COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF INDUSTRIAL ACCIDENTS

EMPLOYEE: Carolyn Hicks
EMPLOPYER: Boston Medical Center
INSURER: Boston Medical Center Group
BOARD NO.: 05553996

REVIEWING BOARD DECISION

(Judges McCarthy, Wilson and Smith **[1]**)

APPEARANCES

Herbert D. Lewis, Esq., for the employee
Richard P. Maloney, Esq., for the self-insurer

MCCARTHY, J. The self-insurer appeals a decision of an administrative judge awarding the employee the full statutory entitlement of 156 weeks of temporary total incapacity benefits followed by ongoing partial incapacity benefits at the maximum rate for a work-related optic neuritis which has rendered her legally blind. The self-insurer argues that the decision is contrary to law, because the employee's blindness, which the judge found to be caused by a flu vaccination administered at her hospital workplace, did not "arise out of the employment." § 26. The self-insurer also challenges the adopted medical evidence of the employee's treating ophthalmologist as being inadmissible due to its lack of a reliable scientific foundation under Commonwealth v. Lanigan, 419 Mass. 15 (1994), and, even if admissible, being insufficient to support the judge's conclusions. We agree with the self-insurer's first argument, to the extent that the decision lacks subsidiary findings of fact on the issue of whether the employee's blindness arose out of the employment. We recommit the case for further findings on that issue and otherwise affirm the decision.

Ms. Carolyn Hicks, fifty-six years old at the time of the hearing, worked as an EKG technician for the employer, Boston Medical Center, from 1990 until she left

work on October 17, 1996 due to vision loss. It is undisputed that on October 16, 1996 Ms. Hicks received a flu shot at her place of employment, which the Boston Medical Center offered annually to its employees, as well as the general public. She had always taken the free flu shot offered by her employer during the time that she worked there. (Dec. 3-4.)

The day after she received the flu shot, Ms. Hicks felt like she had sand in her eyes. The next day, while she was dressing for work, her vision began to fail. She was seen immediately by an ophthalmologist at Brigham & Women's Hospital, who found upon examination that her optic nerves were bleeding. She was admitted to the hospital a few days later, and treated with large doses of Prednisone injections over the course of her three day in-patient stay. Ms. Hicks continued with the injection for a couple of days after her discharge, and her vision improved. However, when she tried to reduce the amount of Prednisone, her vision deteriorated until she was diagnosed as being legally blind. Her physicians explored many possible causes for the sudden onset of blindness, and eventually ruled out everything except for the flu shot of October 15, 1996. (Dec. 4.) The employee has never recovered her sight, and continues to be legally blind. (Dec. 5.)

The self-insurer did not accept the employee's claim for workers' compensation benefits attributable to her blindness. The case went to a full evidentiary hearing after the judge ordered payment of § 34 benefits at conference. The judge ruled that the case was medically complex and allowed the parties to introduce expert medical testimony in addition to that of the § 11A neurologist. (Dec. 2.) The employee introduced the expert medical testimony of her treating neuroophthalmologist, Dr. Don C. Bienfang. He began treating the employee in December 1996. The doctor's initial impression was that the employee suffered from an immune reaction to the flu shot, but he went on to rule out other potential

causes – including sarcoidosis, multiple sclerosis, and Devic's Disease – in solidifying his conclusion. (Dec. 6.) The doctor testified about other neuroophthalmologists who published studies on two cases of vision loss following flu vaccinations. (Dec. 6-7.) In his testimony, Dr. Bienfang described many other published case studies, including his own, that described vision loss and blindness following flu vaccinations. (Dec. 8; Dep. 14-15, 40-49.) He testified that there were no scientific studies showing a statistically significant relationship between flu vaccinations and vision loss, but that his opinion was that most specialists in the field would likely agree that flu vaccinations can cause optic neuritis. (Dec. 8; Dep. 70-71.) Dr. Bienfang's final opinion in his reports, letters and deposition testimony was that the flu shot caused an auto immune reaction of optic neuritis, which led to the employee's blindness. (Dec. 8.) The judge adopted the testimony of Dr. Bienfang. Based on that evidence, and on the undisputed account of the employee's receiving a flu shot on October 15, 1996 at her place of employment, the judge found that she had suffered a work-related injury resulting in legal blindness. (Dec. 11.)

The self-insurer contends that the decision is contrary to law, because the employee failed to prove her injury arose out of her employment with the Boston Medical Center. Specifically, the self-insurer argues that the flu shot could not be found to have been work-related, since the employee received it on her lunch break, and it was administered as part of a free vaccination program that was open to anyone, not just employees. (Tr. 40-42.) We think that it is appropriate to recommit the case for further findings, because the decision is silent on the relationship between the employee's work and the flu shot.

The law on the work connection necessary for the flu shot incident to "arise out of and in the course of the employment" is clear in some respects. That the employee was on her lunch break when she received the shot is irrelevant. "The scope of the

employee's employment was not strictly limited to the time [she] was actually engaged in [her] work. [She] is entitled to compensation for an injury received while [she] is on the premises of [her] employer doing what is necessarily incidental to [her] work." Holmes' Case, 267 Mass. 307, 308-309 (1929). In that case the court held that an employee's injury that occurred on the employer's premises, while the employee was on his lunch break, could not be said, as a matter of law, not to have arisen out of and in the course of the employment. Id. at 309. The court cited Sundine's Case, 218 Mass. 1 (1914), in which the court made its first pronouncement on the lunch hour under the then newly enacted Workmen's Compensation Act: "It would be too narrow a construction of the contract [of employment] to say that it was suspended when she went out for this merely temporary purpose [i.e.getting lunch] and was revived only upon her return to the workroom. It was an incident of her employment to go out for this purpose." Id. at 4. Thus, the self-insurer's argument that the employee received the flu shot *during her lunch break*, and was barred from compensation on the basis that the activity did not occur in the course of the employment, is not persuasive. However, as to whether the flu shot, itself, arose out of Ms. Hicks' employment, the law is governed by considerations not confronted in the decision. The employee must show that the activity was for the mutual benefit of the employer and herself. In Lamplin v. Harzfeld's, 407 S.W. 2d 894 (Mo. 1966), cited in L. Locke, Workmen's Compensation, § 242 (2d ed. 1981), the court held that an employer-sponsored vaccination was compensable:

> [The employee] was administered the influenza inoculation by an agent of her employer on her employer's premises during regular and normal working hours. . . . [T]he record conclusively establishes that her employer encouraged, advised and instructed her to take the inoculation, and that the purposes of the inoculation was to prevent [the employee] from getting influenza and losing work. We need not further elaborate to demonstrate that the inoculation was for the mutual benefit of [the employee] and her

> employer in their employment relationship. This demonstrates that [the employee's] injury arose "out of" her employment because the conditions of her employment as a saleslady created the need for the inoculation which was the cause of the injury she received.

Lamplin, supra at 897. See also Suniland Toys v. Juvenile Furniture, Inc., 148 So. 2d 523 (Fla. 1963). We therefore recommit the case for further findings on the question of whether, and if so, how the flu shot was for the mutual benefit of Ms. Hicks and Boston Medical Center.

The self-insurer next argues that the judge abused her discretion by admitting into evidence the expert opinion testimony of Dr. Bienfang. The judge concluded:

> Thus, comparing all of the medical evidence I find that Drs. Bienfang and Feske excluded all of the possibilities, e.g., multiple sclerosis and syphilis, that were raised by Drs. Lehrich, Langer and Patalano. Further, there have been case studies as pointed out by Dr. Bienfang that have shown a causal relationship between the flu shot and vision impairment or blindness.
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> Therefore, based on all the facts of this case, I find that Ms. Hicks has met her burden of proving . . . legal blindness . . . as a result of the influenza vaccination on October 15, 1996.

(Dec. 11.) The self-insurer's argument is based on the analysis of the principles for admissibility of scientific evidence set out in Commonwealth v. Lanigan, 419 Mass. 15 (1994). In that case, the court recognized that the requisite reliability of a scientific theory or process underlying an expert's testimony does not need to be shown by the "general acceptance in the relevant scientific community." Id. at 24. The court explained the application of the Lanigan principles in Canavan's Case, 432 Mass. 304 (2000):

> "[A] proponent of scientific opinion evidence may demonstrate the reliability or validity of the underlying scientific theory or process *by some other means*, that is, without establishing general acceptance" [in the relevant scientific community]. Commonwealth v. Lanigan, supra at 26. We noted, however, that in most cases general acceptance will be the significant and "often the only, issue." Id. Thus, we have concluded that a party seeking to introduce scientific evidence may lay an adequate

> foundation either by establishing general acceptance in the scientific community or by showing that the evidence is reliable *or valid through an alternate means.* Commonwealth v. Sands, 424 Mass. 184, 185-186 (1997).
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> [W]hen considering novel scientific testimony there is often limited literature for an appellate court to examine to determine whether a scientific theory or method is reliable. This is part of the rationale for abandoning exclusive reliance on general acceptance under the Frye test. We recognized in the Lanigan case that a scientific method or theory could be so novel that it has not yet had time to appear in the scientific literature and thus to have gained general acceptance in the relevant scientific community but could nonetheless be sufficiently reliable to be the basis of admissible expert testimony. Commonwealth v. Lanigan, supra at 25. Thus, primary reliance by a reviewing court on the scientific literature is inconsistent with the principle in the Lanigan case that reliability can be shown through factors other than general acceptance. Id. at 26. Determining whether novel scientific testimony is reliable often will hinge on the presentations made by the parties in a particular case. A trial judge is required to assess the [persuasiveness] of various expert witnesses in determining whether proposed scientific testimony is reliable; these determinations are not readily susceptible to de novo appellate review and these determinations may vary appropriately on a case-by-case basis.

Canavan, supra at 310-312; (emphasis added.) Applying Canavan to the present case, we conclude that the judge did not abuse her discretion when she allowed the expert testimony of Dr. Bienfang into evidence and adopted it as support for her award of compensation benefits.

The judge found, based on competent evidence from Dr. Bienfang's deposition, that various published case studies subject to peer review – some authored by Dr. Bienfang himself – suggested a causal relationship between influenza vaccinations and optic neuritis, vision loss and blindness. **[2]** See Vassallo v. Baxter Healthcare Corp., 428 Mass. 1, 12-13 (1998)(court affirmed judge's admission of expert testimony based partly on case studies published in peer reviewed journals, without classical epidemiological studies). The judge was also persuaded by the doctor's methodology of reaching his diagnosis, by ruling out other possibilities in reaching

his conclusion. (Dec. 8, 11.) See In re Paoli Railroad Yard PCB Litigation, 35 F.3d 717, 758 (3d Cir. 1994) ("differential diagnosis generally is a technique that has widespread acceptance of the medical community, has been subject to peer review and does not frequently lead to incorrect results"), *cert. denied sub nom.* General Electric Co. v. Ingram, 513 U.S.1190 (1995); Glaser v. Thompson Medical Co., 32 F.3d 969, 978 (6th Cir. 1994)(differential diagnosis is "a standard diagnostic tool used by medical professionals to diagnose the most likely cause or causes of illness, injury or disease"). The case studies described by the doctor admittedly were not the type of double blind scientific studies subject to peer review that generally were deemed reliable by the court in Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993). (Dep. 68-70.) The doctor also did vacillate somewhat on the question of general acceptance by the relevant scientific community of the causal connection between flu shots and vision impairment. (Dep. 70-71.) Nonetheless, we conclude that the judge could rely on the doctor's testimony, because the foundation of published case studies, along with the doctor's own considerable knowledge and clinical experience with the proffered diagnosis of optic neuritis, **[3]** as well as his personal experience as Ms. Hicks' treating ophthalmologist and his method of reaching the diagnosis, added up to a foundation that was "otherwise reliable to support [the] scientific conclusion relevant to the case." Canavan, supra at 314. We therefore reject the self-insurer's Lanigan/Canavan challenge to the admissibility of Dr. Bienfang's expert testimony. The judge did not abuse her discretion in allowing the doctor's expert testimony into evidence. Cf. Rotman v. National Railroad Passenger Corp., 41 Mass. App. Ct. 317, 319-320 (1996)(court found no abuse of discretion in judge's exclusion of expert testimony on causal link between optic neuritis and trauma, where expert's own published work refuted such connection).

The self-insurer also challenges the judge's adoption of Dr. Bienfang's opinion that the employee's blindness was causally related to the flu shot, above and beyond its admissibility. We see no merit in the contention. We have stated, and it is indeed axiomatic, that,

> "the ultimate probative value of the medical testimony is to be weighed by the administrative judge." Barbieri v. Johnson Equipment, 8 Mass. Workers' Comp. Rep. 71, 74 (1994), citing Robinson v. Contributory Retirement Board, 20 Mass. App. Ct. 634, 639 (1984). "An administrative judge is free to accept all, part, or none of an expert medical expert's testimony with regard to causality so long as [she] makes sufficient findings." Hannon v. Gillette Company, 7 Mass. Workers' Comp. Rep. 287, 291 (1993). "Factual findings will not be reversed unless wholly lacking in evidentiary support or otherwise tainted by errors of law." Phillips v. Armstrong World Industries, 5 Mass. Workers' Comp. Rep. 383, 384 (1991).

Ottani v. Ottani Tree Service, 9 Mass. Workers' Comp. Rep. 633, 637 (1995). The judge made clear findings on the doctor's well-documented course of treating the employee in reaching his diagnosis and causal relationship opinion. **[4]** (Dec. 6-8.) The judge relied in particular on the doctor's opinion that he "consider[s] that Ms. Hicks has an autoimmune induced central nervous system disease which is related to a vaccination exposure." The judge found this opinion was Dr. Bienfang's final one, and that it remained unchanged throughout his deposition. **[5]** (Dec. 8.) There was no error.

Accordingly, we recommit the case for further findings consistent with this opinion.

So ordered.

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William A. McCarthy
Administrative Law Judge

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Sara Holmes Wilson
Administrative Law Judge

FILED: January 10, 2001

1 Judge Smith no longer as a member of the reviewing board.

2 See Dep. 14-15, 40-49, 68-70; Self-Insurer Dep. Exhibits 6-8.

3 We note, in passing, Dr. Bienfang's extraordinary curriculum vitae.

4 We take note of self-insurer's admission in its brief, that "only Dr. Bienfang, and even his opinion appears to be somewhat tenuous, and certainly suspect, clings to the opinion that the flu vaccination caused Ms. Hicks' blindness." (Self-Insurer's Brief, 20.)

5 We are not persuaded that the self-insurer 's other argument concerning the judge's mischaracterization of Dr. Bienfang as a *board certified neurologist and neuroohpthalmologist*, when in fact he is a board certified ophthalmologist with a subspecialty in neuroophthalmology is anything but harmless error.