

## **list\_update\_select**<sup>11,40</sup>

$\forall T:\text{Type}, l:(T \text{ List}), i:\mathbb{Z}, j:\{0..|l|^{-}\}, x:T.$   
 $l[i:=x][j] = \text{if } (j =_0 i) \text{ then } x \text{ else } l[j] \text{ fi} \in T$