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## Who is the UCT entrepreneur?

What does an entrepreneur look like? What is an “entrepreneurial mindset”, and how is it evident? There is no one way to be an entrepreneur or do entrepreneurship – just like there is no formula that determines its success. And even “success” is a term worth interrogating. Profit turnover and market dominance for a business doesn’t automatically translate into prosperity. As Solange Rosa and Francois Bonnici discussed earlier, we need new metrics to assess the impact and social good of entrepreneurial activity – to better value it and to give rise to the next generation of social entrepreneurs.

UCT entrepreneurs may be seen to fall into four categories:

- students who develop an entrepreneurial business alongside their study focus while an undergraduate or post-graduate student;
- post-graduate students who choose to enrol at UCT in order to focus intentionally on entrepreneurship: either as part of the GSB at UCT or as part of a programme such as the GENESIS project, a Commerce Faculty Honours course in entrepreneurship;
- former students who, instead of taking on a job with a salary after graduating, develop an entrepreneurial business, directly applying learnings and networks from their study to create a new value chain; and, finally,
- academic and support staff who develop entrepreneurial businesses/ventures in addition to or as a result of being part of the institution of UCT.

Through their experience at UCT, a range of current and past studentpreneurs have been inspired to conceptualise and start a business.

This next section presents these stories and contributions, reflecting the wealth of diversity found in studentpreneurship, as well as some core traits shared by successful studentpreneurs. While some students have excelled at conceptualising an idea and bringing it to bear as a pitch for a competition, others have focused on implementing ideas to meet an immediate social need. One studentpreneur developed a food programme that helped feed a whole community; another created a model for upskilling offenders, providing safe and impactful work experience to help holistically rehabilitate ex-prisoners back into society. Some have quietly assimilated changes in the political and policy landscape and identified a niche to work within.

All the contributors whose stories we explore have learned to operate as part of a team. We see how each has drawn on knowledge and experience beyond themselves, identifying areas in which they need expertise and where to find it. Each has absorbed huge costs in terms of time and effort.

These stories are formulated in different ways – several have a narrative focus, tracing key life experiences that have influenced the studentpreneur’s journey and motivation to pursue entrepreneurship. Other accounts respond to a range of questions about entrepreneurship, asserting a particular voice, capability and vision unique to them. Without exception, the stories provide evidence of positive self-assurance and the ability to reflect and build on experience – to extend learning from the lecture hall or laboratory and apply it in a practical and constructive ways to address challenges.





*The Baxter Theater Centre. Photo by Lerato Maduna*





# Vambo Academy



**Chido Dzinotyiwe**

*Chido is the founder of Vambo Academy, winner of the 2021 Entrepreneurship Development in Higher Education (EDHE) tech start-up category and a finalist of the Global Student Entrepreneur Awards (GSEA) for 2022.*

**Vambo Academy is a portal for teaching African languages and heritage that aims to grow African knowledge and pride in students of any age.**



What I admired most about my late grandmother was her immense wisdom and her ability to conjure a proverb to fit any situation. In our village there is a rock with her given name inscribed pointing at her homestead, and it reads, “*Mbuya Utano Homestead*”, the homestead of the “grandmother of wholesome well-being” – a legacy of blessing that she embodied. A rock is a fitting symbol, given her foundational role as the chief matriarch of our family. Even though my grandmother has passed on, I still carry her wisdom and influence within me. A few weeks before the EDHE national finals I dreamt that she crept behind me as I was punching away on my laptop, working on my startup.

“What is always keeping you in front of that screen, Chido, my granddaughter?” she asked in ChiShona.

“It is my business, Gogo. Come closer so I can show you,” I responded.

I then proceeded to take her through the ChiShona course on the Vambo Academy portal and tell her how it can enable anybody across the world to learn our mother tongue and explore our culture through blog posts and video sessions. She smiled at me with pride and gave me her blessing. Waking up from that dream, I knew that I had to do all it takes to build this business so it could be a bridge for African indigenous heritage and culture.

We registered our business about 18 months after starting our work on the concept. Our day-to-day for the first six months was filled with research on competitors, existing solutions, templates, industry-specific podcasts and drafts. Lots and lots of drafts. We would draw out what we wanted





our platform to look like and refine it or scrap it if any new information caused us to reevaluate our ideas. We were tied to nothing yet entirely committed to *something* – which we were still figuring out. We told our first three clients we were testing things out and hoping to use their feedback to improve our models. This helped us to set expectations and experiment for another six months of working, refining, changing and updating. This process is now embedded in our young company's culture: test, receive feedback, scrap/change/refine and repeat.

### A few lessons

Though taxing to some measure, starting a business is the easy part – running it is where the rubber meets the road. It is hard, but it's also an opportunity to tap into your deepest resources and discover strength you never knew you possessed, which can be an amazing revelation of your power.

But it is extremely important for entrepreneurs to understand what it may take to run a business before starting – it helps to temper unmet expectations and disappointments that may discourage people from pushing through the inevitable speed bumps and roadblocks along the journey. My own journey as a studentpreneur has been full of these moments, and I believe there are a few characteristics particular to being a young entrepreneur in Africa that get overlooked.

Firstly, we are not in Silicon Valley; things work differently here. The majority of funding is granted to validated businesses with a workable/working prototype over ideas. In Africa, there is a greater onus on the founder to prove that they are responsible with funds, and there is a huge focus on impact. You are more likely to win when your business contributes to the SDGs or any impact goal, rather than profit for shareholders.

Secondly, if you don't have access to funding or if you don't want to trade equity for capital, then you will need to put your own money into your business. This then requires you to manage your growth expectations. If you are putting R2,000.00 into your business monthly, you cannot put pressure on yourself to beat the biggest player in

your industry. This doesn't mean that you won't succeed; it just means that your path to the top looks different. It will improve as long as you remain consistent and build a lean enterprise.

Thirdly, the days of detesting your competitors are long gone. Learn to be nice, to make friends and to dwell in generosity of knowledge and opportunities.

The best resource you have – especially when nobody believes in you and your idea yet – are your peers. They are the ones in the trenches with you, or those just a few steps ahead of you – they know how to move forward and are willing to pull you up. Most of the time you won't know what you are doing, and so talking to people helps. You find that you either talk yourself toward a solution or discover that someone else has managed to find it. You may be great and smart and driven and ambitious, but never forget the power of a good network and solid relationships. It will take you further than any money ever could.

Finally, be prepared for the wildest rollercoaster ride of your life. We once went from winning a competition on one day and celebrating with our loved ones to processing our biggest refund the next day and feeling like we had failed. Things can swing wildly from top-of-the-world to digging your way out of a challenge – this is the nature of creating something from nothing and trying to put it out in the world.

The wisdom of starting a business is not that different from the business of being alive. My grandmother would certainly have had a fitting proverb, but essentially: live in the moment, reflect and work on learning a lesson the first time (they get more expensive with time). The best way I have found to handle the turbulence is to try to remain calm and to keep moving even if you are shuffling out of the pits. There is no way to escape the ebbs and flows; we just have to get good at not letting them define us. What really matters is the quality of our life experience.

Stay strong, keep building and keep this in mind (as a fellow EDHE studentpreneur, Tshepiso Malema, shared with us): "We will meet at the top."





# FoodPrint



**Julian Kanjere**

*Julian is a founder at FoodPrint and the winner of the 2021 Schmidt Futures Reimagine Challenge, a recipient of the SAB fund, and was the second-place finisher at UCT's 2020 The Pitch competition.*

**FoodPrint is a low-tech digital food supply chain platform for smallholder farmers in sub-Saharan Africa to digitally participate in food value chains, and directly connect with buyers and other participants.**



With our low-tech WhatsApp chatbot, smallholder farmers can capture their harvest and sales data using blockchain, giving them a credible production record that can unlock access to previously inaccessible markets and services. By anchoring on the blockchain, we obtain a single source of truth that is transparent, traceable and positions smallholder farmers to participate in the digital economy.

The origins of FoodPrint can be traced back to mid-2019 when I was enrolled in the MPhil in Financial Technology (FinTech) degree at UCT. During an ideation session in one of my FinTech classes, we brainstormed use cases for blockchain technology in Africa. One such idea was using blockchain to provide farm-to-fork traceability of fresh produce for smallholder farmers, who are

an especially underserved segment of society. As I am personally driven to use technology to improve society and create economic opportunity for all, this idea resonated with me. Together with a few classmates, we built a proof-of-concept web application in collaboration with the Oranjezicht City Farm Market (OZCF), a farmers' market style weekend-market based in Cape Town's Granger Bay precinct at the V&A Waterfront. It connects independent local farmers and artisanal food producers with conscious consumers and tourists, cultivating better awareness of the people and processes required in production, building toward greater food sovereignty.

Partnering with OZCF provided us a test bed and vital feedback loop: every Thursday and Friday farmers entered their harvest data



into our POC FoodPrint platform, the market recorded when produce handover took place, and on weekends, consumers could scan farmer-produce specific QR codes to reveal the provenance of the produce they would buy.

Following the pilot, I started writing my mini dissertation on achieving traceability and transparency for smallholder farmers, which I duly completed and graduated with distinction.

After submitting my MPhil thesis in August 2020, and armed with findings from the pilot at OZCF, I set out to take FoodPrint beyond the academic setting. I found opportunities to pitch the business, network and participate in food system/ entrepreneurship bootcamps. During this time, FoodPrint was awarded second place at the UCT Pitch Competition in 2020 and was a finalist in the F'SAGRI Innovation Challenge the same year. Picking up from the wins we experienced at the

end of 2020, 2021 started with an announcement that I was one of twenty global winners in the Schmidt Futures Reimagine Challenge for my submission on FoodPrint. The challenge, organised by Schmidt Futures, the philanthropic arm led by Eric Schmidt (former Google CEO), sought submissions of innovations that have the potential to impact communities. This was followed in 2021 by securing grant funding from the Algorand Foundation, a blockchain organisation whose mission is to enable an inclusive, decentralised, and borderless global economy at scale, based on the Algorand blockchain technology. The grant funding we received from this enabled FoodPrint to take the next step of incorporation, growing the team, furthering the development of the platform, continuing the quest to achieve product-market fit.

The entrepreneurship journey is best described as one of ebbs and flows. On one side, we celebrated progress and victories in product development



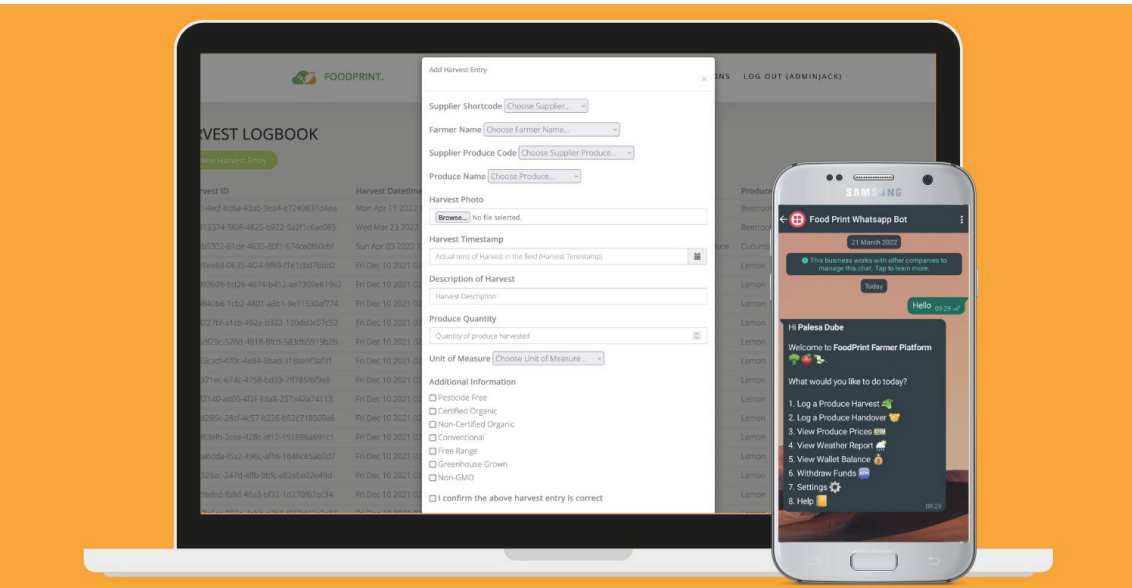
and securing funding. On the other side, we navigated and are still navigating challenges that come with entrepreneurship and building technology with a social impact focus. Some of these challenges include building relationships and trust with the farming communities that we seek to serve, losing key talent within the business, and getting up to speed with governance and regulation (tax and labour laws) and the operational side of running a business. There is no masterclass that prepares one for this, but grit, determination and a can-do attitude are key.

**FoodPrint has come a long way from an idea discussed on a summer afternoon in a UCT lecture room, to where it is today.**

In entrepreneurship, no two days are alike, so one should learn to embrace the process, get comfortable with being uncomfortable and figuring out actions to take on the fly. Be prepared to pitch your business at every opportunity and knock on doors consistently. This creates a serendipity engine that can benefit your business in the most unexpected ways.

Thirdly, seek out a support structure that you can bounce ideas off – this is invaluable. We have found this support in various networks, from UCT channels to wider entrepreneurship circles in Cape Town. Associate Professor Co-Pierre Georg, who heads up the MPhil in FinTech programme in the School of Economics at UCT, has been instrumental in making introductions for us outside of the university walls and in providing general start-up advisory. We have also received support from the team at the UCT GSB Solution Space (they run a venture acceleration programme that we participated in) and UCT Research, Contracts and Innovation team, to mention but a few.

FoodPrint has come a long way from an idea discussed on a summer afternoon in a UCT lecture room, to where it is today. We are still on a journey, which never really ends for a start-up like ours – it just keeps reinventing and disrupting itself to survive. One of the best statements about entrepreneurial journey, and one which I've found to be especially true, comes from Phil Knight, the founder of Nike: "Seek a calling. Even if you don't know what that means, seek it. If you're following your calling, the fatigue will be easier to bear, the disappointments will be fuel, the highs will be like nothing you've ever felt."







A FoodPrint QR Code on display at the Oranjezicht City Farm Market during the pilot.



The FoodPrint team. From left to right, Chaddy Rungwe (software development contractor), Julian Kanjere (FoodPrint founder), Rutendo Chibanda (business operations intern), Daniel Aaron (software developer), Rufaro Chibanda (business analyst intern), Tatenda Muvhu (software development contractor).



## GoShare



### Tshegofatso Masenya

*Tshegofatso is a sixth-year medical student and the founder of GoShare. In 2021, she won the EDHE Student Entrepreneur of the Year Competition and the competition's social impact section.*

**GoShare was Tshegofatso's response to the increasing number of pleas she was seeing on social media platforms by students seeking help to fund their university tuition.**



Stealing time in between her own studies, she designed a crowdfunding platform to help students enrolled in South Africa's public universities and TVET colleges access financial help. With GoShare, no donation is too small, but financial need is also just one aspect of the campaign – the platform lists students' interest and aspirations and the progress they're making, building both transparency and crucial emotional investment in the journey. GoShare is built on the idea that everyone can access education, and anyone can enable it, and this process should be less transactional and far more human.

#### **What does being seen as an entrepreneur mean to you?**

Being seen as an entrepreneur means being amongst those who are interested in pursuing change within their society. Being proactive about the problems that affect me and the people around me and working towards building impactful and sustainable change. It means actively exploring the potential that entrepreneurship could unlock in our country as far as job creation, economic growth, creating a strong sense of community and building a culture that celebrates creative expression in all its forms.



### Where did it start for you?

I don't think I've ever made a conscious decision to become an entrepreneur. I'm a naturally inquisitive person with questions about how the world works and how it can be improved or amended at every turn. So naturally I began asking questions about the education crisis and financial inequity in our country, what distribution of resources among citizens would look like and how it could be facilitated in a dignified and mutually beneficial way. These questions snowballed into what is now GoShare.

**I could walk into the space with an idea I had ruminated over for a long time prior, I could find out whether it was a potentially viable solution and subsequently have access to entrepreneurship education and training available to help me develop the idea.**

### What drew you into the EDHE Competition?

The EDHE competition offers student entrepreneurs numerous opportunities to develop their entrepreneurial capacity while exploring their passion and matching it with lots of hard work, vigour and intention. What this meant for me was that I could walk into the space with an idea I had ruminated over for a long time prior, I could find out whether it was a potentially viable solution and subsequently have access to entrepreneurship education and training available to help me develop the idea.

### How have you built on the EDHE experience?

The experience greatly validated the problem we strongly believe is worth solving and we went on to launch our minimum viable product. Forming a partnership with GradStar, an organisation that

is invested in the upskilling of tertiary students, allowed us to create a funnel that is meant to ensure that students are not only funded but they are adequately prepared for the workplace. GoShare was selected as part of the 2022 UCT GSB Venture Launch Cohort. As a team of students, we realised the value of building on our knowledge to sharpen our execution.

### How has your entrepreneurship journey changed direction since you started?

I'm taking a much more pragmatic approach to entrepreneurship. I'm receptive to taking calculated and balanced risks, provided they're capable of breeding desirable outcomes. I'm more flexible in the delivery of our solution. What we envisioned as a team may not meet users' expectation and we are constantly looking to evolve and ensure that we build a solution that meets a user at their point of need. The wins are glorious and the losses and rejections feel catastrophic, but there's value in both experiences and I'm learning to weave them into my identity as an entrepreneur and a leader.

### What have you learned on your journey?

I've learned a great deal about myself and adaptability. But I am not only agile or driven by an inclination to build a solution, I am also willing to put the work and dedication behind my aspirations. With that said, I have also come to understand that no matter how noble a task, creating a successful, sustainable business can be arduous and demands sacrifice.

### What is your advice to entrepreneurs?

Celebrate the wins, no matter how small; embrace the fact that sometimes the reward is in the process!





# AirStudent



**Ndabenhle Ntshangase**

*Ndabenhle is the founder and CEO of AirStudent, and a finalist in the 2020 EDHE Competition.*

**AirStudent is an innovative group booking platform that enables affordable travel by leveraging students' collective power.**



As a student attending UCT coming from a small town in northern KwaZulu-Natal, the start and end of each term/semester signalled travelling for me. I quickly realised that this would be an expensive exercise, especially since each time I travelled I had to shuttle a semester's worth of possessions with me. On my flights to and from Cape Town, I would notice a number of people from my residence, along with other young people wearing UCT merchandise. This sparked the idea that, if we could pool together as a group, we could probably get preferential deals from airlines for our travel. I knew this was possible because we did it regularly at home. I come from a big family and, whenever we went on holiday, we would book with our cousins to get the best deal possible – I imagined it would be the same with students.

Before I could act on this idea, however, I had to make sure other people were willing to join my group. I created a Google form where people could show interest and asked the guys at UCT JK (Just Kidding Social media platform) to share it on their platform, which students use to keep in touch with university events and culture. It wasn't long before I had the names of 600 people keen for group travel to and from UCT, information which I used to approach Comair.

The real premise behind AirStudent is leveraging a community to get better deals and benefits. We have a large number of students who have to travel between home and university, and they travel around the same times because of similar academic calendars. Utilising this information efficiently was



in everyone's interest. This business model seemed to make the most sense, as it had the potential to maximise value for everyone within our ecosystem.

### Getting off the ground

Being a student entrepreneur is like rock climbing with a harness. You can start learning how to run a business and how to create processes for scale, while having the luxury of not being full time. You get access to a large number of like-minded individuals who are also eager to assist. And, as we've seen with the wave of entrepreneurial programmes at UCT like the EDHE Intervarsity and The Pitch Competition, you get institutional support for your ideas. EDHE forced us to lay out our idea and clarify anything that was vague – if you can tell an idea to someone in a way they can fully understand, then you can be sure that you understand your business as well. Pitching competitions were important for stress-testing our concepts during the early phases of tuning our business model.

While being a student entrepreneur is like rock climbing *with* a harness, you will eventually need to go beyond this and be clear about your strengths. A key area to take charge of is time management. You have to be disciplined with what you spend your time doing and, if your business matters enough to you, you have to be willing to cut down on other things in order to make time for it.

This journey comes with a lot of learning and struggles to overcome. When I first started, I didn't grasp that there was no right way of going about doing things – I could literally go about solving AirStudent problems in multiple ways and the only limit was my own creativity. I thought I had to be perfect prior to taking a new step, which slowed our growth significantly. I overcame this through the help of a coach, Amy Underwood, and by talking through ideas with my co-founder Lwanda Shabalala.

### New flight paths

In 2021 we finished our technical minimum viability product and we now have a solution that students can use and make the most of. We've also started doing travel for corporates and have built innovative corporate travel tech where we average over R70 000 through our system weekly. We plan to launch new service offerings that will continue to improve the student life experience, such as a ride share service whereby students with cars can drive our groups between res and the airport. We have raised over R2,5 million over the past 12 months, and currently have a team of four, which we will continue to grow to reach our goals for this year.

**Being a student entrepreneur is like rock climbing with a harness. You are able to start learning how to run a business and how to create processes for scale, while having the luxury of not being full time.**

The vision has changed drastically from just a group booking platform for students to a full-on ecosystem that leverages everyone within it to create the best possible opportunities for all. At the moment we are focusing on doing this through travel, but we will continue to grow our service offerings as we grow our communities.

As we plan for the future of AirStudent and the other models we're developing, we continue to ask ourselves the same questions we did when we prepared for our pitching competitions early on. We may not be harnessed in the same way, but our foundational learnings are there, and these are the basic tools we need to really soar.



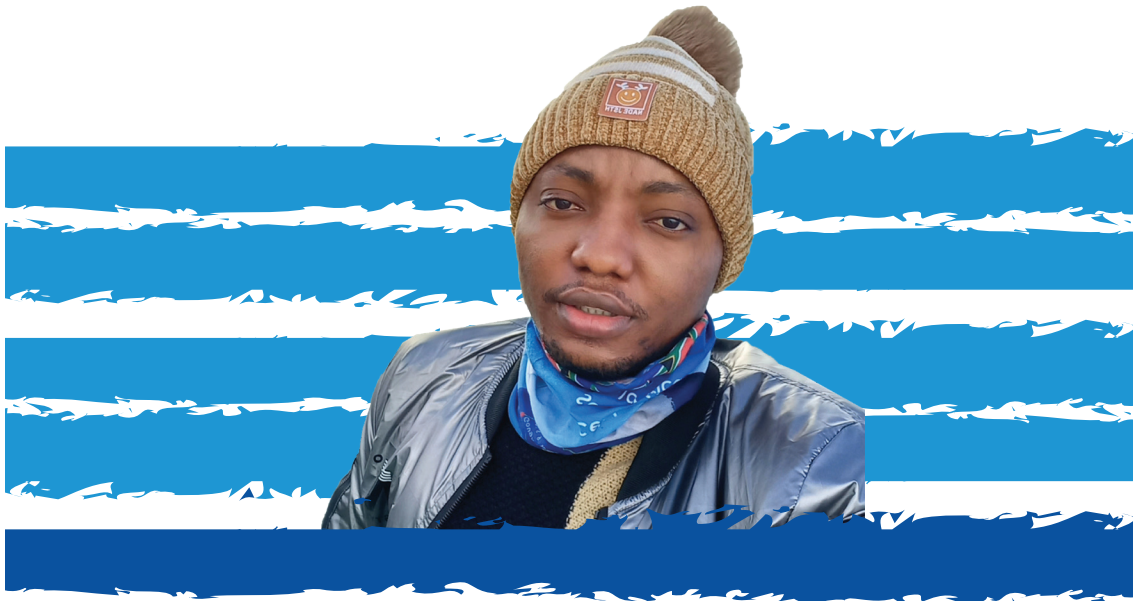
# Relief Integrated Aquaculture (RIA) Farm



**Adetola Adebowale**

*Adetola is a Mastercard Foundation Scholar and recipient of the Scholars Entrepreneurship Fund.*

RIA Farm is a modern-day integrated farm established for the production of catfish and food crops in Ogun state, south-western Nigeria. This farm operates by recycling nutrient-rich wastewater from fish production for use in crop production, thereby reducing production cost, water and ocean pollution, improving soil fertility, producing hygienic crops and promoting food security in Nigeria.



## **What does being seen as an entrepreneur mean to you?**

As a Nigerian, with awareness of my country's high unemployment rate, entrepreneurship has always been the only solution I could think of to escape poverty. Developing unique ideas and turning them into a business or profit-making plan would not only bring *me* income but would also put food on the table for my employees, as well as contributing to the protein needs of the country. Being an entrepreneur means being

resourceful, innovative, and self-motivated – the sensation that you can contribute positively to solving people's problems keeps one going.

## **Where did it start for you?**

My entrepreneurial adventure began in my third year of university, when I did not have sufficient finances to sustain myself in school. I was lacking in the necessities that every student should have, and it was seriously harming my mental health, academics, and self-esteem. I had





a friend who was also financially challenged, so we brainstormed ways to make ends meet without relying on others. After much study and deliberation, we decided to sell smoked fish. Smoked fish was in high demand among many stakeholders in our school setting, so we decided to purchase them on credit from a fish processing centre, resell them, then pay back the cost price and live off the profits. We were able to do so for almost two years till I graduated. Following college, I became aware of the growing demand for fish in my country due to the decline in wild fish harvest. This demand forces the government to spend large sums of money on fish importation annually; this created the opportunity and necessity for fish production in the country. So, with the little money I had, I began catfish producing on a small scale for people in my community and beyond.

#### **How have you built on the Scholars Entrepreneurship Fund (SEF) experience?**

I learned a lot from my SEF exposure, which included not only the funding but also an entrepreneurial mentor who has been working with me and educating me in making thoughtful and purposeful decisions. I have become a better entrepreneur than I was before I participated in the SEF.

#### **What other competitions/opportunities were valuable learning experiences?**

The Jim Leech Mastercard Foundation Entrepreneurship programme has also provided me with great opportunity. This programme was developed in collaboration with Queen State University to teach entrepreneurship courses to students and to build in the opportunity to provide them with financial assistance.

#### **What were the challenges you faced?**

I faced many challenges while starting up the business, ranging from fingerlings production abnormalities; fund inaccessibility; marketing and security, but, with dedicated and consistent efforts I made headway. Sometimes the necessity of instantaneous decisions impacted

negatively on the business. Support structures for entrepreneurs in Nigeria are not easy to come by, so it is hard for business enterprise to scale up. Currently, I am facing a number of challenges on the business front, primarily owing to my distance from the business location, and this is impacting the business growth. My responsibilities include overseeing the business communication, production, marketing, and accounting departments. These responsibilities compete with my academic commitments, but I am doing my best to fulfil them.

#### **What were the landmarks on your journey?**

Notable landmarks along my journey include being awarded the Scholars Entrepreneurship Fund and starting the fish production cycle with minimal funding and infrastructure.

#### **How has your entrepreneurship journey changed direction since you started?**

It has really scaled up now. I have been able to expand my production capacity from 2019, with profit made from each production cycle, scholarship allowances and through the SEF. Catfish production has increased by 70% since I left Nigeria in early 2021 to start my master's programme at UCT, South Africa. I am also working on expanding the production of RIA Farm to produce vegetative crops such as rice, tomato, cowpea, maize, sorghum and millet, thus creating more jobs and enhancing food security in Nigeria.

#### **How have you shared what you learned with others?**

I am a member of Young Entrepreneurs of Nigeria (YEN). This network organises programmes, workshops and seminars for up-and-coming enthusiastic entrepreneurs. There, I share entrepreneurial tips and encourage others to get started building business solutions to address Nigerian-specific challenges.

# Chewi



## Vuthlarhi Shirindza

*Vuthlarhi is co-founder and CEO of Chewi, runner-up of the EDHE 2021 Social Impact start-up section. She is a Talloires Network Next Generation Leader, a Klaus-Jürgen Bathe Scholar, and Student Representative of Rural Doctors Association of South Africa (RuDASA).*

**Chewi is a pet telehealth and e-commerce platform that serves as a one-stop-shop for pets' needs.**



The platform offers all pet-related services, with the primary offering being virtual consultations together with pet-sitting and grooming, and product purchase such as food and toys. The aim is to increase pet health education and services in peri-urban and rural areas where they have been lacking. The vision is for pet owners to access holistic pet health in a more efficient, digitised and safe way from the comfort of their homes. Virtual veterinary consultations are provided on the website, and pet-sitting services will follow soon.

### **What does being seen as an entrepreneur mean to you?**

Being seen as an entrepreneur means being validated for all the hard work, the hours with no one watching – like the world has suddenly

woken up to what I've been brewing in the background. It's reassuring – it's empowering!

### **Where did it start for you?**

It actually began in my second year of university when I started a waffle-making business with my friends: Wafflemania. It took off like a house on fire and I probably learned more about business in six months than some people do studying it for six years. Lo and behold, that business-baby has been laid to rest, but it was surely a valuable experience. Who knows? It might be resurrected in the future, but for now we'll ponder on the good times we had with it. After pressing waffles, I embarked on a completely different venture that involved using drone technology to deliver chronic medication in rural areas.

### What drew you into the EDHE Competition?

My brother won first place in the 2019 EDHE “New Idea” category. I witnessed first-hand how valuable the experience was for him and his business, and how it optimally positioned him for success. This was an inevitable step for me and I entered the 2020 EDHE competition with the drone business idea. The experience was short-lived, as I only made it through to the UCT internal round and no further, but the “failure” provided an opportunity to upskill for the following year, leading to my re-entry into the 2021 EDHE competition with a new idea, team and confidence the next time around.

### How have you built on the EDHE experience?

As Chewi was moving from one round to the next in the EDHE competition, with each pitch we had the opportunity to improve. This covert pressure forced us to hasten our journey because we felt (and knew) that more and better was expected of us each time we stood in front of a panel of judges. The competition was a validation tool for how good the business idea was.

### What were the challenges you faced?

Access to the veterinary market as a non-veterinarian and pet owner has been one of the biggest challenges. This is because we first had to learn and understand the market from the vet and pet owner’s points of view, two perspectives that are particularly novel especially if you hold neither of them. It’s been a constant journey of learning and has taught us that if you spend time understanding the market and its systems, then you save time in the future by preventing unnecessary mishaps that come from rushing the process. The beauty of this challenge is that it has led to wonderful partnerships with various people in the industry that have been instrumental to our success.

### What helped get you through the tough times?

My solid support system, strong faith in God and accountability to my dreams have been anchors during tough times.

### What were the landmarks in your journey?

Winning third place at the EDHE competition was a significant landmark in our journey. We entered the competition in the “New Idea” category and then switched to “Social Impact” mid-way; it was doubtful that we stood a chance against the fierce competition in such a specific category. I’ll never forget something our mentor said when we alerted him of the news with only three weeks before the finals, “You can spend your time fighting or you can spend your time winning”. I believe we chose the latter.

### How has your entrepreneurship journey changed direction since you started?

Chewi has been an ever evolving and expanding business. Initially Chewi was meant to provide virtual consultations and an e-commerce platform only. However, the placement in the EDHE social category required that we incorporate a social impact aspect of the business. Today, we are proud to say that the other leg of Chewi offers mobile clinic veterinary services and pet responsibility training workshops in peri-urban and rural townships, where they have been lacking.

### What have you learned on your journey?

It is crucial for the success of your business that you constantly be learning, and although it may seem faster to go alone, a sustainable long-term goal requires a team. I have learned the importance of investing in yourself, through upskilling and reskilling.

### What is your advice to entrepreneurs?

- Believe in yourself: wholeheartedly, unequivocally, unapologetically.
- Just start.
- Grow: small steps in the right direction every day will lead you to your desired destination.





# Pantsula with a Purpose



## Moeketsi Mashibini

*Moeketsi is the founder of Pantsula with a Purpose, and a finalist in the 2020 EDHE Competition.*

*He received the Allan Gray Orbis Foundation Social Impact Award in both 2020 and 2021.*

**Pantsula with a Purpose aims to bridge the gap in the education space through the provision of holistic development workshops, access to resources and relatable inspiration. We work closely with marginalised schools in Langa township and aim to expand our footprint.**



Entrepreneurship is so broad that everyone has their own stories and meaning attached to it. For me, it means having the ability to realise there's a problem in society, taking deliberate steps to define the challenge, and to formulate a solution that benefits a variety of stakeholders. It's having the courage to make a leap into the unknown and to tackle uncertainties.

My entrepreneurship journey originates from my childhood and upbringing. I had been blessed enough to grow up in a township where entrepreneurship was personified by

all members of society. From the classmate that sold pens and sweets in class, the senior phase learner that ran afternoon classes for a small fee to the old lady selling *amagwinya* every morning. To me it was less about the enterprise carried out by the above-mentioned individuals, and more about making ends meet through hustling. As a result of this, I followed suit with the hustler mentality, selling things.

My actual entrepreneurial journey started when I joined an organisation called Chaeli Campaign in my Grade 7 year. This organisation aims to



change society's perception about children with disabilities. The challenges we were presented with and the projects we undertook stretched me further than I thought possible; this sparked my interest in social issues. That is where my personal inspiration is rooted.

Pantsula with a Purpose emerged with a series of collaborative engagements between three passionate individuals who came from different walks of life but shared the same desire to improve the South African education system. The South African Institute of Chartered Accountants (SAICA) held a competition that required students to propose a possible solution to any of the Sustainable Development Goals. Disgruntled by our observations and the reality of our education system, this was the perfect opportunity for us to do something about it. Samkelisiwe Magudulela, Sitholile Sithole and I decided to enter the competition and spent weeks formulating our solution.

**When we take a step back and look at where we are with Pantsula with a Purpose, although we still have a long way to go, it's good to celebrate how far we've come from our initial ideation.**

Our attempt was unsuccessful – we didn't make it to the finals – but our passion and fire was ignited, and we decided that irrespective of the outcome of the competition we would make the vision come to fruition. We started Pantsula with a Purpose and were operating for three months when we realised that to grow we needed to find external funding – it was not sustainable for us to keep on using our personal funds.

We decided to look for a competition that could finance our next phase. So, the three of us founders split our human capital among different competitions, and I entered the EDHE. I had been a keen follower of EDHE since I met the EDHE 2019 Student of the Year, Mvelo Hlophe, founder

of Zaio. I had heard how the competition uplifted their start-up. This motivated me and gave me an extra edge to participate fully in hope of achieving the same feat for our organisation.

I entered the competition on behalf of Pantsula with a Purpose and that was the beginning of my EDHE journey. Although we finished in the top three in the finals, which meant we missed out on the cash prize, the benefits extended beyond our placement. The exposure we got set us up for establishing partnerships and affiliations. Being backed by the UCT EDHE team, Career Services and even the VC gave us a stamp of credibility. It was instrumental in helping us merge strategic partnerships for our beneficiaries.

Preparing for the interviews at each of the stages nudged us to interrogate our vision and mission at each point and assess how our steps were drawing us closer to that. It helped us conceptualise our business model in a more clearly defined manner. The questions that were asked by the judges at each stage of the competition propelled us to think about aspects of the organisation that otherwise would have been left unattended. It helped us establish the structure of our organisation.

Not winning the cash prize, however, meant that we would still have difficulties in meeting our mandate and realising our vision. It was a challenge on top of other challenges that are simply embedded in the journey of entrepreneurship. On a personal level, I've found that one of the biggest obstacles is time. Being a student means that this journey juggles conflicting responsibilities, which must be managed in a balanced way. Critical trade-offs are part of decision-making and need to be evaluated with care.

When we take a step back and look at where we are with Pantsula with a Purpose, although we still have a long way to go, it's good to celebrate how far we've come from our initial ideation. As a recognised UCT society, we have an exciting journey ahead as we build our presence at UCT and in the community beyond it.



# Politically Aweh



**Stephen Horn**

*Stephen Horn is a creative producer and climate activist from Cape Town, and founder of Politically Aweh. He is included among the 2022 Mail and Guardian Top 200 Young South Africans.*

**Politically Aweh is an award-winning satirical news show that uses humour to help young South Africans 'get aweh' (ie raise their awareness) about important issues.**



Creating a media start-up in an era that has been defined by shrinking newsrooms and the collapse of advertising revenue probably seems like a bad idea. Creating one that explains the news with an irreverent mix of memes, experts and satire so biting that government declares it “fake news” – well that would just be madness, right?

But that's precisely what I set out to do one night in July 2017 when I was struck by the idea that the dark factional politics of the twilight period of state capture presided over by Jacob Zuma (or should I say the Guptas?) felt strongly reminiscent of the political thriller series, *House of Cards*. At the time, pressure on Parliament to act against Zuma was at a crescendo, but few ANC MPs were willing to support a motion of no confidence to remove the president from power. One such MP was struggle veteran Makhosi

Khoza, who received numerous death threats for her failure to toe the party line. South Africa's fledgling democracy was on a knife edge.

This formed the basis of the first ever episode of *Politically Aweh*, and it's how I found myself doing “guerrilla filmmaking” with a small crew outside Parliament in the dead of night. We were filming the opening scene of the show involving a Makhosi Khoza lookalike receiving death threats on her phone. With no filming permits and no budget, it was the beginning of a DIY hustle phase that characterises the beginning of almost any start-up's journey, which is virtually impossible without a strong support network.

Now in its fifth year, *Politically Aweh* has established itself as South Africa's leading satirical news show, with thousands of followers, multiple awards and



coverage in local and international media. Our team of comics and media professionals has created content that is used in schools, universities and sometimes even government workshops. But perhaps most rewarding of all, our Xhosa language climate change explainer video (translated by a master's student at UCT's African Climate & Development Initiative) has been shown to climate-change affected communities in rural Eastern Cape.

When I think back to how that first episode came to be, I remember years spent thinking "this would be a good idea, why is no one else doing this?" before finally taking the first step and knocking out a script in a fit of inspiration late one evening. At the time I was paying bills as a freelance video editor – I have to credit one client who had me working on videos for a branded content campaign that was all about encouraging creatives to just *start something*. There was something so powerful in that simple exhortation, but the older I got the more difficult it seemed. For one, the fear of failure and the perception that I needed to start "adulting" properly grew intensely. On the other hand, the proliferation of the internet and the vast amount of content made it more challenging to wrest my attention away from *consuming* other people's content to *creating* my own.

The five years since then have not been without serious challenges, doubts and setbacks. If you are naturally inclined to create things, as I had been as a child and teenager, then leaving the safety of the home environment and having to make the numbers work can be incredibly daunting. I seemed to be ploughing money and time into a crazy idea while my peers were saving for retirement and working their way up the corporate ladder.

I sometimes felt like we weren't getting the views we deserved for the quality of work we were putting out, failing to realise that the numbers

on some of our videos were the envy of some of the country's biggest media houses. But there was a nagging voice in the back of my mind that this was what I was supposed to do, and if I just kept following my gut and creating high-quality content, somehow things would fall into place.

Eventually, they did. The show attracted attention from other talented individuals who share my passion for satire, including some of the country's top comedy talent. We secured funding over the years from multiple foundations and recently won the Best Online Content Award at the 2022 South African Film and Television Awards. Ultimately, we hope to build a media platform that engages and informs South Africans and positively impacts our democracy.

As I think back over my journey with *Politically Aweh*, the moments that really stand out are the magical and hysterically funny writers' rooms and working with talented presenters and crew on set. Our studio specials, shot with live audiences at UCT TV studio and supported by the Centre for Film and Media Studies, were also highlights that demonstrate the power of ongoing collaboration with one's alma mater and the value that institutional support can provide.

I've come to learn several things over these past few years, including to balance perfectionism with getting things done; to navigate the abundance of advice and use my gut to know which of it to discard; the importance of listening carefully and asking the right questions; to look after my health and relationships, and not to sacrifice these for my career goals; and finally, explaining things and sharing knowledge, though it takes time, is an investment that will pay off in the long run. And, of course, to always approach the struggles with a sense of humour! This makes the long journey possible.







# Kude



**Eugene Fotso Simo**

*Eugene is a water and wastewater treatment engineer with an entrepreneurial mindset. He is a recipient of both the Mastercard Foundation Scholarship and the Scholar's Entrepreneurship Fund.*

**Kude is a mobile app for the mini-bus taxi market. The app provides users with information about fares, routes, stops and tips on using taxis safely. It also gives users information related to their chosen route, such as position of taxi stops, enabling users to plan their next taxi trip better.**



Being an entrepreneur, or rather having the mindset required to become an entrepreneur, can be hard for many, especially given social expectations in many communities to complete education and find stable employment to support your family. Thanks to the multiple communication channels, advances in technology, and relative ease of accessing funds, these societal expectations are gradually losing traction, and jumping into entrepreneurship seems a little less daunting than times before. But it's still a leap.

To me, being seen as an entrepreneur means having self-confidence, being deliberate, having

a clear impactful vision, being willing to get up whenever you fall, and having confidence in the product/service you want to offer.

Throughout secondary school, I had several ideas for owning my own businesses – from opening arcade rooms in my neighborhood to linking sellers and buyers of specific products for a fee. I was never proactive enough to make those dreams come to fruition. School was my main focus, and I was stuck in the mindset that I should make money working for a company after completing university. And that is exactly what happened. After completing my high school studies in Cameroon, I embarked on a new journey in higher



education in South Africa. I completed a BSc in Civil Engineering in 2017, immediately followed by an MSc in Water Quality Engineering at UCT.

To complete my postgraduate degree I needed funding, and I was fortunate to be chosen as a Mastercard Scholar for the Mastercard Foundation Scholarship Program (MCFSP). During these two years, I was part of a diverse cohort of scholars from all over Africa. The combination of such a diverse cohort and the multitude of workshops organised by the foundation created a shift in my entrepreneurship mindset, moving it from reactive to proactive. Environment is crucial.

As I was completing my postgraduate studies, MCFSP was piloting an initiative to financially assist their scholars with viable business ideas: the Scholars Entrepreneurship Fund (SEF). I was curious. After seeing the projects my peers presented in the pilot phase of SEF, I was inspired and decided to apply at the next opening.

### **“Jump in. You will sort out the details as you go through your journey.”**

My entrepreneurship journey officially started when myself and Siso Ngqolosi, a friend, and now co-founder, were awarded the SEF for the development of an app that we hope will revolutionise access to the informal transport system in South Africa. The idea was sparked during a lunchtime conversation that turned serious.

The SEF experience helped us craft a solid business plan for Kude and provided us with a mentor to guide us in the early stages. This was of great help. Following that, we connected with another mentor in the start-up scene who continues to support us when we have roadblocks and need to change perspectives. We also connected with researchers who have undertaken studies related to the service we want to provide and whose expertise is valuable.

The main challenges we have faced, and still face, revolve around the collection and synthesis of data that will be fed into one of the databases we are working on. It is a technical challenge, which could easily have discouraged us, but we continue to work on finding simple and innovative ways to reach our goals.

Two things helped in going through tough times: confidence in our idea, and the people around us. There are numerous experienced entrepreneurs willing to help those who are relatively new in the space. This is something I was unaware of before, but I now realise the value of sharing and brainstorming ideas with others who have travelled a similar road.

A few things I learned in my entrepreneurship journey:

- There are numerous people to help and guide you; all you need to do is ask.
- Working on your own project is satisfying but requires a lot of effort.
- Simply because you have obtained some funding does not mean your project is bound to work.
- Your initial idea will change considerably; be comfortable with that and think flexibly.

If you are an aspiring entrepreneur reading this, I have three pieces of advice for you:

- Prepare yourself mentally to work long hours and to be challenged in unexpected ways.
- Jump in. You will sort out the details as you go through your journey.
- Ask help whenever necessary. There are extremely useful platforms such as LinkedIn or UCT Alumni Connect that you can use to your advantage.

I am still growing in this journey. I am also currently working on another project, [www.thegrowthmarathon.com](http://www.thegrowthmarathon.com), to help myself and others gather and share knowledge on how to grow and develop throughout life – my way of sharing what I learn in life with others. I aim to leave a positive mark on the African continent by uplifting youth and improving service delivery in different industries.



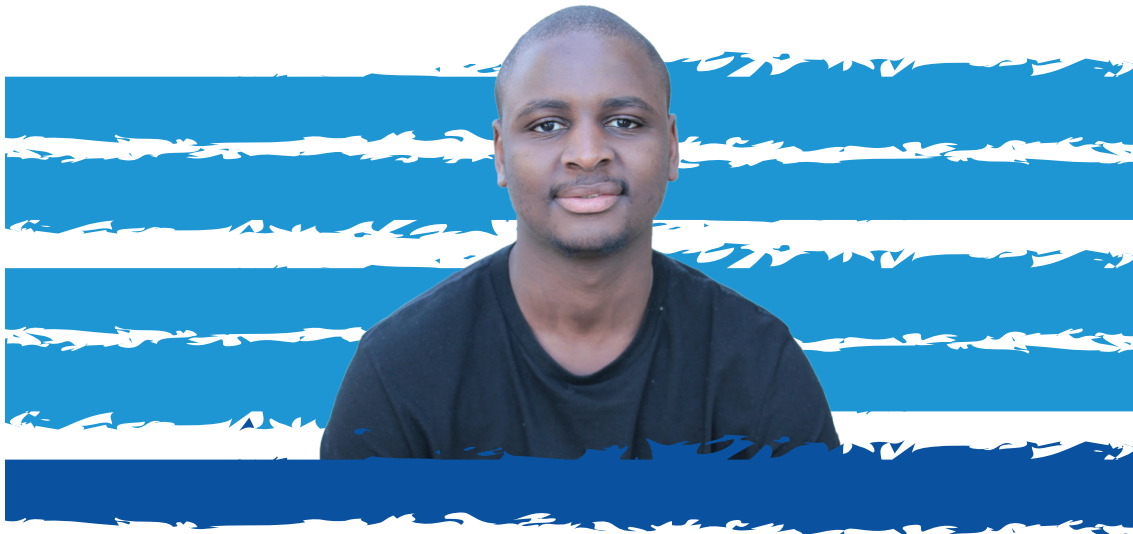
**Zaio**

**zaio**

**Mvelo Hlophe**

*Mvelo is the winner of the inaugural 2019 EDHE National Finals Entrepreneur of the Year and winner of the EDHE 2019 tech start-up category.*

**Problem-solving has always been a natural part of my life. Spotting challenges and coming up with solutions. I found this to be rather fun. It was not until university, however, that I was exposed to larger challenges: real challenges that were multiplied hundreds and thousands of times over around the world. Because of this, my interests grew exponentially. I read up on different industries, ran mini simulations and at times found myself chatting to friends at residence until 3 am about implementing solutions on campus and how we would scale them. When solutions seemed viable, we'd start building. We failed many times and learned often.**



**Fertile ground**

Those moments were the best teachers. Being able to share viewpoints from different backgrounds, cultures and fields of study is what I cherish most about my UCT experience. Not to mention getting free consultation from many experts in their respective fields, and ad hoc advice from my lecturers. UCT really was a fertile ground for validating my assumptions in my many ventures. The good work done by Nadia Waggie in the Careers Office and the staff over at the GSB made a career in entrepreneurship that much easier.

The university has invested a great deal of resources into ensuring that the campus is a good environment for producing successful entrepreneurs. Research has gone into how to do this well and I can attest that the results are being implemented at the highest level. More often than not, it takes speaking to the right people and exposing yourself to the right spaces to take full advantage of what is on offer. And there are plenty of resources to help you make a start and to flourish – from the networking opportunities within societies, to the workshops and accelerator hosted by the Solution Space at the GSB, to all the



pitching competitions, including The Pitch hosted by the VC and the ARC. All these opportunities prepare you for the main intervarsity student entrepreneurship event hosted by EDHE.

It's no surprise that UCT entrepreneurs have been the most successful cohort at the EDHE National Student Entrepreneurship Pitching Competition. Everything I was exposed to on campus and in the wider Cape Town ecosystem prepared me well for the EDHE competition in 2019, which I won. The experience was fantastic – it elevated my venture and created the space to establish myself as part of this vibrant community.

**“Where you know that there is no blueprint, you are in full control and you need to be intentional about it all.”**

#### From planning to prospering

In reflecting on how far Zaio has come – the clients we have worked with, the changes in business models we have gone through,

surviving COVID, it's surreal to realise how much all the effort we have put into building something great has paid off for us. The team is fully self-sufficient, with an office in the richest square mile in Africa – a long way from my dorm room in Liesbeeck Gardens.

The hours put in are well worth it. Leveraging what you have at your disposal to keep moving forward is crucial. Building a thriving support system around you is the foundation of it all. At the end of it all, no one reaps the benefits of entrepreneurship more than the entrepreneurs involved in the business.

I do not believe my personal development would have accelerated the way it did had I not decided to choose this path for myself. I've learned many things throughout my journey. Through difficult experiences where my character was truly tested and more enjoyable moments where I felt on top of the world. Equally, over the years, these have shaped me into the entrepreneur I am today. I believe in learning, unlearning and learning again. To evolve as your business evolves. Being teachable is the best way to do that.



*Back: Mvelo Hlophe, Asif Hassam, Mhlali Xozwa, Ntuthuko Mpaku, Thando Hlongwane. Front: Akhil Boddu, Harjot Singh*





## Kwela Brews



**Reitumetse Kholumo**

*Reitumetse is the founder of Kwela Brews and a recipient of the Jim Leech Mastercard Fellowship on Entrepreneurship; she is winner of UCT Leopard's Lair 2021 Social Innovation Ideation Prize and Top 5 winner in the Dunin-Deshpande Summer Pitch Competition 2022.*

**Kwela Brews is a for-profit social enterprise that aims to support homebrewers of traditional African beer to produce the customarily nutritious beverage safely, efficiently and profitably. They do this by offering quality control and manufacturing support to the homebrewers they use as contract manufacturers, and by getting their brews to new customers at restaurants, events and local markets.**



I remember feeling uncertain about where my chemical engineering studies would take me. But as I became more interested in bioprocess engineering (specifically food, beverages and biopharmaceuticals) and more appreciative of indigenous knowledge, I fell in love with traditional African beer and what it represents. As a jazz lover, I would often fantasise about having a restaurant/bar (read: shebeen) where people would enjoy African jazz (Marabi, Kwela, etc) and indigenous African brews. Then one day I walked into the campus bookstore and saw *Call Me Woman*, printed with the graceful face of its author Mme. Ellen

Kuzwayo on its cover, and impulsively bought it. The autobiography of the late struggle stalwart describes not only her own story, but the history of the country through her unique lens as an African woman and social worker. In the second chapter, Kuzwayo writes about the women who moved from the rural areas to the cities in search of economic promise, but who struggled to find employment. She writes:

I was inspired by these women and realised that my maternal grandmother and my paternal-maternal great grandmother were also these women.



At UCT, I had the opportunity to join Engineers Without Borders (UCT student chapter) and take both a humanities course and a foundation course in human-centered design. These influences allowed me to think beyond just becoming a good brewer, and more about how I could use my skills to improve the experiences of women like my grandmother.

Traditional African beer is intricately intertwined with African culture and is primarily brewed by women. As late as the 1980s, domestic-scale brewing of traditional beer was the single greatest source of employment for women in some African countries. The beverage is naturally nutritious as it is high in B-vitamins and it contains good bacteria. However, the brewing process conditions are typically hygienically poor, and some dangerous variations that are easier to brew have become popular. The main intervention to steer people away from these toxic versions has been the production and sale of low-cost beers. But as the market for homebrews continues to exist and grow, government recently passed legislation that aims to eradicate dangerous homebrews by restricting what ingredients can be used in the brewing process.

As a chemical engineering student, I came up with an idea that would engage homebrewers and enable them to produce the traditionally wholesome beverage efficiently, safely, and according to the legal guidelines. This was the beginning of Kwela Brews – a company that

would supply homebrewers with low-cost brewing machines and ingredients for their recipe. I had the opportunity to pitch this idea at UCT Leopard's Lair in October 2021, winning the Social Innovation Ideation prize sponsored by the Bertha Institute of Social Innovation and Entrepreneurship and SAB Foundation. I am currently using these funds to test critical assumptions that will better shape the product-solution match.

As a first-time founder, I have felt overwhelmed by the idea of starting a business. But as a recipient of the Jim Leech Mastercard Foundation Fellowship on Entrepreneurship for African Students, I have had access to valuable support, including the opportunity to successfully pitch for funding at the Dunin-Deshpande Summer Pitch Competition, enabling further testing of the product-market fit.

As a person living with fibromyalgia syndrome, having the personal support of an occupational therapist on this journey with me – helping me set realistic goals and offering help where needed – has been very beneficial. The entrepreneurial journey is exciting and daunting and requires both physical and mental resilience.

My advice to new entrepreneurs is to care about your potential users and learn as much as you can about their experiences and their values. In time, you will learn to welcome uncertainty and remain curious while allowing the journey to teach you both business and life lessons – this is a rich experience, so drink deep.





# Amnova Tech



## Denislav Marinov

*Denislav is an honours graduate in Materials Science, the founder of Amnova Tech and winner of the tech business category at the inaugural EDHE Intervarsity competition in 2019.*

**Amnova is a young production technology start-up at the forefront of developing sustainable additive manufacturing technologies and industrial-grade hybrid 3D printing systems. Their technologies are used for a variety of rapid prototyping, batch production and large format manufacturing services that find applications in the mining, water treatment, telecom, medical, automotive, aerospace, construction and production industries. Amnova aims to localise manufacturing, empowering Africa to become an independent global manufacturer.**



The truth is, I never explicitly pursued entrepreneurship as a career. It emerged from the absence of an ecosystem around my passion for science and technology, in particular 3D printing. I've always been obsessed with technological advancements and scientific breakthroughs. During my high school years, 3D printing was becoming more accessible and popular around the world. As soon as I learned about this technology that could quite literally bring your ideas to life right before your eyes, I was hooked. Here was a universal technology that could produce affordable prosthetics, rocket engine parts, art and even housing. I was enthralled by the endless applications and possibilities.

But when I looked around at the 3D printing ecosystem in South Africa, it was still very much in its infancy. There were some niche hobbyist groups and a handful of companies that operated in the space, but there was no real appreciation and understanding of the technology amongst the general population. It was mysterious and inaccessible to most. It was not a particularly conducive environment for a keen high schooler to learn more about the space. There was a clear need for someone to build a supportive ecosystem for 3D printing that would enable students, individuals, SMMEs and established companies in South Africa, and more widely in Africa, to explore and utilise this technology.



Innovative local technologies can help us capitalise on Africa's wealth of resources and workforce. 3D printing can be a useful tool to leverage toward this end, though few seemed to recognise its potential – so I decided to give it a try. It has been eight years since I started to apply myself to make 3D useful and accessible to South African and African markets and there is still much to be achieved.

My forays in the 3D printing space culminated in my current business, *Amnova Tech*. Our goal being to make 3D printing and manufacturing services accessible to all. This passion for technology and a strong desire to change unequal power relations regarding manufacturing and innovation has motivated me into the EDHE finals, and beyond. However, none of this was achieved in isolation. Though the 3D printing ecosystem was not yet in existence, a supportive entrepreneurial eco-system was.

**“Entrepreneurship is the activity of sustainably creating communal value.”**

#### The university laboratory

I had begun offering my freelance 3D printing services in high school, but things really took off at university. The university space is one of the most conducive environments to trial ideas. You have access to an expansive group of individuals and diverse communities mirroring the broader South African and global landscape. It's the perfect space to test, to get direct feedback, to iterate, to pivot if needs be, and to test again. This is a protective bubble where concepts can be explored and tried, and where prototypes can be implemented prior to entering the broader market. In addition, you are surrounded by curious, intelligent, enthusiastic and capable individuals who can become invaluable members of your team.

I received support from the UCT Careers Service in my preparations for the EDHE competition. This came in the form of training sessions and workshops, networking opportunities and direct pitch and presentation preparation by skilled and experienced individuals, such as Alison Gwynne-Evans of Professional Communication Studies in the Engineering and Built Environment Faculty. I was also fortunate enough to be an Allan Gray Orbis Foundation candidate fellow as well as a Klaus-Jurgen Bathe Leadership Programme recipient, both initiatives playing crucial roles in developing me as a high-impact entrepreneur and an ethical leader. All these opportunities exist specifically for the student entrepreneur. Even informally, support structures exist within peer groups, departments and in contact with industry professionals. Of course, it is up to the student to act and make use of these opportunities and to cultivate a self-driven mindset.

#### Entrepreneurship: Personal growth for communal good

In observing and practicing entrepreneurship for a number of years – witnessing its many expressions and tools at its disposal – my own ideas about what entrepreneurship is and what it means have necessarily shifted. As entrepreneurship is an inherently dynamic practice, evolving to meet the needs of changing contexts, no single definition will ever be adequate for all of time. One of the least tantalising comes from the Oxford English Dictionary: “the activity of setting up a business or businesses, taking on financial risks in the hope of profit”: undeniably bland, and yet, not entirely unhelpful. Its woeful lack helped me clarify what I find most essential about entrepreneurial activity: the activity of sustainably creating communal value. In other words, to create net positive value that improves and enriches the lives of your stakeholders through sustainable internal and externally informed practices.





# Achiever

## Karabo Thinane

*Karabo is the founder of Achiever, a regional finalist in the 2019 EDHE Competition, and a third-place finisher in the Allan Gray Entrepreneurship Challenge.*

**Achiever is a platform that uses a smart rewards system to help students develop better study habits and improve their academic performance. It also helps link students struggling to make ends meet with relevant bursaries.**



### Where did entrepreneurship start for you?

My upbringing was supported by my mother in the Vaal Triangle, south of Johannesburg, where I grew up hearing stories about my late father's purpose and passion for entrepreneurship. My father was a Soweto arts, culture and media impactor with a big heart for people. He was also managing director for the Kappa clothing brand, a mainstay on the African continent.

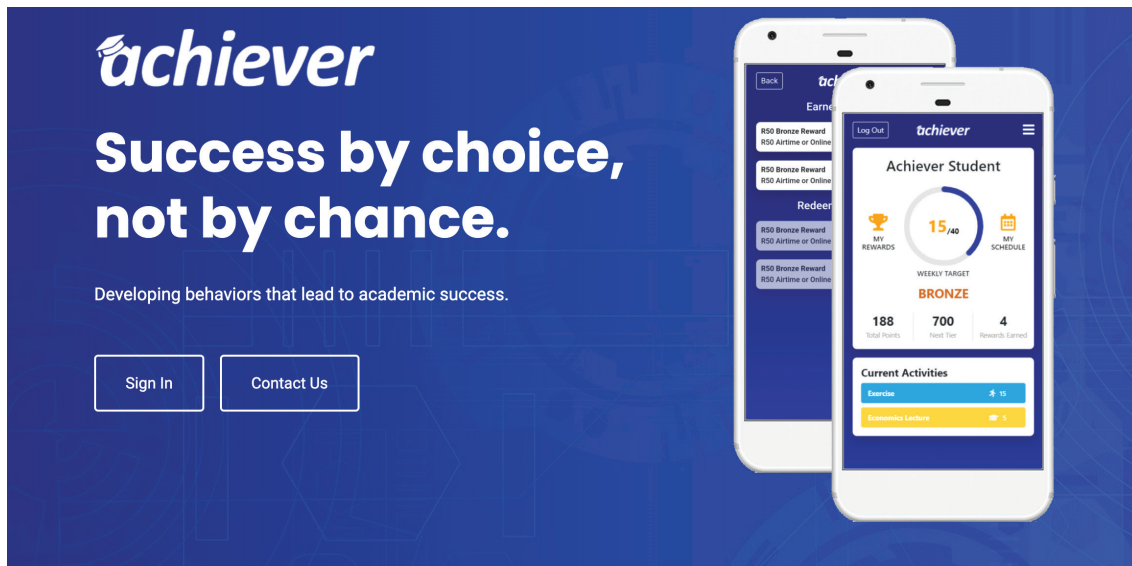
The love of solving problems was cemented by my participation in debating during my high school years, and my love for accounting, which I thought was entrepreneurship at the time. But before I got into work-life problem-solving, it was really just about basic problems of money and creating a better life for myself

and my family. Then I got the opportunity to attend UCT through a scholarship funded by the Allan Gray Orbis Foundation, which really set me on the entrepreneurship path.

### What drew you into the EDHE Competition?

The year EDHE launched, I had just been placed third in the Allan Gray Entrepreneurship Challenge after many failed attempts at pitching during my UCT years (really, it was just poor preparation which led to the exact outcome I deserved). The win from the previous competition and the fact we had launched Achiever and received some traction, meant we were ready to compete in the EDHE competition and to take advantage of this opportunity.





#### How have you built on the EDHE experience?

We now have iterated our business and are ready to launch the second version of our Achiever platform, which will provide better habits and behaviour verification. We just hit the three-year business mark – when most start-ups are rumoured to fail. We've expanded our team, launched our second product, and we have joined the Esquared Pathways programme, which is developing our team and gearing Achiever for investment.

#### What were the challenges you faced?

Market access is still one of the biggest challenges, which Achiever and the team is strategising about. There is no business if you can't access markets – this remains one of the biggest challenges in entrepreneurship in general.

#### What helped get you through the tough times?

The biggest challenge is providing yourself with regular income and having the focus needed to execute the solution to get the business traction. My family was really supportive – this, along with the resources provided by the Allan Gray Association, gave me a soft landing into entrepreneurship. Without either one I would have not made it far.

#### What were the landmarks in your journey?

I pitched three times to Esquared for their pathways programme, without success – only on the fourth try did they accept us. I have met people that continue to contribute to my growth even outside a specific venture – from academic to industry leaders. I am proud to have brought together a team that continues to contribute to the growth of Achiever, and to have found a client that believes and trusts in us as the Achiever team.

#### What have you learned on your journey?

Overnight success is a myth – it's just really consistent work compounded over time. Solutions – or rather, getting the right solution to a problem – takes time. It's important to combine both fast execution and patience, and to remember that traction in the form of clients is the best measure of success.

#### What is your advice to entrepreneurs?

Start and surround yourself with people who are willing to work hard and run the marathon with you.



# Aurora Natural Skincare

AURORA®  
AURORA NATURAL SKINCARE

**Jasantha Singh**

*Jasantha is the winner of The Pitch UCT 2019, Cosmetic Formulation Scientist and Founder of Aurora Natural Skincare.*

**Aurora Natural Skincare is a cruelty-free vegan brand that believes you deserve “the freedom to choose what ends up on your skin and in our oceans”. Its products are personalised for sensitive skin by eliminating common allergens, including essential oils. Recently, Aurora was featured as Editor’s Choice by the Beauty Shortlist 2022 Mama & Baby Awards, alongside global brands; it is currently up for LUXLife Global Vegan Brand nomination.**



My entrepreneurship journey is not about one big defining moment, but a series of them strung together like fairy lights. It’s what Steve Jobs famously referred to as “connect[ing] the dots”: only in hindsight can you appreciate how the path unfolds. When you’re on it, you have to trust yourself and courageously take that first step, which for me came back in March 2018.

## **The origin story**

I glance around the office at my coding teammates, deeply immersed in their 3x3 and 2x2 Rubik’s cubes. I love our cohesiveness

– they make me look forward to going to work every day. Yet, there’s still this hollow feeling that follows me around: I know it’s time to change, I just don’t know how.

April delivers a sign in the form of a Gmail advertisement for UCT’s Hair and Skin Research (HSR) Lab’s 2019 Cosmetic Formulation Science programme. I’m both excited and terrified to let go and move on. Can I afford to leave the stability of my IT corporate career and start over? Can I afford not to?

Intrigued, I email HSR Lab to learn that only the top 11 will be selected for their postgraduate



programme. Now, more than ever, I want in. I want HSR Lab's top dermatologists and industry leaders to teach me to formulate safe skincare and align with EU cosmetic regulations. I want to be a skincare owner who is also a skilled formulator that personally chooses every ingredient from source to skin.

The 29th of June is a bittersweet last day of IT Consulting. Although applications for the HSR programme end only on the 30th of September, I plan to go all in over the next six months. First, I need to recap three years of undergrad chemistry. I have no idea if I will be accepted, but I want to show up for myself. To live by my personal motto: "Courage is about taking that first step into the unknown and trusting what comes next."

Fast-forward to 2019, the year of the programme, and I'm preparing for The Pitch. I'm unpacking my story using author and business coach Simon Sinek's 'Start with why' (if you're a fan of superheroes, like me, you think of your 'why' as your 'origin story'). I practise communicating my story using the "Keep it Simple Principle" – Prof. Jane English and her Professional Communications class is proving invaluable.

## **"Courage is about taking that first step into the unknown and trusting what comes next."**

The night of The Pitch, SA's Dragon Lebo Gunguluza asks me to reflect on the moment when every entrepreneur *knows*. I describe mine: standing over my bathroom sink with a R120 bottle of liquid castile soap, watching most of the 500mls roll out of my left palm and down the sink – money down the drain. That was it! If they could do it, I would do it better. It's 2017, and the last time I ever buy soap.

I test and refine my formula and within three months health shops are stocking my castile soap bars. I dive deeper into my studies and internship. I cherish every moment – from my djembe drumming classes to my first capoeira class. After completing a practical in class I feel heartfelt joy on my way home – despite our class having to

redo it three times. I'm on the right path, I know it. I graduate my programme with distinction.

In early 2020, I attend Build, Countdown and Reach programmes run by Stellenbosch University's LaunchLab, where entrepreneurs teach entrepreneurs. I still don't consider myself an entrepreneur – I'm just fortunate to wake up to something I really love.

I am invited to speaking engagements – from UCT's InvestSoc, the Services Seta's roundtable discussion, to Off-the-cuff Twitter space with our Deputy Minister of Higher Education, Science and Technology, Buti Manamela. I return to The Pitch to share my journey and watch others begin theirs.

## **The still-unfolding path**

The Pitch changed my life: The prize money made it possible to create 70% Isopropyl sanitizer in a lab; When Muizenberg ran out of sanitizer, I was able to assist Naomi's Joy House, a Fish Hoek based NPO for orphaned and abandoned babies; it gave me the courage to open myself to new experiences.

Years from now, I'll remember fondly those late nights with friends working on my branding and website. My first soap mould, gifted to me. My first online sale. Loved ones, standing by me. How eventually customers feel like family. Most of all, I'll remember the feeling of freedom and meaning my life took on. But, I'm not done yet – there's many more dots waiting to be connected.







## Hutch Grill & Bar

### Ebenezer Hutchful

*Ebenezer is a recipient of the MasterCard Foundation Scholars Entrepreneurship Fund and founder of Hutch Grill & Bar, a restaurant that exclusively employs ex-offenders, providing them with crucial skills and training to reintegrate into society and break the cycle of crime.*

**Leaving Ghana to attend UCT, I planned to not just graduate with a MPhil in Criminology, Law and Society, but to return home with the “total package”, which could impact, directly or indirectly, members of my community. As such, when MasterCard Foundation launched the Scholars Entrepreneurship Fund, I saw it as an opportunity to secure seed funding towards bringing into existence my unique restaurant idea, which sought to address the high rate of recidivism in Africa.**



Although I have pursued an academic career in criminology and law, cooking has always been a refuge and a passion of mine. It was important to me to integrate my personal passion with a constructive response to my studies and my experience of entrenched social problems. I know the dismal statistics related to crime and offenders in South Africa, and I've seen how many obstacles there are for people who want to change their lives. I have come to realise the significance of high rates of recidivism, both in South Africa and in Ghana. Recidivism recognises the tendency of

convicted criminals to reoffend. It is common for ex-offenders to face stigmatisation from members of their community and even family. This affects their ability to reintegrate into communities and impacts their quest for employment.

Marrying my extra-curricular skill in cooking with my leadership skills and expertise in criminology, I came up with the project to start a restaurant, Hutch Grill and Bar, with the proviso that the restaurant only employs ex-offenders.





Photo by Fábio Alves on Unsplash

I returned home to Accra to set up the Hutch Grill and Bar, a restaurant focused on providing healthy and good meals at affordable prices while creating job opportunities for ex-offenders through an in-house skills training and incubation system.

**“It was important to me to integrate my personal passion with a constructive response to my studies and my experience of entrenched social problems.”**

Upon my return to Ghana, I followed up on contacts I had made to purchase equipment and secure a space for the restaurant. Soon after I

opened, however, the pandemic broke out. The hospitality sector was particularly hard hit and my business wasn't spared – I had to close my doors at this infant stage, and switched instead to taking food delivery orders. I was forced to reduce the number of staff, which was tough and unexpected but necessary considering the prevailing conditions. I had to be determined, flexible and willing to take risks, and I had to test my underlying motivation: was I establishing a business for profit, or to make a social impact?

Ultimately, I decided that this project constitutes a conscious attempt to disrupt and/or break the cycle of recidivism in my community. I realised that starting up a social venture focused on giving a group of socially at-risk people a second chance isn't just a business but a call to serve.



# Reel Epics



**Mia Cilliers and Jackie Ruth Murray**

*Mia is a director and producer and Jackie Ruth Murray a content producer and cinematographer at Reel Epics Productions.*

**In 2015, while Jackie Ruth Murray and I were in the midst of completing our Master's degrees in Documentary Arts through UCT's Centre for Film and Media Studies (CFMS), we decided to start a production company. We knew nothing about running one – neither of us had worked in production companies before, and even our knowledge of filmmaking was limited.**



Nevertheless, we registered Reel Epics and began working part-time on self-funded shoestring passion projects. It took five years for us to fully transition, eventually taking the leap as a fully-fledged production company with an office, one SAFTA award and one camera. We made the decision in early 2020 to quit our other jobs and put all our energy in conceptualising and establishing Reel Epics. It was an exciting and daunting moment – all we knew was that we shared a similar interest in subject matter and, more importantly, a sense of humour, which propelled us to place our Taurus heads, hearts and minds on the same axis and to take the bull by the horns.

We had no start-up capital, but what we did have were contracts with two major clients that we used to get the ball rolling. From there we worked hard, had fun, had disagreements, conceptualised new story ideas, pitched to new clients, collaborated with like-minded creatives and took on a few employees. As we navigated our way through a competitive environment, our business gained momentum and Reel Epics began to form an identity of its own.

In retrospect, my advice to those of you thinking to start your own company is not to fall for the bells and whistles of expensive



camera gear, a fancy office or a kick-ass logo. You don't necessarily need start-up money. First and foremost, you need a genuine interest in the people whose stories you will tell, a love for your craft and one or two trusted clients. In our case, we had a fledgling relationship with a broadcaster who showed an inclination to work with us.

**“The biggest ingredient of Reel Epics’ success is its partnership. I’ve learned it’s essential to have a likeminded team that shares a common goal – someone you can also bounce ideas off and make decision with, who you can lean on and, in turn, support. “**

Today we are a team of five and our business model is to focus our company in two areas: producing local documentary content, while also servicing foreign film teams who use southern Africa as a backdrop for their productions.

We’ve learned a lot along the way and, in an ever-changing industry, we’re still learning. We have made many mistakes. We have sometimes listened to our hearts and sometimes to our heads. We have kept ourselves going by keeping our creative minds oiled. We have grasped the reality of accepting change, so that we can grow as individuals and as an entity.

The biggest ingredient of Reel Epics’ success is its partnership. I’ve learned it’s essential to have a likeminded team that shares a common goal – someone you can also bounce ideas off and make decision with, who you can lean on and, in turn, support. Starting a business is daunting – I don’t think either of us would have done it alone. While it is exciting, the film industry is also very stressful and has many trials and tribulations. Through determination and tenacity, we’ve found a good balance between holding back when necessary, patience, pushing ourselves and knowing when to take risks. Jackie and I are from different

generations, which means we have different things that drive, inspire and motivate us, which seems to be the right recipe for Reel Epics.

One of our bigger challenges is finding the balance between entrepreneurship and creativity. First and foremost, we are filmmakers – not business-minded individuals. In the pursuit of our passion, we still have to make time for the grinding realities of HR, accounting, marketing, pitching, and so forth, which can be very frustrating to our creative spirits. But in the process, we have acquired a multitude of new skills we hadn’t planned on learning.

When we started out we didn’t have any business experience – we had to trust our instincts, have conviction in ourselves and be receptive to the advice of others. Neither of us have an entrepreneurial background, but filmmaking and producing lends itself to understanding budgeting, client relations, networking with other filmmakers and producers, and forming trusted connections with colleagues – all of which help to appreciate the value and importance of every aspect of the business. When I think back on my time at university, I realise that my part-time student job as a producer at UCT TV, as well as my studies and the relationships I formed, have been crucial in my current career as filmmaker and business owner.

Reel Epics’ value proposition is its ability to translate academic theory and expertise relating to film-making into a practical programme to develop film makers, building in diversity to bring high-calibre African stories to life on the screen. We continue to build on UCT connections to grow, employing university and CFMS alumni, and building a pool of freelancers whom we employ as researchers and crew on various projects, thus developing talent and experience over time. Working with UCT grads, we’ve found a wonderful kismet – in the creative process, the work ethic and the bigger-picture mission of taking hold of African stories and making sure they are told, our way.





## GESLabs



**James de Beer**

*James is a UCT chemical engineering graduate with a UCT Master's degree in Data Science. He is co-founder, director and head of production at GESLabs.*

**GESLabs is pioneering medicinal cannabis production in Africa. As regulator environments begin to embrace this plant and its byproducts, and as science proves its benefits, investors are looking to partner with ventures with technical know-how and business savvy. GESLabs is proving it has both.**



I graduated from UCT with a degree in Chemical Engineering in 2017 and decided to take a working gap year. I dedicated the year to expanding my businesses in the events industry, which I had started while studying. In hindsight, I needed this year to understand where I wanted to take my degree, as the only immediate opportunities seemed to be in the corporate landscape. I didn't intend to leave the skills I had learned in chemical engineering behind, but I couldn't decide if I was ready to use them to work for someone else. Nor did I feel drawn to working in the petrochemical industry, where most of the opportunities in my field seemed to be. I decided to do a master's in data science in 2019-2020 to expand my skill-set while I figured out what career to pursue.

### **Signs of the times**

Medical cannabis became a global topic in 2017 when various countries, including South Africa, decriminalised the plant. That year the Western Cape's High Court ruled that criminalising cannabis was an infringement of the country's constitutional right to privacy, and in 2018 the constitutional court agreed. This was a historical moment in South Africa. My entire life, cannabis had been illegal and now, overnight, it was legal to cultivate and consume in private. It was hard to pinpoint the effect this would have on the economy or on the market in general over a long period of time, but I knew it was a significant moment and turning a blind eye to such a dramatic progressive change in regulation would be naive.



Alongside this, in 2018 Canada became the second country to legalise recreational cannabis use, which created a massive capital market in Canada – large publicly listed companies opening up and attracting huge global investment. Almost in parallel, Lesotho, which resides inside South African borders, legalised cannabis cultivation with the requirement of government licencing. Huge amounts of capital began flowing into Lesotho as companies licenced and started medical cannabis businesses.

I hadn't quite analysed all the pieces of this puzzle, but it fascinated me. The political impact this plant had on the world seemed unprecedented. Its profile had clearly suffered from massive propaganda during the US War on Drugs in the 1970s, but the new data refuting these claims was now growing. In June 2018 the United States Food and Drug Administration approved Epidiolex, a drug to treat seizures associated with a specific type of epilepsy in children. Developed by GW Pharma, it was the first registered cannabis pharmaceutical drug to contain CBD, the active chemical in cannabis. THC, the psycho-active component of cannabis, was also being prescribed to multiple sclerosis and cancer patients to help with chronic pain, to alleviate chemotherapy symptoms, to increase appetite and alleviate nausea.

A plant that had been used for centuries in South Africa by traditional healers, which for decades had suffered from a negative connotation due to a powerful political agenda to ban it, now had real-world data backing up its positive impacts. How was I going to get involved in what seemed to be a gradual but promising global revolution?

In 2017 when I decided to pursue this interest, I knew very little about the politics, the regulatory environment and the agricultural side of the industry. I explored the value chain further until I discovered a niche, which seemed to be a perfect application of my skills and interests.

### A growing field

As I researched and understood the potential of cannabis and its derivatives, it was clear that a significant component of its products was, in fact,

the extracted, refined and purified cannabinoids. Fortunately, the USA had a booming recreational market confined within specific states. This product was not allowed to be exported, but there was free trade within each state, which translated into a globally recognised market. With the power of the internet, I kept a close eye on the full value chain. It became apparent that the cannabis extract market was growing – and competing with the raw plant material as a dosage and administrative format.

During this research phase I noticed that people were extracting cannabinoids using super-critical carbon dioxide (CO<sub>2</sub>) among other solvents. They then refined and purified these plant extracts using techniques such as distillation, crystallisation, liquid-liquid extraction and flash chromatography. These were all methods I had been studying at UCT during my undergraduate degree. In fact, in fourth year we had completed a project for which we designed a caffeine removal process from coffee using super-critical CO<sub>2</sub>. At this point, the penny dropped – I realised I had spent the better half of my degree learning the techniques needed to extract and refine desirable molecules, including from organic plant matter, which related directly to cannabis.

### Crucial connection

In late 2018, I made contact with Peter Nel, another Chemical Engineering graduate from Stellenbosch University who was working in Malawi at the time on a plot of land that had just acquired a cannabis research license. He was working on the feasibility of extracting cannabinoids from hemp, and he had experience working with these techniques through custom-made glass equipment produced in Stellenbosch by Sarel Rautenbach (GlassChem), who became instrumental in the early days of Green Engineering Solutions (GES). I joined the small team and, soon after, GES was supplying customised equipment and providing consulting advice to small-scale cannabis industry players in Africa looking to jump in on what seemed to be the start of a global market development.

At the time, we were a team of five. Both 2018 and 2019 were spent procuring, manufacturing and selling extraction equipment to companies



## Entrepreneurship at UCT

with cultivation setups in Lesotho, Malawi and the Democratic Republic of Congo (DRC) while developing our expertise. We set up pilot lab operations to help these companies investigate the feasibility of entering the medical extract market in parallel to their raw biomass (flower) market objective. We spent these two years gaining valuable experience in building labs, in the extraction and refinement processes, as well as developing knowledge in the regulatory environment of good manufacturing practices (GMP). We made the right mistakes to learn from on a small scale and gained enough crucial experience to understand how to scale this model.

### Scaling up

At the end of 2019, the team had agreed we'd look to raise money in the private equity market to develop and construct our own manufacturing laboratory in Cape Town. We understood at this point that South Africa was the only country in Africa that was part of the Pharmaceutical International Co-Operation Scheme (PIC/S), a co-operative arrangement between global regulatory authorities in the field of GMP of medical products for human or veterinary use. The South African Health and Regulatory Authority (SAHPRA) is the only regulatory body in Africa that complies with the PIC/S guidelines: South Africa has a well-developed pharmaceutical industry with globally recognised manufacturing standards. Green Engineering Solutions changed its trading name to GESLabs, as we pivoted from a consulting and technology provider to being a manufacturer for an active pharmaceutical ingredient (API). It was clear that our market would be a global market of high-scheduled, cannabis-derived pharmaceutical products. Entering this highly regulated and controlled environment was our best option for unlocking value and building a world-class bulk ingredient manufacturing facility.

### Investment

We concluded a R20 million seed-investment fundraise in the first half of 2020 just before the COVID-19 pandemic broke out. This consisted primarily of foreign investment. The pandemic brought many challenges to the start of our facility

construction, but it also brought an element of focus, which helped keep our heads down in the initial design and procurement stage of development. We formalised our position as a founding team, led by Peter, and started to work on constructing and developing our facility, which comprised a pharmaceutical clean-room laboratory inside a warehouse space to limit the movement of materials and personnel.

### We concluded a R20 million seed-investment fundraise in the first half of 2020 just before the COVID-19 pandemic broke out.

By the end of 2020, we had completed building the facility and all the equipment was in place. At the same time, we had been in regular communication with SAHPRA to ensure that we understood the requirements, and by March 2021, we had confidence in submitting our application to SAHPRA to manufacture standardised cannabis APIs in terms of section 22C (1) (b) of the Medicines Act and could attest that we met the requirements in terms of manufacturing GMP compliant products as outlined in the SAHPRA Guideline for the Manufacture of Cannabis-Related Pharmaceutical Products for medicinal and research purposes.

After undergoing two rigorous 18-hour on-site audits conducted by SAHPRA's Chief Auditor, we received confirmation of a positive final assessment by SAHPRA, and we were licensed on 20 October 2021. By 16 December, we became legally fit to operate. This included the manufacturing, import and export of cannabinoids and, most importantly, Dronabinol.

### Taking stock

GESLabs has now grown to 15 highly specialised staff and concluded a Series A fundraise in early 2022. This has allowed us to expand our quality-control department, fund the development of inventory and global supply chains, build our team of scientists and engineers, as well as develop complex strategies that give us an advantage competing as a true pharmaceutical API





*The GESLabs plant at Capricorn Park.*

manufacture for registered drugs. This year has also brought significant progresses with signed long-term supply agreements for GESLabs manufactured API's into Germany and Australia, and it has been a year of our first commercial exports.

Entering as an entrepreneurial-based venture in an emerging field can be seen as a risk, or as a decision which may incur opportunity costs. Like any business-based decision, of course, it needs to be assessed based on risk/reward. Personally, the reward has always outweighed the risk to pursue building a business – and rewards are not only the potential financial success but, more importantly, personal fulfillment through intense learning, creativity and working with an exciting team.

My father always used to say, “You create your own luck”. That saying has stuck with me, and driven me to put myself in a position in which luck or opportunity could present itself when the hard work and due diligence had been put in. One way to minimise the personal risk of an entrepreneurial venture is to ensure you have a funding plan to take you through the tough times where progress is slow and rewards are not seen. If you position yourself and your skills correctly, as well as position yourself to continue to develop your experience and skills while you build a business, you also minimise the opportunity cost of not

developing experience working for someone else.

I was able to leverage the skills learned in my degrees – as well as in my gap-year businesses – to positively impact and contribute to the startup GESLabs' success as a co-founder.

I was able to gain experience in a process engineering environment, and I was able to develop leadership and business skills in parallel. Building a start-up requires a wide spectrum of skills: lacking any of these skills will eventually punish you by slowing down your progress. This means focusing on your personal development, developing self-taught skills on the go, learning from others and keeping focused. Building the correct team from the start will greatly improve efficiency and creativity while the idea is in its infancy.

With the help of mentors and a passionate and devoted chairman, GESLabs has built a solid foundation. We have a managing director who understands all aspects of the business and is a key driver of innovation and progress. We've had investors who see the potential in our business but also our potential as individuals. We're not sure how the pharmaceutical aspect of the cannabis industry in Africa will fare in the long run, but we're doing our part in steering it, and it feels right to be pioneers on this front.



# Impulse Biomedical



## Gokul Nair and Giancarlo Beukes

*Gokul Nair and Giancarlo Beukes are co-founders of Impulse Biomedical and graduates of the UCT Master's in Bio-medical Engineering. Impulse Biomedical is a biomedical engineering company grounded in the founders' shared passion for healthcare, with entrepreneurship almost a by-product of that passion.*



### Founding stories

I'm Gokul, I was born in Mthatha, South Africa but grew up in Coffee Bay, which is in the rural former Transkei region, now part of the Eastern Cape. A story that sticks in my memory from childhood is when my brother broke his arm and my parents struggled to get access to medical treatment. We had to travel the 70km along a bumpy gravel road to the regional hospital in Mthatha for my brother to receive treatment, while he howled in pain. Basic access to healthcare was not available – a reality that propelled me to want to become a doctor or an engineer.

My friend and co-founder, Giancarlo's family story has been hugely influential to his 'why'. His younger brother was born with a rare medical condition. At the time, his parents were unable to afford private

healthcare and public healthcare facilities did not have the necessary equipment to effectively carry out the procedure. His parents were told that he would only live for three days, but he miraculously survived. In fact, he interned at Impulse a couple of months ago, which was really special.

As co-founders we were exposed early on to the challenges of healthcare accessibility and wanted to make an impact in this sector. We were encouraged to look for simple solutions that could make a big difference to the lives of everyday people – and then to go and make that impact. Professor Sudesh Sivarasu, our supervisor for our master's degrees, advised us about how to leverage what we already had, and to use commercialisation to be effective. He got us thinking about stakeholder analysis: interviewing the right people, commercialising the right way and dreaming bigger.





## Breaking into biomedical

Having finished our master's degrees at UCT, we thought we were set to take on the world. We were qualified, we had functional prototypes and UCT's Research Contracts and Innovations Office assisted us by patenting our technologies. We were ready. Our first challenge was a common one for entrepreneurs, but especially for us in the biomedical industry. Any company making medical devices typically needs large amounts of funding before it can get any product to market, but we had none. For a long period neither of us earned an income. We applied for various competitions and started pitching our ideas. We raised a bit of money here and there, but this period was hard – it put a great deal of strain on our families and tested our beliefs and our mission.

We figured that the product development was going to be the toughest part of our venture, then discovered that getting the business going and the product to market was much harder. We realised that we could have the best product in the world, but it still needs to meet the requirements of medical aid professionals, clinicians, academics and, most importantly, patients and customers.

During the commercialisation phase, we chatted to big conglomerates – Bonitas, which is owned by Afrocentric, and to Discovery Health. We were surprised how receptive they were – very open to using our products as long as they met international requirements and passed the clinical trials. But getting our devices into medical journals and academic papers – proving the efficacy of any device – takes a lot of work.

## A better answer for asthma

The first of the products we are commercialising is the Easy Squeezy, a sleeve attachment to a standard asthma inhaler. We found that many patients don't have enough strength to use their inhaler and can end up having severe asthmatic attacks that send them to hospital. We also discovered that without a way to count doses on the device, the only way to check the levels is to shake it, making it easy to miss that it's nearly empty. The third issue was stigma: 42% of school-going kids

don't want to carry their asthma inhaler because they're worried of getting bullied or stigmatised.

All three of these issues we identified with the help of Professor Michael Levin and the Red Cross Children's Hospital, who supported us in our journey. With the addition of his support, we developed the Easy Squeezy, a sleeve attachment that fits over a standard asthma inhaler. The Easy Squeezy has a novel dual lever mechanism that reduces the required force of activation of any standard inhaler by up to four times. It allows anyone older than five years to use their own asthma inhaler – previously, only children older than 12 had that strength to activate their own asthma inhaler.

**“We figured that the product development was going to be the toughest part of our venture, then discovered that getting the business going and the product to market was much harder.”**

We also added a dosage counter to the Easy Squeezy, which informs the user of how much medication is remaining in their inhaler, by counting the number of activations and displaying it on the front of the device. Addressing the issue of stigmatisation is trickier, but we're working on developing a brand as well as animated characters to help normalise asthma and help kids who carry an inhaler to feel less lonely and awkward about it.

The second product is the ZiBiPen, which we worked on in partnership with the Red Cross Hospital and the Allergy Foundation of South Africa. The core issue we discovered was that the treatment for anaphylaxis, a severe allergic condition, is simply too expensive for patients to afford, costing up to R1 800. When a patient with anaphylaxis (a peanut allergy for example) eats a peanut, they go into anaphylactic shock, and their organ systems start to shut down.

This patient could end up in hospital within 15-20 minutes if left untreated and could even die. The only way to treat them and



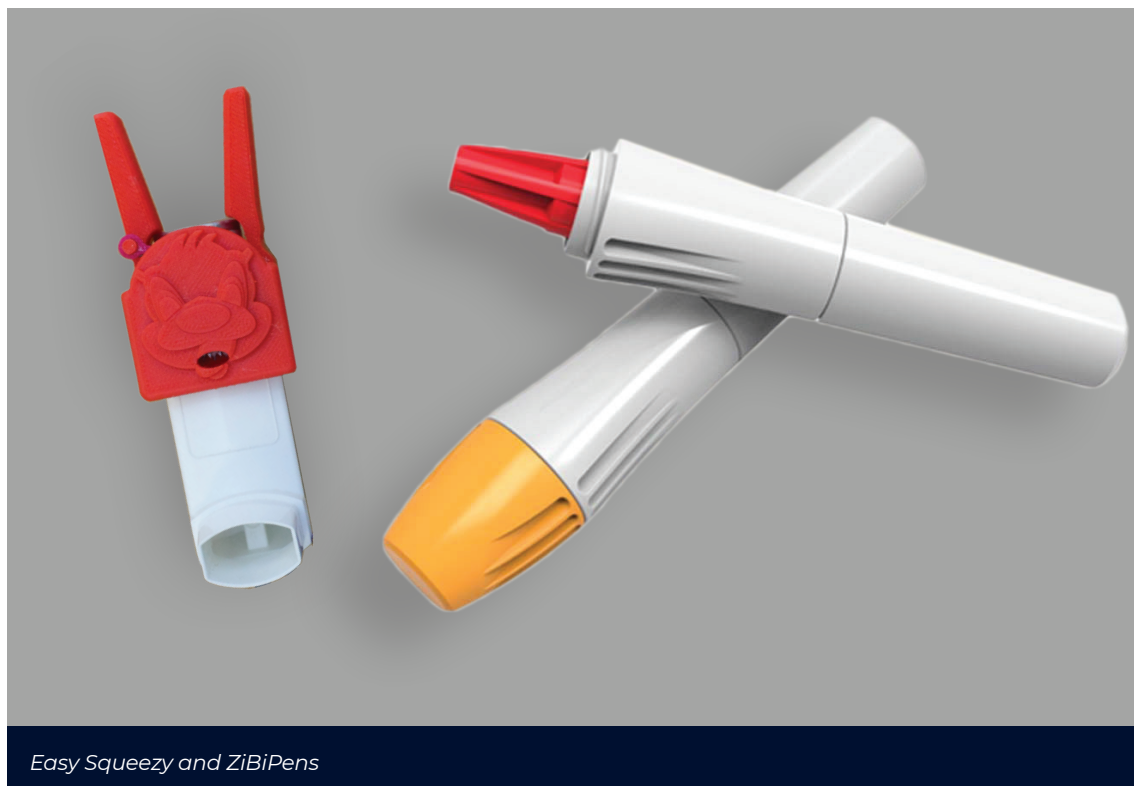
## Entrepreneurship at UCT

get them to a hospital safely is by injecting them with 0.3 mg of adrenaline.

Currently, there's only one adrenaline-based injection device available in the South African market, and because of supply chain issues, by the time the device arrives in South Africa it expires within six months to a year. If the upfront cost wasn't bad enough, the issue of cost is intensified by the fact that the device expires in such a short period of time. Most patients only use their injector 1-4 times in their entire lives, resulting in regular disposal of expired products. This is not only inconvenient, but unaffordable. If you never use the device, you still have to throw it away and buy a new one every single year, costing up to R1,800.00 – unreasonable and expensive. On top of this, the existing device is not very clinically effective for all users. With a needle length of 15mm, it caters for the average adult man. If a person is slightly larger than average, or a woman, they may need a needle that's at least 18mm in length otherwise the adrenaline will be ineffective. Furthermore,

for children, the needle can sometime be too long and can fracture the child's femur.

To solve these issues, we developed the ZiBiPen, which makes the treatment of anaphylaxis significantly more affordable. When our device expires, instead of throwing away the entire unit, you simply need to open up the ZiBiPen and replace the cartridge of adrenaline with a freshly purchased cartridge at a fraction of the cost of an entire unit. Adrenaline is a very affordable pharmaceutical product, so we're able to reduce recurring costs to the patient by up to 74% by having a replaceable cartridge. We've also designed the ZiBiPen to allow for interchangeable needles, which means you can select the needle length that caters best for your body variation and size: a short needle for children or a longer needle for a larger patient. Finally, with ZiBiPen we've put a lot of work in to making injections safer with a one-step injection process thereby reducing any risks of injury.





*The Impulse Biomedical team.*

### Credit where it's due

As founders, support systems have been incredibly important. Our families and friends who believed in us, supported us, helped us, and carried us at times.

We really can't underscore enough UCT's role in getting Impulse Biomedical to this point. The Research Contracts and Innovation (RC&I) team have been amazing. They have gone above and beyond throughout our journey. They patented the very technologies we are working to commercialise. They provided us with grants that allowed us to test concepts quickly and put together a solid business model. They challenged us, even today, while supporting us – meeting with us regularly to chat about strategy.

We are proud to be a UCT spin-off company and we owe a huge amount of our ongoing success to Professor Sudesh Sivarasu, Professor Michael Levin, UCT RC&I, Saberi Marais and many others at the University. Beyond the university, we have been bowled over by how open, kind and caring people in the medical, pharmaceutical and the medical devices space are in South Africa.

### Fuel for the long haul

What keeps us going through tough times are our personal interactions, such as the joy of a child on finding she was able to use the Easy Squeezy. These experiences provide the validation we have needed, that what we are doing is worthwhile.

The process of certifying medical devices is a lot longer than we expected – we had planned on one or two years initially, but it actually takes three or four. It requires a lot of money too, which is where institutional support is crucial: covering the initial cost – of filing for a patent, of selecting the correct countries for filing, etc. It is essential to how an early-stage IP-based company like ours functions, since our high value assets are our intellectual property – our designs, our ideas – it's important to patent it for the value of our company to continue to grow.

Being part of a network of innovators has also been crucial. Both founders are part of an alliance of African Entrepreneurs, called the Harambe Entrepreneur Alliance. We meet regularly with other entrepreneurs from South Africa, Nigeria, Kenya, Zambia, Ghana etc who are all making an impact. We intend our impact to be sustainable and to last far longer than we do.