By show of hands how many people here have a pet? Now of those who have a pet how many of you regularly pick them up or hold them in some way? I have two cats one of whom I regularly pick up, and when I do, admittedly I cradle him like a baby and I usually hold him on the left side of my body. You might have a think about when you pick up your pets how do you cradle them. If I were to take a survey of this room chances are most, not all, but most of us would show a preference to cradle on the left side.

This left sided cradling bias has been observed in how humans cradle their infants. Most parents cradle their infant on the left regardless of whether they are right or left-handed. Right handers say they cradle on the left so that their dominant hand is free, and left handers say that they cradle on the left so that their strong dominant arm is holding the infant. However when asked to hold a pillow or a book bag they will often use their dominant arm. Because everybody seems to cradle infants on the left but not inanimate objects, there needs to be something else that can explain this besides handedness.

Interestingly this left cradling bias is also seen across different animal species. For example, monkeys and apes can be seen holding their infants on the left, and in species who can’t physically cradle their young such as orcas and horses, the mothers typically position their infants on the left side of their bodies. This shows us that there’s something deeper, and that there might be some evolutionary purpose for this.

Recently, researchers have suggested that it has to do with laterality of brain function. What this means is that we have two hemispheres of the brain, and each hemisphere has certain specialties. The left hemisphere is exceptionally good at processing language information in most individuals, whereas the right hemisphere excels at distinguishing between emotions and it also excels at spatial attention. The right hemisphere also controls the left half of the body and takes in information from our left visual fields. As a result of this we tend to notice and respond faster to emotion signals and threat related information when it comes in on the left side of space compared to when it appears on the right. Again this is something we see across different animal species, different taxonomies, with slightly better threat detection on the left side of space. As such, cradling an infant on the left side puts them in a slightly safer space because we can respond faster to threats on that side.

However all the research to date has been on conspecifics, that is, members of the same species. My own research looks at this left cradling bias in an interspecies context. do we treat our companion animals as though they are infants/ children? Emerging research suggests yes. However since this is so new there is a lot of room for exploration on this topic. This is why I wanted to do the flash talk, to open a conversation about this in a dementia context.

In the case of Alzheimer’s disease and other forms of dementia, research suggests that laterality for certain functions is affected, with both hemispheres sharing the load a lot more. If the left cradling bias is a result of laterality, changes or reductions in laterality should change or reduce the left cradling bias.
Also, dementia is associated with social and emotional dysregulation. Some research has shown that the left cradling bias is also reduced in cases of emotion dysfunction such as very high parental stress or feeling less emotionally connected with an infant.

I would be curious whether there is a left cradling bias in persons with dementia, and exploring reasons for why this may or may not be the case. I also think there is scope to see if asking patients to hold animals on the left side would increase the bond they make with their companion animals, or even facilitate new bonds such as with dementia dogs.

I would like to invite you to chat with me about your ideas and perhaps we can collaborate in the future. Thank you!