an exercise facility and occur on two non-consecutive days/week for 6 months. During specified exercises, the exercise interventionist targets the participant’s eight-repetition maximum (8-RM), defined as the greatest resistance that can be moved 8 times through full range of motion with good form. A rigorous, remote fidelity monitoring program maximizes consistency of the intervention across sites. This fidelity oversight program is a model for future exercise studies because of its unique remote, hierarchical structure. All exercise interventionists are initially certified by written examination and direct observations. Some exercise sessions are also video recorded and reviewed using fidelity checklists. After initial certification, repeated direct observation and video-based verification of fidelity are repeated at prescribed intervals for each interventionist to ensure sustained consistency of implementation across sites.

**Session 3125 (Symposium)**

**The Implications of Aging Couples’ Linked Lives: Dyadic Associations in Health and Well-Being**

Chair: Stephanie Wilson Co-Chair: Christina Marini
Discussant: Amy Rauer

Older adults age in the context of their intimate partnerships. Partners’ lives—their emotions, behaviors, and health—are intricately linked as they navigate the challenges associated with aging. This symposium presents research that illuminates ways partners influence one another over time. The talks are diverse with regard to their timescale (e.g., years vs. hours) and context (e.g., dementia vs. pain). Dr. Martire will examine associations between declines in one spouse's physical health over 5 years and the other’s mental health. This talk will further consider whether discussing health concerns exclusively with one’s spouse intensifies such associations. Ms. Nah will show how the pain of both partners (care providers and recipients) contributes to escalating marital conflict over 2 years. Dr. Wilson will demonstrate that emotional reactivity to spousal distress in the lab is associated with increased proinflammatory gene expression up to 80 minutes later, a risky pattern for health if repeated over time. Dr. Monin will examine actor and partner associations of affect and depressive symptoms among people with early-stage dementia and their spouses; the absence of partner associations suggests that emotional spillover may operate differently in early-stage dementia dyads. Dr. Novak will identify correlates of four latent profiles derived from couples’ physical, psychological, and relationship well-being: happy, healthy couples; unhappy, unhealthy couples; and two groups with blissful marriages despite individual problems. Dr. Amy Rauer, an internationally recognized scholar of relationships and health, will discuss ways in which this research advances our understanding of couples’ linked lives.

**Expression of Emotions and Genes: Proinflammatory Gene Expression Rises with Spousal Distress**

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Marital quality shares ties to inflammation-related conditions like cardiovascular disease and diabetes. Lab-based studies implicate hostility during marital conflict as a mechanism via inflammatory reactivity. However, developmental theories suggest that conflict declines with age. Spousal distress is an important but overlooked context for aging couples as networks shrink and assistance needs increase. To examine the effects of spousal distress on changes in proinflammatory gene expression, 38 adults ages 40-81 witnessed their spouse relive an upsetting personal memory aloud, rated their mood before and after, and provided blood samples at baseline and twice post-task. Those whose negative mood increased more in response to spousal disclosure showed larger elevations in proinflammatory gene expression 40 (p=.022) and 80 minutes (p<.0001) after the task. Effects were robust to race, gender, age, alcohol, smoking, and body mass index. These novel findings identify spousal distress as a key marital context that may escalate inflammation-related health risks.

**Effects of Late-Life Health Transitions on Spouses’ Psychological Well-Being**

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Declining physical health likely affects not only older adults’ own well-being, but also that of their spouse. Using two waves of data from 610 couples in the National Social Life, Health and Aging Project, we examined effects of health declines over five years on change in self and spousal psychological well-being. Actor-Partner Interdependence Model findings showed that declines in spouses’ physical health (i.e.,