

Independent  
Interview-Based  
Undergraduate  
Journal

# In-Sight

2013, Winter

# Issue 3.A, Idea: Women in Academia (Part Two)

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Winter Issue, 'Women in Academia (Part Two)' and the coming Spring Issue, 'Women in Academia (Part Three)'.

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# PEOPLE

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## FOUNDER & EDITOR-IN-CHIEF

**Scott D. Jacobsen** studies at The University of British Columbia and Kwantlen Polytechnic University. He conceived of *In-Sight* during the winter of 2010, which culminated in the founding of *In-Sight* on August 1st of 2012. His research work exists in multiple psychology labs working on differing sub-disciplines of psychology. Scott's core interest is in highly gifted ( $\geq +3$ -sigma) youth related to those disadvantaged with low income and/or learning deficits.

If you want to contact Scott Douglas Jacobsen, you can send emails with questions, comments, and/or suggestions for subjects, ideas, and/or recommendations for interviewees to:

**[Scott.D.Jacobsen@gmail.com](mailto:Scott.D.Jacobsen@gmail.com)**



## FACULTY ADVISORY BOARD

**Dr. Wayne Podrouzek** works as an Instructor for the Psychology Department of University of the Fraser Valley and Head of the Psychology Department of Kwantlen Polytechnic University. Dr. Podrouzek earned his a Bachelor of Arts in Child Studies and a Bachelor of Science (Honours) from Mount Saint Vincent University, a Master of Arts from Simon Fraser University, and Ph.D. from Simon Fraser University under Dr. Bruce Whittlesea.

**Dr. Daniel Bernstein** works as the *Canada Research Chair in Lifespan Cognition* for the Psychology Department of Kwantlen Polytechnic University. Dr. Bernstein earned his Bachelor of Arts at the University of California, Berkeley, Master's at Brock University, PhD at Simon Fraser University, and did Post-Doctoral work at the University of Washington. His research interests lie in “Belief and memory; Developmental metacognition; Hindsight bias; Mild head injury; Sleep and dreams.”

**Dr. Betty Rideout** works as an instructor for the Psychology Department of Kwantlen Polytechnic University. Dr. Rideout earned her Bachelor of Psychology, Masters of Counselling Psychology, and Ph.D. in Psychology from University of British Columbia. Her research interests lie in “historical influences on belief systems.”

**Dr. Glen Bodner** works as an Associate Professor in the Psychology Department of the University of Calgary. Dr. Bodner is a cognitive psychologist who studies factors that affect memory, including both memory accuracy and the subjective experiences

associated with memory. Current research in his lab, supported by an NSERC Discovery Grant, investigates how these aspects of memory are shaped by task and context factors.

**Dr. Sven van de Wetering** works as an Instructor for the Psychology Department of University of the Fraser Valley. Dr. van de Wetering earned his BSc in Biology at The University of British Columbia, and Bachelors of Arts, Master of Arts, and PhD in Psychology from Simon Fraser University. His research interests lie in “conservation psychology, lay conceptions of evil, relationships between personality variables and political attitudes.”

**Dr. Wayne Fenske** works as an Instructor for the Philosophy Department of Kwantlen Polytechnic University. Dr. Fenske’s research interests lie in the “nature of practical reason and its relation to moral obligation.”

**Dr. Azra Raza, M.D.** works as a Professor of Medicine and Director of the MDS Center at Columbia University in New York, N.Y. Dr. Raza completed her medical education in Pakistan, training in Internal Medicine at the University of Maryland, Franklin Square Hospital and Georgetown/VA Medical Center in Washington, D.C. and completed her fellowship in Medical Oncology at Roswell Park Cancer Institute in Buffalo, New York.

**Dr. David Froc** works as an Instructor for the Psychology Department of Kwantlen Polytechnic University. Dr. Froc earned his Bachelor of Arts from McMaster

University and Ph.D. from McMaster University. His research interests lie in “how different patterns of neuronal activation alter network properties, facilitating the storage of information in the normal brain and how this process is affected by various insults to normal brain functioning.”

**Dr. Cory Pedersen** works as an Instructor of Psychology at Kwantlen Polytechnic University. Dr. Pedersen earned her Bachelor of Arts from the University of Calgary, and Master of Arts and Ph.D. from the University of British Columbia. Her research interests lie in “Human sexuality; Developmental psychopathology; Child and adolescent social-cognitive development.”

**Dr. Kyle Matsuba** works as an Instructor for the Psychology Department of Kwantlen Polytechnic University. Dr. Matsuba earned his Bachelor of Science in Physiology from the University of Toronto, and Bachelor of Arts (First Class), Master of Arts, and Ph.D. in Psychology from the University of British Columbia. His current research interests lie in “area of civic engagement, moral development, positive emotions, and the psychological effects of internet use.”

**Aislinn Hunter, PhD Candidate** works as an Instructor for the Creative Writing Department of Kwantlen Polytechnic University. Aislinn works as an Instructor at Kwantlen Polytechnic University, and towards her PhD at the University of Edinburgh. She earned her Bachelor of Fine Arts (History in Art/Creative Writing) from the University of Victoria, Master of Fine Arts (Creative Writing) from The University of British Columbia, and Master of Science (Writing and Cultural Politics) from The University of Edinburgh. Her research interests are “material culture,

‘thing’ theory, Heidegger, Victorian writers, writers’ museums, books-as-things, cultural phenomenology, Irish literature, poetry, intertextuality and lyric philosophy.”

**Dr. Zoe Dennison** works as an Instructor for the Psychology Department of University of the Fraser Valley. Dr. Dennison earned her Bachelor of Science (Honours, 1986) from the University of Victoria, and her Master of Arts and Ph.D. (1993) from the University of Western Ontario. Her current research interests lie in the psychology of music.

**Dr. Carla MacLean** works as an Instructor for the Psychology Department of Kwantlen Polytechnic University. Dr. MacLean earned her Bachelor of Arts from the University of Victoria, a Master of Science from Saint Mary’s University, a Ph.D. from the University of Victoria, and completed a Post-Doc. at Simon Fraser University. Her recent research “tests methods to minimize the effect of bias in investigator decision making.”

**Dr. Robert McDonald** works as an Instructor for the Psychology Department of Kwantlen Polytechnic University. Dr. McDonald earned his Bachelor of Arts (Honours) from Wilfrid Laurier University, Ph.D. from McMaster University, and Post-Doc at Rutgers University.

**Dr. Mazen Guirguis** works as an Instructor for the Philosophy Department of Kwantlen Polytechnic University. He earned his Specialized Honours B.A. degree from York University, an M.A. degree from the University of Waterloo, and a Ph.D. from the University of British Columbia. His research interests lie in “cognitive science, philosophy of mind, metaphysics and epistemology.”

**Dr. Arthur Bailey** works as an instructor for the Psychology Department of Kwantlen Polytechnic University. Dr. Bailey earned his Bachelor and Master of Arts from Simon Fraser University, and Ph.D. from the University of British Columbia. His research interests lie in “Contemporary Japanese culture; contemporary novels; history of the Roman Empire; business and culture; education and creating national and cultural identity, especially in Japan.”

**Dr. Elizabeth Loftus** works as the Distinguished Professor of Social Ecology, and Professor of Law, and Cognitive Science at the University of California, Irvine. She earned a double major in mathematics and psychology at University of California, Los Angeles, and Master of Arts and Ph.D. in Psychology from Stanford. For research interests, “her experiments reveal how memories can be changed by things that we are told. Facts, ideas, suggestions and other post-event information can modify our memories. The legal field, so reliant on memories, has been a significant application of the memory research. Loftus is also interested in psychology and law, more generally.”

# SUBMISSIONS

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## MATERIAL

Contributor status access restricted to undergraduate students, graduate students, instructors, and professors. Each submission considered on appropriateness of grammar and style, comprehensiveness, coherence, and originality of content.

## SCOPE

Depending on the issue, the accepted submissions consist of articles, book reviews, commentaries, poetry, prose, and art.

## SUBMITTING

It must not have publication or pending publication elsewhere. For exceptions, sufficient reason should be sent to the Editor-in-Chief along with the material. For written scholarly material, it must be in 12-point font, Times New Roman, double-spaced, and with APA or MLA formatting. Length of material ranges from 2,000 to 7,500 words. Material should be sent to the following:

**[Scott.D.Jacobsen@gmail.com](mailto:Scott.D.Jacobsen@gmail.com)**

## ABOUT IN-SIGHT

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*'In-sight'* exists as an independent undergraduate interview-based journal purposed by an undergraduate student to ask professors, instructors, and graduate students from varieties of fields mostly *open-based* questions about their backgrounds, previous and expected research (if any), philosophical foundations, and examinations of controversial topics in their fields of expertise and inquiry. Additionally, it will include submissions multi- and inter-disciplinarily and about a variety of topics from undergraduate students, graduate students, instructors, and professors. It began on August 1st of 2012.

## GENERAL PHILOSOPHY

In academic settings, integrity exists as the foundation for knowledge, where honesty becomes necessary for integrity, especially honesty of inquiry, and honesty of inquiry goes unfettered by dogma or obfuscation – commonly called ‘academic freedom’. Meaning the ability to question anything and pursue implications of findings despite any reticence, from any harbored biases and fear of backlash, and unabashedly expressing these implications without pre-mature alteration or omission to discover knowledge. In the interviews completed and uploaded to this digital journal, *In-sight* exists to attain, at a minimum, a modicum of academic freedom through an interview format.

## FORMAT

Format of the issues of *In-sight* have specified subjects or ideas per issue. Each issue divides into an interview and submission section, described below:

For interview sections of subject issues, one issue contains *only* professors, instructors, or graduate students from *one* field because of emphasis on *a subject*, e.g. Psychology, English, and so on. For submission sections of subject issues, one issue accepts *only* professors, instructors, graduate students, or undergraduate students from *one* field because of emphasis on *a subject*, e.g. Psychology, English, and so on. Some exceptions of non-academic contributions acceptable with sufficient reason sent to the Editor-in-Chief.

For interview sections of ideas issues, one issue contains *many* professors, instructors, and graduate students from *many* fields because of emphasis on *an idea*, e.g. Epistemology, Crime, and so on. For submission sections of ideas, one issue contains *many* professors, instructors, graduate students, and undergraduate students from *many* fields because of emphasis on *an idea*, e.g. Epistemology, Crime, and so on. Some exceptions of non-academic contributions acceptable with sufficient reason sent to the Editor-in-Chief.

In this, the format shifts from subject to idea. Titles of issues specify format for issues, e.g. 'Issue 1, Subject: Psychology', 'Issue 2, Idea: Epistemology', *und so weiter*. Interview and essay sections have tags to provide requisite indication of their part in the issue. Interviews have the mark 'A'; submissions have the mark 'B', e.g. 'Issue 1.A, Subject: Psychology', indicating only psychology interviews, or 'Issue 2.B, Idea: Arts', indicating many Arts-based submissions.



## FREQUENCY

Frequency of the issues come as sufficient interviews amass to create an issue.

Frequency of uploads for individual interviews comes as they finish to the satisfaction of the interviewees.

## INTERVIEW EDITING

Editing consists of the interviewees original interview with minimal editing to keep the intended meaning and message of the interviewees intact, even where certain answers may contain controversial or ‘politically incorrect’ statements, opinions, or information. After initial editing, the interviewer sends the interview back to the interviewee to confirm the originally intended meaning and message seem sustained to the satisfaction of the interviewee. If the interviewee requires any further alterations, omissions, or edits, the interviewer repeats the cycle of edit to confirmation of accuracy of message and meaning to re-edit until the interviewee evaluates the final version of the interview as sufficiently accurate to their intended meaning and message. Any major editing consists of corrections to grammatical and/or spelling errors. This editing aims to optimize the correspondence between the interview and the interviewees intended message and meaning to the satisfaction of the interviewee.

## INTERVIEW CONSENT

Interviewees either provide email or verbal consent, or have a written form for consent. The email or verbal consent, and consent form, relate to the interviewee

having the power to deny/accept conducting the interview, and for final decision of publication as a singleton interview on the website and/or in the full issue publication with all other issue-interviews in PDF and on the website.

## RESEARCH ETHICS

The nature of the journal does not aim to answer an overarching research question, gives interviewees full control over editing and publication, and provides readers an accurate representation of the interviewee in their own words. Therefore, no ethics board approval is required for the functioning of the journal, especially given the detachment of both funding and constraint of publication from any institution, despite Scott Douglas Jacobsen studying Psychology at The University of British Columbia and Kwantlen Polytechnic University.

## FUNDING

All monetary funding for *In-Sight* comes from Scott Douglas Jacobsen.

## ATTACHMENTS

‘Attachments’ of *In-Sight* regards constraints or restraints based on functioning out of institutions or groups. For instance, an institution or group would consist of a university, an agency, a think-tank, and/or an interest-group of some form. *In-Sight* functions autonomously from any institution or group. This provides total freedom of content.

## ADVERTISING POLICY

All advertising for the journal exists as open-access for any individual.

## OPEN ACCESS

*In-sight* exists as open access for online contents, where any content of *In-sight* becomes accessible for *reading or downloading* to any interested individual/group.

## WEBSITE

*(Click below)*

**In-sight: Independent Interview-Based Undergraduate Journal**

# LETTER OF APPRECIATION

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Dear Readers,

I have decided to re-constitute the format of the journal to an independent interview-based journal. *In-Sight* will cease the title of ‘undergraduate’ beginning with the spring 2014 issue, which equates to ‘In-Sight: Independent Interview-Based Journal’. For those involved in multiple aspects of the journal, it warms my heart to have the support and generosity of time spent to produce this journal, which continues to grow and develop with all types and amounts of support. I thank everyone involved in this project.

I would like to express further gratitude to Dr. Daniel Bernstein, Dr. Sven van de Wetering, and Dr. Betty Rideout for the long-term mentoring in honing my research capabilities.

In addition to this, and equivalently important in another domain of life, I express special thanks to Dr. Wayne Podrouzek, Dr. Betty Rideout, and S. Abbas Raza for being there in the hard times.

Sincerely,

Scott D. Jacobsen

Editor-in-Chief

## DR. HAWA ABDI, M.D.

Physician & Human Rights Activist, Hawa Abdi Foundation



**Dr. Hawa Abdi Diblaawe** was born in 1947 in Mogadishu. Her father was a worker in the city's port and her mother died when she was very young. As the eldest child, Hawa was forced to raise her four sisters in conditions of poverty. But she never lost hope sight of her dreams. "My father was an educated man," she recalls, "He made sure I had the chance to become a doctor." With the help of a Soviet scholarship, Hawa studied medicine in Kiev and soon became Somalia's first female gynecologist. She then completed a Law degree at the Somali National University in Mogadishu, where she later became an Assistant Professor of Medicine. She soon opened a clinic on her family's ancestral land in the Afgooye Corridor, using the profits from her family land to provide free health care to all of her countrymen. When the civil war began in 1991, Dr. Hawa started housing her employees on her land, feeding them and caring for them. Soon their friends and relatives came seeking shelter, then after the friends and relatives of their friends and relatives. Dr. Hawa welcome them all, providing shelter to all those who came regardless of where they came from. In 2012, Dr. Hawa's land housed more than 90,000 refugees, most of whom are women and children. Today, Dr. Hawa Abdi continues to fighter for the women, children and elderly people of the Hawa Abdi Village. With the help of her two amazing daughters, Deqo and Amina, both of whom are doctors who have followed in her footsteps, Dr. Hawa continues to keep a candle of light lit for the people of the Afgooye Corridor. Dr. Hawa has won numerous distinctions and awards, including the John Jay Justice Award, Vital Voices' Women of the Year Award and a nomination for the Noble Peace Prize in 2012. U.S Secretary of State Hillary Clinton has called Dr. Abdi "a perfect example of the kind of woman who inspires me".

For more information and to support Dr. Abdi's work, click below for link:

**Hawa Abdi Foundation**

**Purchase Book**

**1. Where did you grow up? What was youth like for you? What effect do you feel this had on your career path?**

I grew up in the Mogadishu area, where my mother and father lived. Growing up, I saw that in my society people were respecting and loving each other. Parents were educating their children to work hard, respect their elders and also to respect other children. It affected me in that I viewed society as sincere, and I felt that way myself and I was trusting of others. But, in this world today, I have come across many people who are cheating their way through life. However, because of my youth, I always believe that everyone has some good in them. That is why I always want to help even in the most difficult times.

**2. Where did you acquire your education?**

I studied medicine in the Soviet Union, in Kiev. When I returned to Somalia, I studied law at the University of Mogadishu.

**3. Did you have a childhood hero?**

My childhood hero was my grandmother, the mother of my mother. She was a wise, calm, strong, and intelligent woman. She was a natural philosopher. When I read the books of renowned philosophers today, I can find the same words that my grandmother used to tell me.

She always advised me to work hard, because after working hard, you can rest. She also said to me, “sitting is empty, but working is plenty.” When I was a young girl, she would wake me up at 4am every day before the sun was even up. We would together pray, exercise, do chores, and prepare breakfast for the family. She taught me

how to farm, how to take care of the animals. By going the extra mile and not limiting your work, you will find joy and good in life.

She also taught me to be forgiving and fair to everyone you meet. If you cheat or inflict harm onto other people, you yourself will become lost in this world. But, if you are fair and honest, you will succeed. I have kept with her words my entire life, and I am happy.

**4. What was your original dream? If it changed, how did it change?**

**Furthermore, what changed it?**

When I was a child, I only wanted to satisfy my parents and make them happy. At that time, life was difficult and it was hard to get enough food for everyone in the family. But even as there were no jobs, it was raining plenty every season. People were farming, animals were eating grass, and in that

way people were living. It was hard, but there was more honesty and happiness.

Then when after my mother died, I had a dream to become a doctor. My mother died from delivery complications, and I was very sad. She was suffering right before me, but I could not do anything to support her. I felt a very deep pain. At that time many children like me also lost their mothers. So I wanted to help future generations and children to avoid the pain I felt. That was when I had the dream to become a doctor.

**5. What have been your major areas of work?**

While I work in healthcare, I also do work in education, agriculture, and law. Throughout my life, I have been working to fight poverty and malnutrition in Somalia. This includes doing very simple things like going to

fishing and giving the children fish, which is full of protein. I founded a primary school on my land to educate the children. As a lawyer, I can understand what is wrong and what is right, and each person's obligations in society. Every citizen has rights, and each citizen has to defend their own rights while completing their obligations to the government, society, family and children.

**6. What is your most recent work?**

Most recently, my Foundation has built a new library and science lab at the Waqaf-Diblawe Primary School with the help of the Global Enrichment Foundation. We have some English children books in the library, which were brought to Somalia when President Bush visited our camp in 1992. We are looking to obtain more books, start reading classes with the students, and build a reading culture in

our community. We still need to get more tools for the science lab as well so that the children can learn both from the books and from the hand.

**7. If you had unlimited funding and unrestricted freedom, what research/work would you pursue?**

If I had unlimited funding and unrestricted freedom, I want to educate the 25,000 students who have grown up in my camp. I believe education is the key to everything. After their education, I want to create jobs for the students.

**8. Not many individuals know of the situation in Somalia, and the work you do to improve the conditions there, you founded the Hawa Abdi Foundation. It has served to help those most needing assistance in Somalia. For the readers, what is**



**the function of the Foundation?**

**What kind of work does it do?**

The Dr. Hawa Abdi Foundation works to give everyone equal rights and justice. During the civil war, times were very difficult and Somalis had to flee from constant violence. They found refuge on my land, where I provided healthcare, education, and food security to all Somalis regardless of gender, religion, clan, political affiliation. I treat everyone equally and I believe that everyone should be able to access their basic rights.

Today, we continue to do the same work in healthcare, education, and agriculture. We have the Dr. Hawa Abdi General Hospital and Training Centre, which is the only place of free healthcare in a 33-km radius. We have the Waqaf-Diblawe Primary School and a Women's Education Centre to educate women and children. Also, I

am cultivating my 400-hectare farmland to strengthen food security in the region.

Even as the war has ended now, there is still a lot of work to do in Somalia to help people rebuild their lives. We continue to receive up to 40 families a day looking for a safe place to live. We need to continue to give them access to basic rights and opportunities for jobs. That is what we do at the Foundation now.

**9. Related to the previous question, what is the core message of the the Hawa Abdi Foundation. What can people in society do to help with your foundation's work?**

The core message of my Foundation is that everyone must have equal rights and justice. The people who have come under my care learn that it is important to be honest and friendly to all people.

Whereas people are fighting because of clan divisions outside my camp, when they enter my camp, I tell them they cannot identify by clan. If they do, they cannot stay.

As I am fighting illiteracy, poverty, and disease, I will be happy if people in the society can help me in this. I want to educate and create jobs in fishing, farming, animal rearing, business, and healthcare. Some students of mine are now studying medicine, some are in Sweden, Turkey, Germany, Mogadishu – they all want to become doctors because they admire the profession. About ten of them will finish in the coming six years. This is the kind of future I see in Somalia.

But this takes time, and Somalia right now still needs help and capital to take-off. People in society can help through contributing the human and financial

resources needed to train two generations lost to war.

**10. You have received numerous awards for your work. Recently, you earned a nomination for the Nobel Peace Prize and won the BET Social Humanitarian Award. What do nominations and awards like these awards mean to you?**

I am very happy and grateful towards those who have given me these awards. It gives me the strength and self-confidence to continue to work.

Sometimes it can get difficult, where it seems like everything and the world is working against me. In the Somali community, it is more difficult for recognition because people are busy, there is war going on and many people are doing destructive work rather than constructive work. That is why I get a lot of awards outside my country.

When I receive an award, my spirit

becomes alive again, and I can continue to do my job. I am grateful that I am still working and I still have my hope. I thank those people.

**11. How would you describe your philosophical frameworks inside and outside of medicine? How have your philosophical frameworks evolved?**

In my life, I always believe in equality, justice, and honesty. If you are honest and committed, you will not lose anything. There are challenges, but that is the will of the God. I find this in the Italian proverb, *l'uomo propone ma dio dispone*, which says that if God doesn't allow it to be successful, it will never be.

**12. Whom do you consider your biggest influences? Could you recommend any seminal or important books/articles by them?**

Hilary Clinton has always given me the strength to work. When I met her and she said that I am doing the right thing, I felt that someone knows me and understands what I am doing. Socrates also has influenced me. He has said that if you want to know what it is to be a human being, you have to know yourself first. What you need, they need. What you hate, they hate. I believe that human being is one. Their needs are one and the world is one. I suggest that the world work together. If something bad happens in one corner of the world, it will spread to other corners. Things like war, disease, hunger. But if we collaborate, we can try to achieve justice, peace, and happiness. The human being is one and we have to defend each other collectively, regardless of colour and differences.

**13. What do you consider the most important point(s) about your life's work?**

The most important points about my life's work is to save a human being and care for a human being. Caring for a human being is a difficult task, you have to educate, train, and advise them. While their needs are the same, their characters differ. You have to learn to care and guide them according to their character. Some can be nervous and aggressive, while another may be patient. But even if someone has a bad character, we cannot just discard them. I have found that everyone has something good inside of them. We just need to learn to approach them in different ways.

**14. What do you see as the future of the Hawa Abdi Foundation and similar humanitarian organizations aimed at helping people?**

I see DHAF will be a place of pride in the future. It is something that is built by Somalis for Somalis, educating and training our people. If we continue to be honest and committed in our work, the Foundation will be like a kingdom to be continued for generations and generations.

There are many other humanitarian organizations, international ones like the International Committee for the Red Cross (ICRC). They have continued to operate for many years because they are committed. They make immediate decisions, knowing their purpose is to care for the human being, give life and hope. In Somalia, there are many local NGOs but many lack capital to provide for the people. They have to depend on larger and international ones.

I believe that DHAF will become sustainable and generate income from

our economic work at our farm. But it will need some help to take off. After more fully developing our agriculture capacity, I believe it will become sustainable.

**15. Finally, your most recent book**

***Keeping Hope Alive: One Woman:***

***90,000 Lives Changed* outlines a**

**major theme in your life,**

**perseverance. How important is**

**perseverance for changing the world**

**for the better?**

Perseverance is very important. We have come from the medieval times to many new inventions and advancement in medicines that better the lives of everyone in the world. As mentioned before, the world is one and we cannot separate. In order to change the world for the better, we must first learn to love and respect one another, then we can work towards peace, then finally, unity in the world.

# DR. DIANA SANCHEZ

Associate Professor, Psychology, Rutgers University



**Dr. Diana T. Sanchez** received her Ph.D. from the University of Michigan in Women's Studies and Social Psychology in 2005. Currently she is an Associate Professor of Psychology at Rutgers University – New Brunswick and the area coordinator for the Social Psychology program. Her current publication lists over 40 peer-reviewed publications and over 30 national and international presentations. In addition, she received an early career award from the Society for the Psychological Study of Social Issues and a fellowship at the Russell Sage Foundation. Her work has also been supported by several agencies including the National Science Foundation. The social psychological study of stigma, self/identity, and social issues represent the overarching themes of her research. She has pursued these topics in two separate lines of research (1) the racial and ethnic identity and categorization of atypical minorities such as those who are racially ambiguous, multiracial, or multicultural and (2) the stigmatizing nature of gender norms with a special emphasis on the consequences of stigma for women's health and close relationships.

For more information, click below for links:

**Faculty Website**

**Laboratory Website**

**1. What positions have you held in Academe?**

After receiving my PhD in 2005 from the University of Michigan, I accepted a tenure-track position in the Psychology Department at Rutgers University in New Brunswick, NJ. I have been there ever since. I am currently an Associate Professor of Social Psychology.

**2. In brief, how was your youth? How did you come to this point?**

My youth was a bit challenging. My mother died of cancer when I was 17 and my father died of a stroke when I was 21. In some ways, academia saved me because it became my home when there was no home to return to.

**3. When did Psychology interest you?**

As an adolescent, I remember wanting to become a supermodel or a psychologist. I quickly became disenchanted with the idea of modeling and the unrealistic body ideals for women in the industry. No doubt my stint in modeling inspired some of my work on the danger of unrealistic body image ideals.

My true passion for psychology began as a teenager. I found myself playing the role of psychologist for my friends and family, which drew me into my present career path.

**4. Where did you acquire your education?**

After growing up in a small town in Cresskill, NJ, I attended Bard College on the Excellence and Equal Cost Scholarship (essentially a scholarship that allows you to pay state college prices for a private school education if

you graduate in the top 10% of your high school class). At the time, Bard College was a very liberal environment full of tree-hugging liberals and high school outcasts. It suited me well. At Bard, I began conducting social psychological research with Dr. Tracie Stewart, which led me to graduate school in a joint social psychology and women's studies PhD program at the University of Michigan in Ann Arbor.

**5. What kinds of research have you conducted up to the present?**

I have two lines of research. The first involves examining how sexism and the social construction of gender influence interpersonal relationship. For example, I have tackled questions such as, "How do gender role prescriptions influence sexual satisfaction?" "What are the interpersonal costs and benefits of confronting sexism" and "When do

gender roles restrict men and women's freedom to be themselves in relationships?" The second line of research involves identifying the impact of biracial identities on race, intergroup relationships, and social categorization processes. This work focuses on how racial ambiguity challenges prejudice and rigid social cognition. The core question here is "What impact does the growing biracial population have on how we think about race and the relationships between racial groups?"

**6. If you currently conduct research, what form does it take?**

Currently, I examine the social conditions under which racial ambiguity influences racial attitudes after interpersonal interactions. I have also begun some promising work at the intersections of gender and race to better understand the experience of



women of color and the health consequences of combined gender and race-based discrimination.

**7. Since you began studying psychology, what do you consider the controversial topics? How do you examine the controversial topics?**

Any research that challenges the wisdom of conforming to gender norms could be considered controversial in the eyes of the public because many are resistant to scientific studies that demonstrate costs of what some consider the way men and women should behave. Because my work explores the potential costs of restrictive gender roles, I sometimes receive some resistance.

In the field of psychology, I also find it controversial to study sexuality because many do not consider sexuality

research a science worthy of study despite the obvious importance of sex to virtually all aspects of psychology.

As a result, not many social psychologists study sexuality but I see too much importance in sexuality research to ignore this importance facet of interpersonal connections.

At first, studying biracial identity was controversial topic because many did not consider biracial identity to be a legitimate identity. The resistance to biracial identities came from both conservative and liberal circles. In some parts of the country, there was (and continues to be) a strong backlash against interracial marriages and much early research seemed influenced by conservative racial politics. For example in the 1950s, biracial individuals were described as psychologically disturbed and criminally-minded. Even after some of

these ideas were discarded, others resisted biracial identities because they felt that biracial individuals could diminish the power of minority political movements by reducing the population counts of minority populations. Others accused biracial people of trying to escape their minority identity and pass as White. So, there was a public sensitivity around biracial identity, which was only recently overcome by the large, outspoken biracial community who demanded that biracial identity be recognized as a real identity. So, studying biracial identity no longer seems controversial though there is still some backlash from racially prejudiced groups who do not approve of racial mixing.

**8. How would you describe your early philosophical framework? Did it change? If so, how did it change?**

Do what you love and you will live a fulfilling life. This is the philosophy that led me to my career. As for a philosophical framework for my research, I suppose one could say that I adopt a self-determination approach. That is, I think that we have two core motivations that explain a great deal about behavior—the desire to belong and connect with others and the desire to feel autonomous, free, and authentic. I still believe these are cross-culturally important motivations that can help explain social behavior.

**9. If you had infinite resources and full academic freedom, what would you research?**

If I had infinite resources and full academic freedom, I would utilize more international samples, purchase biomedical equipment to study the interface of the physiological body and

the mind, and conduct more longitudinal studies to ascertain long-term psychological consequences. If I had infinite resources that I could use for non-research purposes, I would create programs to improve the diversity of psychology programs at the graduate and faculty levels.

**10. What advice do you have for undergraduate and graduate students? For Psychology students, what do you recommend?**

If you are passionate about your topic of study, work will not feel like “work”. So, pick ideas that will sustain your passion. For those who strive to join PhD programs, get involved with publishable research early in your career. Moreover, I highly recommend getting closely involved in different areas of psychology because I strongly believe that the most exciting

innovations to come will be those that bridge across areas of psychology.

**11. Who most influenced you? Can you recommend any books/articles?**

There are several mentors who influenced my thinking and advised me along my career path (Tracie L. Stewart, Jennifer Crocker, Margaret Shih, Laurie Rudman, Abigail Stewart, James Jackson). Of course, there were also those scholars whom I have never had a chance to talk to in person but whose work has and continues to inspire me (Alice Eagly, Anne Peplau, Susan Fiske, Claude Steele, Jennifer Richeson, M. Lynne Cooper, Edward Deci, Richard Ryan). And of course, there are the intellectual pioneers of the social psychology of identity, prejudice, and stigma (Henry Tajfel, Gordon Allport, Erving Goffman) whose work laid the foundation for the research that I

conduct today. Perhaps, I would recommend that people start with Gordon Allport's Nature of Prejudice and Goffman's book on Stigma: Notes on the Management of Spoiled Identity.

**12. Where do you see Psychology going?**

I can only answer the question of where I would like to see Psychology go. I hope that Psychology continues to

bridge with other disciplines so that scientific discovery can reach its full potential. I hope that we continue to explore the links between the mind and the body. I hope that we become an even more open science so that our work is more widely distributed and we can educate the public. Also, I believe a standard of open science (e.g., data sharing) can also prevent fraudulent science.

## DR. SALLY SATEL

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Lecturer, Psychiatry, Yale University & Resident Scholar, AEI



**Dr. Sally Satel** is a resident scholar at AEI and the staff psychiatrist at the Oasis Clinic in Washington, D.C. Dr. Satel was an assistant professor of psychiatry at Yale University from 1988 to 1993. From 1993 to 1994 she was a Robert Wood Johnson policy fellow with the Senate Labor and Human Resources Committee. She has written widely in academic journals on topics in psychiatry and medicine, and has published articles on cultural aspects of medicine and science in numerous magazines and journals. Dr. Satel is author of *Drug Treatment: The Case for Coercion* (AEI Press, 1999) and *PC, M.D.: How Political Correctness Is Corrupting Medicine* (Basic Books, 2001). She is coauthor of *One Nation under Therapy* (St. Martin's Press, 2005) and co-author of *The Health Disparity Myth* (AEI Press, 2006).

For more information, click below for links:

**Personal Website**

**Faculty Website**

**AEI Website**

### **1. What is your current position?**

I am a Resident Scholar at American Enterprise Institute (AEI) and the Staff Psychiatrist in a Methadone Clinic in Washington, D.C. I am also a lecturer at Yale University School of Medicine.

### **2. What positions have you held in your academic career?**

I was an assistant professor of psychiatry at Yale University from 1988 to 1993. From 1993 to 1994, I was a Robert Wood Johnson Policy Fellow with the Senate Labor and Human Resources Committee.

### **3. What have been your major areas of research?**

I have written in academic journals on topics in psychiatry and medicine, and have published articles on cultural aspects of medicine and science in numerous magazines and journals. I am

author of *Drug Treatment: The Case for Coercion* (AEI Press, 1999) and *P.C., M.D.: How Political Correctness Is Corrupting Medicine* (Basic Books, 2001).

I am co-author of *One Nation under Therapy* (St. Martin's Press, 2005), co-author of *The Health Disparity Myth* (AEI Press, 2006), editor of *When Altruism Isn't Enough – The Case for Compensating Kidney Donors* (AEI Press, 2009) and, most recently, co-author of *Brainwashed – The Seductive Appeal of Mindless Neuroscience* (Basic Books, 2013)

### **4. What is your most recent research?**

My new book has focused on the extent to which brain science, and brain imaging in particular, can explain human behavior. For example, what can a “lit” brain region tell us about an individual’s thoughts and feelings?

There is enormous practical importance for the use of fMRIs and brain science. However, non-experts are at risk of being seduced into believing that brain science, and brain imaging in particular, can unlock the secrets of human nature. Media outlets tend to purvey information about studies of the brain in uncritical ways, which foster misimpressions of brain science's capabilities to reveal the working of the mind.

**5. You published a new book called *Brainwashed: The Seductive Appeal of Mindless Neuroscience* with Dr. Scott O. Lilienfeld. What is the core argument of your new co-authored book?**

My co-author, psychologist Dr. Scott Lilienfeld, and I talk about “losing the mind in the age of brain science.” We mean that brain-based levels of

explanation are regarded as the most authentic and valued way of explaining human behavior. Sometimes this is the proper way to go (when we want to uncover the workings of the brain for clinical purposes or to achieve new insight about the mechanisms of memory, learning, emotion, and so on). Understanding people in the context of their lives — their desires, intentions, attitudes, feelings, and so on — requires that we ask *them*, not their brains.

To clarify, all subjective experience, from a frisson of excitement to the ache of longing, corresponds to physical events in the brain. Scientists have made great strides in reducing the organizational complexity of the brain from the intact organ to its constituent neurons, the proteins they contain, genes, and so on. Just as one obtains differing perspectives on the layout of a

sprawling city while ascending in a skyscraper's glass elevator, we can gather different insights into human behavior at different levels of analysis.

With this template, we can see how human thought and action unfold at a number of explanatory levels, working upward from the most basic elements. A major point we make in *Brainwashed* is that problems arise when we ascribe too much importance to the brain-based explanations and not enough to psychological or social ones.

**6. You have argued against politically correct medicine. How do you define this form of medicine? How is it detrimental to the discipline? In turn, how does it corrupt Public Policy decision-making?**

I refer you to my book *P.C., M.D.: How Political Correctness is Corrupting Medicine*.

In short, the book exposes ways in which the teaching of medicine and public health, and also its practice, is distorted by political agendas surrounding the issue of victimization – in particular, the notion that poor health of minority populations (e.g., ethnic minorities, severely mentally ill people, women) is due to social oppression. In *P.C., M.D.* and *The Health Disparities Myth* (Click for full text), for example, I show that despite insistent claims that racially biased doctors are a cause of poor minority health, there are no data to support this.

Politicized medicine (which is different that PC medicine) can come from both directions: left and the right. For example, pro-life advocates exaggerate the extent to which abortion leads to depression and misrepresent aspects of the stem cell debate.



**7. Whom do you consider your biggest influences? Could you recommend any seminal or important books/articles by them?**

I greatly admire James Q. Wilson and had the honor to know him through AEI, where he was the Chairman of the Academic Advisory Council. In his 1993 book, *THE MORAL SENSE*, Wilson was impatient with moral relativism, especially the idea that man was primarily a product of his culture. He argued that a moral sense was part of our basic nature, rooted in evolutionary biology. However, he took issue with the over-correction to cultural determinism borne by rigid biological explanations of human behavior.

I am a fan of psychologists Steven Pinker (*Blank Slate*) and Timothy D. Wilson (*Strangers to Ourselves*).

**8. What do you consider the most important point(s) in the cross-section(s) between Health Science and Public Policy?**

Disability Reform and Mental Health Treatment are among the most important to me. In the case of Disability Reform, constructive ways exist to use incentives for guiding people back to the workforce or some kind of productivity. Unfortunately the system of disability entitlements, Social Security and veteran's benefits, do not make good use of incentives to counteract the kind of learned invalidism that comes with chronic dependence upon disability payments. As for Mental Health Treatments, there are enlightened programs in use (though not widespread enough) to ensure that the most ill patients follow treatment recommendations and stay safe while living in the community.

These programs entail a kind of civil commitment called ‘Assisted Outpatient Treatment’ and they require some strength of will on the part of policymakers to both enact and then enforce. For an effective example from the New York Times, click title:

**Program Compelling Outpatient Treatment for Mental Illness is Working**

Additionally, organ shortage interests me. Today, 118,000 people await a kidney, liver, lung, or heart. Eighteen of them will die tomorrow because they could not survive the wait for a donated organ. Current law (*1984 National Organ Transplant Act*) demands that organs are given as “gifts,” an act of selfless generosity. A beautiful sentiment, yes; but for those without a willing loved one to donate or years to wait on an ever-growing list, altruism can be a lethal prescription. (Full

disclosure: in 2006, I got a kidney from a friend. If not for her, I would have spent many miserable years on dialysis.)

The only solution is more organs. We need a regulated system in which compensation is provided by a third party (government, a charity, or insurance) to well-informed, healthy donors. Rewards such as contributions to retirement funds, tax breaks, loan repayments, tuition vouchers for children, and so on, would not attract people who might otherwise rush to donate on the promise of a large sum of instant cash in their pockets.

With private buying kept unlawful, available organs would be distributed not to the highest bidder, but to the next needy person according to a transparent algorithm. For organs that come only from deceased donors, such as hearts, or those that are less often

given by loved ones, like livers and lungs, a pilot trial of government-paid or charity-financed funerals makes sense.

I went into detail here because I feel passionate about changing the law that makes it a felony for anyone to give something of value to a potential donor.

## DR. NEDA KERIMI

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Post-Doctoral Fellow, Psychology, Harvard University



**Dr. Neda Kerimi** received her Ph.D. from Stockholm University in Cognitive Psychology. After her Ph.D., Dr. Kerimi worked at **The Judgment and Decision-Making Group** at Uppsala University and now she is a post-doctoral fellow at the department of Psychology, Harvard University where she conducts research in social psychology. Her research interests include decision-making, happiness, risk as well as Human-Computer-Interaction. Additionally, Dr. Kerimi is the news editor of the **European Association for Decision Making**, organizer of the bi-yearly networking event at SPUDM, and editor of the [Indecisionblog.com](http://Indecisionblog.com). Besides being a self-confessed tech-geek, she loves useless facts and futurist science.

For more information, click below for links:

**:IndecisionBlog:**

**Daniel Gilbert Lab**

### **1. What positions have you held?**

#### **What position do you currently hold?**

I actually studied and worked in IT, as programmer and also IT-manager, for a number of years. However, I loved psychology too much so I decided to do a PhD in psychology. Since my PhD graduation in 2011, I have been project manager in Uppsala for a project relating to numeracy and now a post-doctoral fellow at Harvard investigating the impact technology has on our decisions and cognition.

### **2. In brief, how was your youth?**

#### **How did you come to this point?**

I was always interested in knowledge and had a curious nature. I was undecided between IT and Psychology so I eventually studied both. Even though my training in Psychology is more extensive, I am still a computer-geek at heart, which works for me since

I am interested in how technology is changing our cognition.

### **3. When did Psychology interest you?**

I think I have always been interested in psychology. People interest and puzzle me and I love talking and hearing people's stories so it just came naturally I guess.

### **4. Where did you acquire your education?**

I actually got my MA in Informatics first and worked a few years in IT. Meanwhile I studied psychology at Stockholm University, Sweden, where I eventually got my PhD.

### **5. What kinds of research have you conducted up to the present?**

I have been involved in many projects with the denominator Judgment and Decision Making. For instance how Medical Doctor's make decisions, how voting systems impact preferences, how

students choose study strategy, how information is processed and distorted in consumer situations, why we procrastinate and so on. With the years, I have more and more become interested in social psychology and HCI.

**6. If you currently conduct research, what form does it take?**

Being an experimental psychologist, experiments are very important to me. I often look for ideas in the real world but follow it up or investigate it in experimental settings. I think triangulating and replication is important in research so I usually try to mix different methods to study a phenomena.

**7. Since you began studying psychology, what do you consider the controversial topics? How do you examine the controversial topics?**

My field, Judgment and Decision making, have a few controversial topics. The one that has always interested me is whether we should rely on our gut feelings or sleep on it before making decisions. Research has consistently shown that sleeping on it is better, with a few exceptions. However, I have myself not studied this topic, mostly because I am satisfied with the answers that current research has given us regarding that topic.

**8. What form of multi-/inter-disciplinary research does**

**Psychology most need in the near future? What form of research does Psychology need in the far future?** I can only talk about cognitive and social psychology, as these are the areas I have knowledge in. Both areas are actually doing a very good interdisciplinary job. For instance, many psychologists collaborate with

economists and computer scientists to study financial behaviour or how technology is affecting us.

**9. If you had infinite funding, full academic freedom, and zero ethical bounds, what would you research?**

I would probably still do what I do, which is studying humans. But I suppose I would have more research assistants so that I could focus more on research instead. Also, not have to spend a lot of time on writing grant proposals would probably make it easier to actually do research.

**10. What advice do you have for undergraduate and graduate students? For Psychology students, what do you recommend?**

Well, I can only give advice about academia. 1) If you are planning to have a career in academia, make sure that you choose a topic that you love. Academia is a tough world (but fun)

where positive feedback comes seldom so what drives you have to be your passion for the topic. I cannot emphasise enough how important it is that you choose topic, or any career for that matter, based on passion and not prestige, money, and power (the last three mentioned comes naturally if you do what you are passionate about). 2) Another advice would be to network, but with those whose work you love and want to learn from. Learning from others has been the most valuable knowledge I have gathered. And start early, solid networks takes time to build. 3. Focus on your strengths rather than your weaknesses. We all have weaknesses and focusing on only them will hinder you. Besides, everyone have strengths that others don't so use that to your advantage.

**11. Who most influenced you? Can you recommend any books/articles?**

This is so hard because so many people have. But those who have influenced me has been people whom, despite their accomplishments and fame, are so humble and genuine. I once emailed this extremely famous professor that I wanted to meet him. I really didn't expect this person to answer. But I even got a meeting. That inspired me immensely.

**12. You co-run a blog called 'InDecision'. Why did you create the blog? How do you run it? Where do you see it going?**

I have always been involved in curriculum activities such as being involved in research societies because I find it so rewarding and important. At the same time, I have always felt that there is a lack of forum for early career researchers, especially in my field, to network. In addition, not everyone have the same opportunities to meet

other researchers and exchange ideas. So Elina, the other girl I am running the blog with, decided to create such forum. We knew that there would be interest in such blog (we thought that surely, we are not the only ones in need of such a network). However, we did not expect it to be as well received as it was. Because of the positive feedback we received, we got more inspired and motivated to take the blog further. We actually spend a great deal of our free time on the blog but we get so much satisfaction by knowing that we are making a change in the research field. It should be added that the blog had not been possible without the help of our contributors. We have many exciting projects planned and we are getting more and more visibility for every day so I am excited about the future of the blog.



**13. Where do you see Psychology going?**

I am probably biased but I think psychology is one of the most important fields and should be taught in every programs (that and statistics).

Today, everything that in one way or another involves humans draws conclusions from psychology. I would not be surprised if every company or state will have psychologists in their team.

## DR. GIRA BHATT

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Instructor, Psychology, Kwantlen Polytechnic University

Principal Investigator and Project Director, AT-CURA



**Dr. Gira Bhatt** is a researcher and an educator with a Ph.D. in Psychology from the Simon Fraser University, BC, Canada. Currently she is a faculty member in the department of psychology at the Kwantlen Polytechnic University. She is the principal investigator and the director of a federally funded (Social Sciences and Humanities Research Council) Community-University Research Alliance (CURA) project. The goal of this \$1 million, 5-year long project is to address prevention of youth violence and gang involvement using strength-based approach and community engagement. This project has brought together a team of seven academic researchers, four academic institutions, and 11 community partner organizations ([www.actingtogether.ca](http://www.actingtogether.ca)). As the project director, she oversees multiple research streams (three qualitative, three quantitative), training and education of youth, academics, and members of the larger community, and knowledge dissemination through academic and popular media. Additionally, besides her regular teaching commitments at the Kwantlen Polytechnic University, Dr. Bhatt supervises the practicum component of the applied degree in psychology whereby she connects undergraduate learners with potential employer hosts with whom they train for a career of their choice. Also, she is the board member and secretary of the International Relations Committee of the Canadian Psychological Association.

For more information, click below for links:

**AT-CURA**

**Faculty Website**

**1. What academic positions have you held? What academic positions do you currently hold?**

My professional academic career began at the University of Mumbai, India.

Briefly, I worked as a clinical psychologist at a children's hospital.

Later, I was a lecturer at an undergraduate institution affiliated with the University of Mumbai. After completing my Ph.D. at Simon Fraser University, BC, Canada, I taught at Camosun College and University of Victoria, BC, Canada.

At present, I am a faculty member in the Psychology department of Kwantlen Polytechnic University, BC, Canada. As well, I am the Principal Investigator and Project Director for Canadian government funded Community-University Research Alliance (CURA) project. CURA is a multidisciplinary, multi-institutional,

multi-partnership project involving four academic institutions, seven researchers, and eleven community agencies.

Additionally, I am actively involved as the board member and the secretary of the International Relations Committee of the Canadian Psychological Association.

**2. In brief, how was your youth? How did you come to this point?**

I was born and raised in Mumbai, India. My family tradition was guided by strong commitment to scholarship and spiritual pursuits. My father was a journalist, poet, writer, and later a Yoga teacher in retirement. My mother was gentle, but strong, and kept the family life stable and happy. I had strong extended family ties. I recall being surrounded by numerous cousins and visiting relatives, which provided for

many happy times. I loved school.

From a young age, I wanted to be an academic.

When I turned 16, I began questioning some of the traditions of life in India. I became an “atheist” much to the despair of my relatives, and surprise of my friends. However, my father provided me with a long list of books on philosophy and religions for study. The turning point was the study and practice of Yoga for over 8 years.

Although practice of Yoga had been part of my family tradition, I needed to examine the philosophy of it, which appealed to my rational mind. The secular roots of Yoga provided a strong ground I was seeking to keep my mind balanced and a perspective that went beyond the immediate.

Yoga and Psychology are intertwined. Therefore, it was natural to veer in the direction of Psychology.

### **3. When did Psychology interest you?**

Actually, my entry into Psychology was accidental. As an undergraduate student in Mumbai, India, I wanted to major in English Literature because I loved the works of classic writers and poets including Shakespeare, Jane Austin, Bronte sisters, and others. However, my English department informed me that it did not have enough students to offer the major. On this basis, they advised me to sit in any class for the first two weeks, and wait for more students to come forward to declare English Literature as their major. Of course, I was disappointed and a bit worried.

Anyway, I decided to go to a class. My friends told me about a hugely popular class taught by a popular professor. I always remember that class. There were 150 students in the classroom, no

microphone, and the old professor was sitting in his chair talking very gently to a very captive audience. It was an Introductory Psychology class! There was no turning away from there! Two weeks later the English department approached me, much too late...

**4. Where did you acquire your education?**

I completed my Bachelor's degree with honors in psychology and Master's in Clinical psychology at the University of Mumbai. I then came to Canada and earned my second Master's degree and Ph.D. in Social psychology. Yes, I switched from clinical to experimental field of psychology as I wanted to pursue basic research rather than practice in the field of psychological illnesses.

**5. What kinds of research have you conducted up to the present?**

I have three concurrent research tracks. One is focused on Cross-Cultural Psychology examining the issue of self, identity, and acculturation. Second pertains to Applied Social Psychology working with a network of academic scholars and community agencies targeting prevention of youth violence and gang involvement. Third is an overarching philosophical and historical examination of psychological knowledge.

**6. If you currently conduct research, what form does it take?**

Having worked within community-involved research for the last five years, I have decided to work only on collaborative research projects with community input, academic rigor, and a set of clear application-to-life goals.

**7. You have conducted practical and applied research through AT-CURA**

**along with researchers from your university as well as Simon Fraser University, University of Victoria, and Langara College. What is AT-CURA? What is the purpose of AT-CURA? Why do you consider unifying ‘community partners and academic experts’ through a common vision important?**

Acting-Together: Community-University Research Alliance (AT-CURA) is a five-year long project (2009-2014) funded through Canadian government’s Social Sciences and Humanities Research Council (SSHRC). The goal of this \$1 million project is to identify protective factors that may prevent youth from violence and criminal gang involvement. Importantly, unlike most traditional academic projects, academic research is but 1/3<sup>rd</sup> of the project. The other two major arms of the project are; ongoing

training/education of all involved in the project including youth, and continual knowledge dissemination using both academic and popular media.

SSHRC’s mandate for CURA projects is that academic researchers must work alongside community partners at every step of the project from day one until the conclusion of the project. I wholeheartedly embrace this ideal.

As an academic researcher, I had remained rather painfully aware of the two solitudes created by the academic and the community. Academics, especially social scientists, have carved out an ivory tower, which they parachute out of from time to time into an outside community to “collect data”. Next step is to remove any trace of the individual identity of the data contributor. This “coded data” is taken back to the ivory tower where these

data pieces are examined, analysed, chopped up, decorated with charts and tables to be served on the platter of research journals, conference presentations and books - that only a handful may actually read, understand, or find relevant. Although, there is great value in “knowledge for the sake of knowledge”, creation of academic knowledge accessible only to the academic elite is unfair and meaningless. On the other side of things, the community relies on ‘common-sense wisdom’ and works on the “application” side of knowledge without the support of the evidence-based research.

The divide between the academic and the community must be bridged, such that the context is created for the cross-fertilization of knowledge. Academic rigor and community wisdom, when amalgamated, allows for meaningful

contributions by the individual and collective to create a better world.

### **8. If you had infinite funding and full academic freedom, what would you research?**

My research goal will be to move closer to the ideal possible world where groups of people from diverse cultures, nations, religions, traditions, and political ideologies live harmoniously. Yes, understating the dynamics of intergroup relations are important, especially as we are a ‘Global Village’ with increasing movements of millions of people across continents. This expands with the world coming together and becoming connected through rapidly advancing e-technology. This is our future. Our next-door neighbors will be “different”. Yet, they will be part of our shared world. If my research can make a small, humble contribution in helping build

harmonious human connections, I would consider my life blessed.

**9. Since you began studying Psychology, what do you consider the controversial topics? How do you examine the controversial topics?**

As a social psychologist living in Canada, controversial topics to me are inter-cultural relations. Traversing the fine line between the freedom to practice one's cultural traditions while integrating into mainstream life in Canada. It can be a challenge. Some issues such as newcomers to Canada wearing head covers (Hijab, Turbans), face covers (Niqab), body covers (Burqa), and following tradition-specific gender norms are controversial. As well, "racial profiling" is problematic. There is no one correct way to examine these topics. However, it is my

understanding that top-down imposition of "laws" make for a greater divide and discontent within the society; whereas allowing everyone an opportunity to shape laws and policies create good will and receptivity to them. Therefore, my inclination would be to involve members of the groups who might be the targets of the controversy, the policy makers, and expert researchers to work collaboratively to come up with a win-win situation.

**10. How would you describe your early philosophical framework? Did it change? If so, how did it change?**

As noted earlier, growing up in India, cultural and spiritual traditions dictated my world view. My cultural value's foundation has remained strong within me. As such I believed, and continue to believe in the inherent goodness of people, and that being able to help one



and all without expecting rewards and recognition is a duty (“*Dharma*”), and that maintaining a larger perspective on life protects one from stresses of the here & now, and keeps one humble.

These basic values have not changed.

Rather personal experiences strengthened my belief in the importance of human connections and making decisions based on the larger perspective on life.

**11. What advice do you have for young Psychology students?**

Make career decisions wisely. Once a goal is established, give your best to every task, no matter how small, how trivial. Never be a minimalist but go beyond what is required. Learn to be a team player.

**12. Who most influenced you? Can you recommend any seminal books/articles?**

From my Eastern roots, I would consider Patanjali, an ancient scholar from India’s sacred tradition as the one who influenced me deeply. His seminal work “*Yoga Sutras*”, a compilation of Sanskrit hymns, provides a rational and secular philosophy of human nature.

From the standpoint of my Western academic life, I would pick William James as my ideal. James- the great thinker, James- the wise scholar, James - the amazing writer is an enduring source of inspiration to me. His book “*Principles of Psychology*”, especially the chapter on the self and consciousness is probably the best psychological discourse I have ever come across.

**13. What do you hope to achieve in the near and far future with AT-CURA?**

AT-CURA research findings are gradually being disseminated and it is rewarding to see these being embraced by law enforcement agencies, policy makers, and service providers. My vision for AT-CURA is to continue the good work that the project has initiated and inspired. Our academic-community collaboration is very strong today, and work needs to continue to keep it well-nurtured so it can keep growing stronger and larger. I envision that it will have a sustained existence at KPU so researchers and community partners maintain their ties and collaborate on evidence-based programs that will help our youth make right choices in life and keep our community healthy and thriving.

**14. Where do you see Psychology going?**

Psychology as a discipline has very unique historical foundations, and its rapid growth since the early 20<sup>th</sup> century has been non-linear and multidirectional. In light of this, concerns exist about the field “splitting” into too many branches. Psychology as a unitary discipline might be lost in future altogether. I am not sure if there is any trend to allow speculation about the disciplinary direction. I see one constant though. Given that human behavior remains dependent on its contexts - physical, social, cultural, political - which constantly keep changing, the discipline of psychology will never go out of business- although it may take on different garbs and labels.

## DR. RAKEFET ACKERMAN

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Assistant Professor, Psychology, Technion: Israel Institute of Technology



**Dr. Rakefet Ackerman** is an assistant professor at the Faculty of Industrial Engineering and Management at the Technion—Israel Institute of Technology. Her research deals with the cognitive processes of learning, question answering, and problem solving. Her studies follow the metacognitive approach, by which subjective assessment, or monitoring, of knowledge guides the actions people take to achieve their goals. Understanding the factors that affect the reliability of metacognitive monitoring and the associated efficiency of task performance offers a foundation for developing effective study and work techniques. Before her academic career, Dr. Ackerman worked in the hi-tech industry as a leader of software development teams.

For more information, click below for link:

**Faculty Website**

**1. What academic positions have you held? What academic positions do you currently hold? What is your expertise?**

During my Ph.D. studies, I taught Cognitive Psychology in the Open University of Israel and Human Memory in the University of Haifa. During my post-doc, I did not teach. At present, I am a faculty member at the Technion—Israel Institute of Technology. This university is focused on science and engineering, and does not have typical social-science departments. My position is in the Faculty of Industrial Engineering & Management, which is a highly heterogeneous faculty including engineers, mathematicians, computer science researchers, finance researchers, etc. and psychologists. The group of psychologists includes three domains: marketing, organizational psychologists,

and cognitive psychologists. I am in this latter category. At the undergraduate level I teach human-factors engineering, which combines my backgrounds as a system analyst in the software industry and cognitive psychology. For graduate students I give metacognition class, which is my domain of expertise.

Metacognition is a set of cognitive processes that accompany each cognitive task we perform. For example, when a student studies, beyond the transfer of information from the information source (e.g., a book, computer, or auditory source) into memory, the learning process involves regulation of the memorizing and comprehension processes. The student asks herself how well she knows each particular paragraph and decides whether to move on or to restudy it. In other words, during

studying, she assesses her progress, and decides whether her progress is adequate or another learning strategy would better be applied. Alternatively, seeking help is desirable. Finally, she may consider taking a break or decide that the acquired knowledge is satisfactory for achieving her goals. Similar processes take place with facing a test. Prior to answering each question, the student considers the question's difficulty. Whether a point exists in searching her memory for relevant knowledge or she knows too little about the solicited information. After providing an answer, she considers if the answer is good enough or more work is needed. Such knowledge assessments and regulatory decisions are metacognitive processes that take place in large variety of contexts, beyond learning. For example, when a doctor considers a

diagnosis, she should consider whether she knows enough about the phenomenon or should seek more information, whether she needs additional blood tests for assuring her hypothesized diagnosis, and whether she is confident enough about appropriate medication. Similar processes take place in every profession. Take a daily example, when baking a cake, you ask yourself whether you remember all the ingredients and procedures or better consult the cookbook.

The assessment of our knowledge, progress, or success, is called "Monitoring", and the decisions we take in light of this monitoring are called "Control" or regulatory decisions. The metacognitive research domain focuses on exposing factors and conditions that affect our monitoring differently than our actual

performance – these discrepancies suggest that the monitoring processes are not always reliable. Furthermore, we better acknowledge situations where monitoring is particularly biased and others in which it is more reliable. This is important because people cannot know their actual knowledge or expected success without external feedback. Thus, they take actions in light of their subjective monitoring. If the monitoring output is biased, it is expected to mislead the regulatory decisions. For example, if the student is overconfident about her knowledge and assesses her knowledge to be adequate she would cease studying even though her knowledge is too low to achieve her goals. In one of our studies (Ackerman, Leiser, & Shpigelman, 2013), we found that undergraduate students who studied explanations how to solve very challenging problems

were misled by non-informative illustrations incorporated in the explanations. They assessed their understanding to be higher for the illustrated explanations than for the plain explanations, although their actual performance was in fact lower. Their subjective assessment of comprehension was above 90% while their actual success rate was below 40%. This means they exaggerated their assessment of comprehension in about 60%. For the plain explanation versions, they exaggerated “only” in 30%. In another line of research, we showed that studying texts from the computer screen results in larger overconfidence and lower test scores than studying the same texts on paper (Ackerman & Goldsmith, 2011; Ackerman & Lauterman, 2012). In the examples above, such overconfidence may have clear undesirable outcomes

like inadequate medical diagnosis or a messed-up cake. Underconfidence is not desirable as well, as it may lead people to invest too much effort in a particular item while the time could have better be used to study other materials, or for going out with friends...

**2. What was your original dream? If it changed, how did it change? Furthermore, what changed it? Where did you acquire your education?**

In the high school, I studied in a program, which elaborated on computer science. When I joined the Israeli army, as all Israeli boys and girls, I took part in a software development program, which involved two-year studies and four more years of service in a software development unit. I started as a team member, and later on

worked as a system analyst and led a software-development team. As part of this program, we could start our Bachelor Degree in the university. I saw my future in software development, but the degree had to include an additional course. I was interested in psychology, and finally graduated in a combined degree: computer science and psychology. After this, I worked for software companies and led international teams with up to 20 people. I worked with systems that involved large databases and faced challenges that involved management of large amounts of data. After more than 10 years in this industry, I arrived at a new point in my thinking. I thought the software industry should be informed by cognitive science. The human memory system manages large amount of data with great efficiency.

Thus, I thought that insights from its great data processing capabilities may inform the software industry. At that point in time, I was already a mother to three young daughters, which made studying a new world, not an easy decision. Nevertheless, I decided that two years of M.A. studies might allow me to bring a fresh point of view to the software world.

As part of my search for studying about the management of the human memory system, I encountered the domain of Metacognition, and the lab in the University of Haifa, Israel, where leading researchers of this domain work. Dr. Morris Goldsmith became the supervisor for my M.A. thesis. As well, Dr. Asher Koriat, head of the lab, was a collaborator on another research project. During graduate studies, I felt astonished by intriguing research questions studied in this domain and

rigorous research methods employed to address these questions. As a result, this two-year program was converted into a direct Ph.D. course. I realized that there was no way back to the industry for me. I got caught in the research world.

The metacognitive research domain evolved as part of memory research. This domain, called meta-memory, involves monitoring and decision control involved in memorization of word lists and answering knowledge questions by retrieving information from memory. I am attracted to more complex cognitive tasks, such as reading comprehension and problem solving. I learned more about these complex tasks from my post-doc supervisor, Dr. David Leiser, at the Ben-Gurion University, Israel. Now, I see metacognition as ubiquitous, but hidden behind the



scene, in every task people perform. My mission is to contribute to the scientific understanding of the metacognitive processes involved in performing complex cognitive tasks and lay the grounds for developing methods for improving their quality.

**3. What kinds of research have you conducted up to the present? If you currently conduct research, what form does it take?**

Mainly, my studies are performed in my lab, but some occur in classrooms or over the Internet. The lab includes eight computer stations in a small room. The tasks involve learning, question answering, or problem solving. In all tasks, immediately after performing each task, e.g. solving a problem, the participant indicates how confident she is, on a scale of 0% to 100%, that her solution is correct, and

then she moves on to the next item. I measure accuracy of the response, confidence, and response time. All my studies are experimental, which means that we manipulate a variable or two. In the example above, we manipulated the presence of the illustrations in the texts. This was manipulated within participants. This means that each participant studied half the texts with illustrations and half without them. Each text had a version with illustrations and a plain version. The assignment of texts with and without illustrations was random for each participant for ruling out effects of particular texts and/or illustrations on the results. In the media experiments, we manipulated the media for studying between participants – half the participants performed the entire task – learning, predicting their success at the test, and

test taking – on the same media, either screen or paper. This was done to avoid attracting participants’ attention to the media, which may contaminate the results. In other studies, we compare working with and without time pressure, or manipulate motivation for success by assigning higher point value to some items than for others.

#### **4. If you had infinite funding and full academic freedom, what would you research?**

As stated earlier, I see my mission in spreading the word regarding the proneness of the subjective assessments of knowledge to numerous misleading factors in all aspects of life. The problem in this domain is that the research progresses slowly – we must be very careful and make sure that our studies are rigorous in order to

draw reliable conclusions. The study domain is still young, and we know little about the processes involved in performing complex tasks. For example, what are the metacognitive processes involved in engineering work of designing a new machine? Therefore, I need many collaborators and graduate students to share my ambitious to understand better the biasing factors and think together about ways to overcome these biases. Up-to-date technologies, like virtual reality, eye tracking, fMRI, can contribute to this avenue. My dream is to see educational systems and professional development programs incorporate in every activity acknowledgement in the potential metacognitive biases and the necessity to minimize these biases for effective performance of tasks.

**5. What controversial topics exist in your domain?**

Examples of controversial issues in metacognition are:

1. Is the metacognitive monitoring and regulation of cognitive efforts conscious or unconscious?
2. Does the metacognitive monitoring only drive behavior, in a top-down fashion, or also informed by the behavior after it was done, in a bottom-up fashion?
3. Is there a central monitoring mechanism with common characteristics for all cognitive tasks, or are there differences between the metacognitive processes that take place in the various tasks?

**6. How would you describe your philosophical framework?**

A combination of focus and openness is my secret. I realize, of course, that

this sounds like an oxymoron. As mentioned above, I see metacognition everywhere and keep analyzing the world from this point of view. This is the focus side. The openness side is that I see myself as a collector and integrator of ideas more than as an inventor. I keep listening to people, seniors, and juniors. In particular, I learn a lot from discussions with students. I enjoy greatly their fresh minds and the original links they make between topics they study or from their personal life experience. This attitude brought me to major leaps in my research programs. One of my studies evolved from a private conversation with a junior (at the time) colleague who asked an intriguing “what if” question regarding the study I presented to him. Another study evolved while I was standing in a traffic jam, and watched how people get into

the junction and sometimes take risks just because they are tired of waiting for the junction to clear. A collaborative study with Dr. Daniel Bernstein, from Kwantlen Polytechnic University, evolved from a short discussion during a coffee break in a conference. Yet another example is a study in which our plan failed, but my graduate student suggested a new way of looking into the results we already collected. This was then developed into a new study which provided us with highly interesting insights. From a more general perspective, failures often provide opportunities to learn something new. One of my papers in a leading journal (Thompson et al., 2013) was evolved from a failure in replicating a well-known finding. The graduate student who her very first study was failed was so disappointed that she almost left the

program. However, we then considered an explanation for the failure, with the help of Dr. Valerie Thompson from Saskatoon and together came up with beautiful findings and a theoretical contribution.

### **7. What advice do you have for young Psychology students?**

I think that the previous answer, regarding the combination of focus and openness tells the main story. Most students do not know their focus yet. Therefore, openness is the main thing, while it is clearly relevant for those who know their focus as well. I suggest benefiting from the university period much beyond the studies per se. Go to talks of guest speakers, go to other faculties if something there attracts your interest, interact with researchers from various disciplines, consider interesting questions, and

search for answers. For those who consider research as their future direction, get involved in research as early and as much as possible. At the beginning, take part in experiments as a participant, and later on as a research assistant. Take courses that involve developing research proposals and conduction of pilot studies. This is the only way to understand this world and examine whether it attracts you.

**8. Who most influenced you? Can you recommend any seminal books/articles?**

The papers that influenced me the most were writings by Tom Nelson, Louis Narens, Janet Metcalfe, Robert Bjork, John Dunlosky, Keith Thiede, Valerie Thompson, and Asher Koriat. I recommend a recent review paper and a friendly book that

summarize the domain nicely and point to its applied relevance.

Bjork, R. A., Dunlosky, J., & Kornell, N. (2013). Self-Regulated Learning: Beliefs, techniques, and illusions. *Annual Review of Psychology*, *64*, 417-444.

Dunlosky, J., & Metcalfe, J. (2009). *Metacognition*. Los Angeles: Sage Publications, Inc.

**9. Where do you see Cognitive Psychology going?**

I hope to see the cognitive psychology go beyond artificial tasks that can be generated only in the lab, into real-life tasks with larger variety than studied up until now. This requires sophistication and development of research methods that support it without compromising on rigorous research methods.

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# DR. BARBARA FORREST

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Professor, Philosophy, Southeastern Louisiana University

Member, NCSE Board of Directors



**Dr. Barbara Forrest** is a Professor of Philosophy in the Department of History and Political Science at Southeastern Louisiana University. She is the co-author with Paul R. Gross of *Creationism's Trojan Horse: The Wedge of Intelligent Design* (Oxford University Press, 2004; 2007, 2nd ed.), which details the political and religious aims of the intelligent design creationist movement. She has published extensively in both scholarly and popular venues. In 2005, she was an expert witness for the plaintiffs in the first intelligent design legal case, *Kitzmiller et al. v. Dover Area School District*, which was resolved in favor of the plaintiffs. She is a member of the Board of Directors of the National Center for Science Education and previously served on the Board of Trustees of Americans United for Separation of Church and State. She is the 2006 co-recipient with Brown University cell biologist Kenneth Miller of the American Society for Cell Biology's Public Service Award. In April 2007, Forrest was selected as a Fellow of the Committee for Skeptical Inquiry (CSI), formerly Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP). She is also the 2009 recipient of the American Humanist Association's Humanist Pioneer Award.

For more information, click below for links:

[Faculty Website](#)

[National Center for Science Education](#)

[Louisiana Coalition for Science](#)

**1. What academic positions have you held? What academic positions do you currently hold?**

My current position is Professor of Philosophy in the Department of History and Political Science at Southeastern Louisiana University, where I have worked since I began teaching in 1981. I started as a part-time philosophy instructor and remained in that position for seven years until I completed my Ph.D. in philosophy at Tulane University in 1988. That year, the university created a tenure-track position for me as an assistant professor in philosophy, making me the first full-time, credentialed philosopher Southeastern ever hired. I earned tenure and promotion to associate professor in 1994, and ten years later I was promoted to full professor.

**2. How was your youth? How did you come to this point?**

I was born and grew up in Hammond, Louisiana, a small city of 10,000 people that was the epitome of what people typically understand as the “deep South.” I was a bookworm and spent most of my spare time reading. Growing up in the 1950s and 60s, my childhood and adolescence were shaped mostly by the civil rights struggle, which was taking place in my own immediate area and throughout the South. I watched my town change from one in which the public schools were segregated to one in which both white and African-American children attended school together. I was among the first group of students to attend high school under the federal desegregation order, which, believe it or not, is still in effect in my old school district. So my early life was shaped by issues of social justice, particularly concerning race.



**3. What was your original dream? If it changed, how did it change? Furthermore, what changed it?**

My earliest career plan, my “dream,” was to become a physician. This dream was rooted in my concern for social justice and the deep religious faith that I had during childhood and adolescence. My role model was Dr. Albert Schweitzer, the famous Alsatian physician and theologian who left his life in Europe to run a hospital at Lambaréné in French Equatorial Africa. One of the highlights of my childhood was receiving a reply from his secretary to a letter I had sent to him in Lambaréné — several years after I wrote the letter! During recess in the sixth grade, I used to sit on the sidelines and read books about medicine rather than play with the other kids. I was a “nerd” before that

word even existed! But at some point my goals changed. I had little aptitude for mathematics, which I knew that I would need in the study of the sciences necessary to medicine. I was also by nature more suited to teaching, and tackling the problem of ignorance was a very pressing concern to me since I was literally surrounded by it in the form of racism. I was extremely idealistic! So I went for the Ph.D. rather than the M.D. One of my sons is a physician, but he’s much better at math than I was!

**4. When did Philosophy interest you?**

I began taking philosophy courses when I was about halfway through college. My original goal was to become a high school English teacher since I loved books and had wonderful English teachers in the public schools I

attended. I married at eighteen, so I was married when I started college. (And I am still married to the same guy after 43 years!) My husband urged me to take at least one philosophy course before I graduated, as he had done: "Everyone ought to take a philosophy course." So my husband actually gets the credit for steering me toward my profession.

I was an English major and had always loved reading fiction. I loved "highbrow" fiction such as the novels of Thomas Hardy and philosophical poetry such as Alexander Pope's "Essay on Man," so I was clearly leaning in the direction of philosophy although I didn't know it. I didn't know anything about philosophy and had never considered taking any courses. So at my husband's suggestion, I took a class and was hooked immediately. I loved ideas, and I thought that this was

what would save mankind: using great ideas to overcome ignorance. As I said earlier, I was really idealistic.

I became certified to teach high school English, but my student teaching was enough to convince me that I didn't want to spend my life disciplining other people's children! I went straight to graduate school in philosophy and never looked back.

### **5. Where did you acquire your education?**

I attended public schools in Hammond, where I grew up. Family circumstances required that I attend college and graduate school in my immediate area, so I was fortunate to live near public universities. The taxpayers of Louisiana provided me with scholarships, which enabled me to earn my B.A. in English at Southeastern, where I now work, and my M.A. in philosophy at Louisiana

State University. I earned my Ph.D. in philosophy at Tulane University in New Orleans. Tulane was, and still is, the only Louisiana University to offer a Ph.D. in philosophy. Fortunately, I live only about an hour away, so I could drive to my classes and go home at night. My husband worked full-time for the state of Louisiana, but we also operated a commercial poultry farm that he inherited from his parents. We used the farm income to pay for our doctoral degrees. I am probably the only person in the history of Tulane University who financed a Ph.D. in philosophy by raising chickens.

#### **6. What kinds of research have you conducted up to the present?**

Most of my scholarly research has revolved around the issue of creationism, although I didn't start out with that intention. Events in Louisiana

— including a creationist threat to my own children's science education — steered me in that direction.

Fortunately, I was well prepared to write about creationism since my doctoral dissertation was about Sidney Hook's philosophy of education. Hook was John Dewey's most prominent disciple and worked closely with him, so I studied Dewey as well. They wrote extensively and insightfully about the importance of science and democracy to public education and about other, related public policy issues. These three concerns — science, democracy, and public education — were interwoven into much of their philosophical work.

I corresponded with Hook while writing my dissertation and eventually went to visit him; he helped me enormously. I learned from him that philosophers must understand the way the world outside the academy works if

they want their professional work to be useful to people other than their fellow philosophers and if they want to be involved in policy issues. I have never wanted to be isolated in the “ivory tower,” producing publications that would be read only by other philosophers. I have always wanted my work to be useful to people outside my discipline. I also learned from Hook that careful attention to empirical data is essential to producing informed philosophical work. (Hook read avidly about history and science.) Finally, Hook was a master of clear, incisive analysis of other people’s ideas.

Studying Sidney Hook’s work prepared me for writing about creationism.

I have also published on the subjects of philosophical and methodological naturalism, which was also one of Hook’s central concerns.

Methodological naturalism is the

procedural stance of the scientist, who is limited to seeking natural explanations for the natural world.

Science doesn’t work when unverifiable supernatural concepts are incorporated into it. Philosophical naturalism, on the other hand, is a metaphysical view that excludes the supernatural. Scientists need not — and many do not — adopt naturalism as a personal worldview, even though they must leave the supernatural out of their work as scientists. They can be both good scientists and faithful believers as long as they respect the procedural limitations of their science and the epistemological limitations of their faith.

Creationists, however, especially the intelligent design creationists about whom I have written so much, deliberately conflate philosophical and methodological naturalism. They argue

that leaving God out of scientific explanations is tantamount to personal atheism. So my concern as a researcher has been to clarify the relationship between philosophical and methodological naturalism. I argue that although philosophical naturalism rests on what we have learned about the world through the naturalistic methodology of science, methodological naturalism does not, conversely, require philosophical naturalism as a personal worldview because it does not exclude the logical possibility of the supernatural. I think that this is the most accurate and intellectually honest position to take even though I myself am no longer religious.

Finally, I have applied my research concerning creationism and naturalism to the discussion of public policy in regard to public education and the

separation of church and state. These were natural extensions of my research into creationism.

**7. If you currently conduct research, what form does it take?**

I am not currently doing any research. My answer to this question is not what you expected, but I hope that you will print it. It illuminates what is happening across the United States to institutions whose operating budgets — hence whose students and faculty — are bearing the brunt of a conservative political philosophy that treats public universities, young people, and teachers as liabilities rather than assets.

Ultimately, American society will pay a high price for this short-sightedness.

Louisiana is governed by a conservative Republican, Bobby Jindal, who treats public institutions as a liability rather than an investment in the future. In

only five years, he has cut \$650 million from public universities while privatizing state services and giving hundreds of millions of dollars in tax breaks to out-of-state companies. My university alone has absorbed \$48 million in cuts since 2008. As a result, the university revoked reassigned time for faculty research, and teaching loads have increased. Despite being a tenured full professor who has published extensively in both scholarly and popular venues, I now have the teaching load of a beginning tenure-track instructor. I absolutely love teaching, but my philosophy colleague and I are currently teaching a total of nine undergraduate courses this semester alone. So my teaching load leaves me no time for research, despite the fact that I have achieved an international reputation for my work.

I am proof of the value of public schools and universities, having more than repaid the investment that my fellow citizens made in my education. Moreover, my work has been useful to people outside my discipline, which is something that I think most philosophers cannot say. The book I co-authored with scientist Paul R. Gross, *Creationism's Trojan Horse: The Wedge of Intelligent Design*, was a central resource for the plaintiffs' attorneys in the first legal case involving intelligent design creationism, *Kitzmiller et al. v. Dover Area School District* (2005).

But because of the current political priorities in Louisiana, I have no time for research any more, despite the fact that I could still be doing productive scholarly work. On the other hand, I now have the luxury of reading books that I want to read for my own enjoyment. And my first grandchild

was born recently, so I am delighted to have more time to be his grandmother!

**8. If you had infinite funding and full academic freedom, what would you research?**

I am fortunate to already have full academic freedom at Southeastern. The university has been wonderfully supportive of my work, despite its being more controversial than what professors typically do. I would be quite happy with just enough funding for a one-course-per-semester teaching reduction! But if I had infinite funding, I would establish a research center for finding effective ways to counteract the influence of the Religious Right — specifically, the Christian Right — in American education, culture, and government policy. That's a tall order, I admit. However, I see the Religious Right as one of the most destructive

and pernicious influences in America today. It is the force behind creationism, anti-gay bigotry, and some types of mean-spirited economic policies. If I had infinite funding, I would use it to support focused, results-oriented research by philosophers and other scholars, journalists, and policy analysts in an effort to find effective ways to get past this perennial problem in American life.

**Please note:** I am not saying that *religion* is the most pernicious influence in America. I don't believe that. Although religion has been a divisive force throughout most of human history, it is also a fascinating and important aspect of human experience. Having once been very devout myself, I have been on both sides of the religious divide and understand both sides. But the Religious Right has infused American

culture and politics with bigotry and ignorance. Counteracting its agenda has required the expenditure of both time and money by people and organizations that otherwise could have and should have been doing more productive work. So the country needs a well-integrated, long-term commitment by people who can focus exclusively on how to help the country transcend the Religious Right's influence. Even with infinite funding and infinite academic freedom, I couldn't do that all by myself!

**9. Since you began studying Philosophy, what do you consider the controversial topics? How do you examine the controversial topics?**

I think that the most controversial topics concern the theory of knowledge, or epistemology. Both

historically and today, the ways in which people claim to know things have influenced everything that humans do, from founding religions to running governments. Knowledge claims also shape our moral conduct. Depending on what the answers to epistemological questions are, human beings can either benefit greatly or suffer terribly at each other's hands.

The two most basic epistemological questions are these: (1) what truly qualifies as knowledge? and (2) How do humans acquire it? Given the fact that humans must get things done together on the basis of shared understandings of the world, nothing is more important than clarifying what it truly means to know something and creating a body of shared, publicly accessible knowledge. Actually, we already know how to do both of these things, but few people outside philosophy are either



familiar with or concerned about epistemological questions. I was flabbergasted to read in Barack Obama's book, *The Audacity of Hope*, his insightful discussion of precisely this issue. He understands that "the best we can do is to act in accordance with those things that are possible for all of us to know, understanding that a part of what we know to be true — as individuals or communities of faith — will be true for us alone" (p. 220). We cannot build public policy on private, hence unverifiable, religious experience, even if it is a genuine epistemic state. But such epistemological awareness is unusual in anyone outside academia, much less politicians.

There are only four basic ways in which people can claim to know things: (a) supernatural revelation, (b) some form of intuition, (c) rational reflection (reason), and (d) sense experience. The

first two are highly problematic because they are by definition private and unverifiable. Revelation requires the psychological influence of charismatic leaders and the power of authoritative institutions to convince people of its truth. Intuition, similarly, can be used to assert *literally anything* without any accountability for one's claims. So that leaves reason — or rational reflection, which everyone can do — and sense experience, which everyone naturally has, as the only reliable sources of knowledge. All humans have the natural equipment for those. Whatever progress humanity has made during our collective history has come from those two sources.

I see the lack of understanding of epistemological issues as at least part of the reason that the Religious Right has been able to accumulate the influence that it has. (But the problem is much

more complicated than that.) People such as Tony Perkins, who runs the Family Research Council, promote harmful, insidious ideas that are unsupported by any rationally defensible arguments or evidence. The beliefs that Perkins and his FRC associates promote, such as the false claim that gay people are more likely to be pedophiles, are fuelled and funded by their supporters' uncritical acceptance of their claims.

Consequently, in some of my work I have examined the issue of how public policy — for example, concerning the teaching of evolution in public schools — is shaped (or mis-shaped) by ideas about what qualifies as knowledge.

**10. How would you describe your early philosophical framework? Did it change? If so, how did it change?**

I am by nature a generalist. I think that the study of philosophy is enriched by integrating data from history, science, and other disciplines into it. I never teach my students about any philosopher without first setting up the broader context in which the philosopher's work was done. This makes philosophy much more accessible to students. So I have always been drawn to philosophers who were interdisciplinary thinkers and who made a conscious effort to make their work accessible and useful to people outside philosophy. The greatest philosophers — for example, Plato, Aristotle, David Hume, Immanuel Kant, and others — addressed societal issues, and they interacted with people other than philosophers. These thinkers were broadly knowledgeable in areas other than their own disciplines. In addition to their purely philosophical

work, they used their expertise to address matters of concern to their fellow citizens. This is why they are still worth studying.

So I began my formal study of philosophy with a strong attraction to whatever kind of philosophy would be useful in helping to solve “real-world” problems. The philosophers I studied who most effectively addressed such problems were the pragmatic naturalists, especially Sidney Hook and John Dewey, who understood, among other things, the importance of science and public education to democracy. They weren’t narrow specialists. I also studied some of their like-minded colleagues such as philosopher of science Ernest Nagel. Hook and Dewey’s pragmatic naturalism was a natural fit for me since I already leaned strongly in that direction. Of all the modern philosophers I have studied,

their work made the most sense to me and still does. So I have not had any major shifts in my own philosophical framework.

**11. In 2007, you co-authored with Dr. Paul R. Gross *Creationism’s Trojan Horse: The Wedge of Intelligent Design*, what is the origin of the title? What does the book depict?**

Our editor at Oxford University Press suggested the main title, *Creationism’s Trojan Horse*. Although at first I thought it was trite, it captures the essence of the intelligent design (ID) creationism movement: ID is nothing more than the most recent variant of creationism, which its proponents promote as science to gullible people. Paul and I came up with the subtitle to capture the most important aspects of the book’s focus. The book actually grew out of

my research into the Discovery Institute's "wedge strategy," which is its plan for promoting ID. The strategy is outlined in a 1998 document entitled "The Wedge," which was aimed at prospective donors. I was able to authenticate this document, which was leaked and posted on the Internet, and to establish that most of the strategy was being executed — with the exception of producing real science, of course. Paul, who is a distinguished scientist, did a very thorough and careful critique of the "scientific" claims of ID proponents.

The book brings together a huge amount of evidence showing that the Discovery Institute's aims and rationale for ID are — as stated in their own words — explicitly religious. The Discovery Institute's primary aim is to create an opening in the public mind — analogous to using a metal wedge to

split a log — for the idea that the supernatural is essential to scientific explanations. They also aim to get ID into the public school science curriculum by exploiting policy-making processes.

**12. You served as a Plaintiff on the first legal case involving Intelligent Design, *Kitzmiller et al. v. Dover Area School District*, in 2005. What events preceded the case? How did the litigation proceedings conclude? What does this case entail for future legal battles of this kind?**

I was so proud that my work resulted in my being called as an expert witness for the plaintiffs, all of whom were parents of children in the Dover, Pennsylvania, school system. In 2004, eleven parents sued the Dover school board in federal court for trying to present intelligent design to children as

a scientific alternative to evolution. The school board members weren't doing this because they knew anything at all about science. In fact, they were completely ignorant about the science. They simply had personal religious objections to teaching evolution and were determined to force their views into the science classrooms of Dover High School.

The litigation ended in December 2005 with a ruling in favor of the plaintiffs. Judge John E. Jones III ruled that because ID is creationism, it is a religious view and therefore cannot be taught in a public school science class. He issued a permanent injunction against the school board. Even though his ruling is legally binding only in the Middle District of Pennsylvania, it has already dissuaded school boards in other parts of the country from following suit.

Whenever and wherever the next ID legal case comes up, the first thing that the presiding judge will do is read Judge Jones' *Memorandum Opinion*, which is a powerful and thorough decision that he wrote with future cases in mind.

**13. In 2006, you were the co-recipient with Dr. Kenneth Miller of the Public Service Award from the American Society for Cell Biology. What does this award mean to you? What further responsibilities does the award entail?**

This was a very nice award from the scientific community in appreciation for the work that both Kenneth Miller and I had done to defend the teaching of science. Ken was also a *Kitzmiller* expert witness. We were both involved in such work even before that case. To me, the award

signified the fact that I was able to successfully put my philosophical training to use for the public good, which I had always wanted to do. My work was just as important in the *Kitzmiller* case as that of the scientists.

As for further responsibilities, the award didn't formally require anything. But I view my work against creationism as a civic duty, so I have continued to do it. For example, I serve on the Board of Directors of the National Center for Science Education. I would have done the same things even if I hadn't received the award.

**14. Who most influenced you? Can you recommend any seminal books/articles by them?**

Keeping the list to just a few is difficult. As I said earlier, I am a generalist. But I would have to say that the philosophers

whose work most influenced me are Plato, Aristotle, David Hume, John Stuart Mill, and Sidney Hook. Their influence stems from their ability to use their expertise to illuminate issues outside philosophy.

In the *Republic*, Plato stressed philosophers' civic obligation to their fellow citizens, who, through a public education system, provided them with the finest education available.

Philosophers must therefore make a concerted effort to contribute to the public good in payment of this debt. The *Republic* has guided me throughout my career in this respect.

The other thinkers influenced me because of their interdisciplinary orientation to philosophy. They thought deeply and broadly about practical issues. Aristotle, for example, in his *Nicomachean Ethics*, offers a still-

workable ethical system based on virtues of character acquired through one's actions. He stresses the civic importance of virtuous conduct.

In *An Enquiry Concerning Human Understanding*, David Hume, who was a major figure in the Scottish Enlightenment, presciently recognized the need to study human cognitive faculties empirically in order to analyze their capabilities and shortcomings. In doing that, he illuminated the epistemological deficiencies of supernaturalist religion. He also analyzed religion as a human phenomenon in *The Natural History of Religion*. He respected (although he was not convinced by) its more rational aspects, reflected in traditional arguments for God's existence, while warning against its irrational manifestations such as clerical charlatans and what we now call

fundamentalism. A century later, John Stuart Mill, a 19th-century thinker who embodied the best aspects of the Enlightenment, offered one of the most powerful defenses of intellectual and personal freedom in the English language in *On Liberty*. Everyone should read that.

No one, however, influenced me more indelibly than Hook, who was one of the most important public intellectuals of the 20th century. He wrote with a clarity and incisiveness that made the most complex ideas understandable. He avoided unnecessary philosophical jargon and never lost his ability to communicate with non-academics. I think that this stemmed from his very humble beginnings in the slums of Brooklyn.

Hook's essays in *The Quest for Being and Other Studies in Naturalism and*

*Humanism* influenced my own philosophical work. (This book is available in pdf at Internet Archive: [https://archive.org/details/\\_sidneyhooktheque033567mbp](https://archive.org/details/_sidneyhooktheque033567mbp).) He discussed diverse topics such as “Philosophy and Human Conduct,” “Modern Knowledge and the Concept of God,” and “Scientific Knowledge and ‘Philosophical’ Knowledge.” He was never jealous of his philosophical turf. He understood that science has deprived philosophy of most of the metaphysical territory that philosophers have considered uniquely their own and argued that philosophy is more than metaphysical pipe dreams (my term, not his!). In *Philosophy and Public Policy*, he states forthrightly that philosophers must take time to learn the relevant facts if they wish to contribute effectively to policy issues. This statement struck me as I was casually

browsing through the book in the university library when I was in graduate school. Knowing how disconnected philosophers can be from life outside the academy, I never forgot it, especially in my work on intelligent design creationism.

### **15. Where do you see Philosophy going?**

My answer here is shaped by the fact that, except for a few other philosophers who are involved in the creationism issue, I have actually worked more with scientists than philosophers. So my vantage point is mostly from outside the community of academic philosophers.

Concerning philosophy as a teaching discipline, I think that reputable universities will continue to see its value in helping students learn to think about major questions with which



human beings are concerned. Unless a university education is reduced to little more than vocational training, philosophy will continue to be a vital part of the humanities. Young people should learn to think critically and insightfully about how to live a moral life, how to address societal issues such as social justice and equitable distribution of resources, how scientific reasoning works, and, of course, how these issues intersect with epistemological ones. Students are very interested in those things. There is also tremendous value in studying the history of philosophy. Much can still be learned from Plato and Aristotle, Descartes, Hume, etc. Good teaching — which is the most important job of any academic — can highlight the continuing relevance of the great philosophers.

I am not as optimistic about the relevance of philosophy as a research discipline. Philosophers will certainly continue to do research and publish, but much of modern philosophy, in my opinion, has become largely irrelevant to what is happening outside both the discipline and the academy. If the budgets of public universities continue to be cut, philosophers will become vulnerable unless they can demonstrate that what they do is valuable to someone other than themselves. You probably couldn't find ten people in a hundred in the United States who can name a single working philosopher. Most of them have heard of scientists such as Stephen Hawking because of the reach and influence of their work. One can learn about scientists merely by reading Google News! But people don't know anything about living philosophers. This is because

philosophical research has become so specialized and insular that it benefits virtually no one except other philosophers who are doing the same kind of work. Most philosophers live in a very comfortable academic bubble. (That is true of academics in general, however.)

There have been historically and are currently notable exceptions. For example, Kant was concerned about political issues and directed some of his work at a broader audience than other philosophers. Currently, Phillip Kitcher writes about the intersection of science, democratic society, and politics, and he makes an effort to address issues of concern to non-philosophers. Kitcher, too, has expressed concern about the “the increasing narrowness and professionalization of academic philosophy”

([http://philosophy.columbia.edu/d](http://philosophy.columbia.edu/directories/faculty/philip-kitcher)

[irectories/faculty/philip-kitcher](http://philosophy.columbia.edu/directories/faculty/philip-kitcher)). In addition, my friend and colleague Robert Pennock, a philosopher of science at Michigan State University, set the standard for addressing the problem of creationism. And there are other philosophers who are using their professional expertise to communicate with and benefit the wider world.

Certainly, someone has to do the pure, basic philosophical thinking that helps to clarify the conceptual foundations of broader, more practical questions. But if that pure, foundational work is not at some point useful to people other than philosophers themselves, there is little point to it. To the extent that academic philosophy has a future, I think that it lies in taking a more interdisciplinary approach that demonstrates the relevance of philosophy to the concerns of scholars in other disciplines and, ultimately, to the

concerns of ordinary people.

Otherwise, most of us philosophers  
could drop off the planet tomorrow

and the world would neither notice nor  
be any worse off.

# DR. MAHTAB JAFARI

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Associate Professor, Pharmaceutical Sciences, University of California, Irvine

Director of Undergraduate Pharmaceutical Sciences Program,



**Dr. Mahtab Jafari** is an Associate Professor of Pharmaceutical Sciences and Director of the Undergraduate Pharmaceutical Sciences Program at the University of California, Irvine. Dr. Jafari earned her Doctorate of Pharmacy in 1994 and did a Clinical Pharmacy from 1994-1995. In 2005, Dr. Jafari joined the Pharmaceutical Sciences faculty at the University of California, Irvine. Following this, in 2006, she developed the program and major for undergraduate Pharmaceutical Sciences at the University of California, Irvine, which was approved in March of that year. In addition to these, Dr. Jafari earned awards or recognition for achievements in teaching, *Honorable Mention for Innovation in Teaching* by the American Council on Pharmacy Education (1997) and *University of California, Irvine Distinguished Assistant Professor Award for Teaching* (2007-2008), and research, *University of California, Irvine Chancellor's Award for Excellence in Fostering Undergraduate Research* (2008), among other recognitions and awards.

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**Faculty Website**

**Lab Website**

**TEDxUCIrvine: Life 101 Class**

## **1. What positions have you held?**

**What position do you currently hold?**

I am an Associate Professor of Pharmaceutical Sciences and Director of the Pharmaceutical Sciences Undergraduate program at University of California, Irvine. (UCI)

## **2. In brief, how was your youth?**

**How did you come to this point? What was your original dream?**

I was lucky to be raised in a family with loving parents. They were both educated and cared about the education of their children. They were open-minded. They encouraged my two brothers and I to choose careers that we liked, especially my mother. She was supportive of me. She was also a university professor. Growing up, I lived in 3 different countries. I think

being exposed to different cultures and languages had a big impact on who I am today.

I became interested in science in the fifth grade. I describe this in a *TEDx* talk. That is the story of how I came to this point. I feel lucky because I do exactly what I dreamed about doing in fifth grade. My dream was to do scientific work and teach. I love to learn. When working in science, you have no choice, but to learn. I am living my dream right now. (Laughs)

## **3. When did Pharmaceutical Sciences interest you?**

When I got sick as a kid, my parents used to take me to Dr. Maani. My first strep throat was painful. I had a high fever, body ache and could not swallow anything, even my own saliva. Dr. Maani got a swab culture from my throat, checked it under the

microscope, and started me on antibiotics. When we went back to see him for a follow-up, he spent a lot of time explaining to me the importance of hand washing and having a strong immune system. I loved to go back for these follow ups because the prize for getting better was always a lollipop. I also remember that every fall, my entire family would go to Dr. Maani for our flu shots. In my neighborhood, Dr. Maani was considered a hero. Everyone respected him and everyone loved him. Many kids (including me) wanted to become Dr. Maani when we grew up.

By now, you are probably thinking Dr. Maani was an amazing primary care physician, that he was the neighborhood doctor who cared about his patients. Well, you are right about thinking that he was our neighborhood doctor, but he was not a physician. Dr. Maani was an amazing neighborhood

pharmacist. He had a Pharm. D., a wealth of knowledge, and a passion to teach and help people.

#### **4. Where did you acquire your education?**

I earned my Doctor of Pharmacy from the University of California, San Francisco.

And then I did a Clinical Pharmacy Residency at University of California, San Francisco.

#### **5. What kinds of research have you conducted up to the present?**

I used to be a clinical scientist. If you look at my publications and research up to 2005, I was a clinician. I mostly did research on pharmaceuticals. My main work was around cardiovascular pharmacotherapy. I left academia in 2002 and worked as a senior scientist for Abbott Laboratories for a few

years. I worked on metabolic complications of Central Nervous System (CNS) drugs.

Then in 2005, I came back to UCI and joined Pharmaceutical Sciences. The focus of my research shifted from diseases of aging such as cardiovascular diseases and neurological disorders to aging. I became interested in slowing the aging process. At present, I am working with botanical extracts because I believe if we use them at the right dose and quality they are safer than medications. So we work with botanical extracts and try to extend lifespan, but I have to tell you I didn't choose to work with botanical extracts from the start. Sometimes, I like to think my fruit flies chose this for me. We were screening for anti-aging drugs, compounds, supplements, natural extracts, and botanical extracts. Plants and botanical extracts,

did the best during this screening process. With fruit flies there is no placebo effect, I cannot tell you, "They felt real good having *Tumeric*." (Laughs)

**6. If you currently conduct research, what form does it take?**

Mainly, I work with *Drosophila*, fruit flies. That is our main model system. Additionally, we conduct cell culture research. We work with human-cultured cells. Again, we use these as a model system to identify agents, which are all botanical extracts at the moment, that extend lifespan and to understand their mechanism of action.

**7. How much did you increase the lifespan of the *Drosophila* fruit flies?**

By 25%! Our most recent publication, received much media attention with an Orange County

Register article on June 26<sup>th</sup>. We have been on many media venues such as MSN, Yahoo! Voices, and others like this.

**8. Since you began studying Pharmaceutical Sciences, what do you consider the controversial topics? How do you examine the controversial topics?**

This could be an essay. (Laughs) I could write a ten-page essay or talk for hours. In Pharmaceutical Sciences and research, we have a few challenges. For instance, there is the area of ethical conduct of research. When we talk of randomized double-blind controlled studies, especially in psychiatry literature where you use patient interviews and scales, you are probably more familiar with it, Scott, the results can be subjective. In other words, I could conduct research to bring forth

the results desired by me. Research is controversial. The safety of some of the medications, which are already approved by the FDA is controversial.

In my field, with my interest in dietary supplements and botanical extracts, my controversy is looking for the quality and safety of these supplements. For instance, the reporter from the Orange County Register asked me, “In 2008, you published a study with *Rhodiola Rosea* showing a 10% increase in lifespan. Now, you have 25% increase, what happened?” I told him, “Fruit flies don’t lie. We gave them a better quality product and better things happened.” That is exactly what happened. When we characterize the plant that we gave them back in 2008, the plants had the active components, which you like to see in *Rhodiola Rosea*. It was *Rosavin* and *Salidroside*, but percentage wise the extract in the 2013



paper was superior. With this superior extract, my fruit flies did better. Therefore, a superior extract produces better results. For me, the controversy with the work right now is on dietary supplements and botanical extracts. My questions are, "How good is the quality of the product? How safe is the product?" A big controversy arising from this, which I think is applicable to both pharmaceuticals and botanical extracts is **false advertisement**. With my position as a Professor, my primary job is to be an educator, ahead of a research. I tell my students that I consider myself an educator and a teacher above all else. If I cannot translate my science into an understandable fashion for people, what is the use of that science?

I am not familiar with the Food and Drug Administration (FDA) in Canada. I can tell you about the FDA

in the United States. If you had asked me to comment about FDA four years ago, I would have told you, "The FDA is very ineffective and slow." Now, I work closely with them and I know first-hand what an important function FDA plays in our public health. I developed an internship for our UCI Pharmaceutical Sciences students at the FDA. One of the goals is to expose them to the FDA, but an opportunity for them to become ambassadors to educate the public about FDA and to improve public health. For instance teaching the public how to report drug adverse effects to FDA could be a major contribution. Sometimes, you may experience an adverse drug reaction. Even if you do not know what the cause is, you still have to report it to the FDA because one never knows. We see how much FDA tries. We see how much they

do. Reality: they are understaffed and under-budgeted. What do you do in that situation? How could you deal with that? Their work is very important, but they need more resources.

**9. How would you describe your early philosophical framework? Did it change? If so, how did it change?**

I do not know what to tell you about my Philosophical Framework. I like to think that it is a philosophy that encompasses the teachings of philosophers whose goal was to improve humanity. However, I can tell you about service. I was raised in a household devoted to service. My parents and grandparents were involved with the community at many levels. I guess this framed my life philosophy.

For me, Humanism is one aspect of it, especially based on my upbringing. I

have a special outlook on life. As a scientist, sometimes you are questioned about religions and the existence of God. However, our science is not advanced enough to understand the big picture. One day it will do that, I am hopeful for science.

A pillar of my philosophical framework is a strong sense of ethics, and practical ethics. I am not a philosopher or an ethicist. However, in my mind, if an ethical principle is unpracticed, what good is it?

**10. If you had infinite funding and full academic freedom, what would you research?**

If I had infinite funding, I would conduct the same research that I am doing now and for teaching, I would start an education reform to focus on conceptual understanding and not memorizing. I am optimistic that if I

had more funding, I could contribute a lot more to biomedical research. I would expand my basic work to clinical work. As I said, I was a clinician. I understand basic science, translational science, and clinical science. If I had unlimited funding, I would begin interesting human trials, and start testing my extracts in humans. By the way, if I had infinite funding, I did not have to spend so much time writing grants. I would focus more on research and teaching.

Scott, I see another controversy. A big problem in this country with the study of botanical extracts is taking the western magnifier to dissect botanical extracts to find out what specific molecule is functioning. What do we find with this kind of work? We may identify a few active molecules but we still see that the whole extract works best. People have used these extracts

for thousands of years. They have seen results. Then we say, "*Rhodiola Rosea* is a great plant and it has many benefits, but I want to know exactly what molecules are beneficial." If I had infinite funding, I would not worry about the grant reviewers. I would work with the whole extract, not the molecule. That is a big controversy in botanical extract research. That is probably the reason for controversy behind my research because we produce good results with the whole extract. I understand the commercial value. Many of my colleagues tell me, "If you isolate the molecule, you can patent it. You can make money." I tell them, "Why would I want to do that?" Nature knows best. (Laughs) But of course we will devote some of our efforts to identifying active molecules in the extracts we work with.

**11. From the philosophical point of view, there has been much comparison between Western and Eastern philosophies. Western philosophies tend to have a particular view. It asks, especially Aristotle, “How can I separate the world into fundamental units?” It seems non-accidental to me to have the Atomists like Democritus and Leucippus come from this philosophical tradition in the West. Whereas in the East, obviously not as an absolute, but there seems to me a greater tendency towards analysis of whole systems...**

...Think of Avicenna, what did he say? He was perhaps the founder of modern medicine. He is an Eastern Iranian philosopher. He said that you needed to focus on the whole person and not just on his symptoms. Until

we do that in medicine, we will stay where we are right now; a reactive approach to health and an illness model. We treat the symptom and not the root of the problem. We prescribe antibiotic for the infection or a pain medication for the pain because we are interested in treating the symptom fast. But I hope that we move away from this model to a wellness model when we treat the whole person and not just his symptoms and when we take a proactive and preventive approach. This was the reason that I offered the *Life 101* class. My students with anxiety take *Xanax*. When they are sad and depressed, they take *Prozac*. When they need to stay awake to study, they take *Ritalin*. My 20-year old students take all these medications and they sadly received prescriptions for them. I offered *Life 101* based on these facts. I wanted to give my students tools to

manage their stress and aim for wellness. If you deal with the root of the problem, I guarantee that you will not need to take these medications.

**12. ...On the Harvard campus, I read about Positive Psychology courses. Two people doing much research are Drs. Tal Ben Shahar and Daniel Gilbert. Positive Psychology is one of the most popular courses on campus...**

I want to take that course! Their popularity tells you the importance people see in this material.

**13. What other areas have robust research attesting to evidence for life-extending properties of an ingested compound (or compound with a specific active ingredient in it)?**

There are a number of researchers working with botanical extracts or compounds to extend lifespan. They have been successful. I take pride in our work because our results are replicable and they seem to work even in healthy fruit flies. A science that cannot be replicated in other countries or other labs is not real science. For instance, the compound resveratrol extends lifespan, mostly in diabetic and high caloric intake situations. We showed our fruit flies do not need to be unhealthy to experience life extension with *Rhodiola rosea*, which is a significant finding. Resveratrol only extended lifespan in mice with diabetes and obesity. That is not the case with *Rhodiola rosea*. We gave *Rhodiola rosea* to both calorically restricted **and** non-calorically restricted fruit flies and still observed an extension in lifespan. As far as my

research, I can tell you my research is robust because Rhodiola has worked in different strains of flies and different model systems and it has had a positive impact on health and tolerance to stress, but we still have a long way to go.. Our findings need to be repeated in mammalian model systems and eventually humans.

**16. You have a personal story of continuing forward in spite of hardship, planting seeds in the process, and sowing the later benefits of that perseverance. What advice do you have for students going through hardships – big and small?**

My younger brother, Kay who is a Law student, taught me something valuable. A few months ago, I was under a lot of pressure for a grant deadline and felt stressed. Kay told me,

“Stress is only a reaction. You choose to be stressed.” I tell my students, “Rather than focusing on details, you should focus on the big picture.” When my son, Matin, was 13 years old, he gave a TEDxYouth talk. In it, he said, “There’s nothing wrong with being knocked down – just get back up.” We all have hardships. The key is how fast you recover and refocus on the big picture, not the details.

**17. ...There is a Parade Magazine columnist, Marilyn vos Savant, who said, “Being defeated is often a temporary condition. Giving up is what makes it permanent...”**

...That’s right. I still go through hardships – big and small. I have my dream job, but I worry about my students and of course research funding! It sounds cliché, “Never give

up.” I want to add one sentence to it. It’s part of life to feel down and upset, but try to minimize it. I tell my students, “You failed your MCAT. Okay, cry for a day, but not for a month.” (Laughs) Take responsibility for the mistakes you make and your actions, accept it, and then move on. We have become a blaming society. We look outside of ourselves to find someone or something to blame. I do it myself sometimes. I do not understand it. In this *Life 101* class, we talk about emotional intelligence by taking responsibility for our actions. I wish I had a better answer, but I do not have one. (Laughs)

Happiness is a funny thing. Go and help someone, see how you feel. You will notice something. You will want to help more and you feel so happy.

**18. You have received multiple awards for mentorship and teaching excellence. What do these mean to you? What responsibility do these awards entail?**

I feel honored and humbled. My responsibility is to keep listening to my students to improve the way I teach and mentor. Earning a reward does not mean you have reached excellence. I feel blessed, Scott. I have such an open line of communication with my students. They feel comfortable with giving me feedback as I teach. For instance, two weeks into my course one of my students said, “Dr. Jafari, why did you look grumpy in class?” I replied, “I didn’t look grumpy!” He said, “Yes, you did especially in the beginning of your lecture. You did not smile once for the first fifteen minutes. When you smile, you make us feel comfortable.” He

was paying close attention and he was right.

**19. Who most influenced you? Can you recommend any books/articles by them?**

I cannot think of specific authors. I read a lot, but I cannot think of just one article or a book of great influence on me. I consider my mother the most influential person in my life. I am not saying this because she is my mother. I am saying this because she is brutally honest with me. She never sugar coated anything and to date she points to my weaknesses or my flaws. Of course, sometimes I don't like it, but I know I cannot change her. So, I hear her comment, I get upset and then I realized she was right and then move on. Talking about a true humanitarian, my mom is one of those people.

One book comes to mind, which I had one of my graduate students read. It is called *The Purple Cow* written by Seth Godin. It is a marketing book. His message is this, 'if you want to be successful, you need a high quality product and a very outside the box product.' You can apply this to science and teaching too.

**20. Where do you see Pharmaceutical Sciences going? Regarding lifespan extension through botanicals, what future do you envision for this research?**

I can tell you what I hope for Pharmaceutical Sciences to go as a field. I hope that Pharmaceutical Sciences move towards discovering new therapies to treat diseases in a collaborative fashion. I wish that one day pharmaceutical scientists in



pharmaceutical companies and in academic settings collaborate and not compete because I think with collaborations we will achieve more faster. As far as my research with botanical extracts goes, my goal is to slow the aging process with these extracts. Of course I will continue devoting some of my work in identifying the active molecules in these extracts. But I still think when it comes to aging and targeting various genes and pathways, plants work better as a whole and not when they are dissected. I would not think this way 5 or 6 years ago. In 2005, when I started developing an anti-aging lab using fruit

flies, I tested many pharmaceuticals and some botanicals. My findings surprised me because botanical extracts did much better than the molecules or pharmaceuticals. Of course, how we approach and work with a plant extract in my lab is exactly how we would work with a drug. We control for their quality and we have consistent standardization methods – meaning you standardize every time you use them. Working with botanical extracts is challenging because the active compounds change depending on external factors such as altitude, temperature, harvesting time, and that is why standardization is important.

## DR. MARYANNE GARRY

Professor, Psychology, Victoria University of Wellington



**Dr. Maryanne Garry** is a Professor in Psychology at Victoria University, and the Deputy Dean of the Faculty of Graduate Research. For nearly 20 years, she has studied a puzzle of memory: how is that otherwise intelligent, rational people can remember things they never really saw, or experiences they never really had? Professor Garry's interests in applying science to the law predate her interest in memory research or even in psychological science. Her undergraduate degrees are in Forensic Science and Chemistry. Professor Garry received her PhD in 1993 from the University of Connecticut, and did postdoctoral research at the University of Washington under the direction of Professor Elizabeth Loftus, the world's foremost researcher on human memory distortions. She started her position at Victoria in 1996. She is best known for her work on the perils of imagination as a therapeutic technique; the effects of completely inert substances such as fake alcohol or fake cognitive enhancing drugs; and the impact of photographs on memory. Professor Garry's research has appeared in many prestigious international journals and books, and is widely cited both in her own discipline and in the allied disciplines of law and clinical psychology. Professor Garry has worked with the Law Commission, the Crown Law Office, the New Zealand Police, and she has acted as an expert witness in several countries, commenting on the reliability of human memory in criminal and civil trials. She is also the co-director of the Innocence Project New Zealand, and has received numerous grants; her university's Merit Award for Excellence in Research; the university award for Excellence in Teaching; and the Neag Distinguished Alumni Research Award from the University of Connecticut. She was elected Fellow of the Association for Psychological Science in 2005. She serves on the Editorial Board of Applied Cognitive Psychology, and in 2008, she was elected President of Governing Board for the Society for Applied Research in Memory and Cognition, the first person from outside North America to hold that office.

For more information, click below for links:

**Faculty Website**

**1. What academic positions have you held? What academic positions do you currently hold?**

I was a postdoc at the University of Washington, working with Elizabeth Loftus and Alan Marlatt, and then I came to Victoria University of Wellington in 1996. I've been there ever since. I'm a Professor of Psychology here.

**2. In brief, how was your youth? How did you come to this point?**

I'm really a first generation college kid. My parents grew up in the Great Depression and thought college was the way you get a high paying job that gives you lots of security. They were never thrilled with my interests in academia.

**3. When did Psychology interest you?**

Well, from the time I was about 8, I wanted to be a forensic scientist. It wasn't until I was about to graduate from a forensic science program as an undergrad did I learn that I would not be able to pass the eye test to be an FBI agent. Back then, the FBI was suspicious of contact lenses. So I used my forensic and chemistry degrees to teach high school, and then I became interested in cognition, and I realized that I could still tackle forensic problems via cognitive psychology.

**4. Where did you acquire your education?**

I did my PhD at the University of Connecticut and my Forensic Science and Chemistry degrees at the University of New Haven.

**5. What kinds of research have you conducted up to the present?**

I've done research on eyewitness memory, implanted false memories, expectancy effects, truth effects, and some educational research.

**6. If you currently conduct research, what form does it take?**

I'm doing a lot of work with my grad students.

**7. If you had infinite funding and full academic freedom, what would you research?**

Probably the same thing I do now. I really like human memory.

**8. Since you began studying Psychology, what do you consider the controversial topics? How do you examine the controversial topics?**

Without a doubt, in my field it's been the drama about repressed and recovered memories. But across

psychology, I think the controversial topic is what's happening now with respect to null hypothesis testing; replications; low ns producing quirky results, etc.

**9. How would you describe your early philosophical framework? Did it change? If so, how did it change?**

The classes I had with Mike Turvey as a grad student had an enormous impact on the way I think, or at least try to think. I know a lot of people think the Gibsons and their wider ecological approach is some kind of wacky cultish thing, but I don't. In this big picture sense, I think my frameworks haven't changed that much. On other levels, yeah, they've changed. It's a mix of hilarious and painful for me to pick up my dissertation and read any random page. For one thing, I didn't know anything. That's the great myth of

getting a PhD: that you'll leave with your degree knowing what you'll need to know for the future. For another thing, I am much more dedicated to well written manuscripts. The day is too short to slog through papers that make your eyeballs bleed.

### **10. What advice do you have for young Psychology students?**

Without a doubt, here are the three pieces of advice that probably account for 90% of the variance in success:

1. Learn to write. Nothing else matters if you write like crap. Think of the last few truly engaging scientific articles you read. Were they in a journal? Probably not. They were probably in Scientific American, or New Scientist. Learn to write like that. If you have been told that "good data speak for themselves," guess what? They don't. Likewise the idea that you need to

write in polysyllabic passive prose.

Ugh.

2. Write an hour or two every day. Without fail. Mark it in your calendar, and treat it the way you would any other important appointment. You wouldn't not show up to teach class. Show up to write. The most productive writers write every day, whether they think they have anything to say or not. It turns out they always have something to say. Don't think you're a writer? That's the first hurdle you need to get over: you are. So yep, turn off Facebook, staple your ass to a chair, and write.
3. Master the technical side of research. That means taking stats classes, and learning to program. Don't leave grad school until you know something about multivariate techniques, and can program an experiment.

**11. Who most influenced you? Can you recommend any seminal books/articles?**

I had a few influential professors in grad school. From my advisor, Scott Brown, I learned how to be a good advisor. From Mike Turvey, I learned the importance of good teaching and the well-crafted lecture. From Beth

Loftus, I learned that how you say something is as important as what you say.

**12. Where do you see Psychology going?**

Away, finally, from slavish reliance on null hypothesis testing and goofily erratic effects. At least I hope so.

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