

Biographical Sketch: Principal Investigator

Name: Irene TEO Eng Ai

Title: Dr.

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Current Position

- Assistant Professor, Lien Centre for Palliative Care, Duke-NUS (0.75 FTE)
- Clinical Psychologist, Division of Psychosocial Oncology, NCCS (0.25 FTE)

Percentage of time in Singapore every year: 100%

Academic qualifications (Indicate institution's name and year degree awarded)

- Bachelor of Science in Business, Entrepreneurship, Indiana University Bloomington, 2005
- Masters of Science in Health Psychology, Leiden University, 2006
- PhD in Clinical Psychology, University of Houston, 2012
- American Psychological Association Internship, Duke University Medical Center, 2012
- Postdoctoral fellowship, University of Texas MD Anderson Cancer Center, 2015

Research Interests

Psycho-oncology; palliative care; psychological coping; psychological distress

Publications:

- **Teo, I.**, Krishnan, A., & Lee, G.L. (2019). Psychosocial interventions for advanced cancer patients: A systematic review. *Psycho-oncology*, in press. [IF 3.45]
- Cheung YB, Neo SHS, **Teo I**, Yang GM, Thumboo J, Chia JWK, Kho ARK, Qu DLM, Che WL, Lau A, Wee HL. Development and evaluation of a quality of life measurement scale in English and Chinese of family caregivers of patients with advanced cancers. *Health and Quality of Life Outcomes* 2019; 17(1): 35. [IF 2.28]
- Yang GM, Neo SHS, **Teo I**, Lee GL, Thumboo J, Chia J, Lau A, Koh A, Qu D, Che WWL, Wee HL, Glajchen M, Cheung YB. Exploring the score equivalence of the English and Chinese versions of the Brief Assessment Scale for Caregivers, *Journal of Patient Experience*, in press.
- **Teo, I.**, Singh, R., Malhotra, C., Ozdemir, S., Dent, R.A., Kumarakulasinghe, N.B., Yeo, W.L., ... Finkelstein, E.A. (2018). Cost of Medical Care of Patients with Advanced Serious Illness in Singapore (COMPASS): Prospective cohort study protocol. *BMC Cancer*, 18: 459. [IF 3.29]
- **Teo, I.**, Reece, G. P., Huang, S.C., Mahajan, K., Andon, J., Khanal, P., Sun, C., Nicklaus, K., Merchant, F. Markey, M. K., & Fingeret, M. C. (2018). Body image dissatisfaction in patients undergoing breast reconstruction: examining the roles of breast symmetry and appearance investment. *Psycho-Oncology*, 27(3), 857-863. [IF 3.45]
- Yang GM, **Teo I**, Neo SH, Tan D and Cheung YB. Pilot Randomized Phase II Trial of the Enhancing Quality of Life in Patients (EQUIP) Intervention for Patients with Advanced Lung Cancer. *Am J Hosp Palliat Care*. 2018;35(8):1050-1056. [IF 1.28]
- Tan, E. G. F., **Teo, I.**, Finkelstein, E. A., & Chan, C. M. (2018). Determinants of Regret in Elderly Dialysis Patients. *Nephrology*. [IF 2.18]
- Malhotra, C., Foo, R., Singh, R., Ozdemir, S., **Teo, I.**, Sim, D., Jaufeerally, F.,... Finkelstein, E.A. (2018). Study protocol for a cohort study of patients with advanced heart failure in Singapore. *BMJ Open*, 8(9):1-7. [IF 2.41]
- **Teo, I.**, Cheung Y.B., Lim, T.Y.K., Padmavathi, N.R., Long, J.V., Tewani, K. (2017). The relationship between symptom prevalence, body image and quality of life in Asian gynecologic cancer patients. *Psycho-Oncology*. DOI: 10.1002/pon.4457 [IF 3.45]

- **Teo I.**, Fronczyk K.M., Guindani M., Vanucci M., Ulfers S.S., Hanasono M.M., Fingeret M.C. (2016). Salient Body Image Concerns of Patients with Cancer Undergoing Head and Neck Reconstruction. *Head and Neck*, 38(7):1035-42 [IF 2.76]
- Lee, G.L., **Teo, I.**, Kanesvaran, R. (2016). The complexities of breaking bad news in an Asian context: Concordance and discordance among patient preferences, family preferences, perceived and actual communication. *Health Communication*, 13:1-7. [IF 1.93]
- **Teo, I.**, Novy, D.M., Chang, D.W., Cox-Martin, M. M., Fingeret, M.C. (2015). Body image, pain, and depression in patients with lymphedema. *Psycho-Oncology*, 24(11): 1377-83. [IF 3.45]
- **Teo, I.**, Fingeret, M.C., Liu, J., & Chang, D.W. (2015). Coping and quality of life of patients following microsurgical treatment for breast cancer-related lymphedema. *Journal of Health Psychology*. DOI: 10.1177/135910531559801 [IF 1.75]
- **Teo, I.**, Reece, G.P., Christie, I.C., Guindani, M., Heinberg, L.J., Crosby, M.A., & Fingeret, M.C. (2015). Body image and quality of life of breast cancer patients are affected by timing and stage of breast reconstruction. *Psycho-Oncology*, 25 (9): 1106-12. DOI:10.1002/pon.3952 [IF 3.45]
- Fingeret, M.C., **Teo, I.**, & Goettsch, K. (2015). Body image: A critical psychosocial issue for patients with head and neck cancer. *Current Oncology Reports*, 17(1): 1-6.
- Chua, A.C., DeSantis, S., **Teo, I.**, & Fingeret, M. (2015). Body image investment in breast cancer patients undergoing reconstruction: Taking a closer look at the Appearance Schemas Inventory-Revised. *Body image: An international journal*, 13: 33-37. [IF3.18]
- **Teo, I.**, Jensen, M.P., & Tan, G. (2014). Anxiety sensitivity and depression: Explaining posttraumatic stress symptoms in female veterans with chronic pain. *Military Behavioral Health*, 2 (2), 173-79.
- Fingeret, M.C., **Teo, I.**, & Epner, D.E. (2014). Managing body image difficulties of adult cancer patients: Lessons from available research. *Cancer*, 120 (5), 633-41. [IF 5.07]
- DeSnyder, S.M., **Teo, I.**, & Fingeret, M. (2014). Body image struggles and breast cancer care: An under recognized and undertreated issue with important implications for all patients. *Breast Cancer Management*, 3(3), 251-60.
- Bartley, E., Edmond, S.N., Wren, A.A., Somers, T.J., **Teo, I.**, Zhou, S.S., Rowe, K., Abernathy, A., Keefe, F.J., & Shelby, R.A. (2014). Holding Back Moderates the Association between Health Symptoms and Social Well-Being in Patients Undergoing Hematopoietic Stem Cell Transplant. *Journal of Pain and Symptom Management*, 48(3): 374-84. [IF 2.60]
- Tan, G., **Teo, I.**, Srivastava, D, Smith, D.L, Smith, S.L., Williams, W. & Jensen, M.P. (2013). Improving access to care for women veterans suffering from chronic pain and depression associated with trauma. *Pain Medicine*, 14 (7), 1010-20. [IF 2.36]
- Tan, G., **Teo, I.**, Anderson, K.O., & Jensen, M.P. (2011). Adaptive versus maladaptive coping and beliefs and their relation to chronic pain adjustment. *Clinical Journal of Pain*, 27 (9), 769-74. [IF 2.71]
- Lu, Q., Uysal, A., & **Teo, I.** (2011). Need satisfaction and catastrophizing: Explaining the relationship among emotional ambivalence, pain, and depressive symptoms. *Journal of Health Psychology* 16 (5), 819-827. [IF 1.75]
- Schroevers, M.J. & **Teo, I.** (2008). A report of posttraumatic growth in Malaysian cancer patients: Relationships with psychological distress and coping strategies. *Psycho-Oncology* 17, 1239-46. [IF 3.25]

Books

- Fingeret, M.C. & **Teo, I.** (Eds) (2018). *Body Image Care for Cancer Patients: Principles and Practices*. New York: Oxford University Press
- Tan, G., Shaffer, F., Lyle, R., & **Teo, I.** (Eds) (2016). *Evidence-based practice in biofeedback and neurofeedback (3rd ed.)*. Wheat Ridge, CO: Association for Applied Psychophysiology and Biofeedback.

Talks and Workshops

- **Teo, I.** (2019). Sexuality and cancer: an Asian perspective. Regional Oncology Nursing Conference, Singapore.
- **Teo, I.** (2018). Costs and Medical Care of Patients with Advanced Serious Illness in Singapore (COMPASS). HSRI forum, Singapore.
- **Teo, I.** (2016). Challenges patients face during the course of treatment. Asia Pacific Psycho-Oncology Network Meeting (APPON 5), Singapore.
- **Teo, I.** (2016). Coping with cancer psychologically: Finding the yellow brick road. 6th Malaysian International Conference on Holistic Healing for Cancer, Kuala Lumpur.
- Fingeret, M.C., Buck, E.E., **Teo, I.** (2015). Treating body image concerns of cancer patients. Workshop conducted at the American Psychosocial Oncology Society/International Psychosocial Oncology Society Annual Conference, Washington DC.
- **Teo, I.** & Buck, E.E. (2014). Coping with cancer as a couple. Workshop aimed to address body image and sexual health issues of patients and their partners, MD Anderson Cancer Center.
- **Teo, I.** (2014). Body image and its impact on romantic relationships. Talk presented at the Cancer 180 Survivorship Symposium for young adult cancer survivors, MD Anderson Cancer Center.
- Fingeret, M.C. & **Teo, I.** (2014). Coping with cancer as a couple. Talk presented at the MD Anderson Survivorship Conference, Katy, TX.
- **Teo, I.** (2013). The use of Motivational Interviewing (MI) in pain management. Talk presented to the Department of Pain Medicine, MD Anderson Cancer Center

Professional Conference Presentations

- **I.Teo,** Baid, D., Singh, R., Chee, W.Y., Lee, G.L., E.A. Finkelstein & COMPASS Study Group. (2018). Bereavement Adjustment of Caregivers of Advanced Cancer Patients in Singapore: Preliminary Findings from COMPASS. Poster presented at the Inaugural Grief and Bereavement Conference, October 2018, Singapore.
- **I.Teo,** Y.P. Tan, F.T. Pan, J.S.Y. Phang, E.A. Finkelstein, Y.B. Cheung, M.J.G Yang , R.A. Shelby, T.J. Somers. (2017). The feasibility and acceptability of a psycho-behavioral symptom management program (HIBISCUS) for patients with advanced breast cancer in Singapore. Poster presented at the Asia Pacific Hospice Conference, July 2017, Singapore.
- **I.Teo,** J. P. Vilardaga, J. Phang, F.T. Pan, Y.P. Tan, R.A. Shelby, G.M.J. Yang, E. A. Finkelstein, T.J. Somers. (2017). Behavioral symptom management for patients with advanced breast cancer: The feasibility and acceptability of a cross-cultural intervention. Poster to be presented at the Annual Association of Behavioral and Cognitive Therapies, November 2017, San Diego CA.
- **Teo, I.,** Trahan, L.H., Guindani, M., Christie, I.C., Fingeret, M.C. (2015). A longitudinal perspective of body image in head and neck cancer patients undergoing reconstructive surgery. Oral presentation at the International Psychosocial Oncology Society and American Psychosocial Oncology Society Annual Conference, Washington DC.
- **Teo, I.,** Reece, G. Christie, I., Guindani, M., Heinberg, L., & Fingeret, M.C. (2014). Reconstructive status and psychosocial well-being of breast cancer patients. Poster presented at the Society of Behavioral Medicine Conference, Philadelphia, PA.
- **Teo, I.,** Fingeret, M.C., Kroll, J.L., Chang, D.W., Novy, D.M. (2014). Predictors of body image dissatisfaction among patients with lymphedema pain. Poster presented at the Society of Behavioral Medicine Conference, Philadelphia, PA.
- **Teo, I.,** Kagan, S., Weber, R., Hanasono, M., Skoracki, R., Fingeret, M.C. (2013). Toward an understanding of body image adaptation for surgically treated patients with head and neck cancer. Advances in Cancer Survivorship Practice Conference, Houston, TX.
- **Teo, I.,** Heinberg, L.J., Christie, I.C., Guindani, M., Fingeret, M.C. (2013). Body image coping in cancer patients: How do patients adapt to disfiguring surgeries? Oral presentation at the American Psychosocial Oncology Society, Huntington Beach, CA.
- **Teo, I.,** Fingeret, M.C., Chang, D.W. (2013). Living with lymphedema in the long-term: Evaluating quality of life of breast cancer survivors undergoing lymphaticovenular bypass. Interactive poster session presented at the MD Anderson Survivorship Research Retreat, Houston, TX.
- **Teo, I.,** Patwardhan, S.Y., & Naus, M.J. (2011). Minority status as a moderator of emotional expressivity and anxiety symptomatology. Poster presented at the Society of Behavioral Medicine Conference, Washington DC.

- **Teo, I.**, Tan, G. Smith, D.L., Smith, S.L. (2011). Emotional ambivalence: Does it explain the relation between trauma, depression, and chronic pain symptoms? Poster presented at the American Pain Society Meeting, Austin, TX.
- **Teo, I.**, Patwardhan, S.Y., Naus, M.J., & Tsai C. (2010). Psychological adjustment to cancer and health-related quality of life in early-stage breast cancer survivors. Poster presented at the 5th Biennial Cancer Survivorship Research Conference, Washington DC.
- **Teo, I.**, Harper, K.L. & Naus, M.J. (2009). Women's body image and self-esteem: The impact of age on psychological well being. Poster presented at the 43rd convention of the Association of Behavioral and Cognitive Therapies, New York, NY.
- **Teo, I.**, Philipp, L.M., Naus, M.J. & Chamberlain, L.D. (2008). The relationship between body shame, self-esteem and depression. Poster presented at the 42nd convention of the Association of Behavioral and Cognitive Therapies, Orlando, FL.

Patents held (related or unrelated to the study): None

Recent awards (Scientific Awards): None

Current Research Activities

Singapore Cancer Society Award (Feb 2018 – Jan 2020), S\$86,400, PI: I. Teo
Renewing Intimacy and Sexuality (RISE): A Pilot Program to Support Marital Intimacy and Sexual Health of Female Cancer Patients in Singapore

Role: PI

NMRC HSR NIG Award (Aug 2017 – Dec 2018), S\$94,300, PI: I. Teo
Feasibility and Acceptability of A Psychosocial Intervention for Advanced Colorectal Cancer Patients

Role: PI

SMF (Jan 2016- Dec 2018), S\$600,000, PI: E.A. Finkelstein
Cost of Medical Care of Patients with Advanced Serious Illness in Singapore (COMPASS)
 The goal of this study is to capture health care utilization, cost, and quality of life indicators of patients with advanced cancer and their primary caregivers.

Role: Co-Investigator

NMRC (Oct 2016- Oct 2018), S\$999,972, PI: E.A. Finkelstein
Singapore Cohort of Patients with Advanced Heart Failure (SCOPAH)
 The goal of this study is to capture health care utilization, cost, and quality of life indicators of patients with advanced heart failure and their primary caregivers.

Role: Co-Investigator

NMRC (8/1/2015-12/31/2017), S\$100,000, PI: S. Ozdemir-Van Dyke
Randomized Controlled Trial of a Physical Activity Program for Teenagers (FIT-TEEN)
 The goal of this study is to assess the effectiveness of an intervention for teenagers to increase motivation for exercise.

Role: Co-Investigator

Completed Research Activities

Duke/Duke-NUS Pilot Grant Award (May 2016 – April 2018), S\$100,000, PI: I. Teo/T. Somers
Feasibility and Acceptability of A Behavioral Symptom Management Program for patients with Advanced Breast Cancer in Singapore and The US

Role: co-PI

KKH (Oct 2015- Jul 2018), PI: I.Teo, K. Tewani
Quality of Life and Their Determinants in Patients with Gynaecological Cancer in Singapore
 The goal is to examine quality of life and associated psychosocial factors in women with gynaecological malignancies.

Role: Co-PI, research mentor

NMRC HSR-IG (Feb 2016- Oct 2017), S\$97,500, PI: Y.B. Cheung

Development and Validation of a Quality of Life Scale in English and Chinese for Caregivers of Patients with Advanced Cancers in Singapore

The goal of this study is to develop and validate a measure for use with caregiver of cancer patients.

Role: Co-Investigator

NCC (4/1/2016-3/31/2017), S\$150,000, PI: G.M.J. Yang

Pilot Trial of the Enhancing Quality of Life in Patients (EQUIP) Intervention for Patients with Advanced Lung Cancer.

The goal of this study is to assess the feasibility and acceptability of a nurse-led intervention designed to help patients with metastatic disease behaviorally manage breathlessness, fatigue, and anxiety.

Role: Co-Investigator

SGH (Feb 2017- Feb 2018), PI: C.M.Chan (medical student)

Determinants of Regret in Elderly Dialysis Patients in Singapore

The goal is to examine prevalence of regret in elderly dialysis patients and investigate associated factors.

Role: Co-Investigator, research mentor

MD Anderson PA13-0151 (3/15/2013-1/15/2015), PI: I. Teo

Psychosocial Factors and Quality of Life Outcomes in Breast Cancer Patients with Lymphedema

The primary objective of this project was to increase our current understanding of the health-related quality of life of patients who undergo a lymphaticovenular bypass or a lymph node transfer procedure for treatment of breast cancer-related lymphedema.

Role: PI

NIH RSG-PB-09-157-01-CPPB (8/1/2009-7/31/2014), PI: M.C. Fingeret

Pilot Body Image Intervention for Patients with Facial Changes Related to Cancer (About Face 2)

The primary aim of the study was to assess the feasibility of a 4-session psychotherapeutic intervention delivered during the acute phase of post-operative recovery after facial reconstructive surgery and to examine the efficacy of the psychotherapeutic intervention.

Role: Post-doc Research coordinator

Houston VA H-25525 (10/15/2009-10/14/2011), PI: G. Tan

Improving Access to Care for Women Veterans Suffering from Chronic Pain and Depression Associated with Trauma

The primary aim of the study was to assess the feasibility and efficacy of using biofeedback in conjunction with 6-session group therapy via video-teleconferencing for reducing and managing symptoms of chronic pain, depression, and PTSD.

Role: Graduate student research coordinator