Appendix A. The DePaul Post-Exertional Malaise Questionnaire (DPEMQ)

Section 1: Demographic and Illness Information

1. What is your age?

(must be over 18 years old)

2. What is your gender?

- □ Male
- □ Female
- □ Other
- □ Prefer not to answer

3. To which of the following race(s) do you belong?

- □ Black, African-American
- □ White
- American Indian or Alaska Native
- □ Asian or Pacific Islander
- 4. Other race (*Please specify*)
- 5. Are you of Latino or Hispanic origin?
 - □ Yes
 - $\square \ \mathrm{No}$
- 6. Do you currently live in the United States?
 - □ Yes
 - □ No

6a. If you do not live in the United States, what country do you currently live in?

- 7. What is your current marital status?
 - □ Married or living with partner
 - □ Separated
 - □ Widowed
 - Divorced
 - Never married
 - □ Prefer not to answer
- 8. What is the highest degree or level of education you have completed?
 - □ Less than high school
 - □ Some high school
 - □ High school degree or GED
 - □ Partial college/university (at least one year) or specialized training
 - □ Standard college/university degree
 - Graduate professional degree including masters and doctorate

9. What is your current work status? (Check all that apply)

- On disability
- □ Student
- □ Homemaker
- □ Retired
- □ Unemployed
- □ Working part-time
- □ Working full-time

9a. If you are on disability, for what condition do you receive disability compensation? Please Specify_____

10. If you are currently working, what work do you do and what is your job title? Current_____

11. If you are currently not working, what was the type of work you did and what was your job title?

Most Recent_____

12. Prior to leaving the workforce, did you cut back either in number of hours worked or in work responsibilities?

- □ Yes
- 🗆 No

13. What is your current annual income in US dollars?

- □ Less than \$24,999
- □ \$25,000 to \$49,999
- □ \$50,000 to \$99,999
- □ \$100,000 to \$149,999
- □ \$150,000 to \$199,999
- □ \$200,000 to \$249,999
- □ \$250,000 or more
- □ Prefer Not to Respond
- 14. What was your annual income prior to becoming ill in US dollars?
 - □ Less than \$24,999
 - □ \$25,000 to \$49,999
 - □ \$50,000 to \$99,999
 - □ \$100,000 to \$149,999
 - □ \$150,000 to \$199,999
 - □ \$200,000 to \$249,999
 - □ \$250,000 or more
 - □ Prefer Not to Respond
- 15. What have you been diagnosed with?
 - **Chronic Fatigue Syndrome (CFS)**

- □ Myalgic Encephalomyelitis (ME)
- 16. Other (please specify)

17. If you have a diagnosis, what year were you diagnosed?_____

18. What age were you when you were diagnosed?

- 19. Who diagnosed you?
 - Medical Doctor
 - Alternative Practitioner
 - □ Self-Diagnosed

19a. If you were diagnosed by a medical doctor, was he/she an expert/knowledgeable of ME or CFS?

- □ Yes
- 🛛 No

20. How long ago did your problem with ME or CFS begin?

- □ Less than 6 months
- \Box 6-11 months
- \Box 1-2 years
- \square 3-5 years
- □ 6-10 years
- □ Over 10 years
- □ Had problem with ME or CFS since childhood or adolescence
- □ Not having a problem with ME or CFS

21. Has your ME or CFS illness been present for more than 50% of the time since you became ill?

- □ Yes
- □ No

22. How would you describe the course of your ME or CFS illness? (Check one)

- □ Constantly getting worse
- Constantly improving
- □ Persisting (no change)
- □ Relapsing & remitting (having "good" periods with no symptoms & "bad" periods)
- Fluctuating (symptoms periodically get better and get worse, but never disappear completely)
- □ No Symptoms/I am not ill.

23. Which statement best describes your ME or CFS illness during the last 6 months? (Check one)

- □ I am not able to work or do anything, and I am bedridden/completely incapacitated.
- □ I can walk around the house, but I cannot do light housework.
- □ I can do light housework, but I cannot work part-time.

- □ I can only work part-time at work or on some family responsibilities.
- □ I can work full time, but I have no energy left for anything else.
- □ I can work full time and finish some family responsibilities but I have no energy left for anything else.
- □ I can do all work or family responsibilities without any problems with my energy.

Section 2: Onset and Triggers

24. Is the onset of your symptom exacerbation ever immediately after exertion?

- □ Yes
- 🗆 No

24a.If you answered yes, do you experience immediate symptom exacerbation after exertion:

- $\Box \quad \text{All of the time}$
- □ Most of the time
- □ About half the time
- A little of the time

24b. If your onset is *immediate*, please indicate after *what activities*:

24c. If your onset is *immediate*, please indicate for *which symptoms*:

25. Is the onset of your symptom exacerbation ever *delayed* after exertion?

- □ Yes
- No

25a.If you answered yes, do you experience immediate symptom exacerbation after exertion:

- \Box All of the time
- □ Most of the time
- □ About half the time
- □ A little of the time

25b. If your onset is delayed, indicate how long after the exertion does your symptom exacerbation occur (you may check more than one box):

- \Box 1 hour or less
- □ 2-6 hrs
- □ 7-12 hrs
- □ 13-24 hrs
- □ 1-2 days
- □ 3-4 days
- □ 5-6 days
- □ More than 1 week

25c. If your onset is *delayed*, please indicate after *what activities*:

25d. If your onset is *delayed*, please indicate for *which symptoms*:

26. Do basic activities of daily living like going to the toilet, bathing, dressing, communicating, and/or reading trigger your symptom exacerbation?

- □ Yes
- 🗆 No

26a. If you answered yes, do you experience the worsening of symptoms after exertion:

- $\Box \quad \text{All of the time}$
- □ Most of the time
- About half the time
- A little of the time

27. Do positional changes (e.g., your body *position* is shifted from the lying down to standing) lead to symptom exacerbation?

- □ Yes
- □ No

27a. If you answered yes, do you experience the worsening of symptoms after exertion:All of the time

- □ Most of the time
- □ About half the time
- □ A little of the time

28. Does emotional stress (good or bad) lead to symptom exacerbation?

- □ Yes
- □ No

26a. If you answered yes, do you experience the worsening of symptoms after exertion:

- $\Box \quad \text{All of the time}$
- □ Most of the time
- □ About half the time
- $\Box \quad A \text{ little of the time}$

29. Are there some instances in which the specific precipitants of your symptom exacerbation cannot be identified?

- □ Yes
- □ No

30. On a day you are recovering from symptom exacerbation, does it take less exposure that usual to a trigger to exacerbate your symptoms?

- □ Yes
- □ No

31. If you have mild overexertion over several days, can this also produce an abnormal physical or cognitive response?

□ Yes

D No

32. Do you have other triggers that provoke symptom exacerbation such as (check box if yes):

- **Chemicals**
- □ Foods
- □ Light
- □ Heat
- □ Cold
- Noise
- Visual overload
- □ Watching movement (such as a video)
- Sensory overload

Section 3: Consequences and Symptoms

33. If you go beyond your energy limits by engaging in pre-illness tolerated exercise or activities of daily living, do you experience any of the following (check box if yes):

- □ An abnormal response to minimal amounts of physical and/or cognitive exertion
- □ An onset that is immediate or delayed by hours or days
- A severity and duration of symptoms that are out of proportion to the initial trigger
- □ A loss of functional capacity and/or stamina
- Post-exertional exhaustion
- **G** Symptom exacerbation

Section 4: In the next set of questions, indicate whether or not the following symptoms **made worse due to physical or cognitive exertion** (which we will refer to as "**symptom exacerbation**"):

Symptoms	<pre>Frequency: Throughout the past 6 months, how often have you had this symptom? For each symptom listed below, circle a number from: 0 = none of the time 1 = a little of the time 2 = about half the time 3 = most of the time 4 = all of the time</pre>						nths ympt or ea pelow sym mild mod seve	ugho , how com b cch sy v, cire fr ptom l lerat	v <u>mu</u> pothe /mpt cle a rom: n not	e <u>pa</u> i <u>ch</u> red om nui	has this you? listed
34. Reduced stamina and/or functional capacity	0	1	2	3	4		0	1	2	3	4
35. Physically fatigued while mentally wired	0	1	2	3	4		0	1	2	3	4
36. Cognitive exhaustion	0	1	2	3	4		0	1	2	3	4
37. Problems thinking	0	1	2	3	4		0	1	2	3	4

38. Unrefreshing sleep	0	1	2	3	4	0	1	2	3	4
39. Insomnia	0	1	2	3	4	0	1	2	3	4
40. Muscle pain	0	1	2	3	4	0	1	2	3	4
41. Muscle weakness/instability	0	1	2	3	4	0	1	2	3	4
42. Aches all over your body	0	1	2	3	4	0	1	2	3	4
43. Dizziness	0	1	2	3	4	0	1	2	3	4
44. Flu-like symptoms	0	1	2	3	4	0	1	2	3	4
45. Temperature dysregulation	0	1	2	3	4	0	1	2	3	4

46. Please list any other PEM symptoms you experience:

Section 5: Duration, Recovery, and Pacing

47. Does your prolonged, unpredictable recovery period from symptom exacerbation last days, weeks, or even months?

- □ Yes
- No

47a. If yes, how long does your prolonged, unpredictable recovery period typically last (you may check more than one box):

- □ Within 24 hours
- □ Between 24 hours and 1 week
- □ Between 1 week and 1 month
- **D** Between 1 month and 6 months
- **D** Between 6 months and 12 months
- □ Between 12 months and 2 years
- □ Over 2 years

48. Is the severity and duration of your symptom exacerbation out-of-proportion to the *type* of the exertion?

- □ Yes
- □ No

48a. If you answered yes, do you experience the worsening of symptoms after exertion:

- $\Box \quad \text{All of the time}$
- □ Most of the time
- □ About half the time
- □ A little of the time

49. Is the severity and duration of your symptom exacerbation symptoms out-of-proportion to the *intensity* of the exertion?

- □ Yes
- □ No

49a. If you answered yes, do you experience the worsening of symptoms after exertion:

- □ All of the time
- □ Most of the time
- About half the time
- A little of the time

50. Is the severity and duration of your symptom exacerbation out-of-proportion to the *frequency* of the exertion?

- □ Yes
- 🗆 No

50a. If you answered yes, do you experience the worsening of symptoms after exertion:

- $\Box \quad \text{All of the time}$
- □ Most of the time
- About half the time
- □ A little of the time

51. Is the severity and duration of your symptom exacerbation out-of-proportion to the *duration* of the exertion?

- □ Yes
- 🛛 No

51a. If you answered yes, do you experience the worsening of symptoms after exertion:

- □ All of the time
- □ Most of the time
- □ About half the time
- □ A little of the time

52. Does pacing allow you to completely avoid your symptom exacerbation?

- □ Yes
- □ No

53. Does pacing allow you to avoid only to a certain degree your symptom exacerbation?

- □ Yes
- 🗆 No

53a. If yes, how frequently do you find pacing to be effective in avoiding symptom exacerbation?

- $\Box \quad All of the time$
- □ Most of the time
- □ About half the time
- □ A little of the time

53b. If yes, how effectively do you find pacing to be in reducing the level of severity of your symptoms?

- Very effective
 Moderately effective
 Mildly effective
 Barely effective