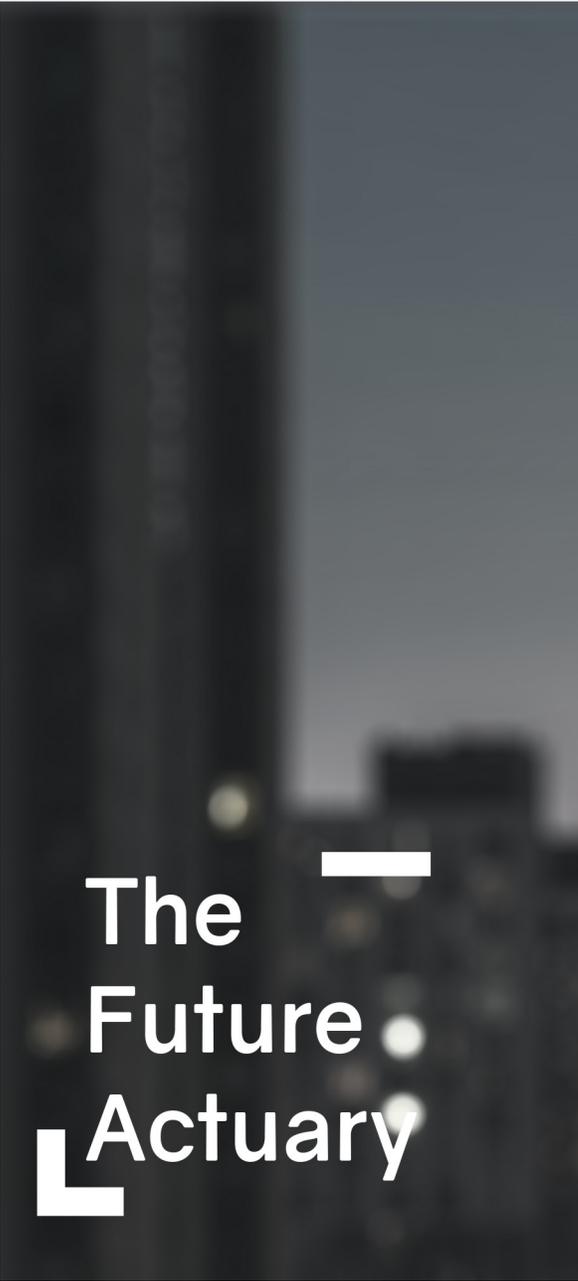
A long-exposure photograph of a multi-lane highway at night. The image shows bright, curved light trails from cars moving along the road, illuminated by streetlights. In the background, several high-rise buildings are lit up, their windows glowing against the dark sky.

Breaking the Paradigm

A dark, blurred photograph of a city at night. The lights from buildings and streetlights are out of focus, creating a bokeh effect. The overall tone is dark and moody.

The
Future
Actuary

A dark, blurred photograph of a city at night, similar to the one above. The lights are out of focus, creating a bokeh effect. The overall tone is dark and moody.

Summer
2017

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A letter from our president



Hello everyone,

I hope you've all had a warm and fruitful Summer thus far. Akin to seasons, ASNA has also made and will continue to make changes meant to improve the student experience, that I would like to touch on briefly.

We are excited to announce a new scholarship program titled the "ASNA Student Scholarship" that will be launching and taking applicants in early 2018, in collaboration with ACTEX. I believe that this initiative, alongside our monthly webinars and Mentorship Network, will provide value and support to students in our member universities like never before.

Secondly, I would like to highlight our upcoming ASNA 2018: Ottawa convention, taking place at the Westin Ottawa. Being situated next to Parliament Hill, it will become a winter wonderland, and with attractions both inside and out of the hotel, this year is absolutely shaping up to be a dazzling experience. I hope to see you all there!

Sincerely,

A handwritten signature in white ink, appearing to read "Victor Wang".

Victor Wang
President
Actuarial Students' National Association



Actuaries then, now, and tomorrow

featuring Mike Lombardi

Compiled by Catherine Martin
Throughout his career, Mike Lombardi, a McGill University graduate, has taken on a wide variety of roles within Prudential, Willis Towers Watson and Reinsurance Group of America (RGA). He is currently President of his own consulting firm, Mike Lombardi Business Consulting (MLBC), as well as the President of the Society of Actuaries.

How has the insurance field evolved since you started working?

When I started working, it was ancient history. We had neither calculators nor e-mails. All memos were typed by secretaries, and we had to wait weeks for a reply to an international memo. If we had a question, the same waiting cycle would repeat itself. Nowadays, instant communication is the way to go: emails, smartphones, social media, etc. Conference calls are much more accessible, and interviews happen on Skype as opposed to physically travelling to a faraway location.

Moreover, when I first started out, there were a lot more Canadian and American insurance companies as well as mutual insurance companies,

organizations that were not public stock. Seeing as the latter did not do quarterly reporting, the actual profitability of those organizations was rather obscure. Insurance companies back then were long term institutions, and the environment employees worked in felt no different than that of government workers: they were under the constant impression that these companies would remain forever and that connections and moving up the ranks were all that mattered.

Over the past thirty to forty years, there have been many changes to the industry. Due to the amount of pressure applied for companies to merge, a big merger and acquisitions takeover period took place in the eighties and nineties in Canada and drastically reduced its total number of insurance companies. However, a few failures occurred, such as Confederation Life, which brought to light the riskiness of insurance companies and the possibility of them going insolvent. In the late eighties, early nineties, this acknowledgment resulted in the creation of new regulatory requirements and reserving, in addition to modern financial reporting, stress tests and the emerging concept of the appointed actuary being responsible for risk management.

What are skills actuarial students should acquire?

There are two types of skills students should acquire: technical skills and soft skills.

Technical skills, such as core mathematics, statistics and finance, probably have not

changed since my time. Although there are new components and new applications, like derivatives, predictive analytics, and computer programming which did not exist or were very rudimentary back then, the mathematics are still the same and are still as crucial to understand. The other technical skills students should acquire vary by country and by field of practice: insurance laws, standards of practice and products. They will be different than they were thirty years ago, and they will continue to evolve over the length of a career, but it is still important to learn about them as it is basic knowledge that can be tested and that non-actuaries will not know.

Human interactions are a key factor of one's career, so soft skills such as communication, presentation, negotiation and networking skills are as important as technical skills. Some of those you will interact with will be actuaries, but many will not and will instead come from different backgrounds and have different sets of skills. Therefore, being understood is highly important, as an actuary needs to be able to communicate clearly and defend his or her conclusions. All these social, interactive and interviewing skills play an important role in terms of success in the actuarial field.

What are your hopes for actuarial science students?

My hope is that actuarial science students will continue to appreciate the value of pursuing an actuarial designation and a career in a field that is constantly developing new applications to

actuarial science. For example, back in the old days, actuaries that worked in the pension field would only do valuations and now, they will give advice on how to invest the pension portfolio and what kind of asset-liability risk might result from the duration of those assets and liabilities. We also have actuaries working in banks in South Africa and actuaries doing enterprise risk management and there's a whole new focus on stochastic analysis, which is a better way to deal with uncertainty.

This being said, my hope is that the students pursuing the actuarial profession will find that it is a stimulating, rewarding and thriving field, and that when they retire, they will be proud to say "Wow, I made a great career choice."

Is the SOA planning on engaging more with students?

The SOA is always interested in engaging with students and does so in a variety of ways. We have the Centers of Actuarial Excellence (CAE), we have the Student Summit, we sponsor prizes for exam takers, we support the Actuarial Students' National Association (ASNA) in Canada and for the past two to three years, we have been working on a new program to promote actuaries in non-traditional fields. To put it briefly, we support financially between ten to fifteen interns hired by companies like Google, Microsoft and NASA, which you would not traditionally associate with actuarial employers, to expose these employers to the value actuaries harbor. This allows organizations to try out

actuaries and if those students are successful in interesting their non-traditional employers, then we hope they will hire more actuaries to assist them in the future.

Students are our future, so both the SOA and its members are highly interested in the issues faced by students, in finding ways to overcome those issues, and in finding measures the SOA can take as an organization to help them.

Can we expect the SOA to announce other big changes regarding the exams?

The SOA periodically reviews its curriculum, and there has been a change announced for 2018, where the associateship exams will be modified and a predictive analytics assessment added.

We are also trying to rebalance the long term versus short term insurance material. Traditionally, the SOA has focused on long term insurance. Given all the developments in health care, which tends to be short term, and the fact that the SOA has the general insurance track, also short term, our standpoint is that actuaries should be exposed to all kinds of insurance.

We start off trying to make you a generalist, and then you choose a specialty. If you want to become a general insurance actuary, a life actuary, or a pension actuary, the philosophy stays the same: you learn the basics that all actuaries should know, including predictive analytics, and from there specialize according to your interests.

To answer the question, as far as I am concerned, other than what has been announced, nothing major should take place, although it is fairly obvious that in two to three years there may be iterations, fine tuning of exams, or the introductions of recent topics on specializations. You should expect a continuous evolution of exam content and examination method. In the old days, you would write multiple choice tests and would be graded on paper. Nowadays, there is a variety of ways to test people: we have the Validation by Educational Experience (VEE), the traditional multiple choice exam and the long answers exams. We also have case studies, including live presentations of case studies. We try to keep up with trends not only in terms of our exam content, but also in the way we assess one's acquisition of that knowledge.

What is the best thing about being an actuary?

There used to be a US Army commercial on TV, and it went along the lines of "be the best that you can be". For many of my colleagues and myself, being an actuary is exactly that. There are many days where I go to work and think "I cannot believe people are paying me to do this. This is so much fun!" And you meet a lot of people and realize that this is a very different experience compared to a lot of other workers. A lot of people work nine to five jobs and long for the weekend to come so they could go out and live "the real life", but doing what you want, loving what you do and being paid for it is such a liberating experience. It cannot be described with words.



An interview with a corporate actuary featuring Edward Lam

Compiled by Saurabh Santoshkumar

Edward Lam is the director for the corporate actuarial team and Appointed Actuary for Unifund Assurance, an entity of RSA Canada. Saurabh Santoshkumar recently sat down to talk to him.

So what exactly is your role at RSA?

I am the director for the corporate actuarial team and Appointed Actuary for Unifund Assurance, an entity of RSA Canada. My team is responsible for actuarial reserving, financial reporting, loss ratio planning and planning for the next year or next few years. My team works very closely with other departments such as finance, claims, underwriting and reinsurance on issues such as liability adequacy, profit and loss (P&L) (which is the old income statement) and impact on P&L. Additionally, we often offer business insights and potential business recommendations to our

stakeholders.

Even though I am the Appointed Actuary (AA) for the Unifund account, I also work with all RSA Canada entities. It is just that I sign off on the Unifund statement whereas my boss, the chief actuary, signs off on all of the statements.

So what exactly does a corporate actuary do?

My role mainly involves reserving. The AA is required to value actuarial policy liabilities at the end of each financial year and determine whether the amount on unpaid claims reported in the financial statement is reasonable. I am also required to prepare and submit an Appointed Actuary's report to the regulator with the necessary documentation and supporting exhibits. So what do unpaid claims mean? Let's take your auto policy for instance. Typically, your auto policy lasts for one year. But an accident

can occur on any day, even on the last day of the policy. For some of the claims, it would be a minor accident. Then the claim would typically be sent to the auto body shop to be repaired. The insurance company then pays the repair costs and the claim is closed. But sometimes, if it is a serious accident which involves bodily injury or accident benefits, it could take a very long time, maybe five or ten years, to settle such serious claims. Then as a corporate actuary, we need to ensure that there is enough money in the insurance company's bank account to pay off all future liabilities or "unpaid claims" that the company is liable to pay. Basically, we have to ensure that the policyholder will be reimbursed as long as their claims are valid.

Could you walk us through a typical day in your life?

In a typical day, approximately 50 to 75 percent of my time would be

spent in meetings– unfortunately. I meet with my team as well as with other actuarial teams such as the pricing team, the actuarial systems team and the economic capital team. I occasionally meet with finance, claims and reinsurance department representatives. Just to give you an example, today, I have meetings scheduled from 9 a.m. to 5 p.m. back-to-back. Earlier this morning, I met with a claims representative. There was a hail storm in Québec two days ago in a rural town seven hours away from Montreal. I need to ensure that we have enough IBNR (incurred but not reported) necessary to meet the expected future payments associated with this hailstorm. That meeting took about half an hour. The next hour involved planning projects with my team, as I had my vacation next week. I wanted to ensure that my team had enough projects to work on for the next two weeks. After that, I had to meet with the systems team. We needed them to change the data output structure so that we would be able to analyze the data in more detail. There is an actuarial systems team that helps us extract relevant data in a nice format so that actuaries don't need to spend all of the time doing the data extraction. Then, I had a meeting with Mr. Usman from the national subrogation team to talk about salvage and subrogation, how the corporate team can help them interpret some of the trends from the reserving triangles. And now I have a meeting with you guys! So this is my fifth meeting already!

Does your job change over the year?

Each quarter, there will be a

quarter-end analysis which will last for a month and a half. One half of a month will then be spent on financial reporting. For the remaining month of the quarter, I try to get the team to cool down a bit so that they can be prepared for the next quarter. The quarter end is usually a prime time for my team to take vacation or to work on some new projects or make improvements to existing templates. They are the least busy during May, August and November. At the end of the year, we have to issue the Appointed Actuary's report. My team is also responsible for planning. Typically the planning process starts in July and lasts until November. So, in short, although my job seems repetitive on an annual basis, there are constant shifts in focus throughout the year.

Earlier this morning, I met with a claims representative. There was a hail storm in Québec two days ago in a rural town seven hours away from Montréal. I need to ensure that we have enough IBNR to meet the expected future payments associated with this hailstorm.

You had mentioned working with the chief actuary. How does that work?

The chief actuary is the Appointed Actuary for five entities of RSA

Canada. The work that my team does will significantly influence her because she is legally responsible for the unpaid claim estimates reported in the financial statements. She is required to sign off the numbers on an annual basis.

What external factors result in changes on a year-over-year basis?

If you are talking about the work process, it does not change by much on a year-over-year basis. However, the analysis may change significantly based on external factors.

For instance, there were legislative reforms in Ontario's auto insurance introduced on June 1st, 2016. As a result, we had to change some of the factors in our analysis. Our analysis can also be impacted by a social trend or a legal trend. If people are trying to sue more or less, it is going to affect our analysis. Another thing that can affect our analysis is innovation in cars. For instance, we now have better safety systems in our automobiles. If the number of collisions is expected to decrease, then subsequent changes will have to be made in our analysis. We also have natural CAT (catastrophe) events. Take for instance the Alberta wildfires at Fort McMurray or the hailstorm in Québec that I just discussed with my claims CAT manager this morning. The magnitude of those events will also be reflected in our analysis. Thus, while there are a few things that impact our analysis, our work process relatively remains the same.

You mentioned that you work



with other departments. If possible, could you tell us more about the teams that you work with on a regular basis?

We work extensively with the pricing team. It is important to get their input on rate changes and recent underwriting changes. For an extreme case example, say they increase the rate tenfold. My historical loss ratio might be 60 percent but if I am not aware of the rate change increase, I could be way over reserving because the rate change would change my loss ratio to go much lower than initially anticipated. Similarly, if I increase the reserves, they need to understand why too. There is a mutual relationship in helping one another ensure that the business is moving in the right direction. We also work with the claims team. In that aspect, I need to know exactly what they are doing and what changes they are implementing in their claims processes that can influence our reserving analysis. As corporate actuaries, we are required to communicate frequently with other departments. The fundamental reserving assumption is that claims that are coming in the

future will be similar to the past. If the claims department has laid off a bunch of people, that would, without a doubt, delay all the claims. Although I would see fewer claims in the system, I will have to keep a higher IBNR to offset the reduction in case reserves. Otherwise, the company will be under-reserved. The underwriters also need to know our perspective on the business in terms of whether it is improving or deteriorating or if action needs to be taken.

Do you work with any global teams?

We communicate regularly with other actuarial teams through our reserving committee meetings to check whether the IBNR is reasonable or not. I know that our pricing team also frequently connects with our global partners in order to discuss how they could enhance or improve their pricing methodology.

How would you describe your job?

My job often requires me to see the big picture. I don't necessarily go into the details of every single

line but the whole corporate picture is very important for me. I feel that I get a sense of a bit of everything, which is great. If you are working in pricing, you may be focusing on auto pricing in Ontario, but that will only be one of the lines that I observe.

From the purview of your role, how do you see the industry changing?

The general trend is a focus on big data, data analytics, predictive modelling, and pricing sophistication. It has become more statistical and data driven now. Actually, the industry is a good blend of business and numbers and by having more focus on data analytics, I feel that the role of actuaries is going to become stronger and more important because we have an analytical mindset and we can communicate and provide business insights to our partners.

How does your team synergize with subrogation?

Whenever we see subrogation ratios increasing, we expect to change our loss ratios. There was one specific segment of our

company earlier this year that seemed to have been deteriorating in terms of subrogation recoveries. We reached out to the department heads so as to enquire why we were seeing this trend. We wanted to understand if this was a one time occurrence, seeing as if it was, then we would take the financial hit and eventually things would go back to normal. However, if it were to become the new future, then we would have to increase the loss ratios to compensate for that. On the other hand, if it were a timing issue, wherein the amount recovered was coming down then but would later rise back up. Then I might have to increase the IBNR temporarily and release it at a later time.

What are the necessary knowledge, skills and experiences required to perform your role?

You need to have good communication and people skills. Additionally, when you are in a management role, you need to have some project management and people skills. Furthermore, it is important to understand when to step back to look at the big picture and when to go into details so that when people ask you questions, you will be able to answer them with the right type of information.

My job is all numbers. I can produce pages and pages of numbers. Obviously no one, including myself, wants to read just numbers in emails. Typically I have to translate or transform the numbers into a story limited to a paragraph or two so that all the other people will be able to

understand. It is common, as an actuary, that while writing an email, you put in a lot of numbers to support yourself. Oftentimes, I hold back and ask myself what exactly do I need to write? Sometimes I trim down my e-mail to short paragraphs. If someone wants more details, they can request precisions. Notwithstanding, the highlights are a few crisp points that they can share with the other stakeholders.

Why become an actuary?

I was fortunate enough to have a high school teacher who told me about this field. There was a career planning course in my high school. My teacher had heard about this career and although she did not know a whole lot about it she encouraged me to research it. I found that it was more problem solving, more numerical, analytical and involved business interaction. I then went to the University of Waterloo to study actuarial science.

How did you prepare for your exams?

The way I approached all my exams was that I studied on my own for the professional exams before I took my classes at the University of Waterloo. This allowed me to get through my courses without much difficulty. By the time I had my convocation, I had already acquired my ACAS. A year later, I had my FCAS.

A year later? You did five more exams within one year?

It was a different exam system back then: there were only nine exams. I finished 7 exams to get

my ACAS. After my ACAS, I did two more exams to get my FCAS.

I like your approach a lot. If I did not procrastinate as often as I do, I probably would have adopted your approach.

Not everyone can follow this route. I was fortunate enough to have my full time offer before my convocation. If you have too many exams without job experience few companies will be willing to hire you. Hence, you do need experience. At the time, I actually did take a break because I thought --I finished all my preliminaries, maybe I need to stop for a bit. So I skipped one sitting or two and once I got my job offer, I continued to write my exams. Everything worked out for me.

If you had to pitch the idea of becoming an actuary, what would your take be on its advantages?

If you really like business and mathematics, you should definitely try it out. It will provide you a decent career given you are committed to doing the exams. New Fellows are typically paid really well. However, you really need to commit to doing the exams. It is a long process, but once you get past the barrier, it gets a lot better. Actuaries are well respected within the company because they have a good mix of mathematics and business knowledge, which is quite valuable. In sum, that is why it is often listed as one of the best jobs.



Learn it once, learn it right featuring Roy Ju and Mike Jennings

Compiled by Catherine Martin

Roy Ju, the world's youngest FSA and Mike Jennings, his friend and co-author, have just launched their book, Actuarial Exam Tactics: Learn More, Study Less. Check out their study tips!

Roy and Mike met while studying in the actuarial science program at Drake University. Roy was a freshman; Mike, a junior. After graduating, they both started working for Principal Financial Group. Roy is now working for Nationwide in Columbus, Ohio.

Mike: The first time I was really intrigued with Roy was when we were studying for the Models for Life Contingencies (MLC) actuarial exam. He was a freshman and I, a junior. I asked him how he was studying, and he replied that he was doing the practice problems for approximately every third chapter, but not doing any of the readings. He would start with the practice problems, and that was a completely foreign approach to me. It sounded pretty absurd to skip all the readings, but the more I looked into it, the more I saw that there was some merit behind that approach. Around the moment we started working

full time at Principal Financial Group, we decided to put our minds into translating his crazy techniques into something that the everyday student could use.

The book does not contain any strange rituals. So, what is it offering?

Roy: The advice and techniques outlined in the book reflect my best attempt to characterize the study methods that I used throughout my exam-taking experience. I recommend buying our book or reading some of the free articles at our website www.rethinkstudying.com to learn more. In general, my approach centered on developing a flexible work-life balance. Some of the key topics in the book include focusing on high-priority syllabus items, seeking to intuitively understand exam concepts, and finding ways to optimize energy levels and learning retention. The obvious answer to “how do I study?” is not always the best one. This book is one more tool to help you craft your best study strategies; obviously, each student must find an approach that works for them individually, but I think this book is a great help.

Mike: Throughout the book, we present general studying strategies useful for all types of exams (preliminary or fellowship assessments). Therefore, on the website, we focus on more specific topics. Multiple articles found on the website were initially going to be part of the book, but, seeing as exams are constantly changing, we decided to leave them out of the final draft. We also wanted to offer additional free resources to our readers.

How was your experience writing a book?

Roy: The experience was excellent. I have never considered myself a writer, so I appreciated the opportunity to step outside my comfort zone. I am thankful to all of the individuals who reached out over the years and encouraged me to share the strategies that worked for me. In working with my coauthor, Mike Jennings, we enjoyed matching theory with practice and validating these strategies with credible and well-established learning research.

Mike: It was really fun and interesting. Working with Roy has definitely pushed me to a higher

level of execution. We were able to write a first draft, start to finish, in about 2 months. It is not that long of a book, so it is not that crazy, but it was an interesting process. We would start by dividing up the sections, doing a brain dump of all our ideas for that chapter and then consolidating and editing it. After improving my own exam performance, I wanted to share this newfound knowledge with others so they could do the same thing.

What exactly will you find in the book? What is the studying secret?

Mike: The book has two main focuses: effectiveness (how to pass exams) and efficiency (how to study faster). The name of the game for effectiveness is the spacing effect and active recall.

The spacing effect, as the name suggests, is all about spacing out your study sessions. If you study one hour today and one hour next week, you will have better long term retention and you will remember better than if you study two hours today. Instead of reading through the manual and leaving three weeks for review before the exam, you are better off reading a chapter, doing a few problems now, doing two or three problems the following week to keep it fresh, and then at the end of the month, doing a high level review of all those chapters. It takes a bit longer to get through the material, but then you do not have to review nearly as much. Learn it once, learn it right, and you are good to go. This is increasingly important for fellowship exams. If you space out your reviews, you can achieve

doing a single effective read-through instead of the two or three recommended.

Active recall is just another way to say self-testing. Practice problems are usually the way to go, seeing as they test your ability to retrieve a concept from memory and to apply it to a problem. Hence, that is, by far, the best way to review. Rereading sections or your own notes is more of a passive review method, and it is based on trying to store information. However, the skill you actually need on exam day is retrieving information from memory. Therefore, that is the type of review that helps you remember information long term.

The active recall and the spacing effect are two easy ways to increase exam performance without increasing the amount of time you are studying. We discuss those in our sample chapters, which are available for download on our website.

The efficiency section is all about cutting down your study time. Traditionally, when speaking of studying for actuarial exams or finals, people think of three to four hour study sessions, an idea that is reinforced by the one hundred hour rule for studying for exams. The big tip for improving efficiency is to restructure your study sessions to make them shorter and more frequent. Our natural attention span and ability to focus decreases quickly over time: some studies state you can only hold your full focus for fifteen to twenty minutes. If you think of a three hour study session, after that first hour, perhaps you would only be focusing at 50% of your capacity. You could achieve the

same results by just doing an hour of more focused work later on. Dividing lengthy study sessions into shorter ones then proves to be more efficient timewise while also achieving the same level of learning with fewer hours.

There are other benefits to this approach. Student schedules are often packed with classes, homework and extracurricular activities. Seeing as blocks of three to four hours are difficult to find, it is much easier to sneak in a short half hour study session here and there, which is another justification for maximizing that thirty minute period.

Another big benefit of this method, albeit not directly related to exams, is that it trains your ability to command your focus, a key skill to succeeding in most careers these days. At work, you may be tempted to think that a thirty minute break in-between two meetings is a waste of time, but having the capacity to command your focus counters that. Short study sessions help train the focus-relaxation-recovery cycle.

Comparatively, weightlifting or any physical activity is similar in the way that short bursts of exertion are followed by a recovery period. While studying, your brain activity intensifies for a moment, but needs a period of relaxation to follow. Always be 100% focused or 100% relaxed and recovering.

Want more of these tips (or an explanation on why you're more efficient when you procrastinate)? Here's the link to buy their book! www.rethinkstudying.com/book/

Future Bites

featuring the Canadian Institute of Actuaries

by: Samuel Lookman and Saurabh Santoshkumar



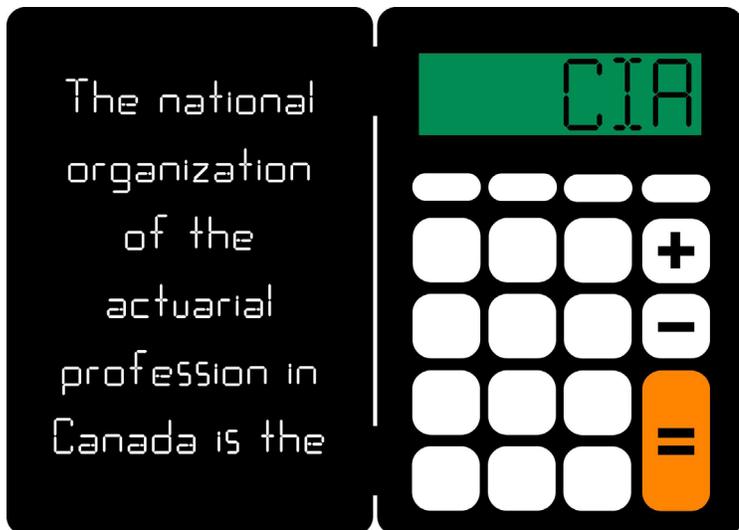
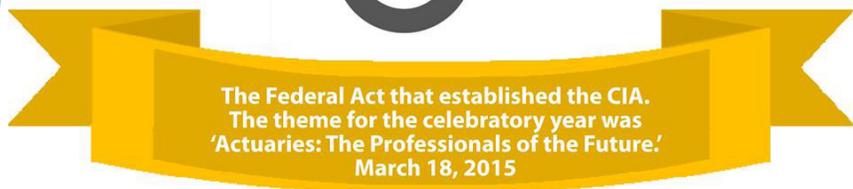
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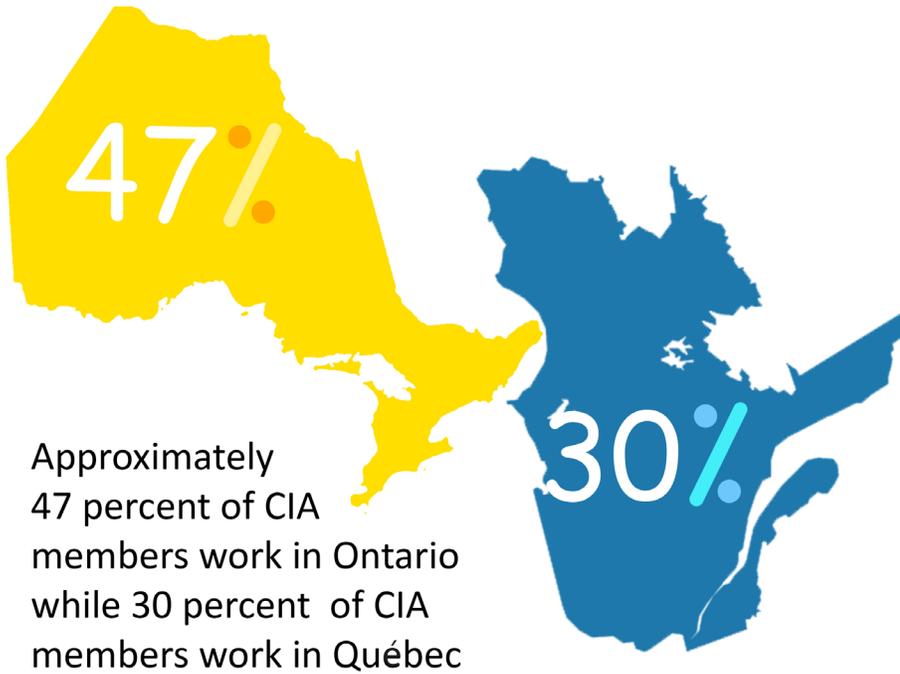
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PROFESSIONNELS DE L'AVENIR



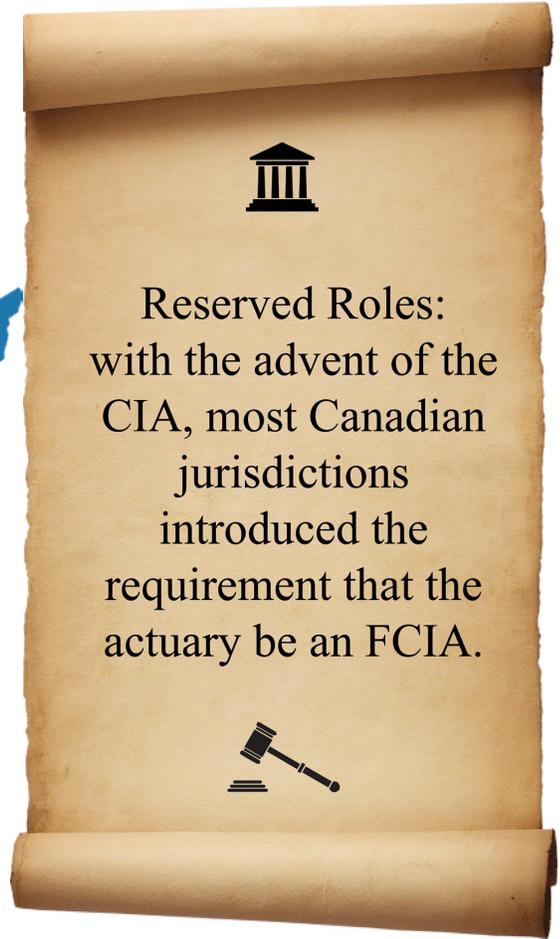
ACTUARIES
PROFESSIONALS OF THE FUTURE



Over 400 CIA volunteers and staff work together on education, professional development, research, and more



Approximately 47 percent of CIA members work in Ontario while 30 percent of CIA members work in Québec

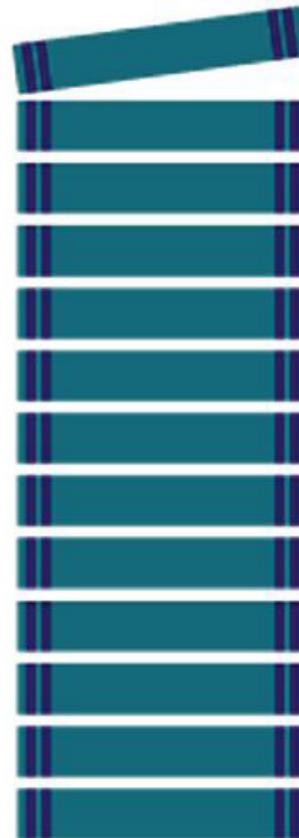


Reserved Roles:
with the advent of the CIA, most Canadian jurisdictions introduced the requirement that the actuary be an FCIA.

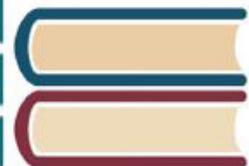
March 18, 1965



The Canadian Institute of Actuaries was established by an Act of the federal parliament on this day



The CIA's 2016–17 total research commitment is estimated to be approximately **\$459,000**



100 Years of Expertise, Insight & Solutions



SOCIETY OF ACTUARIES



In addition to our 11 accredited universities, the CAS and SOA are our education partners on whom we rely for certain aspects of our qualification process for ACIA and FCIA.



Insider tips to becoming an actuary featuring Jean-Sébastien Côté

Compiled by
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Tell us a bit about yourself.

To begin with, I graduated from Concordia University in 2013 with a BSc in actuarial mathematics with a minor in finance. I was in a co-op program, so over the years I interned with four different companies. I spent one co-op term each with the Canadian Revenue Agency (CRA), Towers Watson in pension administration and consultation, Intact in property and casualty and Standard Life in risk management.

How many exams have you completed?

I did my five preliminary exams while I was at Concordia. Subsequently, I followed the Associate of the Society of Actuaries (ASA) and Associate of the Canadian Institute of

Actuaries (ACIA) pathway. I have also completed two FSA (Fellows of the Society of Actuaries) exams and modules for the retirement track. I am currently preparing for my last FSA exam.

When did you do your exams and in what order?

I did my preliminary exams while I was in university. I prepared for the exams when it was convenient to study for them. I did my P and FM exams in the summer after my first year of university. I then completed my MLC exam during my internship at Towers Watson. I passed my MFE exam during my internship with Intact and I passed C during my last semester. I passed all my exams in the first attempt.

Was there any guide that you used? What books do you recommend for exam preparation?

I mostly referred to the Actuarial Study Materials (ASM) manuals while preparing for my preliminary exams. ACTEX and ASM manuals are generally used as reference material for preparing for the exam. Studying from these manuals is the best way to go about preparing for your preliminary exams as they were made to help you succeed in these exams.

How did you prepare for exam P and exam FM?

I used the ACTEX manual for exam P and ASM for exam FM. I prepared for both exams in the summer after my first university year. I spent only one month preparing for P because we had two stats courses at Concordia that prepared us well for exam P. As such, I only had to review the material. Generally, for exam P and FM, you need to be fast.

You need to know shortcuts and for that, you need to know the concept thoroughly. FM will be harder than P, mainly because you have five types of interest rates. The examiner could use the annuities questions to mess with your head and trick you into making a mistake. Hence, when preparing for the exams, you need to know exactly what the answer will be rather than narrowing down to one of the multiple options.

Did you follow a study regime? If so, please describe it.

Well, the general rule of thumb is to spend 100 hours in preparation per hour of examination. However, to be honest, it really depends from person to person. Your preparation really boils down to the number of hours you spend in deliberate and focused study. Reading, for the sake of reading doesn't count. I spent around sixty hours in preparation per hour of examination and I tried to balance everything. I found that studying for more than four hours per day was counterproductive and that it was better to spend four hours in a focused manner rather than spend twelve hours half-heartedly. I did my exams during my internships. I started preparing for my exam three months in advance and I prepared on a daily basis. Usually, I would study for two hours before work and then spend two hours after work. I would then spend the rest of my time running outside, pursuing other recreational activities and doing some ASNA work. At first, you may feel that such a time table is not possible. But it helped keep my brain productive. Focusing only on one thing isn't very good. If you focus too much

on one thing, it may work well at first but eventually you will burn yourself out.

Did you prepare differently for your third exam?

My study pattern did not change by much. I still maintained a study schedule and I planned everything well in advance. My MLC exam, which was my third exam, was done on paper. Nowadays it involves a written question segment. Do not worry about the writing part since it will prepare you for more advanced exams and MLC is still fairly mathematical. FSA exams however have open ended questions. You will need to know how to answer the questions and how to best convey the idea that you are trying to explain. Part of the reason I was able to do well in all my preliminary exams is because we had good professors at Concordia.

Nothing is easy at first. Sometimes, you may be tired, but you should endeavour to get the job done.

I have been told that the examination process becomes really tough from exam 3 onwards. How true is that?

Well, the exams are different. Although they are tougher, if you really want to become an actuary, you will put in the required hours. The exams can be mentally strenuous and can be tough time wise. I found that

balancing everything was the tough part. The course material is not so hard. exam P and exam FM are starters, so you would be well prepared if you do the school exams. MFE, however, might have to be done on your own, as the material was different from what was taught in class. To be honest, nothing worth having is easy to get in life. It comes down to how much you want it.

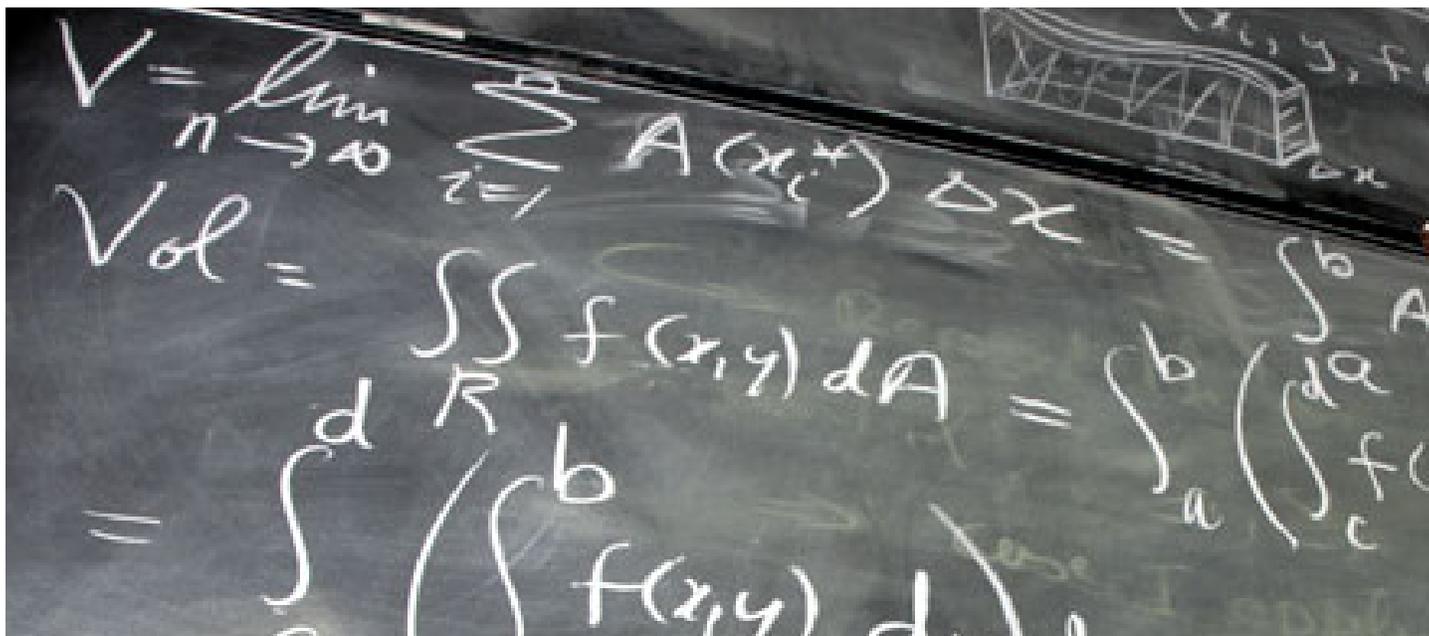
How did you balance doing an internship and preparing for exams at the same time?

I tried to segment my activities to better balance my lifestyle. I planned my day in advance and managed it based on a schedule. It is not easy at first. Nothing is easy at first. Sometimes, you may be tired, but you should endeavor to get the job done.

Would you recommend group study?

Personally speaking, I did not study in groups a lot. Furthermore, I found no obvious benefits in group study whilst preparing for my preliminary examination as the study manuals covered the material very well. I did use group study for one FSA exam. We only met once for 30 mins. During that time, we brainstormed over what questions could be asked in that exam and worked out those questions. Furthermore, we also discussed concepts and problems.

It really depends how you use your study group. Is it for understanding concepts or is it for working out tough problems? What is important is what you could get out of the study group. Moreover, it is important to keep



in mind peer compatibility when deciding on a study group. Since everybody has a different way of studying, group studying greatly depends on group synergies. In return study groups offer you the advantage of critical thinking and help you tackle concepts you may otherwise struggle with, especially for FSA exams.

Is there any software or tutorial site that you would recommend?

I never really found it necessary when preparing for my preliminary exams. Occasionally, I would refer to the Actuarial Outpost while preparing for some of my FSA exams. Sometimes, some people use it. If you can understand the patterns in the question or the underlying core concept, then you should be able to apply the concepts without referring to software. If you try to do everything (refer to multiple sources), you may get lost. You should instead pick only one source and focus your effort on it. As I said, the quantity will not matter if you don't deliberately practise and understand core concepts.

What can you do if you fail an exam?

The exam process is long and failing one of them along the way is a risk. No one is prepared for when they fail an exam for the first time. If you should fail, I would recommend taking a step back and look at where you went wrong. Did you have enough preparation time? Was it a balancing issue? Did something happen in your life? I would also recommend talking to someone who is able to ask those necessary questions that you might be overlooking. Even when you pass, you should be aware of why you passed your exam or where you can improve. Failure is never the end. In fact, it may even teach you more.

What do you think is the key difference between preliminary exams and track based exams?

The preliminary exams are very mathematical. The FSA exams are more case based. A lot of the questions are open ended. Generally, the questions that you

will face depend on the track that you will pursue after achieving your ASA. I chose to pursue the retirement track. The six tracks have similarities and most of them have three advanced exams. There are study manuals for each track. The one that I am using is called 'The Edge'. When preparing for an FSA exam, you have to memorize bullet points on laws and codes of conduct and learn theories on how to set assumptions and use accounting standards in pension. It is very different from memorizing formula.

Any additional words of advice?

I would highly recommend developing communication skills. Communication skills are extremely necessary in the business world. However we don't study that in a math program. We don't learn how to effectively communicate results. I would recommend taking a communications class or any class that will help you communicate effectively and efficiently.

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