

# ACTUARIAL SOCIETY OF SOUTH AFRICA

CAPE TOWN

24 - 25 October 2018

## 2018 Convention

24 - 25 October

Cape Town International Convention Centre, Cape Town

### Convention Update

Convention month is upon us, and the Convention Organising Committee is pleased to share with you some additional information with regards to some of the presentations, as well as the official invitation for the cocktails and dinner event.

If you have not had a chance to look at the programme yet, please click [here](#) to access it.

### Cocktails and Dinner

If you missed the announcement, the Cocktails and Dinner event this year will be held at the Shimmy Beach club. The theme is Carnival Circus, and it promises to be a colourful event. Don't miss out, purchase your tickets today if you haven't done so yet.

DATE  
24.10.18

VENUE  
SHIMMY  
BEACH CLUB

2018  
CONVENTION  
COCKTAILS  
AND DINNER

TIME  
07:00 PM

DRESS  
SEMI FORMAL

DON'T DELAY, GET YOUR TICKETS TODAY

### **Diversity and Inclusion workshops**

Nene Molefi, whose session and workshops were very popular at last years' Convention, joins us again in presenting the Diversity and Inclusion workshops. Please keep a lookout for the announcement of workshop bookings opening and be sure to secure your place to attend. To obtain some context regarding the workshops, please see below:

We all bring unconscious biases into the workplace. These deeply subconscious attitudes span race, gender, appearance, age, wealth and much more. They influence everything from the car you drive to the employee you promote and the one you don't. And because they are so reflexively triggered without our knowledge, they are virtually concealable. Last year, we introduced the topic of unconscious bias at the actuarial convention, touching on high level biases that display themselves in our workplaces in our drive to an inclusive environment. These workshops were very well received and as a result, have decided to bring them back this year.

This year, there will be three separate themes for each of the workshops, deep diving into some of the key challenges faced by most in the working environment. The three workshops will cover Multi-generational biases, Gender biases as well as biases that are associated with Rank, Power and Privilege.

For more information on these workshops, please see the full abstract provided by Nene by clicking on the title within the [programme](#) or the [presentation summary](#) on the website.

### **Papers being presented**

We are excited to share the following abstracts with regards to papers being presented at the Convention this year. To read the full papers, please click on the title within the [programme](#) or the link within the [presentation summary](#) on the website.

#### **CONSTRUCTING OPTIMAL INVESTMENT STRATEGIES FOR RETIREMENT INCOME BY COMPARING THE BLENDING OF DEFERRED AND IMMEDIATE ANNUITIES WITH TRADITIONAL ASSET CLASSES by John Anderson and Steven Empedocles**

Internationally, deferred annuities have become more popular to include in the design of post-retirement investment strategies. Very little research or development has been done in this regard in South Africa.

Our paper evaluates the efficacy of using deferred annuities in designing post-retirement investment strategies, using an adjusted version of a goals-based model introduced in Anderson & Empedocles (2016).

The South African industry is undergoing significant change for the better. This comes at a time when people are living longer and the returns on traditional asset classes are expected to remain low. As such, additional sources of value need to be explored to meet individuals' goals. Given the increasing focus on retirement income solutions in South Africa, in particular funds having to adopt default annuity strategies, we hope that the paper will assist practitioners and product providers to provide better advice and construct better solutions in order to improve the outcomes for retirement fund members.

#### **WHAT DO YOU WANT? MANAGING RISKS FOR BETTER OUTCOMES WHEN YOU RETIRE by Warren Matthysen**

The Association of Savings and Investments South Africa (ASISA) reports that for the year to 30 June 2017, people retiring invested over 90% by amount in Living Annuity Products.

On the face of it, a living annuity product seems easy to understand. However, the benefits and risks that investors face may be more complex.

- A living annuity implicitly allocates investment capital to a death benefit for investors
- It is not possible for a living annuity investor to maximise the income benefit they receive from the product.
- Investors who draw down more than 5% pa as income are likely to have to reduce their income in real-terms in a living annuity product.

If we bifurcate the benefits provided by retirement investments into the component parts of a death benefit and an income benefit:

- We can provide more context for investors to decide how to invest at retirement
- We can design solutions that are relevant for the retirement journey

### **SLAYING THE DRAGON: IMPROVING COMPANY AND INDIVIDUAL RETURNS ON INVESTMENTS IN ACTUARIAL EDUCATION by Mike McDougall**

The actuarial profession has a reputation for attracting the best and brightest students. However, despite their record of academic success, many students battle to make progress with the actuarial exams. This paper reviews the correlation between exam success and various demographic and other factors. These factors include amongst others the university attended, employer and education interventions applied. The second part of the paper considers the business case for an actuarial education allowing for direct and indirect costs as well as the financial benefits to both employers and the potential actuary - comparing the value of different interventions to both the student and employer.

### **AI IN ACTUARIAL SCIENCE by Ronald Richman**

Rapid advances in Artificial Intelligence are creating products and services with the potential not only to change the environment in which actuaries operate, but also to provide new approaches to actuarial work. These advances in AI are based on a modern approach to designing, fitting and applying neural networks, generally referred to as Deep Learning, and are one of the hottest technologies and most in demand skills in Silicon Valley today. Join the AI in Actuarial Science session at the 2018 ASSA convention to be introduced to Deep Learning and hear how cutting edge approaches to actuarial work rely on AI. Some of the examples that will be covered in short term insurance are claims reserving, non-life pricing and telematics (life insurance examples are in the accompanying paper). Free code has been provided on GitHub so that you can experiment with AI techniques for yourself, and build your own deep neural networks. AI will likely be one of the defining technologies of the coming years and here is your chance to get on-board!

Regards,  
The 2018 Convention Organising Committee

Convention Secretariat | African Agenda

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