

# Father's love of science was catalyst for research career

When Madeleine Cunningham was a child growing up in Mississippi, her father drove her through the Southern forests and explained his work as a botanist and forestry expert.

"He used to show me all of his experiments with trees," Cunningham said. "He would talk about their genetics. He just had a great interest in science."

That love of science was transferred from father to daughter.

Cunningham earned an undergraduate degree at Mississippi State College for Women and a Ph.D. in both microbiology and immunology from the University of Tennessee Center for Health Sciences.

Today, she is a George Lynn Cross Research Professor and Presbyterian Health Foundation Presidential Professor in the Department of Microbiology and Immunology at the University of Oklahoma College of Medicine, where she has taught and conducted research into infection and autoimmune diseases for 33 years.

"My training was in Group A streptococcal disease, but I also love immunology, which is our body's response to infections," she said.

After researching rheumatic fever, myocarditis and other heart-related diseases for 15 years, Cunningham received a call from the National Institutes of Mental Health. They wanted her to investigate a puzzling condition affecting children



**Jim Stafford**

BIO MATTERS

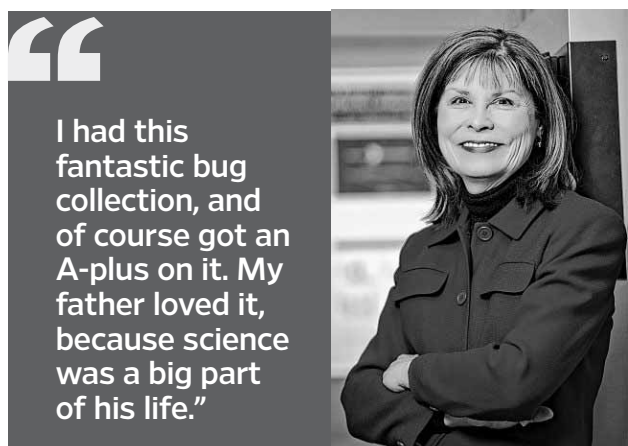
known as pediatric autoimmune neuropsychiatric disorder associated with strep, commonly known as PANDAS.

Cunningham became a collaborator of Dr. Susan Swedo, Chief of the Pediatrics and Developmental Neuroscience Branch at the National Institutes of Mental Health. They made some important discoveries that explained perplexing conditions among children who displayed obsessive compulsive symptoms, tics and behaviors that were out of control for no apparent reason.

Turns out, many young people are susceptible to infections that cause changes in their brains and alter their behaviors. Some children who are originally diagnosed with autism may actually have PANDAS and may be cured.

Cunningham eventually developed five tests that can confirm whether children are suffering from PANDAS and similar autoimmune disorders.

"Once we began to publish our results, parents wanted us to open a study where we could take their children and that would help us see what was going on," Cunningham said. "So, that's what we did. We studied approximately 1,000 pa-



"I had this fantastic bug collection, and of course got an A-plus on it. My father loved it, because science was a big part of his life."

**MADELEINE CUNNINGHAM**

GEORGE LYNN CROSS RESEARCH PROFESSOR AND PRESBYTERIAN HEALTH FOUNDATION PRESIDENTIAL PROFESSOR IN THE DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY AT THE UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

tients over a year and a half."

The tests were so effective that Cunningham collaborated with veteran entrepreneur Craig Shimasaki to found a company known as Moleculera Labs.

Since it was founded in 2011, Moleculera Labs has established certified testing laboratories and began offering the tests commercially. It already has tested 1,500 samples using technology licensed from OU.

"Parents are so grateful," Cunningham said. "They feel it has saved their children's lives. They are very tearful and emotional about it."

Moleculera Labs also has received more than \$2 million in investment capital from i2E, Inc., and other regional and local angel investors.

Cunningham shares her love of science with chil-

dren outside of her laboratory. Earlier this year, she made a presentation to a group of first graders using pond water and a microscope in a fascinating program on germs.

"The children were so excited, and the teacher said it was one of the best presentations they had all year," she said. "They stood in line to look through the microscope until their mothers came to pick them up."

As she told me that story, Cunningham was reminded of a science project from her childhood.

"I had this fantastic bug collection, and of course got an A-plus on it," she said. "My father loved it, because science was a big part of his life."

A love of science transferred long ago from father to daughter.

Jim Stafford is a communications specialist with i2E Inc. in Oklahoma City.

## BUSINESS PEOPLE

**First Fidelity Bank** adds **John Hahn** as banking officer, mortgage sales manager. Hahn, with more than 16 years in mortgage lending experience, will manage the mortgage sales division of the bank. He will be responsible for development and implementation of strategic goals and profitability initiatives, as well as developing new business channels for mortgage origination. Additionally, he will oversee mortgage lending products and staff.



**Hahn**

**Valliance Bank** promotes **Sarah Ribble** to banking officer. Ribble has been with Valliance Bank for six years and is the portfolio manager for the Private Bank at Valliance.



**Ribble**

**BancFirst Moore** has promoted **Marlene Wood** to executive vice president. Wood brings 34 years of banking industry experience to the job and has been a loan officer for the past 27 years. She had spent most of her career at Exchange National Bank of Moore when it was acquired by BancFirst three years ago. For the past two years, she has focused her efforts on commercial lending.



**Wood**

**Schnake Turnbo Frank**, a public relations and management consulting firm, has promoted **Erika Huffman** to senior account executive. Huffman joined Schnake Turnbo Frank in 2011 as an account executive in the firm's Oklahoma City office, but has supported clients throughout the region. She has lent her communications and management skills to various industries including health care, agriculture, energy and nonprofit. Her expertise lies in event coordination, messaging development, and community relations.



**Huffman**

**St. Anthony** appoints **Gerry Gliva** to the position of director, Business Applications and IT Infrastructure. Gliva since 2011 has held the position of technology project consulting and management at St. Anthony.



**Gliva**

**Rainbow Fleet**, a nonprofit childcare resource and referral agency, has named **Carrie Bullard** as its executive director. "Carrie's impressive management and operations background, as well as her extensive fundraising experience, make her the perfect fit to lead our agency," said Mike Gibson, president of Rainbow Fleet's board of directors. Bullard is a graduate of the University of Central Oklahoma.



**Bullard**

**Michael J. Visina** and **Steven Lovette** have joined **AXA Advisors** as financial professionals.



**Visina**

## BUSINESS ALMANAC

### MEETINGS

#### Tuesday

• National Association of Purchasing Management, 5:45 p.m., Ted's Café Escondido, 2836 NW 68th, Arco Van Antwerpen and Butch Oldenburg on "Safety and its Effect on Supply Chain". No cost to members. Contact Aparna Popley, 727-1653.Thursday

#### Wednesday

• Engineering Club of Oklahoma City presents retired Lt. Col. Steve Russell, a candidate for Oklahoma's Fifth Congressional District seat, discussing "Obamacare, Second Amendment, Jobs & Economy," noon at Gattitown, 5833 Northwest Expressway. Contact: Nancy Cain, 525-5101.

#### Thursday

• Wild West Chapter OK Society of Government Meeting Professionals presents Alice Moore offering a State of the Chapter Address during the annual Supplier Appreciation and Awards Banquet, 11 a.m. at the Hyatt Regency Tulsa, 100 E 2 St. in Tulsa. Cost: \$10 planners; \$20 non-member suppliers; member suppliers and first-time planners are free. Contact: Brenda Gentry at bregentry@ouhsc.edu or 271-8001, Ext. 42131.

• Oklahoma City BYU Management Society presents state Rep. Randy Grau offering a review of the 2014 legislative session and a discussion of how ethical leadership is needed on the local, state and national level, 11:45 a.m. at Casa de los Milagros, 5111 N Clusen Blvd. Fee: Cost of lunch. Contact: Sean Bruce at 802-9096 or seanpbruce@gmail.com.

• Black Chamber of Commerce of Metropolitan Oklahoma City presents attorney Melvin C. Hall and Charles and Paula McDade discussing "Safeguarding Your Brand," noon at Langston University OKC, 4205 N Lincoln Blvd. in Oklahoma City. Fee: Free for members; lunch is \$15 for nonmembers.

## Planning is needed for end of life



**Cynda C. Ottaway**

LEGAL COUNSEL

At some point most of us will face the difficulty of helping a loved one who is dying. Certain actions taken in advance may make the situation easier for all concerned.

### Durable powers of attorney

Each adult, despite age or health, should appoint one or more individuals to serve as an agent to make decisions concerning health care and property rights. These powers may range from simple tasks such as paying utility bills or helping with medical appointments to major decisions such as selling homes or making end-of-life health care decisions. An agent may be given powers which are either immediate or "springing" meaning the powers do not come into existence until incapacity. The agent should always be someone who is trustworthy to ensure the power is not misused.

### Inventory and location of assets

A detailed list of assets and where they are located should be prepared and updated regularly. Provide a hard copy of the asset list to your agent and store an electronic version. If you access accounts online, maintain a secured list of user names for each account along with the passwords. You must update this list

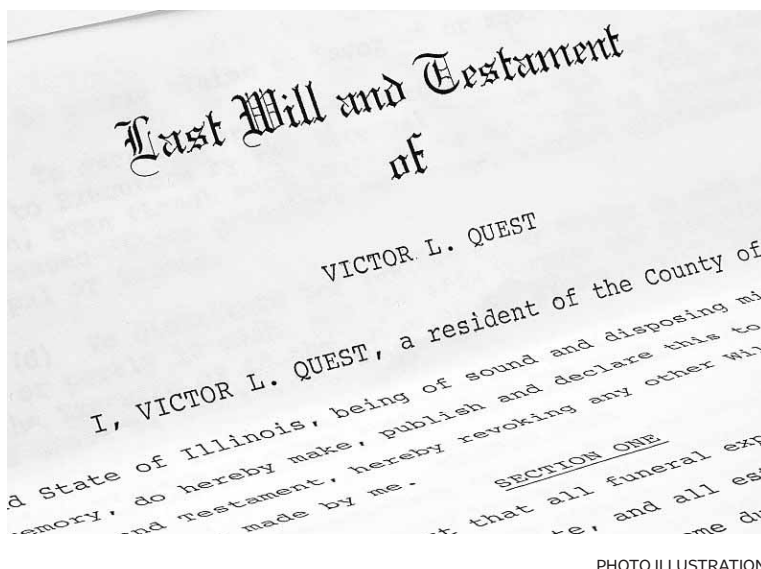


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regularly as many accounts require periodic changes of the password.

### Document location

Prepare and update estate-planning documents and provide the storage location of the originals to the person who will be in charge of handling matters upon disability or death.

### Funeral and burial instructions

Pre-planning your funeral is a gift you can give to your family. The stress of making decisions without input from a loved one before death is an added burden on survivors. If death is sudden and unplanned, then there is an increased risk that choices will be made in haste or out of guilt and would not reflect the true wishes of the decedent.

### Family meeting

This final suggestion of a family meeting before death to

discuss plans set up by the dying person is one that is often avoided because of emotional strain of discussing death. If you do not want to handle this alone, then see if a trusted friend, adviser or counselor would be willing to assist you. This meeting can be a time for discussion of wishes and dreams for the future as well as the mechanics of disposition of assets. If a face-to-face meeting is not desired, then consider a written statement with any final wishes to be passed along to the family. This could be simply a letter sharing one's feelings along with an explanation of the legal documents in place. However, be careful that statements made could not be interpreted as any change in one's will or other testamentary plans. If you have questions, you should consult with your attorney.

Cynda C. Ottaway is a director at Crowe & Dunlevy and chair of the firm's Private Wealth & Closely-Held Business Practice Group

## List: Survey seeks top companies

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Anyone can suggest a company — employees, interns, customers or the head honcho.

The business can be

public, private or nonprofit, but it must employ at least 35 people.

Starting with your nominations, *The Oklahoman's* partner, WorkplaceDynamics LLC, will recruit em-

ployers to participate in a satisfaction survey of their employees. Employers scoring highest locally and meeting national benchmark scores will make the final rankings.

Later this year, the top-ranked companies will be recognized in *The Oklahoman* and on NewsOK.com, where we will highlight what makes those organizations special.