Aims and outcomes of the project:

For teachers
1. To integrate contemporary science and health research findings into the curriculum in one pilot school in Southampton and Hampshire.
2. To provide professional development in translational research and curriculum design for eight teachers from Southampton.
3. To produce key stage 3 teaching resources based on translational research.
4. To pilot and evaluate novel ways for teachers to work with scientists.

For students
1. Engage students with state of the art research that is conducted in their city and hospital, with a focus on understanding how their early life affects their later health.

A previous pilot has shown meaningful changes in attitudes to health.
2. Encourage students to consider careers in science and health-related disciplines.

A previous pilot has shown meaningful changes in attitudes to careers in science and health-related professions.
3. Enable students to learn about how they can improve their own health and the health of their future children, with the aim of influencing their health literacy and lifestyle choices, especially with regard to diet and physical activity.
4. To evaluate attitudinal changes in students undergoing the LifeLab experience as part of this project.

The scientists gave a brief overview of the research, allowing the teachers to hear about the cutting edge research happening at the University in their city. The scientists were asked to think about why their research is important to school students (and teachers) and what messages about lifestyle choices they would want the teachers to pass onto their students, enabling the teachers to think how they could use ideas from the research in their teaching in school, both in Science and also PSHE.

We had a good mix of 7 scientists, all speaking for 10mins each. The feedback from the seminar was excellent. The mix of speakers was commented on (scientists/clinicians/surgeons), the ease with which they spoke about their research and the passion which they all obviously felt for their work. There were a number of requests for copies of the slides for use in school. One teacher commented “this really made me remember why I love science”

All the presentations were recorded and the powerpoints with associated audio recordings will be made available to the teachers involved in the project, but they will also be an excellent resource for schools to use.

CPD day 1
The next session held was the CPD day for teachers, covering topics such as:
• “What do we mean by translating research?”
• Modelling how to re-image academic scientific research into classroom resources
• “A taster of LifeLab practical activities”

Current work
The teachers have been writing their modules of work and will teach them this term.

There is a range of topics/main research ideas, including “A healthy heart”, “Strong bones”, “Nutrition”. The teachers have put together a series of lessons, and have incorporated these ideas and lessons plans into student resource booklets to be used in class.

Future work
The modules of work will be taught this term. As part of the module of work, the school students attend a LifeLab day at the University (to be held at the Science Learning Centre SE). Currently we have 7 LifeLab activity days booked in, to be held between October and December.

The LifeLab activity day
This day will be tailored to each module of work, but in general, students will rotate through a series of activities which will be linked by a common theme, namely “how lifestyle choices could impact on their future health and the health of any future children”.

The students may:
• learn how to take measurements to understand how healthy an individual is.
• measure the flow of blood through the carotid artery, linking this to blockages in the artery caused by poor diet.
• extract their own DNA
• learn how to study bone cells and to appreciate the importance of calcium in the diet.

Evaluation
We have previously evaluated knowledge, attitudes and behaviour, using pre and post questionnaires, incorporating the FFQ (Food Frequency Questionnaire) derived from the Southampton Women’s Survey. We will continue to use this method to assess the impact on the students. We will also evaluate through questionnaires, focus groups and in-depth interviews, the impact of involvement in this project on the teachers.