I am an epidemiologist and an assistant professor in the Department of Health Science at Brigham Young University. I joined the BYU faculty in July 2013 and at this writing I have completed almost one year of service. I am writing this faculty development plan according to the guidelines given in the University Rank and Status Policy.

This faculty development plan has three main sections: Teaching, Scholarship, and Citizenship. Within each of these three main sections I provide a self-assessment, my professional goals and a plan to accomplish the goals, descriptions of how my individual goals relate to department and university aspirations and needs, resources needed to accomplish my goals, activities and accomplishments so far in achieving my goals, and my thoughts on measures used to assess success in my professorial responsibilities and accomplishing my goals.

TEACHING

A. Self-assessment

During my first year I taught two undergraduate courses in the Department of Health Science: HLTH 310 – Chronic Diseases: Prevention and Control and HLTH 447 – Introduction to Biostatistics. I enjoyed teaching these courses, both of which drew on my talents but also challenged me. I anticipate continuing to teach these two courses over the next several years.

Strengths. Based on anonymous student evaluations I received during my first year, I feel my greatest strengths as a teacher are that I have strong interest in my students’ learning, I care a great deal about their success, I respect my students and they respect me, and I have effectively communicated my high levels of interest, caring, and respect to my students.

Skills. I am skilled in written communication, oral communication, organizing information, prioritizing information, providing constructive feedback to students on their work, and being thorough in my work. I have a good memory which helps me remember my students’ names.

Competencies. I am competent in epidemiology and biostatistics. To teach HLTH 310 I have begun developing competency in other relevant areas, including pathophysiology, disease prevention, and mitigating the adverse consequences of disease. I feel somewhat competent in lecture-style teaching and in facilitating in-class active learning exercises for groups of students. I feel very competent in one-on-one interactions with students, for example during office hours; I feel this teaching situation best plays to my strengths.

Interests. I am interested in finding ways to connect my courses more firmly to real life. I would love to have my students produce work intended for and shared with audiences outside the classroom. I am interested in discovering ways to help my students master chronic diseases and biostatistics using hands-on approaches in addition to book-work approaches. In terms of additional courses beyond those I am already teaching, I have discussed with Mike Barnes the possibility of teaching HLTH 466 – Health and the Aging Process in the future. I have also
expressed interest in teaching or assisting in teaching epidemiology courses such as HLTH 345 – *Principles of Epidemiology* and HLTH 602 – *Epidemiology* in the future.

**Opportunities.** I feel I have ample opportunities to make a difference in students’ lives as a teacher, and to improve as a teacher, at BYU. I currently see myself as a *pretty good* teacher, but I would like to become an *excellent* teacher, and I think BYU is the best place in the world for me to achieve excellence in teaching. I appreciate the opportunity to work with consultants at the Center for Teaching and Learning to improve my courses. In the coming year I will invite strong teachers to provide peer evaluations of my teaching. I also plan to spend some time observing some of the best teachers in the Department of Health Science and other departments to learn from them.

**Areas in which I wish to develop.** After two semesters of teaching I feel that my greatest weakness as a teacher is that I tend to underestimate my students’ abilities and potential, I set my expectations too low for them, and consequently they don’t learn or grow as much as they could if I were to set my expectations higher and lead them to expect more of themselves and achieve higher levels of learning and application. The anonymous student evaluations I received during my first year also reflect my students’ desire for a more challenging experience in my classes – they have told me I should expect more from them, and have more faith in them. My most important short-term priority as a teacher is to raise the bar for my students to match how strongly I care about them. I want to create experiences for my students that are more academically challenging than what I achieved in my first year. I want my students to come out of my classes having learned more, and having developed stronger intellectual skills.

**B. Teaching goals and plan to accomplish my goals**

I want to become the best teacher I can be. I want to focus particularly on becoming skilled at teaching undergraduate students in medium-sized classes – say, 40 to 80 students – because this is the typical classroom setting in which I expect to spend much of my teaching time at BYU. Currently, for both my *Chronic Disease* course and my *Biostatistics* course, I feel that the most important step I can take toward becoming a great teacher is to increase the difficulty of my courses and expect more of my students. I want to be careful to increase the difficulty and raise the expectations in ways that will inspire and motivate my students, rather than in ways that will discourage and de-motivate my students. In other words, I want to significantly raise the bar academically and at the same time I want to completely maintain and even strengthen the clear message I have been giving my students that I care deeply about them and desire their success.

To succeed in raising the bar for my students I will need to hold *myself* to higher standards. For example, I will need to strengthen my own mastery of what I am teaching, so I can lead my students to greater knowledge and application of knowledge. I will also need to continually improve my materials, including syllabi, reading assignments, writing assignments, lecture materials, in-class student participation exercises, and exams. Finally, I will need to improve my teaching skills by learning and using proven teaching techniques, even if they are new to me.

I have two teaching goals for my courses on *Chronic Diseases* and *Biostatistics*:

1. Increase the amount my students learn and their ability to apply their knowledge, as measured by my assessments of their learning and application.

2. Increase the amount my students perceive they learn, as measured by their anonymous subjective reports of “amount learned” and “intellectual skills developed.”
I have the following specific plans for accomplishing my teaching goals listed above:

- **Read at least one book about teaching each year.** I plan to read either “What the Best College Teachers Do” or “McKeachie’s Teaching Tips” by the end of 2014.

- **Invite peer reviews of my courses during Fall 2014 and Winter 2015.**

- **[Both courses]** I want to increase student participation in out-of-class reading assignments and link the reading assignments more strongly to the in-class material. I plan to do three things in the future that I did not do in my first year. First, I plan to create brief reading guide assignments in which I will require students to submit a page of written responses based on the assigned reading. I anticipate using about one reading guide assignment per week. Second, I plan to offer credit for completing the assigned readings, so that students will perceive the readings as required rather than optional. Third, I plan to incorporate something from the assigned readings preceding a class period directly into the in-class material for that class period.

- **[Both courses]** I want to modify some in-class sessions to require a higher level of student preparation and encourage a higher degree of student participation. I think linking the readings to the class sessions better, as I mentioned above, will increase student preparation. To increase student participation I plan to improve my use of questions in the classroom, and increase my use of application exercises where students will make use of basic knowledge to address a higher-level issue. I will meet with Mike Johnson in the Center for Teaching and Learning to brainstorm ideas and then I will implement these ideas in class.

- **[Both courses]** I want to increase the difficulty of exams and ensure the exam questions are linked to the course learning outcomes, such that the exams will better assess student learning. During my first year, I wrote exams for my courses in a rush at the last minute before I needed to administer the exams. As a result, the exams tended to be too easy and fell short of their potential as evaluation instruments and as learning aids for my students. In the future, I plan to draft exams at least one month before I plan to administer them, so I can more carefully align the exams with the learning outcomes and develop more difficult questions. I also plan to consult with the Center for Teaching and Learning and other faculty members to help me improve my exams.

- **[Chronic Diseases course]** I want to increase the difficulty of the research paper and provide stronger support for students to become better writers. During my first year, I assigned students to write research papers that were descriptive in nature. In a typical paper, a student would refer to a sampling of published research to summarize some key points of the public health significance of a chronic disease, including its pathophysiology, population patterns, causes, consequences, and prevention. In the future, I plan to increase the difficulty of the research paper by assigning students to tackle a current unresolved problem or controversy in chronic disease prevention, rather than simply summarizing basic information. I anticipate that this change will require students to work harder to synthesize information and think critically to construct persuasive arguments to support positions they take in their papers. I also plan to partner with the BYU Writing Fellows, led by , to give my students an opportunity
to improve their writing by consulting with the Writing Fellows during the semester as they develop their papers.

- [Biostatistics course] I want to increase the difficulty of the homework assignments and raise my expectations for students to use software such as SAS or Stata to perform analyses. I plan to revise the homework assignments I created during my first year to raise the bar in terms of difficulty. In most cases this will mean creating more challenging examples that are truer to actual research problems biostatisticians address; I think making the homework assignments more challenging will complement my plan mentioned above to improve the reading assignments, in-class sessions, and exams. I also plan to incorporate use of SAS or Stata early in the course, and require students to use such software regularly in their homework assignments, in contrast to my first year where I incorporated the software relatively late in the course and gave students very limited opportunities to use the software.

- [Biostatistics course] I want to change the amount of time spent on certain topics, to better reflect the importance of different topics in the practical application of biostatistics. Reflecting on teaching the course for the first time in Winter 2014, I feel I over-emphasized some theoretical points, such as probability and the central limit theorem, at the expense of devoting enough time to some practical points, such as measures of association and regression models. I also feel that I placed such a heavy emphasis on communicating about biostatistical results that I lost some opportunities to help the students gain more solid skills in producing biostatistical results. To improve the balance of topics, I plan to revise the syllabus to reflect greater time spent on more important topics, and I plan to revise the in-class sessions to be more deliberate about limiting in-class time spent on less important topics. I plan to consult with Ray Merrill, Brianna Magnusson, and Natalie Blades (BYU Dept of Statistics) as I work to improve the course.

C. How my teaching goals relate to department and university aspirations and needs

The university wants great teachers; the department wants great teachers; the students want great teachers; I want to be and plan to be a great teacher. What more can I say? Chronic Diseases is a core course for all public health majors; Biostatistics is a required course for students majoring in epidemiology or health science. Therefore, my goals to improve these courses are in line with the department’s aspirations to provide high quality public health education for our students.

D. Resources needed to accomplish my goals

Currently I do not need money or equipment to accomplish my teaching goals. I need time, and I feel the department has provided me with adequate time to devote to teaching.

E. Activities and accomplishments so far in achieving my goals

So far I have taught two semesters of Chronic Diseases and one semester of Biostatistics. These initial teaching experiences and the mid-course and end of semester anonymous student evaluations I received give me a baseline for comparison with my future efforts.

F. Measures of success in my teaching responsibilities and accomplishing my goals

As mentioned above, I plan to measure success in student learning based on objective assessments in my courses, and I plan to improve my exams so they will better reflect whether students have achieved the learning outcomes for the courses.
As long as the current anonymous student rating system is in place I intend to use it as a primary source of information about my success as a teacher, from the students’ perspective. I will use student comments to guide me in retaining strong aspects of my courses and improving weak aspects. Students’ anonymous comments I received during my first year have helped shape the teaching section of this faculty development plan. I anticipate improving my teaching each year by addressing anonymous comments I receive from students. For the numerically scored items, I want to score an average of 7.0 or above on each item, each semester, in each class I teach (on a scale of 1 to 8). I will consider items on which I score below 7.0 as targets for improvement.

SCHOLARSHIP

A. Self-assessment

During my first year I focused mainly on publishing peer-reviewed journal articles that were already in progress when I arrived at BYU, initiating some new projects with students that will lead to peer-reviewed journal articles within the next year, and obtaining start-up internal research funding from the College of Life Sciences. I also resubmitted a grant application for a research project about atrial fibrillation to the American Heart Association (AHA) that I had previously submitted when I was a post-doc, and I submitted a new grant application to the AHA with a BYU undergraduate student to request funds for the student to work on a summer research project. I have been successful so far in publishing peer-reviewed articles. Since arriving at BYU I have had one first-authored article published and another one accepted, to be published in June 2014; I have also had five articles published on which I am a coauthor and two more accepted on which I am a coauthor, to be published within the next few months. Additional articles are in the pipeline, including some that were already in progress when I arrived and some that I have initiated since arriving. In contrast, I have not yet been successful in obtaining external grant support. The application resubmitted to the AHA to study atrial fibrillation was not funded, and the new application submitted to the AHA for undergraduate summer research was not funded. I want to try again with grant applications. I do not have any new applications in the pipeline yet.

Strengths. I think my greatest strengths as a scholar are my curiosity about health and disease, my ability to ask questions and seek out answers to those questions, my attention to detail, and my writing skills. I also feel that my network of colleagues I developed during my years of education and training at BYU, Harvard, University of Washington, and University of Alabama at Birmingham strengthens my potential as a scholar because I have many people I can rely on to help me produce strong scholarly work.

Skills. I am skilled in writing, quantitative data analysis, literature review, and collaborating with other researchers who have varying backgrounds, training, and expertise. I am able to see manuscripts through to publication, as evidenced by my publication record prior to coming to BYU and after arriving at BYU.

Competencies. I am competent in epidemiology and biostatistics. I have limited competency in some domains of medicine, such as cardiology, neurology, and internal medicine, as a result of what I have learned through my collaborations with physicians on many manuscripts and studying the medical literature to support my epidemiologic research.

Interests. I am interested in promoting neurological health and preventing neurological disease in older adults. More specifically, I am interested in the relationship of cardiovascular health and
disease with cognitive function. More generally, I am interested in the health of older adults. I am interested in learning how to leverage my competency in epidemiology to engage in work that would be more closely aligned with health promotion. This is an important reason I came to BYU – to work in the same department as several faculty whose expertise is in health promotion.

**Opportunities.** I recognize opportunities both within BYU and outside BYU that will help me develop into an excellent scholar. Within BYU I have potential collaborators in the Department of Health Science, Department of Statistics, and possibly other departments, especially within the College of Life Sciences. So far I have been so focused on finishing projects that I started before coming to BYU, and initiating new projects that are very similar, that I have not yet put much energy into developing collaborations with other BYU faculty. So far, I am coauthoring at least one paper with in the Department of Statistics, and I have had good discussions with a handful of other faculty members about possible collaborations, including , , , , and in the Department of Health Science, and in the Department of Statistics. However, I feel I have barely scratched the surface of potential collaborative research with BYU faculty members. As I move forward I want to take advantage of opportunities to collaborate with BYU faculty, especially on projects that are related to my main research interests. I am maintaining collaborations with faculty members at other universities where I trained. These connections will provide me with many opportunities in the future, and may also provide opportunities for my students. I feel well connected to three multi-institutional groups of collaborators: (1) the Cardiovascular Health Study investigators, (2) the Reasons for Geographic and Racial Differences in Stroke Study investigators, and (3) members of the American Heart Association Council on Epidemiology and Prevention. I want to maintain and strengthen these connections.

**Areas in which I wish to develop.** I am aware of some weaknesses in my development as a scholar. I think my most important weakness is perfectionism. I have a tendency to get bogged down in unimportant details in my projects, which slows the projects down and results in me taking an unnecessarily long time to finally publish a paper after starting it. Another weakness I have is spreading my effort too thin on multiple projects. During my first year at BYU I have initiated four specific research papers with students, and I have discussed preliminary ideas for new research papers with several more students. It has been difficult for me to keep up with four separate research papers as a primary mentor to multiple students who are doing this sort of work for the first time. The students generally reach a point where they need more feedback and guidance before I have been able to take time to review their work and provide the feedback and guidance they need. As I move forward I want to avoid initiating too many projects at once, and I also want to improve my ability to teach, trust, and delegate responsibility to my research assistants so they can become more independent of me in pursuing their projects. A third weakness I have is that I don’t read enough in the scholarly literature on the topics I am researching. Therefore I find that I am limited in my ability to produce truly impactful new work that will directly and clearly contribute to ongoing scholarly conversations. I want to focus better on reading the relevant literature in the fields where I am trying to make contributions, so I can do a better job of framing my contributions in terms of the important questions in the field.

**B. Scholarship goals and plan to accomplish my goals**

The area of epidemiologic research in which I most want to become an expert is the relationship of cardiovascular health with cognitive health, especially in older adults who tend to have a
heavy burden of cardiovascular disease and a high risk for cognitive decline and dementia. I want to discover answers to big-picture questions such as the following:

- Why are cognitive decline and dementia more common in people who develop cardiovascular disease than in people who maintain cardiovascular health?
- How can risk for cognitive decline and dementia be reduced in people who have clinically significant cardiovascular disease?
- What impact would reductions in cardiovascular disease and improvements in cardiovascular health have in reducing occurrence of cognitive decline and dementia?
- Would the prospect of preventing or delaying future cognitive decline and dementia motivate people to achieve and maintain better cardiovascular health early in life?

I have three scholarship goals for epidemiologic research on cardiovascular health and cognition:

1. By Summer 2018, when I am preparing materials for my sixth-year review at BYU, I want to have made several significant scholarly contributions as an expert in cardiovascular health and cognition, and be recognized as an expert in this field by my colleagues at BYU and elsewhere. I would like to publish at least one first-authored peer-reviewed article on cardiovascular health and cognition each year. I would also like to obtain at least one externally-funded grant to support my research by the end of 2015.

2. I also want to have established a strong and consistent track record of successfully involving undergraduate and graduate students in my research by facilitating their participation as lead authors or coauthors on peer-reviewed journal articles about cardiovascular health and cognition. I would like to publish at least one peer-reviewed article on cardiovascular health and cognition each year with a student as first author.

3. Finally, I want my scholarly contributions to actually have a positive impact on the cardiovascular health and cognitive health of older adults, rather than merely ending up on the library shelves. Currently the best way I know of to tell whether my work is having this sort of impact would be to see my articles cited in guidelines written for physicians and public health professionals. I would like to explore other ways of assessing the impact of my work.

I have the following specific plans for accomplishing my scholarship goals listed above. These plans involve reading, discussion, and writing, according to the wisdom of Francis Bacon (1561-1626): “Reading maketh a full man; conference a ready man; and writing an exact man.”

- **Reading.** I plan to become fluent in the scholarly literature on the relationship of cardiovascular health and disease to cognition, including current and historical literature. To do this I will establish and regularly update a reading list consisting of the best available articles, I will spend time every week studying these articles, and I will maintain an annotated bibliography to help me remember what I have learned.

- **Discussion.** I plan to broaden and deepen my relationships with other researchers who are studying cardiovascular health and cognition, by proactively initiating conversations with them. Some of these researchers are already in my network; many are not. I will contact researchers whose articles I study, to pursue further conversations with them by phone or email. I will also meet with these researchers at conferences, especially the American
Heart Association Epidemiology and Prevention conference, which I attend annually. I anticipate that these conversations will lead to access to data, ideas for peer-reviewed articles, opportunities to collaborate in writing grant applications, and opportunities for my students to join advanced training programs after they graduate from BYU.

- **Writing.** I plan to write every weekday, for at least 15 minutes, on the relationship of cardiovascular health and disease with cognition. I believe this is the key to achieving the level of scholarly productivity I aspire to. It is also probably the most difficult thing for me to do, because I tend to procrastinate writing. In the past, I have resolved many times to write every day, and I have made some good starts, but I have never succeeded in making daily writing a solid long-term habit. There are four things I will do to increase my likelihood of success in daily writing: (1) I will mark the first available hour of every weekday on my calendar as writing time. (2) I will go to a location other than my BYU office during this hour, taking with me only a pen and paper, in order to reduce distractions. (3) I will keep track of whether I write each day. (4) I will ask Ray Merrill to allow me to be accountable to him by reporting periodically on my writing habits.

**C. How my scholarship goals relate to department and university aspirations and needs**

The university wants scholars who will become leaders in our fields; I aspire to become a leader in the area of cardiovascular health and cognition, an important issue in public health. I feel the department benefits from my interests in cardiovascular health, cognitive health, and older adults, because these interests are shared by some of our students, but are not represented by most other faculty. Therefore, I feel I broaden our faculty expertise and expand what we can offer to our students. The university and the department want faculty to provide mentored research opportunities to students. I feel I have made a good start in mentoring students and I plan to improve my ability to involve students over time.

**D. Resources needed to accomplish my goals**

Currently I do not need equipment to accomplish my scholarship goals. I need money and time, and I feel the college and department have provided me with adequate money and time so far. I intend to apply for 2nd and 3rd year startup funding from the College of Life Sciences. I also anticipate that as I move forward I will need external funding to support research assistants. I plan to apply for external funding, as noted above. However, currently, I think my research projects are progressing well without external funding.

**E. Activities and accomplishments so far in achieving my goals**

I am accumulating publications in the area of cardiovascular health and cognition, to establish my interest and expertise in this area. Just prior to arriving at BYU my first article in cardiovascular health and cognition was published:


My second article in cardiovascular health and cognition will be published soon:

I am a coauthor on two articles on cardiovascular health and cognition currently under review at journals:


I have initiated three articles on cardiovascular health and cognition with BYU students, who are expected to be first authors on these papers:


During 2014-2015 and subsequent years I will be initiating additional projects focused on cardiovascular health and cognition, and related topics. In some of these projects I will serve as first author, in some I will serve as a coauthor to external collaborators, and in some I will mentor BYU students.

F. Measures of success in my scholarship responsibilities and accomplishing my goals

I plan to exceed the department’s minimum expectation of publishing one to two articles per year and one first-authored article per two years. I will consider the department’s list of preferred journals when submitting articles for peer review.

CITIZENSHIP

A. Self-assessment

To me citizenship at the University means at least three things: (1) get to know my colleagues, be helpful to them, and be a good person to associate with, (2) find ways to engage in meaningful work with my colleagues, whether it be in teaching, research, or other activities, and (3) do my best to fulfill specific committee assignments I receive. I am sure this view of citizenship is narrow; I can seek to broaden my notion of citizenship over time. During my first year I got to know all full time faculty in the Department of Health Science, a few adjunct faculty in the department, and a few faculty in other departments. I aspired to do some collaborative teaching with but did not bring that plan to fruition. I discussed collaborative research ideas with several faculty, including , (BYU Dept of Statistics), and (BYU Dept of Statistics), and got one of these research ideas off the ground in the form of a masters project for one of her statistics students. I plan to continue talking with people and strengthening my relationships over time. During my first year I served on the College of Life Sciences Mentoring Environment Grant (MEG) review committee, the Department of Health Science MPH curriculum committee, and the Department of Health Science alumni connections committee. I anticipate these assignments will remain the same in the short term, and that later I will be assigned to additional committees.
**Strengths.** My strengths as a citizen are that I am trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent. (Yes, I am a Boy Scout.)

**Skills.** I am skilled in asking questions, seeking answers, sharing opinions, and giving feedback.

**Competencies.** I am competent in leading meetings, evaluating proposals and other types of documents, and following instructions. I feel I am gaining some competency in understanding our MPH program through my service on the MPH curriculum committee. Developing this competency is important to me because I do not hold an MPH degree and my understanding of public health is narrow due to my focused training and experience in epidemiology.

**Interests.** I am very interested in continuing to serve on the MEG review committee. Although the workload is heavy for a few weeks during Fall semester, this experience is important for me in at least two ways: (1) I provide a needed service to my faculty peers that is valued and appreciated by those who are leading the MEG review process, and (2) I learn about effective and successful mentoring by reading proposals submitted by strong, experienced mentors.

**Opportunities.** Serving on College and Department committees is an opportunity for me to cause good things to happen outside of my own teaching and research. For example, as a member of the MPH curriculum committee led by Carl Hanson I helped design and implement a change in graduation requirements for students who wish to emphasize practical fieldwork over public health research. As another example, as a member of the alumni connections committee led by Rosemary Thackeray I helped brainstorm and plan ways to bring some alumni back to campus to interact with our current students. Neither of these efforts was closely related to my own teaching or research; yet both efforts will benefit students I work with.

**Areas in which I wish to develop.** There are at least three areas in which I wish to develop as a citizen of the BYU community. First, I want to build stronger relationships with faculty in the Department of Health Science by working collaboratively in teaching or research, rather than pursuing my agenda somewhat in isolation from other faculty in the department. This is challenging for me, especially in research, because I am the only faculty member in our department doing research in my particular niche of heart health and brain health. Second, I want to investigate joining the BYU Neuroscience Center, which would align well with my research interest in cognitive function and might open doors to relationships with many faculty in the College of Life Sciences and in the Department of Psychology. Third, I want to investigate becoming active in some capacity in the Utah office of the American Heart Association (AHA), which I hope would allow me to leverage my interest and expertise in heart health to benefit the Utah population, not only from a research perspective but also from a health promotion perspective. Becoming involved with the Utah AHA office could also help me open doors for my students to network with AHA professionals, potentially leading to internships and employment.

**B. Citizenship goals and plan to accomplish my goals**

At this stage in my development I think the two most important things I can do to improve as a citizen are to engage in some collaborative teaching and in some collaborative research with other faculty in the Department of Health Science. Len Novilla is likely the best fit for my initial efforts in collaborative teaching because we both teach sections of HLTH 310 – *Chronic Diseases: Prevention and Control,* Len is very experienced in teaching this course, and I want to learn from her. Ray Merrill is likely the best fit for my initial efforts in collaborative research because he is a prolific publisher, we have some shared interests, and I want to learn from him.
I have two citizenship goals for collaborative teaching and research:

1. Beginning in Fall 2014, and every semester thereafter, include a collaborative component with in my Chronic Diseases course.

2. By Summer 2015, publish one collaborative research paper with .

I have the following specific plans for accomplishing my citizenship goals listed above.

- Meet with during Spring/Summer 2014 to brainstorm and plan a collaborative aspect of Chronic Diseases. Implement our ideas in my Fall 2014 course.
- Meet with during Summer 2014 to initiate a project. I would like for this project to be related to my overall interest in connections of heart health with brain health. See the project through to publication.

Once I have achieved the citizenship goals listed above I believe I will be in a stronger position to pursue additional citizenship goals over the next several years.

C. How my citizenship goals relate to department and university aspirations and needs

I believe the university and the department want me to become well integrated into the BYU community. My goals will help me become more integrated by strengthening my relationships with other faculty members.

D. Resources needed to accomplish my goals

Currently I do not need any money or equipment to accomplish my goals. I need time, and I feel the department provides me with enough time to pursue collaborative teaching and research.

E. Activities and accomplishments so far in achieving my goals

So far I have scheduled a meeting with to discuss our HLTH 310 collaboration. I have previously had some discussions with about collaborative research, and we plan to continue our discussion and plan a project during Summer 2014.

F. Measures of success in my citizenship responsibilities and accomplishing my goals

For the goals I have specified above, measuring success should be easy – I will document my collaborative teaching with in the Chronic Disease course, and I will have a published paper with . Another way to measure success in my citizenship responsibilities will be to seek feedback from faculty who lead the committees I participate on.
I aspire to do research that will improve the health of older adults. To achieve this I am developing a research focus on cardiovascular health and cognitive function. Here I outline an overall framework, short-term goals, strategies, and plans to evaluate progress.

A. Organizing framework for my program of scholarship

The following is an excerpt from my faculty development plan:

The area of epidemiologic research in which I most want to become an expert is the relationship of cardiovascular health with cognitive health, especially in older adults who tend to have a heavy burden of cardiovascular disease and a high risk for cognitive decline and dementia. I want to discover answers to big-picture questions such as the following:

- Why are cognitive decline and dementia more common in people who develop cardiovascular disease than in people who maintain cardiovascular health?
- How can risk for cognitive decline and dementia be reduced in people who have clinically significant cardiovascular disease?
- What impact would reductions in cardiovascular disease and improvements in cardiovascular health have in reducing occurrence of cognitive decline and dementia?
- Would the prospect of preventing or delaying future cognitive decline and dementia motivate people to achieve and maintain better cardiovascular health early in life?

I have three scholarship goals for epidemiologic research on cardiovascular health and cognition:

1) By Summer 2018, when I am preparing materials for my sixth-year review at BYU, I want to have made several significant scholarly contributions as an expert in cardiovascular health and cognition, and be recognized as an expert in this field by my colleagues at BYU and elsewhere. I would like to publish at least one first-authored peer-reviewed article on cardiovascular health and cognition each year. I would also like to obtain at least one externally-funded grant to support my research by the end of 2015.

2) I also want to have established a strong and consistent track record of successfully involving undergraduate and graduate students in my research by facilitating their participation as lead authors or coauthors on peer-reviewed journal articles about cardiovascular health and cognition. I would like to publish at least one peer-reviewed article on cardiovascular health and cognition each year with a student as first author.

3) Finally, I want my scholarly contributions to actually have a positive impact on the cardiovascular health and cognitive health of older adults, rather than merely ending up on the library shelves. Currently the best way I know of to tell whether my work is having this sort of impact would be to see my articles cited in guidelines written for

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physicians and public health professionals. I would like to explore other ways of assessing the impact of my work.

**B. Specific scholarly goals to complete by February 2015**

By February 2015 I want to have submitted for publication to peer-reviewed journals the following three original research articles linking cardiovascular health with cognition, each of which is currently in progress with a BYU student expected to be first author:


By February 2015 I also want to have submitted for publication to a peer-reviewed journal one original research article linking cardiovascular health with cognition, with myself as first author. Likely topics are hypertension and cognitive decline or diabetes and cognitive decline.

**C. Specific strategies of scholarly productivity**

The following is a paraphrased and abbreviated excerpt from my faculty development plan:

I plan to follow the suggestions of Francis Bacon (1561-1626): “Reading maketh a full man; conference a ready man; and writing an exact man.”

- **Reading.** I plan to become fluent in the scholarly literature on the relationship of cardiovascular health and disease to cognition by spending time every week studying the best available articles in this field and maintaining an annotated bibliography to help me remember what I have learned.

- **Discussion.** I plan to broaden and deepen my relationships with other researchers who are studying cardiovascular health and cognition, by proactively initiating conversations with them. I will contact researchers whose articles I study. I will also meet with these researchers at conferences, especially the American Heart Association Epidemiology and Prevention conference, which I attend annually.

- **Writing.** I plan to write every weekday, for at least 15 minutes, on the relationship of cardiovascular health and disease with cognition. (1) I will mark the first available hour of every weekday on my calendar as writing time. (2) I will go to a location other than my BYU office during this hour, taking with me only a pen and paper, in order to reduce distractions. (3) I will keep track of whether I write each day. (4) I will ask Ray Merrill to allow me to be accountable to him by reporting periodically on my writing habits.

**D. Methods for evaluating success**

In February 2015 the most important metric of short-term success in my scholarship will be the list of articles I have submitted for publication. I will also assess my annotated bibliography, contacts made with other researchers, and log of daily writing, and determine whether my strategies of reading, discussion, and writing have become stronger habits.
I aspire to develop strong positive relationships with my faculty colleagues at BYU, especially those in the Department of Health Science. Here I outline two specific short-term collaborative goals I intend to prioritize between now and February 2015.

1. **Collaborative teaching.** Len Novilla and I both teach sections of HLTH 310 – *Chronic Diseases: Prevention and Control*. In my first two semesters teaching this course, Fall 2013 and Winter 2014, although I consulted with and based my version of the course somewhat on her version, we did not really collaborate in teaching the course. More recently, we have discussed our shared desire to take a more unified approach, and to communicate this unified approach to our students.

   My goal is to include a collaborative teaching component with in the *Chronic Diseases* course beginning in Fall 2014 and continuing every semester thereafter. I anticipate we will collaborate by guest-lecturing to each other’s students in selected class sessions, and we may also come up with other ideas. Defining the collaborative component will require meeting with to brainstorm and plan, which I will do during Summer 2014. I will invite to meet with me at least monthly during Summer 2014, Fall 2014, and Winter 2015 semesters to further strengthen our collaborative teaching.

   This collaboration with will stretch me in at least two ways. First, trusting another instructor with my students will be a challenge for me; I tend to prefer doing everything myself in order to maintain control. Second, collaborating in teaching will require me to prepare for class sessions further in advance, which will be a positive change for me, because I tend to postpone class preparation until just before a class session.

2. **Collaborative research.** Ray Merrill has been a long-time mentor to me in epidemiology, since I was an undergraduate. However, we have yet to publish a coauthored research paper together. We have discussed some ideas over the past several months, but have postponed acting on these ideas because we are both engaged in other projects. At least one of the ideas, a paper about correlates of carotid artery intima-media thickness in adults, complements my main research interest – cardiovascular health and cognition – because carotid artery disease is one important vascular cause of brain damage.

   My goal is to publish one collaborative research paper with by Summer 2015. Therefore we should aim to submit a paper to a journal by January or February 2015. I will meet with during Summer 2014 to initiate a paper, and I will invite to meet with me at least monthly – probably more like every two weeks – to ensure that we complete the project.

   This collaboration with will stretch me in at least two ways. First, tends to be much faster than I tend to be in completing study design, data management, data analysis, and writing tasks; therefore I will practice working more quickly. Second, I will learn a dataset that I have not used before, and a topic that I have not previously studied.