Purpose:
The Alumni Newsletter provides information on graduates from the Albany Medical College Basic Science program. This newsletter contains information in the type of fields graduates enter, as well as the location of their occupation and satisfaction with the education they received.

Alumni Statistics:
The alumni statistics are based on a survey of six questions. The majority of people who took the survey obtained Ph.D. degrees from the Neuropharmacology and Neurosciences department.

The survey shows that most graduates leave the area for many different places. A number of students have stayed in Albany. Boston and Philadelphia also appeared to be somewhat popular areas for graduates to work.

A large percentage of graduates have worked in academia at some point in their careers. There are about equal amounts of graduates working in academia and industry, the top current career choices.

Fortunately the majority of graduate felt they received a good education for AMC and were well prepared for the current career.

The Alumni survey overall showed encouraging trends. Many alumni are still working in academia despite the difficult funding climate. Lastly even though alumni work in a variety of careers most were happy with the training they received at AMC.
**Alumni Statistics:**

What degree did you graduate from Albany Medical College with?
- MS Basic Science (4) (15%)
- PhD (21) (78%)
- Alden March Bioethics (2) (7%)

In which department did you earn your degree?
- Neuropharmacology & Neuroscience (9) (33%)
- Cell Biology and Cancer Research (2) (19%)
- Cardivacular Sciences (7) (15%)
- Immunology and Microbial Disease (5) (7%)
- Other (3) (7%)

In what city do you currently work?
- Other
- Albany
- Philadelphia
- Washington D.C.
- New York City
- Denver
- Boston
Recent Alumni: Ashley Harris, MS

- **AMC Training:**
  Ashley earned her MS in 2011 while working in the laboratory of Dr. Sally Temple (CNN). Her thesis work was entitled: Exploring the plasticity of the human retinal pigment epithelium. She also completed the Bioethics program through Alden March Bioethics institute. Ashley earned her MS under the training of Linda MacDonald Glenn with thesis work entitled "ethical considerations of emerging stem cell technologies".

- **Career after Graduation:**
  Lab Manager at the University of Michigan in Ann Arbor, MI I perform translational oncology research using stem cell models. I also train new personnel, perform administrative duties, and manage a core facility. Recently attended AACR Epigenetics conference in Atlanta in June.

- **Advice to Future Students:**
  Use this time to learn every single thing you can. Learn every technique and the rationale behind it. Read every relevant paper in your field, current and historic. Now is the time to soak everything in. Don't be afraid to do something because it is hard or time-consuming. Those are usually the most worthwhile and educational experiences.

- **Personal Life:**
  Married to David Harris (AMC M.D. class of 2011) who is an anesthesiology resident at University of Michigan. My first year here I was a percussionist in the Life Sciences Orchestra, an orchestra comprised entirely of scientists and healthcare professionals at U of M. Traveling as much as possible after graduation including Mexico, Puerto Rico, Hawaii, Las Vegas, Los Angeles, Chicago, Houston, Atlanta, and my home state of Minnesota. Recently started a science-oriented charity fundraiser to launch in 2014 (hopefully more updates on that for next year!)
Recent Alumni: John McMahon, PhD

• More info: http://mgm.duke.edu/faculty/silver/lab/mcmahon.html

• John earned his PhD in 2012 under the tutelage of Dr. Yunfei Huang in the Center for Neuropharmacology and Neuroscience.

• AMC Training: My project explored the role of the mammalian target of rapamycin (mTOR) pathway in epileptogenesis. Specifically, we showed that in a forebrain neuron specific conditional mouse model that hyperactivation of mTOR led to the development of spontaneous recurrent seizures and caused inhibition of autophagy. In order to elucidate the contribution of autophagy to the development of epilepsy we utilized an autophagy deficient Atg7 knockout mouse. We found Atg7KO mice developed spontaneous seizures, demonstrating, for the first time, that disruption of the autophagic pathway was sufficient to promote epileptogenesis.

• Career After Graduation: Postdoctoral Scholar. My current position entails conducting basic science research on the role of RNA binding proteins, specifically components of the exon-exon junction complex, in corticogenesis and neuroprogenitor fate.

• Retrospection on time at AMC: I feel AMC prepared me well for my position. AMC provided me with the fundamental knowledge, the technical background, and the experience to perform my current job. My advice to future students would be to strive to quickly become proactive and constantly look for ways to advance your project. Also I would encourage future students to pursue science without the fear of failure. In science we all fail at some point, be it an experiment or a hypothesis, what sets apart those who succeed is that they not only persevere, but also learn from failures and continue to grow.

Recent Alumni: Anthony Hickey, PhD
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AMC Training: Dr. Hickey earned his Ph.D. from the Center for Immunology and Microbial Disease with Dr. Dennis Metzger. His thesis project was on the development of a subunit vaccine for tularemia.

Career after Graduation: Dr. Hickey’s current position is as an Intramural Postdoctoral Fellow at the National Institutes of Health, Eunice Kennedy Shriver National Institute of Child Health and Human Development. His research involves studying Tf1, a retrotransposon in budding yeast with homology to HIV and other Long terminal repeat (LTR) retroviruses.

Retrospection on time at AMC: Yes, I do feel that my educational experience and research training at AMC was enriching and comprehensive. I attribute this in part to the excellent mentorship I received from multiple individuals including my supervising PI, as well as key members of my dissertation committee. The rest is a result of the overall experience I gained from working in a cross-disciplinary environment at AMC, which has helped me build my technical and analytical skills and knowledge base. My rigorous graduate training has certainly taught me to stay resilient in the face of experimental setbacks and helped me retain a dedication and a passion for the science behind the research.

Personal Life: I have been married to Dr. Sharon Sequeira for over close to eight years now. We met in graduate school so we both understand the hardships, sacrifices and challenges that are part and parcel of this career path. We now live together in Rockville Maryland with two adorable cats who are like our kids. We are both hardworking scientists but make it a point to carefully balance work with fun and friends and not let things get too overwhelming. In addition to my scientific work in the lab, I enjoy writing and am a contributing author for the NICHD connection newsletter.

Advice to Future Students:

1. Try to remember that there is no such thing as a perfect experiment. Every experiment, no matter how carefully designed or executed, will always have room for improvement, and if the experiment is “successful” it will need to be repeated, regardless. I am NOT saying don’t take any time or care to plan your experimental designs, but if you are too much of a perfectionist, it will become alarmingly easy to get bogged down with minute details and lose sight of the big picture. You may find that you are talking yourself out of doing almost every experiment that you had planned, and this is obviously not a good thing. Sometimes it’s better to not to overthink things, and just get to work.

2. Remember that hindsight is always 20/20! If after you conduct your “perfect” experiment and find it’s not so perfect because of a detail you missed then learn from this experience, and quickly! Scientific research work often entails repeating different permutations of the same experiment over and over again. While many of us are our own worst critics, it is however, completely unproductive to beat one’s self up over an oversight or a mistake.

3. Never lose sight of who you are doing this work for: yourself. While is VERY important to maintain good relationships with your mentor and committee members, all this hard work is for YOUR future. You are doing this for yourself, not someone else, and it is very easy to lose sight of that, in the face of criticism and failures. If you have a strong vested interest in your work and your future career goals, then you are much more likely to be not only productive but even enthusiastic about your daily work. If not, and you find what you do to not be fulfilling, than I urge you to rethink your academic strategy and choices, early in the game. Start planning for your future after graduate school (yes, there is a life after school!!) as early as you can and surround yourself with people that will help you attain that future.
Alumni From the Past: Lawrence W. Fitzgerald, PhD, MBA

Dr. Fitzgerald earned his MS at AMC in 1992 and subsequently his PhD in 1993. After receiving these degrees he decided to continue his education earning an MBA from the University of Michigan in 2010.

AMC Training: Dr. Fitzgerald worked under the tutelage of Stanley Glick, PhD, MD. The Center for Neuroscience and Neuropharmacology had been known as the Department of Pharmacology and Toxicology at the time. In Dr. Glick’s lab his thesis work was entitled “Neurochemical and behavioral characterization of a spontaneous mouse mutant: a novel model of dopaminergic dysfunction.”

Career after Graduation: President and Owner of LW Fitzgerald Consulting, a firm that consults for entities engaged in drug discovery (e.g., pharma/biotech, academia, nonprofits, government); Entrepreneur, Founder and CEO of Mend Therapeutics, Inc., a nonprofit pharma company that provides services and therapeutics for diabetes and its complications in the developing and developed world.

Associate Fellow – Pharmacia Corp (2000-2003)
Director/Senior Director – Pfizer, Inc. (2003-2009), Founder & Head of its Autism Research Unit
Director and Head of Neuroscience, AstraZeneca Pharma (2009-2010)
Vice President, Biology Research – Lundbeck (2010-2011)
Vice President, Sage Therapeutics (CNS Start-up) (2011-2013)

Retrospection on time at AMC: I do feel I received a good education. The best part was the comprehensive medical education (e.g., Physiology, Biochemistry, Cell biology) plus focus areas (Neuroscience and Pharmacology). Careers call for generalists and experts and the flexibility and desire to continually learn and adapt.

Advice to Future Students: follow your heart and identify your passions. You will only be excellent at what you are passionate about. Understand the variety of career options available in a changing job market. There are more options than a tenure track position or pharma scientist position. For example, join a venture capital firm, learn to build a business...

Personal Life: Married to AMC student Laura Rydelek Fitzgerald (for 25 years this month), two wonderful boys (age 11 and 16 years) two crazy Devon Rex cats, no such thing as work life balance just work/life choices (no free lunch!); outside interests – sports/exercise, cooking, Michigan football, travel all over with my son the premier soccer player, volunteer on BOD for nonprofits

Last Most Significant Publication:
Alumni From the Past: Brian Cohen, PhD
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- **AMC Training:**
  Dr. Cohen earned his PhD in Biochemistry and Molecular Biology from AMC in 1998. His thesis work entitled, “Regulation Of The Anaerobic Gene, **DAN1**, In **S. cerevisiae**” was performed under the training of Dr. Charles V. Lowry.

- **Career after Graduation:**
  Current position (since Fall, 2003): Lecturer, Dept. of Biological Sciences, Union College, Schenectady, NY. As a lecturer, I teach a full load of 6 courses (or equivalents) each year. I also do college service. Although not required as a lecturer, I also do research on the human FSH receptor. I work with undergraduate students who do their senior research with me.

  Prior to Union, I spent 3 month working at a small nanotechnology company in Troy, Evident Technologies where I worked on protocols for conjugating quantum dots to biomolecules. For my postdoctoral research I worked at the Wadsworth Center with Dr. James Dias.

- **Retrospection on time at AMC:**
  Dr. Lowry was an incredible friend and mentor. I am incredibly grateful for the way he taught me how to think, troubleshoot, and problem solve. To this day when student ask me why I do things a certain way in the lab, I tell them “that’s how Chuck taught me to do it; so that’s how you will do it.”

  My classes were very good. The best classes were the ones that were smaller and more literature based like the one I took on cell-cell adhesion with Peter Vincent and Fred Minnear. I really learned how to dissect papers in that class.

  Looking back, I wish I had spent more time learning to write manuscripts when I was a graduate student. That is my Achilles’ heel and I wish that had been more of a focus when I was a student. My advice to future students - work on your writing because I believe it will make or break your careers.

- **Personal Life:**
  I got married to my wife the summer after my first year of graduate school. We were college sweethearts and she was a student at Albany Law School. My son was born in 1998 - I was 6 months into my postdoc. My daughter was born in 2001. With each child, my productivity as a postdoc slowed down a little. My suggestion would be to always communicate with your advisor (either graduate or postdoc) to make sure that you know what their expectations are and they know what your needs are.

- **Last Most Significant Publication:**