RSA News

Spring 2023



Research Scientist Association

A note from the Research Scientist Association Council Chair

We hope everyone is enjoying the warm spring weather and beautiful blooms that this time of year brings to New England! The RSAC has been busy this spring working on projects to support the Research Scientists. Our big project this year has been working on compiling the results of the Research Scientist Survey we sent out in December 2022. Thank you to all who participated! We will be sharing these results with the Research Scientists very shortly and are making plans for a hybrid Town Hall on May 19th to discuss the results with the Research Scientists, followed by the annual RSAC Open Meeting and Spring Social. This meeting is open to all Research Scientists, especially those who are interested in learning more about the Council and potentially joining! Even if you can't make it to the Open Meeting, please come and join for the Social afterwards! Kind regards,

Karen Inouye

Important Reminders

RSA Spring Seminar: May 4th, 2023 at 1-2pm

We are pleased to have HSPH Research Scientists Dr. Susan Peters and Dr. Gillian SteelFisher, both winners of the 2022 Research Scientist Association Award, present their work. Zoom link is <u>available here</u> (pass: 649410).

Research Scientist Town Hall and Open Meeting, followed by Spring Social: Friday May 19th, 12:30-2pm, FXB Center, followed by the Social, 2-4pm)

Open to all Research Scientists. Come review and discuss the results of the recent Research Scientist Survey, learn about the Research Scientist Association Council, and get to know your fellow Research Scientists. We especially encourage Research Scientists who are interested in joining the RSAC to attend the Open Meeting. Email invitation to come soon.

Research Scientist Appointment Applications Due - Monday, May 8, 2023

Due dates for application materials for new RS appointments, re-appointments, promotions for consideration at the RS review committee meetings are due Monday, May 8th, 2023, for the May 23rd meeting.

Other School Activities

Grant writing consultation service available

Harvard Catalyst offers individualized feedback for Harvard-affiliated staff planning to apply for an NIH K award. See <u>link</u> for more details.

Harvard Academic Workers (HAW) Union is collecting signatures to indicate interest in being represented by the union. Find out more on their website.

2022-2023 COUNCIL MEMBERS

Karen Inouye – RSAC Chair

Molecular Metabolism

Shafika Abrahams-

Gessel – Center for

Health Decision

Science

Mesfin Bekalu - Social and

Behavioral Sciences

Terence Cheng – Global

Health and Population

Shannan Ho Sui –

Biostatistics

Radhika Khetani -

Biostatistics

Megan Marx Delaney -

Health Policy and Management

Minttu Rönn – Global Health

and Population

Linda Vesel – Health Policy

and Management

Philip Kret (Administration) – Office of Faculty Affairs

New Research Scientist Appointments

Simona Cristea, Research Scientist, Biostatistics, 11/22

Vincenzo Bollettino, Senior Research Scientist, Global Health and Population, 1/23

Mario Flores, Research Scientist, Nutrition, 2/23

Ki-Do Eum, Research Scientist, Health Policy and Management, 4/23

Abhinav Kaushik, Research Scientist, Environmental Health, 4/23

Zhu Zhuo, Research Scientist, Biostatistics, 4/23

Zhuoxin Sun, Senior Research Scientist, Biostatistics, 4/23

Jeremy Simon, Senior Research Scientist, Biostatistics, 5/23

Promotions

Marianna Cortese, Senior Research Scientist, Nutrition, 12/22 Gurol Tunçman, Senior Research Scientist, Molecular Metabolism, 12/22 Michael Chao, Senior Research Scientist, Immunology and Infectious Diseases, 2/23 Shannan Ho Sui, Principal Research Scientist, Biostatistics, 2/23 Danielle Braun, Principal Research Scientist, Biostatistics, 4/23

Faculty appointments

Kjetil Bjornevik, Epidemiology and Nutrition, Senior Research Scientist appointed as Assistant Professor of Epidemiology and Nutrition, 3/23

CONGRATULATIONS TO ALL!

Summary of Research Scientist Survey results

Find out more, share your experience and contribute to change, join us at the upcoming Research Scientist Town Hall meeting on May 19th

Goal of the survey: To understand the needs and concerns of HSPH Research Scientists in order to better advocate for Research Scientists and to improve the Research Scientist experience at HSPH.

Survey administration: On December 13, 2022 the HSPH Research Scientist Council sent out a survey to all HSPH Research Scientists. We collected information about demographics, professional development, career trajectory, compensation, mental health and wellness, and overall top concerns of Research Scientists. We received responses from 51 out of 110 TH Chan Research Scientists.

Main findings of what Research Scientists are looking for:

- 1. Revision of the Research Scientist title
- 2. Improved salaries and salary equity
- 3. Improved definition of career and promotion path
- 4. Improved support/resources

(Full results will be shared prior to Town Hall)

Research Scientist Updates

Collaborations

Susan Peters (Research Scientist, Social and Behavioral Sciences) is a co-investigator and Harvard Sub-award PI for a project entitled Thriving Workers and Thriving Workplaces: Identifying modifiable working conditions, individual characteristics, and the well-being of workers, funded by La Superintendencia de Seguridad Social (SUSESO), Chile. The purpose of this 18-month project is to identify working conditions that affect worker well-being using the Thriving from Work Questionnaire in workers across several sectors in Chile through a collaboration with Mutual de Seguridad and FLACSO Chile.

Presentations

Tim Lomas (Research Scientist, Human Flourishing Program) joined a delegation in March 2023 from Harvard led by Arthur Brooks at the Kennedy School to visit His Holiness the Dalai Lama in Dharamsala, India, with whom Dr Lomas participated in a small panel on the topic of leadership and happiness.

Publications

Shafika Abrahams-Gessel (Research Scientist, Health Policy and Management, Center for Health Decision Science) has recently published a study shows that the levels of awareness of hypertension awareness, treatment, and control improved significantly in a rural cohort of older in adults in Agincourt, South Africa over 5 years from baseline to follow-up. (Abrahams-Gessel, S., Gómez-Olivé, F. X., Tollman, S., Wade, A. N., Du Toit, J. D., Ferro, E. G., Kabudula, C. W., & Gaziano, T. A. (2023). Improvements in hypertension control in the rural longitudinal HAALSI Cohort of South African adults aged 40 and older, from 2014 to 2019. *American journal of hypertension*, hpad018. Advance online publication. https://doi.org/10.1093/ajh/hpad018).

Victor Barrera (Research Scientist, Biostatistics), has recently published a study, in collaboration with fellow Principal Research Scientist Shannan Ho Sui that describes the use of low-dose interleukin 2 (IL-2) therapy to expand regulatory T cells in vivo and to enhance immune modulation in face transplant recipients to reduce immunosuppression-associated complications during face transplant rejection. (Murakami N, Borges TJ, Win TS, Abarzua P, Tasigiorgos S, Kollar B, **Barrera V**, **Ho Sui S**, Teague JE, Bueno E, Clark RA, Lian CG, Murphy GF, Pomahac B, Riella LV. Low-dose interleukin-2 promotes immune regulation in face transplantation: A pilot study. Am J Transplant. 2023 Feb 4:S1600-6135(23)00239-3. doi: 10.1016/j.ajt.2023.01.016. Epub ahead of print. PMID: 36740193)

Selina Bopp (Research Scientist, IID) has recently published a study on drug development in malaria research. (Bopp, S., Pasaje, C.F.A., Summers, R.L. *et al.* (2023). Potent acyl-CoA synthetase 10 inhibitors kill *Plasmodium falciparum* by disrupting triglyceride formation. *Nat Commun* **14**, 1455. https://doi.org/10.1038/s41467-023-36921-2)

Shannan Ho Sui (Principal Research Scientist, Biostatistics) has recently published several studies, including the abovementioned study with Research Scientist Victor Barrera on the use of low-dose interleukin 2 (IL-2) therapy to expand regulatory T cells in vivo and to enhance immune modulation in face transplant recipients to reduce immunosuppression-associated complications during face transplant rejection (Murakami N, Borges TJ, Win TS, Abarzua P, Tasigiorgos S, Kollar B, **Barrera V**, **Ho Sui S**, Teague JE, Bueno E, Clark RA, Lian CG, Murphy GF, Pomahac B, Riella LV. Low-dose interleukin-2 promotes immune regulation in face transplantation: A pilot study. Am J Transplant. 2023 Feb 4:S1600-6135(23)00239-3. doi: 10.1016/j.ajt.2023.01.016. Epub ahead of print. PMID: 36740193)

Shannan has additionally published the following manuscript: Choi EB, Vodnala M, Saini P, Anugula S, Zerbato M, Ho JJ, Wang J, **Ho Sui SJ**, Yoon J, Roels M, Inouye C, Fong YW. Transcription factor SOX15 regulates stem cell pluripotency and promotes neural fate during differentiation by activating the neurogenic gene Hes5. J Biol Chem. 2023 Mar;299(3):102996. doi: 10.1016/j.jbc.2023.102996. Epub 2023 Feb 9. PMID: 36764520; PMCID: PMC10023989

Tim Lomas (Research Scientist, Human Flourishing Program) has had a productive few months with these publications:

- Lomas, T., & Case, B. (2023). A history of psychogeography and psychocosmology: Humankind's evolving orientation on earth and in space. *Current Research in Ecological and Social Psychology*, 4, 100090. doi: 10.1016/j.cresp.2023.100090
- Lomas, T., & Case, B. (2023). From angels to aliens: Humankind's ongoing encounters with, and evolving interpretations of, the genuine celestial unknown. *Zygon*. Advance online publication. doi: 10.1111/zygo.12891
- Lomas, T., Diego-Rosell, P., Shiba, K., Standridge, P., Lee, M. T., Case, B., Lai, A. Y., & VanderWeele, T. J. (2023). Complexifying individualism versus collectivism and West versus East: Exploring global diversity in perspectives on self and other in the Gallup World Poll. *Journal of Cross-Cultural Psychology*, 54(1), 61-89. doi: 10.1177/00220221221130978
- Lomas, T., & VanderWeele, T. J. (2023). The mental illness-health matrix and the mental state space matrix: Complementary meta-conceptual frameworks for evaluating psychological states. *Journal of Clinical Psychology*. Advance online publication. doi: 10.1002/jclp.23512
- Lomas, T., & VanderWeele, T. J. (2023). Toward an expanded taxonomy of happiness: A conceptual analysis of 16 distinct forms of mental wellbeing. *Journal of Humanistic Psychology*. Advance online publication. doi: 10.1177/00221678231155512
- Gudka, M., Gardiner, K. L. K., & Lomas, T. (2023). Towards a framework for flourishing through social media: A systematic review of 118 research studies. *Journal of Positive Psychology*, 18(1), 86-105. doi: 10.1080/17439760.2021.1991447
- Lomas, T. (2022). The appeal of aesthetics: A cross-cultural lexical analysis. *Psychology of Aesthetics, Creativity, and the Arts*. Advance online publication. doi: 10.1037/aca0000484
- Lomas, T., Bartels, M., Weijer.M, V. De, Pluess, M., Hanson, J., & VanderWeele1, T. J. (2022). The architecture of happiness. *Emotion Review*, 14(4), 288–309. doi: 10.1177/17540739221114109
- Lomas, T., Lee, M. T., Ritchie-Dunham, J., & VanderWeele, T. J. (2022). The varieties of vitality: A cross-cultural lexical analysis. International Journal of Wellbeing, 12(4), 155-180. doi: 10.5502/ijw.v12i4.2627
- Lomas, T., & VanderWeele, T. J. (2022). The garden and the orchestra: Generative metaphors for conceptualizing the complexities of well-being. *International Journal of Environmental Research and Public Health*, 19(21), 14544. doi: 10.3390/ijerph192114544

Susan Peters (Research Scientist, Social and Behavioral Sciences) has recently published a study describing the development of the long- and short-form versions of the Thriving from Work Questionnaire, which was designed to evaluate work-related well-being across six domains: basic needs for thriving from work, psychological and emotional well-being from work, social well-being from work, work-life integration, job design and experience of work, and work-related health. (Peters SE, Gundersen D, Sorensen G, Katz JN, Wagner GR. Thriving from Work Questionnaire: Dimensionality, Reliability, and Validity of the Long- and Short-Form Questionnaires. American Journal of Industrial Medicine. 2023. In Press.)

Susan also published a Cochrane Systematic Review examining the effectiveness and safety of splinting for carpal tunnel syndrome, a common upper limb disorder. (Karjalainen TV, Lusa V, Page MJ, O'Connor D, Massy-Westropp N, **Peters SE****. Splinting for carpal tunnel syndrome. Cochrane Database of Systematic Reviews 2023, Issue 2. Art. No.: CD010003. DOI: 10.1002/14651858.CD010003.pub2)

Additionally, Susan's book chapter describing the management of pain in the workplace – from primary through to tertiary prevention is expected to be released in May 2023 (Peters SE. Work Rehabilitation. In: Pain: A textbook for health professionals. 3rd Edition. Editors: Strong, J. & van Griensven, H. Elsevier. In press. ISBN: 9780323870337.)

Health Ribaudo (Principal Research Scientist, Department of Biostatistics, Center for Biostatistics in AIDS Research) is the lead statistician and co-PI of the Data Coordinating Center for the Randomized Trial to Prevent Vascular Events in people living with HIV (<u>REPRIEVE</u>). A planned interim analysis of data from the trial found that participants who took pitavastatin calcium, a daily statin, lowered their risk of major adverse cardiovascular events by 35% compared with those receiving a placebo. See the <u>NIH news release</u> for details on this exciting breakthrough.

Minttu Rönn (Research Scientist, Global Health and Population) recently published a manuscript identifying prepandemic correlations between flu vaccination coverage and presidential election vote share: correlations with voting patterns were stronger for covid-19 than for flu, but the characteristics associated with vaccination status were similar. (Minttu M Rönn, Nicolas A Menzies, Joshua A Salomon, (2023) Vaccination and voting patterns in the United States: analysis of COVID-19 and flu surveys from 2010 to 2022, American Journal of Preventive Medicine (2023), doi:https://doi.org/10.1016/j.amepre.2023.03.001)

Matt Smith's (Research Scientist, Environmental Health) manuscript "Pollinator Deficits, Food Consumption, and Consequences for Human Health: A Modeling Study" was chosen by editors as one of the top twelve papers published in Environmental Health Perspectives last year, included in their "Editors' Choice Collection 2022.

Zhu Zhuo (Research Scientist, Biostatistics) recently published a manuscript that demonstrates that the transcription factor Creb5 plays an instrumental role in the formation of synovial joints, and directs the genesis of the articular cartilage by driving the expression of signaling molecules that specify the joint interzone and inhibit a Wnt5a positive feedback loop in the perichondrium. (Zhang CH, Gao Y, Hung HH, **Zhuo Z**, Grodzinsky AJ, Lassar AB. Creb5 coordinates synovial joint formation with the genesis of articular cartilage. Nature communications. 2022 Nov 26;13(1):1-8. DOI: 10.1038/s41467-022-35010-0 PMID: 36435829 PMCID: PMC9701237)