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In the Matter of the Compensation of  
**CAROLYN MCCANN, Claimant**  
WCB Case No. 07-04605  
ORDER ON REVIEW  
Cary et al, Claimant Attorneys  
Sather Byerly & Holloway, Defense Attorneys

Reviewing Panel: Members Langer, Weddell, and Herman. Member Langer dissents.

Claimant requests review of that portion of Administrative Law Judge (ALJ) Mundorff's order that upheld the self-insured employer's denials of her occupational disease claims for abnormal heart rate/autonomic dysfunction. On review, the issues are whether the "firefighter's presumption" applies and compensability. We reverse.

FINDINGS OF FACT

We adopt the ALJ's "Findings of Fact," with the following summary.

Claimant began working for the employer as a firefighter/paramedic on February 9, 1998. When initially hired, she underwent a treadmill test that revealed excellent cardiovascular fitness. (Ex. 0-2). Overall, claimant was in excellent physical condition and described by her practitioners as very healthy and fit. (Exs. 2, 7-2, 70-12, -13).

In May 2006, claimant presented to her family practitioner with a history of repeated concussions from playing rugby and soccer and a recent history of short term memory loss. (Ex. 12).

On December 2, 2006, claimant went to the emergency room after suffering a severe bout of vomiting and a loss of consciousness. Her CT scan and lab tests were normal. She was referred to a neurologist for further work up.

On December 7, 2006, claimant treated with Dr. Fitzgerald, a neurologist. Dr. Fitzgerald took a history of the events of December 2, reporting that claimant had not slept the day before, had a vigorous day of exercise, and then drank four glasses of wine during the evening. She later became nauseated with a subsequent significant bout of vomiting and a syncope episode (*i.e.*, fainting). Dr. Fitzgerald noted that claimant had a history of chronic bradycardia but had no prior episodes

of syncope. She concluded that the December 2 episode was likely related to a progression of profound bradycardia<sup>1</sup> in the context of the vomiting with a syncopal-type phenomena. (Ex. 16). She ordered an MRI and EEG, which were both normal. (Exs. 17, 18).

In December 2006, claimant began treating with Dr. Ashley, a cardiologist, who noted that claimant had suffered eight concussions in the past related to athletic activity. She concluded that claimant's syncope episode was primarily related to marked bradycardia during malignant vasovagal activity. (Ex. 20).

On January 19, 2007, claimant underwent a treadmill test, which revealed chest pressure suggestive of angina with exercise and positive EKG findings. (Ex. 30). A subsequent coronary angiogram showed normal coronary arteries. (Ex. 34).

Based on claimant's test results, Dr. Ashley stated that claimant's clinical picture suggested vasovagal syncope. She noted that claimant had a young, strong, healthy heart, but that she was under a great deal of stress with situational depression. (Ex. 36).

Dr. Reddy, a cardiologist from the same clinic as Dr. Ashley, began evaluating claimant in February 2007. His impression, based on claimant's history and test results, was "vagal syndrome, chronic hypotension, chronic bradycardia," with her primary problem being "some sort of autonomic dysregulation." (Ex. 42). He also referred to his diagnosis as "dysautonomia/neurocardiogenic syncope." (Ex. 45).

On March 25, 2008, Drs. Ashley and Reddy stated that claimant's most dominant condition was a chronic vagal syndrome manifested by symptomatic bradycardia, syncope and palpitations. They reported that although the exact underlying etiology of claimant's symptoms was unclear, she undoubtedly had cardiac manifestations currently dominated by symptomatic bradycardia, but previously manifest by syncope. (Ex. 66).

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<sup>1</sup> "Bradycardia" is defined as "slowness of the heartbeat, as evidenced by slowing of the pulse rate to less than 60." *Dorland's Illustrated Medical Dictionary* 223 (28th ed 1994).

On April 9, 2008, Dr. Reddy installed a permanent pacemaker. Claimant responded well and was released for all normal recreational and occupational activities. (Exs. 69, 70-62 through 70).

On August 19, 2008, Dr. Semler, a cardiologist, performed a records review for the employer. He stated that claimant suffered from dysautonomia, which had many symptoms. He found no signs of heart disease or peripheral vascular disease. He explained that vasovagal syncope was synonymous with dysautonomia and that there were no generally accepted etiologies of that diagnosis. (Ex. 72). Dr. Semler stated that the vagus nerve was not part of the heart but served to produce chemicals that activated the heart, but were not part of the structural anatomy of the heart. (Ex. 73). Dr. Semler was deposed on December 16, 2008. (Ex. 76).

On October 7, 2008, Dr. Kron, a cardiologist who treated claimant on February 1, 2007, concluded that he was unable to express an opinion regarding claimant's medical condition beyond that date (*i.e.*, February 1, 2007). According to Dr. Kron, neurocardiogenic syncope was a cardiovascular disease of the nervous system in the heart. He explained that this condition involved the brain, heart, and blood vessels, which were all integrated in a feedback loop. He reported that patients with this condition may experience bradycardia and inappropriate dilation of the blood vessels, which causes them to feel faint. Dr. Kron stated that this was something cardiologists see and treat, and as such fell within the scope of cardiovascular disease. (Ex. 75).

The employer denied echo viral myocarditis and autonomic dysfunction. Claimant requested a hearing contesting the denials.

### CONCLUSIONS OF LAW AND OPINION

The ALJ upheld the employer's denials, concluding that claimant's abnormal heart beat disorder, characterized as vasovagal syndrome or autonomic dysfunction/dysautonomia, was not a "cardiovascular-renal disease" subject to ORS 656.802(4), the so-called "firefighter's presumption."

On review, claimant contests the ALJ's assumption that ORS 656.802(4) requires that a "cardiovascular-renal disease" involve actual "pathological" change to the heart or blood vessels, rather than merely a symptomatic disorder of the heart function that requires medical services. According to claimant, she has a disorder of the cardiovascular nervous system (abnormal heart rate) resulting in

disability or requiring medical treatment (implantation of a pacemaker), which falls within the scope of ORS 656.802(4) as a “cardiovascular disease.” Claimant asserts that she has met all the elements necessary under ORS 656.802(4) to establish presumptive compensability of her condition, and that the employer did not meet its burden of overcoming the presumption by clear and convincing evidence. For the following reasons, we agree.

Under ORS 656.802(4),<sup>2</sup> if a qualifying firefighter suffers death, disability, or impairment of health as a result of “cardiovascular-renal disease,”<sup>3</sup> the condition is presumed to have resulted from employment as a firefighter.<sup>4</sup> The presumption, however, is rebuttable. To overcome the presumption, the employer must establish by “clear and convincing medical evidence that the cause of the condition or impairment is unrelated to the firefighter’s employment.” To be “clear and convincing,” the truth of the facts asserted must be highly probable. *Riley Hill General Contractor, Inc. v. Tandy Corp.*, 303 Or 390, 407 (1987); *SAIF v. Brown*, 159 Or App 440 (1999).

The phrase “impairment of health” includes in the presumption of compensability a worsening of symptoms as well as a worsening of the underlying disease. *Wright v. SAIF*, 289 Or 323, 335 (1980) (the condition of worsening of pain, if it requires medical services or results in disability, is compensable in the case of a firefighter if the other requirements of the statute are met).

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<sup>2</sup> ORS 656.802(4) provides:

“Death, disability or impairment of health of firefighters of any political division who have completed five or more years of employment as firefighters, caused by any disease of the lungs or respiratory tract, hypertension or cardiovascular-renal disease, and resulting from their employment as firefighters is an ‘occupational disease.’ Any condition or impairment of health arising under this subsection shall be presumed to result from a firefighter’s employment. However, any such firefighter must have taken a physical examination upon becoming a firefighter, or subsequently thereto, which failed to reveal any evidence of such condition or impairment of health which preexisted employment. Denial of a claim for any condition or impairment of health arising under this subsection must be on the basis of clear and convincing medical evidence that the cause of the condition or impairment is unrelated to the firefighter’s employment.”

<sup>3</sup> There is no contention that claimant has a disease of the lungs or respiratory tract or hypertension. *See* ORS 656.802(4).

<sup>4</sup> On review, the employer does not renew its contention that claimant’s pre-employment physical examination did not meet the requirements of ORS 656.802(4). It is also undisputed that claimant worked as a firefighter for the employer for at least five years.

The parties' dispute centers on whether claimant's abnormal heart rate/dysautonomia is covered by the presumption as a disability or impairment of health caused by a cardiovascular disease.<sup>5</sup> For the following reasons, we conclude that it is.

In *Mathel v. Josephine County*, 319 Or 235, 240 (1994), the court looked to *Webster's Third New Int'l Dictionary* 648 (unabridged ed 1993) to determine that the "ordinary meaning" of the term "disease" was "an impairment of the normal state of the \* \* \* body"; "sickness, illness." The *Mathel* court, however, only cited that part of the dictionary definition of "disease" that was necessary for it to resolve the matter before it (*i.e.*, the difference between "disease" and "injury"). In more detail, "disease" is defined as "an impairment of the normal state of the \* \* \* body or of any of its components that interrupts or modifies the performance of the vital functions \* \* \*." *Webster's Third New International Dictionary* 648 (unabridged ed 1993); *see also Charles J. Solberg*, 57 Van Natta 1929 (2005); *George C. Kernion, Jr.*, 57 Van Natta 1621 (2005).

Relying on *Stedman's Medical Dictionary* 314 (28th ed 2006), we have defined "cardiovascular" as "relating to the heart and blood vessels or the circulation." *Timothy R. Cramblit*, 61 Van Natta 1507, 1510 (2009).

Combining the above definitions, we conclude that the term "cardiovascular disease" refers to an impairment of the body or any of its components that interrupts or modifies the heart *and* blood vessels. *See Karjalainen v. Curtis Johnston & Pennywise, Inc.*, 208 Or App 674, 682 (2006), *rev den*, 342 Or 473 (2007) (where a statutory term may be "associated with a specialized discipline such as law, medicine, or psychiatry--and may have acquired a particular meaning within that discipline--\* \* \*, we will resort to such evidence of the specialized

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<sup>5</sup> Regarding the employer's argument that the statutory term "cardiovascular-renal disease" must involve the heart, blood vessels, *and* kidneys, we agree with the ALJ that such an interpretation is not supported by the case law or legislative history. When dealing with heart conditions, the court has not required a renal component of a cardiovascular condition for the presumption to attach to a claim, and a review of the legislative history reveals that the phrase "cardiovascular-renal disease" was intended to be broadly interpreted to encompass both cardiovascular diseases involving the heart and blood vessels, and those that may also involve a renal component (although not necessary). *See, e.g., Wright v. SAIF*, 48 Or App 867 (1980) (on remand); *Long*, 163 Or App at 399-401; Submission from Herbert E. Griswold, M.D., House Labor and Industries Committee, Feb. 2, 1961; Submission from Earl R. Noble, Oregon State Fire Fighters Council, House Labor and Industries Committee, Jan. 24, 1961. This is consistent with Dr. Kron's statement that "'cardiovascular-renal disease' is a generic reference to a broad category of conditions affecting blood supply in the body. These would include cardiovascular and renal disorders in combination or separately." (Ex. 75-1).

meaning as likely was available to the legislature at the time of enactment.”); *see also Oregon State Denturist Ass’n v. Bd. of Dentistry*, 172 Or App 693, 701-02 (2001) (resorting to medical dictionary and dictionary of ordinary meaning to determine meaning of statutory reference to “dentures”).

However, while the *meaning* of a statutory term is a question of law, resolution of whether a particular worker’s condition meets that definition depends on the medical evidence in the record. *Young v. Hermiston Good Samaritan*, 223 Or App 99, 107 (2008); *Karjalainen*, 208 Or App at 681; *SAIF v. Calder*, 157 Or App 224, 228 (1998) (“The Board is not an agency with specialized medical expertise entitled to take official notice of technical facts within its specialized knowledge”).

Here, Dr. Kron stated that claimant’s fainting due to decreased heart rate (*i.e.*, vasovagal syncope or neurocardiogenic syncope) was:

“a cardiovascular disease of the nervous system in the heart. This condition involves the brain, the heart and blood vessels that are all integrated in a feedback loop. Patients who suffer this condition may experience bradycardia and inappropriate dilation of the blood vessels which will cause them to faint or feel as if they are going to faint. This is something that cardiologists see and treat, so it falls within the scope of cardiovascular disease.” (Ex. 75-1).

Dr. Kron persuasively explained that the term “cardiovascular-renal disease” is a “generic reference to a broad category of conditions affecting blood supply in the body.” (*Id.*) His opinion thus establishes that claimant has a condition that modifies or interrupts the performance of the heart and vascular system by causing symptomatic bradycardia and inappropriate dilation of the blood vessels.

Furthermore, the opinions of Drs. Reedy, Ashley, and Semler all establish that claimant’s heart beats too slowly and that not enough blood is circulating, which causes her to faint. (Exs. 70, 71, 76). Thus, claimant’s abnormal heart rate impairs the performance of the heart by adversely affecting its ability to function at a rate that is sufficient for good circulation of the blood. Because claimant’s slow heart beat modifies the function of her heart and blood vessels, her condition qualifies as a “cardiovascular disease,” as defined above.

Accordingly, we conclude that a preponderance of the medical evidence establishes that claimant's abnormal heart rate, which resulted in disability or impairment of health, represents a "cardiovascular disease" as contemplated by the statute because it "interrupts or modifies" the heart and blood vessels by causing the heart to pump too slowly, thereby reducing blood flow through the blood vessels to other areas of the body.<sup>6</sup>

Under these circumstances, claimant has established the facts that give rise to the presumption that her abnormal heart rate results from her employment (*i.e.*, she had completed five or more years of employment as a firefighter of a political subdivision, she had a "disability or impairment of health" caused by a cardiovascular disease, and she underwent medical examinations prior to employment that revealed no cardiac problems). ORS 656.802(4). The employer, therefore, must produce clear and convincing medical evidence that the cause of claimant's condition is "unrelated" to her employment. *Id.*; *Wright*, 289 Or at 332. For the following reasons, the employer has not met that burden.

Drs. Reddy and Ashley stated that fatigue due to sleep deprivation could have played a role in causing claimant's condition, although they could not be sure. (Exs. 70-30, -54, -58, 71-55, -56). Specifically, Dr. Reddy opined that "it would not be a stretch to suppose that sleep disorders or weird sleeping patterns would affect the autonomic system." (Ex. 70-55). He explained that he could not rule out a sleep cycle disruption in claimant's case because he "can't rule out anything, the cause. We don't know what the cause is. But that would be one of the things you could put on the list of possibilities." (Ex. 70-56). Dr. Ashley agreed that fatigue and overexertion could affect heart function "in that the less sleep you have, the higher your sympathetic tone becomes typically. And in people who have dysautonomia, then they may have more dramatic swings in heart rate and blood pressure." (Ex. 71-53-54). She could not rule out that claimant's long and different shifts, with disrupted sleep, were a potential cause of the bradycardia. (Ex. 71-55). Similarly, Dr. Semler said that exhaustion from fatigue "is a possible triggering mechanism" for vasovagal syndrome. (Ex. 76-16).

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<sup>6</sup> We acknowledge that the medical evidence relied on by the dissent contains statements describing claimant's condition as a nervous system disorder. However, it is our role as fact finder to determine whether claimant's condition meets the definition of "cardiovascular disease," as described above. Even considering the presence of an underlying nervous system disorder, we remain persuaded that all the medical evidence, including that relied on by the dissent, establishes that claimant's heart and blood vessel function has been interrupted or modified.

Based on these uncontradicted opinions, we do not find that the employer has established that it is “highly probable” that the cause of claimant’s condition is unrelated to her employment as a firefighter. Consequently, the employer has not carried its burden to rebut the presumption. Accordingly, we reverse.

Claimant’s attorney is entitled to an assessed attorney fee for services at hearing and on review. ORS 656.386(1). After considering the factors set forth in OAR 438-015-0010(4) and applying them to this case, we find that a reasonable fee for claimant’s attorney’s services at hearing and on review is \$20,000, payable by the employer. In reaching this conclusion, we have particularly considered the time devoted to the case (as represented by the record, claimant’s appellate briefs, and her counsel’s contested fee request at hearing), the complexity of the issue, the value of the interest involved, and the risk that counsel may go uncompensated.

Finally, claimant is awarded reasonable expenses and costs for records, expert opinions, and witness fees, if any, incurred in finally prevailing over the denials, to be paid by the employer. *See* ORS 656.386(2); OAR 438-015-0019; *Nina Schmidt*, 60 Van Natta 169 (2008); *Barbara Lee*, 60 Van Natta 1, *recons*, 60 Van Natta 139 (2008). The procedure for recovering this award, if any, is prescribed in OAR 438-015-0019(3).

### ORDER

The ALJ’s order dated September 3, 2009 is reversed. The employer’s denials are set aside and the claims are remanded to the employer for processing in accordance with law. For services at hearing and on review, claimant’s attorney is awarded an assessed fee of \$20,000, payable by the employer. Claimant is awarded reasonable expenses and costs for records, expert opinions, and witness fees, if any, incurred in finally prevailing over the denials, to be paid by the employer.

Entered at Salem, Oregon on October 6, 2010

Member Langer dissenting.

The majority concludes that the “firefighter’s presumption” applies because claimant has established a disability or impairment of health caused by a “cardiovascular-renal disease.” Because I disagree with that assessment, I respectfully dissent.

In *Mathel v. Josephine County*, 319 Or 235, 240 (1994), the court addressed the definition of “disease” in the context of an “occupational disease” under ORS 656.802. Considering prior case law and the dictionary definition of “disease” as “an impairment of the normal state of the \* \* \* body”; ‘sickness, illness,’” the court interpreted the text of ORS 656.802, relating to “occupational disease,” as “referring to ongoing conditions or states of the body or mind.” *Id.* at 242. Thus, to the extent *Mathel* defined “disease,” it did so for a limited purpose and only in the context of ORS 656.802. Because this case deals with ORS 656.804, I do not find *Mathel* helpful or controlling. See *Wright v. SAIF*, 289 Or 323, 334-35 (1980); *Aetna v. Aschbacher*, 107 Or App 494, 503, *rev den*, 312 Or 150 (1991) (the Supreme Court’s interpretation of a different statutory scheme not applicable to occupational disease claims by firefighters).

The diseases subject to the presumption in ORS 656.802(4) include “any disease of the lungs or respiratory tract, hypertension or cardiovascular-renal disease.” “Cardiovascular-renal disease” is a statutory term and, thus, its interpretation is a matter of law. In my view, its meaning is not so precise as to require no interpretation. Accordingly, our task is to determine what the legislature most likely intended it to mean as a matter of law. See *Karjalainen v. Curtis Johnston & Pennywise, Inc.*, 208 Or App 674, 681 (2006), *rev den*, 342 Or 473 (2007) (interpreting “arthritis or arthritic condition” of ORS 656.005(24)(a)(A) as a question of law).

The firefighter’s presumption was enacted in 1961, Or Laws 1961, chapter 583, section 1, “to give relief to firefighters because statistical studies indicated that firefighters were much more likely to suffer from heart and lung diseases due to exposure to smoke and gases under strenuous conditions.” *Wright*, 289 Or at 327. The proponents of the presumption contended that firefighting duties involved particular strain on the cardiac and respiratory systems, resulting in higher incidence of angina, coronary thrombosis, high blood pressure and hardening of arteries. Statement of Earl R. Noble, Secretary of the Oregon State Fire Fighters Council, House Labor and Industries Committee, HB 1018, Jan. 24, 1961. Further, a physician advocated that the term “cardiovascular-renal disease” (the term eventually enacted) rather than “heart disease” be used to cover common complications of heart disease, such as stroke, rupture of a major blood vessel and kidney failure. Statement of Herbert E. Griswold, M.D., House Labor and Industries Committee, HB 1018, Feb. 2, 1961.

As relevant in this case, the legislative history shows that the 1961 legislature intended the presumption to apply to diseases of the heart and arteries, including some consequences of the heart malfunction, that were statistically proven to correlate with the firefighters' stressful working conditions.<sup>7</sup> Accordingly, not every disease affecting the heart or blood vessels is subject to the presumption; only those diseases linked to the firefighter's overstressed cardiovascular system may be presumed to arise from that occupation. To extend the aid of the presumption to *any* disease affecting the heart or blood vessels would defeat the policy consideration for the firefighter's presumption, which is relieving the firefighters from affirmatively proving compensability of diseases that the legislature had accepted as probable consequences of the firefighters' working conditions.

Here, the persuasive medical evidence establishes that, although claimant has symptoms in her heart and is treated by cardiologists, she does not have a "cardiovascular-renal disease" within the meaning of ORS 656.802(4). Rather, as discussed below, she has an impairment of her nervous system.

According to Drs. Reddy and Ashley, claimant's primary reason for treating since December 2006 was for "chronic vagal syndrome manifest by symptomatic bradycardia, syncope and palpations." (Ex. 66). Both Dr. Ashley's and Dr. Reddy's physical examinations of claimant's heart were normal and they both concluded that she did not have a cardiovascular disease. (Exs. 36, 42-2, 71-29, -40). Dr. Reddy's "best diagnosis" was "autonomic dysfunction that makes claimant's heart rate slower than is physiologically appropriate for her and gives her symptoms." (Ex. 70-38).

Dr. Reddy explained that "neurally-mediated" or "vagal" syncope was "fainting in the absence of underlying heart disease due to something from the brain, which is neurally-mediated, forcing your body to pass out." (Ex. 70-9). He noted that cardiologists treat patients who have neurally-mediated syncope, even though it is not actually a cardiac problem, but is a "brain-originated malfunction" related to the autonomic nervous system. (Ex. 70-11, -12, -27). He explained

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<sup>7</sup> Similarly, in 2009, based on scientific studies showing that firefighters are at a greater risk of contracting cancer due to exposure to many hazards and toxic substances, an amendment to ORS 656.802 was proposed to provide that certain cancers be presumed to arise out of firefighters' employment. Statement of Bob Livingston, Legislative Direction of the Oregon State Fire Fighters Counsel, Commerce and Workforce Development, HB 2420, Exhibit 1, Feb. 25, 2009. See Or Laws 2009, ch 24, § 1; ORS 656.802(5).

that claimant's bradycardia was a symptom, and not a condition itself, and that in diagnosing autonomic dysfunction or "dysautonomia" as the cause of claimant's bradycardia, other causes were excluded, "such as medications or a sick heart." (Ex. 70-13, -17). Dr. Reddy noted that claimant's treadmill test, echocardiogram, coronary angiogram, and MRI tests were all normal and "excluded underlying heart disease as a cause of claimant's condition." (Ex. 70-20-22). Dr. Reddy's prognosis of claimant was "[g]ood. Normal blood vessels, good activity and good functional ability. You know, with or without a pacemaker her prognosis is good from a cardiac perspective. \* \* \* much of her symptoms were not because of her heart function \* \* \*." (Ex. 70-38).

When asked whether dysfunction of the autonomic nerves controlling the heart was "a cardiovascular process," Dr. Reddy responded that it was not a cardiovascular process, although cardiologists treat the condition. He explained, "We do all these tests, the heart is normal, but the patient still has a slow heart rate or is passing out is actually a manifestation of something else. But the heart is one of the manifestations of it." (Ex. 70-42). Dr. Reddy explained that if you took claimant's heart and traded it with someone else's, claimant would still have the problem and the person with her heart would have a perfectly healthy, active, fit heart in their body. (Ex. 70-41). According to Dr. Reddy, claimant does not have a "dysfunction" of the heart itself. He interprets such a term as suggesting that the autonomic malfunction is somehow damaging the heart, which it is not, or causing the heart to do something wrong. He reasons, "If your brain or your nervous system tells the heart to slow down and the heart does slow down, I guess from the heart's perspective, it's doing what it's told. \* \* \* So it can cause symptoms, including symptoms of bradycardia." (Ex. 70-43-44).

Finally, Dr. Reddy explained that the pacemaker was a way to treat the symptom of slow heart rate on the basis of excessively high vagal tone. It is "a treatment of a normal organ to treat a symptom that comes from something we don't have a good way to treat directly." (*Id.*)

Dr. Ashley agreed with Dr. Reddy's diagnoses and opinion in its entirety. (Ex. 71-40). She explained that claimant's autonomic dysfunction exacerbated her baseline vagal bradycardia. (Ex. 71-21). She described claimant's condition as symptomatic bradycardia related to an underlying physiologic bradycardia and autonomic dysfunction. (Ex. 71-24, -25). As with Dr. Reddy, she explained that claimant's disorder was not a heart disorder, but a disorder of the autonomic nervous system. The underlying mechanism involved the autonomic nervous system sending signals that caused an otherwise healthy heart to function at a

high vagal tone, which is not a condition of the heart, but a condition of the parasympathetic nervous system. (Ex. 71-46, -61). “It’s a nervous system issue that has cardiovascular effects.” (Ex. 71-46-47). Thus, according to Dr. Ashley, claimant’s autonomic dysfunction was a neural problem with cardiovascular manifestations, but claimant had a normal, healthy heart and no cardiovascular disease. (Ex. 71-29, -39, -40).

Dr. Semler’s opinion corroborates that of Drs. Ashley and Reddy. He explained that “vasovagal syndrome” or “vasovagal syncope” is synonymous with “neural mediated syncope, neurocardiogenic syncope, high vagal tone, and dysautonomia,” which all represent a disorder of the autonomic nervous system. (Exs. 72-3, 76-33). He considered claimant’s symptoms to be part of the autonomic nervous system dysfunction and of unknown etiology. (Ex. 73-2). He explained that the above disorders or syndromes occur in otherwise healthy individuals or athletes, and there is no specific cause for these diagnoses. (Ex. 72-3). Dr. Semler also explained that the vagus nerve comes down from the brain and sends branches out to the lungs, the laryngeal nerve, the stomach, and the right atrium. These nerves are not part of the heart, but serve to produce chemicals that activate the heart. (Ex. 73-2).

Dr. Semler unequivocally found no evidence that claimant had any cardiovascular disease. (Exs. 72-5, 76-27). He explained that claimant had “no signs of any heart disease or peripheral vascular disease, and there were no signs of myocarditis, cardiomyopathy, coronary artery disease, valvular disease, or infections heart disease.” (Ex. 72-3).

Dr. Semler also disagreed with Dr. Kron’s statement that “neurocardiogenic syncope is a cardiovascular disease of the nervous system in the heart.” He explained that the autonomic nervous system is the culprit, and the heart is just an innocent bystander that is affected. According to Dr. Semler,

“There’s nothing going on in the heart. It’s all related to the autonomic nervous system, which is \* \* \* composed of the parasympathetic component \* \* \*. 75 percent of the parasympathetic influence on the heart rate is related to the vagus. That’s why we call it the vasovagal syndrome. It’s part of the autonomic nervous system.” (Ex. 76-27, 28).

Finally, Dr. Semler provided the following analogy for claimant's condition and why it is not a disease of the heart:

“In a person who has, say low back pain, \* \* \* and the diagnosis is a slipped disk or herniated disk and it presses on the nerves, like sciatica, and it goes down the foot and you get numbness and tingling in the foot. Those are reflex changes from a nerve being irritated. \* \* \* There's nothing wrong with the foot. But the problem is in the nerve, the sciatic nerve being pinched by the disk. So the analogy would be the heart is like a foot. And it's an innocent bystander, with the nervous influences of the autonomic nervous system, which is the mechanism for [claimant's] vasovagal syndrome.” (Ex. 76-37).

I find that the above medical opinions unequivocally establish that claimant does not have a heart or vascular disease causing her symptoms or disability. Rather, they establish that claimant's symptoms in the heart are caused by another disease not covered by the presumption.

The above opinions also persuasively rebut Dr. Kron's singular opinion to the contrary. Furthermore, as opposed to the situation in *Karjalainen*, 208 Or App at 682, where the medical experts disagreed about the meaning of a statutory term, here, Drs. Ashley, Reddy, and Semler all agree that claimant does not have a cardiovascular disease, and they do not dispute the meaning of that term.

Therefore, on this record, I am unable to conclude that a preponderance of the medical evidence establishes that claimant has disability or impairment caused by a cardiovascular disease.

Because I would find that claimant's abnormal heart rate/dysautonomia does not fall under the firefighter's presumption, claimant must prove that work activities were the major contributing cause of her occupational disease. ORS 656.802(2)(a); *Lecangdam v. SAIF*, 185 Or App 276, 282 (2002). Claimant has not presented any persuasive medical evidence establishing that occupational factors were the major cause of her condition. Dr. Reddy agreed that it would be speculation to try and determine what relationship claimant's condition had to her work as a firefighter. He could not say with certainty that it was caused by work. (Ex. 70-31). Dr. Ashley also could not say if claimant's work as a firefighter played a role in the development of her condition. (Ex. 70-40, -56). Finally,

Dr. Semler opined that claimant's condition was unrelated to her work activity as a firefighter. (Exs. 72-3, 76-12). There does not appear to be any medical evidence in the record to the contrary.

Under these circumstances, a preponderance of the evidence does not support the compensability of claimant's condition under either a material or major contributing cause standard. Therefore, I would affirm the ALJ's order that determined the claim was not compensable. Accordingly, I dissent.