Homer is a name given to one of the earliest scribes in Western civilisation. According to Western literary tradition, Homer was best known for writing the epic poem, the Odyssey. Originally recounted and performed orally, the poem tells of the adventures of the Greek king, Odysseus during his journey home to Ithaca after sacking the city of Troy. Odysseus’ voyage was long and arduous, chequered with many twists and turns that the listener may be led to think that he would never make it home. He did finally reach home, however, aided by gods, especially Athena, the goddess of wisdom and war, who took on various roles as protectress and mentor.

Today, the word odyssey has come to mean a long and eventful journey or experience. The American Heritage Dictionary even calls an odyssey “an intellectual or spiritual quest”. We have chosen the theme of an odyssey for this half-decade report because we think an odyssey is what might properly describe the endeavours of the clinicians who ventured into Health Professions Education (HPE) research with us.

The bulk of this report recounts their stories and how each of them overcame their mental, physical and emotional hurdles to embark on what had been an unknown realm for many of them when they started on their research. Each of the clinician-researchers here has had the gumption to venture into unfamiliar ontologies and epistemologies in order to resolve a practical problem or satiate an intellectual curiosity. In the process, each of them has reached another peak in their professional development and contributed to the growth of HPE. In the quest to discover causes, effects and interventions in the learning and working of HPE, each clinician-researcher can be likened to an Odysseus. HOMER does not claim to be Athena or Mentor in these voyages. But how happy and privileged are we, to have played an integral role in accompanying Odysseus in this report!
“Telemachus, you’ll lack neither courage nor sense from this day on, not if your father’s spirit courses through your veins – now there was a man, I’d say, in words and action both!”
"Nevertheless I long –
I pine, all my days – to travel home
and see the dawn of my return.
And if a god will wreck me yet
again on the wine-dark sea,
I can bear that too, with a spirit
tempered to endure. Much have
I suffered, laboured long and hard
by now in the waves and wars.
Add this to the total –
bring the trial on!
"

ODYSEUS

"If it is SOMETHING
THAT YOU THINK ABOUT
EVEN IF THERE IS
NO MONEY INVOLVED

and it is
BUGGING YOU ENOUGH
to KEEP YOU UP AT NIGHT,
THEN DEVELOP IT.

If it is of INTEREST TO YOU,
PURSUE IT!
"

A/PROF WONG TECK YEE
FAMILY PHYSICIAN, SENIOR CONSULTANT,
DEPARTMENT OF CONTINUING AND COMMUNITY CARE,
TAN TOCK SENG HOSPITAL;
ASSISTANT DEAN,
LEE KONG CHIAN SCHOOL OF MEDICINE
The ability to draw a clear connection between a Health Professions Education (HPE) initiative and patient outcomes is the holy grail of HPE research. This connection, however, is extremely difficult to establish because the influence of education is often not instant, and patient outcomes depend on the system in which the patient is receiving care rather than the individual doctor alone. Therefore, it is necessary for HOMER research to work collaboratively with relevant individuals in the HPE ecosystem, including clinicians, nurses, allied health professionals, medical students, healthcare administrators, and policy makers to effect change.

Two fundamental assumptions undergird HOMER’s operations. The raison d’être of HPE is the betterment of health outcomes for the population. HPE, therefore, should be conducted with health outcomes as an endpoint. HOMER conducts research that falls into Pasteur’s Quadrant or what is known as “use-inspired basic research”, research that improves fundamental understanding as well as solves practical problems.
We are fortunate to be the first institution in Singapore to have a dedicated unit to look into HPE research. HOMER has developed a comprehensive set of competencies that provided a robust foundation for undertaking the challenge in pushing new frontiers in HPE, and we have seen good results in the culture HOMER was able to create in HPE research. As HOMER continues to contribute to institutional and national efforts in HPE through the harmonisation of research and practice, I believe that HOMER will make a huge impact in the field of HPE. This is in line with our mission of improving the health of our patients and the community through the education of our present and future healthcare workforce, healthcare partners, patients, and caregivers.

HOMER was conceived when a few like-minded educators got together to ask questions about how they could make teaching and learning better in NHG. While these conversations seeded the creation of HOMER, leadership from A/Prof Lim Tock Han, Adj A/Prof Lim Wee Shiong, Ms Yvonne Ng and Mr Issac Lim served to grow and develop the team greatly. HOMER has since become the education research nidus in NHG stimulating interest, driving collaboration and developing greater capabilities. Nonetheless, the heart of HOMER’s work still lies in answering these ground up questions about ideas that change practice.

HOMER has grown from strength to strength since its inception in 2011, when the unit assumed the vital role of developing Health Professions Education (HPE) research in NHG. As one of the three key pillars of NHG, Education forms an essential part of the healthcare landscape, laying the foundation towards the facilitation of learning, and acquisition of knowledge that is paramount to the personal and professional growth of our healthcare providers. Having established itself as a focus of excellence in HPE research, recognised in both local and international communities, HOMER’s educational research directives will continue to guide us in building the competencies of our core pool of talent. In providing this bridge to excellence, HOMER has aligned its work with NHG’s vision of a vibrant Regional Healthcare System to meet the future needs of healthcare.

HOMER plays a critical role in developing our voice in HPE, and was set up to help us understand the impact of the rapid progress in HPE research, and how we may harness this knowledge effectively in our learning, teaching, and delivering of patient care. From partnering healthcare professionals in our institutions, to engaging overseas researchers and colleagues in important discussions, HOMER provided the impetus for us to adapt to system changes and develop our own research in education. This allows us to be an active contributor to the HPE research of the future.
It has been my immense privilege to walk along this amazing journey with HOMER from our conception and inception through to the forward projection. HOMER was born out of a deep conviction about the fundamental strategic importance of scholarship in developing HPE. Today, that conviction is being lived out in Pasteur’s Quadrant use-inspired research that clarifies, illuminates and ultimately transforms the practice of HPE through collaborative efforts within the local and international community of practice.

When we started HOMER five years ago, we were determined that HOMER will operate in a way that keenly reflects the realities in HPE. We contended that teaching and learning activities would always be embedded in a complex and dynamic institutional environment with multiple, and often competing demands, and that the raison d’être of health professionals was for the betterment of health outcomes for the Singapore population. With these two fundamental ideas weaved into our DNA from inception, it was clear for us that the research at HOMER would not only have to push the frontiers of knowledge; it would also have to improve practices at the coalface. In other words, we sought to do research that falls into Pasteur’s Quadrant. Balancing these sometimes competing priorities was difficult, but critical for us to remain relevant now and for the future.
Issac is a social scientist with training in education, organisational behaviour, and sociology. He established HOMER in 2011, which he has led since. He adopts an eclectic approach to research, frequently combining conceptual and methodological tools with diverse epistemologies to solve practical and theoretical puzzles.

His research seeks to answer the question of how healthcare institutions can prepare healthcare professionals to care for future populations, and straddles the fields of HPE, health services delivery, interprofessional teams, and workplace learning. To date, his research work has been showcased at numerous international conferences, in which he received several best poster and oral presentation awards. Additionally, he reviews journals such as BMC Nursing, Medical Education, Journal of Mixed Methods Research, and Journal of Interprofessional Care.

He is a member of NHG’s Interprofessional Leadership Programme’s Working Committee and a board member of UK’s Centre for the Advancement of Interprofessional Education. Previously, he completed graduate work at the National University of Singapore and Stanford University where he received the Stanford School of Engineering Fellowship. He is currently reading a Doctor of Philosophy at the University of Oxford, where he is a member of the Oxford Centre for Sociocultural and Activity Theory research group.

A/Prof Lim Wee Shiong is Senior Consultant in the Department of Geriatric Medicine, Tan Tock Seng Hospital. He is also Faculty Advisor for medical education research to HOMER. Adjunct A/Prof of Yong Loo Lin School of Medicine, National University of Singapore; Fellow of the American Geriatric Society; and Associate Fellow of the Association for Medical Education in Europe.

He is a teaching faculty of the Massachusetts General Hospital Institute of Health Professions as well as the Maastricht-Singapore Masters of Health Professions Education Programme.

He strives to conduct Pasteur’s Quadrant research that balances rigour and relevance in his research interests in interprofessional teams and leadership; outcomes-based programme evaluation; evidence-based medicine; and mixed-methods research. A firm believer in asking questions to understand the complexity and richness of phenomena, A/Prof Lim takes on an eclectic approach to research underpinned in the philosophy that “the best method is the method which best answers the research question.”

Yong Hao adopts a pragmatic approach in his research on HPE. This renders a variety of research methods for answering different research questions, and for drawing out the practical implications of completed research projects. In HOMER, he is involved in research and evaluation projects related to undergraduate and graduate medical education. These projects include analysing assessment data collected by the various residency programmes to better understand residency training, developing faculty evaluation tools, and evaluating the impact of training programmes.

He completed his Master of Social Sciences (Psychology) with a concentration in Quantitative Methods at National University of Singapore. Prior to that, he worked on research and evaluation projects in health promotion as well as teaching psychology undergraduates research methods and statistics. His research interests include evaluating statistical methods when data is suboptimal (e.g. non-normality, small sample sizes, missing data, etc); applying structural equation modelling; the feedback process in teaching and learning; educational assessments in HPE; and increasingly, interprofessional collaboration and education from different levels of analysis.

Sik Yin is passionate about enhancing quality of patient care through improving the processes and outcomes of health care professionals’ training. Her dual portfolio as researcher and clinician places her in a unique position to realise this commitment. Sik Yin recognises and values the complementarity between different research approaches to gain a better understanding of some of the challenging issues in the complex healthcare environment. Her educational research interests relate to professionalism of healthcare professionals and interprofessional collaborative practices. She has presented on educators’ attitudes towards interprofessional education and collaborative practice at local and international medical conferences. Her other projects include investigating the formation of professional identities in medical students and allied health profession educators, and conducting a BEME systematic review on the influence of informal and hidden curriculum on the development of empathy in medical students.

She is also a senior dietitian with Tan Tock Seng Hospital. She was awarded the HMDP (Health Manpower Development Plan) in 2012 to undergo in-depth training in renal nutrition in Massachusetts, United States. She holds a Master of Nutrition and Dietetics from the Flinders University.

Yu Han’s research interests are leadership in healthcare teams and collaborative healthcare practices, with a focus on complexity in shared leadership and team dynamics in interprofessional teams. In 2014, she developed and validated a shared leadership scale that assesses the level of shared leadership in interprofessional teams in non-acute settings. This contribution to research on team communication in clinical settings is recognised regionally and internationally. In 2015, she won two poster prizes for her presentation, Validation of the clinical shared leadership scale for interprofessional team meetings in geriatrics care – one at the Asia Pacific Medical Education Conference; and the other, at the International Conference on Faculty Development in the Health Professions.

Her other current research work includes team communication for collaborative decision making and evaluation of residency communication courses where she uses a range of methods in her research, from survey design to interviews and focus groups to draw out the various aspects of communication and learning in clinical contexts.

Before joining HOMER, Yu Han received her Master of Arts in Mathematics Education from the King’s College London in the United Kingdom, where she was awarded an International Postgraduate Taught Scholarship.
One critical divine intervention Odysseus received for his journey home was good wind conditions. Indeed, Aeolus, the keeper of winds bestowed him a bag of winds, out of which only the West Wind, Zephyros, would bring him and his crew back to his kingdom in Ithaca. All other winds in the bag would actually pull him farther from his kingdom in Ithaca.

In HOMER, our West Wind is our core research areas: interprofessional education and collaborative practice, work-based learning and faculty development.

They lead us to the frontiers of HPE and beyond; ultimately, to better patient care.

The modern developed world, and especially Singapore, is experiencing a massive change in healthcare. With our population ageing, people are also suffering more from chronic diseases than acute episodes of illness. This means that while people may be living longer, they also bear the burden of living with diseases that cannot be cured, only managed. Singapore is said to have one of the best healthcare systems in the world. However, NHG’s Group CEO, Prof Philip Choo is more circumspect. To him, the current system is a ‘failed system’, because it is more about treating illnesses than promoting good health. A systemic change is needed – one that is patient-centric rather than facilities-centric; one that is integrated and involves different people working hand-in-hand with one another.

The ingredient in making this change work is what the World Health Organisation terms as Interprofessional Education and Collaborative Practice (IPECP). The idea is for the different health professions to put away differences and work together to better patient care. HOMER has done much work in improving the understanding of interprofessional team communications and leadership. However, much more needs to be done.

In short, our focus areas are grounded in current and future healthcare realities. They are our Zephyros, which we trust will steer us to the frontiers of health professions education, responsive patient care and a healthy population.
“When we started

In 2010, **WE WERE AGAINST ALL ODDS.**

But **BECAUSE OUR FACULTY always POURED THEIR HEARTS into EDUCATION,**

we have **OVERCOME THOSE DIFFICULTIES.**

---

**ADJ A/PROF KOH NIEN YUE**

**SENIOR CONSULTANT**

**DEPARTMENT OF GENERAL MEDICINE, TAN TOCK SENG HOSPITAL; LEAD FVE MEDICINE, LEE KONG CHIAN SCHOOL OF MEDICINE**

---

How could I drive you from my ship?
Come sail with us, we’ll tend you at home, with all we can provide.

---

**TELEMACHUS**

**BOOK XV**
A

djunct Associate Professor Koh Nien Yue has been playing an active role in shaping the education landscape since the beginning. She recalls that when residency programmes were established, education research was considered an anomaly amid clinical and biomedical research. Soon enough, people realised that it was necessary to have research behind education initiatives in order to bring these initiatives forward. Said Adj A/Prof Koh, “Our residency programmes took off on a shaky start. When we began, we were not sure how the research arm and education arm can come together. We have evolved since. Over the years, there are more people presenting at the AMEE (The Association for Medical Education in Europe) annual conferences. Many projects started not just at the Programme Director (PD) or Faculty level, but also by Programme Coordinators (PC). This is a huge milestone given that education research was never a consideration then. Now, everyone is also aware that there is HOMER.”

Adj A/Prof Koh explains that for collaborations to be fruitful, having a shared understanding must happen first: “Clinicians and researchers have to take some time to understand each other, and this does not occur overnight. We need to find common ground, understand each other’s working styles and be sensitive to needs.” HOMER’s engaging approach worked well to bridge gaps in understanding.

Clinicians and researchers have to take some time to understand each other, and this does not occur overnight. We need to find common ground, understand each other’s working styles and be sensitive to needs.

What helped tremendously, was having onboard Wee Shiong (Adj A/Prof Lim Wee Shiong, Faculty Advisor, HOMER), and Isaac (Mr Isaac Lim, Head, HOMER).

Adj A/Prof Koh also speaks of how HOMER researchers lend a fresh look at the clinical community’s data, projects and ideas. She recalls that with the Internal Medicine Residency Programme, HOMER’s visualisation of data collected on residents’ performances prompted Programme Directors and Programme Coordinators to scrutinise their data collection procedures and reduce redundancy. “HOMER’s representation of data enabled us to see how our residents have progressed annually. The comparisons in the data showed us straightaway whether we had achieved what we had set out to do.”

Adj A/Prof Koh says HOMER’s endeavour to keep the light on education should continue: “Teaching has always been part of the NHG culture, and research in education is a natural and necessary progression of our residency journey. When we started in 2010, we were against all odds. But because our faculty always poured their hearts into education, we have overcome those difficulties.”

"It is the glue that binds together every piece of the work process and relationship within the process.” Under trustful partnerships, researchers will find it easier to overcome obstacles and avoid misunderstandings.

His own collaborative efforts bear this out, even though he modestly attributes his success to luck when he recounts his foray into medical education research. His trustworthy investigative partner was A/Prof Kevin Tan, Senior Consultant at NNI. In 2006, their joint project resulted in an article published in the highly reputable Medical Education journal. The publication spurred the senior neurologists to strive for further excellence as they embarked on another project, Team-based Learning in Undergraduate Neurology Education. This second project led to even bigger wins: the Programme Innovation Award at the SingHealth Academy Duke-NUS Golden Apple Awards in 2012; and another journal article, this time, in BMC Medical Education.

A pioneer contributor to the establishment of HOMER in 2011, A/Prof Tan has watched it grow over the years, and gladly notes that the culture of collaboration is palpable in the research unit: “This culture of good things being done together has formed HOMER.” He has faith that it will continue to lead in HPE research.

O Associate Professor Nigel Tan, the key to high quality HPE research lies in fruitful collaborative partnerships. For those relationships to occur, there needs to be trust. A/Prof Tan advises novice researchers looking for collaborative opportunities to seek out people they can trust. He explains, “Trust lays the foundation of collaboration. It is the glue that binds together every piece of the work process and relationship within the process.” Under trustful partnerships, researchers will find it easier to overcome obstacles and avoid misunderstandings.

His own collaborative efforts bear this out, even though he modestly attributes his success to luck when he recounts his foray into medical education research. His trustworthy investigative partner was A/Prof Kevin Tan, Senior Consultant at NNI. In 2006, their joint project resulted in an article published in the highly reputable Medical Education journal. The publication spurred the senior neurologists to strive for further excellence as they embarked on another project, Team-based Learning in Undergraduate Neurology Education. This second project led to even bigger wins: the Programme Innovation Award at the SingHealth Academy Duke-NUS Golden Apple Awards in 2012; and another journal article, this time, in BMC Medical Education.

A pioneer contributor to the establishment of HOMER in 2011, A/Prof Tan has watched it grow over the years, and gladly notes that the culture of collaboration is palpable in the research unit: “This culture of good things being done together has formed HOMER.” He has faith that it will continue to lead in HPE research.

T

１

Here are A/Prof Tan’s seven principles to having successful collaborations (BEST-HPE):

PRINCIPLE 1
A good Buddy is helpful.

PRINCIPLE 2
Trial and Error. Pilot your study and don’t be afraid to fail.

PRINCIPLE 3
Start with something small and build on it.

PRINCIPLE 4
Work with people you Trust.

PRINCIPLE 5
Don’t be afraid to ask. Be Humble to learn.

PRINCIPLE 6
People are very important.

PRINCIPLE 7
Go beyond your centre. Reach out to External collaborators.
OMER’s influence on Associate Professor Kevin Tan’s development as a researcher in medical education evolved from being a sounding board for research ideas to being an architect of a community of practice. In the early years, he would turn to HOMER whenever he needed to run his ideas by an expert third party. Each discussion left him with more than a handful of plausible solutions to the issues he had raised.

Over time and through multiple brainstorming sessions with different clinicians and budding education researchers, he noticed HOMER gradually seeding a Community Of Practice – a space where HPE researchers were nurtured and supported.

As time went on, HOMER’s advisory role morphed into an incubatory one. Over time and through multiple brainstorming sessions with different clinicians and budding education researchers, he noticed HOMER seeding a Community of Practice (COP) – a space where HPE researchers were nurtured and supported. Being part of this COP is important to him in two ways. First, he now has his ‘own gang’ and was surrounded by equally passionate people who would excite, encourage and support one another in long research journeys. The motivation generated from this support group leads to a second pay-off: the long research journeys. The motivation generated would excite, encourage and support one another in a space where HPE researchers were nurtured and HOMER gradually seeding a Community of Practice – a space where HPE researchers were nurtured and supported.

And all that it took was for a couple of members in the COP to get their work published. Their success would trigger subsequent successes as other members begin to work on turning their ideas into proposals, research designs, data, discussions, and finally, recommendations and interventions. Researchers congregate to share and discuss their ideas throughout the community, and in the process foster mentor-mentee relationships. In other words, short-term wins within a COP generate multiple successes.

A/Prof Tan cites the HOMER Grant and HOMER Meeting as instrumental in HOMER’s role as an architect of this community of practice. The grant increases the visibility of HPE researchers, an importance which surpasses the actual monetary value. “The HOMER Grant is not just about the money… The fact that someone is willing to fund a research shows that its value is being recognised… This is more powerful than the actual money itself.” HOMER Meeting provides a platform for sharing about the research projects funded by HOMER Grant. Together, they lay the foundation for building a COP of HPE researchers which can be a valuable resource for budding educators.

A/Prof Tan envisions more clinicians becoming educators as education gets increasingly seen as an attractive career option. Traditionally, health professions educators enter education because of their passion. This meant having to dedicate time, effort and other resources for teaching in addition to one’s clinical duties. A/Prof Tan explains how having a community of practice will change this. “We want to create an environment that will encourage younger clinicians to be educators as well.” This environment should foster training in education theory, and encourage clinicians to acquire conceptual frameworks that can be applied in teaching and curriculum design.

We need to be even more forward-looking. We are good at seeing current and immediate-future problems. For NHG to go forward, the (NHG) Education Group and HOMER should anticipate medium-to long-term problems at organisational and even cluster and system levels, and demonstrate how education and education research can produce recommendations that would prepare the whole cluster to deal with these issues. That would make for an exciting future.
Adjunct Associate Professor Sim Kang has been HOMER’s collaborator since 2010. Recalling his first encounter with HOMER, he talked about how its outreach efforts to the various healthcare professionals helped many colleagues to kick-start their own HPE research projects. Today, he notes how HOMER has grown not only in size, but also in prominence as its work is shared over different podiums. To him, “HOMER has really projected to the learning community not only in size, but also in prominence as its work is recognized and appreciated.”

When asked to project trends in HPE research, Adj A/Prof Sim Kang spoke of technological advances in education but cautioned educators not to neglect understanding the specific needs of learners. When the pedagogy resonates with learners, they become more engaged with the learning process. The faculty should always “motivate, mentor and evaluate” their students in ways that strengthen teacher-student relationships. It is a learning journey for both parties and HOMER can add value by creating communities of practice in HPE research and hence, increase the personal touch in NHG’s education and research endeavours.

Adj A/Prof Sim Kang is well acquainted with HOMER activities. He attends HOMER Meetings, reviews grant applications, and has several colleagues at IMH who have been awarded the HOMER Grant. “There is wholesomeness in the approach that HOMER is taking, which should be encouraged. In the process of applying for the HOMER Grant, there is a lot of homework to be done, such as the review of literature. That is one opportunity for growth. In the process of setting up the study, arrangements have to be made within and across teams. Investigators also have to manage their projects within a time frame.

When the study is completed, researchers have to manage the data and disseminate information. There is growth in knowledge, interpersonal and collaborative relationships.”

“HOMER can add value by creating communities of practice in HPE research and hence, increase the personal touch in NHG’s education and research endeavours.”

Adj A/Prof Sim Kang is well acquainted with HOMER activities. He attends HOMER Meetings, reviews grant applications, and has several colleagues at IMH who have been awarded the HOMER Grant. “There is wholesomeness in the approach that HOMER is taking, which should be encouraged. In the process of applying for the HOMER Grant, there is a lot of homework to be done, such as the review of literature. That is one opportunity for growth. In the process of setting up the study, arrangements have to be made within and across teams. Investigators also have to manage their projects within a time frame.

When the study is completed, researchers have to manage the data and disseminate information. There is growth in knowledge, interpersonal and collaborative relationships.”

When asked to project trends in HPE research, Adj A/Prof Sim Kang spoke of technological advances in education but cautioned educators not to neglect understanding the specific needs of learners. When the pedagogy resonates with learners, they become more engaged with the learning process. The faculty should always “motivate, mentor and evaluate” their students in ways that strengthen teacher-student relationships. It is a learning journey for both parties and HOMER can add value by creating communities of practice in HPE research and hence, increase the personal touch in NHG’s education and research endeavours. During the process, Adj A/Prof Sim Kang reminds us to have fun, “If we enjoy what we do, we will do better and want to do more. We must not forget that it can be fun working together.”

Adj A/Prof Sim Kang
DEPARTMENT OF GENETIC PSYCHIATRY, INSTITUTE OF MENTAL HEALTH

HOMER’S PERSONAL TOUCH to HEALTH PROFESSIONS EDUCATION RESEARCH

Associate Professor Wong Teck Yee is constantly looking for ways to foster innovations in HPE. At the same time, he sees clinicians struggling to pursue their research interests. “In our clinical environment, we are practitioners first and researchers second. Having a unit like HOMER is important. HOMER provides the scaffold we need to pursue our research interests amid our core clinical responsibilities.”

But how does one know which interest to pursue? He offers a tip: “If it is something that you think about even if there is no money involved and it is bugging you enough to keep you up at night, then develop it. If it is of interest to you, pursue it!”

A HOMER Grant awardee, A/Prof Wong also helps HOMER review proposals from other clinicians. He urges “young researchers to take advantage of this resource (HOMER Grant). My grant might have been a few thousand dollars but it was enough for me to get materials and employ somebody to do the data entry. This is extremely crucial for a new researcher to pave his way into doing more research. The HPE research field is very competitive. But entering it sets you up for future work and you learn from the experience.”

A/Prof Wong’s advice for clinicians venturing into medical education research:

1. Your idea is key – go after what interests you
   If you are doing a particular type of research because you think it is a soup of the day and everybody is doing it, then it is not going to work.

2. Remind yourself that you will be dedicating time to it
   At a certain time in your career, you need to decide where you want to place your energy. The research you do has to be worth the investment of your time and energy.

3. When you lose passion, don’t fear
   You may start out extremely passionate. Along the way you may lose steam. That’s when you have to realise that your research may serve as a springboard to something else.

4. Manage expectations
   You may want to go into something and do a complete overhaul. But always manage your own expectations. What you are intending to do for the study and who you are going to approach will align your expectations.

A/Prof Wong Teck Yee
FAMILY PRACTICE, TAN TOCK SENG HOSPITAL, ASSISTANT DEAN, LEE KONG CHIAN SCHOOL OF MEDICINE
Burnout and psychological morbidity can reduce job satisfaction, psychological and physical well-being, all of which in turn, may compromise patient care. These findings were published in Palliative Medicine (2015) after Adjunct Assistant Professor Mervyn Koh and Dr Allyn Hum, decided to study the prevalence of burnout and psychological morbidity in the palliative care community in Singapore.

They concluded their paper with a call for better support in the home hospice care fraternity in terms of greater staffing, institutional or ministry support. “Their research was awarded the HOMER Grant in 2013. Adj Asst Prof Koh explained how the grant “helped us pay for the licensing of the Maslach Burnout Inventory upon which the study was developed. The grant also paid for the statistician’s time and effort. Every cent of it helped to pay for the things that we needed.”

HPE research is so important to Adj Asst Prof Koh that he dedicates a portion of his busy schedule to guide junior practitioners in HPE research. For instance, he worked with Dr Janine Kee (Associate Consultant, Psychological Medicine), and HOMER to identify lapses in communication skills among junior doctors. “Janine strongly believed in teaching good communication skills and took the initiative to do most of the work herself. My role as a mentor was to encourage her when we met with difficulties. In addition, I linked her up with HOMER and together, we fine-tuned the project. It was a really good collaboration between us, Issac (Mr Issac Lim, Head, HOMER) and Hwee Sing (Dr Khoo Hwee Sing, Research Analyst, HOMER).”

The preliminary results of the study were presented at the 13th Asia Pacific Medical Education Conference in 2016. Dr Koh explained how the grant “helped us pay for the licensing of the Maslach Burnout Inventory upon which the study was developed. The grant also paid for the statistician’s time and effort. Every cent of it helped to pay for the things that we needed.”

In 2013, Dr Lim Wen Phei got to work with HOMER when she embarked on her first medical education research project, The doctor as a psychotherapist: The impact of psychotherapy in psychiatry residency. In her study, she found that the introduction of psychodynamic psychotherapy and cognitive behavioural therapy enhanced the knowledge, skills and attitudes of third year psychiatry residents. She rounded off her data collection and analysis with presentations to the hospital’s psychiatry programme directors, the psychotherapy network at National University Hospital and the Association for Medical Education in Europe Conference in 2014 to positive reception. Encouraged by the outcome of her first study, Dr Lim proceeded with the second and third phases of the project where she investigated the longitudinal changes in skills, knowledge and attitudes of practitioners who underwent psychotherapy training.

She made these first steps into HPE research when her mentor, Associate Professor Nicholas Chew (Designated Institutional Official, NHG) urged her to develop the question that was playing in her mind, into an insightful project and introduced her to Yong Hoo (Mr Lim Yong Hoo, Senior Research Analyst, HOMER), who has been instrumental in the success of the project. While it is tempting to take the easy way out and get HOMER research analysts to handle the mundane aspects of a research project, Dr Lim advises clinicians against doing so. “It would be naïve for clinicians to think that they can relegate the HOMER team to simply take care of the numbers. If you want the working relationship to be productive, there has to be transference of learning within your partnership.”

The success of her first medical education research project has led to new ideas such as the development of a new mentorship model for residents and medical students. She advocates that all young medical educators take on education research, for research both stimulates reflections on pedagogy, and enhances the learning process for their personal development.

Married practitioners and those who attached spiritual meaning to their work were at lower risk of burnout.

Those working in home hospice care were at higher risk of psychological morbidity compared to their colleagues working in acute care or inpatient care settings.

Practitioners who adopted a combination of strategies were shown to cope better with the psychological stress from caring for seriously ill patients.

In whichever setting, working beyond 60 hours per week caused significantly higher risk of burnout and psychological morbidity.

As a relatively seasoned researcher now, her advice is for young medical educators to make good use of two HOMER initiatives:

HOMER Meetings – for serving as a convivial platform for clinicians of different backgrounds but similar interests to come together and exchange project and research ideas.

HOMER Grant – for providing the means to resources like journals and research assistants to support new research ideas.
Ms Heidi Tan believes that her personal goal of building a strong team of Allied Health Professional Educators (AHPEs) would contribute to the hospital’s goal of becoming the hospital of choice in Singapore. In 2013, the TTSH Education Lead (AHS) initiated the Allied Health Education Taskforce (AHET) to facilitate the planning of learning and educator development activities for allied health students and professionals. Since then, teaching and assessment activities have become the two most prominent concentrations of the taskforce’s efforts in developing the hospital’s AHPEs.

Ms Tan now has plans to encourage more AHPEs to take on HPE research in spite of being cognisant of the educators’ apprehension to grapple with complex education pedagogies and theories. She cites Entrustable Professional Activities (EPAs) as an example. Supervisors in clinical settings want to know accurately, the type and size of tasks they should entrust their trainees with once they think they have acquired a sufficient level of competence. “However, the process of translating competencies into practice is very complex for us. We need materials that we can read easily and understand quickly,” explains Ms Tan.

To expose AHET members to HPE, she invited Charmaine (Dr Charmaine Krishnasamy, Senior Research Analyst, HOMER) to participate in AHET meetings. “When we discuss EPAs, Charmaine would pass us easy-to-read articles on EPAs. I see Charmaine as our bridge to HOMER’s resources and expertise. Her presence in the taskforce has reduced the level of inertia for AHPEs to venture into education research as they know where or whom to turn immediately should they require assistance in designing research studies and analysing research data.”

Charmaine is now a regular at AHET meetings and is often involved in brainstorming potential research ideas with the AHPEs. To Ms Tan, “Collectively conceptualising research ideas is the first step to producing quality education research work and growing the body of knowledge in HPE research.”

Most importantly, unexpected findings emerged from the research. “We tried to put aside pre-conceived notions on what was happening. That helped us to find unexpected things. For example, we always thought that a checklist was important but participants talked about how during a rush (to get things done), it didn’t really help.” She also had the opportunity to present her findings at an oral presentation of the 11th Asia Pacific Hospice Conference 2015 in Taiwan and generated great interest amongst the conference participants. The investigation also provided Ms Chen a chance to learn computer-assisted qualitative data analysis. And she was grateful to have HOMER’s help in setting up that opportunity for her. HOMER helped with finding the appropriate software for her to do analysis. The HOMER Grant enabled her to hire research assistants, who were necessary for time-pressed clinicians.

Ms Chen notes that education research in nursing is changing. Awareness of HPE research is increasing and its initiatives are leading nursing research. “The trends are changing. We always used to employ pre/post type of methodologies. Over time, however, I realise that there are more productive methods and that pre/post methodologies might not reveal the complete information I want to know.”

The investigation also provided Ms Chen a chance to learn computer-assisted qualitative data analysis. And she was grateful to have HOMER’s help in setting up that opportunity for her. HOMER helped with finding the appropriate software for her to do analysis. The HOMER Grant enabled her to hire research assistants, who were necessary for time-pressed clinicians.
Dr Sandra Kemp was another partner who got to know HOMER at one of its HOMER meetings. This acquaintance soon developed into a collaboration when Nanyang Technological University announced a grant call for research related to enhancing teaching and learning.

LKCMedicine thought that a project to study the university's first cohort of medical students’ transitions from classroom-based learning to learn in clinical settings would be valuable. The situational information provided a broader understanding of what the students are experiencing in transition.

"As expertise grows, different qualitative research methods for data gathering and analysis will become more common. These methods provide us with different ways of looking at a problem and different ways of trying to understand it." 

Transition from classroom-based learning to learning mainly in clinical settings would be valuable. "We also thought this project would be an excellent opportunity to collaborate with HOMER. HOMER's skills complemented our skills and experience. We learnt from one another, exchanging ideas and perspectives. Our combined expertise was pivotal to the success of this project," she adds.

In the photo elicitation component of the project, the student-participants became co-researchers as they recorded their experiences as the first cohort of medical undergraduates at LKCMedicine. Photography as a research modality allowed the students to express what they could not describe in words alone. HOMER also helped with the social network analysis of the students’ interactions to reveal the types of interpersonal relationships students experience in their learning journey and how these support their adjustment to learning in clinical settings. The situational information provided a broader understanding of what the students are experiencing in transition.

To Dr Kemp, pooling together diverse expertise when doing research is key for HPE research. "As expertise grows, different qualitative research methods for data gathering and analysis will become more common. These methods provide us with different ways of looking at a problem and different ways of trying to understand it. I hope people will see that collaborative research using qualitative research methods has its own value which is different from research methods commonly used in biomedical research. Research in HPE using qualitative research methods is growing in a series of successful studies and outcomes. Dr Xie is grateful for the much needed seed money that the grant provides. Without it, a research endeavour could be stalled or even aborted. The money is instrumental in keeping many clinicians engaged. Dr Xie believes that HOMER is a resource a budding research community should have. "Having a team like HOMER is very helpful. Just knowing that there is somebody there to support us is a very important source of encouragement for people like me." Like other committed educators, she appreciates the importance of taking a step back from their usual educational practices in order to innovate, integrate and improve. However, with her current clinical workload, reflection becomes almost a luxury. However, with HOMER’s support, the synergy between our nursing and educator roles comes closer to fruition. As educators, we should always ask ourselves, ‘How sure are we that what we are teaching is based on the best evidence?’”

In 2008, 25 year-old Dr Xie Huiting became the youngest nurse in Singapore to pursue a PhD. Back then, she had hoped to conduct evidence-based research in her discipline, as well as mentor novice researchers. Today, with three HOMER Grants under her belt, the nurse educator at the Institute of Mental Health (IMH) has fulfilled that aspiration, and is recognised as a role model for HPE research among clinicians at IMH. Like many clinicians in NHG, she got to know of HOMER at one of the HOMER Meetings. The symposium sparked her desire to produce research within the purview of HOMER Grant. She applied for the grant the next chance she got and had not looked back since. For the first application led to the first partnership and that partnership led to the second application, etc. All of which resulted in a series of successful studies and outcomes.
Dr Raymond Ng and his team won a HOMER Grant in 2015 for their proposal on explicating the role of Advance Care Planning (ACP) Facilitators. Their project ties in nicely with two themes stipulated in the Grant: Professional Identity Formation and Inter-Professional Collaboration and Education. Dr Ng explains that ACP is the “process of planning for your future health and personal care. It includes discussing one’s personal beliefs and goals for care with loved ones and healthcare providers.” Professionals from different vocations are involved in ACP facilitation and people of different professional vocations are likewise grouped together in role play training. The funding would give research in ACP facilitation a boost and consequently, bring about increased collaboration among different healthcare disciplines and professions.

Clarifying the role of the ACP facilitator is what spurred Dr Ng and his team to apply for HOMER Grant. The facilitator for ACP can be a doctor, nurse or a social worker. To Dr Ng, the role potentially belongs to every healthcare professional. Research was necessary to explore all possible facets of the role, as well as the barriers to ACP facilitation. The team would speak with practitioners from the various fields in healthcare to find out how to enhance the professional identity of ACP facilitators.

He believes that HOMER Grant plays a crucial role in getting HPE research off the ground. “I think that while people are interested in teaching, they don’t take education seriously enough to do research in it. The HOMER Grant may not be a huge sum. Nonetheless, it is enough to get new researchers in HPE started. I find this very encouraging.” He said that the grant is a demonstration that people are the most valuable agents of change and worth developing. He believes there will be a direct and positive impact on patient care.

Mr Chong Chun Meng
SERNOR RADI DiAGNOSTIC RADIOLoGY
CLINICAL EDUCATOR LEADERSHIP
PRE-PROFESSIONAL EDUCATION OFFICE
TAN TOCK SENG HOSPITAL

Upon the advice of Associate Professor Tham Kum Ying (Assistant Chairman of the Medical Board (Education), TTSH), Mr Chong Chun Meng approached the HOMER team for an assessment of the placements at the Radiography Department which had been facing falling feedback scores from students. Issac (Mr Issac Lim, Head, HOMER), Nasloon (Ms Nasloon Ali, former Research Analyst, HOMER) and Charmaine (Dr Charmaine Krishnasamy, Senior Research Analyst, HOMER) got on board and they were superb. We ended up with spin-offs from the study, garnering us good publicity,” says Mr Chong. He had thought that the radiographers didn’t know what to teach but the problem was actually a misalignment between students and preceptors. The radiographers wanted to teach skills which they deemed as valuable but the students were not ready to receive such training. With the findings, Mr Chong and his fellow radiographers worked on improving their communication with the students. They crafted faculty development sessions, a six-part series during lunch time, and learnt to articulate their teaching in a more explicit and accountable manner.

The research team also spoke to the teachers and the directors of the school for other improvements. The project was presented at the Singapore Health & Biomedical Congress 2015 and 12th Asia Pacific Medical Education Conference 2015. “Colleagues, radiographers from other hospitals saw our posters and approached me thereafter. They extracted the findings to shape practice on their side. I am glad that whatever we have done is helping,” Mr Chong says.

Mr Chong is grateful for HOMER’s involvement in education research. He finds the accessibility, the knowledge and expertise available have allowed for a seamless collaboration. “I’m very proud of the fact that we have HOMER. When I mention my work with HOMER, people are impressed that HOMER is not a research unit that is only accessible to medical doctors, but one that collaborates with all professional groups including nursing and allied health professionals.”
Ms Law Hwa Lin had been observing HOMER research analysts interacting with other departments in allied health and radiography for a while. Each time she learnt about a HOMER collaboration with other health professions, she would wonder how the pharmacy professional group could work with HOMER too. The chance finally came when the NHG Education Development Office’s Pre-Professional Education team introduced her to HOMER.

Ms Law and her team addressed the issue by having clinician educators articulate and explain their expectations and lesson objectives to their students during orientation. Students were also surveyed pre, mid, and at the end of postings to allow the department to capture and address student preferences and concerns earlier. As it turned out, students indicated that they preferred certain rotational structures over others. The results of the project have since been presented at the 13th Asia Pacific Medical Education Conference earlier. As it turned out, students indicated that they preferred certain rotational structures over others. The results of the project have since been presented at the 13th Asia Pacific Medical Education Conference in 2016.

That foray into research led Ms Law not to accept figures at face value. “Now, I don’t take results literally. Instead, I’d think about why the results have occurred,” she says.

For Ms Law, every clinician ought also be an educator. “We need more committed and competent preceptors especially with the introduction of the pharmacy residency programme, and postgraduate education.”

Dr Alvin Lum has always been interested in education, believing that senior clinicians should impart the good that they have learnt to junior staff. This motivation for paying things forward through education and research stems from the beneficiaries he has had in his development as a doctor. “I was blessed with good mentors, motivated by their dedication and desire to treasure their guidance. Hence, I believe that we should do likewise.”

Today, he is a model educator himself, having won the 2015 NHG Teaching Excellence Awards. He hopes that the award will encourage more family physicians to be involved in Health Professions Education (HPE); “Dr Lum is on the teaching faculty of Graduate Diploma Mental Health and a tutor at the Yong Loo Lin School of Medicine in National University of Singapore. His interest in HPE as well as his passion in research led him to design a research study, The General Practitioner (GP) partnership programme – A model of successful interprofessional collaboration and possible lessons for interprofessional education.

He and his collaborators wanted to evaluate if the successes of interprofessional collaboration in the GP-Partnership Programme could be used to develop a new interprofessional education (IPE) training programme, or to enhance current training programmes with the inclusion of IPE modules. The team applied and won a Homer Grant in 2013. The funding got them started on their research, which resulted in the identification of some components that contributed to interprofessional collaboration as well as the creation of possibilities for IPE in existing education programmes. They were recognised for their efforts. A team member won a Bronze Award in the 2014 Singapore Biomedical Research Congress category for HPE research investigators. In the following year, their abstract was shortlisted for Best Abstract for Poster Presentation at the 12th Asia Pacific Medical Education Conference as well as the 3rd International Conference on Faculty Development in the Health Professions. Success inspires further effort and the team went on to apply for a second HOMER Grant in 2015. They got the funding and embarked on...
The benefits from the HOMER Grant went beyond the monetary. According to Dr Lum, HOMER Grant, "allowed team members who were not clinicians an opportunity to be exposed to healthcare research and to better appreciate the process of developing studies within a healthcare setting. Post-study, the opportunity to present and talk about our project was also a very beneficial platform for learning."

In 2015, this learning journey culminated in the NHG Outstanding Education Partners Award. His tireless efforts in connecting institutional healthcare to primary care and in customising course curricula to better suit the needs of GPs, have reaped some dividends in HPE and research. To Dr Lum, however, this bridging work has only just begun. “HPE should not only be ‘silio-ed’ in institutions and hospitals. We should continue to reach out to the primary care sector. There are many capable doctors whom we can tap, and it is a loss if we do not do so.”

**Dr Lum offers the following strategies to encourage more faculty physicians to get involved in HPE research:**

- Increased outreach and awareness to the primary care sector through publicity, word-of-mouth.
- More involvement: His study involves GP partners in focus groups. This is a small step. More such studies and involvement should be considered.
- Invitation to partner as joint principal investigators.
- HOMER as a catalyst for bringing about partnerships and activities with primary care.

The trio went on to work on another project together. Dr Ong introduced the sensory encounter, ‘Dialogue in the Dark’ (DID) into the residency programme to promote experiential learning among the residents. The doctors enlisted Nasloon’s help and designed a qualitative study to find out more about their students’ learning process during the session.

...medical education research was a relatively new area among primary care physicians and conducting this sort of exploratory research was a steep learning curve for him. But Dr Seah knew he could count on the support of his research team...
working with HOMER is valuable for Ms Tan Keng Teng, because of the different perspectives HOMER analysts bring to an inquiry. “Its analysts’ diverse training enriched the research process as a learning experience for all involved,” recalls Ms Tan.

In 2011, Ms Tan worked with HOMER on a project funded by HOMER Grant. The project was presented at the Singapore Health and Biomedical Congress 2012. Ms Tan, as principal investigator, presented the study and won second prize in the Health Professions Education Research Investigator category. Subsequently, the research was published in the Journal of Interprofessional Care.

She came to know of HOMER Grant at the Essentials for Clinician Teacher Course when Issac (Mr Issac Lim, Head, HOMER) spoke about the funding for HPE researchers. His talk piqued her interest as well as that of Dr Mark Chan’s (Head, Department of Geriatric Medicine, TTSH), “We got excited when Issac invited us to carry out research in interdisciplinary collaboration and learning. We hold weekly multidisciplinary rounds at the Centre for Geriatric Medicine and a detailed inquiry into improving the interprofessional collaboration would help not just the clinical team, but most of all, the patient.”

“We took our idea to HOMER. They introduced us the conceptual framework and helped shape the design of the study. They also conducted the focus group discussions, interviews, and analysed the data with us.” The experience was eye-opening for the clinicians. “We were hard sciences folk. HOMER brought in qualitative research which we found fascinating and essential for fleshing out the object of our study.”

The conceptual framework hinged on the notion of transactive memory system (TMS). Issac had introduced this notion because of the intensive collaborative work the team undertakes. “With TMS, no one person is overly taxed when it comes to acquiring and using knowledge or information needed to care for a patient. Each member of the multidisciplinary team learns to retrieve information that is stored in another member’s cognitive bank,” explains Ms Tan. All members in the multidisciplinary team then come to a collective decision about the care required. Ms Tan found that the more often a member attended the weekly discussions, the higher their TMS scores and work satisfaction. As Ms Tan and her colleagues delved deeper into their study, there was a striking realisation that “in carrying out the research, writing it up for conference presentation, for a journal, going back and forth with one another, splicing disparate pieces of information from one another – we were enacting the notion of transactive memory system ourselves.”

Mr Yong Keng Kwang got acquainted with HOMER through the InterProfessional Leadership Programme (IPLP), a leadership development initiative aimed at equipping junior managers with the skills for interprofessional collaboration and organisational improvement. When the collaboration started, he had regarded HOMER as an auditor for putting measures in place for outcome evaluations. Over time, he saw HOMER evolving into a partner in this project. As Chair of the IPLP Steering Committee, his team is responsible for delivering IPLP training over the next three years to 1,500 junior managers across NHG. During the conceptualisation of the training programme, the committee quickly realised that there had to be a robust framework to evaluate the outcomes of the programme. Mr Yong recalls, “We wanted to know if we were doing well. Because you can’t run a programme and assume that you are delivering results. Associate Professor Nicholas Chew (Group Chief Education Officer, NHG), suggested that HOMER would be a good help.”

Conducting outcome evaluation was not merely to account to senior management for the resources spent. “We also needed to account to the learners and trainers. We needed to establish the value of the IPLP Programme vis-à-vis other leadership programmes in NHG.” He noted how when HOMER started to frame IPLP’s evaluation work-stream in a more robust manner, it strengthened the committee’s ability to demonstrate that they were achieving their objectives. “Intuitively we know certain things, but we need data to verify these intuitions.” HOMER assumed a more involved role when it started to examine the processes and to collect formative data that would inform the committee on ways to improve the programme.

“Intuitively we know certain things, but we need data to verify these intuitions,” HOMER assumed a more involved role when it started to examine the processes and to collect formative data that would inform the committee on ways to improve the programme.

When asked about his view on the future of HPE research, he talks of the need to explore opportunities for interprofessional learning amid the norm of developing only within one’s own professional group. He also hopes for more research on peer-to-peer learning, and on fostering dialogues across the research communities.
Congratulations to HOMER on its fifth anniversary year!
Begun with a brilliant vision in 2011 under the direction and guidance of A/Prof Lim Tock Han, A/Prof Nicholas Chew, Ms Yvonne Ng, Adj A/Prof Lim Wee Shiong and Mr Isaac Lim, the distinguished inter-disciplinary HOMER team now assembled has produced extraordinary results. It is impressive to read their research reports, experience their presence at international healthcare education meetings, and review their live activities sponsored in Singapore. The output of this team of dedicated scholars is most definitely advancing the field of HPE nationally and internationally. BRAVO!

PROF ELIZABETH ARMSTRONG
Clinical Professor in Pediatrics, Director of Harvard Macy Institute, Harvard Medical School.

We had a wonderful audience for our talk hosted by HOMER, which got us to think about next steps for some of our research. Clinical research is important but in medical education, you ask different questions. The good work you are doing at HOMER builds towards what we all strive to do in HPE research, which is to have healthier patients, and better health outcomes across the populations.

PROF NICOLE BORGES
Assistant Dean, Medical Education Research and Scholarship; Professor, Department of Pediatrics, Office of Academic Affairs, University of Mississippi School of Medicine.

I had the opportunity to interact with HOMER through in-depth discussions about research methodologies, theories, and writing. These sessions allowed us to share our research philosophies and understand how we can better harness our interests and beliefs to advance the field of HPE. Congratulations to HOMER on reaching the five-year milestone. I am glad to be part of the HOMER journey, and I believe that HOMER will continue to forge ahead in HPE research.

PROF LORELEI LINGARD
Chief, Center for Education Research & Innovation Professor, Department of Medicine, Schulich School of Medicine & Dentistry, University of Western Ontario.

Healthcare and education are evolving rapidly – the ways we learn and the professions we identify will change significantly in this century. Finding ways to incorporate new technologies while retaining the compassion that makes us caring health professionals is a huge challenge. For this reason, the work of centres like HOMER are needed more than ever to push the frontiers of HPE.

PROF BRIAN HODGES
Director, Department of Education, University Health Network; Professor, Department of Psychiatry, Faculty of Medicine, University of Toronto; Scientist, Richard and Elizabeth Currie Chair in Health Professions Education Research, Wilson Centre for Research in Education; Senior Fellow, Massey College; Project Lead, The AMS Phoenix Project.

Quality healthcare is supported by scholarly approaches to HPE and training. HOMER is perfectly placed to contribute to ongoing developments in strengthening Singapore’s health network. Embedded in one of the leading regional health systems to fulfill the academic missions of clinical care, education and research, HOMER members are inspired by real problems and work to conduct high quality rigorous education research to inform clinical educational processes.

ASST PROF TINA MARTINIANAKIS
Director, Scholarship & Education Researcher, Assistant Professor, Department of Obstetrics & Gynecology, Wilson Centre for Research in Education, Faculty of Medicine, University of Toronto Hospital for Sick Children.

I am pleased to see HOMER and CenMED collaborating on education research activities proactively to further medical education in Singapore and internationally. Collaboration is the key to development of and building sustainable, mutually beneficial and meaningful future frameworks to further knowledge, as well as to enable impactful outcomes. The need for collective cooperation is a critical element in the area of Education in Singapore, where the medical education ecosystem is small and there are current concerns of the excessive and unnecessary ‘commodification’ of education. On this note, I look forward to greater collaboration within the medical education community in Singapore to further advance and push the frontiers of medical education research.

DR DUJEERA D. SAMARASEKERA
Chief, centre for medical education (CENMED), NUS, Faculty of Medicine, National University Health System.
As long as I
and great Odysseus soldiered there,
ever once did we speak out at odds,
nor in open muster nor in royal council:
forever one in mind,
in judgment balanced,
shrewd, we mapped our armies’ plans
so things might turn out best.

NESTOR
2011

**MILESTONES**

**THE HOMER JOURNEY BEGINS**

**FIRST HOMER MEETING**

**2012**

**July 2012**

**Launch of SATELLITE HOMER MEETING with INSTITUTE OF MENTAL HEALTH**

**The Homer Journey Begins**

**January 2013**

**HOMER wins THE RESEARCH INVESTIGATOR AWARD (GOLD)**

**ADJ A/PROF LIM WEE SHIONG**

At Singapore Health and Biomedical Congress, Singapore (SHBC) for a study led by Dr. Lim Wee Shiong on factors that increase the likelihood of studies achieving a clarification purpose, through a review of 186 abstracts.


**September 2013**

**HOMER receives MEDIA COVERAGE IN THE STRAITS TIMES**

For communication patterns of health-care workers study: Direct and nurses ‘talk less face to face’.

**August 2013**

**HOMER receives BEST POSTER PRIZE**

Mr Issac Lim and A/Prof Chia Chung King (1st Out of 781 Posters)

At the Association for Medical Education in Europe (AMEE), Lyon, France for their study on communication patterns of health-care workers at Tan Tock Seng Hospital (TTSH).


**November 2013**

**Launch of NHG-HOMER GRANT**

**2014**

**January 2014**

**HOMER wins BEST ORAL PRESENTATION**

**ADJ A/PROF LIM WEE SHIONG**

At the Asia Pacific Medical Education Conference (APMEC) for a study on the trends of research purpose in the last five years.


**February 2014**

**HOMER joins E-LEARNING SYSTEMATIC REVIEWS PROJECT in NHG-NTU collaboration**

**2015**

**January 2015**

**HOMER wins BEST ABSTRACT FOR POSTER PRESENTATION PRIZE**

**MS ONG YU HAN AND ADJ A/PROF LIM WEE SHIONG**

At the Asia Pacific Medical Education Conference (APMEC) for a study on the validation of a shared leadership scale for interprofessional healthcare teams.


**April 2015**

**HOMER COLLABORATION WITH MERSU**

To study how to enhance the transition from classroom learning to workplace learning environments (funded by NTU ExEd Grant).

**August 2015**

**Adj A/Prof Lim Wei Shiong is named ASSOCIATE FELLOW OF THE ASSOCIATION FOR MEDICAL EDUCATION IN EUROPE (AMEE)**

**2016**

**April 2016**

**NHG-HOMER GRANT FUNDS 50TH PROJECT EVALUATION OF THE INTERPROFESSIONAL LEADERSHIP PROGRAM**

**2017**

**February 2017**

**HOMER wins BEST ABSTRACT FOR POSTER PRESENTATION PRIZE**

**ADJ A/PROF LIM WEE SHIONG**

At the Asia Pacific Medical Education Conference (APMEC) for a study on interprofessional collaboration for improving patient safety in geriatrics care.

**November 2017**

**HOMER wins BEST ORAL PRESENTATION**

**ADJ A/PROF LIM WEE SHIONG**

At the Asia Pacific Medical Education Conference (APMEC) for a study on the trends of research purpose in the last five years.

Bakim, S., Lim, Y.-H., Cha, F., & Kuan, M. L. (2015, September). Improving feedback to internal medicine residents following Clinical Competency Committee performance evaluation: A faculty study. Poster presented at the Association for Medical Education in Europe, Glasgow, UK.

Krishnasamy, C., Lim, I., & Lim, W. S. (2014, September). Towards a translational paradigm for outcomes-based medical education research. Poster presented at the Association for Medical Education in Europe, Milan, Italy.

Koh, G., Merchant, R., Lim, W. S., & Amin, Z. (2013, August). Geriatric education: Didactic teaching improves knowledge but clinical exposure improves attitudes. Poster presented at the Association for Medical Education in Europe, Prague, Czech Republic.

Kassim, S., Lim, Y.-H., Cha, F., & Kuan, M. L. (2015, September). Classification of outcomes-based medical education research using a translational paradigm. Poster presented at the Asia Pacific Medical Education Conference & International Conference on Faculty Development in the Health Professions, Singapore.


Koh, G., Merchant, R., Lim, W. S., & Amin, Z. (2014, September). Research quality of the various abstract categories at Association for Medical Education in Europe: Is there a difference? Poster presented at the Association for Medical Education in Europe Conference, Milan, Italy.


Cheong, S., Chia, C. K., & Lim, W. S. (2013, September). Confidence levels of internal medicine trainees in rheumatological skills and diagnosis. A Singapore perspective. Paper presented at the Association of Medical Education in Europe, Lyon, France.


Bakim, S., Lim, Y.-H., Cha, F., & Kuan, M. L. (2015, September). Improving feedback to internal medicine residents following Clinical Competency Committee performance evaluation: A faculty study. Poster presented at the Association for Medical Education in Europe, Glasgow, UK.

Krishnasamy, C., Lim, I., & Lim, W. S. (2014, September). Towards a translational paradigm for outcomes-based medical education research. Poster presented at the Association for Medical Education in Europe, Milan, Italy.

Kassim, S., Lim, Y.-H., Cha, F., & Kuan, M. L. (2015, September). Improving feedback to internal medicine residents following Clinical Competency Committee performance evaluation: A faculty study. Poster presented at the Association for Medical Education in Europe, Glasgow, UK.


Koh, G., Merchant, R., Lim, W. S., & Amin, Z. (2013, August). Geriatric education: Didactic teaching improves knowledge but clinical exposure improves attitudes. Poster presented at the Association for Medical Education in Europe, Prague, Czech Republic.

Koh, G., Merchant, R., Lim, W. S., & Amin, Z. (2013, August). Geriatric education: Didactic teaching improves knowledge but clinical exposure improves attitudes. Poster presented at the Association for Medical Education in Europe, Prague, Czech Republic.

Koh, G., Merchant, R., Lim, W. S., & Amin, Z. (2013, August). Geriatric education: Didactic teaching improves knowledge but clinical exposure improves attitudes. Poster presented at the Association for Medical Education in Europe, Prague, Czech Republic.
Lim, W. (2013, October). Interprofessional collaborative learning: What do residents mean when they talk "I have taught, but have you learnt?" Poster presented at the Association for Medical Education in Europe Conference, Prague, Germany.

Ng, D., Lim, W., & Chan, M. (2013, September). Determinants of clinical leadership in medical residents. Poster presented at the Association for Medical Education in Europe Conference, Barcelona, Spain.


Homer Meeting was launched in 2011 as a quarterly platform for health professionals of different specialties and backgrounds to come together and share their research. Over the past five years, it has facilitated interprofessional dialogues among more than 450 participants including physicians, nurses, allied healthcare professionals and administrators.

The research presented at each session provides the healthcare professionals with opportunities for discussion, collaboration, learning, and the exchange of valuable comments and inputs about current research projects and future studies. Through these conversations, we hope to encourage our attendees to pursue their research interests and recognize the relevance and application of research in their administrative, clinical and educator roles.

In addition to communicating findings of completed projects, and obtaining feedback for ongoing research studies, Homer Meetings facilitated sharing of specific research methodologies, as well as innovative ideas and latest trends in Health Professions Education (HPE). In order to reach a wider audience, we utilised video-conferencing facilities to enable interested participants from other locations to join the discussion. We also hosted overseas speakers who generously shared their research expertise on fundamental issues in HPE.

Our team is appreciative of the support that Homer Meeting has garnered from the HPE community over the years. We are dedicated to continuous atrument to ensure that Homer Meeting will be at the forefront of the emerging trends in HPE.
<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>PRESENTER(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 APR 12</td>
<td>How do web 2.0 tools enhance teaching and lifelong learning in medical education</td>
<td>MR BENEDICT CHIA Human Resources Development Consultant, Human Resource Development, Tan Tock Seng Hospital</td>
</tr>
<tr>
<td></td>
<td>Reliability and validity part 2: Scale construction and validation</td>
<td>MS FADZLI BAHAHAN ADZAHAR Research Analyst, HOMER, Education Development Office, National Healthcare Group [with HOMER until 2013]</td>
</tr>
<tr>
<td>12 JUL 12</td>
<td>Let’s talk about assessments: Where we are &amp; where we are going</td>
<td>DR LIM WEE SHIONG Senior Consultant, Department of Geriatric Medicine, Tan Tock Seng Hospital, Faculty Advisor, HOMER MR ISSAC LIM Manager, HOMER, Education Development Office, National Healthcare Group</td>
</tr>
<tr>
<td></td>
<td>Reliability and validity part 3: Evaluating the quality of qualitative research</td>
<td>MS FADZLI BAHAHAN ADZAHAR Research Analyst, HOMER, Education Development Office, National Healthcare Group [with HOMER until 2013]</td>
</tr>
<tr>
<td></td>
<td>Teaching intravenous cannulation to medical students in emergency department: A prospective study</td>
<td>DR NORAIZLINA RAHMAN Registrar, Emergency Department, Tan Tock Seng Hospital (with TTSH until 2013)</td>
</tr>
<tr>
<td>16 OCT 12</td>
<td>The effects of problem-based learning on clinical reasoning ability in mental health nursing</td>
<td>MS POH CHEE LIEN Assistant Director, Nursing (Education), Institute of Mental Health</td>
</tr>
<tr>
<td></td>
<td>Transactive Memory System as a measure of interprofessional collaborative practice and work satisfaction in a multidisciplinary geriatrics team</td>
<td>MS TAN KENG TENG Senior Clinical Pharmacist, Department of Pharmacy, Tan Tock Seng Hospital</td>
</tr>
<tr>
<td></td>
<td>Reliability and validity part 4: The design and conduct of mixed methods research</td>
<td>MR FADZLI BAHAHAN ADZAHAR Research Analyst, HOMER, Education Development Office, National Healthcare Group [with HOMER until 2013]</td>
</tr>
<tr>
<td>21 JAN 13</td>
<td>A web-based approach in teaching basic neuroradiology interpretation to junior residents</td>
<td>DR JAI RAO Registrar, Consultant, Division of Neurourology, Institute of Mental Health</td>
</tr>
<tr>
<td></td>
<td>Assessment of surgical trainees’ quality of knot tying</td>
<td>DR CHING SOK SIONG Registrar, Department of General Surgery, Changi General Hospital</td>
</tr>
<tr>
<td>25 APR 13</td>
<td>Innovations in clinical reasoning through nursing education</td>
<td>MS POH CHEE LIEN Assistant Director, Nursing (Education), Institute of Mental Health</td>
</tr>
<tr>
<td></td>
<td>Does a rectal examination trainer improve accuracy in clinical examination of the prostate in experienced family physicians</td>
<td>DR DAVID HO WEI LIANG Deputy Head, Family Medicine, National Healthcare Group Polyclinics</td>
</tr>
<tr>
<td></td>
<td>Stereotypes in healthcare professions</td>
<td>MS KAMISA BATRA Research Analyst, HOMER, Education Development Office, National Healthcare Group (with HOMER until 2014)</td>
</tr>
<tr>
<td>16 JUL 13</td>
<td>Introduction to the principles of program evaluation</td>
<td>DR CHARMAINE KRISHNASAMY Research Analyst, HOMER, Education Development Office, National Healthcare Group</td>
</tr>
<tr>
<td></td>
<td>Using learning theories to diagnose learner-related problems</td>
<td>MS ONG YU HAN Research Analyst, HOMER, Education Development Office, National Healthcare Group</td>
</tr>
<tr>
<td></td>
<td>Interprofessional practice of allied health professionals in Tan Tock Seng Hospital: A ‘dipstick’ exploratory survey</td>
<td>MS FLORENCE CHEONG Senior Manager, Senior Principal Occupational Therapist, Department of Occupational Therapy, Tan Tock Seng Hospital</td>
</tr>
<tr>
<td>22 OCT 13</td>
<td>Lost in transition – Newly qualified registered nurses and their transition to practice journey in the first six months: A qualitative descriptive study</td>
<td>MR EUGENE TEOH YEN TJIUN Nurse Educator, Nursing Service, National Healthcare Group</td>
</tr>
<tr>
<td></td>
<td>Getting started with Zotero</td>
<td>MR LIM TONG HAO Research Analyst, HOMER, Education Development Office, National Healthcare Group</td>
</tr>
<tr>
<td>23 JAN 14</td>
<td>GP Partnership Programme</td>
<td>DR ALVIN LIM Deputy Director, IMH-GP Partnership Programme, Institute of Mental Health</td>
</tr>
<tr>
<td></td>
<td>Determinants of research purpose</td>
<td>DR LIM WEE SHIONG Senior Consultant, Department of Geriatric Medicine, Tan Tock Seng Hospital, Faculty Advisor, HOMER</td>
</tr>
<tr>
<td></td>
<td>Formulating a search strategy for a literature review</td>
<td>DR CHARMAINE KRISHNASAMY Research Analyst, HOMER, Education Development Office, National Healthcare Group MR LIM TONG HAO Research Analyst, HOMER, Education Development Office, National Healthcare Group</td>
</tr>
<tr>
<td>10 APR 14</td>
<td>Senior residency – What should I choose?</td>
<td>DR JOANNE KUA Consultant, Department of Geriatric Medicine, Tan Tock Seng Hospital</td>
</tr>
<tr>
<td></td>
<td>Effectiveness of a multi-professional training module focusing on Autism Spectrum Disorders</td>
<td>MS ONG TZE JUI Senior Psychologist, Department of Child &amp; Adolescent Psychiatry, Institute of Mental Health</td>
</tr>
<tr>
<td></td>
<td>A study on the antecedents of shared leadership in multidisciplinary teams in a sub-acute geriatrics ward</td>
<td>MS ONG YU HAN Research Analyst, HOMER, Education Development Office, National Healthcare Group</td>
</tr>
<tr>
<td>17 JUL 14</td>
<td>Guided E-Self Study (QUEST-SS) the challenge of e-teaching musculoskeletal (MSK) examination to trainees</td>
<td>ADJ A PROF TIAN SOON YIN Head of Department, Senior Consultant, Department of Rehabilitation Medicine, National Healthcare Group</td>
</tr>
<tr>
<td></td>
<td>Incorporation of IPAD into the NHG anaesthesiology residency program in Singapore (a pilot study)</td>
<td>MS RUBISMAIL Programme Coordinator (Anaesthesiology), Graduate Medical Education Office, National Healthcare Group [with NHG until 2014]</td>
</tr>
</tbody>
</table>
Health professions education (HPE) is a wide field, covering a spectrum of educational activities that prepare healthcare workers and ancillary staff for practice and continuous professional development. We want to promote scholarship in the field because this scientific endeavour, as operationalised in the user-inspired research that we do with our stakeholders, fosters ideas and conceptual and interpersonal connections; all of which serve to promote discovery, advance teaching, enhance clinical practices, and marry theory with practice.

The NHG-HOMER Grant is an expression of this enabling role. Established in 2011, HOMER has been providing this short-term funding to fledging researchers with promising ideas and a commitment to contributing to the field for five years now. We strove to be inclusive in our grant framework in concordance with the interdisciplinary and interprofessional nature of HPE. Grant-seekers are encouraged to work with counterparts in other institutions, disciplines and professions. We also facilitated collaboration between senior and junior researchers across disciplines and professions on the premise that these interactions enrich the HPE research community.

The grant also has a developmental function. We hand-picked our reviewers for their track record in HPE research as well as their propensity for mentoring. Our reviewers did not only evaluate proposals, they also educated the writers of the proposals. As experienced and passionate researchers themselves, they affirmed and instructed fledging clinician-researchers at the same time through their thoughtful, scholarly and practical reviews. HOMER also nurtured emerging research teams by connecting them to necessary resources for the conduct of research, such as working with the NHG Research & Development Office to facilitate the Institutional Review Board (IRB) application of the study team. In addition, we worked alongside with grantees through the nitty-gritty of research – from conceptualisation and design of study through data collection and analysis to writing, presentation and publication.

To date, 55 HPE research teams have been awarded the NHG-HOMER Grant. These teams and their projects have added to the richness of the field as characterised by the diversity of theoretical perspectives and methodologies encapsulated in abstracts, posters and research papers, and experienced in the interventions taking place in our wards and clinics.
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A01</td>
<td>A mixed method study of the quality of interprofessional education and collaboration amongst team members of Geriatric multidisciplinary rounds in the acute care setting</td>
</tr>
<tr>
<td>A02</td>
<td>The prevalence of burnout and use of coping mechanisms among palliative care practitioners</td>
</tr>
<tr>
<td>A03</td>
<td>A qualitative study of newly qualified registered nurses in their transition to practice journey</td>
</tr>
<tr>
<td>A04</td>
<td>A mixed method study of the quality of interprofessional education and collaboration amongst team members of Geriatric multidisciplinary rounds in the acute care setting</td>
</tr>
<tr>
<td>A05</td>
<td>A mixed method study of the quality of interprofessional education and collaboration amongst team members of Geriatric multidisciplinary rounds in the acute care setting</td>
</tr>
<tr>
<td>A06</td>
<td>A mixed method study of the quality of interprofessional education and collaboration amongst team members of Geriatric multidisciplinary rounds in the acute care setting</td>
</tr>
</tbody>
</table>
WE STAND at the CUSP of a MAJOR TRANSFORMATION in the LANDSCAPE of HEALTH PROFESSIONS EDUCATION.

ADJ A/PROF LIM WEE SHIONG
FACULTY SPONSOR
SENIOR CONSULTANT, DEPARTMENT OF GERIATRIC MEDICINE, TAN TOCK SENG HOSPITAL
In the next five years, there will be unprecedented opportunities for collaborative research that involves partners from different disciplines, nationalities and cultural backgrounds. The evolution of advances in technology will bring new opportunities. Yet in this brave new world, there is an even greater need for thoughtful sense-making of the new, the old and the link between the two. HOMER’s role in pushing the frontiers of HPE will be even more critical in helping to link the past, present and future of innovations and phenomena.

One of our proudest achievements was the diversity of our partners. Our view was that HOMER was only one component of an ecosystem that consisted of administrators, clinicians, policy makers, researchers, students, and of course, patients and their caregivers. HOMER would not be flourishing if not for the unstinting support from its partners. An old African adage said it well, “If you want to go fast, go alone. If you want to go far, go together.” This report documents the collective journey HOMER embarked with our partners since we started. We all joined the journey with the noble intention to serve our fellow citizens, friends, and family. Let us not lose sight of our respective roles in making healthcare better through the improvement of teaching and learning, especially for the future generations of healthcare professionals. They will be the individuals who will take care of us, our families and loved ones when we fall ill.

We press on.

**CONTRIBUTORS**

Nasoon Ali
Khoo Hwee Sing
Charmaine Krishnasamy
Alden Lai
Mary Lee
Issac Lim
Lim Wee Shiong
Lim Yong Hao
Loo May Eng
Ong Sik Yin
Ong Yu Han
Yvonne Yock

**ACKNOWLEDGEMENTS**

We thank all our collaborators who have given their time to help us with the report, the many more collaborators we were unable to feature, and the senior management of NHG for their unstinting support in our continuing HPE research journey.
Homer is a name given to one of the earliest scribes in Western civilisation. According to Western literary tradition, Homer was best known for writing the epic poem, the Odyssey. Originally recounted and performed orally, the poem tells of the adventures of the Greek king, Odysseus during his journey home to Ithaca after sacking the city of Troy. Odysseus’ voyage was long and arduous, chequered with many twists and turns that the listener may be led to think that he would never make it home. He did finally reach home, however, aided by gods, especially Athena, the goddess of wisdom and war, who took on various roles as protectress and mentor.

Today, the word odyssey has come to mean a long and eventful journey or experience. The American Heritage Dictionary even calls an odyssey “an intellectual or spiritual quest”. We have chosen the theme of an odyssey for this half-decade report because we think an odyssey is what might properly describe the endeavours of the clinicians who ventured into Health Professions Education (HPE) research with us.

The bulk of this report recounts their stories and how each of them overcame their mental, physical and emotional hurdles to embark on what had been an unknown realm for many of them when they started on their research. Each of the clinician-researchers here has had the gumption to venture into unfamiliar ontologies and epistemologies in order to resolve a practical problem or satiate an intellectual curiosity. In the process, each of them has reached another peak in their professional development and contributed to the growth of HPE. In the quest to discover causes, effects and interventions in the learning and working of HPE, each clinician-researcher can be likened to an Odysseus. HOMER does not claim to be Athena or Mentor in these voyages. But how happy and privileged are we, to have played an integral role in accompanying Odysseus in this report!