Dr. Marek Michalak says a combination of luck and great mentors helped him develop as a researcher; now, he’s paying it forward

Like most people, U of A biochemistry professor Dr. Marek Michalak didn’t sit down and plot his career trajectory from start to finish.

“Being in science was obvious to me,” he says, “but in which capacity – a professor or whatever – I didn’t know.” To a large extent, his decision to pursue biochemistry in university, complete a PhD, and accept an academic post at the U of A, was a matter of luck – and the people he met along the way.

After becoming interested in biology and chemistry in high school, Michalak gravitated to science in university. He stumbled upon biochemistry – which he considered the best of both worlds – and found professors who nurtured his interest. Over the course of his undergraduate and graduate education, they suggested labs and research projects where he could hone his skills as a researcher and learn more about specific areas of science. Ultimately, Michalak zeroed in on molecular cell biology, and left Poland for Canada, eventually landing at the U of A.

Now he runs his own research program, focused mainly on protein-folding diseases like Alzheimer’s and Multiple Sclerosis. He’s published more than 200 papers and drawn $24 million in research funding to date. Graduate students are an important part of the research and he finds it fascinating to watch them evolve rapidly during a very short period of time. “You see these students go from, ‘I know nothing,’ to ‘I know more than you do,’ ” he says. Michalak isn’t being facetious; he hopes that these bright, young people will surpass him.

Over the years, Michalak has come to realize just how strongly his mentors guided his career and how much influence he now has over students. “It’s a pretty risky business we’re in, when it comes to science,” he says. After all, results are never guaranteed and can take years to achieve. But people are a very different matter. “The only thing you can count on is that you’ll impact people. That’s very clear to me now.”

Relationships are two-sided. Michalak says his research benefits from his role as a teacher and mentor. “Teaching forces us to focus and put our thoughts together,” he says. “I think it’s a good exercise.” And, since teaching often involves communicating his own work, it motivates him to push his research forward. “I don’t want to be giving the same lecture each year,” he laughs.

Even the act of teaching subjects that aren’t relevant to his research program can have a benefit, he notes. Earlier in his career, he reluctantly agreed to teach a class on lipid metabolism, which generally has nothing to do with his research. But years later, he stumbled upon a discovery he wouldn’t have if he hadn’t been forced to teach the class and bone up on lipid metabolism research. “People in the lab couldn’t believe me when I said, ‘Trust me, I know exactly what’s going on here,’” says Michalak.

It was a lesson in the importance of keeping an open mind – and a reminder that teaching and research are inextricably linked.

As a teacher, Michalak works hard to “get into the student’s shoes” to help them understand the material and engage their critical thinking skills. He focuses more on concepts than memorizing details. “Especially at the graduate level, I want them to understand biochemistry, but to be able to solve problems in any discipline whatsoever,” he says.

Michalak attributes his teaching abilities to guidance he received from people at the U of A when he first arrived on campus, many years ago, as well as to the other professors who helped him get his bearings. But teaching is a process, and he’s continuously trying new strategies to engage students. “It’s not a trivial thing to learn and it takes time.”
UPCOMING DEADLINES FOR ACADEMIC AWARDS

MCCALLA PROFESSORSHIP
McCalla Professors are those who value excellence in teaching, acknowledge the importance of students, conduct themselves in an ethical manner, are collaborative, open to change, take pride in history and traditions and are committed to integrating their research and teaching.

Large Faculties determine individual submission deadlines; therefore, please check Faculty websites for more information. Recommendations from large faculties are to be submitted to the Office of the Provost and Vice-President (Academic) no later than the last working day in January (i.e. January 31, 2013).

Submissions from small Faculties should be sent each year to the Office of the Provost and Vice-President (Academic) on the first working day of December (i.e. December 3, 2012).

*An information session for the McCalla Professorship will be held on November 1, 2012 in 2-31 South Academic Building (SAB) from 2:00 – 4:00 PM.

TEACHING AND LEARNING ENHANCEMENT FUND (TLEF)
Applications are invited from all University of Alberta instructors who seek innovative ways of creating exceptional learning experiences and environments. It is anticipated that this fund will support a diverse range of initiatives specifically focused on creating exceptional and life changing university experiences for students.

There are two levels of funding for the TLEF: professional development (in the area of teaching and learning) and projects or research. Applications for funding for professional development are accepted on a continual basis. The deadline for funding for projects or research is January 15, 2013 (Note: new deadline this year).

*An information session for the TLEF will be held on November 8, 2012 in 2-31 South Academic Building (SAB) from 9:30 – 11:00 AM.

ALAN BLIZZARD AWARD
The Alan Blizzard Award was developed by the Society for Teaching and Learning in Higher Education (STLHE) to highlight excellence in collaborative university teaching and learning.

The Alan Blizzard Award seeks to foster recognition, visibility, and appreciation for effective collaboration in university teaching and learning. Application deadline is February 15, 2013.

More information is available at http://www.stlhe.ca/awards/alan-blizzard-award

DESIRE2LEARN INNOVATION AWARD
The Desire2Learn Innovation Award in Teaching and Learning recognizes innovative approaches that promote learning in new ways at post-secondary institutions.

Awards are open to all instructors currently teaching at a post-secondary institution, regardless of discipline, level, or term of appointment. Application deadline is January 13, 2013.

Further details at: http://www.stlhe.ca/awards/desire2learn-innovation-award

AWARDS FOR TEACHING EXCELLENCE
The deadline to submit nominations for the following awards is February 22, 2013.

Award for Excellence in Graduate Teaching
Any individual who teaches graduate students as a full-time continuing member of the academic teaching staff is eligible. Nominees must have taught graduate students within the last 24 months of the date of nomination to be eligible for this award.

Provost’s Award for Early Achievement of Excellence in Undergraduate Teaching
Any individual who has completed no more than five years of University teaching as a full-time continuing member of the academic teaching staff is eligible to be nominated for this award.

Rutherford Award for Excellence in Undergraduate Teaching
Any individual who has completed a minimum of five years of teaching at the University of Alberta as a full-time continuing member of the academic teaching staff is eligible to be nominated for this award.

Teaching Unit Award
The Teaching Unit Award recognizes teaching excellence that occurs when two or more academic staff members collaborate to provide leadership in the preparation and coordination of instruction at the undergraduate or graduate level and who are actively involved in the delivery of instruction. Collaboration may occur within, between or among members of a faculty, school, department or division and may include additional team members.

William Hardy Alexander Award
Temporary academic as well as continuing academic staff (Administrative Professional Officers, Faculty Service Officers, Librarians, part-time continuing academic staff and Trust staff) with at least three years teaching experience (and who have taught at least 18 credits) at the University of Alberta are eligible to be nominated for this award.

FOR MORE INFORMATION
Visit our website, www.ualberta.ca/academicawards, use the search tool or navigate to the award you are interested in. For discipline specific awards, select the appropriate field of study and determine which award(s) are applicable to you.

With the support of the campus community, we have added numerous new awards that University of Alberta faculty members have received to our website, ualberta.ca/academicawards. If you have received an award and your outstanding accomplishment is not celebrated on our website, please contact us so that we may recognize your achievement.

Need help with an academic award nomination? For more information or assistance with a teaching award nomination, please contact Laura Connell, Acting Faculty Awards Facilitator, at 780.492.2644 or via email at laura.connell@ualberta.ca.