## Appendix S1

## 99 Lives Cat Genome Sequencing Consortium (Domestic cat analysis – whole genome

## sequencing data from 362 cats and whole exome sequencing data from 52 cats)

Reuben M. Buckley<sup>1</sup>, Danielle Aberdein<sup>2</sup>, Marie Abitbol<sup>3</sup>, Paulo C. Alves<sup>4,5</sup>, Asa Ohlsson Andersson<sup>6</sup>, Gregory S. Barsh<sup>7,8</sup>, Rebecca R. Bellone<sup>9,10</sup>, Tomas F. Bergström<sup>11</sup>, Nuket Bilgen<sup>12</sup>, Adam R. Boyko<sup>13</sup>, Jeffrey A. Brockman<sup>14</sup>, Bart J.G. Broeckx<sup>48</sup>, Margret L. Casal<sup>15</sup>, Marta G. Castelhano<sup>16</sup>, Lyndon M. Coghill<sup>47</sup>, Judith Cruzado<sup>49</sup>, Brian W. Davis<sup>17</sup>, Lucy J. Davison<sup>18</sup>, Ottmar Distl<sup>19</sup>, Nicholas H. Dodman<sup>20</sup>, N. Matthew Ellinwood<sup>21</sup>, Jonathan E. Fogle<sup>22</sup>, Oliver P. Forman<sup>23</sup>, Dorian J. Garrick<sup>24</sup>, Edward I. Ginns<sup>25</sup>, Bianca Haase<sup>26</sup>, Gabriele Habacher<sup>52</sup>, Jens Häggström<sup>6</sup>, Robert J. Harvey<sup>27</sup>, Isabel Hernandez<sup>28</sup>, Angie Hibbert<sup>50</sup>, Marjo K. Hytönen<sup>29</sup>, Vidhya Jagannathan<sup>30</sup>, Maria Kaukonen<sup>29</sup>, Christopher B. Kaelin<sup>7,8</sup>, Philippa J.P. Lait<sup>31</sup>, Sorrel Langley-Hobbs<sup>51</sup>, Emilie Leclerc<sup>32</sup>, Teri L. Lear<sup>33</sup>, Tosso Leeb<sup>30</sup>, Ronald H.L. Li<sup>34</sup>, Hannes Lohi<sup>29</sup>, Maria Longeri<sup>35</sup>, Mark A. Magnuson<sup>36</sup>, Richard Malik<sup>37</sup>, Shrinivasrao P. Mane<sup>38</sup>, Rondo Middleton<sup>39</sup>, John S. Munday<sup>2</sup>, William J. Murphy<sup>17</sup>, Alexandra N. Myers<sup>17</sup>, Niels C. Pedersen<sup>40</sup>, Simon M. Peterson-Jones<sup>41</sup>, Max F. Rothschild<sup>42</sup>, Clare Rusbridge<sup>43</sup>, Jeffrey J. Schoenebeck<sup>44</sup>, Joshua A. Stern<sup>40</sup>, Rory J. Todhunter<sup>16</sup>, Wesley C. Warren<sup>45</sup>, Elizabeth A. Wilcox<sup>16</sup>, Julia H. Wildschutte<sup>46</sup>.

INSERM U1217, Université Claude Bernard Lyon I, Institut NeuroMyoGène, 69008, Lyon, France

<sup>&</sup>lt;sup>1</sup>Department of Veterinary Medicine and Surgery, College of Veterinary Medicine, University of Missouri, Columbia, Missouri, 65211 USA

<sup>&</sup>lt;sup>2</sup>School of Veterinary Science, Massey University, Palmerston North 4442 New Zealand

<sup>&</sup>lt;sup>3</sup>Université de Lyon, VetAgro Sup, 69280, Marcy-l'Etoile, France.; Université de Lyon, CNRS UMR5310,

<sup>&</sup>lt;sup>4</sup>CIBIO/InBIO, Centro de Investigação em Biodiversidade e Recursos Genéticos/InBIO Associate Lab & Faculdade de Ciências, Universidade do Porto, Campus e Vairão, 4485–661 Vila do Conde, Portugal

<sup>&</sup>lt;sup>5</sup>Wildlife Biology Program, University of Montana, Missoula, Montana, 59812 USA

<sup>&</sup>lt;sup>6</sup>Department of Clinical Sciences, Faculty of Veterinary Medicine and Animal Science, Swedish University of Agricultural Sciences, Uppsala, SE-750 07 Sweden

<sup>&</sup>lt;sup>7</sup>HudsonAlpha Institute for Biotechnology, Huntsville, Alabama, 35806 USA

<sup>&</sup>lt;sup>8</sup>Department of Genetics, Stanford University, Stanford, California, 94305 USA

<sup>&</sup>lt;sup>9</sup>Veterinary Genetics Laboratory, University of California - Davis, Davis, California, 95616 USA

<sup>&</sup>lt;sup>10</sup>Department of Population Health and Reproduction, University of California - Davis, Davis California, 95616 USA

<sup>&</sup>lt;sup>11</sup>Department of Animal Breeding and Genetics, Swedish University of Agricultural Sciences, 750 07 Uppsala, Sweden

<sup>&</sup>lt;sup>12</sup>Department of Genetics, Veterinary Faculty, Ankara University, 06110 Ankara, Turkey

<sup>&</sup>lt;sup>13</sup>Department of Biomedical Sciences, College of Veterinary Medicine, Cornell University, Ithaca, New York, 14853 USA

<sup>&</sup>lt;sup>14</sup>Hill's Pet Nutrition Inc., Topeka, Kansas 66601 USA

<sup>&</sup>lt;sup>15</sup>Reproduction, and Pediatrics, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, 19104 USA

<sup>&</sup>lt;sup>16</sup>Department of Clinical Sciences, College of Veterinary Medicine, Cornell University, Ithaca, New York, 14853 USA

<sup>&</sup>lt;sup>17</sup>Department of Veterinary Integrative Biosciences, College of Veterinary Medicine, Texas A&M University, College Station, Texas, 77845 USA

<sup>&</sup>lt;sup>18</sup>Clinical Sciences and Services, Royal Veterinary College, Hawkshead Lane, North Mymms, Hertfordshire, AL9 7TA United Kingdom

- <sup>19</sup>Institute for Animal Breeding and Genetics, University of Veterinary Medicine Hannover, 30559, Hannover, Germany
- <sup>20</sup>Department of Clinical Sciences, Cummings School of Veterinary Medicine, Tufts University, Grafton, MA, 01536 USA
- <sup>21</sup>National MPS Society, PO Box 14696, Durham, North Carolina 27709 USA
- <sup>22</sup>Department of Population Health and Pathobiology, College of Veterinary Medicine, North Carolina State University, Raleigh, North Carolina, 27607 USA
- <sup>23</sup>WALTHAM Centre for Pet Nutrition, Freeby Lane, Waltham on the Wolds, Leicestershire, LE14 4RT United Kingdom
- <sup>24</sup>AL Rae Centre of Genetics and Breeding, Massey University, Palmerston North, 4442, New Zealand
- <sup>25</sup>Department of Psychiatry, University of Massachusetts Medical School, Worcester, MA, 01655 USA
- <sup>26</sup>Sydney School of Veterinary Science, Faculty of Science, University of Sydney, Sydney, NSW, 2006 Australia <sup>27</sup>School of Health and Behavioural Sciences, University of the Sunshine Coast, Sippy Downs, Queensland, 4558 Australia
- <sup>28</sup>Pediatrics and Medical Genetics Service, College of Veterinary Medicine, Cornell University, Ithaca, New York, 14853 USA
- <sup>29</sup>Department of Veterinary Biosciences; Department of Medical and Clinical Genetics, University of Helsinki and Folkhälsan Research Center, Helsinki 00014 Finland
- <sup>30</sup>Vetsuisse Faculty, Institute of Genetics, University of Bern, 3001 Bern, Switzerland
- <sup>31</sup>Langford Vets, University of Bristol, Langford, Bristol, BS40 5DU United Kingdom
- <sup>32</sup>SPF Diana Pet food Symrise Group 56250 Elven, France
- <sup>33</sup>Department of Veterinary Science, University of Kentucky Lexington, Lexington, Kentucky, 40506 USA (*In memoriam*)
- <sup>34</sup>Department of Surgical and Radiological Sciences, School of Veterinary Medicine, University of California Davis, One Shields Ave, Davis, California, 95616 USA
- <sup>35</sup>Dipartimento di Medicina Veterinaria, University of Milan, 20122 Milan, Italy
- <sup>36</sup>Departments of Molecular Physiology and Biophysics, Cell and Developmental Biology, and Medicine,
- Vanderbilt University, School of Medicine, Nashville, Tennessee, 37232 USA
- <sup>37</sup>Centre for Veterinary Education, University of Sydney, Sydney, NSW, 2006 Australia
- <sup>38</sup>Elanco Animal Health, Greenfield, Indiana, 46140 USA
- <sup>39</sup>Nestlé Purina Research, Saint Louis, Missouri, 63164 USA
- <sup>40</sup>Department of Medicine and Epidemiology, School of Veterinary Medicine, University of California at Davis, Davis, California, 95616 USA
- <sup>41</sup>Small Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University, East Lansing, Michigan, 48824 USA
- <sup>42</sup>Department of Animal Science, College of Agriculture and Life Sciences, Iowa State University, Ames, Iowa, 50011 USA
- <sup>43</sup>School of Veterinary Medicine, Faculty of Health & Medical Sciences, University of Surrey, Guildford, Surrey, GU2 7AL United Kingdom
- <sup>44</sup>Royal (Dick) School of Veterinary Studies and Roslin Institute, University of Edinburgh, Easter Bush, Midlothian EH25 9RG United Kingdom
- <sup>45</sup>Division of Animal Sciences, College of Agriculture, Food and Natural Resources; School of Medicine, University of Missouri, Columbia, Missouri 65211 USA
- <sup>46</sup>Bowling Green State University, Department of Biological Sciences, Bowling Green, Ohio, 43403 USA
- <sup>47</sup>Department of Veterinary Pathobiology, College of Veterinary Medicine, University of Missouri, Columbia, Missouri, 65211 USA
- <sup>48</sup>Department of Veterinary and Biosciences, Ghent University, Merelbeke 9820, Belgium
- <sup>49</sup>Southern Counties Veterinary Specialists, Unit 6, Forest Corner Farm, Hangersley, Ringwood, Hampshire, BH24 3JW, United Kingdom
- <sup>50</sup>The Feline Centre, Langford Vets, Langford, Bristol, United Kingdom
- <sup>51</sup>Bristol Veterinary School, University of Bristol, Langford, Bristol, United Kingdom
- <sup>52</sup>Raddenstiles Veterinary Surgery, CVS UK Ltd, Liverton Business Park, Salterton Road, Exmouth, EX8 2NR, United Kingdom