



The Science of Attachment and Oxytocin

Video Transcript

[Words appear on black film strip with IU DAY banner at top: STARTING SOON...ASK IU: THE SCIENCE OF ATTACHMENT AND OXYTOCIN; A live Q & A with Dr. Sue Carter, Executive Director of the Kinsey Institute]

[Video: Erica Sagon and Dr. Sue Carter sitting at a table with IU logo and IU Day banner in the background]

Erica speaks: Hello, and welcome to Ask IU, our series of live interviews with IU experts. Because it's IU Day, we're celebrating by proving that you can ask IU pretty much anything.

[IU logo and words appear: ERICA SAGON, Host, IU Day]

Erica speaks: That's because our amazing faculty and staff can speak expertly on such a wide variety of topics.

[Video: Close-up of Dr. Sue Carter]

We're here with Dr. Sue Carter. She's the Executive Director of the Kinsey Institute. Today, Dr. Carter's gonna be talking about love and oxytocin.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Welcome, Dr. Carter, and happy IU Day to you.

Dr. Sue Carter speaks: Thank you, Erica. It's a pleasure.

Erica speaks: Thank you. Well, we've already crowdsourced some of our questions on social media, but you can chime in with your own questions for Dr. Carter right now. Use the hashtag #askiu and the hashtag #iuday, so we can find your question. Or you can comment right here in the Facebook Live broadcast, and we'll try to get to as many questions as we can.

Dr. Carter, you probably more than anyone, know the answer to the question, "How do we find love? How do we fall in love?" But underlying all these questions is the idea of attachment, which is what you study. Give us a little primer on what is attachment.

[Video: Close-up of Dr. Sue Carter with blue, gray, and brown tiled corner-wall in the background]

[IU logo and words appear: C. SUE CARTER, PH.D., Executive Director, Kinsey Institute]

Dr. Sue Carter speaks: Okay, I'll try. I would say, really, no one can answer your question. Let me start with that. But we can give you information, and people can take it in to their own lives, and see if it has meaning for them. The word "attachment," let's start with that. It's a more complex idea than it sounds.

[IU logo and words appear: ASK YOUR QUESTION NOW; Ask using #IUday & #AskIU or at Facebook.com/IUFoundation]

Humans attach to lots of things. The most powerful attachments are other people, but we can attach to objects, we can attach to our environment, we can attach to ideas. So, the construct of attachment is something going on inside of us. It's a biological construct, to me, and it's a construct with extremely broad implications for how we live our lives.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Is attachment another way to say love? Is it the same thing?

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Most people would use the word love for more emotional forms of attachment, I think. I have written papers on this, trying to sort of parse out what it means to be in love.

[Video: Image of young man with brown curly hair and young woman with long brown hair with a blurred image of a tree in the background. The young woman is leaning her head on the man's shoulder and they are both smiling and gazing fondly at each other]

I was accused of studying love. I didn't start out to study it. I was interested in pair bonds.

[Video: Dual screen images of young man and woman photo in top left screen and smaller close-up of Dr. Sue Carter speaking in bottom right screen with IU Day banner in the middle bottom screen]

I was working with animals. I was really just interested in the fact that a small mammal I was working with ... This reflects my background as a biologist ... Was forming lifelong pair bonds, living together for their entire lives.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

And at that time, which is now several decades ago,

[Video: Close-up of Dr. Sue Carter]

the idea that rodents could have lifelong attachments just didn't seem to make sense.

Erica speaks: You used rodents to study attachment?

Dr. Sue Carter speaks: We were using small rodents. I was invited, in a way, into the world of human attachment.

[Video: Close-up sketch of two prairie voles together in a field, one on all fours and one standing on hind legs]

I've run conferences on this. Because I realized that what we were calling attachment in animals, which was really staying together for a lifetime, might not be what humans were talking about.

[Video: Close-up of Dr. Sue Carter]

Certainly, the word "love," seemed to me a pretty exotic construct. As I've studied this, again, for over 30 years, I would say that they do have underlying biological units. There's something deep down inside of us that is the same for animals and humans, and the biology of that is what fascinates me.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Okay. When we are talking about attachment, are we talking about, is this romantic attachment? Or are there different relationships that you study?

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: That's a very good and a very important question. Romance is what some people mean by love.

[IU logo and words appear: C. SUE CARTER, PH.D., Executive Director, Kinsey Institute]

Romance is very complex. Anyone who's had any kind of romantic relationships, or even fantasies of romantic relationships, knows that it doesn't always go the way we plan. Romance is what most people mean when they ask me, at least, "How can I fall in love?" Usually, I won't try to answer that question on a deep level, because it depends on the individual.

[Video: Older male and female with gray hair. Male has his arm around female and both are smiling and gazing fondly at the other]

It gets boring to talk about it.

[Video: Dual screen images of older man and woman photo in top left screen and smaller close-up of Dr. Sue Carter speaking in bottom right screen with IU Day banner in the middle bottom screen]

But we can tell you what sorts of events can lead to long-term attachments. I can answer that question with a little bit firmer answer. I'm gonna try.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Sure, let's answer that. Let's answer that question.

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Okay. First, we have to remember what attachments and bonds are for. They're for two purposes.

[IU logo and words appear: ASK YOUR QUESTION NOW; Ask using #IUday & #AskIU or at Facebook.com/IUFoundation]

One is to simply stay alive, to be here on this planet, to be here in this room. Our ancestors, yours and mine, which probably had some shared genes, we were built upon a model that said, it's better to be with other, than to be alone.

The second piece of this is, of course, reproduction. To pass our genes forward to the next generation. Once we knew that, we could say, well,

what sorts of things lead to us coming together, and what sorts of things keep us together? And then, what are the consequences, the outcome of that? The outcome, in humans, is more humans.

Erica speaks: Okay.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Dr. Sue Carter speaks: Those are the background constructs, but under that there's ... If you almost think of this as an artichoke. If we peel away layers, we're doing a kind of neural archeology. We're getting down underneath, and underneath is this very deep concept of safety. Needing others, so that we will stay alive. It's that fundamental.

[Video: Close-up of Dr. Sue Carter]

And the biology of staying alive turns out to be the biology of attachment.

So, romance is a little bit the frilly outside of the story, but as we get deeper, we're going to see, and we have seen, very old neural systems, very old parts of the brain that preceded the human cortex. When I started this work, I thought, "Oh, it's learned. Attachment is learned. Love is learned." It really isn't. It's partially learned, because the object of our love is learned, to some extent. But more deeply, it's this need for others that drives us to other, and we can't learn or unlearn that.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Okay. I want to back up and ask you about the rodents, prairie voles, that you studied. Maybe some of you out there are wondering, "What can humans learn from prairie voles, when it comes to attachment?"

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Certainly. Well, when I started this I would have said, "Very little." But as we looked, again, at the pieces of the biology,

[Video: Close-up sketch of two prairie voles together in a field, one on all fours and one standing on hind legs]

we realized we have all of those same parts. We have the same chemicals, we have most of the same neural structure that's needed for forming attachments.

[Video: Dual screen images of prairie vole photo in top left screen and smaller close-up of Dr. Sue Carter speaking in bottom right screen with IU Day banner in the middle bottom screen]

The cortex is one of the least important, and that's what, of course, makes humans unique.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

We have a very large, complex cortex. We have a lot of cognition.

[Video: Close-up of Dr. Sue Carter]

We're very proud of that, but the basic mechanisms are underneath that. So if this is the cortex, it's down here in the brain stem that the most important parts of the attachment systems reside.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

We discovered this, really, by accident. Because if you had told me before I started working with rodents, called prairie voles, that I could see a lifelong attachment, I would have said, "No, it's not possible. How could they even remember each other?"

[PowerPoint slide: Title: Using data from prairie voles we have found that oxytocin may be released during---Social Engagement and Social Bonding (photo image of prairie voles depicting this); Sexual Behavior (photo image of prairie voles depicting this); Maternal Behavior (photo image of prairie voles depicting this) Paternal Behavior and Allopaternal Behavior (pup exposure) (photo image of prairie voles depicting this)]

But in nature, they do form these bonds, and they are permanent. Perhaps more so than humans.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica: Okay. All right. Let's go back to humans.

Dr. Sue Carter: Back to humans.

Erica speaks: For people who are entering into a new relationship, how can they use the idea of attachment to form lasting bonds?

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Well, you could use tricks, I guess.

[Video: Image of young man with brown curly hair and young woman with long brown hair with a blurred tree in the background. The young woman is leaning her head on the man's shoulder and they are both smiling and gazing fondly at each other]

The trick that's perhaps most obvious ...

[Video: Dual screen images of young man and woman photo in top left screen and smaller close-up of Dr. Sue Carter speaking in bottom right screen with IU Day banner in the middle bottom screen]

Everyone kind of knows it ... Is that, if there's a circumstance surrounding you that's frightening, or very scary in some way, fear-inducing ... That will encourage us to get closer together.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

If there were an earthquake right now, in this room, you and I would become fast friends.

[Video: Close-up of Dr. Sue Carter]

We would never forget each other, because our lives were threatened, and the more severe the threat, the more we're going to take that information and keep it with us.

[IU logo and words appear: C. SUE CARTER, PH.D., Executive Director, Kinsey Institute]

Now, in the case of real attachments, deeper attachments, events like birth are automatically ways of bringing us together ... In this case, a mother and a baby ... And being sure that that relationship is held together by a kind of hormonal glue. If you want to form an adult relationship with someone, the more things you do together that are exciting, the better.

[IU logo and words appear: ASK YOUR QUESTION NOW; Ask using #IUday & #AskIU or at Facebook.com/IUFoundation]

You have to also take into account that you can form unintentional relationships. Human sexuality is a pretty powerful kind of emotional experience. It can lead people into relationships that are ... Down here in the brain stem, they're just fine ... But in the real world, in our reality of our lives, they don't make any sense at all. I think most people are looking for good, deep relationships that will last, not one night stands.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: I do want to mention, before this broadcast, Dr. Carter and I were talking about how reality television shows use this trick. Can you tell us a little bit more about that?

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Well, they've kind of got it down to an art. If you want to help somebody who's having problems forming relationships, you could do this, in a way ... I wouldn't call it help. Let me say, encourage ... You could encourage a relationship by putting two people into something like a parachute jump, a helicopter ride, if they've never been on one before. Diving into the ocean together, under conditions ... And I'm making these up, but I know they're used in reality TV as a way of getting people to sort of come together, and they're very powerful. I've often wondered if you did an analysis of all these kinds of pair bonding scenarios, like The Bachelor,

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

or ... There's one called Married ... There's one where they have people get married, and then meet each other.

Erica speaks: Yes.

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Arranged marriages, modern style. You would find that the relationships have more passion if there's more excitement. It doesn't mean they'll last longer, unfortunately. When you get past the passionate, romantic phase, then you're faced with paying the bills or dealing with the uniqueness of the other person, and it gets complicated.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: All right, so these producers know what they're doing.

Dr. Sue Carter speaks: They know exactly-

Erica speaks: That parachuting makes good TV, but it also brings people together.

Dr. Sue Carter speaks: It brings them together, at least superficially.

[Video: Close-up of Dr. Sue Carter]

So what we need to know now is, how long do those relationships last?
And then, I think other things kick in. Shared interests, values.

Erica speaks: Sure. You gotta have some support for the relationship.

Dr. Sue Carter speaks: Some kind of support would be helpful.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Can't ride on parachuting forever.

Dr. Sue Carter speaks: No.

Erica speaks: Okay, so on the flip side, let's say there's someone who has been in a long relationship, and it has ended for some reason. Divorce, death. Can they find attachment again, or is this a one-shot deal?

Dr. Sue Carter speaks: That's a wonderful question.

[Video: Close-up of Dr. Sue Carter]

I think, yes.

[IU logo and words appear: C. SUE CARTER, PH.D., Executive Director, Kinsey Institute]

The human has a kind of serial social monogamy. We form multiple relationships across our lives. The first being with the parents, then with friends, then with some kind of partner or partners. We're open here to all possibilities in modern life.

[Video: Image of young man with brown curly hair and young woman with long brown hair with a blurred image of a tree in the background. The young woman is leaning her head on the man's shoulder and they are both smiling and gazing fondly at each other]

What happens when the relationship ends, though? This is really tricky. In fact, I'd like to study this.

[Video: Dual screen images of young man and woman photo in top left screen and smaller close-up of Dr. Sue Carter speaking in bottom right screen with IU Day banner in the middle bottom screen]

There aren't very good studies. There are descriptive studies. People are sad. They're almost always sad.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Sometimes really depressed, depending on whether they had any control over the relationship ending.

[Video: Close-up of Dr. Sue Carter]

After that, there is a kind of syndrome called irreconcilable grief.

[IU logo and words appear: ASK YOUR QUESTION NOW; Ask using #IUday & #AskIU or at Facebook.com/IU Foundation]

People who, after six months or longer, are still not over the loss of the partner, can't go on with their lives. They're in deep depression. That's serious. Exactly how to deal with that ... I mean, psychiatrists work with it, but I don't think there's a good answer.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Shorter-term grief is normal.

[Video: Close-up of Dr. Sue Carter]

When a relationship breaks up, there's actually a biology to the breakup, as well. You're losing the ability to co-regulate with the other. You're losing a whole ... It's almost like the two nervous systems in a really good relationship are bound together, and when they're pulled apart, they then have to be able to function separately. Some people will immediately dive into a new relationship. Others will wait. And others will be so depressed, they can't form new relationships. There's no one size fits all.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Wide variety of responses, there.

Dr. Sue Carter: Yeah.

Erica speaks: At the beginning of the broadcast, we sort of teased this word, "oxytocin." We haven't talked about it yet, but can you tell us what oxytocin is, and how it fits in to all of this?

Dr. Sue Carter speaks: Yes.

[Video: Close-up of Dr. Sue Carter]

Oxytocin's an ancient molecule.

[PowerPoint slide: Words appear with image of oxytocin molecular structure: Oxytocin is central to understanding the biology of social behavior, social bonds and social support, and sexual behavior.]

It's at least 100 million years old, and it's built on a set of old molecules that are at least 600 million years old. They pre-date mammals. They pre-date the evolution of what we call vertebrates, things with backbone.

[Video: Dual screen images of Oxytocin molecular structure PowerPoint slide top left screen and smaller close-up of Dr. Sue Carter in bottom right screen with IU Day banner in the middle bottom screen]

What you have, indeed, is a kind of physiological glue. It's fascinating to me that the actual molecule is sticky. Everything about oxytocin seems to relate to its ability to help us bond. Bonding, and these social bonds, have to have a biology. If they were just cognitive, they wouldn't last long enough to raise a baby, to build a family,

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

to experience other people across our lives,

[Video: Close-up of Dr. Sue Carter]

like our parents or partners.

Oxytocin is being shown now, by actually hundreds of studies, to have consequences for healing wounds, for allowing bones to restore themselves, for normal growth and development. I argue it's one of the

most powerful molecules on the planet. It allowed us to be human, because we have these large heads that have to get from inside of the mother to the outside ...

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

You remember this. You told me you have a baby ... And getting that baby to the outside is a major biological trick.

[Video: Close-up of Dr. Sue Carter]

Up until modern times, it was always accomplished by the birth process. Meaning, contractions of the uterus. That's one of oxytocin's most important jobs.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

It also supports lactation.

[Video: Close-up of Dr. Sue Carter]

But for our purposes here, it supports bonding.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica: We're getting some commenters online. Several are IU parents, and they're mentioning how proud they are of their children. Does oxytocin drive that experience?

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Maybe.

Erica speaks: Okay.

Dr. Sue Carter speaks: To be honest, that's the one study that hasn't been done yet. There have been hundreds, as I mentioned.

[IU logo and words appear: C. SUE CARTER, PH.D., Executive Director, Kinsey Institute]

The studies that have been done have shown that oxytocin can take even people who don't know each other, and cause them to be more interested in each other.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Pride, I think, would build on a lot of other ideas.

[Video: Close-up of Dr. Sue Carter]

Like just feeling good, reward ... Constructs that are a little more complicated and have, in addition to oxytocin, other molecules like dopamine involved.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

But the answer is yes. You feel proud of your child because you're attached to that child,

[Video: Close-up of Dr. Sue Carter]

and because there is something very special about the parent-child ... Both fathers and mothers have the ... And even non-biological parents, of course ... Have very strong feelings of attachment. I think evidence is quite strong that oxytocin is necessary for that to happen.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Okay. Going back to the idea of romantic love, what about the idea of opposites attract? Is that a real thing, and does attachment help explain any of that?

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Humans are very, very programmed not to engage in incest, and when we do, it's considered a terrible shame. But the reason is probably to be sure that genetically, we get new genes. Opposites attracting is also going after a new set of genetic genes, to put into the offspring. But opposites attract can also apply to non-reproductive situations, and there it's similar to the question about pride. It's feeling excitement. It's feeling good. It's novelty. Humans like novelty. We love novelty. This gets in the way of these long term social bonds. But I think opposites do attract,

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

and I think it's a kind of part of the joy of being humans. That we have more than just sameness to look for.

Erica speaks: Sure. Opposites attract, good news for many of us out there.

Dr. Sue Carter speaks: It is.

Erica speaks: I'm also kind of curious how Internet dating has influenced the idea of attachment. Have you looked into that much, or what are your thoughts?

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: I have not. I've been approached by people who wanted to actually study oxytocin in Internet dating. Maybe one of those studies did get done, but perhaps it didn't work, because I can't remember what they found. But there are many technical issues. Internet dating should be just like any other kind of dating, except you have less information. All right? You're having to judge from, initially, a written word, a few pictures, that sort of thing. Building up to a real relationship, of course it's got the same properties. Just meeting on the Internet is not gonna be good enough, because we need to know each other personally. We're human.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: So there is a bit of a missing piece, then, with online dating? You do think-

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Well, the person.

Erica speaks: Yeah.

Dr. Sue Carter speaks: I don't know how ... I'm not an expert at all. There are certainly a lot of people studying it, but not at the level of the physiology. I think you would want to consult with somebody like Justin Garcia at the Kinsey Institute, one of my colleagues who's worked on these questions. He works with Match.com. I know people who've found their partners on the Internet. The advantage is, you have a lot of choices in the beginning. You're not just limited to the people you meet in person, or the geographic area. But the old fashioned coming together, ultimately, is going to be necessary for most people.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Sure.

Dr. Sue Carter speaks: Sure.

Erica speaks: Dr. Carter, you have been studying love for, is it 35 years? 30 years?

Dr. Sue Carter speaks: Well, indirectly.

Erica speaks: Okay.

Dr. Sue Carter speaks: I didn't set out to. I always have to remind myself, I don't know how I got here,

[Video: Close-up of Dr. Sue Carter]

because I was fascinated by attachment and pair bonding. I did not use the word "love," until I was accused of it by people who saw what we humans call love in what I was doing. I was, to some extent, in denial. Because for a biologist to say they're studying love, is a pretty dangerous bit of territory to take. But yes, I started doing this work over 35 years ago.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: When you started, talk to me more about some of the differences in the thought of attachment back then, versus now. How people think about love.

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Okay. We would have accepted, 35 years ago, that mothers had a feeling of love for their babies. We would have accepted the notion that adult humans form loving relationships. But the idea that this was anything, beyond learning, was very foreign to the field. The oxytocin story did not develop until our work with prairie voles. The mother-infant love relationship had gotten into some technical problems, I guess you could say. People were saying, "Well, oxytocin doesn't have anything even to do with maternal love." That this is an instinct. Of course, that begged the question, what's an instinct?

But there was a kind of denial in the field, that love had a biological basis. It had already been shown that maternal behavior could exist without a cortex in rats, so that was leaving people very confused. They

hadn't appreciated, yet, the importance of these old brain stem structures.

[PowerPoint slide: Title: Using data from prairie voles we have found that oxytocin may be released during---Social Engagement and Social Bonding (photo image of prairie voles depicting this); Sexual Behavior (photo image of prairie voles depicting this); Maternal Behavior (photo image of prairie voles depicting this) Paternal Behavior and Allopaternal Behavior (pup exposure) (photo image of prairie voles depicting this)]

Oxytocin was still kind of a dubious ... It was known, but not very well understood. It was a dubious idea.

[Video: Dual image PowerPoint slide: Using data from prairie voles...in top right corner and smaller close-up of Dr. Sue Carter speaking in bottom right screen with IU Day banner in the middle bottom screen]

Now, I'd say pretty much everyone accepts the notion there is a biochemistry of love. Love is real.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Love itself has consequences. That's the most exciting part to me,

[Video: Close-up of Dr. Sue Carter]

that we are able to understand how a loving relationship keeps us alive, allows us to flourish, to thrive.

[PowerPoint slide: Image of two young adult hands embracing an older adult's hand]

To not only raise children, but to love others.

[Video: Dual image PowerPoint slide: Image of two young adult hands embracing an older adult's hand in top right corner and smaller close-up of Dr. Sue Carter speaking in bottom right screen with IU Day banner in the middle bottom screen]

To engage in positive social experiences. And that construct wasn't out there, when I started.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: Yeah, just incredible strides since you started researching.

Dr. Sue Carte speaks: Yeah. Different point of view.

Erica speaks: Yeah. Lastly, Dr. Carter, I want to ask you if you have any advice for people out there who might have had some trouble finding lasting attachment. What can you tell them?

[Video: Close-up of Dr. Sue Carter]

Dr. Sue Carter speaks: Yeah. That's really a hard question. Because, of course, if we knew, we'd package it. We'd sell it. We'd market it. I think the deeper construct is safety. People who enter relationships that are dangerous often will find that they don't last. If there's too much threat, and our basic biology ... The staying alive thing is very fundamental. When the relationship gets too dangerous, it can break the bonds. It's more, survival's the first law of nature. Forming these relationships is number two.

The other thing, though, is that you do need excitement. We're always walking a kind of a tightrope, aren't we? Trying to find love, keep it together, and to nurture others. I mean, if you can give love, you can probably get it back.

[Video: Back to full screen with Erica Sagon and Dr. Sue Carter sitting at table]

Erica speaks: All right. Well, Dr. Carter, we're unfortunately all out of time. But thank you so much-

Dr. Sue Carter speaks: It's a pleasure.

Erica speaks: ... for shedding some light on attachment and love. We really appreciate it.

[Words appear: LEARN MORE ABOUT IU DAY; Join the conversation at #IUday and support IU at iuday.iu.edu

If you have additional questions for Dr. Carter, or you want to see more IU Day videos and interviews, you can head to iuday.iu.edu. There's also opportunities to support IU. As you know, IU depends a great deal on private support from people like you, and this is just a small part. IU Day is just a small part in that big picture.

Thank you so much for watching. Thank you again, Dr. Carter, for being here. And thanks for supporting IU.

[Video: IU logo top center and IU Day banner center appear]

[Transcript ends]