

Research Participant Registry

IMPROVING HEALTH THROUGH RESEARCH

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Dr. Vieira is an assistant professor in the Department of Oral Biology at the University of Pittsburgh School of Dental Medicine. He is a pediatric dentist with a special research interest in the genetics of craniofacial abnormalities. Dr. Vieira is also founding director of the school's Dental Registry and DNA Repository.

RESEARCHER IN THE SPOTLIGHT: ALEXANDRE R. VIEIRA, DDS, PHD

What kinds of people should participate in clinical research?

All kinds! In order to fully understand diseases and medical conditions, we need a wide range of participants in our studies. In addition to participants who may have a particular condition, we need healthy volunteers too, since many of our studies rely on large numbers of healthy individuals to serve as a comparison group. In some cases we may also need entire families to participate in research in order to understand how some of these conditions are inherited in families.

What happens to the information that I provide for a study?

Many people are appropriately concerned about what happens to their personal medical information or samples collected from them for a study. Researchers have a moral, ethical, and legal obligation to ensure that patient data remain confidential and secure. To do this, we use multiple layers of protection. For instance, blood samples are preserved in individually numbered tubes without names. The medical/dental charts are stored separately in a locked file cabinet. The master list matching tube numbers with patient names is secured in yet a third restricted location, usually as a password-protected computer file. We utilize security personnel for our offices, firewall systems for the computer servers, and we lock everything—computers, desks, cabinets, doors, laboratories, freezers—you name it. We rely on the generosity and trust of individuals to participate in our studies, and the least we can do in return is assure that their medical information remains secure.

RESEARCH FINDINGS

As a dentist with specialized training in pediatrics, Dr. Vieira studies the role that genes play in many common childhood dental conditions such as cavities, periodontal (gum) disease, and cleft lip and palate (CL/P). In one study, Dr. Vieira and colleagues studied the incidence of cancer among relatives of people born with CL/P. Using detailed family history questionnaires, molecular genetic tests, and statistical analysis tools, the researchers found a genetic link between CL/P and cancer, particularly colon cancer. Dr. Vieira's research suggests that individuals with relatives affected by CL/P could possibly be at higher risk for developing cancer and should consider measures to reduce that risk, including healthy lifestyle habits and early and aggressive cancer screenings.

The Pitt School of Dental Medicine's Dental Registry and DNA Repository, which Dr. Vieira founded and directs, is thought to be the world's first and only dental DNA bank. So far, more than 1,500 patients have volunteered saliva samples for the Dental Registry. Using the information in the Dental Registry, the Vieira lab has uncovered evidence of an association between having childhood asthma or epilepsy and the development of cavities. Further studies will look for factors that may be contributing to these associations, such as medications, environmental triggers, or genetic influences.

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Fun Dental Facts

\$2 billion—dollar amount spent by Americans each year on Halloween candy; interestingly, also the amount Americans spend each year on toothpaste, mouthwash, and dental floss

164 million—hours of work lost by employed adults each year due to oral health problems or dental visits

2,500—number of bristles on the average toothbrush

80—percent of Americans who have had at least one cavity by age 17. Cavities are the most common chronic disease of childhood.

46—percent of dental care expenditures paid for out-of-pocket

45—number of seconds that the average person brushes. The recommended amount of time is two minutes.

1—age of the recommended first dental visit



For more information and tips on oral health, visit these web sites:

National Institute of Dental and Craniofacial Research
<http://www.nidcr.nih.gov>

The American Dental Health Association
<http://www.ada.org>

RESEARCH STUDIES AVAILABLE

Whose teeth do you have, your mother's or your father's? Dr. Vieira is conducting a study on the contribution of genetics to cavities. Any interested participant over the age of 14 and from the Pittsburgh area is eligible.

For more information or to enroll, please contact the Research Participant Registry Office at 1-866-438-8230.

Assorted Vegetables with Cucumber Yogurt Dip

2 cups plain nonfat yogurt	1 garlic clove, chopped
2 large cucumbers	1 cup cherry tomatoes
1/2 cup nonfat sour cream	1 cup broccoli florets
2 Tbsp chopped fresh parsley	1 cup baby carrots
1 Tbsp lemon juice	1 cup green pepper strips
1 Tbsp chopped fresh dill	

1. Peel, seed, and grate one cucumber.
2. Slice the second cucumber and set aside.
3. Combine grated cucumber, sour cream, lemon juice, parsley, dill, and garlic in a serving bowl.
4. Chill for 1 hour.
5. Arrange tomatoes, cucumbers, broccoli, carrots, and green pepper on a platter and serve with cucumber dip.

Recipe serves 6.
Per serving, 100 calories, 7 grams protein,
18 grams carbohydrate, 0 grams fat, and 2.5 grams fiber

