
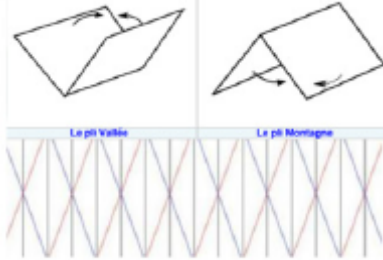
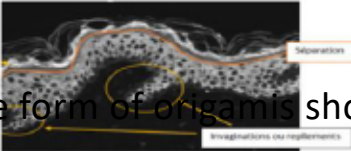





# Structural analogies between origamis models and the skin

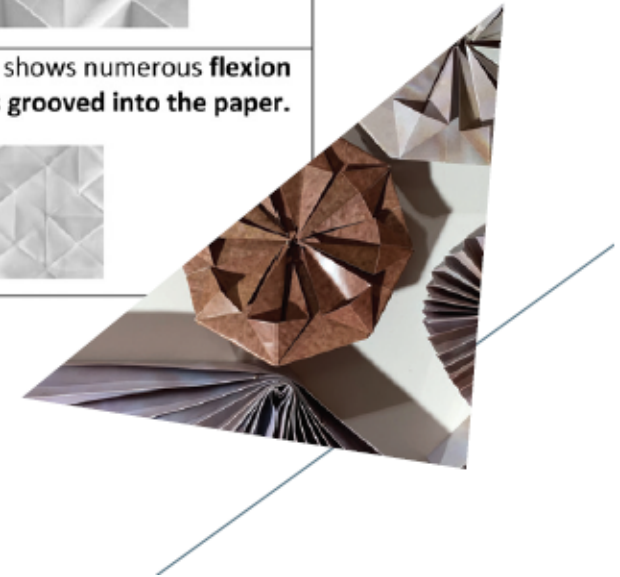
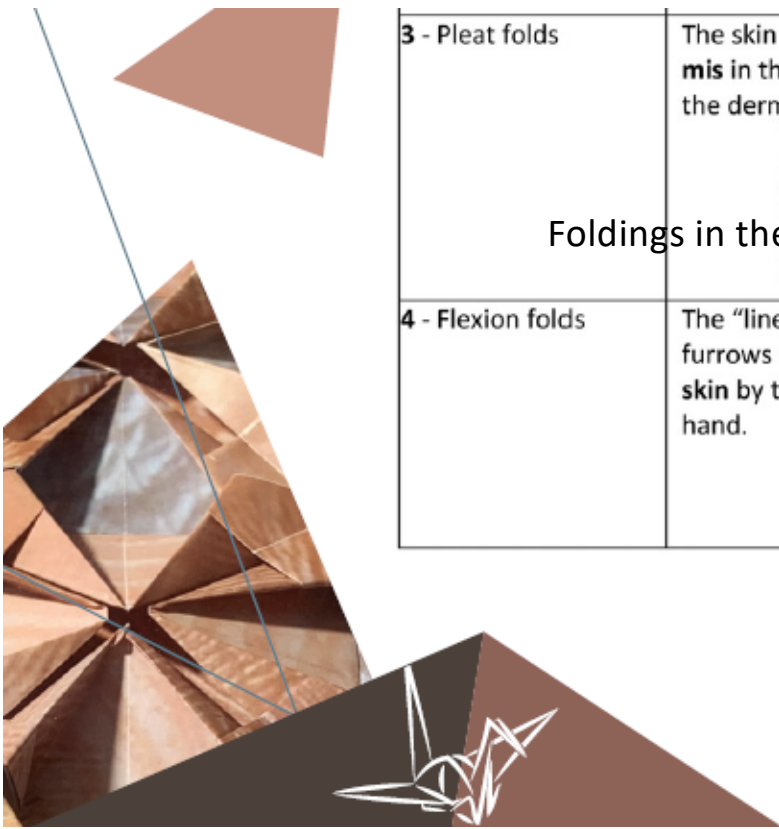
PEAOrigami  
 "SAUVER SA PEAU" /  
 "SAVE YOUR SKIN"  
 Traditional lucky  
 charm origamis  
 for the skin,  
 2019 - 200 x 150

| Similarities  | Structure of the skin   | Structure of origami models   |
|---|---|---|
| 1 - A multi-layered structure                               | The skin is a multi-layered structure formed of <b>three tissue layers</b> :<br>- The <i>epidermis</i> : the surface layer<br>- The <i>dermis</i> , the intermediate layer<br>- The <i>hypodermis</i> , the deep layer.   | Composed origami models use <b>several superimposed layers of washi paper</b>   |
| 2 - Polygonal mosaic appearance and presence of basic folds | The <b>network of surface microdepressions</b> constitutes the basic folds at the skin surface bestowing a mosaic appearance when it is observed under the microscope.<br><br>The basic folds on the skin surface are composed of the network of surface microdepressions which forms a <b>network of furrows of variable depth</b> which groove the surface of the epidermis and demarcate areas of varied geometric shapes.<br><br> | Origami models often begin with the same succession of folds, it is frequently necessary to start from a "base."<br>The fundamental folds in origami are the <b>valley folds and the mountain folds</b> .<br>Using these fundamental folds, a solfeggio of folding lists the figures referred to as " <b>basic folds</b> ." Origami folding plans present a symmetrical <b>mosaic appearance</b> .<br><br> |

# Structural analogies between origamis models and the skin

|                          |  |   |
|--------------------------|--|---|
| <p>3 - Pleat folds</p>   | <p>The skin presents <b>invaginations of the epidermis</b> in the dermis; which creates pleat folds at the dermo-epidermal junction.</p>                                       | <p>Complex origami models include pleat folds and <b>invaginations of the paper</b>.</p>                         |
| <p>4 - Flexion folds</p> | <p>The "lines of the hand" are <b>flexion folds</b>, that is furrows of variable depths, <b>grooved into the skin</b> by the set of multiple osseous joints of the hand.</p>  | <p>An unfolded origami shows numerous <b>flexion folds</b>, that is furrows <b>grooved into the paper</b>.</p>  |

Foldings in the form of origamis show the skin's characteristics




ORIGINAL CONTRIBUTION

# An Educational Artistic Exhibition on the Skin: “PEAUrigami® or SKINorigami”

Corinne Déchelette, PharmD, PhD



ABSTRACT



No other organ in the human body has as many functions as the skin: biologic, cultural, social, and psychologic functions. The skin is a cutaneous paper, more precisely “the paper of self,” which covers our body. Origami is the art of paper folding. SKIN and ORIGAMI, beyond the wordplay around paper, are similar in several respects: the polygonal network, the basic folds, and pleat folding; hence, the idea of producing artwork connecting the cutaneous physiology with the art of origami pays an artistic tribute to the skin. Our artistic and cultural endeavor has an educational purpose to communicate knowledge of the physiology of the skin to different audiences: (1) to an audience of initiates, dermatologists, and scientists who will be able to recognize the basic facts of skin physiology reinterpreted by origami and (2) to the general public who discover the unsuspected complexity of the skin. We first took photographs of different skins, with different magnifications, which were developed on different-sized squares of paper in order to make folded structures. With skin physiology being reinterpreted through origami in this way, we logically called this educational artistic exhibition “PEAUrigami,” associating the French word *peau* (skin) and “origami.” (*SKINmed.* 2019;X:1–6)