Impostor Syndrome: No You Are Not a Fraud
By Marie Reine Haddad, PhD

Do you feel like you are not as bright as people think you are or that you do not deserve the success or the academic levels you have achieved? If you answered "yes," you may have experienced "impostor syndrome," also known as impostor phenomenon or fraud syndrome.

Impostor syndrome is a psychological phenomenon, defined by the Caltech Counseling Center as "a collection of feelings of inadequacy that persist even in face of information that indicates that the opposite is true." Psychologists Dr. Pauline R. Clance and Dr. Suzanna Imes first coined the term in a 1978 article in Psychology and Psychotherapy: Theory, Research and Practice. The two observed that many highly accomplished women believed they were not actually smart and had fooled anyone who thought otherwise. Impostor syndrome can manifest itself in several ways, including feeling like a fake, attributing success to luck or timing, or discounting success.

Often, impostor syndrome is associated with high-achieving, highly successful individuals. People in diverse fields, such as acting, teaching, academia, and the social sciences all may suffer from impostor feelings. Golden Globe and Academy Award winner Kate Winslet once said, “Sometimes I wake up in the morning before going off to a shoot, and I think, I can’t do this. I’m a fraud.”

This idea did not seem unusual to me or uncommon in our scientific field. To assess how much impostor syndrome might affect our own NIH community, I questioned 18 of my colleagues—90 percent of whom have higher education degrees—about their own experience with impostor syndrome. When I defined its characteristics, 67 percent identified with the phenomenon. As I went into more detail, many said: “How did you know exactly how I felt?”

While my sample suggests that men experience impostor syndrome as often as women in our community, it may affect life outside the lab more often for females. Less than half of the men thought that impostor feelings affected their personal lives, but more than 73 percent of the women thought it did.

Some psychologists posit that impostor syndrome originates from childhood (continued on page 3)
Letter from the Editor

The theme this month is self-reflection. Life can be hectic, and it’s hard to take a quiet moment to think about the health of your mind and body. We have several articles in this issue that tackle the importance of evaluating your lifestyle and thought patterns.

Dr. Reina Haddad examines “impostor syndrome,” the feeling that you’re a fake and have achieved success by mere luck. Her article reveals surprising data points about how impostor syndrome affects the personal lives of NIH fellows.

For some fellows, maintaining a healthy lifestyle is the largest challenge. Erin Fincher provides an excellent recap of the latest NICHD Exchange meeting, which focused on evidence-based practices for weight loss and obesity prevention in children. As it turns out—not so surprisingly—some of the fad diets aren’t a cure-all, and it breaks down to a simple calories-in versus calories-out.

Perhaps no one would argue the need for self-reflection more than the Dalai Lama. Postbac Uma Srivastava offers her reaction to the Dalai Lama’s recent NIH visit in the “Thoughts of a Postbac” column. The Dalai Lama’s inspiring words helped her to find pleasure in life’s daily activities and reconciled some of her thoughts on science and religion.

While we focus on personal health, we haven’t forgotten about the health of your career. In this issue, we provide a thorough Former Fellow Follow-up with Dr. Fiona Mitchell, senior editor for The Lancet Diabetes & Endocrinology and Part II of our Three-Minute-Talks Workshop recap by Dr. Parmit Kumar Singh.

As is with the course of life, we are forced to say goodbyes, some too soon. We are saddened to have recently lost two valued members of our NICHD community, Dr. Robert E. Cooke and Dr. Alexander Vergara Tinoco. Dr. Cooke, in collaboration with Mrs. Eunice Kennedy Shriver, was a key player in founding the NICHD. He was 93 years old at the time of his death at his home in Martha’s Vineyard. Dr. Vergara, a postdoc who shared his time between the Stopfer lab and Dr. Steve Semanick’s lab at NIST, passed away while visiting family in Mexico City. His contributions to the scientific community were numerous, with his latest project aimed at developing algorithms to distinguish the signals that odors elicit from artificial sensors.

Please take a moment to reflect on the importance of our past colleagues.

Sincerely,
Shana R. Spindler, PhD
Impostor Syndrome: No You Are Not a Fraud

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experiences. For example, sibling rivalry may create a situation where a person, regardless of what he or she accomplishes, sees the sibling as the “smart one.” The person will then be driven to find ways of getting validation for his or her intellectual competence. Family expectations may also feed impostor feelings. A person may begin to distrust their family’s perceptions of their competence and start to doubt him or herself. A postdoctoral fellow in NICHD emphasized, “In basic research, the reward is very scarce, which leads to frustration,” creating impostor feelings.

Many high-achieving people with impostor syndrome have trouble acknowledging their own accomplishments. According to Joyce Roche, author of “The Empress Has No Clothes: Conquering Self-Doubt to Embrace Success,” the first step to alleviating this syndrome is to avoid destructive thoughts and become aware of impostor feelings. “I try to remind myself of recent successes in my career, and through that reinforce the positive attitude,” said a fellow NIH scientist. Another fellow suggested that keeping a written record of positive feedback about your competence can help.

Additional tips and career-related coaching can be found in the award-winning book “The Secret Thoughts of Successful Women: Why Capable People Suffer from the Impostor Syndrome and How to Thrive in Spite of It” by Dr. Valerie Young, who is scheduled to speak in Washington, DC, this July.

Self-recognition can be difficult, especially if the roadblock is you. So, do not doubt your own abilities, and do not fear to embrace success!

REFERENCES

2. Kate Winslet, Interview magazine, November 2000.

READ MORE about how to combat impostor syndrome in these two great books:
1. The Empress Has No Clothes: Conquering Self-Doubt to Embrace Success by Joyce M. Roche
2. The Secret Thoughts of Successful Women: Why Capable People Suffer from the Impostor Syndrome and How to Thrive in Spite of It by Dr. Valerie Young
Former Fellow Follow-up with Dr. Fiona Mitchell

Dr. Fiona Mitchell is the Senior Editor for *The Lancet Diabetes & Endocrinology*. Before her current position, she spent two years at the NICHD in the Shi lab. There, she characterized a transgenic mouse strain in which the gene encoding LAT1—a transporter for thyroid hormones and amino acids—could be knocked out by Cre co-expression globally or in specific tissues. In a Q&A with *The NICHD Connection*, Dr. Mitchell shares her experiences as an editor:

I. What does a senior editor at an academic journal do?

The Lancet journals have an in-house editorial system. *The Lancet Diabetes & Endocrinology* is the latest of the Lancet specialty titles to launch. The core team running the journal is three people: Editor, Deputy Editor, and Senior Editor. Because the team is small, the Deputy Editor and Senior Editor are responsible for part of every section of the journal. On other journals, one individual will be responsible for one section, but this is not the case for *The Lancet Diabetes & Endocrinology*.

As the Senior Editor, I handle approximately half of the articles that we publish in the journal. Once original research articles are passed onto me by the Editor, I read them in-depth, do a primary assessment of their quality and novelty, and feed back my assessment to the Editor. After discussion, I will either let the authors know that we have decided not to proceed with their paper, or I will arrange for peer review by a statistician and secure three to four clinical reviewers. All research papers that will be sent back to authors for revision on the basis of reviewer comments are presented at a weekly meeting with the wider Lancet team; this includes other Lancet specialty journal editors as well as editors from *The Lancet*. Research submissions generally go through one to two rounds of peer review and revision before acceptance.

Each original research paper that we accept is published alongside a Comment article. After a paper is accepted, these articles must be commissioned quickly and processed with a fast timeline. To meet our publication targets, papers are published four weeks after acceptance; so linked Comments must be commissioned, written, submitted, revised if necessary, edited, and proofed in this time.

As well as research submissions, I commission reviews on topics of interest in the field. We aim to publish novel reviews that will fill a gap in the current literature, so I need to be aware of current topics of interest and advances in the field. I travel to international conferences several times a year, which is important for generating review ideas, networking with leading clinicians and academics, and keeping abreast of ongoing studies. I also handle the peer review, developmental editing, and

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revision process for review articles after submission.

We also publish news stories, and as the Senior Editor I am responsible for ensuring that we have sufficient content to fill this section of the journal. We commission freelancer writers for much of our news content, and I am responsible for liaising with the writers. I also generate a lot of the ideas for news stories that we commission.

The journal team writes Editorials in rotation, so we will each write once every three months. We also write calls for papers, arrange for press releases, commission cover art, and take on other projects such as Series (a group of papers on a theme).

After acceptance, papers are edited in-house by Assistant Editors and figures are redrawn by Production Editors. I am responsible for liaising with this wider team, in order to meet our publication deadlines. Original research timelines are roughly eight weeks from submission to online publication, and we publish three to four research papers per month in print. We publish around two to three reviews per month, news, Comments, Editorials, Correspondence, and Clinical Pictures.

2. What’s your typical day like?

It is varied, but usually involves some aspect of peer review, “second reads” of new articles that have been submitted, and status meetings with the team. I might also be writing, providing developmental comments for a review author, or researching ideas for a series of reviews. If I’m at a conference, then I will be attending talks and also meetings with leading academics.

3. When did you start thinking about becoming an editor?

I knew that I didn’t want to stay at the bench, but I am interested in how research projects are designed and conducted. I also didn’t like focusing on one small area when I was more interested in how it all fits together. Becoming an editor allowed me to use my scientific knowledge and thinking, but also see the bigger picture. I started working towards this change in career while I was a postdoc.

4. How did you find your position with The Lancet Diabetes & Endocrinology?

I took a maternity cover position at another journal, and when I was there I met other editors. Someone I knew moved to a new position at one of the Lancet specialty journals. When The Lancet Diabetes & Endocrinology was recruiting before launch, they let me know about the position.

5. Please describe the application/hiring process. Did it take a long time?

I applied with a CV and cover letter. Because this was a new journal, there

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was a lag time because they were recruiting the Editor before the rest of the team. I received an editing test—writing an editorial on a topic of my choosing and selecting articles for peer review and suggesting reviewers. I was then invited for an interview.

6. Which skill sets from the lab best apply to becoming a journal editor?

The ability to see projects through to completion is good for working on Series. The scientific knowledge and understanding of good study design is necessary to be able to assess papers for their rigor, validity, and utility.

7. What activities or resources at the NIH helped prepare you for your career transition?

I was supported by my supervisor who understood that the training position was about more than gaining lab skills. I joined the Fellows' Editorial Board, which was useful for me to see how lots of different papers are put together. The discussions I had about research design were helpful—whether we were discussing research ongoing in the division or new papers that had recently been published.

8. As a journal editor, what is your take on team science?

Some of the information generated in large collaborative efforts is very interesting. The genome-wide association study (GWAS), for example, is allowing us to understand phenomena such as heritability of drug actions that could lead to targeting of treatments based on what will work best for each individual. Large databases are also uncovering interesting trends, such as ethnic/socioeconomic disparities. These efforts would not be possible without many people with different skill sets working together.

9. Do you have any advice for fellows who are thinking about entering the editing career field?

Every journal and publisher is different. I was lucky to find an open opportunity at a journal in the field I was interested in—endocrinology. Like bench science, it's long hours and you need to be passionate about the subject to enjoy the job. But I find it more rewarding than being at the bench because you're involved with more completed stories. Being able to write is a positive, as is the ability to critically appraise research. Additionally, you should be aware of what is “hot” in the field. If you are interested in becoming an editor, these are skills that are very useful.

10. Is it ok if current NICHD fellows contact you with questions?

Yes. They can contact me at f.e.mitchell@hotmail.co.uk.
Sometimes, modern life can feel incompatible with a healthy lifestyle. Each morning we pick up our extra-large, whole-milk mocha with whip—knowing we can’t make it through the morning without one. We skip breakfast, head to the vending machine, and then pick up a large pizza for dinner. We spend eight hours a day (usually more) hunched over computers or lab benches. We drive frantically like we’re the only ones on the road, because we always have somewhere to be. Rarely do we take the time (or have the time) to examine these everyday unhealthy habits and think about how they affect the population at large. This month’s NICHD Exchange meeting, entitled “Healthy Lifestyles: Eat Well, Exercise Well, Drive Well, Be Well” gave us that chance, as experts gathered to discuss a host of unhealthy habits, along with the best methods of prevention and treatment.

A growing portion of the US population is either overweight or obese; it’s a complex problem with no single, clear solution. Dr. Gilman Grave began February’s meeting with a discussion on the current state of obesity in the US, as well as the many factors that contribute to our ever-growing waistlines. In search of the cause of our obesity problem, scientists have examined everything from increasing portion sizes to viral infections. To date, researchers have identified 108 drivers of obesity, forming a dangerous, tangled web of correlated relationships. This may be why single-focus solutions—such as higher taxes on soft drinks—seem to have little impact on large-scale obesity rates.

Although obesity rates are high within the population, it doesn’t mean that any one individual is helpless against this battle of the bulge. Dr. Joan Han provided us with a summary of what approaches have been scientifically proven to help patients lose weight and become healthier. Surprisingly, much of what is generally accepted as common weight loss knowledge is not scientifically substantiated. Suggestions like eating more fruits and vegetables and cutting out highly processed foods are supported by plenty of anecdotal evidence, but there is ultimately little scientific research to back them up. Many people try to cut a certain type of

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food from their diet—such as carbohydrates or fats—but research shows that weight loss is simply a matter of calories-in versus calories-out.

Another conclusion that may come as a surprise to some is that diet, not exercise, is the key to substantial weight loss. However, this shouldn’t be a deterrent to keep you from exercising. Exercise is still highly beneficial, and has been proven to help people who have lost weight successfully keep the pounds off.

Ultimately, prevention is far more effective than treatment when it comes to obesity. That’s why obesity rates in children should be of particular concern, especially within the NICHD community. In 1980, obesity rates for children six to 11 years old and adolescents 12 to 19 years old were seven percent and five percent, respectively. In 2012, these numbers skyrocketed to 18 percent for children and 21 percent for adolescents. Over one-third of children are currently overweight or obese. But there is hope. A recent study showed that obesity in children aged two to five has decreased by 43 percent over the past decade.

In many populations, however, childhood obesity is still a growing problem. Minority and low-income children, as well as children with disabilities, are particularly vulnerable to becoming overweight or obese. Dr. Tina Urv and Dr. Layla Esposito gave a joint talk on the difficulties of managing obesity in children with mobility, intellectual, and developmental disabilities. “This is a whole group of kids who are falling through the gaps,” Dr. Urv reminded us. For children who are currently overweight or obese, Drs. Han, Urv, and Esposito all emphasized the same major points: successful interventions are those that are custom-tailored and involve entire families, rather than focusing solely on the child.

When we think about “being healthy,” we tend to focus largely on things like food, weight, and exercise. Dr. Bruce Simons-Morton reminded us that behavioral health is an often overlooked part of good health. Managing risky behavior keeps us safe and mitigates poor choices that have possible disastrous consequences. Dr. Simons-Morton studies adolescent health behavior, specifically teen driving patterns. He provided us with some interesting strategies that increase teen driving safety, the most effective of which is getting parents involved in their teen’s driving habits.

The take-home messages from this Exchange meeting were that health has many facets and the strategies used to improve patient health need to be individually tailored. Parents can have a huge impact on their children’s health by working to improve the health of their entire family (themselves included). By instilling healthy habits in childhood and adolescence, we can create a healthier adult population.
Three-Minute-Talks Workshop: Part II
By Parmit Kumar Singh, PhD

Can you describe your postdoctoral work in three minutes or less? The new NICHD Science Communication “Three-Minute-Talks” Competition is helping postdoctoral fellows do just that. As part of the competition, Mr. Scott Morgan leads workshops on how to present scientific achievements in a concise format.

If you missed it, you can find a recap of Mr. Morgan’s first workshop in last month’s issue of The NICHD Connection. The second workshop was on February 18, 2014. During the workshop, participants presented their research on a single slide and in a talk of less than three minutes. Mr. Morgan then met with each fellow and suggested changes to the slide as well as to the spoken content. I asked several fellows to share some of the problems highlighted by Mr. Morgan during their session. Based on their responses, I have compiled the top ten most common mistakes to watch out for in your presentations:

1. The first line of the talk should be more general than specific, but should still reflect why your research is important. You need to grab the audience’s attention!
2. Avoid slides that have too much content or look too busy. Remember, not every detail you say needs a figure.
3. Refer to your slide when mentioning a figure with phrases like “as shown in figure one” or “as shown in the top-most figure."
4. If you are presenting a model to explain your work, consider using two different figures. The first figure should explain the model of what is known before your work, and the second figure should explain the full model based on your current work.
5. Figures should be made self-explanatory by providing legends.
6. Remove parts of the figure that are not discussed during your talk.
7. Each figure should relate to your research question. Do not include unrelated information.
8. Conclude your talk with future aims.
9. Be careful to stay on topic. Your results and conclusion should give—or at least point to—an answer to the original research question.
10. Last, but not least, maintain eye contact!
Thoughts of a Postbac: the Dalai Lama’s Visit

By Uma Srivastava

His Holiness the Dalai Lama, a clinician, and a scientist walk into a room. No, really, this actually happened. The Dalai Lama, sometimes referred to as simply His Holiness, visited Washington, DC, during the first week of March. The NIH was honored to have him visit the campus, where he spoke about the role of science in human flourishing.

The Dalai Lama is a well-known spiritual figure whose ideologies are prominent in Asia. One might question, what exactly is he doing at the National Institutes of Health? It can be hard to imagine how a spiritual leader would be accepting of modern science, but it was quickly apparent that the Dalai Lama was open to scientific exploration and excited to see new trends in science. He spoke of his visit with a young girl who, after being diagnosed with cerebral palsy, could finally walk thanks to new research.

Because such a recognized humanitarian was visiting, the NIH held a lottery for tickets to attend the Dalai Lama’s talk. I was lucky and won a ticket to see his lecture live. This was a unique and unforgettable experience; I never thought I would be in the same room, ten rows away from the Dalai Lama.

I found his talk to be very inspiring as he discussed the delicate balance between religion and science. He said it is okay to practice a certain religion, but do not let that get in the way of research. He then stated that research is important, but do not let that get in the way of being a good human.

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Thoughts of a Postbac: the Dalai Lama’s Visit
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The Dalai Lama emphasized that there is no point in being a good scientist if one’s life is full of stress and unhappiness. I pondered on that statement even after the talk. He was correct: what is the point of being a scientist, or any other profession, if one cannot fully appreciate the joys?

After his talk, I felt inspired; yes, that does sound cheesy and stereotypical. Right now, I am a young scientist who is still learning about research and the different dynamics. His message of enjoying life and having less stress is true. I notice the people around me at work and home; everyone seems to be extremely stressed regarding their work. If we could all take a moment to relax and enjoy what we have, life will be much more pleasant.

I also really appreciated the fact that he said to respect one’s religion but not to let it interfere with science. While it’s important to consider the ethical implications of each experiment, the separation of science and religion will help us to focus on the research and achieve more. This message will remain with me long after the talk, just like his unique laughter.
April Announcements

SAVE THE DATE: POSTBAC POSTER DAY IN MAY

The annual poster day for our postbac fellows will take place on Thursday, May 1, at Natcher from 10 a.m. to 3:30 p.m. NICHD will hold a competition to recognize the best three posters from our institute. Posters will be judged by some of our very own postdoc fellows. Don’t forget to mark your calendar for this excellent opportunity to see our postbacs showcase their work.

THE 10TH ANNUAL FELLOWS RETREAT IS NEAR

The Annual Meeting of Postdoctoral, Clinical and Visiting Fellows, and Graduate Students will take place on Monday, April 21, at the Smithsonian National Museum of the American Indian.

Keynote speakers include Dr. Eric Wieschaus of Princeton University, a Nobel Prize winner, and Dr. Sherri Bale, co-founder and managing director of GeneDx, a local company that specializes in testing for hereditary genetic disease.

MENTOR OF THE YEAR AWARDS: TIME TO NOMINATE!

Intramural NICHD has two annual mentoring awards to recognize individuals who have served as outstanding mentors to trainees in the institute.

Awardees in both the investigator (tenured, tenure-track, staff clinician, staff scientist) and fellow categories (postdoctoral, clinical, visiting, or research fellows) will be announced at the PI retreat in June. The deadline for receipt of nomination submissions is Monday, April 28.

For forms and more information on the nomination process, please visit: https://science.nichd.nih.gov/confluence/display/fellows/Mentor+of+the+Year+Awards+2014

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April Announcements
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WANT TO BE A FELCOM REPRESENTATIVE FOR NICHD?
Each institute has two representatives on the intramural-wide Fellows Committee, known as FelCom—one clinical and another for basic science. We are looking for nominations and expressions of interest for the Basic Science rep for 2014-2015. The rep also works with the Office of Education to identify academic and career programs of benefit to NICHD fellows. FelCom meets once a month. You will have a chance to network with other fellow leaders across the campus and contribute to planning and delivery of intramural-wide training programs. In fact, each rep is asked to serve on one subcommittee, like Mentoring or FARE.

For more information, contact Dr. Stephanie Cologna (stephanie.cologna@nih.gov), our current NICHD basic representative. To apply, send Dr. Yvette Pittman an email, together with a few sentences about why you’d like to be the NICHD rep, by Friday, May 2, and we will meet with our Scientific Director, Dr. Stratakis, who will make the final selection.

SAVE THE DATE: INTERVIEWING FOR ACADEMIC JOBS
Are you going on the job market for a faculty position soon and would like to know what the interview is really like and how to prepare for it?

On Friday, May 16, 12-1 PM, The Office of Education is offering a brown bag lunch session with two of our senior fellows who recently completed several interviews for faculty positions at both research-intensive and teaching colleges and universities.

This is a great opportunity, in a small-group, informal forum, for you to hear firsthand what to expect during the interview process. We want you to walk away from the discussion with a sense of what search committees are interested in, the type of questions that are asked, tips for both phone and in-person interviews, what skills are most needed to be successful, and what you can do throughout your NIH training to be more prepared.

If you would like to attend, please send Yvette Pittman (yvette.pittman@nih.gov) an email. Space is limited to 25 fellows.
April Events

TUESDAY, APRIL 15, 3 – 5 PM
FelCom Event: Careers in Academia
Building 10, Lipsett Amphitheater
Please register here

MONDAY, APRIL 21, 8:30 – 5 PM
Tenth Annual Fellows Retreat
Smithsonian National Museum of the American Indian
Visit http://retreat.nichd.nih.gov for more info