

COMMONWEALTH OF MASSACHUSETTS
Worcester, ss. Superior Court Department
of the Trial Court

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COMMONWEALTH OF MASSACHUSETTS *
v. * Criminal Action
KELLY HOOSE * No. 03-0546(1-4)
* * * * *

MOTION TO EXCLUDE TESTIMONY
OF CHRISTINE BARRON, MD
BEFORE: FECTEAU, J.

A P P E A R A N C E S:

ON BEHALF OF THE COMMONWEALTH:
Worcester County District Attorney's Office
340 Main Street
Worcester, Massachusetts 01608
By: Maura McCarthy, Assistant District Attorney

ON BEHALF OF THE DEFENDANT:
JAMES J. KAEDING, Esq.
17 Hamilton Street
Southbridge, Massachusetts 01550

Worcester Superior Court
March 10, 2005

Susan A. Garvin
Official Court Reporter

I N D E X

WITNESS:	DIRECT	CROSS	REDIRECT	RECROSS
CHRISTINE BARRON, MD (By Ms. McCarthy)	4		37	
(By Mr. Kaeding)		19		41

1 (Court in Session.)
2 (Defendant present with counsel.)

3 THE CLERK: The next matter is Commonwealth
4 versus Kelly Hoose. That's 03-0546. Would the parties
5 please introduce yourselves for the record.

6 MS. McCARTHY: Good morning, your Honor.
7 Maura McCarthy for the Commonwealth.

8 MR. KAEDING: James Kaeding representing
9 Mr. Hoose.

10 THE COURT: Do we have anything other than a
11 motion to exclude the testimony of Dr. Barron?

12 MR. KAEDING: Not today.

13 THE COURT: That's what we are dealing with
14 today?

15 MS. McCARTHY: Absolutely. Yes.

16 THE COURT: Is there anything you want to say
17 by way of opening or introduction?

18 MR. KAEDING: I don't, your Honor.

19 MS. McCARTHY: Your Honor, the only thing I
20 believe is at issue is whether or not Dr. Barron is
21 qualified to testify as an expert on the Tanner scale;
22 and I expect Dr. Barron is here to take some testimony.

23 THE COURT: Then you may call her.

24 MS. McCARTHY: Dr. Barron, please.

1 CHRISTINE BARRON, MD, Sworn

2 MS. MCCARTHY: May I proceed, your Honor?

3 THE COURT: Any time you're ready.

4 THE WITNESS: Good morning.

5

6 DIRECT EXAMINATION

7 BY MS. MCCARTHY:

8 Q Good morning. Would you identify yourself
9 for the record?

10 A Yes. I am Dr. Christine Barron.

11 Q And what is your occupation, Dr. Barron?

12 A I'm a board certified pediatrician who
13 specializes in child abuse and neglect.

14 Q And Dr. Barron, could you tell the Court
15 about your education?

16 A Certainly. I received a BS in biochemistry
17 from the State University of New York, Binghamton, in
18 1990. I then obtained my medical doctorate from the
19 State University of New York, Health Science Center, in
20 Brooklyn, New York, in 1995. I then completed a
21 three-year pediatric residency at Brown University,
22 Hasbro Children's Hospital. I then completed a
23 two-year fellowship specializing in child abuse and
24 neglect from 1998 to 2000. I was then recruited for my

1 fellowship in 2000 to create a child protection program
2 at UMass Memorial Children's Medical Center, and in
3 February of 2004 I was recruited back to Hasbro
4 Children's Hospital to be the clinical director for
5 their child protection program.

6 Q What do you do as a clinical director for
7 their child protection program, specifically?

8 A I complete evaluations for children who are
9 suspected victims of child maltreatment, including
10 sexual abuse, physical abuse, and neglect. I teach
11 residents, medical students, and four fellows in the
12 field of forensic pediatrics in the evaluation for
13 child abuse and neglect.

14 Q Have you been awarded any postgraduate
15 honors?

16 A Yes.

17 Q And what are they?

18 A I received several teaching awards through my
19 residency, including teaching awards from the residents
20 and medical students. I received the Haffenreffer
21 Award. And since being out of fellowship, I have
22 received the CASA and Ann McCarron Award, and the
23 Liberty Bell Award from the Worcester County Bar
24 Association.

1 Q And do you hold any professional licenses
2 and/or board certifications?

3 A Yes, I do.

4 Q And what are those?

5 A I have a board certification in pediatrics
6 from the American Board of Pediatrics. I hold a
7 license to practice medicine in both Massachusetts and
8 Rhode Island.

9 Q Do you currently have an academic
10 appointment?

11 A Yes, I do.

12 Q And where is that?

13 A I'm an assistant professor of pediatrics at
14 Brown University.

15 Q And have you written any publications on
16 child abuse, or participated in publications concerning
17 child abuse?

18 A Yes, I have.

19 Q And how many have you participated in?

20 A I have written chapters on both sexual abuse
21 and physical abuse that were just recently published.
22 I have written review articles in Developmental &
23 Pediatrics concerning child abuse and neglect. I have
24 published on Munchausen Syndrome by Proxy, and

1 currently have pending two other chapters, one in
2 Emergency Medicine textbook, and one in Nelson's
3 Textbook of Pediatrics.

4 Q And have you been invited and have you spoken
5 on the issue of child abuse in your tenure as a medical
6 physician?

7 A Yes, I have.

8 Q And how often have you done that?

9 A Quite often. I actually locally provide
10 lectures and education, but have been invited to
11 numerous national conferences to provide lectures and
12 workshops.

13 Q Have you testified concerning child abuse
14 prior to this event in court?

15 A Yes, I have.

16 Q And where have you testified?

17 A I have testified in Rhode Island,
18 Massachusetts, and New York.

19 Q And what courts specifically, Dr. Barron,
20 have you testified in?

21 A In juvenile and family court, as well as
22 superior court.

23 Q And how many times would you estimate that
24 you have testified?

1 A Approximately 45 times.

2 Q Dr. Barron, were you asked to review some
3 documents relating to the case of Commonwealth versus
4 Kelly Hoose?

5 A Yes, I was.

6 Q And who were you asked to review documents
7 by?

8 A I cannot recall the name of the individual.

9 Q Was it a police officer named Christopher
10 Donais?

11 A It was a police officer named Christopher
12 Donais, yes.

13 Q Did you meet with Officer Donais on a date in
14 March 2003?

15 A Yes, I did.

16 Q And did he provide to you some images that
17 had been secured via a search warrant of Mr. Hoose's
18 computer?

19 A Yes.

20 Q And do you recall where you were when you
21 looked at those images?

22 A I was in my office at UMass Memorial
23 Children's Medical Center.

24 Q Do you recall how many images Officer Donais

1 had provided to you?

2 A There were over a hundred images.

3 Q And when you looked at those -- were you
4 asked to look at those images?

5 A Yes.

6 Q What did you see when you looked at those
7 images?

8 A I reviewed the images, looking at the general
9 appearance, as well as applying Tanner staging, and
10 identified conservatively 36 images of those hundred
11 depicted children under the age of consent.

12 THE COURT: Under the age of?

13 THE WITNESS: Consent. Under the age of 17
14 or 18.

15 Q What would you deem the age of consent in
16 your mind when you were looking at those pictures?

17 A Seventeen.

18 Q So the pictures that you looked at and
19 selected, were they under -- what age did you select?

20 A I specifically was conservative to identify
21 Tanner staging 1 and 2; and as I stated in my brief
22 report to you, identified that, for instance, breast
23 development of stage 2 would depict children of 9.96
24 years of age, plus or minus a standard deviation of

1 1.82 years, so therefore approximately under the age of
2 12.

3 Q Dr. Barron, you mentioned the Tanner staging,
4 what is that?

5 A Tanner staging is a scale to describe the
6 pattern of sexual development. It's the physiologic
7 age of children, and we use it to monitor sexual
8 development in children.

9 Q When did you first learn about Tanner
10 staging?

11 A In medical school.

12 Q And what year of medical school,
13 specifically?

14 A I would have learned Tanner staging in the
15 second year.

16 Q And has that theory or technique been tested?

17 A Yes.

18 Q And how has it been tested?

19 A The Tanner staging itself, obviously, is
20 applied by all practicing clinicians who see children
21 and whenever we do examinations on children. I
22 personally have examined several thousands of children,
23 and each of those children I would assess for Tanner
24 staging of breast development, as well as pubic hair

1 development and genital changes that occur in a
2 consistent and predictable pattern. The Tanner staging
3 itself has recently, in the last 16 years, been used in
4 two very large studies.

5 Q And how -- when you say a large study, how
6 many children participated in that study that you
7 referred to, or the two studies that you referred to?

8 A The two studies combined are approximately of
9 60,000 children. The initial study was between 1988
10 and 1994, which was the third National Health and
11 Nutrition Examination Survey, known as the NHANES III,
12 conducted by the National Center for Health Statistics,
13 which examined approximately 40,000 individuals from
14 two months of age to adulthood; and then in 1992 to '93
15 the pediatric research in the office setting known as
16 the PROS study, which was conducted by the American
17 Academy of Pediatrics, where they examined over 17,000
18 children between the ages of three and 12.

19 Q Regarding those two studies that you cite,
20 were any conclusions drawn from those studies?

21 A Yes.

22 Q What were they, regarding the Tanner method?

23 A Using the Tanner method, since it describes a
24 predictable and consistent manner, what they were able

1 to do was to see what the physiologic ageing of
2 children was and compare that to chronological age.
3 And what they were able to conclude from the data is
4 that for breast development, Tanner stage 2, you have
5 children who are 9.96 years of age, plus or minus 1.82
6 years, and when you look at overall data, what that
7 shows is that 99.9 percent of girls who have Tanner
8 staging 2 occurs before age 17 1/2, and the same is
9 true for Tanner staging 3. Basically what that means
10 is that children who are Tanner stage 1, 2, or 3, that
11 they are statistically less than 17 years of age to
12 99.9 percent certainty.

13 MS. MCCARTHY: Your Honor, may I approach?

14 THE COURT: Yes.

15 Q Dr. Barron, I am showing you a series of
16 photos that are identified via the indictments
17 referring to Mr. Hoose, and I ask you if you can take a
18 look at those pictures that are associated with those
19 indictments and tell us whether or not you recognize
20 those pictures?

21 A Yes.

22 Q And Dr. Barron, are there any substantial
23 changes that you would note to those pictures from the
24 time that you reviewed those with Officer Christopher

1 Donais?

2 A Only that the originals that I saw were in
3 color.

4 Q When you apply the Tanner stages to pictures,
5 is it good -- for lack of a better word -- for you to
6 have color photos? Do they assist you in some way?

7 A They are obviously more detailed than copies;
8 and so, yes, colored photos are better.

9 Q And how do you recognize those photos? What
10 do you recognize those photos to be?

11 A Those were the photos shown to me in my
12 office.

13 Q Now, were there additional photos that are
14 not part of those, or were those the photos that you
15 selected as being children based on the Tanner scale?

16 A Those were the children I selected out of the
17 over a hundred photos.

18 Q And could you describe to the Court what
19 criteria or protocol that you used to apply the Tanner
20 scale to those specific pictures?

21 A Yes. Initially, obviously, in identifying
22 any child under the age of 17, looking at the general
23 appearance of the child in the image, as well as then
24 to apply Tanner staging for breast development, as well

1 as Tanner staging for pubic hair development, and
2 identifying if I can clearly distinguish any other
3 physiologic changes that would occur as children mature
4 sexually. So that includes such things as body fat
5 distribution, pelvic width enlargement, which shows
6 indentation, or waist, at a young girl's age, usually
7 starting at age 9; but also looking at the genitalia
8 itself, that in addition to Tanner staging, the
9 genitals actually undergo changes. So, for instance,
10 in a young girl as she develops into an adolescent and
11 then an adult, the labia majora and the labia minora,
12 which are the outer and inner lips of the genitalia,
13 will grow in size and will also develop rugae, which is
14 basically wrinkling of the skin.

15 Q And the photos that you have just reviewed
16 and are attached to the indictments, did you make
17 specific notations or notes about each photo that you
18 had observed?

19 A Yes.

20 Q And do you have those notations with you here
21 today?

22 A I made notations with the officer.

23 Q And when you made those notations, what
24 specifically -- what were you doing with the officer?

1 A I was being very conservative in identifying
2 photos in which the image was clear enough to identify
3 through the general appearance of the person, as well
4 as being able to then apply the Tanner staging, and any
5 photos that I could not do that with I would exclude,
6 that did not have a clear image, or did not have
7 children who would depict Tanner staging 1 or 2.

8 Q And when you looked at these photos, did you
9 generate a report after you had taken a look at these
10 photos with Officer Donais?

11 A Yes, I did.

12 Q And do you have that report with you here
13 today?

14 A Yes.

15 Q And specifically what were your
16 determinations upon your reviewing these photos that
17 you selected and are the subject of the indictment of
18 Mr. Kelly Hoose?

19 A That the images that I selected depict
20 children who are under the age of consent.

21 Q And when you say "age of consent," just to be
22 specific, what age are you referring to?

23 A Seventeen years of age.

24 Q Are you familiar with any known or potential

1 rate of error when the Tanner scale is applied?

2 A Yes. There is standard deviation, as I
3 stated in my report, such as the fact that children
4 with Tanner stage 2 breast development are 9.96 years
5 plus or minus 1.82 years.

6 Q And when you indicated that you were
7 conservative with the photos that you selected and
8 determined as being children, based on using the Tanner
9 scale, what was the outside range of the age of the
10 child?

11 A As to breast development was stage 2, again,
12 9.96 years, plus or minus 1.82 years, so under the age
13 of 12. And this means that basically images that I
14 have identified are children whose ages are 11.78 years
15 by breast development and -- no greater than 11.78
16 years by breast development, and no greater than 12.18
17 years by pubic hair development.

18 Q So it is your opinion that there are children
19 regarding the subject of these indictments that are
20 less than the age of 13 years of age?

21 A Correct. And the numbers that we have, but
22 overall the data itself that is clearly applicable, is
23 that children who have this type of development are
24 99.9 percent less than 17 years of age.

1 Q Has the Tanner method been, in your
2 experience, generally accepted within the scientific
3 community?

4 A Yes.

5 Q And are you aware whether or not your peers
6 use the Tanner method in their occupation as forensic
7 pediatricians?

8 A Yes.

9 Q And just to be clear, what is the working
10 definition of a forensic pediatrician?

11 A Forensic pediatricians are pediatricians who
12 specialize in evaluations for any type of child
13 maltreatment.

14 MS. MCCARTHY: May I just have one moment,
15 your Honor?

16 THE COURT: Sure.

17 Q And just so that I was -- in case I was not
18 clear, when you looked at the specific images, did you
19 follow a protocol of applying the Tanner method to
20 specifically these images that you have chosen?

21 A Yes.

22 Q And what was the protocol, the exact sequence
23 of events that you did in order to apply and look at
24 the Tanner method?

1 A It's to look at the overall image initially,
2 then to Tanner stage breast development and pubic hair
3 development, and then also, if depicted in the picture,
4 to look for other secondary changes in body habitus and
5 changes in genitalia, as I described before. And the
6 application of the Tanner scale is not to identify the
7 actual chronological age of the child, but the
8 physiologic age.

9 And that Tanner staging scale has been
10 utilized in these two very large studies, and again,
11 which shows that applying the physiologic changes that
12 we see by Tanner staging to chronological age, we can
13 say statistically that those children who are Tanner
14 stage 2 and 3 are 99.9 percent less than 17 years of
15 age.

16 Q Have you applied the Tanner stage in other
17 cases involving court indictments of suspected child
18 pornography or abuse?

19 A Yes.

20 Q In how many cases have you done that,
21 Dr. Barron?

22 A As a fellow I reviewed five cases with my
23 supervisor. I have completed -- this is my fourth case
24 that I have reviewed on my own for court purposes.

1 Clearly, all of the children that I examine, I apply
2 and determine Tanner staging of all of those children
3 that I personally examine, as well as the fact that I
4 have several images that are sent to me from other
5 physicians, even other forensic pediatricians,
6 particularly for questions of physical abuse or sexual
7 abuse, at which time from those images I also would
8 determine Tanner staging.

9 MS. MCCARTHY: I have no further questions.

10 THE COURT: Mr. Kaeding?

11 MR. KAEDING: Thank you, Judge.

12
13 CROSS-EXAMINATION

14 BY MR. KAEDING:

15 Q Doctor, you are currently the clinical
16 director of the Child Protection Program at Hasbro
17 Children's Hospital in Rhode Island?

18 A That's correct.

19 Q And you testified that in your work as a
20 clinical director you evaluate child victims of sexual
21 abuse and physical abuse; is that correct?

22 A I evaluate suspected victims of child abuse.

23 Q And by "evaluation," that means meeting with
24 them personally, correct?

1 A In those particular evaluations I will
2 evaluate children directly. But as I stated, I also am
3 asked by several other physicians to review their
4 cases.

5 Q And those physicians that are asking you to
6 review their cases have met the children in person,
7 correct?

8 A Yes.

9 Q In your experience, your professional
10 experience both at the University of Massachusetts
11 Medical Center, and since then in Providence, it has
12 involved clinical experience and clinical supervision,
13 correct?

14 A Yes. In addition to, again, reviewing other
15 cases.

16 Q And again, by clinical, that would mean
17 either meeting with alleged victims in person, or
18 reviewing cases of other doctors who have met the
19 alleged victims in person, correct?

20 A That's correct. Except for the nine cases of
21 specifically requesting to review images for the
22 question of child pornography.

23 Q In reviewing your resume, you have never
24 presented any scholarly papers or presentations on the

1 use of the Tanner scale, correct?

2 A Correct.

3 Q You have not had anything published regarding
4 the use of the Tanner scale, correct?

5 A Correct.

6 Q You testified that you use the Tanner scale
7 in your clinical practice, correct?

8 A Yes, I do.

9 Q And again, when you are using it, you are
10 using it with the person right in front of you,
11 correct?

12 A Again, the same response I had before, yes;
13 in addition to reviewing cases from other physicians
14 and the nine cases I have described.

15 Q Now, you testified that the purpose of the
16 Tanner scale is to describe a pattern of sexual
17 development and to identify physiological age?

18 A Correct.

19 Q The purpose of the Tanner scale is not to
20 determine chronological age, correct?

21 A Correct. Nobody would apply the Tanner
22 staging, for instance, to identify an image of a person
23 who is 14 versus 15.

24 Q And the Tanner scale is named for a