

Cell EXPLORERS

Summary report

2017-2018



Cell EXPLORERS Summary reports 2017-2018

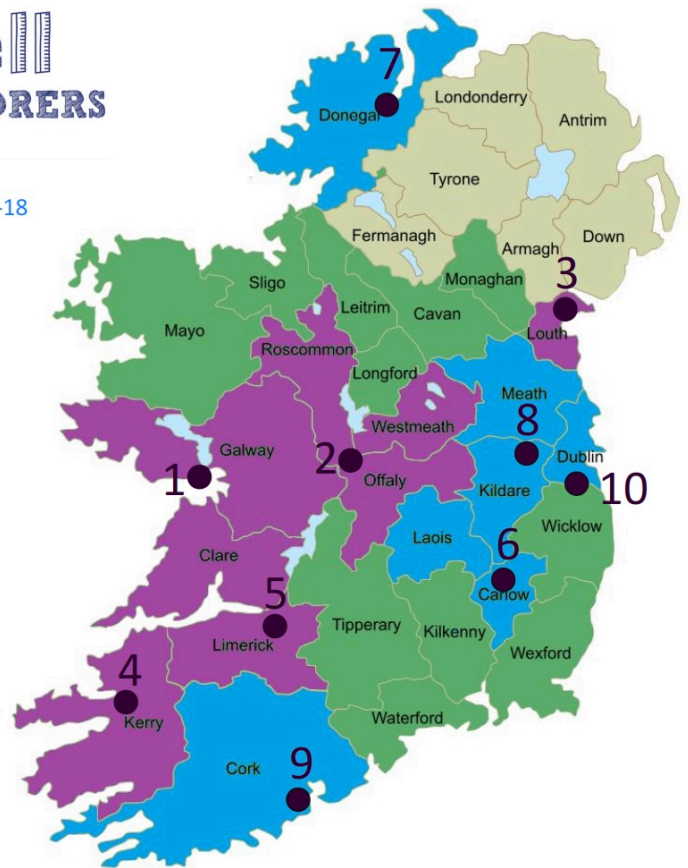
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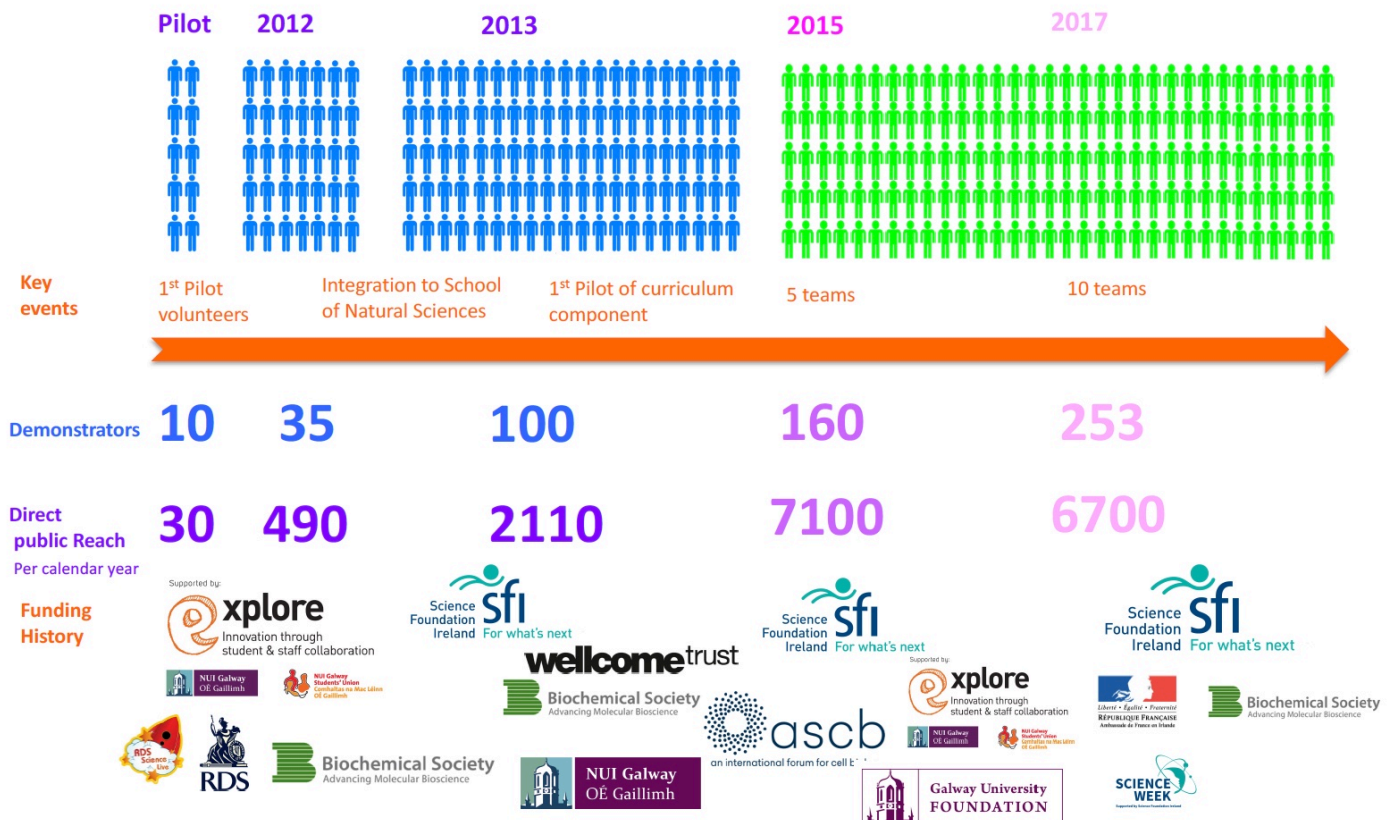
Cell EXPLORERS National Network



cell
EXPLORERS



Cell EXPLORERS expansion, reach & funding history



Cell EXPLORERS working model

Volunteers
Students / Staff



Project students
Curricular based



Benefits

- Society
- University
- Students

Multiple benefits of the programme

Community & Society (Public, schools, Civic Society, Industry, workforce)	Higher Education Institutions	Higher Education Students
• Interest in STEM • Awareness, attitudes, education & understanding of STEM and Research • Increase of science capital in families • Uptake of STEM subjects at secondary and third level • Best practice in informal science education	• Teaching • Research • International visibility • Staff development • Community engagement • Funding	• Transferable skills • Graduate attribute • Personal development • Engagement and leadership • Irish workforce trained at engaging in Science

Engage local community

HEI mission

Train workforce and STEM advocates

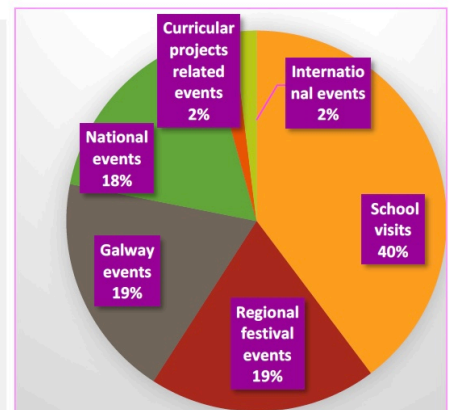
10 Teams active in 2017

Team composition



51 activities 6756 direct reach

- **School visits:**
11 events reached 2685
- **Regional festivals:**
7 events reached 1309
- **Galway events:**
13 events reached 1284
- **National events:**
12 events reached 1187
- **Curricular projects:**
2 events reached 159
- **International events:**
6 events reached 132

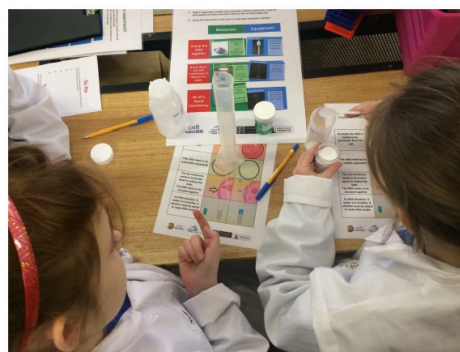


Novel Sessions development by Final year projects

Astrobiology (Classroom + Festival)



Inquiry-based Fantastic DNA



My Blood (Classroom + Festival)



Cell EXPLORERS volunteers feedback 2017

Data obtained from * pre-volunteering survey, N=66 * post-volunteering survey, N=47



Benefits of taking part#

Reported skills gained:

- | | |
|---|--|
| 1. Enthuse Children & Public in Science (38%) | 1. Skills of working with children 84% |
| 2. Cease an interesting opportunity (21%) | 2. Communication skills 76% |
| 3. Improve my teaching skills (11%) | 2. Teaching skills 76% |
| 4. To give back to the community (9%) | 4. Working in a team 71% |
| 5. Work with children (8%) | 5. Speaking in group 64% |
| 6. Gain new skills (7%) | 6. Time management 58% |
| 7. Was asked to do it (3%) | 7. Confidence 56% |
| 8. Helpful experience to CV (1%) | 8. Oral presentation 52% |
| 9. Meeting new people (1%) | 9. Organisation skills 51% |
| | 10. People management 44% |

And also:

"I got a great sense of achievement feel I gained many skills and everyone involved was so lovely"

"I want to be the one that child remembers in 10 years when they graduate from University and say that this program helped them realise that "science" is something that they could do!"

"I found the experience rewarding especially to see how engaged the children were when doing the experiments."

"I believe that it is something that many pharmaceutical companies would regard highly. "

"The skills I have gained and improved upon are vital for my future career - Cell Explorers allows me to develop and maintain them in a fun and interesting way"

"It keeps me connected with the more fun side of science"

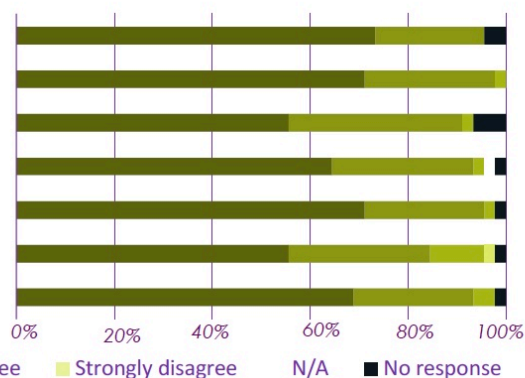
"I enjoy volunteering in science outreach, sharing my passion for science and inspiring the next generation of scientists"

"I made new friends through cell explorers and the team was very friendly and helpful towards me."

View on the Cell EXPLORERS programme

Positive feedback was provided on all aspects of the programme

- It is worthwhile to volunteer in Cell EXPLORERS
- I would recommend Cell EXPLORERS to my friends
- Training was sufficient
- I received sufficient support from the Cell EXPLORERS team
- The Cell EXPLORERS is a welcoming community
- I felt my opinions were asked and listened
- I felt part of the team



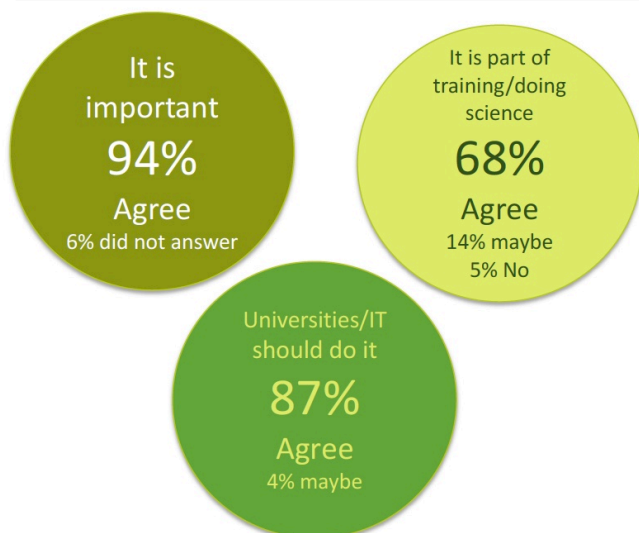
Favorite Aspects

- Work with children
- & Bring excitement of science to the public

90% would volunteer again 89% think their experience might with Cell EXPLORERS in the future. help them in their studies/career.



View# on Science Outreach



"I look forward to volunteering with you for the rest of my years in college"

"I really enjoyed the program, the aim of the program and everyone I met and worked with was fantastic, enthusiastic and engaging."

"Delighted to be involved. It was great fun for all!"

"It gave me a sense of responsibility and was very interesting to see the reaction of the children who were being demonstrated."

"Great organisation that has lots of fun and plays very vital role in the community a lot of hard work and dedication goes on in the background to make every activity successful"

"I love the team, everyone is so nice! Really made the second semester more fun and interesting. Hope to volunteer again."

Fantastic DNA School Roadshow

Map of all school visits 2017



Fantastic DNA visits

10 Teams

196 Volunteers

57 Schools (89 classes)
including 3 secondary schools (4 classes)

40% Rural Schools
16 DEIS Schools

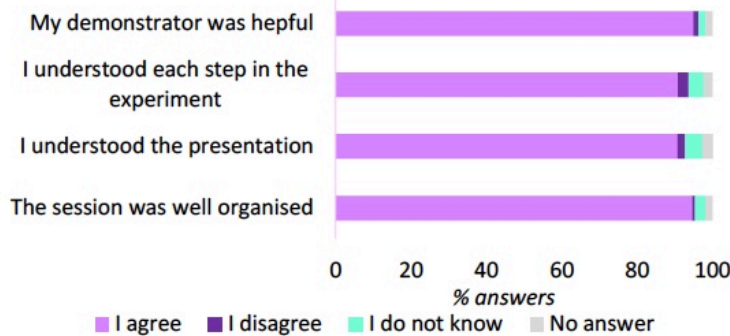
2224 children

939 primary school Children Feedback

given by 46% boys 53% girls (2% Unknown)

23 primary school Teacher Feedback

Children's Feedback ON the Fantastic DNA session



"it was well presented and easy to do"
"the scientist were very professional and made it fun"
"I liked the way the steps were laid out. It was very well laid out. I understood what we had to do and I had fun."
"The way everything was explained"

What did you like best about Cell EXPLORERS session? (Top 3 answers)



1 Extracting DNA 41%



2 Fishing the DNA 17%



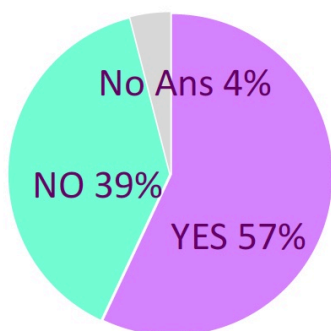
3 Squashing banana 15%

"it was fun using the pipets and like ... You are extracting DNA!"
"I liked using the dropper because I had to concentrate"
"I liked learning about all of the things in the cell. It was very fascinating."
"I liked the way we mixed everything together pouring liquid into tubes and plastic bags. I felt like a scientist."
"I liked extracting the banana DNA because it was really fun, a bit challenging."

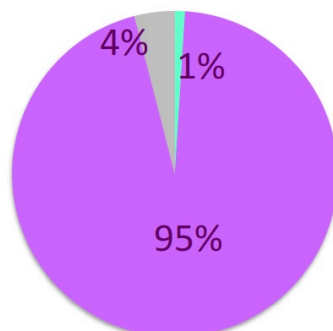
"I liked the part when we made the structure of DNA because when it was all finished it looked amazing."
"I liked the fact they told us that humans are made of 100 trillion cells because I thought that we had about 100 so it was really good to learn that"
"I liked adding in all the chemicals because I was excited to see what was going to happen. It was also really fun to do it with my demonstrator and friends."

Meeting the Cell EXPLORERS scientists

Had you met a scientists before?



Did you like meeting the scientists?



Why did you like meeting the scientists?
Top 4 Answers (out of 571)

- 1 They were helpful/nice /fun/interesting 61%
- 2 They taught me something new 15%
- 3 I got to do experiment 5%
- 4 I love science 5%

"I liked being able to do the experiment myself"
 "they explained everything clearly and i never met a scientist"
 "they taught me things i didn't know"
 "It was fun to see a scientists in real life and not just on the TV"
 "It was nice to do an experiment with real scientist"

"If you don't understand something they were ready to help with a nice attitude"

"Because they are scientist, they're the coolest people ever"

"We got to learn about DNA and do fun experiments"

"I understood them, I felt like I was a cell explorer"

"When they were speaking I understood everything"

Teacher feedback on Cell EXPLORERS visits

Top two MOST beneficial aspects of the visit as ranked by teachers:

1. The opportunity for each child to do an experiment (30%)
2. Interactions between the children & local 3rd level science demonstrators (30%)

Differences between CE & other science visits to school:

- CE is MORE hands on (9 Teachers)
- CE has MORE instructors (6 Teachers)
- CE has MORE resources and BETTER organization (3 Teachers)

Schools reported average annual science visits between 1 and 2.

What did you think of the Cell EXPLORERS Session?



"They loved how hands-on everything was. it really gave them the experience of being a scientist"

"Team were very professional and engaging. So well organized"

"I loved the fact that the children were engaged and hands on in the experiment. There were plenty of facilitators with each group"

"It was age appropriate and well organised so the children benefited hugely and really enjoyed"

"Session was most interactive and equipment far exceeded any school equipment. Presentation was very well pitched."



Cell EXPLORERS Highlights 2017

BTYSTE 2017



New National Team Network



New NVRL UCD Team



Big Day Out



5th Year of Fantastic DNA

New Maynooth Uni Team



June Connemara Tours



Meeting President Michael D Higgins at Áras an Uachtaráin

New IT Carlow Team



Problem Solving Festival



New UCC Team



In Edu Erasmus +
collaboration



Blackrock Castle
Observatory collaboration

Becoming Gaisce Challenge Partner

New Letterkenny IT Team

