Exhibit ‘‘A’’

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Bruce E. Disenhouse
Kinkle, Rodiger and Spriggs
3333 Fourteenth Street
Riverside, CA 92501

RE : Carole Krechman, et al v. County of Riverside, et al
Case No. CV 10-08705 ODW(DTBx)

Dear Mr. Disenhouse:

Introduction

I am a board-certified emergency department physician with substantial experience in sudden cardiac arrest and sudden cardiac death, including my service as the Medical Director of the American Heart Association Training Center at the University of California, San Diego Center for Resuscitation Science since 2007. I am also an independent researcher on the effects of body positioning and restraint techniques and the impact they have on human physiology. I am also knowledgeable of the state of the medical and scientific research of restraints and the impact on humans as well as in-custody deaths. I have been retained to review relevant materials and provide expert opinion on the cause of Mr. Robert Appel's death. After careful review, it is my opinion that Mr. Appel suffered a cardiac arrest after being handcuffed by deputies. The actions of the deputies did not cause the death. Mr. Appel was exhibiting signs of excited delirium syndrome, which can be lethal in and of itself, but also had cardiomyopathy and severe hyperkalemia associated with renal failure, both of which can cause sudden cardiac arrest. These opinions and related opinions are set forth in this expert report.

Materials Reviewed

Riverside County Sheriff Department Special Investigations Bureau Central Homicide Unit
Investigation of In Custody Death of Robert Appel on 5/14/10
Medical Examiner's Report and Toxicology Testing
Incident Report 1/29/10 involving Robert Appel
Investigative Report of 5/12/10 DUI involving Robert Appel
Computer Automated Dispatch Records
Standing Order Regarding Newly Assigned Cases in Krechman v. County of Riverside
Autopsy photos
Scene and emergency department photos
Interview of Inv Alfaro
Interview of Inv Dusek
Interview of Inv Garcia
Interview of Deputy Chacon
Deposition of Deputy Edward James Chacon
Deposition of Investigator Sean Michael Dusek
Deposition of Investigator Martin Alfaro
Deposition Investigator Robert Garcia
Deposition of Rachel Baker
Deposition of Carole Sumner Kretchman
Deposition of M. Scott McCormick
Medical records from Eisenhower Medical Center from 5/15/10.

After reviewing these materials, there are several issues that are clear given this information. My review of the above noted materials support the basis of my opinions with the regards to the restraint and subsequent cardiac arrest of Mr. Robert Appel. All opinions given are to a reasonable, or higher, degree of medical or scientific certainty or probability based on this information.

Overview of case

On May 14, 2010 at approximately 2230, Mr. Robert Appel, who was 48 years old at the time, was approached by a Sheriff's deputy who was responding to a 911-call hang up. Mr. Appel was noted to be talking to himself outside, was not wearing a shirt, and was sweating profusely. He did not have shoes on and had cuts to his feet and was bleeding. At one point, unprovoked, he jumped into the bushes. Officers subsequently tried to restrain him for safety purposes and he became agitated and required four officers to get him handcuffed. Within a minute of cuffing, he became unresponsive, but was noted by officers to still have a pulse and rise and fall of his chest, indicative of breathing. Upon arrival of Emergency Medical Services (EMS), Mr. Appel was noted to be in cardiac arrest, was treated by paramedics, and was initially resuscitated. He was transported to the

emergency department where he was noted to have both life-threatening elevated serum potassium and magnesium levels as well as renal failure, and subsequently went back into cardiac arrest and could not be resuscitated and was then pronounced dead. The medical examiner reported the cause of death was sudden cardiac arrest following physical confrontation with law enforcement, with alcoholic cardiomyopathy listed as another significant condition.

In brief, my opinions are as follows with more description of each below:

1. The use of the handcuffs and having Mr. Appel on his stomach in a prone position with passive restraints did not cause or contribute to his death.

2. The use of the weight on his back during the handcuffing process did not cause or contribute to the death of Mr. Appel.

3. The attempted placement of a lateral vascular neck restraint (LVNR) did not cause or contribute to the death of Mr. Appel.

4. The three reported fist strikes to Mr. Appel's head did not cause or contribute to his death.

5. Mr. Appel was suffering signs and symptoms consistent with excited delirium syndrome, which in and of itself can cause sudden cardiac arrest.

6. Mr. Appel had reported alcoholic cardiomyopathy, which places him at risk for sudden cardiac arrest.

7. The life-threatening level of hyperkalemia (elevated potassium levels) and hypermagnesemia (elevated magnesium levels) due to renal failure were the most likely cause of his cardiac arrest and death.

8. The actions of the deputies in handcuffing Mr. Appel did not cause his death.

9. Under the circumstances presented, there was nothing that the sheriff's officers should have done differently in restraining Mr. Appel to prevent his cardiac arrest, as it was an unpredictable event.

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Detailed review of opinions

1. *The use of the handcuffs and having Mr. Appel on his stomach in a prone position with passive restraints did not cause or contribute to his death.*

There are no studies, clinical findings in this case or previous case reports that support that any variation of restraining a handcuffed individual with hands behind his back will impede one's ability to ventilate and cause positional asphyxia or a respiratory arrest. Leaving the subject on his stomach in the prone position is considered physiologically neutral. The Mr. Appel was breathing and could move side-to-side if desired and not having the ventilatory movement of his lungs impeded. Mr. Appel did not suffer from positional asphyxia nor did the restraint have any contributing component to his demise.

2. *The use of the weight on his back during the handcuffing process did not cause or contribute to the death of Mr. Appel.*

During the period that Mr. Appel was being handcuffed, he was restrained in a prone position with a certain amount of weight force was being placed on his back by the officers to secure the handcuffs. Mr. Appel was making noises and struggling and even verbalizing without any evidence of respiratory or ventilatory difficulty during this time period. He was reported to be moving and resisting during this period and was not noted to complain of shortness of breath or difficulty breathing. Given that Mr. Appel was clearly alive and struggling during the short period of restraint and minimal weight force, and that the cardiac arrest was sudden, as well as there were no findings or changes consistent with asphyxiation on autopsy, the weight force on the back did not cause Mr. Appel' death.

3. *The attempted placement of a lateral vascular neck restraint (LVNR) did not cause or contribute to the death of Mr. Appel.*

The pathophysiology and safety, of the lateral vascular neck restraint (LVNR), also known as a carotid restraint, are relatively straightforward and well delineated in many texts. The purpose is to place the arm around the neck of the subject to be controlled. The crook of the elbow is placed at the anterior (front) region of the neck and the forearm and upper arm come around the sides and are used to place pressure on the lateral aspects of the neck where the carotid arteries are located. Pressure placed on the arteries diminishes blood flow to the brain, quickly rendering the subject

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unconscious. The reports reflect that there was an unsuccessful attempt to place Mr. Appel into an LVNR. However, correct placement could not be obtained and the attempt was abandoned. The findings in the autopsy report support that there was no negative impact from this attempt as the hyoid bone was intact as were the laryngeal cartilages. Additionally, there was no soft tissue injury reported of the neck muscles. The attempted placement of the LVNR did not contribute to the death of Mr. Appel.

4. *The three reported fist strikes to Mr. Appel's head did not cause or contribute to his death.*

Although Mr. Appel reportedly received a strike with a fist three times to his head with he was reportedly trying to bite one of the officers, there were no clinical changes reported at the time of the strike, including no loss of consciousness from the strike. Additionally, there were no autopsy findings that indicate that these strikes had any contributing effects to Mr. Appel's death.

5. *Mr. Appel was suffering signs and symptoms consistent with excited delirium syndrome, which in and of itself can cause sudden cardiac arrest.*

Prior to and during the time of his being placed into handcuffs, Mr. Appel was exhibiting signs and symptoms consistent with excited delirium syndrome (ExDS). In his case, the ExDS appeared to be caused by and underlying and undertreated paranoid psychosis. ExDS is a syndrome most commonly caused by use of stimulant drugs like cocaine, methamphetamine or PCP and presents typically with aggressive and often paranoid behavior, but can also be caused by uncontrolled behavioral or psychiatric illnesses. Classically, people suffering from ExDS are delusional, hyperactive, and may be violent. They are often breathing fast, sweating and under clothed for ambient conditions. They are often destructive, do not yield to overwhelming force, and have reported to have a propensity to break glass.

Excited delirium syndrome places the individual at increased risk for sudden death, felt by most experts to be caused by an irregular heartbeat from the increased stress and work on the heart by the excited, over-stimulated, agitated physical state. Once the heart goes into an irregular beat, blood flow through the body ceases and shortly thereafter, the subject will lose consciousness due to lack of blood flow to the brain and then stop breathing. Often, law enforcement officers will notice that the subject has finally quieted down, no longer yelling and struggling, thinking that he has finally calmed down and given up the fight. Then a short time later is when someone will identify that the

subject is suddenly in cardiac arrest. In this case, the change in status was promptly noted and appropriately addressed by the deputies at scene.

Sudden death from ExDS has been documented to occur with subjects in restrained, prone, supine and even sitting positions. The position does not appear to be the causative factor for the cardiac arrest, but rather the ExDS state itself. Once a person goes into cardiac arrest from excited delirium syndrome, they are almost impossible to successfully resuscitate.

Mr. Appel, though all of his medical records are not available to me, has a history of noted bizarre and paranoid behavior. He was reported in January of 2010 in an incident report to exhibit paranoid behavior, including accusing a security guard of allowing his computer to get hacked and reporting that he was raped, but had no specific complaints or details of the incident. He was noted by the community guard, as well as a neighbor, to be acting bizarre and "unstable" for quite some time. His mom also reported that on the day of his death, he was crawling around house and acting "crazy" "like an animal." She reported that he had a cut foot and bleeding all over the carpet and repeating that someone had given him something or made him take something and that they were out to get him.

Medications found at his house included Zyprexa and Depakote, both of which are mood stabilizers used to treat psychosis, including paranoid schizophrenia and excited moods. The urine toxicology screen by the medical examiner did not find either of these medications in Mr. Appel's blood or urine samples, indicating that he was not apparently taking them. If Mr. Appel, was indeed a patient with underlying psychosis, who was intermittently on medications, that would certainly explain some of his functionality in the past months as noted by the community guard, who reported periods of normal behavior as well a "unstable" behavior. And stopping the medications would explain the decompensation and increased paranoid and bizarre behavior and place at risk for excited delirium syndrome and sudden death.

Clinically, Mr. Appel was suffering the signs and symptoms consistent with a diagnosis of excited delirium syndrome. He was profusely sweaty and only partially clothed. He was delusional, thinking he was poisoned and that there were people after him that were not really there. Broken glass was found in his house. He was not complaint with officers' commands and was struggling against overwhelming force and did not appear impacted by pain, as evidenced by the continued

struggle even with an arm bar hold. His sudden cardiac arrest is also consistent with sudden death by excited delirium syndrome.

6. *Mr. Appel had reported alcoholic cardiomyopathy, which places him at risk for sudden cardiac arrest.*

Mr. Appel had alcoholic cardiomyopathy noted on autopsy, which was described as concentric left ventricular hypertrophy. The medical examiner described it as a "large dilate, almost balloon like heart…" This physical enlargement of the heart in and of itself can place an individual at increased risk for sudden cardiac arrest and death from a spontaneous irregular heart beat. Given the excited state and agitation of Mr. Appel, along with his enlarged heart, he was at risk to go into cardiac arrest.

7. *The life-threatening level of hyperkalemia (elevated potassium levels) and hypermagnesemia (elevated magnesium levels) due to renal failure were the likely cause of his cardiac arrest and death.*

Mr. Appel was found to have a potassium level >10.0 and a magnesium level of 5.2 at the time of his emergency department evaluation at 23:27 on 5/14/10. The cause of these elevations is his kidney failure as noted by his creatinine of 3.7 at this visit. This elevation was not caused by or worsened by the interaction with the officers. In my almost 20 years of being an emergency department physician I have never seen a potassium level this high before. By way of comparison, a normal potassium level is 3.5-5.0. Patients with chronic kidney failure on dialysis can get up to levels of 6.0 to 7.5 with little in the way of clinical findings, but patients with acute kidney failure will have EKG changes at these levels and are already at risk to go into sudden cardiac arrest. The highest level I have seen is in the 8+ range and was in a dialysis patient who did not go to his dialysis and presented in cardiac arrest from the hyperkalemia. Mr. Appel, with a potassium of greater than 10 was at risk to go into cardiac arrest at any moment, with or without any involvement by law enforcement. When the potassium level is greater than 8, significant EKG findings occur, including widening of the normal electrical activity and significant slowing of the heart rate. This is exactly what was reported in Mr. Appel in that his heart rate slowed prior to his cardiac arrest. A potassium level of greater than 10 is not compatible with sustaining life for very long. This severe hyperkalemia is the probable cause of Mr. Appel's cardiac arrest.

8. *The actions of the deputies in handcuffing Mr. Appel did not cause his death.*

As noted above, the restraint, weight on the back, attempted LVNR and the strikes did not cause or contribute to Mr. Appel's death.

9. *Under the circumstances presented, there was nothing that the sheriff's officers should have done differently in restraining Mr. Appel to prevent his cardiac arrest, as it was an unpredictable event.*

Mr. Appel had previously undiagnosed kidney failure with life threatening hyperkalemia coupled with cardiomyopathy. He was a ticking time bomb ready to go into cardiac arrest at any time. The officers restrained Mr. Appel in an expeditious manner and then evaluated his vital signs while EMS was en route. There is no medical care that needed to be rendered prior to the arrival of EMS as Mr. Appel was breathing and had a pulse. This evaluation and monitoring is what is warranted by law enforcement under these circumstances to manage a combative subject.

Background and Qualifications

My background is that I am a full time faculty member in the department of emergency medicine at the University of California, San Diego Medical Center. I am residency trained and board certified in Emergency Medicine. I work full time as a practicing clinician in the Emergency Department of a busy urban hospital. I also work for the medical center as the Director of Custody Services for the San Diego County Sheriff's Department Jail Medical Service where I oversee direct patient care, interface between the jail clinical staff and the hospital staff, and have been involved in the process of utilization review. I have also served as the UCSD Medical Center's Chair of the Medical Risk Management Committee as well as the Chair of the Patient Care and Peer Review Committee, both of which are charged with the task of reviewing medical records and making determinations of standard of care, and I currently serve as Chief-of –Staff for the Medical Center.

As a physician working at both the jail and in the emergency department that is contracted to care for incarcerated patients, I have managed many patients over the last 15 years who have been incarcerated. I have worked at the jail as a clinic physician for over 10 years and I have taken care of hundreds of patients at the time who have been arrested by police and thousands of patients who

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have been arrested and restrained. I have also been directly involved with numerous restraints and extractions of individuals. I have also been involved in multiple evaluations and research on humans involving restraint techniques and have restrained hundreds of human volunteers. A list of my peer reviewed published articles can be found in my attached Curriculum Vitae.

Appendix A is a copy of my current Curriculum Vitae, which includes a list of all publications authored by me over the previous ten years. Appendix B is a list of all cases in which I have testified as an expert in trial or deposition within the preceding four years. I have not referred to any other specific sources beyond my own research and those listed in this report. Appendix C contains my and rate sheet. The knowledge base that I utilize has been developed over time from my years of clinical practice, reading and research, including specifically those articles that I have published myself in Appendix A.

Respectfully submitted,

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