specific initiatives aim to achieve this by, among others, improving our research infrastructure, enhancing our graduate programs and increasing collaboration on multi-disciplinary projects.
- 2. Improve research infrastructure.**
 - College staff to work with university administration on developing a master plan for academic buildings, with goal of having up-to-date buildings and laboratories needed for competitiveness in grant funding, for collaboration with faculty at Tier 1 research universities, and for allowing research to be conducted safely and in compliance with all federal regulations.
 - College staff or college-wide committee to develop a plan for cyclical equipment upgrades/replacements. Plan to include assessment of needs and assessment of funding options (e.g., targeted fundraising, providing more incentives for applying for BoR Enhancement and other equipment grants).
 - Establish core facilities to provide instrumentation for research use across the college. Initial efforts to focus on a molecular biology – genomics - proteomics core facility and an environmental chemistry – geochemistry - environmental sciences core facility. Initial efforts also to address options for covering technician salary and maintenance / repair costs (e.g., user fees, monies generated from indirect costs returns).
 - Develop a plan for upgrading faculty/staff computers and software (including site licenses for programs essential for grant proposal preparation, data analysis and manuscript preparation).
- 3. Increase size and quality of applicant pool for our graduate programs.**
 - Form a committee consisting of graduate coordinators of each graduate program in the college. Committee meets at least once per semester to discuss/evaluate/compare their methods used for graduate student recruitment.
 - Work with graduate school to increase funding for advertising and on-campus visits for potential students.
 - Work with graduate school towards providing competitive stipends for teaching assistants and University fellows.
 - For programs for which a target of increased enrollment from our undergraduate programs is appropriate, investigate potential for dual undergraduate/graduate enrollment (see also under I.1 above).
- 4. Increase the number of graduate programs.**
 - College staff and college-wide committee to study potential for new MS and PhD programs in the college. Initial efforts to include focus on an interdisciplinary PhD in Geosciences/Physics, an MS degree in chemistry, and the potential for additional PhD programs in interdisciplinary areas.
- 5. Re-invigorate established Ph.D. programs.** Established graduate programs have lost research-active faculty, in part due to retirements and heavier reliance on instructors to accommodate growth in undergraduate enrollment.
 - Develop a plan to return these programs to original target numbers for research-active faculty.

6. Enhance multi-disciplinary collaboration among college faculty.

- Increase information flow within the college (e.g. college newsletter, more frequent college-wide events).
- Optimize college web site and ensure that departments/school web sites have easily-accessible information on faculty research areas.
- Review administrative systems and processes (including tenure review, annual evaluations) with an eye on making modifications that would encourage interdisciplinary collaborations.
- Investigate the use of active approaches (such as use of the Delphi method) to exchange ideas and promote collaboration on multidisciplinary projects and grant proposals.
- Establish mechanism for college-wide seminars on interdisciplinary topics, such as regularly sponsoring a nationally prominent, interdisciplinary scientist for a college-wide seminar or initiating a college-level colloquium series with speakers working on interdisciplinary research topics.
- Investigate the potential for using existing university centers and institutes for organizing and catalyzing interdisciplinary research initiatives.

7. Increase faculty and graduate student access to scientific journals.

- Work with the library to encourage a transition to one with a primary focus on providing online access to serials.
- Work with university administration and library to investigate potential for establishing a pool with other UL System Universities.

8. Increase the number of graduate fellowships in the college.

- Provide incentives for PIs to apply for BoR PhD Fellowship and BoR MS Fellowship grants. Promote discussion and information exchange among PIs on existing BoRGF grants and PIs on proposals that did not receive funding.
- Investigate potential for fundraising targeted at graduate fellowships.

9. Enhance funding for graduate student research and support. Including:

- Investigate potential for graduate student research funding via “crowdfunding”. If this looks promising, work with graduate school and research office on organizing a crowdfunding workshop for grad students.
- Work toward formalizing funding mechanisms (outside traditional grant and contract mechanisms) whereby industry or businesses can support student “apprenticeships”.

10. Introduce incentives to encourage funding graduate students as research assistants on grants and contracts.

- Investigate means of incentivizing faculty investigators to fund students from grants, including high weights for annual evaluation rubric scores related to such funding, and providing “in-kind” tuition waivers for some students supported as graduate research assistants.

11. Enhance mentoring of new research-active faculty members.

- College staff or college-wide committee to assist departments with mentoring of new research-active faculty members.

TARGET II: ENHANCING EDUCATION QUALITY

1. **Increase opportunities for undergraduate research, internships, or other capstone experiences.**
 - Conduct an inventory of existing opportunities within the college, and determine what can be done to increase opportunities (e.g. incentives for participating faculty and students).
 - Advertise these opportunities on the college website for recruiting purposes but also to increase collaboration across departments (e.g. chemistry majors involved in biological research or biology majors involved in biomathematics research) and promote interdisciplinary projects.
 - Establish an undergraduate research experience program that can serve both as capstone experience and can be used to transition our undergraduates into our graduate programs (for graduate programs that benefit from increase in local recruitment).
 - If funding is available, develop a COS office for undergraduate research. This office would coordinate undergraduate research on campus and provide COS-wide professional development opportunities for undergraduate student researchers. The office would also track undergraduate researcher numbers and outcomes.
2. **Increase capacity for courses that form “bottlenecks” towards student graduation.**
 - School directors and department heads identify bottlenecks and meet to discuss and implement approaches best suited to remove the bottlenecks. Solutions could include an increase in manpower (e.g., additional graduate teaching assistants, additional instructors, use of undergraduate seniors on work study) or scheduling of courses outside traditional hours (when space is limiting factor).
3. **Enhance recruitment of strong students into our undergraduate programs.**
 - Increase college involvement in regional Science Fairs, Science Olympiad, Louisiana Computer Programming Classic, etc. This could be reflected in giving out a special College of Sciences overall award. The college staff will work with the Office of Undergraduate Admissions & Recruitment to ensure follow-up (application packets sent out participants).
 - Set up a college-wide committee to work with Office of Undergraduate Admissions & Recruitment to increase visibility of college during recruiting efforts and to enhance enrollment in sciences. This committee is to assist the Office of Undergraduate Admissions & Recruitment in evaluating innovative recruiting techniques (such as predictive modeling tools that use past enrollment data to predict an institution’s prospective students in terms of likelihood to enroll). The committee is also to assist the Office of Undergraduate Admissions & Recruitment Office in enlisting faculty members and possibly graduate students with task of exciting prospective students at targeted high schools.
 - Coordinate efforts (within the college and with efforts at the university level) towards dual enrollment of qualified high school students into freshman classes.
 - Form a committee to assist with coordination and to look into availability of STEM grants (to attract more students or to possibly fund extra summer courses).

4. **Enhance mentoring of new faculty members, and promote adoption, among established faculty, of new didactical approaches and methods.**
 - College staff or college-wide committee to assist departments with mentoring of new faculty members.
 - College (in collaboration with university) to investigate what can be done as far as incentives for faculty to adopt effective didactical approaches, and to provide training opportunities.
5. **Investigate the potential for offering certificates** in areas with a strong employment potential and not covered by our existing programs.
6. **Enhance graduate education** with many of the initiatives that are targeted towards both graduate programs and research excellence (see Target I above).

TARGET III: INCREASING VISIBILITY AND OUTREACH

1. **Enhance fundraising in the college.** Establish a college-wide committee on fundraising, to allow for exchange of ideas and best practices among departments. Committee should also coordinate with university-level efforts, and those by the UL Foundation.
2. **Improve contact with alumni via newsletter and social media.**
3. **Enhance promotion of the college and its units.** College (with input from departments) to coordinate with efforts at the university level on promoting the brand name of the College of Sciences and units within the college.
4. **Advertise the strength of our programs** and opportunities for hands-on learning and student research.
5. **Establish an external college advisory board** (with community leaders, industry representatives, alumni, etc.) to advise the college with respect to long-term planning.
6. **Investigate and try out options for establishing business ties.** Conducting workshops and open-house events are some of the potential options.
7. **Provide “news releases” on faculty and student research, accomplishments,** etc. to the university Office of Communications and Marketing.
 - Provide college-level assistance with newsletter content, soliciting news from department heads and directors on a regular basis, and serving as contact for the university Office of Communications and Marketing.



UNIVERSITY
OF
LOUISIANA
L a f a y e t t e

**Ray P. Authement College of Sciences
Office of the Dean**

Martin Hall, Room 219
Lafayette, LA 70504-3290 USA
Office: (337) 482-6986
Fax: (337) 482-1247
<http://sciences.louisiana.edu/>

Université des Acadiens

November 26, 2013

RE: Implementing the RPA College of Sciences Strategic Plan

Dear Department Heads/Directors/Program Coordinators,

As you are aware, a team of representatives from each department of the RPA College of Sciences has worked diligently over the last year to develop a strategic plan for the College. Key goals of the team were to develop a plan that aligns well with the University-level strategic plan and to design a fully implementable plan with actionable items.

Realizing our strategic plan will require an effective and creative implementation strategy with significant input and commitment from each department and unit within the College of Sciences. Specifically, our implementation strategy must take into consideration several factors, including but not limited to, available university and college resources, departmental needs and long-term goals, interdisciplinary research and federal funding opportunities, and undergraduate and graduate recruitment/retention.

I have asked Andy Hollerman, Paul Klerks (co-chair), Nabendu Pal, Dmitri Perkins, Durga Poudel, Eric Taylor and Mike Totaro (co-chair) to comprise the team that will develop the specific actionable details of Phase I of our implementation plan. This team is charged with determining detailed implementation strategies for 3-4 initiatives as specified in the strategic plan document. During the development process of this implementation plan, each member of the committee is asked to consult closely with his Department Head/Director/Program Coordinator and to obtain other faculty members' input. We will then work as a College to implement those initiatives over the next 2 years.

As Dean of the RPA College of Sciences, it is my goal to continue the growth of the College in each of the targeted areas defined in our strategic plan. While I realize that it will take some time and effort to develop these action items, I believe this approach provides us the opportunity to realize our strategic plan in a systematic and efficient manner. I am attaching the draft strategic plan for the RPA College of Sciences for your convenience.

Thank you for your continued hard work and dedication.

Sincerely,

Azmy S. Ackleh, Dean
RPA College of Sciences

RAY P. AUTHEMENT COLLEGE OF SCIENCES (“COS” hereafter)
 STRATEGIC PLAN IMPLEMENTATION COMMITTEE
 PROPOSED ACTION ITEMS for year 1.

1. Strategic plan initiative (RESEARCH): INCREASE MULTIDISCIPLINARY COLLABORATIONS.

- a) **(I^{*}) Evaluate and introduce incentives for multidisciplinary collaborations:** Administration (dean, VP of Research) to evaluate options for further incentivizing multidisciplinary collaborations. Options include an increase in indirect cost returns for such collaborators, the establishment of a small fund as “seed money” to initiate interdisciplinary collaborations, and assigning extra credit to multidisciplinary collaborations in the annual faculty evaluations.
- b) **(I) Set up a COS Moodle site,** to enhance cross-disciplinary information exchange. A COS Moodle site for research-active faculty would facilitate information exchange among faculty; a faculty member could easily e-mail all faculty to gauge interest in collaboration on a specific RFP on a multidisciplinary topic, post the RFP, etc.
- c) **(I) Publish a college-wide research newsletter,** to keep faculty informed on research activities in other units and research interests of their faculty. Regular versions (published bimonthly?) for COS distribution, and an annual special edition version (glossy, professional) to be distributed also outside the college (including local and regional businesses) to increase the COS visibility.
- d) **(L[†]) Create a database on COS research expertise.** There is currently no easy way for faculty to search other faculty’s research activities and interests (for purpose of identifying potential collaborators). This info could be brought together on COS website or Moodle site, with data searchable by department, faculty, research topics, and key words. Could have links to faculty’s own research website for access to more in-depth information.
- e) **(L) Organize a COS colloquium series.** A college-wide colloquium series (once monthly?) on an interdisciplinary topic - to enhance interaction among departments/units.
- f) **(L) Optimize scheduling of departmental colloquia.** Departments’ current colloquium scheduling has some scheduling conflicts, preventing cross-department participation – departments should coordinate choosing their colloquium time to prevent this.
- g) **(L) Organize “exchanges among the disciplines” meetings:** regularly scheduled (once monthly?) and/or scheduled as needed (on basis of a specific RFP) meetings for COS research-active faculty to discuss specific research opportunities or specific interdisciplinary topics. Involve ORSP when meeting is in response to a specific RFP.
- h) **(L) Initiate one or more cross-disciplinary collaborations,** by defining a multidisciplinary problem and then identifying faculty who can work together to address this problem and secure funding. Could be initiated by an appointed researcher (along the lines of “LITE Fellow”) or committee with representation from all COS units.

2. Strategic plan initiative (RESEARCH): ENHANCE FUNDING FOR GRADUATE STUDENTS

- a) **(I) Increase awareness on the availability of fellowships,** by collecting and distributing information on graduate fellowships from all potential sources (federal programs, state programs, private foundations). Information to be posted on COS Moodle site and COS Website.
- b) **(L) Explore opportunities for alternative sources for graduate student support.** E.g. funding by local industry for MS student doing research on topic of mutual interest and mutual benefit.

* “I=Immediate”; suggested for immediate action, as a “low-hanging fruit”

† “L=Later”; suggested for action following those on the “low-hanging fruits”

3. **Strategic plan initiative (EDUCATION): IMPROVE RECRUITMENT OF STRONG STUDENTS**, with a special focus on recruiting non-traditional students including employees from local companies, teachers and former military members. New certificate programs may be needed for this focus.
 - a) (I) **Standardize protocol and format for establishing new certificate programs**, and disseminate this information on COS Moodle site. This would result in uniform procedures and facilitate compliance with UL / BoR regulations, etc.
 - b) (I) **Accumulate, organize, and disseminate information about existing COS certificate programs**. Information to include required/elective courses and contact information. Information to be disseminated via COS website and newsletters.
 - c) (L) **Enter in discussions with local and regional companies about need for specific training** that could be met by existing UL courses, existing certificates or new certificates to be developed.
 - d) (I) **Investigate availability of grants for training of teachers**.
 - e) (L) **Survey local/regional teachers with respect to need for further education**. Survey to include questions on the need for Continuing Education Units; specific challenges that could be met by existing UL courses, certificates or new programs (including summer courses for teachers); desirability of certificate program for teaching AP classes; need for mentoring and/or further training in teacher's science field; need for training in emerging areas in science and technology fields.
 - f) (L) **Evaluate success of current dual-enrollment program with high schools**, and expand this program if it has been successful.
 - g) (I) **Assess current status with respect to facilitating enrollment of former military**. Evaluation to include current practice with evaluation of military credits for transfer; option to allow for military experience as satisfying college course requirements; whether COS faculty who are former military should play an active role in recruitment; role of UL Lafayette Military Science Coordinator in recruitment; identification of existing UL connections with military organizations and assessment of potential for expanding connections (organizations: National Armaments Organization, Stennis Space Center, Fort Polk, Barksdale AFB).
 - h) (L) **Evaluate potential for a program specifically aimed at recruiting, mentoring and retaining former military**.

4. **Strategic plan initiative (VISIBILITY): INCREASE ADVERTISING OF COLLEGE STRENGTHS**. Some actions have also a fundraising component.
 - a) (I) **Evaluate COS website**. Evaluate whether web site information is correct and current, renders correctly on different mobile devices, and sufficiently highlights major achievements. Web site should also list certificate programs and teacher education activities.
 - b) (I) **Work with Office of Communications and Marketing on maximizing visibility of achievements** such as major grants, influential publications, prestigious awards, etc.
 - c) (I) **Evaluate option of having a COS Facebook page**, and set one up if deemed worthwhile.
 - d) (L) **Prepare/distribute annual newsletter** (glossy, professional) to businesses, alumni, etc. – see earlier.
 - e) (L) **Provide public recognition to donors**. Recognize contributors and donors to RPA College of Sciences (except for those who wish to remain anonymous). Recognition could distinguish different contribution levels (platinum, gold, etc. - on basis of frequency rather than amount?); single out scholarship sponsors and acknowledge memorial scholarships; recognize endowment sponsors. COS could have annual awards for donors/sponsors.
 - f) (L) **Highlight college strengths in meetings with local business community**. Meetings could be in a form of a business luncheon hosted by the Dean of Sciences.

Strategic planning leading to all Departments and Schools within the College of Sciences to be Associated with a Ph.D. Program

In 2013, led by an initiative of the Dean, the College of Sciences at the University of Louisiana at Lafayette went through the process of establishing a five-year strategic plan effective January 1, 2014 through December 31, 2019. This plan is the result of the collective efforts and input from faculty and administration of all units within the College of Sciences. The strategic plan outlines and defines the College's aspiration to grow into a pre-eminent institution in the Gulf Coast region and to become competitive with R1-classified doctoral universities in the region.

To achieve this long-term aspirational objective it was evident that the research productivity and graduation rates in several strongly connected directions needed to be enhanced. In particular, it was paramount to increase the annual external grant production rate and the number of graduate students with emphasis on Ph.D. students. The strategic plan outlines how to achieve research excellence with initiatives aimed at increasing research funding and publications. These initiatives are focused on the research enterprise itself (infrastructure and collaborations across disciplines) and on the support provided by strengthening graduate education and research. This in turn requires to utilize the entire cadre of research faculty and provide them with the opportunity to supervise M.S. and Ph.D. students in scientific fields in high demand in the State of Louisiana and the entire nation. Research-intensive faculty without a graduate program are hindered in many ways from achieving their potential contribution to the research aspiration of the college. Plus the absence of a graduate student population has a negative effect on the teaching loads because of the lack of teaching assistants.

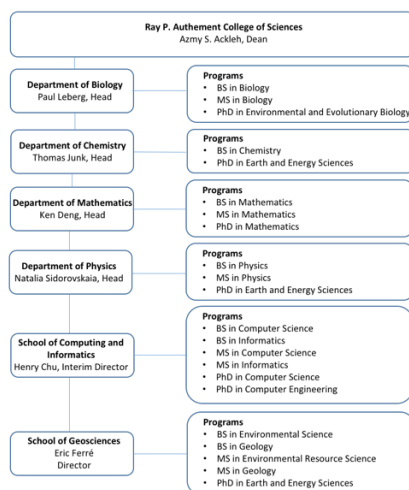
The structure of the College in 2013, before the strategic plan was initiated and enacted, was as follows: three departments/units had well-established and highly ranked Ph.D. programs (Biology, Computer Science, and Mathematics) leaving three others without a Ph.D. program (Chemistry, Geosciences, and Physics), three programs without an MS degree (Chemistry, Environmental Science, and Informatics), out of which two had no access to a graduate program at all (Chemistry and Environmental Science). All of these units had a very strong cadre of faculty with substantial research productivity and scientific contributions (supported either by undergraduate students, or by graduate students from other programs), and had the potential to be significantly strengthened by the addition of the lacking MS and Ph.D. programs.

The strategic plan outlines how the structure of the college can be improved and how this in turn will lead to increased research productivity and graduate student production. To start the implementation of the plan and to build the foundation for major change, three MS programs to cover the existing gaps were proposed. In addition, an interdisciplinary Ph.D. program in the area of Earth and Energy Sciences was proposed. The research emphasis of the interdisciplinary Ph.D. program is a topic that benefits the specialties and research agenda of the faculty in the School of Geosciences, the Department of Physics, and the Department of Chemistry which co-own the new program.

In 2017 the MS Programs in Informatics and Environmental Resource Science were approved by the Louisiana Board of Regents. The MS program in Environmental Resource Science was

successfully kicked off in the Fall of 2017 and the MS Program in Informatics in the Spring of 2018. The MS program in Environmental Resource Science has currently 11 students enrolled, exceeding the projected number by one student, and the MS program in Informatics attracted 23 students, which exceeds by far the projected number of 10 students.

In 2018 the Ph.D. in Earth and Energy Sciences was approved by the Louisiana Board of Regents. This interdisciplinary program which focuses on critical areas for the state of Louisiana and the nation will be kicked off in the Fall of 2019. The relatively large number of applications (>40) up to this point indicates that the program will be popular and that the projected enrollment of five students for the first semester will be exceeded.



College structure after implementation of the strategic plan (MS Industrial Chemistry still under development)

The letter of intent for one last new program, the MS in Industrial Chemistry, was approved by the Board of Regents in the Fall of 2017. A fully developed proposal has been submitted in the Fall of 2018 and is currently under external review. After the implementation of this program, planned for the Fall 2019, all students in the College of Sciences have the option to obtain MS and terminal PhD degrees in their field of study. In addition, the attractive new programs will help with our graduation rates and the new research programs will attract additional external funding. Furthermore they will help cover the shortage of the State workforce needs in these areas.

Strategic Plan: Initiatives In Support Of The Target Areas, Actions, Achievements

Target I: Enhancing Research Excellence

Actions and Achievements

- The last five years have seen solid investments (millions of dollars) into facility upgrades and the creation of new research labs from internal (startup) and external (BoR, NSF) funding sources. Examples are the Rock-Eval 6 analyzer obtained by a BoR grant for interdisciplinary research in the geosciences and NSF-MRI funding for two sea gliders obtained by an interdisciplinary proposal by faculty from physics, biology, and geology.
- External research funding where the College Faculty serve as PIs or Co-PIs reached an annual average of \$8.3 million.
- A permanent technician position was established in the School of Geosciences in support of the geochemistry and environmental chemistry research programs.
- A major Louisiana Economic Development (LED) grant (\$4.5M) was awarded to the University of Louisiana at Lafayette to expand the program in the School of Computing and Informatics with the goal of substantially increasing number of degrees awarded. This led to the hire of three new continuing faculty in the School including one instructor and two tenure-track faculty with top notch research programs.
- Excellent new research-oriented faculty, with the potential for interdisciplinary research in existing and new programs, have been hired and are already making an impact in the research capabilities and productivity of the college. New faculty in physics, chemistry, and geosciences have been hired with interdisciplinary projects and collaborations through the new Ph.D. in Earth and Energy Sciences program (an interdisciplinary program between the Chemistry, Geosciences and Physics).
- The Sciences Interdisciplinary Monthly Meeting (SIMM) is an established initiative to enhance interdisciplinary research in the College. It brings the college as a whole together and fosters collaboration and interdisciplinary research amongst faculty of the College.
- The annual Herman Hughes lecture was established to enhance interdisciplinary collaboration and communication between the College of Sciences and the College of Engineering.
- With the arrival of the new M.S. in Environmental Resource Science and the Ph.D. in Earth and Energy Sciences new additional Teaching Assistantships have been obtained. The number of Teaching Assistantships in other programs, such as geology, biology and mathematics, have also been increased over the past few years.
- Monthly mentoring of new faculty at the college-level has been initiated and is an ongoing effort to increase the success of the new hires and to commit to the investment in this important human resource.
- New guidelines for tenure and promotion are now college-wide and will make the tenure and promotion process more uniform and transparent.

Target II: Enhancing Education Quality

Actions and Achievements

- The goal of increasing undergraduate enrollment and enhancing undergraduate education led to the following initiatives:

- The establishment of Science Day as a major recruiting event for high-school students. This annual event brings ~800 students on campus and exposes them to all programs in the college.
- The establishment of several 2+2 programs between 2-year colleges and several UL Lafayette programs. This allows for a seam-less transition from a community college to UL. This includes several 2+2 programs with LSUE, Baton Community College and SLCC.
- Creation of undergraduate interdisciplinary concentration in Physics, Biology and Informatics.
- The goal of increasing graduate enrollment and expanding graduate education led to the following initiatives:
 - The establishment of an M.S. in Environmental Resource Science program. This program currently has an enrollment of 11 students and it will graduate its first cohort of 7 students in May 2019.
 - The establishment of an M.S. in Informatics program. This program has an enrollment of 23 students.
 - The establishment of an interdisciplinary Ph.D. Program in Earth and Energy Sciences. We already have 7 students who accepted an offer to join the first cohort of our Ph.D. program Fall 2019.
 - A proposal for an M.S. degree in Industrial Chemistry is in the final stages of approval by the Louisiana Board of Regents. With this, all programs in the College of Sciences have access to M.S. and Ph.D. degrees.

Target III: Increasing Visibility And Outreach

Actions and Achievements

- A fulltime development director for the College of Sciences was hired. She coordinates outreach events and meetings for Deans and Department Heads with potential donors and alumni. Fundraising efforts at the college level have been significantly increased.
- A college newsletter was initiated two year ago and is regularly published in connection with the office of Communication and Marketing.
- A Facebook page with weekly updates has been established.
- The website from the College of Sciences is frequently updated and contains a significant and updated news section.
- Faculty increased participation in the Louisiana Board of Regents “Speaking of Science” program, which allows faculty to talk about their science to school students of all ages, thereby promoting the university in the entire state.