



Newsletter of the Hong Kong Association of Therapeutic Horticulture
香港園藝治療協會專刊

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編者的話 Message from Editor

跨地域實習不是夢

有否想過修讀園藝治療課程時可以跨地域實習？除了實踐所學、交流經驗，更可感受異地文化。今期將介紹本會首個跨地域--台灣園藝治療實習計劃的推行概略；澳門及國內的跨地域實習也在安排中。

專注成就專業

本會一直致力推動香港園藝治療工作的專業發展。引進經驗、沉澱、反思再實踐，是走向進步的一個循環。今期我們將繼續提供分享更多國外園藝治療學者的經驗和文章，供有意加入園藝治療大家庭的友好，提供便捷之門。文章將會同步存於本會網址 (<http://www.hkath.org/>) 歡迎瀏覽、賜教與交流。

園藝治療與安寧人士晚期生活質素先導研究

筆者接觸不少患病長者和臨終人士，他們有些活得自在、有些則沉鬱不安。儘管香港醫療已達國際級水平，處於生命中的最後階段，除要承擔肉體上的痛楚及不適，還要面對即將離別、捨不得等等的心理反應與糾結情緒，壓力著實不少。如何促進臨終人士的正向心理和生活質素，實是一門值得探索的課題。

本會聯同香港理工大學護理學系賴錦玉教授和她的團隊，及基督教靈實協會靈實醫院舒緩治療科，為安寧人士推行園藝治療先導研究：「探討園藝治療對安寧照護病人的效果」，研究結果反映園藝治療給予參加者正面的經歷，感受生命。更令人欣喜的是，參加者透過植物及在活動中感受分享，打開一片心窗，向親人和關愛的人「道愛、道別、道謝和送上祝福」，對彼此而言，這是一份永摯難忘的鼓勵。詳情可參閱本期內文。本會在此謹向參與是次研究的參加者、其家人、醫護人員及研究團隊送上真摯的謝意。

Dream comes true – overseas HT internship

Have you ever thought of overseas HT internship? Apart from applying what we have learnt, we can also have chances to share experience with overseas expertise as well as experiencing other countries' culture. Here we would like to tell you, HKATH's first overseas HT internship was carried out in Taiwan, and hopefully there will be some more in Macau and mainland China.

Focus on HT Professionalism

HKATH promotes HT professionalism continuously in Hong Kong. In order to move forward, we learn from others' experiences, reflect, rethink and put into practice. Remarkable overseas scholars and HT friends will continue to share their experiences with us in this issue. We do hope you will get some insights from their articles. You may also read the articles via HKATH's website (<http://www.hkath.org/>).

HT pilot study - Effect of Horticultural Therapy on Patients under Palliative Care

Editor did contact with frail elderly and palliative cases. Some of them feel happy, however, some of them are not. In Hong Kong, we have sophisticated medical treatments and standard. However, when one reaches the end of life, s/he will have physical pain and discomfort. Apart from that, s/he may experience psychological stress and have unfinished business. It is worthwhile to examine the ways to promote quality of life among them.

HKATH collaborates with Prof. Claudia LAI of Hong Kong Polytechnic University, School of Nursing and her team members, as well as Palliative Care Service of Haven of Hope Hospital, to carry out a pilot study on the "Effect of Horticultural Therapy on Patients under Palliative Care". The research showed positive result. The most touching point was, after engaging at HT activities, the patients had feeling of release and could give blessing to their relatives and beloved comfortably. This would be an unforgettable memory for both parties. You may read the full research passage in the latter section of this newsletter. HKATH would like to express sincere thanks to those patients, their family members, medical staff of Haven of Hope Hospital and the research team.



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香港園藝治療協會 園藝治療專業認證制度

協會於三年前開始推行園藝治療專業認證制度，以美國園藝治療協會認證制度為藍本，依據香港獨特情況改良，培養新一代的本土園藝治療師。園藝治療實習機構一共有 45 間，其中一間在澳門，也有一間在台灣。經過三年，到目前為止，註冊園藝治療師 9 位、助理園藝治療師 7 位、園藝治療服務員 20 位。註冊園藝治療師分別在不同社會服務機構、醫院及學校帶領園藝治療小組及活動計劃。

協會園藝治療專業註冊認證制度亦與亞太園藝治療協會(Asia Pacific Association of Therapeutic Horticulture, APATH) 連繫，本協會會長 Connie 擔任亞太園藝治療協會秘書長，聯同該會會長金炯得先生及各會員國，一起在亞太區推廣園藝治療。

園藝治療專業註冊的級別

1. 園藝治療服務員 (HTF)

園藝治療服務員能夠在註冊園藝治療師 (HKATH / AHTA) 督導下，在園藝治療活動中提供協助或擔當義務工作。成功完成本協會認可的園藝治療基礎證書課程及園藝治療活動實務操作證書課程，並實習 60 小時。

2. 助理園藝治療師 (AHT)

這級別是讓對園藝治療有興趣人士加入園藝治療的專業行列。

在註冊園藝治療師(HKATH / AHTA)督導下，助理園藝治療師可策劃和執行園藝治療活動/計劃。成功完成本協會認可的園藝治療基礎、中級及高級證書課程。並實習 200 小時。

3. 註冊園藝治療師 (RHT)

這是園藝治療師註冊的主要級別。擁有認可學士學位或具同等學歷。註冊園藝治療師能獨立地策劃及執行園藝治療項目。成功完成本協會認可的園藝治療基礎、中級及高級證書課程或相關園藝治療課程。並實習 400 小時。

園藝治療訓練課程

1. 園藝治療基礎、中級、高級證書課程

課程著重園藝治療的知識和技巧，包括治療性景觀。讓園藝治療師掌握園藝治療軟件和硬件上的知識和技巧。所有認證級別必需修讀園藝治療基礎證書課程。助理園藝治療師及註冊園藝治療師必需修讀園藝治療中級證書課程及高級。

2. 園藝治療證書課程 - 小組技巧及心理學初探

讓學生可以掌握小組工作和輔導基本概念和技巧，並認識人類成長和行為。

註冊園藝治療師申請者，若未曾於專上學院或大學修讀人文學科，需修讀此課程。

3. 園藝治療活動實務操作證書課程

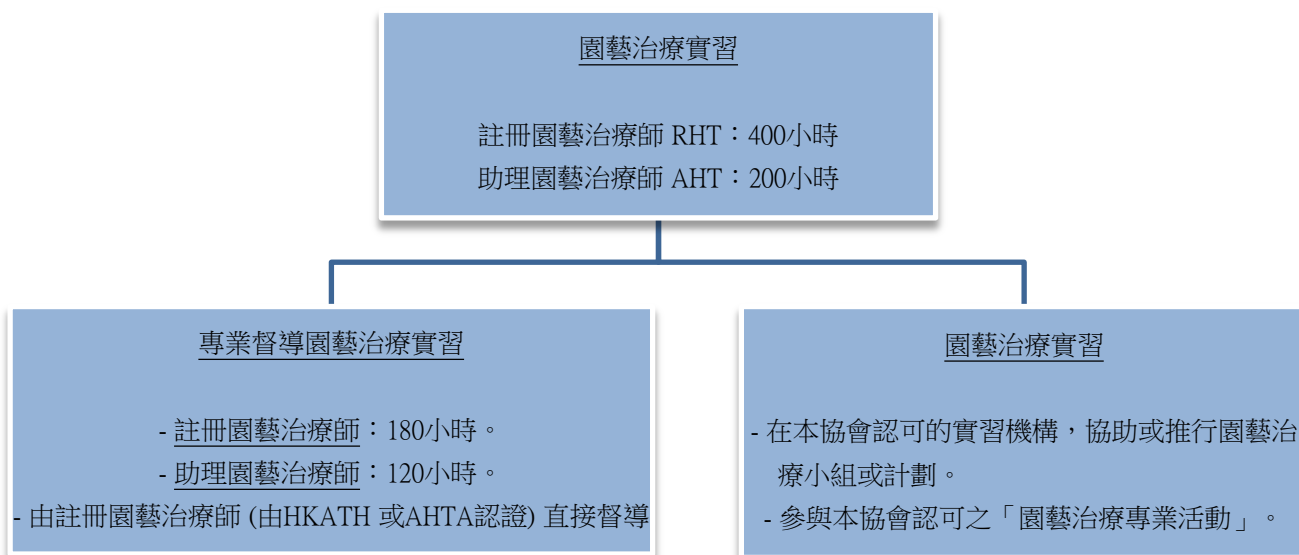
課程的特點是園藝治療和園藝的整合。學習園藝治療常用植物的種植知識和技巧。註冊園藝治療師申請者，若未曾於專上學院或大學修讀園藝學科；及園藝治療服務員申請者，需修讀此課程。

園藝治療實習

1. 園藝治療服務員 (HTF)

園藝治療實習時數共 60 小時。其中園藝治療活動實務操作實習 30 小時，另 30 小時為園藝治療實習。

2. 註冊園藝治療師及助理園藝治療師 (RHT & AHT)



若進一步了解如何申請成為實習生或本協會認可的實習場地，請與香港園藝治療協會聯絡。

電郵：info@hkath.org

Hong Kong Association of Therapeutic Horticulture Horticultural Therapy Professional Registration

HKATH develop her HT registration system, with the America Horticultural Therapy Association registration system as blueprint, and based on unique situation of Hong Kong. It has smoothly launched for 3 years. So far, we have 9 Registered Horticultural Therapists, 7 Assistant Horticultural Therapists and 20 Horticultural Therapy Facilitators. There are 45 HT internship sites, including one in Macau, and also one in Taiwan. Registered Horticultural Therapists are now leading HT groups and projects in different social service agencies, hospitals and schools.

HKATH HT professional registration system affiliate with the Asia Pacific Association of Therapeutic Horticulture (APATH). Our president, Connie, serves as Secretary of the APATH, working closely with APATH President Mr. Kim Hyoung Deug and member countries to promote horticultural therapy in Asia Pacific region.

Registration Levels

1. Horticultural Therapy Facilitator (HTF)

This level is intended for those persons helping or volunteering in the HT programs. They are expected to have successfully completed HT Elementary Cert Course and HT Cert Course – Horticulture Practice, with 60 hours internship experience.

2. Assistant Horticultural Therapist (AHT)

This level is designed for those persons transitioning into the field of Horticultural Therapy. They have successfully completed HT Elementary, Intermediate and Advanced Certificate Courses, to include 200 hours HT internship experience.

3. Registered Horticultural Therapist (RHT)

RHT is capable to plan and implement HT programs independently. They are expected to have a bachelor degree at a university and successfully completed HT Elementary, Intermediate and Advanced Certificate Courses, to include 400 hours HT internship experience.

Horticultural Therapy Training & HT Certificate Courses

1. Horticultural Therapy Elementary, Intermediate, Advanced Certificate Courses

These courses focus on HT knowledge and skills, also including therapeutic landscape. It equips horticultural therapist with the knowledge on software and hardware of HT. HT Elementary Certificate Course is the basic requirements for all HT registration levels. HT Intermediate & Advanced Certificate Courses are the requirements for AHT & RHT registration.

2. Horticultural Therapy Certificate Course -- Human Science

Students can acquire the basic group work and counselling skills, understanding on human growth and behaviour. For those RHT applicants who have not studied semester subjects on human science, they should have successfully completed this course.

3. Horticultural Therapy Certificate Course – Horticulture Practice

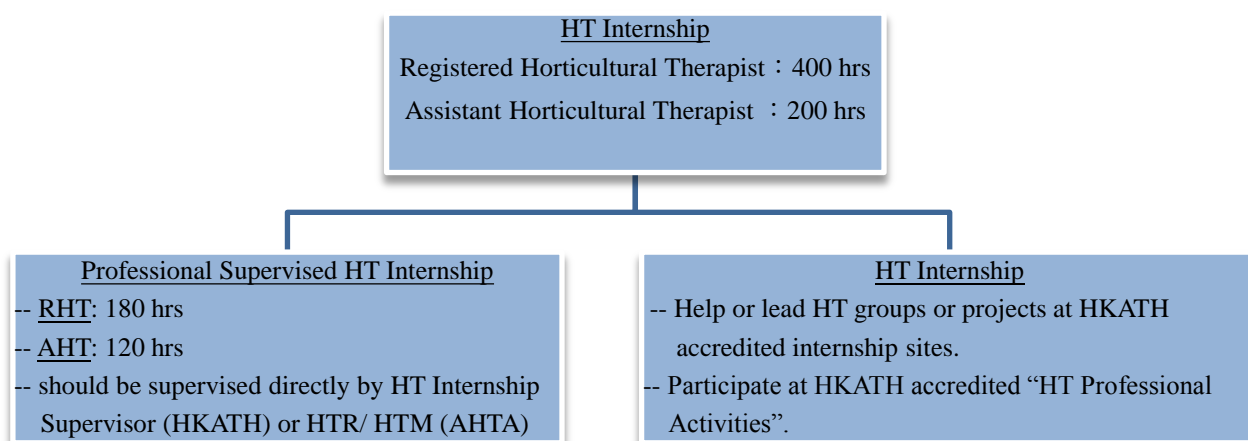
The characteristic of the course is integration of horticultural therapy and horticulture. Students focus to acquire knowledge and skills in planting those plants commonly used in HT programs. The course is the requirements for HTF registration. Also, for those RHT applicants who have not studied semester subjects on horticulture, they should have successfully completed this course.

Horticultural Therapy Internship

1. Horticultural Therapist Facilitator (HTF)

HT Internship of 60 hours should be under supervision of Registered Horticultural Therapists (AHTA or HKATH). 30 hours are horticulture internship and the rest 30 hours will be horticultural therapy internship.

2. Registered Horticultural Therapist & Assistant Horticultural Therapist (RHT & AHT)



Please contact HKATH for details of the applications as intern or as internship site.

Email : info@hkath.org

特別活動預告 ANNOUNCEMENT

*The 1st International Conference on Horticultural Therapy
and Therapeutic Landscaping –
“Horticultural Therapy and Therapeutic Landscaping for Health and Well-Being”*

Host Organisers:

- Hong Kong Association of Therapeutic Horticulture
- Centre for Gerontological Nursing, School of Nursing,
The Hong Kong Polytechnic University

Tentative Date : 20, 21 June 2014

Theme areas:

- Evidence-based HT & health
- Therapeutic landscaping & health
- New trends in application of HT & therapeutic landscaping
- HT with special populations
- Sustainable HT programs
- Policy development of therapeutic landscaping in metropolitan city

Overseas speakers are invited from US, Korea and Taiwan including:

Professor Paula Diane Relf

- Professor Emeritus of Horticulture
- Virginia Polytechnic Institute and State University (Virginia Tech)
- Co-Founder and Past President of American Horticultural Therapy Association
- Founder and Past Chair of People Plant Council

Candice Shoemaker, Ph.D.

- Professor, Horticulture and Human Health
- Director, Graduate Studies in Horticultural Therapy and Urban Food Systems,
Kansas State University

海外園藝治療實習 - 行政院衛生署八里療養院 (台灣)

香港園藝治療協會安排了第一次海外園藝治療實習小組 -- 香港、澳門、台灣的 crossover。實習機構是台灣行政院衛生署八里療養院，服務對象是精神病患者。

實習生 : 黃達洋，澳門扶康會怡樂軒 職能治療師，助理經理
實習助理 : 喬建欣及司徒素琮，助理園藝治療師 (HKATH)
實習督導 : 馮婉儀，註冊園藝治療師 (AHTA)，香港園藝治療協會會長
實習機構聯絡人 : 張建隆，職能治療師

實習日期由 2013 年 5 月 22 至 29 日，上、下午舉辦園藝治療實習小組，每組 6 次聚會。實習督導 Connie 於 5 月 23 及 24 日進行現場督導。

這次種籽成功的撒播，希望日後也能在不同的地方開花結果，而中國亦在萌芽中，園藝治療實習小組將會展開。

Overseas HT Internship – Bali Psychiatric Center, DOH (Taiwan)

HKATH arranged the 1st Overseas Horticultural Therapy Internship – crossover among Hong Kong, Macau and Taiwan. Internship site is the Bali Psychiatric Center, DOH (Taiwan). The service target is mentally ill patients.

Intern : Vong Tat Leong, Occupational therapist, assistant manager, Yee Lok Centre of Fuhong Society of Macau
Internship Assistants : Kiu Kin Yan, Judy & Szeto Soo Kheng , assistant horticultural therapist (HKATH)
Internship Supervisor : Fung Yuen Yee, Connie, registered horticultural therapist (AHTA), President, HKATH
Internship Site Contact Person : Chang Chien Lung , occupational therapist

Internship started from 22 to 29 May 2013. There were HT groups in the morning and afternoon respectively with 6 sessions. Connie conducted internship live supervision on 23 and 24 May.

HT seeds were sowed. It is hoped to flourish someday in future. Internship in China is in progress and plan to start in coming autumn.



一次難忘的實習之旅

喬建欣 Kiu Kin Yan, Judy, AHT (HKATH)

某一天，收到 CONNIE 老師來電，問我有沒有興趣到台灣當園藝治療輔助員；當時心情十分興奮，因為這是另一種的學習，於是馬上在第二天向公司請假。

出發前，與來自澳門的實習生阿達和香港的阿 SOO 一起開會討論，原來預備工夫也不少，絕對不能看輕，感覺自己代表香港的園藝治療協會，絕不能「失禮街坊」，還得要了解文化〔例如台灣規定某溫度以下是不能開冷氣〕與詞彙的差異〔例如我們常用的膠袋，普通話是塑料袋〕，才能至臻完美。幸而阿達在台灣唸大學，住了好幾年，才沒有笑話連篇出現。還有就是得到八里療養院職能治療師張建隆的滿分協助，令整個實習過程順利進行，事半功倍。



到了台灣第一天，到了八里療養院，建隆首先帶我們到疾病防控部學習如何正確洗手，並需要在接觸病人前後要洗手，以免感染細菌或將細菌傳染他人，每人還獲發酒精洗手液一支。之後便與他商討開小組的物資安排，晚上還要到附近的店舖買東西。

第二天，大清早便準備了。小組正式開始，我的心情真是戰戰兢兢，這是由於我是第一次面對精神病的對象，怕自己不懂面對突發事情，又恐怕文化差異或語言不通；後來見到上午的八人男子組，他們有說有笑，十分友善，心想必定是建隆精心挑選的參加者，致不令我們有額外的壓力。下午女子組也顯得積極參與，有問有答，加上帶組的阿達也能帶起活動的氣氛；整體來說，無論是室內手工藝活動或簡單種植，還是戶外的耕種活動，參加者都表現我很投入。

總括來說，雖然我只參與了四天的活動，但也覺得十分有意義和值得學習。海外實習，真的需要裡應外合，先有香港園藝治療協會的 CONNIE 穿針引線，再有台灣八里宗療養院的支持，提供場地實習；建隆無私的協助，甚至他從家中帶來不少小組用的物資，還有對台灣有所認識的阿達，最後輔助員阿 SOO 的盡心盡力，令整個實習順利進行。



園藝治療專題研究及文章

Articles and Research Papers on Horticultural Therapy

Palliative Care Patients' Experience on Horticultural Therapy

Kan Wai Yin

Registered Nurse, Graduate of the Hong Kong Polytechnic University

Horticultural therapy was conducted for palliative care patients in 2011 summer. It was a research project co-organized by the Hong Kong Polytechnic University, Hong Kong Association of Therapeutic Horticulture and Haven of Hope Hospital. The aim of the study was to explore the experience of horticultural therapy on palliative care patients. A total of 29 patients participated in the study. Observations and interviews were conducted during the period. Participants showed positive responses towards horticultural therapy. It brought them with happiness, new planting experience and distraction from illness.

Most of the participants reflected that they were happy and actively participated in the horticultural therapy. The process of having the horticultural activities gave them enjoyment and happiness.

"I enjoyed in the activity process very much! I was very happy. There was a delightful feeling, coming from my deep heart... I was smiling all along."

Some participants expressed that they liked looking at the flowers and the greenery. The flowers grew splendidly, as though they were smiling. They were simply happy whenever they looked at the plants, or enjoyed the odour of the plants.

"I like growing flowers. I am very happy whenever I think about it. It is because I will be especially happy when I look at the flowers. It's my feeling. There were lots of flowers growing here. It's worthwhile for me to look at and appreciate the flowers."

"It is delightful to have the horticultural activities. I feel happy when looking at the green plants. The smell of grass makes me feel fresh and comfortable, as though I have been to the countryside... I am delighted, with a fresh feeling. I will be happy whenever I look at the green colour."

Horticultural therapy brought new planting experiences. Some patients mentioned that it was their first time having different horticultural activities like growing and flower arranging. The different planting methods in horticultural therapy provided the participants with a fresh feeling.

"It's my first time to arrange flowers. My first time to grow the Dracaena sanderiana (富貴竹) with the use of plastic beads... I had never tried before. It's my first time. And it's my first time to grow wheatgrass (小麥草) too."

Palliative care patients had a first-hand and different experience of planting. They could have direct contact with the soil and plants which they had never had previously.

“I have never had such a feeling before. It seems different. It’s another feeling. Those plants you see in the park are different from these that were arranged by me! You can’t touch the plants in the park... not even for a while! But now I have a first-hand experience. It’s me who grew the plants myself. I arranged the plants myself... paved the soil and pressed on it.”



Horticultural therapy helped distracted patients away from negative thoughts of their disease. Instead, they could focus their attention on the plants. Their comfort, vigor and mood improved as a result of the horticultural activities.

“My attention might be on looking at the plant and providing care to it. I got diverted, and was not thinking those bad things.”

“The activities provided distraction and relieved my physical discomfort. I love flowers. It is good to concentrate on doing what I like... I will be in full vigor when I smell the flowers and see the natural colors.”

Palliative care patients had positive experience towards horticultural therapy. They enjoyed the horticultural activities and provided care to the plants. They were happy, had new planting experience and got distracted from their disease. Further studies on the impact of horticultural therapy on palliative care patients had been undergoing. It is hoped that horticultural therapy improved their clinical outcomes and quality of life.

Gardens in health care: An introduction to the design and application of healing gardens, therapeutic gardens, and horticultural therapy gardens

Paula Diane Relf, Prof. Emeritus, Virginia Tech University.

ABSTRACT

People intrinsically recognize that being around plants, being in a garden is good for you. Throughout history people have used the garden as a place of mediation, sanctuary and healing. However for a long period of time medical philosophy and practice took us away from natural elements to synthetic medications and surgery. In recent times, a shift in attitudes back toward a holistic approach toward health and well-being has resulted in a significant increase in interest of researchers in documenting, quantifying and understanding the health effects of plants. Thus research has now documented that the benefits are not just a placebo effect. Health benefits, which range from stress reduction to improved outcomes for specific ailments, accrue from working with plants, merely being in the presence of plants and viewing them, and consuming healthful fruits, vegetables, and herbs. Healing landscapes and horticultural therapy have become increasingly viable fields of research. As the use of plants in health care is experiencing a resurgence that involves both the general public and professionals from several fields there is not yet a consensus on the terminology, theoretical foundation or research methodology used to document and insure the efficacy of this interaction. This paper addresses some of the most widely held concepts.

INTRODUCTION

Most researchers involved in studying the relationship of nature to human health and well-being recognize the Biophilia hypothesis of E. O. Wilson (1984) as one of the major supporting theories for their work. The Harvard University entomologist coined the term to refer to humans' love of living things, an "innate tendency to focus on life and lifelike processes.". Wilson maintains that humans are naturally attracted to other living organisms - flora and fauna and related environment (i.e. the green hues of plants and blues of water as opposed to the grays of concrete and other unnatural materials) - because of our evolutionary development in the natural world.

According to Gerlach-Spriggs, et. al., (1998)“Restorative or healing gardens for the sick have been part of the landscape of healing since medieval times. Such gardens have been parts of hospitals, hospices, rehabilitation centers, and more recently nursing homes for the infirm and elderly.” However by the 1950’s economic considerations began to reduce the farm, the garden and the open ground around various types of healthcare facilities. The combination of new medical technology and insurance company pressure to reduce the length of stay further contributed to the loss of outdoor-nature experiences in health care. Other factors took precedence over the idea that there could be healing quality to nature. Not long after this transition to a technology-based world began changing health care, a few individuals began to doubt the wisdom of the shift. By 1972 the predecessor to American Horticultural Therapy Association had been formed and the Kaplans at

Michigan State University were beginning their groundbreaking research in environmental psychology. Throughout the 1970's and 1980's increasing numbers of researchers and healthcare facilities began to explore the healing and therapeutic impact of nature.

The rising interest in alternative or complementary medicine and a holistic lifestyle through the 1990's appears to have encouraged the application of the research documenting positive benefits of near-by nature to health. However the most influential researchers in the field, including Roger Ulrich, Rachel and Steven Kaplan, Clare Cooper Marcus, and Marni Barnes, agree that the value of the garden in health is very difficult to prove and new methods of assessing the impact must be continually tested.

An extensive overview of the role of plants in human health is available from a referred journal article that is on-line at no cost. It was prepared as part of the American Society for Horticultural Science's historical review for the 100th anniversary of the society and published in *HortSciences*. Clicking on the following site will download a free PDF file of all of the papers in the historic review, from the list of articles, click on the one entitled *Human Issues in Horticulture* by Relf and Lohr: <http://www.electronicipc.com/data/journalez/pdf/0420/002/HistoricalReview2003.pdf>.

LANDSCAPNG FOR PUBLIC HEALTH

From the broadest view, the environment in which we live directly impacts our mental and physical health. Of course most of us recognize that plants and the landscape play a major role in establishing and maintaining a healthy environment. However, only in recent years has the need to conduct research that helps better design our environment to be healthy been recognized and pursued. Research on both indoor and out plants is documenting that plants help solve many of our urban environmental remediation and clean-up problems and reduce the potential for future problems. The conclusion from the research available to date is that the landscape, properly designed and maintained, may play a critical role in the health of the environment and impacts the quality of life and economics of individuals, businesses and communities. (Relf and Lohr, 2004)

Likewise, the community in which we live greatly impacts our physical and mental health. Again, the concept that we need to understand how plants impact community health and how to better design to bring about that benefit is relatively new. Plants and gardening enhance health of communities in many ways beyond environmental health and aesthetics; ranging from a greater sense of community to reduced crime and from reduced stress to obesity management. There is strong indication that urban greening is highly successful in building communities and reducing the public health hazards associated with isolation, loneliness, poor exercise, and lack of community ties. Frumkin (2001) at Emory University School of Public Health has called for more collaborative, clinical, and

epidemiological research documenting the benefits of interactions with natural landscape, plants, and animals, so that prescriptive interventions for specific illnesses could be offered by the medical community and supported by health insurance companies. He points out that such research would also foster zoning and planning decisions that would promote greater community health.

The research and theories related to these two broader areas of landscape and health shed important light on the area of our focus: gardens in health care.

GARDENS IN HEALTH AND WELL-BEING

Healthcare can be viewed as being a continuum with prevention being the primary goal of most individuals (we don't want to get sick); medical treatment being the domain of the doctors and hospital; restoration and maintenance of life quality being the role of a variety of therapist and rehabilitation facilities; and long term or terminal professional care in nursing care centers and hospice being needed by a few individuals. There is an increasing need for an international consensus clarifying the meaning of terms used within the over-all subject area of the therapeutic role of gardens and gardening in health care. Among the terms in common usage, there are many terms describing the various levels of interactions between plants and gardens, the patient, and other individuals within the health care community.

Prevention. The research of Rachel and Steven Kaplan and many of their former graduate students and collaborators focuses on the restorative value of nature to maintain the health and well-being of all individuals. They have assessed people's perception of their environment and addressed what people value most in their surroundings. They and others researchers, such as Francis Kuo, have looked at the impact that nearby nature can have on physical and mental health, mental functioning, and social relationships. One of their important conclusions is that while the nature experience must have "extent" that is not a reflection of size, but rather that it is extensive enough to meet one's expectation and needs. Thus a restorative natural setting can be small, quite large, or anywhere in between.

Restoration Gardens, Meditation Gardens, and Sanctuary Gardens are terms often applied to public and private gardens that are not affiliate with healthcare but designed with the idea that the users would experience an exceptional level of mental and/or physical enhancement due to experiencing a period of time as a visitor in the garden. The Kaplans' research and theories of the restorative value nature to individuals in communities and public parks underlie much of the knowledge of restorative gardens. In addition, many other types of gardens (including Sensory Gardens, Medicinal Gardens, Commemorative Gardens, Memorial Gardens, and Sculpture Gardens) are seen by some as being restorative or healing gardens. In fact, the terms healing and restorative are often used interchangeably. There does seem to be an agreement that while almost any landscape may ultimately be considered to be restorative the key to achieving restoration goes beyond aesthetics. In *Healing Gardens*, (Barnes and Cooper Marcus, 1999): "Gardens can be healing and restorative via a

number of mechanisms. The most obvious is the aesthetics of nature, that is, creating a beautiful verdant place that will be a powerful enticement to go outdoors.” However, this concept is taken further by these authors and clarified by Gerlach-Spriggs (1998), “A restorative garden is intended by its planners to evoke rhythms that energize the body, inform the spirit, and ultimately enhance the recuperative powers inherent in an infirm body or mind.”

In specializing in design of restorative landscapes the firm of Roy-Fisher Associates, Inc (2006). identified several common garden features with restorative qualities:

- Clarity. Healing Garden design should be clear and inspiring, not ambiguous or unintelligibly abstract.
- Access. The garden should be easily accessible. Codes and locks are obstacles and need to be reconsidered. A successful garden has simple and direct wayfinding in place.
- Gathering Spaces. The garden must have open space for events and activities. Open space creates opportunity and encourages interaction and socialization with others.
- Private/Intimate Spaces. Alongside gathering spaces, we need intimate spaces to escape, to mourn, to relax, to hold private conversations, and just to think.
- Inspiration. Healing gardens engender a variety of responses from its users. Besides stress relief, users need inspiration and encouragement to accomplish goals and restore oneself. Sculpture, painting, and music can revitalize the spirit and make it stronger.
- Connection to Nature. Modern society is awakening to the notion that immersion in the organic can put us in places no built environment can. The scent of a rose, the bright orange of a Hibiscus, the sound of an oak’s boughs in the wind, and the soothing rumble of a waterfall are natural stimulants and can be alternatives to pain medication and other methods that don’t give the body a chance to heal itself first.

Cooper Marcus (2001) identified seven essential components to creating gardens that heal. They are: visibility, sense of security, physiological comfort, opportunities to make choices—seeking privacy or gathering for social support, engagement with nature, familiarity, unambiguously positive design features. According to her, the garden can possess one or many of the above characteristics thus the definition is broad and inclusive.

Based on the current work and writings of researchers and landscape architects, it can be interpreted that a restorative garden can be anything from an herb in the window or a pot of grass to clip for a Hospice patient to public spaces such as the Vietnam Memorial. It may be very private and individual or intended for group sharing. It may be targeted to children or elderly or for any age. It may be for employees to recover from the morning stress during lunch or travelers to avoid road rage during a driving break.

Conclusion: Ultimately the concept of Restorative Gardens is refocusing the design of the landscape from the aesthetic and functional needs of the site to the psychological, social, and physical needs of the users. This trend could lead to healthier individuals, communities and environments.

GARDENS IN HEALTHCARE SETTINGS

In healthcare setting in which treatment is being provided by teams of professionals, there have been a number of studies that document the healing quality of near-by-nature. One of the most recognized and cited studies conducted by Ulrich took advantage of ten years of clinical data on cholecystectomy patients who were randomly assigned to rooms facing either a stand of deciduous trees or a brick wall based on room availability. He restricted his study to matched pairs of males who were in the hospital only when the trees were in foliage and was able to determine statistically significantly positive effects of the view of trees. These results included patients spending less time in the hospital and using fewer doses of strong pain relievers if they had a room with a view of trees rather than a view of a brick wall (Ulrich, 1984). Other studies using nature scenes and sounds as an intervention in a randomized control design and restorative activities such as walking in a garden both had similar positive results.

Although space is at a premium in urban/suburban locations, most healthcare facilities have areas that are suitable for landscaping for healing or restorative purposes. Often the plantings in these areas (if existent at all) are mandated by local codes to meet minimum aesthetic standards that are far below the architectural standards of the building and often serve to detract or demean the facility. Likewise maintenance is sub-par and unhealthy plants add to the feeling of disrespect. In their book, *Healing Gardens*, Clare Cooper Marcus and Marni Barnes analyzed and categorized the different types of outdoor/planted spaces in the hospital settings they were studying. The spaces they defined in their study are: Landscaped Grounds, Landscaped Setback, The Front Porch, Entry Garden, Courtyard, Plaza, Roof Garden, Roof Terrace, Healing Garden, Meditation Garden, Viewing Garden, The Viewing/Walk-in Garden, A Tucked-Away Garden, Borrowed Landscape, Nature Trails and Nature Preserves, and Atrium Garden. The attributes of each are discussed thoroughly in the book and their potential to contribute to the overall health characteristics of the facility are considered. Needless to say, while many of the facilities have comparable architecture locations as those given above, most are not using them most effectively for their healing qualities.

Healing Gardens As a result of the earlier studies of Ulrich and the Kaplans, the concept of designing landscapes at hospitals, hospices, and similar sites for their healing qualities rather than merely to cover the grounds is gaining favor. According to their study a healing garden is defined as “a category that includes outdoor or indoor garden spaces in hospitals that are specifically designated as healing gardens by the administration and the designer” (Cooper Marcus and Barnes, 1999), which means that directed thought has been given to creating a therapeutic environment. This concept is further

emphasized by Gerlach-Spriggs and Wiesen (2002), “When landscape architects enter the realm of health care, they do so to assist the medical profession as it strives to meet its goals. When designing therapeutic gardens, landscape architects assume the standards of the medical profession as well as their own.

Research sponsored by the Center for Health Design on the use and therapeutic benefits of hospital gardens finds an overwhelmingly positive response from employees, patients, and their families and friends for these types of gardens (Marcus and Barnes, 1999). They are gardens designed to be places of retreat, respite, tranquility, etc. In general the healing gardens are designed by professionals and installed and maintained by a grounds maintenance staff and intended for use by staff, visitors, and clients at their discretion, rather than as a part of a treatment plan. Though usually designed and cared for by professionals, research has indicated that these types of gardens may be more effective in creating a restoration effect if the various users are directly involved in all aspects of the design, installation, and maintenance of the garden.

According to Ulrich and others focused primarily on the environment in the treatment setting, healing gardens should contain prominent amounts of real nature content such as green vegetation, flowers, and water and should have therapeutic or beneficial effects on the great majority of its users. As an example Cooper-Marcus and Barnes (1995) quotes a healthcare employee regarding their use of the garden “It’s like time has stopped, like a vacuum, a quiet space. I’m really glad it’s here; it gives me an out’. I close my eyes and listen to the water like I’m hearing a stream or a brook . . . I can get away from the downstairs hustle and bustle. It’s the best thing about this hospital.”

Therapeutic Gardens. The term “therapeutic garden” is used to describe a garden designed specifically for use as part of a medical treatment program. It can be considered as a subcategory or specific type of Healing Gardens. It may be a physical extension of a Physical Therapy or Occupational Therapy Department on a rooftop or patio that is for exclusive use by the therapist and patients of that area. It may be a specific portion of a larger garden clearly designed to facilitate many of the exercises and experiences in an OT or PT Unit. It could include walkways, steps, wooden or grassed raised beds to use as outdoor exercise mats, flat area for ball, rope, and other exercises, etc. In either situation, patients should be involved in the design to discuss both physical and psychological factors related to the design and location that might not be anticipated by the professional (for example, unacceptable levels of public exposure). In addition, the therapeutic garden may be integrated into a larger healing garden as a somewhat private and sheltered location for the client to begin practicing the skills acquired in the rehab unit in a quasi-public setting. A therapeutic garden may be designed for a talk therapist to work individually or with small groups in a setting conducive to relaxation and communication. Privacy will be of utmost concern.

Therapeutic gardens may be part of a treatment plan in which the client is under direct supervision of the therapist or may give the client the opportunity for free use of the area within the context of its

identified therapeutic benefit to the patient. For example, *wandering gardens* are designed for Alzheimer patients to help reduce symptoms associated with the disease such as violent outbursts.

Therapeutic gardens are typically designed and maintained by professionals for the use of the therapist and client. Gerlach-Spriggs and Wiesen (202states that, “a ‘therapeutic garden’ is an attempt to improve the medical environment, not from a purely aesthetic standpoint, but rather in pursuit of the treatment of disease.” Further, if the garden is used appropriately and successfully it will assist recovery from disease and can be evaluated by using clinical data to obtain measurable outcomes.

Horticultural Therapy Gardens. *Horticultural therapy gardens* are designed specifically for the use of patients in the care and cultivation of plants as part of a treatment program thus are a subcategory of therapeutic gardens with unique characteristics. *Horticultural therapy* is a treatment modality used by many different professionals as a part of their over-all treatment regime. To be considered as truly horticultural therapy, a program must have three elements: a client in treatment for a defined problem, a goal the client is trying to achieve, and the responsibility by the client for the care of living plants. The goals of the program vary from one facility to another and address physical, emotional, social, intellectual and spiritual needs of the patient. Horticulture as therapy for individuals with a variety of diagnoses has a long history. It has been used effectively in psychiatric hospitals since the late 1800s; it likewise has a long history of use with individuals with intellectual impairment particularly in vocational and educational centers. Programs are also found in rehabilitation hospitals and Veterans Administration hospitals. More recently there have been reports of positive responses to horticulture activities from seniors with Alzheimer’s disease in an adult day services program. In addition, arboreta and botanic gardens are employing registered horticultural therapists to conduct educational outreach programs for professionals and clients in treatment facilities in their communities.

Gardens designed for conducting horticultural therapy programs differ from a healing garden of the general healthcare facility or even a therapeutic garden in several ways; most importantly, they must be designed for the client to assume full, or at least partial, responsibility for the care and life of the plant. It is the sense of ownership and responsibility – the knowledge that the plant is dependent for care - that contributes much of the therapeutic value of HT. It is a key in motivating the client to many of the actions in the garden. If the clients feel that staff will maintain the plants if they choose not to, then the dynamics of the therapy session can change significantly. For this reason the HT garden needs to be small enough for the client to indeed care for it appropriately. It needs to be composed of plants both of interest to the client and within their skill and knowledge level to care for successfully.

The garden needs to be designed and plants selected such that the area will look reasonably attractive even with minimal maintenance. It should be in a location such that it will be acceptable to allow it to deteriorate to the level of competency of the clients as they achieve success through person responsibility. Depending on the needs and diagnosis of the clients in HT, the garden may require more privacy than some of the other types of gardens.

It is important to note that the same garden might serve all four functions, but would need to be designed with special consideration. The garden may be open to the general public for *restoration* but this use should not interfere with the use by staff or family members at the healthcare facility who may need privacy for grieving or for intimate talks with loved ones who are using the garden as a truly *healing* space. Patients who are participating in treatment with therapists may not be comfortable having the public watch them utilize the *therapeutic* elements of the garden; for example, as they learn to walk again. Similarly, if the *horticultural therapy garden* is public in nature there may be a strong temptation on the part of the staff to assume responsibility for the life of the plant from the patient in order to keep the gardening “looking nice” for the public. This, of course, eliminates the therapeutic benefit to the patient of the nurturing of the garden. In effect, it turns the horticultural therapy garden back into a healing landscape with very different goals and effects. The design of a garden for multiple uses will require the thorough understanding of goals and needs of all of the intended clients. This may be facilitated by segmenting the garden with privacy plantings and walls.

DESIGN GUIDELINES

A few basic guidelines apply for the design of any type of healing garden. These include:

- *The client (including administrators, staff and patients) should be involved throughout the design process.*
- *The garden should be easy to access, comprehend, and navigate.*
- *The garden should provide a sense of security, safety, and familiarity.*
- *The garden should encourage wildlife (birds, butterflies, small animals, etc.) in the garden and some domestic animals if appropriate.*
- *The garden should stimulate an understanding of self through understanding of the cycle of life through plants.*

SUGGESTED BOOKS

1. Appleton, Jay. 1996. *The Experience of Landscape*. John Wiley & Sons. England.
2. Carpman, Janet Reizenstein; Grant, Myron A. and Deborah A. Simmons. 1986. *Design That Cares*. American Hospital Publishing, Inc.
3. Carstens Diane Y., 1993 *Site Planning and Design for the Elderly: Issues, Guidelines, and Alternatives*. Wiley; New Ed edition.
4. Crisp, Barbara. 1998. *Human Spaces: Life-Enhancing Designs for Healing Working, and Living*. Rockport Publishers, Inc. Massachusetts.
5. Francis, Mark; Lindsey, Patricia, and Jay Stone Rice. 1994. *The Healing Dimensions of People Plant Relations: Proceedings of a Research Symposium*. Center for Design Research. UC Davis, California.
6. Francis, Mark and Randolph T. Hester, Jr. 1990. *The Meaning of Gardens*. The MIT Press. Cambridge, Massachusetts and London, England. 81

7. Gerlach-Spriggs, Nancy; Kaufman, Richard Enoch and Sam Bass Warner, Jr. 1998. Restorative Gardens: the healing landscape. Yale University Press. New Haven and London.
8. Kaplan, Rachel and Stephen Kaplan. 1989. The Experience of Nature. Cambridge University Press.
9. Kaplan, Rachel; Kaplan, Stephen and Robert L. Ryan. 1998. With People in Mind. Island Press.
10. Kellert, Stephen R. and Edward O. Wilson. 1993. The Biophilia Hypothesis. Island Press.
11. Lewis, Charles A. 1996. Green Nature/Human Nature: The Meaning of Plants in our Lives. University of Illinois Press. Urbana and Chicago.
12. Marberry Sara O., editor. 1995. Innovations in Healthcare Design: Selected Presentations from the First Five Symposia on Healthcare Design. Wiley Publishers.
13. Cooper Marcus, Clare and Marni Barnes. 1995. Gardens in Healthcare Facilities: Uses, Therapeutic Benefits, and Design Recommendations. The Center for Health Design, Inc. .
14. Messervy, Julie Moir. 1995. The Inward Garden. Little, Brown & Company. Canada.
15. Rawlings, Romy. 1998. Healing Gardens. Willow Creek Press. WI.
16. Relf D, ed. 2004. Expanding Roles for Horticulture in Improving Human Well-Being and Life Quality, Brussels, Belgium: International Society for Horticultural Sciences, Acta Horticulturae 639. <http://www.actahort.org/books/639/index.htm>
17. Matsuo, E. and P.D. Relf, eds. 1995. Horticulture in Human life, Culture and Environment ISHS Acta Horticulturae 391 <http://www.actahort.org/books/391/index.htm>
18. Relf, Diane. 1992. The Role of Horticulture in Human Well-Being and Social Development: A National Symposium. Timber Press, Inc. Portland, Oregon.
19. Sempik J, Aldridge J, Becker S. 2003. Social and therapeutic horticulture: evidence and messages from research. Leicestershire, UK: THRIVE,.
20. Tyson Martha M., 1998 The Healing Landscape: Therapeutic Outdoor Environments New York: McGraw-Hill.
21. Wilson, Edward O. 1984. Biophilia. Harvard University Press.
22. Wilson, Edward O. 2002. The Future of Life. Alfred A. Knopf, a division of Random House, Inc. United States.

Internet Websites:

1. American Horticulture Therapy Association <http://www.ahta.org>
2. Canadian Horticultural Therapy Association <http://www.chta.ca/>
3. Center for Health Design <http://www.healthdesign.org/>
4. Dirtworks PC Landscape Architecture <http://www.dirtworks.us/healthcare/>
5. HortScience ASHS Historical Review select Human issues in Horticulture by Relf and Lohr <http://www.electronicipc.com/data/journaez/pdf/0420/002/HistoricalReview2003.pdf>
6. Plants for People <http://www.plants-for-people.org>
7. Plants at work <http://plantsatwork.org/>
8. Therapeutic Garden Design <http://host.asla.org/groups/tgdpigroup/>

9. Therapeutic Landscapes Database <http://www.healinglandscapes.org>
10. Thesis_Master of Architecture Annalisa Gartman Vapa:
<http://scholar.lib.vt.edu/theses/available/etd-05132002-115528/>

CITATIONS

1. Cooper Marcus, C. 2001. "Hospital Oasis." *Landscape Architecture*, Vol. 91, No. 10, pp. 36-99.
2. Cooper Marcus, Clare and M. Barnes.1995. *Gardens in Healthcare Facilities: Uses, Therapeutic Benefits, and Design Recommendations*. Martinez, CA: The Center for Health Design.
3. Frumkin H. 2004. White coats, green plants: clinical epidemiology meets horticulture. In: Relf D, ed. *Expanding Roles for Horticulture in Improving Human Well-Being and Life Quality*, Brussels, Belgium: International Society for Horticultural Sciences, *Acta Horticulturae* 639:15-27.
4. Frumkin, H. 2001.American Journal of Preventive Medicine 20(3). "Beyond Toxicity: Human Health and the Natural Environment." Elsevier Science Inc.
5. Gerlach-Spriggs, Nancy; Kaufman, Richard Enoch and Sam Bass Warner, Jr. 1998. *Restorative Gardens: the healing landscape*. Yale University Press. New Haven and London.
6. Gerlach-Spriggs, N. and A. Wiesen 2002. *The Therapeutic Garden: A Collaboration Of Professions*. *Therapeutic Garden Design* 3 (1): 5 . Viewed 05 June 2006on-line at http://host.asla.org/groups/tgdpigroup/TGD_2002_newsletter.pdf.
7. Relf, P.D. and V.I. Lohr. 2003. Human issues in horticulture. *HortScience*. 38(5):984-993.
8. Roy-Fisher Associates, Inc, Landscape Architecture Environmental & Land Planning 381 Tequesta Drive Tequesta, Florida 33469 <http://www.roy-fisher.com/Healing%20Garden.pdf> viewed 9 June 2006.
9. Ulrich, R. S. 1984. View Through A Window May Influence Recovery From Surgery. *Science*, Vol. 224, pp 420-421.
10. Wilson, E. O. *Biophilia*, 1984, Harvard University Press



HORTICULTURAL THERAPY IN NURSING HOMES

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Horticultural therapy is the engagement of a client in garden-related activities, facilitated by a trained therapist, to achieve specific treatment goals. Therapeutic benefits occur when people are exposed to plants, and when they are involved in planning, planting, growing, and caring for plants. Horticultural therapy is an adaptable treatment tool for clients of all ages and abilities. Given that gardening is a popular leisure-time activity for older adults it is particularly well-received with older adult populations.

Horticultural therapy is practiced in healthcare, rehabilitation and vocational facilities, as well as in community programs such as senior centers and community gardens. Several universities and institutions offer certificate, associate, and bachelor degree programs in horticultural therapy. The American Horticultural Therapy Association is a national association serving the profession and offers a voluntary registration system for horticultural therapists.

What research tells us:

Physical, psychological, and cognitive abilities as well as social roles are impacted as a person ages. Gardening can be used in a therapeutic way to address these issues and improve the elder's physical and emotional conditions, cognitive ability and social interactions. Reported outcomes from passive contact and active participation in gardening experiences at geriatric care facilities include:

- Maintenance of life satisfaction
- Reduced stress
- Providing sensory stimulation
- Improved memory and concentration
- Improved social interaction
- Reduced agitation in residents with Alzheimer's

What horticultural therapy practitioners say:

Due to the nature of gardening, a horticultural therapy program in a long-term care facility can address some of the needs that arise from simply living in an institution. A horticultural therapy program can provide opportunity for:

- *Self-expression*: horticulture activities offer excellent outlets for creative expression, for example, designing a flower bed or patio container, flower arranging, or caring for bonsai
- *Variety*: horticulture activities are guided by the seasons, i.e. planting seeds in spring, harvesting produce through the summer, etc.

- *Change*: gardens and plants are always changing, overtime a seed becomes a mature, flowering plant
- *Control and independence*: care for indoor plants, patio plants, and providing resident's their own garden space
- *Social interaction*: horticulture and gardening tend to bring people with a common interest and past experiences together in an enjoyable way
- *Service*: horticulture activities offer many opportunities for service from making and delivering flower arrangements to bed-ridden people or to the dining area to growing and selling plants to raise funds for special projects for the institution
- *Mental stimulation*: for the novice gardener as well as the experienced, horticulture is a stimulating field of study
- *Physical activity*: many of the activities of gardening are moderate-intensity activity

Getting started:

A horticultural therapy program in a long-term care facility can add much to the lives of the residents. In establishing and maintaining a program consider the following:

- Conduct an informal (or formal) feasibility study of the residents to determine their interest and degree to which they feel they would be involved
- If an outside garden is to be implemented
 - The site should receive at least 6 hours of direct sun for vegetables and most flowering plants
 - A source of running water should be nearby
 - Assess the soil and amend if needed
 - The site should be easily accessible by the residents
 - The site should be in view of a high traffic area to remind the residents to visit the garden
 - Shade and seating should be near the garden for passive enjoyment of the garden
- If a patio garden is to be implemented
 - Stained concrete reduces the amount of glare and provides a level surface
 - Shade and seating should be nearby to offer rest, provide a break from the sun, and provide an area for seated activities such as transplanting or just socializing
 - Consider the view from the inside, design the patio garden in such a way to lure people to the outdoors
 - Provide choice by using movable seating
 - The patio can be designed with raised beds of varying heights, table-like raised containers, vertical-frame beds, hanging baskets on pulleys, and containers to provide gardening opportunities for residents of varying abilities

- For indoor gardening
 - Consider tropical plants, many are well suited for the reduced light levels of indoor environments
 - Most plants can be grown under fluorescent bulbs, in a sunny room provide 8 hours of lighting, in a windowless room provide 14 hours of lighting
- Plant selection is important, consider plants for their fragrance, texture, taste, sound, familiarity
- Look to your community for support
 - Contact your local county extension agent for gardening advice
 - Look to your local Master Gardeners, educated through the state extension service, for gardening advice and service
 - Contact your local gardening clubs, most have service as part of their mission, as well as providing gardening advice
 - Contact your local nurseries, garden stores, hardware stores for donation of materials and supplies, including the large chain stores

Resources

American Horticultural Therapy Association, <http://www.ahta.org>, 3570 E. 12th Ave. Suite 206, Denver, CO 80206, 1-800-634-1603

Gardening for Good, <http://www.gardening4good.org/>

Thrive, <http://www.thrive.org.uk/>

Selected Books:

Accessible Gardening: Tool and Techniques for Seniors and the Disabled. Joann Woy, 1997, Stackpole Books, ISBN 0-8117-2652-5

Gardening is for Everyone. Audrey Cloet and Chris Underhill, 1990, B.T. Batsford Ltd, 4 Fitzharding Street, London, ISBN 0-285-64954-X

Gardens in Healthcare Facilities: Uses, Therapeutic Benefits, and Design Recommendations. Clare Cooper Marcus, MA, MCP and Marni Barnes, MLA, LCSW, 1995, University of California at Berkeley. The Center for Health Design, Inc. ISBN 0-9638938-2-3

Growing with Care: Using Greenery, Gardens and Nature with Aging and Special Populations. Betsy Kreidler, 2002, Venture Publishing, ISBN 1-892132-34-6

Horticultural Therapy and the Older Adult Population. Suzanne E. Wells, MS; Ed. with American Horticultural Therapy Association and Friends Organization. 1997, Haworth Press, Inc. ISBN 0-7890-0045-8. [Also published as: *Activities, Adaptation & Aging*, Vol. 22, Numbers (1/2)(3) 1997.]

Horticulture as Therapy: Principles and Practice. Sharon P Simson and Martha C. Straus, editors, 1998, Haworth Press, Inc. ISBN 1-56022-859-8

A Note from Taiwan: Healthy Landscape, Healthy People

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The number of people seeking nature-based recreation opportunities and green-related lifestyles is increasing in Taiwan, as it is throughout the world. Evidence from various experiments, surveys, and literature shows that natural environments are important not just for wild life but also for human health and wellbeing. After more than 15 years of studying how natural landscape provides ecological services in terms of its configuration and composition, my group and I have worked together on ways of realizing beneficial encounters with natural landscapes and now have an interest in proposing a Healthy Landscape Healthy People conceptual framework. A healthy landscape plays a vital role in terms of preserving native wildlife, promoting human health, and as in our case recently, providing a better Qi setting and perception. The following are brief introductions of our working patches within the framework.

In terms of preserving native wildlife, studies of landscape ecology define a healthy landscape from the aspect of the level of naturalness, which is measured by landscape ecological metrics. Landscape ecological metrics provide an objective way to define physical environment and allow attributes of a landscape to be analyzed. So, the relationship between a physical environment and the level of the health of its wildlife can be found. Besides, our group has not just emphasized this relationship but also demonstrated various landscape scales that sensitively reflect different native species, particularly but not only in the context of rural Taiwan.

More than being essential for preserving wildlife, a healthy landscape also has a profoundly positive effect on the public's health and wellbeing. Although still in its relatively early stages, there is already a large body of research demonstrating that access to a healthy landscape, such as well-configured green space, is a fundamental resource in terms of enhancing psychological wellbeing, reducing stress, promoting healing outcomes, improving cognitive capacity, and building place identity. We have been trying to pull together related theories, such as stress reduction theory and Attention Restoration Theory, to support related studies, which were operated particularly in nature-based recreation areas, leisure rural areas, or work places. With both qualitative and quantitative analysis, we have tried to identify the effective factors of the natural landscape on health experience. Along with psychological measurements, we also emphasized psychophysiological indices. Using biofeedback instrument, we collected multiple psychophysiological reactions while exposing participants to landscape stimuli. The results showed a similar direction as in the literature. Furthermore, we compared the positive effect of activities, the composition of plants in an office, and restorative experience in rural leisure areas. All of these works were pulled together to provide support for the beneficial effects of green or natural environment on public health, particularly for those who face daily pressure in an urban context.

To narrow the gap between a physically healthy landscape and human health, we have recently been working on Qi-related theories and experiments. In traditional Chinese culture, Qi is an active element that exists as part of any living being. Qi is frequently described as the flow of energy that surrounds a creature or element of the environment. Traditional Chinese philosophy states that humans can absorb Qi energy from their surroundings and, in doing so, they get “in tune” with the environment. Allowing Qi to permeate one’s body is seen as essential to health and well-being. Recently, the relationship between Qi and human health has received considerable attention. Many studies have examined the outcomes of Qi exercise, but relatively few have paid attention to physical environmental conditions or how environmental precursors affect positive Qi. For the millions of practitioners of Qi, this is an important gap in the literature that limits the capacity of practitioners to boost positive energy of Qi in their surroundings and thereby increasing the health impacts of their Qi practice. By developing a reliable measurement to describe environmental Qi, our group conducted studies to explore an environment’s Qi field and Qi experience. For now, the result demonstrates that landscape structure and visual quality matter to Qi perception and, furthermore, settings with good a Qi field also tend to possess more natural elements and consider artificial constructions as disturbances.

To the conclusion, it is clear from the brief description above that a healthy landscape is not just essential for wildlife but also for human health. Being isolated from nature has become a common lifestyle in modern society, and people suffer from stress-related chronic disease more seriously each decade. To draw an overview of this problem, we tried to construct a Healthy Landscape Healthy People conceptual framework. While structuring this framework, we realized that many scientific gaps still need to be filled. From our perspective, a Qi-related study is one of many novel ways that is worth trying, though it is obviously not the only way. For example, to identify more specifically the effects of a landscape on perception, fMRI experiments have shed some light on brain mechanisms in recent years. fMRI experiments could be a powerful way to demonstrate relationships between healthy landscape and people, and an increasingly amount of researchers have adopted this new technique of inquiry. The growing body of related studies has now revealed the great value of natural/green environment in improving and facilitating a holistic and a sustainable life; however, there is still much more creative and practicable effort needed in this inter-disciplinary area to provide more substantial and solid scientific evidence. In our view, our conceptual framework might be helpful to pull these efforts together.



青少年園藝活動(課程)園藝治療效益的探討

Effects of horticultural therapy of horticultural activity (curriculum)

in adolescent : A descriptive research

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摘要

青少年從少年進入青春期的時期，身、心發育已產生一些微妙的變化，以因應未來成年人所需的功能。青澀時期面對不同負向的壓力，如課業壓力、同儕競爭壓力、家庭經濟支持上壓力、適應新環境心理壓力等；生理方面，如食欲不振、頭痛、全身無力等；心理方面，如心情低落、注意力不集中、偏向負向思考等。如果因此無法承受成績和入學帶來的負擔和壓力，有可能憂鬱、逃學、曠家、暴力行為、藥物濫用、自殺。預防勝於治療(Prevention is better than cure)；園藝療法，在高職新生應用其課程(活動)二個月，從心理層面、生理層面、社交層面和認知層面瞭解；在問卷調查經過 SPSS18.0 統計分析結果顯示：園藝活動，帶動手部操作，肢體協調變得靈巧；青春期的思考與行為的叛逆性，其情緒維持平靜；在園藝知識和技能上獲得新知，在應用實習課程，懂得團隊合作及和他人友善連結；在日常生活中有著踏實感。

關鍵詞： 青少年、園藝療法、信度

前言：

華人社會文化，青少年日常生活重心，以課業為主，忽略其它生活事項重要性，衍生壓力而不自知；如課業壓力、同儕競爭壓力、家庭經濟支持上壓力、適應新環境心理壓力等；生理方面，如食欲不振、頭痛、全身無力等；心理方面，如心情低落、注意力不集中、偏向負向思考等。

人為主動的個體，受有目的之活動(提供各類刺激)影響；經由其內在意志與動機，發揮自己的能力(黃曼聰、陳威勝、陳芝萍，2011)。園藝活動經由身、心、手、腦一致性應用，生理神經肌肉達到活絡效果、啟動頭腦功能，可以讓心情穩定、消除緊張、舒解壓力。

利用植物的園藝療法，讓青少年體會到自己與同儕一樣地共同栽培植物的共同經驗，且賦予責任感與合作觀念；把自己收穫的成果送給師長、家人、朋友，增進社會交往能力(孫基哲，2006)。

文獻報告指出其衍生壓力、憂鬱問題，尤以高中生較明顯；忽略青少年身心平衡的發展。反觀，高職生著眼技職教育，除了學識課程外，並重技藝實習，達到學以致用；此過程潛移默化，身心是否有正向發展？本文探討高職生園藝課程(活動)園藝治療效益。

方法

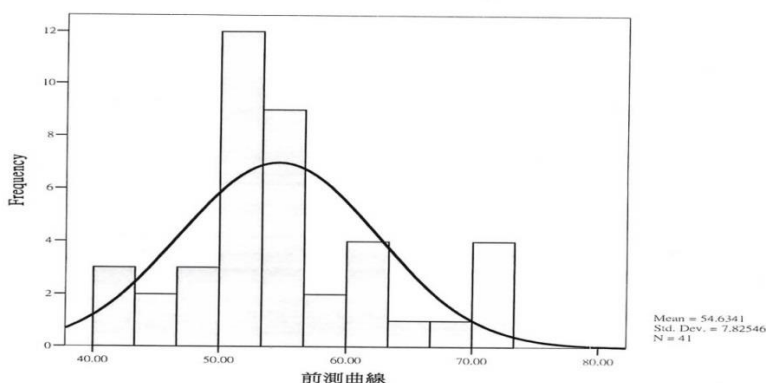
- 1.北部某高職園藝科一年級新生 42 人，園藝課程活動實施二個月後，職能效益問卷調查。
- 2.人口學調查：女生 21 人，男生 21 人。年齡為 15 歲。教育程度為國中畢業進入高職學校的新生。
- 3.園藝課程活動每週實施 11 小時。
- 4.此園藝活動(課程)園藝治療效益問卷十五題選項中，有二個題項為反向題，量表填答採用李克特五點量表(Likert-type scale)格式。最後計分時，反向題反向計分。
- 5.共計九週後的問卷，有效問卷 41 份、無效問卷 1 份。
- 6.統計分析：SPSS 18.0 統計套裝軟體。

結果

- 1.整體問卷題問項均表正向反應，如表一，高職生對園藝活動(課程)，此問卷最低分為 40 分、最高分為 70 分，(滿分 75 分)，平均 54.63 分。
- 2.園藝活動(課程)效益問卷十五題選項中，有二個題項設計反向題，分別為[園藝類科對上學是有負擔]、[園藝類科會帶來憂鬱的心情]。反向題反向計分。
- 3.有四項題問[園藝類科對自己的情緒可以維持平靜心情]、[園藝類科對自己的自信心有提昇]、[園藝類科對自己日常生活事物，負向思考轉變正向思考]、[園藝類科對自己上課會集中注意力]，50%以上學生表示“沒意見”，推測高職新生剛離開熟悉國中環境與學習文化，進入技職學校教育新環境，對自己面對自身心理層面問題，當下採取保留態度。
- 4.問卷中自認為手部功能靈巧(表二，phy1)和肢體協調靈活(表二，phy2)；在獨立樣本 t 檢定，「變異數相等的 Levene 檢定」之 F 值未達到顯著差異($F=1.291, p=.263 > .05$ 及 $F=.243, p=.625 > .05$)，表示二問項樣本變異數同質，查看「假設變異數相等」列之數據，t 值=2.941、df=39、 $p=.005 < .05$ 及 t 值=2.955、df=39、 $p=.005 < .05$ ，均達.05 顯著水準(紅色實線標記)；另變異數分析(ANOVA) F 值分別為 8.648 和 8.730 (F 分配臨界值 4.08， $p=.005 < .05$ 和 $p=.005 < .05$)達到顯著水準(紅色實線標記)(表三)。表示男生比女生的肢體靈巧明顯。
- 5.本文職能效益問卷可信度，李克特五點量表的信度考驗方法適用 Cronbach' s α 係數；在經 SPSS 18.0 信度統計分析，其數值.881，屬於內部一致性信度高(表四)。

表一

Graph



表二

		Independent Samples Test							
		Levene's Test for Equality of Variances		t-test for Equality of Means			t-test for Equality of Means		
		F	Sig.	Std. Error Difference	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			Mean Difference
psy1	Equal variances assumed	1.112	.298	.26411	-.00087	1.06754	2.019	39	.050
	Equal variances not assumed			.26298	.00116	1.06551	2.028	38.428	.050
s1	Equal variances assumed	.052	.821	.23969	-.43720	.53244	.199	39	.844
	Equal variances not assumed			.24012	-.43829	.53353	.198	38.436	.844
psy2	Equal variances assumed	.131	.719	.23868	-.69468	.27087	-.888	39	.380
	Equal variances not assumed			.23861	-.69456	.27075	-.888	38.944	.380
psy3	Equal variances assumed	.070	.793	.30365	-1.04990	.17847	-1.435	39	.159
	Equal variances not assumed			.30472	-1.05279	.18136	-1.430	37.634	.161
psy4	Equal variances assumed	.905	.347	.30468	-.73055	.50198	-.375	39	.710
	Equal variances not assumed			.30498	-.73132	.50275	-.375	38.690	.710
psy5	Equal variances assumed	1.515	.226	.27850	-.33714	.78952	.812	39	.422
	Equal variances not assumed			.27970	-.34042	.79280	.809	37.201	.424
psy6	Equal variances assumed	.270	.606	.27602	-.23450	.88212	1.173	39	.248
	Equal variances not assumed			.27619	-.23494	.88256	1.172	38.785	.248
psy7	Equal variances assumed	.458	.503	.28111	-.21146	.92575	1.270	39	.211
	Equal variances not assumed			.27915	-.20847	.92275	1.279	37.016	.209
psy8	Equal variances assumed	1.297	.262	.26220	-.26369	.79702	1.017	39	.315
	Equal variances not assumed			.26000	-.26065	.79399	1.026	35.987	.312
psy9	Equal variances assumed	6.688	.014	.24284	-.14595	.83643	1.422	39	.163
	Equal variances not assumed			.24605	-.15766	.84813	1.403	29.464	.171
phy1	Equal variances assumed	1.291	.263	.25585	-.23487	1.26989	2.941	39	.005
	Equal variances not assumed			.25608	-.23429	1.27047	2.938	38.720	.006
psy10	Equal variances assumed	.335	.566	.22268	-.21231	.68850	1.069	39	.292
	Equal variances not assumed			.22287	-.21281	.68900	1.068	38.719	.292
cog	Equal variances assumed	.927	.342	.23838	-.18455	.77979	1.249	39	.219
	Equal variances not assumed			.23874	-.18547	.78071	1.247	38.528	.220
s2	Equal variances assumed	.202	.655	.28835	-.09990	1.06657	1.676	39	.102
	Equal variances not assumed			.28764	-.09851	1.06517	1.680	38.907	.101
phy2	Equal variances assumed	.243	.625	.24014	-.22380	1.19525	2.955	39	.005
	Equal variances not assumed			.24044	-.22304	1.19601	2.951	38.614	.005

表三

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
前園藝治療	Between Groups	149.409	1	149.409	2.503	.122
	Within Groups	2328.152	39	59.696		
	Total	2477.561	40			
前phy1	Between Groups	5.799	1	5.799	8.648	.005
	Within Groups	26.152	39	.671		
	Total	31.951	40			
前phy2	Between Groups	5.157	1	5.157	8.730	.005
	Within Groups	23.038	39	.591		
	Total	28.195	40			

表四

觀察值處理摘要		
觀察值	有效	個數
	排除 ^a	0
	總數	41
		%
		100.0
		.0
		100.0

a. 根據程序中的所有變數刪除全部遺漏值。

可靠性統計量	
Cronbach's Alpha 值	項目的個數
.881	15

討論與結論

- 1.無對照組。本文研究參考他學者論述青少年日常生活問題的現狀與改善措施。
- 2.高職新生應用於園藝課程(活動)，從問卷中的心理層面、生理層面、社交層面和認知層面皆有正向的效益(如表一)。生理方面，男生比女生的園藝活動帶來體驗有顯著效益。心理方面，園藝類科高職新生，在問卷調查未發現，顯著壓力存在。原因：除了一般教室的學識教育，還有園藝操作活動(實習課程)；與植物環境接觸，為其特點。在問卷中課業壓力選項有 58%學生肯定園藝活動減緩課業壓力、32%學生未表示意見。臺灣文獻(弘光學報)調查有 30.5%青少年存在著憂鬱傾向；在問卷中園藝課程(活動)未發現有顯著憂鬱的心情。
- 3.在應用實習課程，懂得團隊合作及和他人友善連結；在日常生活中，內心有著踏實感(表二，psyl)。

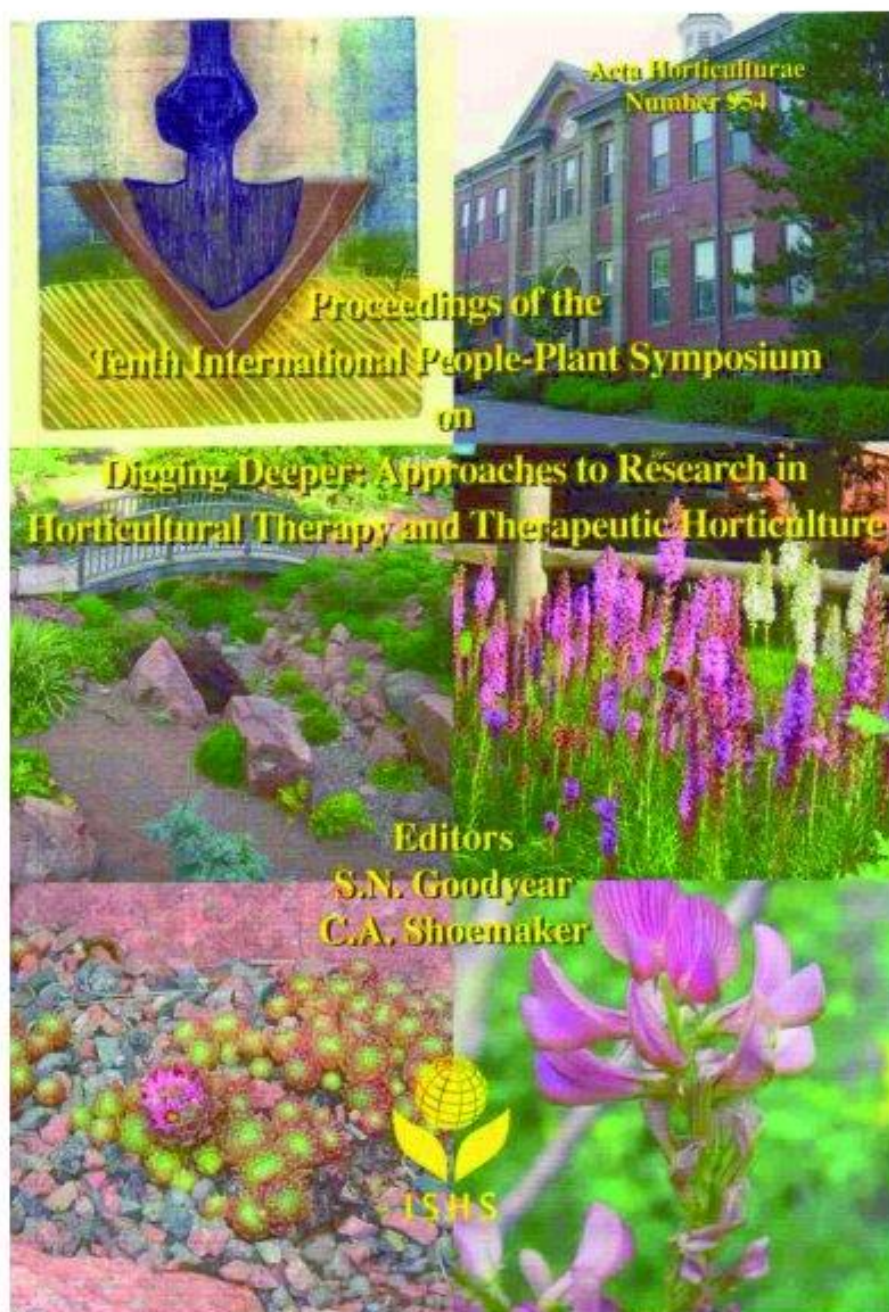
參考文獻

- 1.曾慈慧、毛慧芬、凌德麟(民 93)。園藝治療在職能治療中的應用，科學農業，52(7,8)，198-211。
- 2.孫基哲(民 95)。種植有益健康的室內植物。台中：晨星。
- 3.張彩秀(民 97)。青少年健康行為與憂鬱情緒之差異分析，弘光學報，52，55-65。
- 4.劉曉玫(民 97)。高中生憂鬱情緒之研究(未出版碩士論文)。慈濟大學，花蓮。
- 5.陳惠美(民 98)。園藝活動對人與環境之效益，自然生態環境與健康效益國際研討會論文集，50-65。
- 6.劉真伶(民 98)。健康焦慮、健康促進生活型態與輔助/替代醫療行為之研究(未出版碩士論文)。南台科技大學，台南。
- 7.洪瑜筑(民 99)。治療性園藝活動應用於觀護少年之行動研究(未出版碩士論文)。國立台灣大學，台北。
- 8.張元毓、蘇瑋佳、張俊彥(民 99)。學生從事園藝操作之表現與其提升注意力及獲得成就感多少之關係。臺灣園藝，56(1)，57-65。
- 9.黃曼聰、陳威勝、陳芝萍(民 100)。精神健康職能治療—理論與實務。臺北市：五南。
- 10.廖曼利、紀芬蓮、歐聖榮(民 101)。園藝治療活動對高中生減輕憂鬱效益之研究，人與植物學術研討會論文集，78-89。
- 11.吳明隆(民 101)。SPSS操作與應用：問卷統計分析實務(二版七刷)。臺北市：五南。
12. Butterfield, B., & Relf, D. 1992. In: Relf, D.(ed). The role of horticulture in human Well-being and social development (pp211-212).Timber Press, portland, Oregon, US.
13. Clopton, H. 1998. Horticultural therapy in a therapeutic farm community. J. Therap. Hort. 9:9-14.
14. Christine, L., & Rebecca, L. 2006. Horticultural therapy methods—making connections in health care, human service, and community programs. CRC Press, Boca Raton London New York.



★ 'Proceedings of the Xth International People-Plant Symposium on "Digging Deeper: Approaches to Research in Horticultural Therapy and Therapeutic Horticulture", August 6-8 2010, Nova Scotia, Canada.'

Emily Shum from HKATH has presentation on "Development of Horticultural Therapy in Hong Kong" on behalf of Connie Fung, president of HKATH. The presentation content was published ACTA Horticulture Number 954, ISHS, pp169-174.



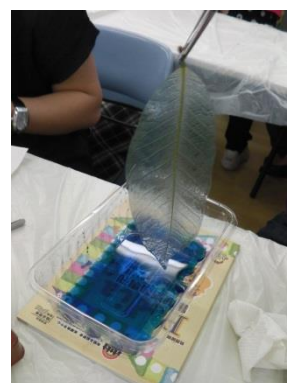
「園藝治療實習簡介、個案實習及研討」分享會 2-1-2013

有志在園藝治療專業發展的實習生，這晚齊集在聖雅各福群會聽取如何成為一位專業的園藝治療師，認證制度的專業資格。會後，由註冊園藝治療師分享在實習期間要注意的事情。



「園藝治療實務體驗 - 葉脈書籤 DIY」工作坊 26-6-2013

原來做葉脈書籤的事前工夫，真的不少。導師 Ronald 清楚教導如何做得好葉脈書籤。當天，會員都小心翼翼地將葉肉擦走，塗上顏色，過膠，就成為他們的葉脈書籤。



2013 年 9 月社區畫廊

本協會之展板將於九月份在荃灣港鐵站之社區畫廊展出。



2013 下半年專業增值講座

<會員費用全免 · 備茶點享用>

8/2013：「園藝治療用於婦女濫藥」專題講座

9/2013：第三屆會員大會暨「園藝治療實習小組於台灣」分享

12/2013：「園藝治療實習簡介、個案實習及研討」分享會

地 點：聖雅各福群會 · 灣仔石水渠街 85 號

備 註：名額有限，先報先得；

舉行日期、時間、材料費、報名手續等詳情，將於活動舉行前約 3 周，經電郵通知各會員

如有意就園藝治療資訊投稿或提供意見，歡迎電郵至 info@hkath.org 與吳小姐聯絡
(投稿人交來圖文必須持有版權，不可轉載，並註明投稿人真實姓名、電話及電郵地址)