

# We've Got Issues

## Willamette University Psychology Department Quarterly Newsletter

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### From the Chair

Hello, all, and welcome to the spring semester! I hope you had a good winter break and that the first month of classes has gone well.

I want to let everyone know of some important upcoming events either in the Psychology Department or elsewhere but which may be of interest. These events will also be listed in the calendar of events section as well. Wednesday, April 19th is Student Scholarship Recognition Day. There will be no classes this day, so we hope that you will be able to attend some of the presentations. You can watch some of our best students present and defend their scholarly work (and perhaps get ideas of your own?). Please speak with one of our faculty if you're interested in presenting some research of your own!

Finally, commencement this year is May 14th. Good Luck to our seniors as they ap-

proach this important milestone!

I would like to share some additional bits of information. First, juniors and seniors will shortly be receiving ballots so that they can vote for candidates for Psychology Awards given to seniors each year: The Kaestner Award for the outstanding senior psychology major and the Evans Award for the senior displaying the most passion and dedication to psychology. Please be sure and vote and return your ballots by February 17th. The more students who take the time to vote the more meaningful the selections are.

Professors Tony Hermann and Jeremy Miller are the new advisors for Psi Chi. If you are interested in applying for membership in Psi Chi, applications are available in the Psychology Department office in Smullin 220. Professors

Hermann and Miller are also forming a Psychology Club that would be open to all, including Psi Chi members. More details will follow as the program develops.

The Department will be hosting a group advising session as we approach pre-registration for the fall term; please see the announcement from Professor Hermann elsewhere in this bulletin.

As always, please let me know if you have any comments, questions, concerns or feedback regarding the Psychology Department (or if you feel we could use the newsletter better to meet students' needs). Until next time... happy studying!

Sincerely,  
Sue Koger, Chair

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### Mark Your Calendar...

**February 14th**  
Happy Valentine's Day!

**March 23rd**  
Last day to w/d from full semester courses

**March 27th-31st**  
Spring Vacation!

**April 4th**  
Advising and Dessert

**April 10th-17th**  
CLA Web Registration

**April 19th**  
Student Scholarship Recognition Day (SSRD)

**May 14th**  
Commencement



Happy  
Valentine's  
Day!

# *Fun With Numbers: Probability and the Law* *(not to be confused with The Law of Probability!)*

The first three words do not constitute an oxymoron — honest! One could easily make the case that quantitative literacy is important enough in contemporary society that “everyone should try it — like spinach!” At the same time, however, playing with numbers can be a fascinating way of gaining insight into human beings’ “comedy of errors” when it comes to understanding questions of risk and uncertainty.

Of course, some of these errors would be a lot more humorous if they didn’t have such significant consequences. One area where our misunderstanding of risk and probability looms especially large is in the courtroom. Whether it’s DNA testing, predictions of violence, data on health hazards, or any one of a number of other topic areas, judges, juries, and attorneys are increasingly called upon to comprehend quantitative estimates of risk and uncertainty. Sometimes the errors in using such information comes from an honest misunderstanding; at other times, the errors come from deliberate deception or strategic manipulation of the numbers.

In his book *Calculated Risks: How to Know when Numbers Deceive You* (2002, Simon & Schuster Publishing), cognitive psychologist Gerd Gigerenzer describes a particularly interesting bit of testimony and strategy from the O. J. Simpson murder trial. As most of you may know, O. J. Simpson, a retired Hall of Fame football player and celebrity, was tried for the murder of his wife, Nicole Brown Simpson, and her companion, Ronald Goldman. Evidence suggested that there had been a history of domestic violence in the Simpsons’ relationship. The prosecution sought to use this as evidence to suggest that her husband, O. J., was in fact the murderer.

Harvard attorney Alan Dershowitz, consulting for the defense attorneys, apparently played an important role in O. J.’s team’s ability to convince the jury that domestic violence is not a good

predictor of murder. Based on FBI data for crime reports, the defense argued that there was less than one homicide for every 2,500 incidents of domestic abuse. Clearly, it is very rare that domestic violence ends up in murder. The defense argued that testimony about past domestic violence therefore had little diagnostic or “probative” value. Instead, such testimony would be unfairly “prejudicial” in turning the jury against the defendant.

Was Dershowitz correct? Or was he confused (or even deliberately misleading)? It turns out that Dershowitz was focusing on the wrong probability. The question was not really one of “What’s the probability of being murdered, given that one is a victim of domestic violence?” — a value that is admittedly fairly low. Instead, the jury already *knew* that Nicole had been murdered; this was a certainty. As the result, the real question was “What is the probability of the husband/partner being the murderer, given that the victim was abused *and* murdered?” Would this probability be low as well, making testimony about past domestic abuse unhelpful to a jury?

Gigerenzer provides the following analysis:

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If Dershowitz is correct in his probability (1/2500) of spousal murder, then in a group of 100,000 abused women, about 40 would be murdered by their abuser. Other statistics on crime victimization suggest that about 5 women in every 100,000 abused women are murdered each year by someone *other than* their abuser. The odds still look remote until one has the following crucial insight. In a given year, about 40 + 5 women out of every 100,000 abused women will be murdered. Of those 45 murders, 40 will be by the woman’s domestic abuser. In other words, the probability of the abuser being guilty, *given that* the victim was abused *and* also murdered, is  $40/45 = .89$

or 89%. Thus, an “89% chance” that O.J. was Nicole’s murderer sounds quite a bit different than the “1 in 2500” chance implied by the defense’s faulty analysis. Did the defense attorneys deliberately mislead, or did it simply fail to recognize the flaw in an argument that favored their client? It certainly makes the Simpsons’ history of domestic violence something the jury would want to hear about. Nevertheless, such statistical information helps the jurors only if they know how to interpret it properly!

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People often associate the study of risk and probability with word problems involving dice games, coin tossing, card dealing, and the like. Yet the crucial role that this kind of “numeracy” plays in important real world decisions is a reminder that such topics are important to more people than just wonky statistics instructors (not that I have any particular wonky instructor in mind ☺). The best protection from being “lied to with statistics” is to cultivate quantitative literacy not only among Psychology majors but throughout the population at large!

Jim Friedrich  
Professor of Psychology



## *And now a word from Psi Chi...*

Professors Tony Hermann and Jeremy Miller are the new advisors for Psi Chi. If you are interested in joining Psi Chi and have any questions, please feel free to visit with either Professor Hermann or Professor Miller. Applications for Psi Chi are available in the Psychology department office in Smullin 220.

## *New Psychology Club*

Professors Hermann and Miller are the new advisors of the Psychology Club that is open to all psychology majors. The new club will be included and be organized in conjunction with Psi Chi. More details to follow...

## *Job and Internship Opportunities*

Salem family looking for students who may be interested in working with their 5 year old autistic son in their home, for two to three hours a day in the afternoon.

They need someone who is familiar with some basic teaching methods (discrete trial, pivotal response training to name a couple) or someone who would be interested in learning about these and other methods for teaching children with autism.

Their son currently attends Pringle elementary school as a kindergartner at the developmental learning center (DLC) classroom and has a full-time assistant at school.

Please contact the Psychology Department Administrative Assistant, Elizabeth Martineau, at [emartine@willamette.edu](mailto:emartine@willamette.edu) if you are interested or would like more information.

## *Advising and Dessert!!*

Are you a Freshman or Sophomore Psychology Major?  
Are you Interested Psychology as a Major?  
Come to our annual Advising and Dessert Meeting!!

Have questions about what's involved with psychology internships?  
How you can get involved in research?  
What psychology classes that will be offered when?  
Just want to chat with a psychology professor a bit about your classes?

We will be giving important tips on how to get the most out of the psychology major, & answering your questions. (If your adviser is Professor Stewart, please be sure to come. Even though he isn't around this semester, we can help.)

Come and meet fellow psychology majors, meet all the professors, get your sugar fix, and take care of advising all at once!

Who: All freshman and sophomores psychology majors and anyone who is interested in being a psych. major  
What: Advising and dessert! Bring your degree audit & yourself.  
When: Wednesday, April 4, 6:30-8:00pm  
Where: TBA



Willamette University  
Psychology Department  
Quarterly Newsletter

James Friedrich, Editor  
259 Smullin Hall  
503/370.6435

Elizabeth Martineau  
Layout & Production  
220 Smullin Hall

**Please deliver to:**

*Reverse Psychology*

[www.willamette.edu/cla/psychology](http://www.willamette.edu/cla/psychology)

## Psychology Department Faculty—Spring 2006 Courses

### **Meredy Goldberg Edelson**

Professor  
253 Smullin Hall, 503/370.6133  
medelson@willamette.edu

*Introduction to Psychology, Abnormal Psychology: Child/Adolescent, Major Internship II*

### **Jim Friedrich**

Professor  
259 Smullin Hall, 503/370.6435  
jfriedri@willamette.edu

*Social Psychology, Seminar: Judgment/Decision Making*

### **Anthony (Tony) Hermann**

Assistant Professor  
252 Smullin Hall, 503/370.6427  
ahermann@willamette.edu

*Research Methods and Analysis II, Internship/Thesis Orientation*

### **Staci Simmelink-Johnson**

Visiting Professor  
208 Smullin Hall, 503/370.6661  
ssimmeli@willamette.edu

*Introduction to Psychology, Abnormal Psychology: Adult*

### **Sue Koger**

Professor and Department Chair  
201 Smullin Hall, 503/370.6341  
skoger@willamette.edu

*Biopsychology*

### **Larry McBride**

Associate Professor  
254 Smullin Hall, 503/370.6425  
(no email address)

*Introduction to Psychology, Developmental Psychology: Adolescence, Psychology of Learning*

### **Jeremy Miller**

Assistant Professor  
260 Smullin Hall, 503/370.6964  
millerj@willamette.edu

*Introduction to Psychology, Research Methods and Analysis I, Seminar: Psychology of Human Memory*

### **Mark Stewart**

Associate Professor  
208 Smullin Hall, 503/370.6661  
mstewart@willamette.edu

*On sabbatical Spring 2006*