

# THE [CATALYST]



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## Quote of the Month:

"If it disagrees with experiment, it's wrong. And that simple statement is the key to science. It doesn't make a difference how beautiful your guess is, it doesn't matter how smart you are, who made the guess, or what his name is. If it disagrees with experiment, it's wrong. That's all there is to it."

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*Richard Feynman*

## [News & Announcements]

The Department of Neurobiology and Anatomy and the Center for Neuroscience at WVU will host a seminar given by **Dr. Subhash Pandey** on **Wednesday April 10, 2013 at 12:30pm** in **Erma Byrd 301** titled "Epigenetic landscape of anxiety and alcoholism." Dr. Pandey is from the Department of Psychiatry at the University of Illinois, Chicago and is being hosted by Dr. Haning Zhang.

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The Department of Physiology and Pharmacology will host a special seminar on **Thursday, April 11, 2013 at 12pm** in room **1905** (Learning Center). **Dr. Bryan L Roth, MD, Ph.D** will present "Mining and Manipulating the GPCR-ome." Dr. Roth is a Michael Hooker Distinguished Professor of Protein Therapeutics and Translational Proteomics at the University of North Carolina School of Medicine. Dr. Roth is being hosted by Dr. David Siderovski.

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The Department of Biochemistry and the HSC Graduate Student Organization (GSO) are excited to announce that one of our distinguished alumni will be returning to WVU to give a seminar. **Dr. Marcia Federici** will present "Fulfilling the Promise of Biotechnology: From Cloning Genes to Protein Drugs" on **FRIDAY April 12, 2013 at 1pm** in **Erma Byrd 301**. Dr. Federici received her Ph.D in biochemistry in 1977 and went on to a postdoctoral fellowship position at the NIH where she studied protein structure and conformational changes. She has been working in the biotech industry

since 1981 and is currently self-employed as a biotechnology consultant. Dr. Federici authors regulatory documents for investigational drugs and license applications and provides expert advice on biopharmaceutical drug development and regulatory approval strategies.

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The WVU Chancellor's Office and the HSC Graduate Student Organization will be presenting a special seminar on **Tuesday, April 30, 2013** given by **James H. Chamberlain, M.B.A.** titled "Options and Opportunities with a Biomedical Advanced Degree." Mr. Chamberlain is a member of the WVU Foundation Board of Directors, WVU Alumnus, former Chairman of the Board, BioSource International, former chairman, president, and CEO, BioSource Industries, Inc., and former Business Development Director at Amgen, Inc. The seminar will be held at **12pm** in room **1905** (Learning Center) and boxed lunches will be available.

**Have you seen the  
Biochemistry  
Timeline??  
Check it out on the  
Department website!**



**Have an announcement or news story? Submit it to  
[asuchanek@hsc.wvu.edu](mailto:asuchanek@hsc.wvu.edu).**

## Marcia Federici, PhD

Independent Consultant on Biotechnology & Pharmaceuticals;  
Graduate Faculty, University of Maryland Baltimore County



### WVU Graduate Advisor:

Dr. Fred Lotspeich

### Graduation Year:

PhD, 1977

### What do you enjoy most about your current position, field of study, or your current life endeavors?

I have always wanted to focus on teaching and once I got going in industry I was able to parlay that interest and expertise into being the company spokesperson presenting strategies and data to the FDA. Now I am grateful for having the time and opportunity to teach this skill at the graduate level and to volunteer my time mentoring students. I recognize that being able to focus on teaching without worrying about funding for a laboratory, grant applications and administrative duties is quite a luxury. I also currently enjoy hiking and going to movies with my husband, attending Paul's events and reading popular fiction. Only working part time at something you love is a real treat after a busy career. So I am grateful for this time in my life...I feel that I have spent my whole career learning enough and getting to this point of giving back.

### What advice would you give to current or incoming graduate students here at WVU?

- Work hard....Then work harder

- Pay attention to learning the basics of data analysis and experimental design
- Question your results and the ones you read about in the literature
- Learn to present and explain scientific data & conclusions....you will do this many times in your professional science career
- Master the skill of writing extremely well..... I can't say enough about how important this is!

### How did your experience at WVU contribute to your professional career?

The most valuable thing for me was the quality of my professors. They were dedicated to learning and set the bar very high. I learned my basic biochemistry very well. Specifically my experience at WVU taught me how to do the following:

- *Think independently-* To not be afraid to tackle something even though you don't know anything about it....to teach yourself
- *Think critically and not take things at face value-* This is one of the most important skills to learn and my professors were experts at teaching us this. In particular, Drs. Larry Harris, Jim Blair and John Ellingson insisted on this. They actually got me to think at a higher level because of their standards. Not believing everything you read and questioning your own data are key attributes to develop.
- *Dig for an Answer-* I think that too many times we give up after our first internet search or initial failed experiment. One thing I learned at WVU was not to give up easily and be persistent. This goes for doing science (you often do 50 experiments before I works!) as well as performing a literature search.
- *Present a seminar-* This is an important expertise to develop and we had to give a seminar every semester. I learned how to get over my nervousness, organize a set of information and get my point across.
- *Really Have A Good Time-* maybe because we were all under so much pressure...since completing graduate or medical school defines the whole course of your

Continued on page 3

[Alumni Spotlight]



**Continued from page 2**

professional life....But we had some great parties...frequently at my apartment! Many of the close friends that I made in Morgantown are still my close friends to this day. We formed a real bond at WVU and I cherish it.

**What advice do you have for students getting ready to graduate during these difficult economic times?**

- *A good postdoctoral fellowship can round out your education* - I still reap benefits from my NIH postdoctoral experience; pay attention to what kind of science you are good at and where your weak points are...there are a lot of different kinds of science out there.
- *Be flexible* - When I got out of graduate school and then completed my post doc there was no such thing as a biotechnology industry....you never know where your field will be in the future....be open to possibilities
- *Learn to work for what you want...* like you don't know where your next meal will come from and then work even harder!
- *Don't think...* you have to have your entire career path figured out immediately or that it won't change
- *Develop your network and find a mentor*- It is always..."who do you know". Nearly every job I have ever gotten was through someone I know. I am so grateful...my mentors have helped me so much in my career.

• *Embrace life's inevitable changes* - The only thing I can guarantee you about life is that things are going to change and the only changes that I know of that are irrevocable are dying and having a baby!

**Any additional comments you'd like to include?**

I look forward to meeting all of you in the spring.



**Dr. Federici with her husband Tom (left) and son Paul (right) in 2012.**

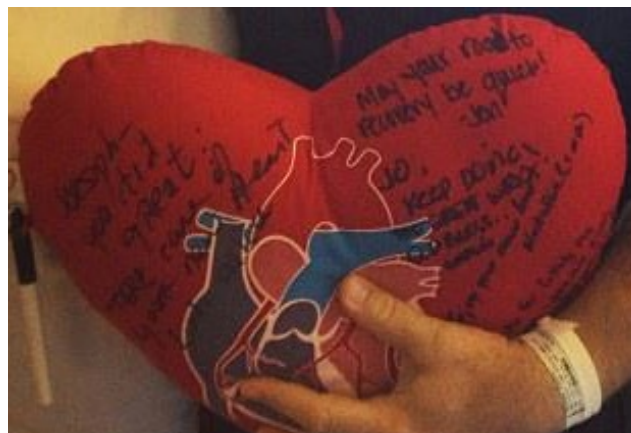
**[From the Editor]**

Greetings fellow biochemists! As a few of you know, I recently made an unplanned trip home to the west coast after I received word that my dad would be undergoing open-heart surgery to replace a damaged aortic valve and repair an aortic aneurism. The diagnosis itself was scary enough, but even scarier was that his problems were discovered thanks only to dumb luck. In a nutshell, he was in for a regular visit with his new doctor, who just happened to hear a heart murmur, which she recommended my dad have checked out. The battery of tests he went through following that visit showed no sign of atherosclerosis or any blockages—only a moderately calcified bicuspid (rather than the normal tricuspid) aortic valve and an aorta that was twice the diameter it should've been. So the decision was made to repair both as soon as possible. The gravity of what was happening didn't hit me until we were sitting in the waiting room talking to the lead surgeon after his surgery. He showed us before and after repair images of the aorta and told us simply that Dad's new doctor had saved his life.

The reason I'm telling you all of this is simply to say that heart problems don't just happen to unhealthy people. I know most of you are well aware of this, but I

think it bears repeating. My dad is in the best shape of his life. It doesn't matter how old you are, what kind of shape you're in, or whether your diet consists of bran muffins or doughnuts, you're not immune to heart problems. Get your regular checkups and take every opportunity you can to check your heart. Just be aware—and remember that ignoring problems does not make them go away. ☺

-Amanda



# 10 Things you didn't know about Sandy Poulson



## The Basics:

**Title:** Administrative Assistant

**Lab/Office:** Main Biochem Office

### 1. What was your very first job?

Working at the WVU Student Affairs Office

### 2. Biggest pet peeve?

Fake stupidity.

### 3. Who was your favorite teacher/professor in school, and why?

All my grade school teachers were my favorites and unbelievably I still remember all their names – they were our “Moms” away

from home back before suing people became so rampant.

### 4. How many languages can you speak?

Lucky to remember one!

### 5. Most embarrassing moment?

The old skirt-in-the-pantyhose snafu...

### 6. When you were a child, what did you want to be when you grew up?

A nurse

### 7. Best advice anyone's ever given you?

Lots that I'm sure I promptly ignored.

### 8. Do you know or have you ever performed the “Gangnam Style” dance?

Lord no!

### 9. If you could have dinner with any historical figure/world leader/scientist/celebrity, who would it be and why?

Katharine Hepburn –love her “moxey.”

### 10. Do you keep in touch with any friends from school?

I keep in touch with a lot of friends from high school and that's remarkable after all these years—we know too much about each other so we have to stick together!



the[Spotlight]



PLEASE  
RECYCLE



# [Newsday Crossword]

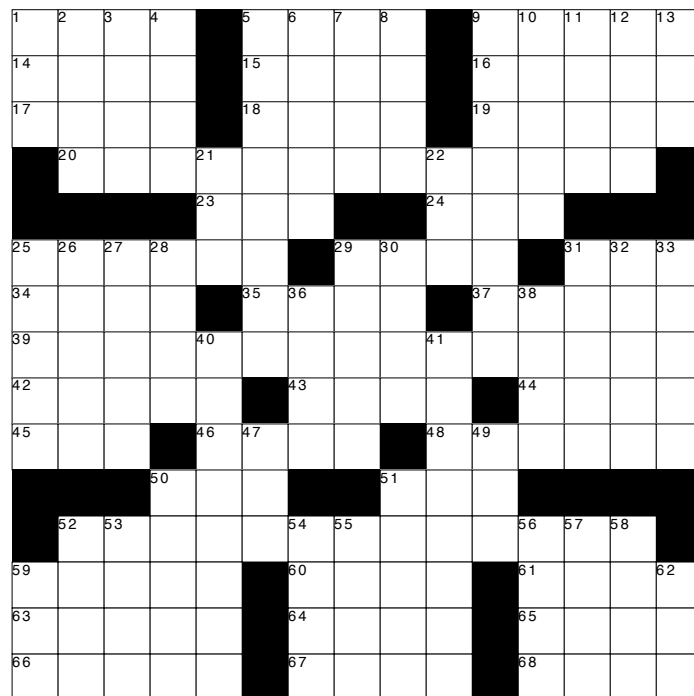
04/09/13 ON THE MARCH Sally R. Stein, edited by Stanley Newman

## Across

- 1 Make preparations
- 5 Pasta nutrient, for short
- 9 Computer infection
- 14 Stand up
- 15 Bassoon kin
- 16 Currently occupied
- 17 Leave out
- 18 Orderly and clean
- 19 Decree
- 20 Soldier's ABCs
- 23 \_\_\_ Moines, IA
- 24 Santa \_\_\_, CA
- 25 Where ships anchor
- 29 Well-qualified
- 31 %: Abbr.
- 34 Soprano's solo
- 35 Mexican snack
- 37 Steeple
- 39 Soldier's marching rhythm
- 42 Treat badly
- 43 Ancient Roman garment
- 44 Signals to actors
- 45 Tree fluid
- 46 Nevada city
- 48 Have a brawl, in rural slang
- 50 Poor grade
- 51 Two-\_\_\_ tissues
- 52 Soldier's instructor
- 59 With 5 Down, type of orchestral work
- 60 Twosome
- 61 Den or dinette
- 63 Santa's helpers
- 64 Apex
- 65 Zoo enclosure
- 66 Attentive
- 67 Those people
- 68 Took a photo of

## Down

- 1 Golf instructor
- 2 Arm or leg
- 3 Korea's continent
- 4 Butterfly catchers
- 5 See 59 Across
- 6 Aids in crime
- 7 Lion's sound
- 8 Software test version
- 9 From Austria's capital
- 10 Gandhi's homeland
- 11 Devastate
- 12 Ocean rescue org.
- 13 Full collection
- 21 Wedding phrase
- 22 Suffix for proverb
- 25 Laughing sounds
- 26 Caribbean island
- 27 Tear to shreds
- 28 Flying mammals
- 29 Sneeze sound
- 30 Tennis great Bjorn
- 31 Devout
- 32 Very mean
- 33 Concise in speech
- 36 Envelope abbr.
- 38 One-stripe GIs
- 40 "Let's ask for directions"
- 41 Type of tea
- 47 Electrified fish



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Coffee Break

