# thextra Urology

Winter 2014



# VUR: Against the Flow

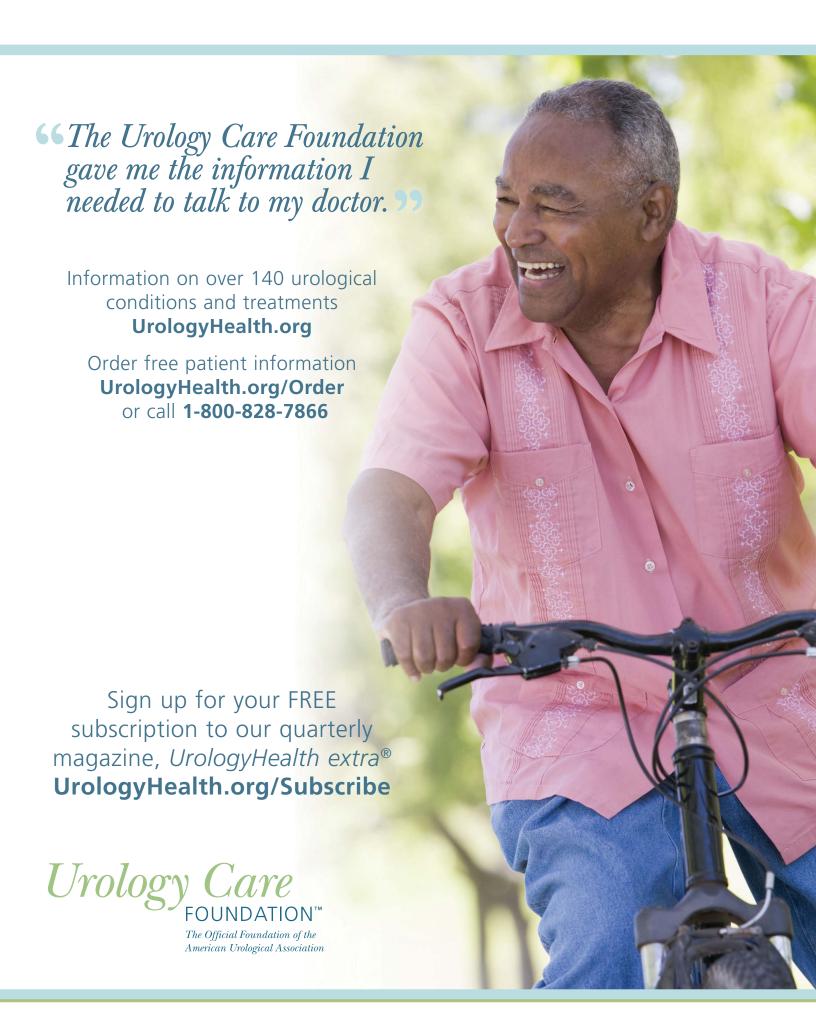
**VESICOURETERAL REFLUX: CHILDREN'S URINARY TRACT DISEASE** 

PLUS:

**KEEPING YOUR BONES** STRONG DURING **PROSTATE CANCER TREATMENT** 

Urology Care

The Official Foundation of the American Urological Association



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# **BLADDER-FRIENDLY RECIPES:** Holiday Edition

There are a lot of great bladder-friendly recipes to make this holiday season. Whether you're hosting friends and family or hitting the road to join the party, these tasty treats are perfect. Check out the following four recipes made with ingredients many would say are less irritating to their bladder. It is a good idea to think about using these recipes if you suffer from interstitial cystitis (IC) or overactive bladder (OAB). The recipes are a safe bet to delight friends and family this holiday season!





### **Blueberry Streusel** Scones

#### **INGREDIENTS**

2 cups all-purpose flour 1/3 cup granulated white sugar 2 teaspoons baking powder 1/4 teaspoon salt

6 tablespoon-size pieces of cold, unsalted

1 cup fresh blueberries 1 large egg

1 teaspoon pure vanilla extract 1/2 cup whole milk

#### STREUSEL TOPPING

1/4 cup firmly packed light brown sugar 1/4 cup all-purpose flour 1/2 teaspoon ground cinnamon 2 tablespoons cold butter

#### **DIRECTIONS**

- Preheat oven to 400 degrees F.
- Lightly butter the baking sheet and place it in the center rack of the oven.
- Whisk together the flour, sugar, baking powder and salt in a large bowl.
- Cut butter into pieces, and blend it into the flour mixture with your fingertips.

- Add blueberries.
- In a separate bowl, whisk the egg with the vanilla extract and whole milk.
- Add this mixture to the flour mixture and stir into a dough (careful, don't over-mix the dough!).
- Place the dough on a lightly floured surface and knead it a few times.
- Mold the dough into a 7-inch round. Cut this circle in half, then cut each half into four pie-shaped wedges and place the scones on the baking sheet. Lightly brush the scone tops with whole milk.

### STREUSEL TOPPING

- Whisk together the sugar, flour and cinnamon until a crumbly mixture results.
- Gently apply 1 ½ teaspoons of the mixture on each scone top.
- Bake scones for 20 minutes; cool scones briefly. Makes 8 scones. Enjoy!



### **Banana Almond Smoothie**

#### **INGREDIENTS**

- 1 frozen peeled banana, broken into 3 – 4 chunks
- 1 cup almond milk
- 1 tablespoon almond butter

### **DIRECTIONS**

Combine all ingredients into your blender and puree until smooth. Enjoy!



### **Caramel Popcorn**

### **INGREDIENTS**

1 cup butter

1/2 cup corn syrup

2 cups brown sugar

1 teaspoon salt

1/2 teaspoon baking soda

1 teaspoon vanilla extract

5 quarts popped popcorn

### **DIRECTIONS**

- Preheat oven to 250 degrees F.
- In a saucepan over medium heat, melt butter and stir in brown sugar, corn syrup and salt. Bring to a boil while continuously stirring the mixture, then boil without stirring for five minutes. Turn off the burner and proceed to stir in soda and vanilla. Pour in a thin stream over the already popped popcorn that should be sitting in a large bowl; stir the combined contents to coat the popcorn.
- Place in large baking dishes and bake in the preheated oven; make sure to stir every 15 minutes for 1 hour. Remove from oven. Once it has fully cooled, you may begin breaking it into pieces. Serves about three people. Enjoy!

### **Candy Cane Cupcakes**

#### **INGREDIENTS**

1 box of white cake mix (roughly 18 oz.) Water, vegetable oil, egg whites, etc. (ingredients called for on cake mix box)

- 1 teaspoon peppermint extract
- 1 teaspoon red paste food color
- 2 containers (12 oz. each) of fluffy white whipped frosting
- 1 cup crushed peppermint candy canes

#### **DIRECTIONS**

- Heat oven to 350 degrees F and place paper baking cups in 24 regular-size muffin pan cups.
- In large bowl, blend the cake mix, water, oil, egg whites and peppermint extract, and divide the batter in half. Stir in food color to the first portion until it is red. In each muffin cup, place 2 tablespoons red batter; top with 2 tablespoons white batter. Swirl the batters together with a knife for an aesthetically pleasing marble
- Bake for 19 minutes and cool for 10 minutes, then remove cupcakes from the pans and cool completely for about 20
- Frost cupcakes and top each with crushed peppermint candies. Enjoy!





VESICOURETERAL REFLUX -CHILDREN'S URINARY TRACT DISEASE Vesicoureteral reflux is often diagnosed after a child has had more than one urinary tract infection; however, it generally does not cause pain or pose problems for children when they urinate. Children with VUR may develop urinary tract or kidney infections and may have a higher chance for kidney damage.



Addison Parks was just 15 months old when she had her first urinary tract infection (UTI). Her doctor prescribed antibiotics, and she recovered; but then, just two months later, she developed a second UTI. That is when her doctor sent her to a pediatric urologist, a doctor who specializes in children's diseases of the urinary tract.

After undergoing an X-ray of the bladder, Addison was diagnosed with vesicoureteral reflux (VUR). In normal kidney-bladder function, urine flows from the kidneys to the bladder. In children with VUR, the urine flows backward from the bladder up toward the kidneys. As a result, children with VUR may develop urinary tract or kidney infections and may have a higher chance for kidney damage.

Most children with VUR are diagnosed when they are two or three years of age. About three-fourths of children treated for VUR are girls. Managing the condition usually involves doctor visits and may involve medication or medical procedures. However, Addison's mother, Sara, says they have learned to adjust to life with VUR. "Addison has had no side effects—no one would ever know she had this condition unless we told them," said Sara, who also is a nurse.

VUR can be passed down from parent to child. If a mother has been diagnosed with VUR, as many as half her children may also have the condition. Signs of VUR can be detected before birth using an ultrasound. But VUR cannot be diagnosed for certain until the baby is born and has a bladder x-ray. Most children, as in Addison's case, are diagnosed after they have more than one urinary tract infection.

VUR affects about one percent of children, and many grow out of it around age five or six. This is because the connection between the bladder and ureter develops and grows as the child grows. During the X-ray procedure used to diagnose VUR, the child's bladder is

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filled with a harmless fluid that contains an X-ray dye. When the child's bladder is full, they are asked to empty their bladder. X-rays of the bladder are taken to see if the dye goes backward toward one or both kidneys. Children may be awake for this simple procedure, or they may be sedated, as was the case with Addison. "Sedation was a godsend for us," said Sara. "She wasn't scared."

Many children suffer no pain or kidney damage from VUR. But for those who develop repeated urinary tract infections and kidney scarring, the damage can be serious, says Addison's doctor. Craig A. Peters, MD, is the Chief of the Division of Surgical Innovation at the Sheikh Zayed Institute for Pediatric Surgical Innovation at Children's National Medical Center in Washington, DC. "Our challenge is to try to figure out who to worry about, and tailor the management of the disease to the child's risk," he says.

The goal of medical treatment is to prevent urinary tract infections and kidney damage until the child grows enough for VUR to disappear.

Many children with VUR do not urinate often or empty their bladders completely. These toilet habits leave children at a higher risk for getting a kidney infection. "This is a very com-

"Our challenge is to try to figure out who to worry about, and tailor the management of the disease to the child's risk"

mon problem," Dr. Peters says. "We see kids who are 'overtoilet-trained.' These are often busy little girls who don't want to 'waste their time' going to the bathroom, and end up holding it in."

Children with VUR often go to the doctor for regular checkups to look for signs of infection. They may be prescribed lowdose antibiotics to keep from getting an infection, and they may need an occasional X-ray of the bladder and kidneys to see whether the VUR is going away.

Not all children with a urinary tract infection need to have a bladder X-ray, according to Dr. Peters. "If a young child with an infection has an ultrasound that doesn't show any signs of VUR (such as one kidney that is smaller than the other), and if they don't have another infection, it's reasonable to not treat," Dr. Peters observes. "If they have a second urinary tract infection, I would strongly consider a bladder X-ray to check for VUR."

A study published in May 2014 in the *New England Journal* of *Medicine* looked at more than 600 children with VUR who had a urinary tract infection. The study included children two months to six years of age, and lasted for two years. Those who were given daily, low-dose antibiotics were half as likely to have more infections with a fever, compared with children who did not take the medicine.

The study points to the need to find which children with VUR are at the highest risk of urinary tract infection with fever and kidney injury, Dr. Peters notes. "The children we worry about most are those with VUR who have a high fever, vomiting, back pain and pain in the bladder," he says.

Some parents don't want their children to take antibiotics for long periods because they are worried about antibiotic resis-



"The children we worry about most are those with reflux who have a high fever, vomiting, back pain and pain in the bladder"

tance. Dr. Peters tells them this is more likely to develop in children who take higher doses of antibiotics for unnecessary reasons, such as a viral infection. However, if parents understand the risk of not taking the drugs and promise to monitor the child closely, this can be an acceptable alternative to long-term medication, Dr. Peters says.

"Parents have a choice of treating their kids with a full dose of antibiotics every time they get a urinary tract infection, or a low dose of preventive antibiotics. Kids who get an infection can get really sick. With each succeeding urinary tract infection, the chance of kidney scarring increases. We'd love not to use long-term antibiotics, but we don't have a good alternative except for surgical repair." Treating infections promptly decreases the risk of kidney scarring.

"If you treat each infection as it comes, that puts a big burden on the family to spot the infection. Young kids don't have a sign on them saying, 'I have a kidney infection.' They look great until they suddenly look terrible," explains Dr. Peters.

If a child takes long-term antibiotics, works on their bladder training, and still gets infections, the doctor may recommend surgery. Addison's family has decided not to go through surgery for now. She is taking daily, low-dose antibiotics, and has periodic bladder X-rays to check on her condition. "Every situation is a little different," says Sara. "As long as Addison's kidneys aren't being damaged or hurt, and she's maintaining the status quo, we'll keep reevaluating every six months."

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VUR affects about of children.

Most children with VUR are diagnosed when they are

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TWO OR THREE years of age.

About THREE-FOURTHS of children treated for VUR are

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In many children, reflux appears to be **INHERITED**.

If a mother has been treated for reflux, as many as

of her children may also have reflux.

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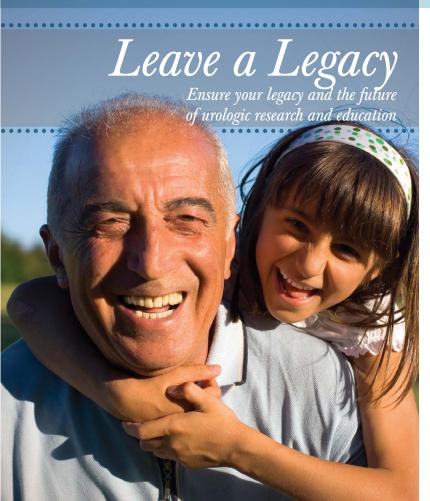


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# Catheterization Q&A



A urinary catheter is a hollow, flexible tube used to drain fluid from the bladder. Urinary catheters come in many sizes; can be used by men, women and children; and are generally needed when someone is unable to empty his or her bladder. Most people require the use of catheters for a short period of time; however, those with a severe illness or injury may need to use urinary catheters for a much longer period of time.



Mary H. Wilde, RN, PhD, associate professor of nursing at the University of Rochester, has been researching the use of urinary catheters for years. She explains the different types of catheters and shares tips about how to stay healthy if you are using one.

### What are the types of urinary catheters?

There are two types of catheters: intermittent catheters and indwelling catheters.

Intermittent catheters are urinary catheters temporarily inserted into the bladder and removed once the bladder is empty. Indwelling catheters are ones placed inside the bladder, remain in place for a longer period of time and drain fluid into a bag outside the body.

### What are common reasons for needing a catheter?

Your doctor may recommend use of a catheter if you are not able to empty your bladder on your own or if you are not able to control when you urinate. Examples of reasons why either of these may occur include:

- Injury to the nerves of the bladder.
- Surgery on your bladder, prostate or genital area (short term after surgery).
- Medical condition such as multiple sclerosis.
- Spinal cord injury.
- Blocked flow of urine due to an enlarged prostate.

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### How can a person stay healthy using a catheter?

The key to staying healthy is to drink plenty of fluids, especially water. Fluids can help flush bacteria from the bladder. Other tips include:

- Limit your caffeine drinking coffee can irritate the bladder.
- Drink enough. How much you should drink depends on your weight. Ask your health care provider how much you should drink. Drink more fluids when it is hot or when you exercise.
- Pay attention to the color of your urine. It should be light yellow all day long.
- Ensure your diet consists of plenty of fiber to prevent constipation. The bowel lies close to the bladder, and pressure from a full bowel can result in obstruction in the flow of urine down the catheter.

### What problems can develop from the use of a catheter?



Problems can include:

- Frequent or persistent urinary tract infections.
- A blocked catheter.
- A catheter that accidentally pulls out of the bladder.
- Urine leakage.

### How can you help prevent problems with the catheter?



Keeping the catheter clean is important. For an indwelling catheter, wash the area where the catheter enters the body once a day. For either type of catheter wash your hands before and after you handle the catheter. If the catheter is cracked, get rid of it. Most importantly, stay aware of your body and how you feel. If you notice any changes, talk with your health care provider.

### What advice do you have for living with a catheter?



Prepare. Going out can sometimes be challenging so make certain you prepare beforehand. Think about where restrooms are located and if they have facilities with a shelf for you to lay out your supplies. There are Internet resources for finding these facilities or you can call ahead to ask.



# MAKING A DIFFERENCE

The Urology Care Foundation is truly grateful to all the community supporters who continue to help us make a difference in patient lives' through research and education.

# **Special Thanks to**

# Chesapeake

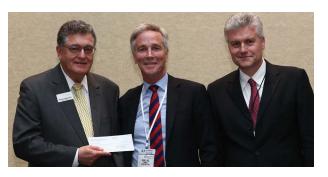
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### for their sustained support and commitment to the Urology Care Foundation's research scholar awards program!

Chesapeake Urology Associates' annual fundraising efforts through the Baltimore Zero Prostate Cancer Challenge have raised more than \$1 million over the past few years. It's led to establishing the Chesapeake Urology Prostate Cancer Fund, a permanent research scholar award at the Urology Care Foundation.

Thank you to Dr. Sanford Siegel, Chesapeake Urology Associates and the Zero Prostate Cancer Challenge for helping to make an impact on the present and future of urologic re-









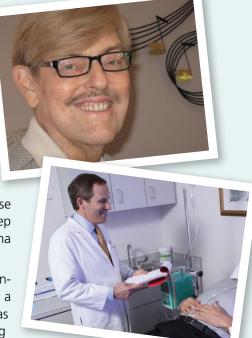
Men with advanced prostate cancer are at risk for the brittle-bone disease, osteoporosis. This can be because the disease has spread to the bone, or because they are taking a type of prostate cancer treatment called androgen deprivation therapy (ADT). This medication lowers the amount of estrogen, a hormone that keeps bones strong. The bones of men who take ADT may become thinner, more brittle and at increased risk for breaking.

Fortunately, men with advanced prostate cancer can take medications and make lifestyle changes to protect their bones and help prevent fractures.

In addition to estrogen, ADT also lowers the body's supply of the hormone testosterone. This hormone serves as the main fuel for growth of prostate cancer cells. Studies suggest that men live longer if they start ADT after prostate cancer has spread to lymph nodes, the bones, or other tissues. ADT may be given to men with prostate cancer that has spread beyond the prostate or for prostate cancer that is in an advanced stage. Some doctors may even prescribe ADT for men in an earlier stage of prostate cancer because it can shrink the tumor and make radiation treatment more effective.

Patrick "Flash" Ludwick, a 72-year-old singer and songwriter, was diagnosed with prostate cancer in 2007. He has been taking ADT since his cancer spread to his bones. He says the disease is not slowing him down. He and his wife regularly walk three miles indoors and do an exercise video together. Men with prostate cancer should get regular exercise to keep their bones strong, says his doctor, Neal Shore, MD, Director for the Carolina Urologic Research Center in Myrtle Beach, South Carolina.

Ludwick also takes calcium and vitamin D daily to protect his bones—another key recommendation for men taking ADT. "I'm still out performing a couple of nights a week—I don't have pain in my bones," he says. He has had some side effects from previous prostate cancer treatment, including some numbness in his hands and feet. But he continues to enjoy a busy schedule. "My lifestyle hasn't really changed a whole lot," he says.



Neal Shore, MD

Patrick "Flash" Ludwick

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"Men with prostate cancer should get regular exercise to keep their bones strong"

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If you are receiving ADT, there are a number of things you can do to reduce your risk of bone loss, Dr. Shore explains. "Make sure you are not leading a sedentary lifestyle—exercise regularly and keep fit with weight-bearing activities like walking," he says. "Avoid smoking and excessive amounts of alcohol. Supplement your diet with vitamin D and calcium to keep bones strong." Your doctor may recommend a yearly bone density scan to see if your bones are thinning.

In addition to Flash's prostate cancer treatment, he receives an injection every month called denosumab. This medication is given monthly to some men whose prostate cancer has spread to the bone to help prevent or delay fractures as well as pain. Denosumab is also given to some men on ADT to prevent osteoporosis-induced fractures. This form of the drug is given every six months.

Your doctor may also prescribe another kind of drug to strengthen bones when on ADT or when cancer has spread to bones. Called bisphosphonates, these drugs can prevent a decrease in bone strength. These drugs may also delay or prevent fractures and development of bone cancer pain.

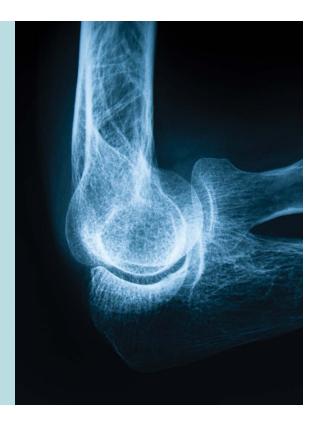
The most commonly used drug of this type is called zolendronic acid. It is given as an intravenous injection, usually once every three to four weeks. This drug can affect the kidneys. So if you take this drug, your doctor will regularly check your kidney function. Your doctor will also want you to have any needed dental work done before you start this treatment.

Other treatments for men with prostate cancer that has spread to the bone include:

- Corticosteroid drugs. These drugs can help relieve bone pain.
- Radiation therapy. This treatment can help reduce bone pain and shrink tumors on the spine or other parts of the body.
- Radiopharmaceuticals. These drugs contain radioactive elements. They are injected into a vein. They settle into areas of the bone with cancer, where they kill cancer cells. These drugs are known as strontium-89, samarium-153 and radium-223. These drugs can help relieve pain caused by prostate cancer that has spread to the bone.
- Radium-223 has been shown to help prostate cancer patients whose cancer has spread only to their bones to live longer.

# In addition to ADT, other risk factors for osteoporosis include:

- Being thin or having a small frame
- Having a family history of the disease
- Using certain medications, such as steroids
- Not getting enough calcium
- Not getting enough exercise
- Smoking
- Drinking too much alcohol



### If you have or are at risk for osteoporosis, it's important to prevent falls. Here are some tips for keeping yourself safe in your home:

- Place items you use most often within easy reach so you don't have to bend and stoop.
- Put skid-proof backing on carpets and area rugs, or tack them to the floor.
- Remove loose cords and wires from the floor.

- Place a non-skid rubber mat in the shower or tub.
- Keep a flashlight by your bed so you don't trip if the power goes out.
- Mark the bottom and top steps of your stairway with brightly colored tape.

# **MAKING A DIFFERENCE**



The Urology Care Foundation is the official foundation of the American Urological Association (AUA). It is a leader in advancing urologic research and education to improve patients' lives. Since 1975, the Foundation has funded researchers working toward scientific breakthroughs and advances in urologic research.

Next year, the Foundation and the AUA will celebrate 40 years supporting research. In that time, more than \$20 million has been invested to help train more than 600 of the best and brightest doctors and scientists in urologic research. In 2015, the Foundation and the AUA expect to fund 64 research projects, totaling more than \$1.2 million.

Many key gains in urology research have been made by researchers trained through Urology Care Foundation awards. These researchers have improved the lives of patients with urologic health conditions. The Research Scholars Award is the Foundation's oldest and largest program. It provides support and mentoring to young researchers.

This year, a number of urology societies and sections have supported urologic research. 10 groups have started 12 new research endowments. For each endowment, the groups and their members generously donated \$250,000. The AUA matched those donations five to one. Each \$1.5 million endowment will provide yearly income to fund a new Urology Care Foundation Research Scholars Award forever. The Foundation and the AUA are grateful for the donors whose charitable gifts are ensuring urology research awards are available as long as they are needed. Those donor groups are:

- Endourological Society two awards were endowed; the Endourological Society Research Scholar Award and the Endourological Society/ Raju Thomas, MD Award. www.endourology.org.
- Indian American Urological Association (IAUA) two awards were endowed: the IAUA/Sakti Das, MD Research Scholar Award and the IAUA/Kailish Kedia, MD Research Scholar Award. www.iauanet.org.
- Society for Pediatric Urology started the Society for Pediatric Urology/Sushil Lacy, MD Research Scholar Endowment Fund. www.spuonline.org.
- Society of Urologic Oncology (SUO) - two awards in urologic oncology were endowed by SUO. www.suonet.org.
- Southeastern Section of the AUA (SESAUA) - this is the third award endowed by the SESAUA. www.sesaua.org.

- Western Section of the AUA (WSAUA) this is the second award endowed by the WSAUA. www.wsaua.org.
- Society for Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction (SUFU) endowed the Society for Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction/Hari Badlani Research Scholar Award. www.sufuorg.com.
- North Central Section of the AUA (NCSAUA) – endowed their second Research Scholar Award. www.ncsaua.org.
- South Central Section of the AUA (SCSAUA) - this is the second Research Scholar Award endowed by the SCSAUA. www.scsauanet.org.
- Sexual Medicine Society of North America (SMSNA) - this is the first award endowed by the SMSNA. www.smsna.org.

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