

Cell EXPLORERS

Summary report

2016-2017



Cell EXPLORERS Summary reports 2016-2017

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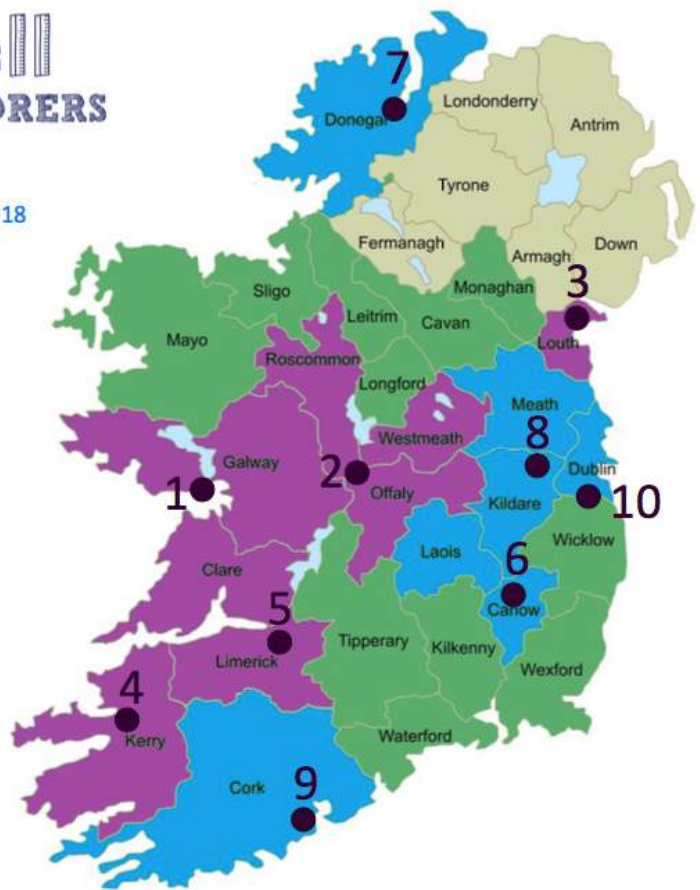
Cell EXPLORERS National Network



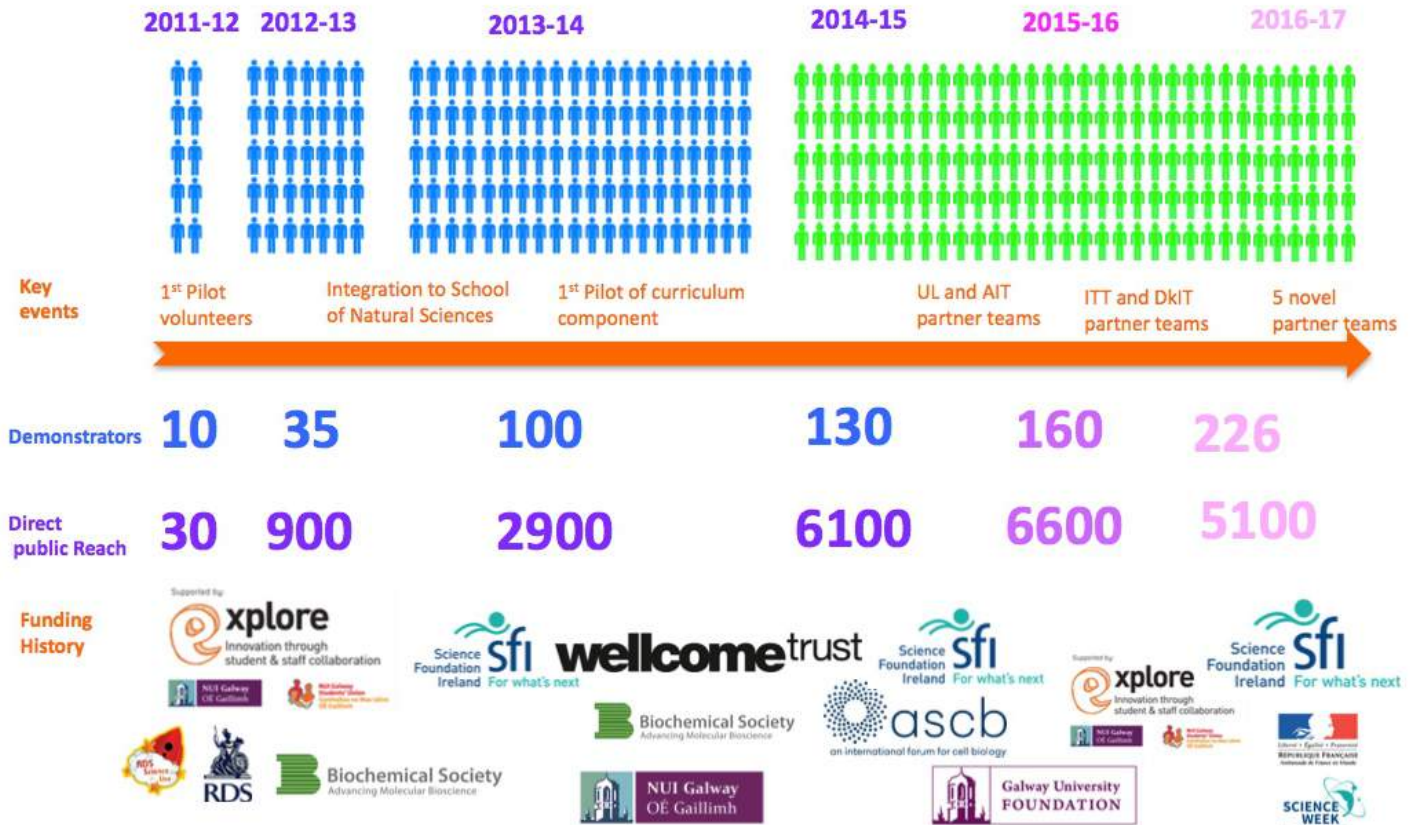
Existing reach 2015-16 **Additional reach 2017-18**

● Team Locations

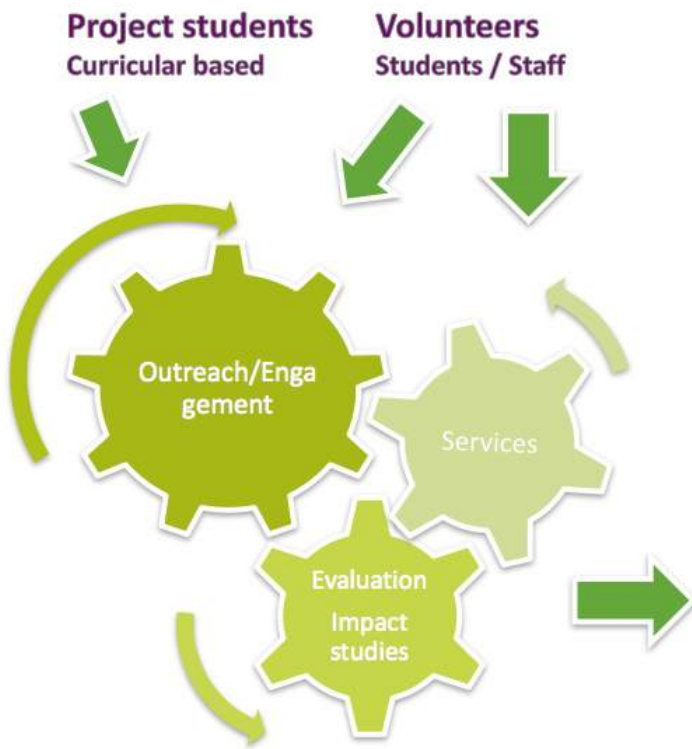
- | | | | |
|---|--|----|--|
| 1 | NUI Galway
OÉ Gaillimh
School of Natural Sciences | 6 | INSTITUTE of TECHNOLOGY CARLOW
At the Heart of South Leinster |
| 2 | AIT
Connect & Discover | 7 | lyit
Institiúid Teicneolaíochta Leictiriceanann
Letterkenny Institute of Technology |
| 3 | DUNDALK
INSTITUTE of TECHNOLOGY | 8 | Maynooth University
National University of Ireland Maynooth |
| 4 | INSTITUTE of TECHNOLOGY TRALEE
Institiúid Teicneolaíochta Tralee | 9 | UCC
Cúrsaí na hOllscoile Conaught, Éire
University College Cork, Ireland |
| 5 | UNIVERSITY of LIMERICK
Ollscoil Luimnigh | 10 | UCD DUBLIN |



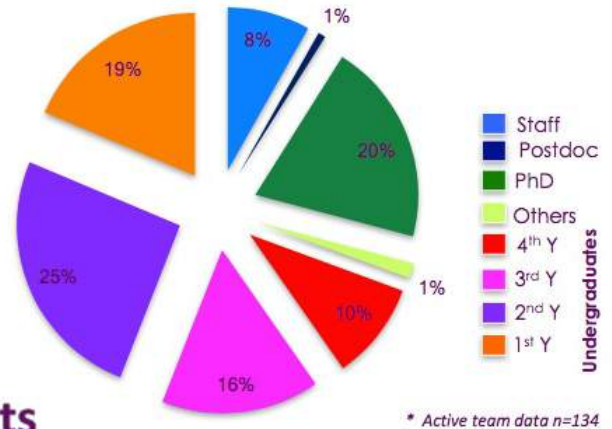
Cell EXPLORERS expansion, reach & funding history



Cell EXPLORERS working model



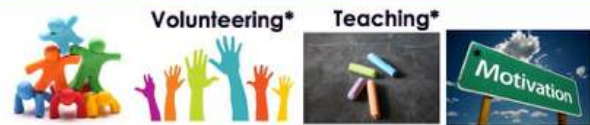
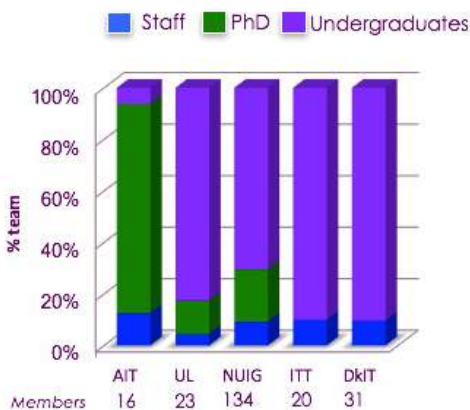
NUI Galway Team Composition* 2016-17



Benefits

- Society
- University
- Students

The 5 Cell EXPLORERS Teams active in 2016 *



Team	Volunteering*	Teaching*	Motivation
NUI Galway OE Gallimh	68% Science Undergraduates	73%	49%
UNIVERSITY OF LIMERICK	83% Science Education undergraduates	38%	63%
AIT	94% Researchers	50%	71%
TRALEE	90% 1 st & 2 nd year undergraduates	100%*	100%*
DUNDALK	90% 3 rd & 4 th year undergraduates	71%	50%

Mixed incl. Share interest about science & community contribution
Share interest about science
Share interest about science
Mixed Community contribution Interest in programme
Teaching experience

* Low pre-Volunteering survey intake

* pre-volunteering survey, N=59 (28, 5, 13, 2 & 11 for NUIG, UL, AIT, ITT & DkIT respectively)

NUI Galway Final Year project students



- 95% students satisfied
- 100% students recommend science communication to be part of curriculum

Student's experience of the project



Biochemistry External Examiner:

"The outreach projects are **very well organised**, and the students who take part in these **gain significantly from them**. This is to be applauded"

Cell EXPLORERS volunteers feedback 2016

Data obtained from * pre-volunteering survey, n=59 * post-volunteering survey, n=61



Volunteers gained:

- | | |
|--|--|
| 1. Engage Children and Public in Science | 1. Communication skills 90% |
| 2. Contribute to the community | 2. Skills of working with children 82% |
| 3. Gain new skills | 3. Working in a team 79% |
| 4. Acquire teaching experience | 4. Teaching skills 77% |
| 5. Cease an interesting opportunity | 5. Confidence 74% |
| 6. Work with children | 6. People management 69% |
| 7. Add this experience to CV | 7. Speaking in group 69% |
| 8. Meeting with people | 8. Time management 64% |
| | 9. Oral presentation 52% |
| | 10. Organisation skills 62% |

Benefits of taking part#

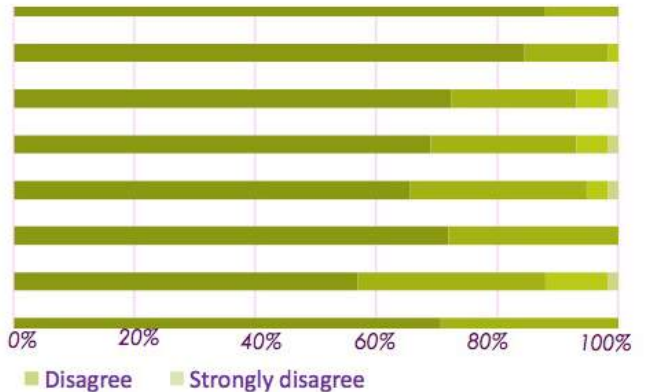
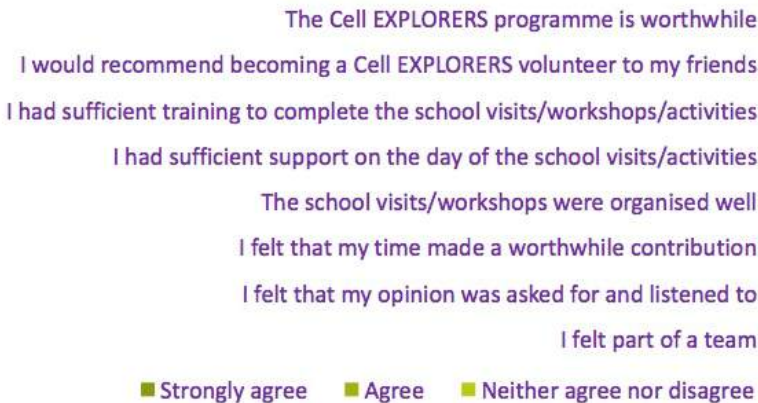
And also:

- 'It was fulfilling and enjoyable to teach the school children and to see them enjoying learning about science.'
- 'I'm so much more confident in my self-esteem and I have benefited hugely from it! I love it! I believe in myself and I am recommitted to science and love promoting it!'
- 'There is something about teaching kids about science that makes you feel good about being a scientist yourself. It helps you remember why it matters.'
- 'It is a really good insight as to the type of work I might possibly want to do going forward when I finish my degree.'
- 'A greater understanding of how science can be applied in everyday life'
- 'Happiness, it was fun.'
- 'It was great to meet other Cell Explorers volunteers from other disciplines in the college. I have made new friends.'
- 'I gained the opportunity to get to know other like-minded people with same professional interest.'



View on the Cell EXPLORERS programme

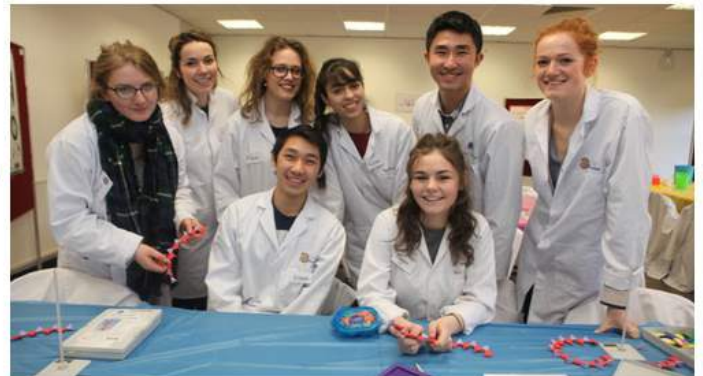
Positive feedback was provided on all aspects of the programme



2 Favorite Aspects

1. Work with children
2. bring excitement of science to the public

90% would volunteer again 84% think their experience will help them in their studies/career.



View# on Science Outreach

It is important in universities:

100%
Agree

Why is universities engagement important?

- To get young people in science
- To benefit society
- It is their duty

it should be part of the undergraduate curriculum

87%
Agree

How should it be integrated?

It should be mandatory : 20%
It should be optional: 80%

'It is my favorite thing that I do as a part of the University.'

'Everyone was very welcoming and we worked well as a team making the experience an enjoyable one.'

'I enjoyed the short few months so far doing it and am already looking forward to next year's outings. It has become an integral part of my week and I hope it continues and I can continue to contribute.'

'As a child, I would have reveled in an opportunity like this! I am so happy to be able to give children this wonderful experience and encouragement!'

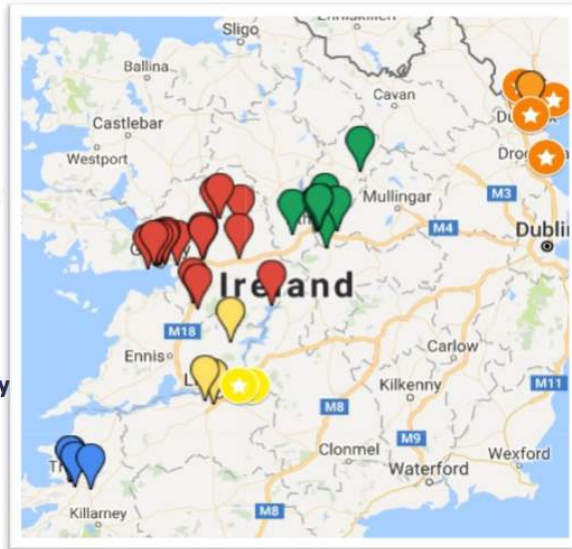
'It's an amazing programme!'

Cell EXPLORERS Fantastic DNA School Roadshow 2016

Schools visited by NUI Galway, UL, DkIT, ITT, & AIT teams

Partner teams

- NUI Galway
- University of Limerick
- Athlone Institute of Technology
- Institute of Technology Tralee
- Dundalk Institute of Technology



Map of Cell EXPLORERS Fantastic DNA school visits 2016

5 Teams

64 Volunteers

43 Schools

78 Classes

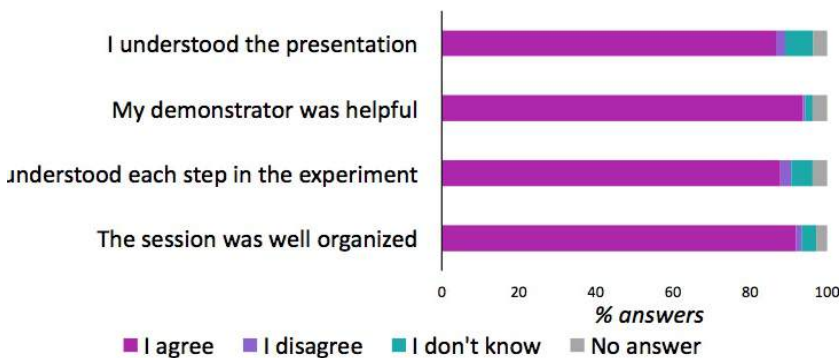
1881 children

1100 Children Feedback

50% boys 49% girls

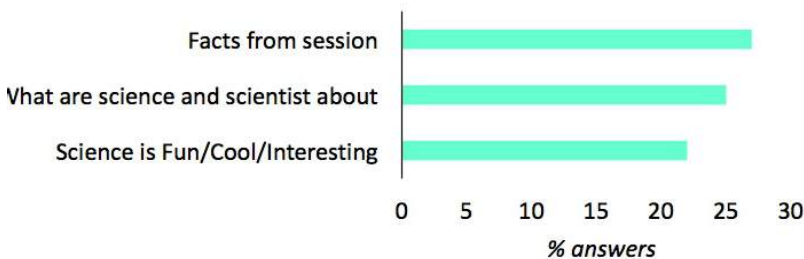
50 Teacher Feedback

Children's Feedback on the Fantastic DNA session



*"I liked it because it was fun to learn"
 "That I want to go back there [DKIT] in the future"
 "It was exciting and really cool the demonstrators put in a lot of work to make it exciting"
 "Thanks and thanks for inspiring me to be a scientist"*

What new things did you learn about science?



*"DNA is like a spiral staircase And I want to be a scientist when I'm...!!OLDER!!"
 "I learned you need science for almost everything"
 "The science can be fun and not hard"
 "There are a lot of scientists and they don't always work in a lab"*

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

1 Using the lab equipment (535)

2 Doing the experiment myself (519)

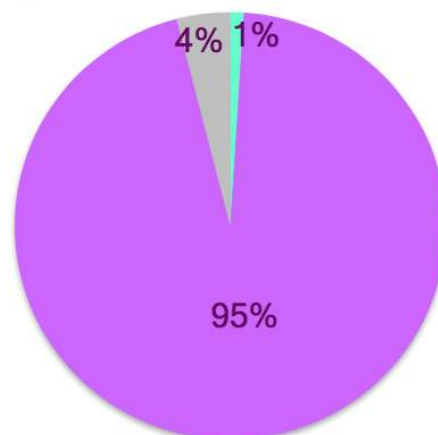
3 Fishing the DNA (411)

Meeting the Cell EXPLORERS scientists

Had you met a scientist before the Cell EXPLORERS?



Did you like meeting the scientists?



Why did you like meeting the scientists?

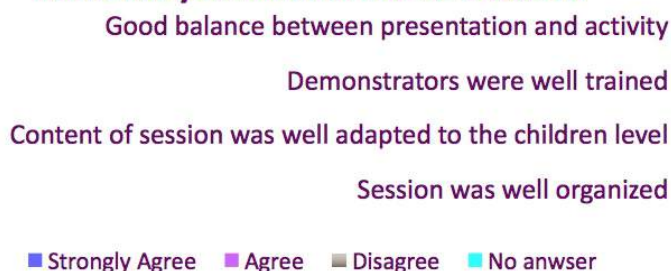
"They taught us a lot and it made science fun"
"I liked meeting the Cell EXPLORERS because I never seen a scientist girl before"
"It was fun to see real scientists"
"They were brilliant at explaining and it was all fun experiments"
"they have fun with their job"

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 (47%)
2. Interactions between the children & local 3rd level science demonstrators (26%)

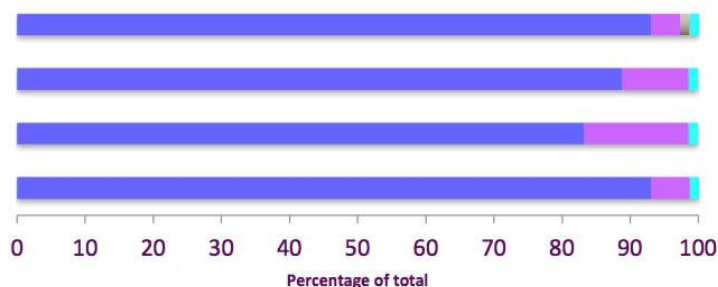
What did you think of the CE session?



Differences between CE & other science visits to school:

- CE is MORE hands on (10 Teachers)
- CE has MORE instructors (8 Teachers)
- CE has BETTER organization and MORE resources (5 Teachers)

Schools reported average annual science visits between 1 and 2.

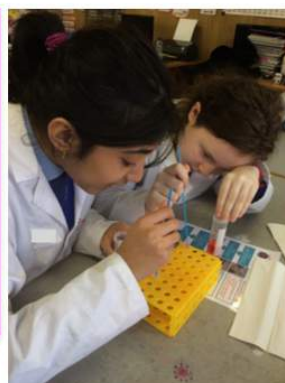


"Thanks for a wonderful workshop. Both the children and I really enjoyed it and learned a lot"

"very impressive demonstration and intriguing experiment that motivated and appealed to the children senses."

"The cell explorers approach the lesson in a very child friendly fashion, get the balance between activity, information exactly right."

"I thought that today's session was fantastic. The children learnt so much and also a greater interest in science was instilled in them."



NUI Galway Cell EXPLORERS sample activities & reach



By young Scientists 2016& 2017



NUI Galway 1st MiniMedSchool 2016



Gozo Science days 2016



Spring/October open days



ISC @ Galway for a Day Oct & February



Youth Academy 2016 & 2017



Workshops at Galway Science & Technology Festival Exhibition day 2016: Little Gills, Fantastic DNA, Under the microscope, Artsy Scientist, Cell explorers



Engaging Children in Science Education
 Join the Discussion!
 Register on EventBrite!
 25th April
 10am-4pm
 In EDU conference organisation 2017



Little cell school visits 2016 & 2017



St Patrick's Festival, Big Day out 2016 & 2017

Let's make Galway the European Capital of Culture



We're backing the bid

