Evaluation Results-

During the opening night for Creative Reactions the public were asked to fill in a short questionnaire about their experience of the night. 33 members of the public completed the survey of the 112 people who came to the launch night. The results found:

- 82% strongly agreed, they were interested in science and 18% agreed
- 30% strongly agreed, 46% agreed and 25% were neutral for Creative reactions stimulating their interest in local research
- 30% strongly agreed, 67% agreed, and 3% were neutral on Creative Reactions linking the research and artwork well
- 49% strongly agreed, 49% agreed and 2% were neutral they liked the variety of Art
- 66% strongly agreed, 32% agreed and 2% were neutral about seeing scientists and artists collaborate more
- 61% strongly agreed and 39% agreed the labels for the artwork were useful
- 65% strongly agreed and 32% agreed and 3% were neutral on recommending Creative Reactions

When asked to make comments on what they would improve about Creative Reactions next year there were a range of answers. Many included:

- Range of artistic medians on display could be more diverse
- Space could be bigger
- Having more artwork on display
- Having talks to accompany the artwork
- Having more performance pieces

As a result of seeing Creative Reactions the public said they would intend to:

- Do more artwork
- Read about more science
- Go to more art exhibitions
- Think about science communication more
- Think about scientific research more
- Ask more questions about science

And finally, when asked to sum up Creative Reactions in 3 words the public responded with a variety of words including: Interesting, stimulating, unique, creative, vibrant, passionate, cool, linking, epic, thought-provoking, unusual, inspiring, original, fusion and great.

The map showing distributions of people coming to the exhibition also showed a large range of Bristol covered, so the public were not just from one area in Bristol. Creative Reactions was successful in having a diverse range of the public coming to the exhibition. Areas that people came from included:

- Fishponds
- Clifton
- Bedminster
- Whitehall
- Nethan
- Bower
 - Ashton
- Windmill Hill
- Filton
- Little Stoke
- Eastville
- Ashton
 - Gate
- Bishopton
- Redland
- Henbury
- Southmead

Interview Responses-

Scientists and artists that took part in Creative Reactions Bristol 2018 were interviewed using semi-structured qualitative interviews. The interviews ranged from 22-44 minutes and were conducted face-to- face. The main themes discussed was the collaboration process and how they felt the collaboration went from their experiences as an artist or a scientist. In total 11 volunteers were interviewed 6 scientists and 5 artists.

The Collaboration Process

There was a split between scientists and artists on their thoughts of the collaboration process. All artists felt happy with the information they received and the collaboration process on the whole, even though some artists had a very minimum input from their artist to the work. Artist's interviewed were more concerned with trying to understand scientific research presented to them and felt the role of the scientist was to mentor and help them overcome that. However, scientists were more split on how they viewed the collaboration process. Some of the scientist's interviewed felt their role was also a mentoring one and were happy to leave the artist to interrupt their work however they wanted. But some of the scientist's expressed a desire to be more involved than just mentoring the artist and would have liked it to be a truer collaboration with more of their input in the final piece.

Scientists as Mentors

Comparing the analysis of the scientists and artist's interviews, there seemed to be more concerns from the scientists as to the collaboration process. It was expressed many (n=4/6) of the scientists interviewed that they would have liked to have been more involved with the process. All of the scientists (n=6/6) in the Creative Reactions process took on a 'mentoring' role in the collaboration. Although, all artists interviewed seemed quite content for this some scientists expressed a desire to be more involved. Scientist 4 who was interviewed was a PhD student who had studied fashion before choosing science as a degree, they described how they would have liked to have been more involved in the producing the final product instead of the traditional mentee approach especially because of having a bit of a background in art nevertheless, she expressed restrictions in not knowing how to get more involved when asked about the collaboration:

"the only thing I would do differently is be more involved, and have the confidence to be more involved in the project and have more of an input into it. I think I was so out of my comfort zone before, but now looking back I would like to meet her up more, and understand the process, and go to the workshop and see the piece being made. I would have loved to have done that looking back."

Understanding Scientific Research

The artists did not have the same concerns many expressing it was good when the scientist took a mentoring role and was there to help them understand the science and research more. Some of the artists especially felt limited and constricted by the collaboration because of the jargon the scientist used. To compact this some of the artists used drawings and graphs as a visual representation of the data to understand the science. Artist 4 explained:

"It was her thesis and a couple of papers I read, so I was looking at imagery from her work a lot to try and understand [the research] better." Having more contact with the scientists lead the artists to have a greater understanding of the scientific research.

Others felt it was good when they could converse with their scientists and informally ask them questions explained by artist 3:

"A lot of it was quite technical. I couldn't understand all of it and had to go to her and ask her to explain it...She took the time to help me understand her work...I think because of that I really could put-across her research well."

Many artists felt depending on how much time their scientist put into the collaboration and into communicating their work reflected how good the science was in the final product.

Learning from each Other

Another dominant theme in the interviews for both scientists and artists when discussing the collaboration process was learning from each other. All participants interviewed found that learnt something new and gained new knowledge from the experience.

The artists interviewed felt they had learnt a lot from discussing scientific research they had never known about. As artist 4 said:

"when working with a scientist it opens up all sorts of opportunities and makes you aware of a world

I didn't know existed."

Artist 2 also commented about learning new scientific research when asked what she hoped to gain from the experience:

"I just really wanted to learn about someone's filed, and learn as much as possible"

She went onto explain it could help her with future sci-art work and it was an area she had a lot of interest in.

The scientists interviewed also felt they had learnt a lot from the process and especially that their perception of art had changed. All of the scientists interviewed n=6 believed they had learnt a lot about the artistic process and gained an appreciation for art. Scientist 6 described it as:

"It's like seeing behind a curtain or backstage."

Scientist 2 described her change of opinion in art further:

"[Laughing and looking embarrassed] In a really bad way I would have though science is a bit more important especially the work that's produced from it...I gained a lot more respect for art than I had before"

It opened up scientists to art and caused a lot of the scientists to appreciate it more once they learned the technical aspects and input that went into art.

Time

Time was a constraint and a concern that was discussed by all participants in their interviews n=11. Both scientists and artists felt the more time that was put into the collaboration the better quality the final artwork would be as a result. As this process was just one project amongst the busy work schedules of both scientists and artists many commented on the practicality of negotiating times to

meet. This in some ways limited both the artists and scientists. Scientist 6 in their interview remarked on time being quite an issue and hindrance to the collaboration process:

"I guess it's just hard to find time to meet-up but I think that's because we have such different schedule's."

Time especially when artists and scientists are on different schedules can really impact the quality of the collaboration, and many hoped in future collaboration projects that could optimise time and meet more with their collaborative partners to produce more in-depth work and even higher quality art. Artist 2 described timing as an issue:

"the longer you have the more you produce and the more you will delve into it [the research]"

Artist 2 felt they could have delved into the research more with a longer time frame.

Overall Experience of Creative Reactions

All volunteers interviewed expressed a willingness to take part next year if they could, and all expressed their admiration and positive experience in being involved with Creative Reactions Bristol 2018.

Artist 4 had a direct comparison with last year's event and talked about how she felt it compared with this year's Creative Reactions:

"Having done it last year, I have a direct comparison and I feel like the communication this year was fantastic the support given by the team was wonderful. Any questions were quickly answered, and a small amount of money for material was fantastic and really important to the artists' and the venue was fantastic."

Artist 5 also added he found the overall experience great and would commented that he would definitely take part again:

"There's nothing that stands out that needed improvement I think it went smoothly, I would encourage everyone to just keep doing it and make it bigger!"

Scientist 3 also commented on how much she enjoyed the project and what a unique opportunity it is:

"It's a great process I really enjoyed, it and there's not many opportunities to engage the public like this so I would love to do it again!"

Improvements for Next Year-

Artist 5 explained he would have liked more promotion and marketing so more people would have known about Creative Reactions:

"I think maybe more promotion would have been good, and to communicate a clear social media strategy to get lots of clear cross referencing. I would have liked to have seen more momentum around it."

Scientist 5 also commented on what they would improve for next year:

"It would be good to go bigger, with more funding. It would be good to give the artists more money...

The meet and greets were brilliant. I think it just needed tightening, I think people should have had
more confidence in themselves."

Overall, everyone felt it was a great process to be part of and enjoyed it immensely. There are just a few tweaks they would do for next year to really make the process as successful as possible such as more publicity, pairing-up earlier, bigger venue and just make the whole process bigger.