



# NIH Loan Repayment Programs

## Success Story Digest

*In the profiles below, eight researchers describe how the LRPs have enriched their careers.*

### **David Aronoff, M.D.**

*Dr. David Aronoff is an assistant professor of medicine at the University of Michigan. He is a clinical research LRP awardee whose initial award was given in 2004. His most recent award ended in 2010.*

Biomedical research allows me to combine patient care with research, and I study how the innate immune system helps protect against bacterial infections in the respiratory and female reproductive tracts. The Loan Repayment Programs gave me the freedom to pursue this research career and even helped shape my research. At the conclusion of my education and training, my student loan debt was more than \$275,000, and because the program is so competitive, I applied to the Loan Repayment Programs three times before receiving the award. With each new application, I had to make adjustments, but persistence paid off. When my last LRP payment is made in 2010, this program will have reduced my debt by \$210,000. Really, I find it hard to put into words my appreciation for the program because without the LRPs, I would have never been able to apply for my R01.

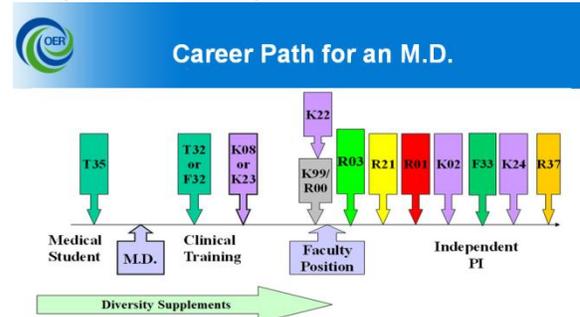
### **Julie Anne Bastarache, M.D.**

*Dr. Julie Anne Bastarache is an assistant professor of medicine in the Division of Allergy, Pulmonary and Critical Care Medicine at the Vanderbilt University School of Medicine. She received a clinical research LRP in 2005 and renewed the contract in both 2007 and 2009.*

I study acute lung injury – specifically why and how lungs are injured through trauma and illness. I was hooked on science after receiving my first chemistry set as a child; now, thanks to the assistance of the NIH Loan Repayment Programs, I’m working toward tenure and starting my own research lab. After medical

school I had a lot of student loan debt, and I wouldn’t have been able to make the payments on a researcher’s salary alone. The LRPs were critical to making my career choice a possibility. My colleagues told me about the programs, and I was awarded my first contract in 2005. Since then, my LRP award has been renewed twice. Not only is this program evidence that NIH believes in my research and wants to help me succeed, the process has helped me develop my grant writing skills. Since receiving my first LRP contract, I have also received a K08 award and participated in NIH’s Building Interdisciplinary Research Careers in Women’s Health program. With the help of the LRPs, I have the support that I need to continue my research project, and I hope to secure NIH funding for the duration of my career.

### **Sample Career Path for an M.D.**



*The National Institutes of Health offer a variety of career development opportunities for scientists. This includes training grants (Ts), fellowships (Fs), career development awards (Ks), and research grants (Rs). This is a sample career path for a researcher who has a M.D. Often, LRP recipients go on to apply and receive these career aids.*

**Amy Heimberger, M.D.**

*Dr. Amy Heimberger is an associate professor of neurosurgery at the University of Texas M.D. Anderson Cancer Center. She was a clinical research LRP awardee from 2004 to 2007.*

I worked as a researcher before medical school, so it was no surprise that I focused on a career as a translational scientist. However, after amassing a large amount of debt, my career options did not seem as flexible as I desired. To continue a research career, I needed a way to bring down my debt, and the great thing about the Loan Repayment Programs is that NIH really believes in fostering research. I now spend half my time doing clinical work and the other half studying malignant brain tumors. I investigate how brain cancer cells interface with the immune system, and I helped develop a vaccine that targets a protein found only on these malignant brain cancer cells. Last year, in recognition of my research efforts, I received the Presidential Early Career Award for Scientists and Engineers. Getting to this stage of my career would have been much tougher without this program.

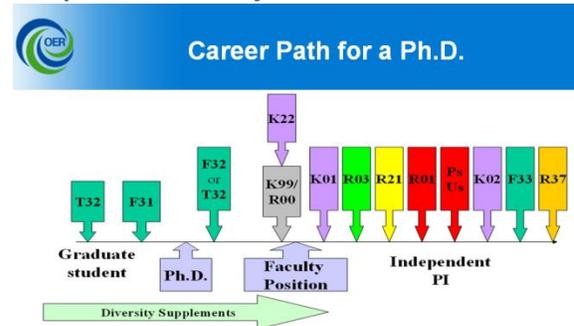
**Timothy Peters, M.D.**

*Dr. Timothy Peters is an assistant professor of pediatrics at Wake Forest University's Brenner Children's Hospital. He received a pediatric research LRP in 2003 and renewed the award in 2005.*

During the first year of my fellowship, I faced a tough decision – continue to pursue a research career or open my own pediatrician's office. Both my wife Katherine and I are pediatricians, and we wanted to pursue academic careers. Katherine had more flexibility because she was fortunate to graduate without debt. I, on the other hand, had about \$139,000 of student loans. I learned about the NIH Loan Repayment Programs through an e-mail, and my fellowship program director encouraged me to apply. I received an initial award and then renewed it two years later. Through this program, my debt has been reduced 93 percent– that's a total of \$130,000 that I no longer have to repay. The LRP award is a fantastic, incredible opportunity

for researchers like me. I now investigate the impact of vaccines on epidemic pediatric respiratory infections, and as a bonus, Katherine and I get to work together.

**Sample Career Path for a Ph.D.**



*The National Institutes of Health offer a variety of career development opportunities for scientists. This includes training grants (Ts), fellowships (Fs), career development awards (Ks), and research grants (Rs). This is a sample career path for a researcher who has a Ph.D.*

**Dorian Traube, Ph.D.**

*Dr. Dorian Traube, Ph.D., is an assistant professor in the School of Social Work at the University of Southern California. A recipient of the health disparities LRP, Dr. Traube's research focuses on children and adolescents with HIV. Thus far, her major contribution has been developing basic theories for this emerging field, and she plans to translate these into prevention and intervention methods. In addition to the LRP, Dr. Traube has received an R03 from the National Institute on Drug Abuse and fellowships from the National Institute of Mental Health and the NIH Office of Behavior and Social Science Research.*

The Loan Repayment Programs are the singular reason I have been able to focus on research since joining the USC faculty. For me, this support has been a great way to connect to the NIH and help develop my career plan. In addition to paying my loans, this program helped me define the scientific contributions I want to make and allowed me to advance

science through a federal platform. Also, the beauty of the NIH is that once you're in the pipeline, you hear about additional opportunities. My program officers gave me referrals, broadened my understanding of health disparities and vetted my initial research ideas. My advice for potential LRP applicants:

1. Reach out to colleagues and mentors who have been in the programs. They can provide insight into the application process and may offer examples of their successful applications.
2. Enlist the assistance of an LRP reviewer who can explain that process to you.
3. Attend NIH-sponsored trainings and events. For instance, LRP has archived webinars that will help you complete your application and understand career paths for both M.D.s and Ph.D.s, and each year the Office of Extramural Research offers Regional Seminars that explain program funding and grants administration in depth.

***Nirav R. Shah, M.D., M.P.H.***

*New York State Health Commissioner Dr. Nirav R. Shah is helping to transform the nation's largest Medicaid system with a coordinated effort to redesign its components and reduce the state's Medicaid spending by \$2.3 billion. Prior to this appointment, Dr. Shah was an attending physician at Bellevue Hospital Center in Manhattan, associate investigator at the Geisinger Center for Health Research in central Pennsylvania and an assistant professor of medicine at the New York University School of Medicine. Dr. Shah received a clinical LRP in 2006 and successfully renewed in 2008 and 2010. He is regarded as an expert in the use of systems-based methods to improve patient outcomes and is a leading researcher in the use of large scale clinical laboratories and electronic health records.*

Research is definitely the best training ground for anyone who may have an interest in public policy. It opens a lot of doors, and it's easier to transition to a policy role because you know the language and are aware of the issues. Having the NIH LRP definitely allowed me to do work

that interested me. Also, because I didn't have to worry about a large debt load, I could comfortably purchase a home and start a family. With my new position, I now have the opportunity to change the lives of millions of people.

I started January 2011, but had only begun to consider the position in December. I had to leave grants, papers, consulting jobs as well as a variety of speaking engagements. I also had to invest in a completely new wardrobe – suits instead of khakis. Thankfully, I have a phenomenal and extensive staff that is helping me through this transition, and we've hit the ground running. I am focused on reducing costs, maintaining access and improving the quality of the health care New Yorkers receive. To this end, we have already assembled a redesign task force and have 4,000 reform suggestions worth well over \$4 billion.

With both rural and urban areas, New York is a virtual microcosm of the U.S., and health care delivery is quite different in the Bronx than in Buffalo. There are no one-size-fits all solutions. The health care industry has been reluctant to embrace the paradigm shifts of information technology. In 20 years, everyone will have electronic health records, and this will impact how and where health care is delivered. We will no longer see the doctor just three times per year for 20 minutes each. Instead, the paradigm of healthcare will expand so that the care continuum will extend to almost anytime and anywhere.

***Anne M. Walling, M.D., Ph.D.***

*Dr. Anne M. Walling, a recipient of a clinical LRP, is a visiting assistant professor in the department of medicine at the University of California, Los Angeles and a palliative care physician at the Greater Los Angeles Veterans Affairs Healthcare System. She recently published an article on end-of-life care in the Archives of Internal Medicine, and her findings were highlighted in multiple medical publications including MedPage Today and Senior Journal.*

During my residency, I decided to pursue a research career because it would allow me to work to improve the way we care for patients in today's healthcare system. Doctors tend to focus on managing patients' medical problems, but I also think it is important to think about the patients' whole experience. I am especially interested in evaluating the way patients with life-limiting illness and their families are supported. Through my research, I hope to improve the way clinicians communicate with patients and their family, especially at the end of life. Receiving the LRP impacted my career tremendously by giving me the opportunity to pay down my student loans while returning to school to get a doctorate in health services. Without the LRP, I would not have been able to take the extra time to complete a doctoral dissertation. This opportunity has certainly supported me in my first step towards a successful clinical and research career.

**Deborah Wexler, M.D.**

*Dr. Deborah Wexler is an assistant professor of medicine in the Harvard Medical School and an assistant in medicine at Massachusetts General Hospital. She was supported through the clinical research LRP from 2003 to 2009.* I always wanted research and service to be a part of my daily life, so academic medicine was a good fit. My research focuses on the quality of life and improving quality and effectiveness of care for people with Type 2 diabetes. As an endocrinology fellow at Massachusetts General Hospital, my program director told me about the NIH Loan Repayment Programs; deciding to apply was a no-brainer. I had about \$150,000 in loans and had been moonlighting as a clinician to repay the debt. The LRP funding relieved my financial stresses, and allowed me to focus on research. I was able to pay my loans in five years rather than 15. Also, receiving the funding boosted my confidence and gained me the respect of my colleagues and mentor. NIH has continued to be a part of my career development. I now have a K23 Career Development Award in Patient Oriented Research, and this is allowing me to expand my research program and preparing me to apply for independent funding in the next few years. The

NIH LRPs are unique because they facilitate the pursuit of a research career at a time when many competing financial demands present a real barrier.

**Dorian Traube, Ph.D.: Advice for LRP Applicants & Early Career Researchers**

*Dr. Dorian Traube, Ph.D., is an assistant professor in the School of Social Work at the University of Southern California. A recipient of the health disparities LRP, Dr. Traube's research focuses on children and adolescents with HIV. Thus far, her major contribution has been developing basic theories for this emerging field, and she plans to translate these into prevention and intervention methods. In addition to the LRP, Dr. Traube has received an R03 from the National Institute on Drug Abuse and fellowships from the National Institute of Mental Health and the NIH Office of Behavior and Social Science Research. She will soon apply for an R01 and offers the following insight and guidance for potential applicants and early career researchers.*

The Loan Repayment Programs are the singular reason I have been able to focus on research since joining the USC faculty. For me, this support has been a great way to connect to the NIH and help develop my career plan. In addition to paying my loans, this program helped me define the scientific contributions I want to make and allowed me to advance science through a federal platform. Also, the beauty of the NIH is that once you're in the pipeline, you hear about additional opportunities. My program officers gave me referrals, broadened my understanding of health disparities and vetted my initial research ideas. My advice for potential LRP applicants:

1. Reach out to colleagues and mentors who have been in the programs. They can provide insight into the application process and may offer examples of their successful applications.

2. Enlist the assistance of an LRP reviewer who can explain that process to you.
3. Attend NIH-sponsored trainings and events. For instance, LRP has archived webinars that will help you complete your application and understand career paths for both M.D.s and Ph.D.s, and each year the Office of Extramural Research offers Regional Seminars that explain program funding and grants administration in depth.

*Think you may be eligible for the NIH Loan Repayment Programs? Go to <http://www.lrp.nih.gov> for additional information on eligibility and benefits. To learn more about the Career Paths for M.D.s and Ph.D.s, check out our “Mapping Your Career to the NIH” webinar at <http://bit.ly/ftYRkC>*