What is the Vanderbilt University Postdoctoral Association?

The Vanderbilt University Postdoctoral Association (PDA) was formed in 1998 and has strived to unite postdoctoral research fellows from across campus. All postdoctoral fellows from Vanderbilt University and Vanderbilt University Medical Center are invited to participate in the PDA. There are many benefits to participating, ranging from networking opportunities to developing organizational and communication skills. Participation provides PDA leaders the opportunity to voice concerns to University and Medical Center leaders responsible for forming postdoctoral policy. The officers for the 2015-2016 academic year are Loren LaPointe (Senior Co-chair), Boone Prentice (Junior Co-chair), Arnie De Leon (Secretary/Treasurer), Sarah Baum (Senior Advisor), and Jan Varadarajan (Chair of Scholarly Learning). The PDA holds regular meetings on the first Thursday of each month and several social events throughout the year. The Postdoc Talk is a biannual publication seeking to highlight events and resources of relevance to postdocs.

Welcome new postdoctoral fellows!

Vanderbilt University (VU) and Vanderbilt University Medical Center (VUMC) welcomed 130 new postdoctoral fellows this past year. The Department of Pathology, Microbiology, and Immunology leads the way with 16 postdocs, followed by the Department of Biochemistry (12), the Department of Psychiatry (7), and the Department of Radiology and Radiological Sciences (6). Please join us in welcoming these new postdoctoral fellows to the Vanderbilt community!

10th Annual PDA Symposium

by Loren Lapointe, Ph.D.

The 10th Annual Postdoctoral Association and Shared Resources Symposium took place on April 29th, 2016. The annual symposium is an event held on campus to celebrate the achievements of our postdoctoral trainee community. Vanderbilt University and VUMC host over 400 postdoctoral fellows at any given time across all types of scientific research areas. The goal of the symposium is to bring postdocs together to network and share research and ideas. Faculty are invited to participate and many volunteer to judge posters during the poster session; our goal is to incorporate the faculty more in years to come.

2016 Symposium Planning Committee:

Sarah Baum  Laura Daniel  Daniel O’Brien
Tasia Brown  Michelle Failla  Boone Prentice
Arnie de Leon-Carlson  Ralph Hazelwood  Huzaifa Salat
Mohit Chhadha  Vaibhav Jany  Erick Spears
Rogelio Coronado  Meher Juttukonda  Antonia Thelen
                  Loren Lapointe  Jan Varadarajan
Dr. Peter Fiske delivers keynote at PDA symposium
by Loren Lapointe, Ph.D.

We were very lucky to host Dr. Peter Fiske as our Keynote Speaker for the 10th Annual Postdoctoral Association and Shared Resources Symposium. Dr. Peter Fiske is both a seasoned executive and an accomplished scientist, with two decades of experience across industries such as Defense, Natural Resources, Renewable Energy, Water and other utilities, and entrepreneurial technological development. Dr. Fiske is also a nationally-recognized author and lecturer on the subject of career development, leadership and entrepreneurship for scientists and engineers. He is a regular contributor to Nature (the #1 international scientific journal) and a past columnist for Science (the #1 US scientific journal). His articles have also appeared in The New Scientist. Dr. Fiske is the author of Put Your Science to Work!, the most widely-read career development book for early-career scientists and engineers.

Some major take home points from Dr. Fiske's lecture were: 1) making a list of transferrable skills from your PhD training for your CV, 2) how to effectively network (also discussed in Dr. David Shifrin's lecture) and 3) general confidence boosting that PhD training is unique and valuable. Dr. Fiske, who also has an MBA, mentioned that he would trust a PhD more than an MBA with running a successful company. Now, we don't want to downgrade our MBA friends, but getting a PhD is truly unlike ANY other educational experience. You are pushed to the brink of knowledge. Think of it like standing at a cliff of knowledge. You know everything you can know about your particular thesis problem. And then your advisor asks you to take the next step, off that cliff: into the unknown. "What other training is like this?", Fiske posed to a room full of postdocs and grad students.

As someone who has often struggled with the decision to go to graduate school (before, during, and after), Dr. Fiske's talk was completely refreshing to me. I knew from day 1 of graduate school that I didn't want to become an academic professor at a major research institution. I thought I wanted to go back to working in industry, but that a PhD would be useful. I had no idea how useful this experience would actually be, and still might not be fully aware of its utility without having heard Dr. Peter Fiske's lecture.

Dr. David Shifrin offers career advice at PDA symposium
by Loren Lapointe, Ph.D.

In addition to inviting a keynote speaker to the annual Postdoctoral Association and Shared Resources Symposium, the PDA also invites a local area speaker to the symposium and we try to choose someone with close ties to Vanderbilt who is doing something outstanding and interesting with their career. We were extremely lucky and honored to host Dr. David Shifrin as our 2016 local invited speaker. Dr. Shifrin obtained his Ph.D. from Vanderbilt University in the Department of Cell & Developmental Biology 2013 and also stayed on for a year as a postdoctoral research fellow. Now, he is a science communication strategist and owns a company called Filament Life Sciences in the Nashville area.

Dr. Shifrin started his talk by examining the role of luck in our career. No scientist wants to admit that they've been dealt a lucky card. But, in fact, most of our careers can be built around luck. Think about how many times you've heard a scientist say "I noticed that..." Dr. Shifrin posed a question: why don't we take a more scientific (flexible) approach to developing and honing our own careers. He spent some time talking about what luck is and how to recognize it. Or rather, how to turn luck and chance encounters into being optimistic and thinking positively. Positive expectations lead us to positive outcomes.

For me, this talk was a refreshing spin on a general "pep talk" that you might hear when you're approaching graduating from college or
obtaining your Ph.D.

Next, Dr. Shifrin talked about how to become a lucky person and how to win by utilizing chance encounters in your life. First, you should take a strengths assessment. He recommends two strengths tests: Enneagram test and the Gallup Strengths Finder. A strengths assessment will give you your own context from which you can develop a strategy to approach your career. This will help give you a clear direction of where you want to go. Set goals and stick to them. When you find yourself veering off your path, make sure to take steps to get back to the path. Once you have your strengths figured out, along with your goals, you can develop your own personal brand. I think this is very important for us as scientists, and something we don't always consider. When we head out into the “real world” a lot of the nitty gritty skills we learn in our training aren't going to be that useful. But, if you take the time to develop your own personal brand, on top of your practical skillset, you're sure to be a stronger and more employable force in the workplace.

The last section of Dr. Shifrin's talk really focused on tips for putting yourself out there with the main one being (of course): to network. We hear this all the time, we know it's important, but we stay in our comfortable academia bubble. Some tips Dr. Shifrin had are to really get to know people you network with, find out what they do, what they need, and stay in touch. Networking isn't something you go out and do one time at a career fair….it is a necessary lifestyle for both the corporate and academic world. In Dr. Shifrin's eyes an optimistic, well branded, scientist with a clear goal in mind and a large network can be successful if they just relax. Your career trajectory is not going to follow a straight line and you need to be flexible and relax. Take the chance encounters when you get them and build your personal brand and your personal network. After hearing Dr. Shifrin's talk I felt encouraged and motivated to set myself up for new opportunities with an open mind and a positive attitude. It was a twist on a regular “you can do whatever you put your mind to” lecture that served as inspiration for postdoctoral fellows as we step out of training into the next phase: the real world.

Symposium awards honor excellence among postdocs and mentors
by Loren Lapointe, Ph.D.

POSTDOC OF THE YEAR: Boone Prentice, Ph.D.

This award is presented annually to a postdoc with outstanding scholarship, leadership, and outreach and is selected by faculty in the Biomedical Research Education and Training (BRET) office. Dr. Prentice is the Junior Co-Chair of the Postdoctoral Association and makes several contributions to the Vanderbilt Community. He is also a very productive scientist and produces multiple research publications annually.

MENTOR OF THE YEAR: Khaled Abdel-Kader, M.D.

This award is presented annually to a faculty mentor nominated by a postdoc and voted on by the PDA Symposium planning committee members. Dr. Abdel-Kader is assistant professor of medicine, division of Nephrology and Hypertension. Dr. Abdel-Kader's research interests include quality of life in chronic kidney disease (CKD) and predictive modeling.

TRAVEL AWARD: Pallavi Manral, Ph.D.

This award was established this year as incentive to participate in the PDA Symposium and to serve as scientific development for postdocs at Vanderbilt. Dr. Manral is this year's winner, earning $500 towards travel to a scientific meeting of her choosing.

SHARED RESOURCES AWARDS

These awards were given to postdocs who have made outstanding contributions to Shared Resources at Vanderbilt. First Place ($300 prize) was awarded to Dr. Danielle Dean, and two Second Place ($150 prize) honors were awarded to Dr. Shan Wang and Dr. Mellissa Hicks.
DEPARTMENT PARTICIPATION AWARD: Pathology, Microbiology and Immunology

This award was established this year and was awarded to the department with the highest postdoc participation in the PDA Symposium. The Department of Pathology, Microbiology, and Immunology is this year's winner, earning $500 towards social events for postdocs and students in the department.

SCIENTIFIC AWARDS

**Best Posters:** These awards were given to postdocs who gave an outstanding poster presentation assessed by our faculty judges. Prizes: $25 gift card to Amazon and generous gift bag from the VMAA.

- Nathaniel Hart, Ph.D. (Dept. of Cellular Biology)
- Juliane Krueger, Ph.D. (Dept. of Neuroscience)
- Zahra Mashhadi, Ph.D. (Dept. of Biochemistry)
- Joseph Zackular, Ph.D. (Dept. of Pathology, Microbiology and Immunology)
- Linda Zhang, Ph.D. (Dept. of Pharmacology)

**Best Abstracts:** These abstracts were chosen by a selection committee to give a research talk at the symposium. Prizes: $25 gift card to Amazon and gift bag from the VMAA.

- Kathryn McCulloch, Ph.D. “AnnexinA13 forms a unique domain-swapped dimer”
- Jason Foss, Ph.D. “High Salt Activates Dendritic Cells to Promote Hypertension”

**Where are they now? - Interview with Dr. Lindsey Morris**

**by Jan Varadarajan, Ph.D.**

The *Postdoc Talk* is happy to highlight VU/VUMC alumni and their career path. In doing so we hope to bring to light the various career paths in science, and the experiences of the alumni in their current field.

For this edition, I had the pleasure of interviewing Dr. Lindsey Morris, a former postdoc in the department of Molecular Physiology and Biophysics in VUMC. She was also the past president of the VUMC PDA, during the academic year of 2014-15.

Dr. Morris is currently the Director of Data Science and Analytics at Axial Healthcare in Nashville, TN. She has been employed at Axial for close to a year now. During my interview, Dr. Morris explained what her responsibilities in her current role are, how she transitioned into this position, what the job market is like now for postdocs who want to transition into this field and much more. Read on to find out more.

**What are your primary responsibilities in your current position at Axial Healthcare?**

Axial Healthcare is a start-up that has pioneered in evidence-driven predictive pain management solutions that empowers insurers and equips health care professionals to manage the cost and quality of patient care. Working for a small company, I do wear a lot of hats and so my responsibilities shift a lot. However, my main responsibilities are to procure the data sets for the company, manage the data exchange between the company and the clients, the insurance companies, as well as crafting analyses and writing computational code to perform the analyses. The data that we work with in Axial Healthcare are medical claims data and pharmacy data.
How did you transition from your postdoctoral fellowship to your current position?

This is my personal experience on how I made the transition. This might work for other postdocs; however, I don't think this is the only way to go about transitioning to another job. The current Chief Science Officer, Dr. Elizabeth Ann Stringer at Axial did her graduate work at Vanderbilt and was a speaker in a PhD Career Connections seminar in Fall 2014. I learnt then that work at Axial Healthcare involved a lot of programming, which I was quite interested in doing. So I got connected with Elizabeth and not only started conversations with her but visited Axial a few times, got to know the people there as well as learnt about what they worked on. Axial had just started around then and had just about 4-5 employees. Soon Axial got a huge amount of investor funding and so were hiring. I then let them know that if they were hiring, I would be interested in working there. At that time I was also learning some programming courses through Coursera and so they let me analyze some data, liked what I did, and hired me as they thought I was a good fit for the company.

Did you face any challenges during this transition? If so, what were they and how did you deal with them?

Yes, the sheer pace of things was quite a challenge in the beginning; projects are short and are usually completed within a week or two. Also, when you start in a new company the objectives change very quickly, as rapidly as within a day. For example, if you are asked to work on one set of data analysis today, you might be asked to stop that the next day and work on another one as it has a higher requirement now. That was difficult initially as I was not too familiar with the programming then. But I just had to get used to rolling with it and I am able to deal with it better now. You do get better with time as you get more experience in the job and I like the sense of gratification that comes with successfully completing each project.

What are some of the important skills that you use in your current work?

I think this is an important question as usually postdocs/PhDs start thinking about the techniques they know when asked about skillsets. But in reality, the soft skills that you have matter more. For example, how quickly can you adapt, how well can you learn, how creative can you get, how well can you work with a team and your problem-solving ability to come up with solutions. These types of skills are much more important in my current work than specific laboratory skills. And I think these skills are very valuable to have whichever career path one chooses. In my specific example, I never really interviewed at Axial. I met them and got to know them and with a little bit of data analyses that I did for them, they found that I was a good fit for the job and my personality fit in well with the work environment there. They were OK with the fact that I didn't know programming but was taking the steps to learn the programs needed for the sort of work done at Axial. I would add that my involvement with the PDA and other professional societies’ activities helped improve my soft skills.

What is the job market like now for postdocs who want to get into data science and analytics?

The job market is very hot in this field of work now. I get contacted by recruiters pretty constantly. There is a plethora of data and the insurance companies don't know what to do with it, and that's where we the PhDs come in. As we all know, postdocs are well-trained and very good at analyzing and interpreting data.

What advice would you give postdocs looking to go down a similar path like yours?

I think you just have to put yourself out there, find out who the key players are in the field or company you want to get into, try to get to know them, spend time with them, and even volunteer to do a project on the side if you can to build up your portfolio. For programming and analytics sort of jobs, there are online courses offered through Coursera that you can take to specifically craft your skillset. Try to get out of your lab for a little while every now and then, reach out to people and spend some time networking and doing things related to your career development.

My coffee break with Dr. Mosely

by Laura Daniel, Ph.D.

I recently had the opportunity to speak with Dr. Jonathan Mosley (MD, PhD), clinical instructor at Vanderbilt. He uses bioinformatics approaches to identify novel genotype-phenotype associations. But, our chat extended beyond the science and was more about his experience with moving up in the ranks from postdoc to junior faculty. This will be a recurring theme in our newsletter in which I’ll be interviewing new faculty at Vanderbilt who have recently transitioned from postdoctoral fellowships, trying to learn of how they succeeded in transitioning to their tenure-track or non-tenured faculty positions at Vanderbilt.

Dr. Mosley was a former postdoctoral fellow at Vanderbilt in the division of Clinical Pharmacology and his research project was funded through a T32 grant/award. When asked about some of the things he did to help in the transition, he said that when he was a postdoctoral fellow, besides attending the meetings related to his mentor’s lab group, he would attend other groups’ lab meetings. This, he thought was a helpful experience because it gave him an understanding of how things worked in other labs and other departments, which would prove useful when it comes time to start his own lab. He added that this experience, along with attending career development talks, helped him advance his career.

When Dr. Mosely’s career as a postdoc was coming to an end his mentor, Dr. Dan Roden, played a large role in helping him navigate the application process for junior faculty. Dr. Mosely said his mentor was instrumental in helping him through the process by not only
providing him with confidence but also by being his advocate. The application process for becoming junior faculty at Vanderbilt doesn't require a formal interview, but does involve a lot of paper work and is similar in many ways to applying for a grant: you need three letters of recommendations, publications, grants, and a successful mentor.

Dr. Mosley is now a junior faculty member and has held this position for almost two years. While this is not a tenure-track position, it has the advantage of allowing more time to acquire funding before your tenure clock starts. Once the clock starts, at least at Vanderbilt, you only have a few years to get two R01 level grants.

Dr. Mosley's goal, as junior faculty, is to obtain outside funding so he can begin the tenure process. As part of that goal he has recently applied for a NIH K01 award. He was recently awarded funding from the American Heart Association Fellow to Faculty Transition award. This award is for fellows or instructors with clinical research duties and provides up to five years of funding. Recipients are allowed to work for 1-3 years as a fellow or instructor and then transition to tenure-track faculty for the remainder of the grant. He has also received an internal VUMC Faculty Research Scholars career development award.

Dr. Mosley stated that success in this career, whether in getting grants or a tenure-track faculty position is all about proving you can do what you say you are going to do. If you can convince hiring committees and grant review panels of this you will be setting yourself up for success.

### Informational Interviewing

by Ashley Brady, Ph.D.

Informational interviewing is one of the single most powerful, yet underutilized, networking tools available to you. An informational interview is an informal, but professional, meeting with someone in a career area of interest to you. It allows you to meet someone new and learn about their current position, the company they work for and their career path. Moreover, meeting individuals in this context helps you to grow your network exponentially, as they will often suggest others whom you should meet.

The intention of an informational interview should never be about getting a job offer or responding to an open position. Rather, as the name implies, it is strictly about gaining information. Nevertheless, you may find that from these conversations you gain insight into what is referred to as the “hidden job market.” Insiders in a particular field will know about job opportunities before they are advertised, such as knowing that a particular department is planning to expand, or that someone in a particular company is planning to leave. You may be made aware of these potential market/industry changes in advance and be able to begin conversations with the appropriate stakeholder before a job description is even written. Another benefit to conducting informational interviews is that they provide a low-stress environment in which you can build your confidence and practice talking to people, which helps you do better in job interviews later on.

Finding people to interview is actually easier than it sounds and a good place to start is your own personal network. Start asking family, friends and colleagues if they know of anyone who would be good for you to talk to in order to gain more information about various career areas. Seek out alumni contacts from your college or university and graduate program who may be in a particular industry or field. (LinkedIn is a great tool for this!).

Once you have identified a few individuals to contact, send them an email asking for a meeting. Conducting informational interviews can be done at any point in your career, but there is no better time than when you are still in a “training” position such as your post-doctoral fellowship. Make your message succinct and easy to read. Tell them who you are and why you are contacting them. Also include any connection you may have through colleagues or universities, for example. Many professionals are more than willing to try to help someone who is just getting started. You might be surprised by the positive responses you get.

Once you get a meeting set, it is very important to prepare ahead of time. You should be able to give a 30-60 second “elevator pitch” to tell them who you are and what you are trying to learn. Research the person you are meeting with, as well as their company/department and industry. Use LinkedIn and Google to find websites, annual reports, press releases and news articles that will help you develop questions to ask. You should also prepare 10-12 focused questions to help guide the conversation. There are many resources available online to help you find good informational interview questions.

While informational interviews are generally informal meetings, you never want to make a bad first impression. Be sure to dress professionally, be on time or early to the meeting, turn off your cell phone, bring a pen and paper to take notes, be enthusiastic and personable, keep an eye on the time, and thank them for taking the time to meet you.

The follow-up after an informational interview is perhaps even more important than the interview itself. It is absolutely imperative that you send a thank you email within 24 hours of your meeting. Use this email follow-up as an opportunity to let them know that you would
Congratulations to Dr. Huzaifah Salat!
by Jan Varadarajan, Ph.D.

Huzaifah Salat, MD, was selected as one of 6 finalists from all over the US to compete in the second part of the 2016 American Society of Nephrology (ASN) Innovations in Kidney Education Contest. Every year, ASN invites PhD faculty, postdoctoral fellows, medical students, graduate students, and nephrologists to participate in the ASN Innovations in Kidney Education Contest and develop innovative ideas and tools to teach medical and graduate students various aspects of nephrology, including renal physiology, pathophysiology, or clinical disease. In the first part of the contest, Dr. Salat submitted a proposal for a board game titled “Revenge of the Nephron”. As a finalist, he will now receive a grant to help him develop his board game and contest with the other finalists in the second part of the contest later this year. Up to three finalists will be selected as winners and will receive a cash prize of $5,000 along with a complimentary registration and travel support to participate in the ASN Kidney Week 2016 Annual Meeting later this year in Chicago. Dr. Salat is a postdoctoral Research Fellow working with Dr. Khaled Abdel-Kader in the Vanderbilt Center for Kidney Disease. Dr. Salat is an International Medical Graduate of the Aga Khan University, Karachi, Pakistan. He is passionate about soccer, Internal Medicine, likes to write, and travel. Not surprisingly, he possesses a soft spot for Pakistani cuisine and mangoes!

Join us in wishing Dr. Salat the very best in the competition! For more information about this contest, please visit: www.asn-online.org/education/contest/

Congratulations to Dr. Arnie de Leon-Carlson!
by Laura Daniel, Ph.D.

After the 10th Annual Shared Resources and Postdoctoral Symposium last month Dr. Arnie de Leon-Carlson packed her belongings and headed for Cincinnati, Ohio, saying goodbye to her life as a postdoc and hello to her new career in industry. I had the opportunity to chat with Dr. de Leon-Carlson about her new job at Nitto Denko Avecia, a company that has played a vital role in oligo therapeutic approaches. Specifically, the facility at Cincinnati, OH, optimizes the synthesis of oligonucleotides for cGMP production. Being a new member of the company, Dr. de Leon-Carlson is still learning about all of her responsibilities in her current position; however, one of her primary responsibilities is to update the clients about the progress of projects. She adds that she is enjoying learning about the business side of science.

When asked about her experience, so far, transitioning to an industry job, Dr. de Leon-Carlson says she is appreciative of the fact that a sizeable portion of the training she is required to attend is specially tailored for individuals like her that have never had industry experience and this has helped with a smooth transition. This, she says, is good news for those postdocs who are intimidated to transition into industry because of their lack of industry experience. However, she says, unlike in academia, there isn't much flexibility to alter procedures in the industry. This is due to the fact that each procedure that is developed has to be validated prior to implementation.

Just as many of us have heard at various career talks Dr. de Leon-Carlson echoes, don't underestimate the value to transferable skills. She's glad she used to push herself to regularly learn new techniques and about new instruments and says it helped her “in a way not to be too intimidated of new or bigger instrumentations”.

Stay tuned folks, we will be checking back with Dr. de Leon-Carlson and get a follow up on how she is doing and what life is like working in industry.
Naturally occurring DNA damage from metabolic and hydrolytic reactions occurs tens of thousands of times per cell per day. When one considers the effects of exogenous sources such as UV radiation and exposure to carcinogenic substances, it is truly amazing that our genetic material doesn’t crumble into chemical chaos. The suite of molecular repair systems that maintain the integrity of our DNA is so vital to human health that the 2015 Nobel Prize in Chemistry recognized Thomas Lindahl, Paul Modrich, and Aziz Sancar “for mechanistic studies of DNA repair.”

DNA damage, in the form of nucleobase lesions, commonly includes deamination, oxidation, alkylation, and spontaneous detachment from the phosphoribose backbone. Most of these lesions are repaired by the well-described base-excision repair pathway, where a damage-dependent glycosylase enzyme opens the minor groove of the helix in order to ‘flip out’ the entire nucleobase from the helix and into the active site of the repair enzyme. However, a recent study from Professor Brandt Eichman’s laboratory at Vanderbilt University challenges the traditional belief that base-excision repair is the exclusive mechanism for correcting small chemical modifications. Instead, first author Elwood Mullins, a postdoctoral research fellow in the Eichman lab, and coworkers propose that the repair enzyme, in this case the alkylpurine DNA glycosylase (AlkD), can perform lesion excision without base flipping and without gross conformational changes to the DNA helix.

During traditional base-excision repair, the physical geometries and chemical compositions of the enzyme’s active site provide the specificity for the DNA repair mechanism. However, Mullins and coworkers were able to use a series of flash-frozen crystallographic snapshots in tandem with quantum mechanical calculations to demonstrate that the AlkD-DNA interaction is stabilized by a series of hydrogen bonds and two catalytic CH-π interactions. Noncovalent CH-π interactions have been reported in other protein-ligand systems; however, their observation in the non-base-flipping mechanism represents the first observation of catalytic CH-π interactions in DNA repair.

This work suggests that DNA damage repair can occur without binding pockets, possibly necessitating the development of alternative therapeutic targeting strategies in clinical workflows. The fact that there are minimal steric limitations with the AlkD repair mechanism indicates that the enzyme may have the ability to repair bulky lesions and suggests a broader role in genomic maintenance. For example, Mullins and coworkers demonstrated that the large alkylating agent yatakemycin, which acts as antibiotic, could be excited from the DNA helix by AlkD, but not by other DNA glycosylases that rely on base flipping. “These findings represent a new paradigm for DNA repair and have potentially far-reaching implications for DNA damage recognition,” said Mullins. Interested in the implications for cellular toxicity and further DNA damage repair, Mullins is currently studying the biochemical and biophysical aspects of yatakemycin-adenine adducts, which have been found to be unusually resistant to spontaneous depurination and appear to dramatically stabilize certain DNA conformations.

Literature Cited: