Dear Doctor,

As you know, Golden Retrievers have a high incidence of cancer, with a 1998 Health Survey indicating that 57% of females and 66% of males will be affected. While many types of cancer are elevated in the breed, approximately half of the totals are lymphoma (1 in 8 Goldens) and hemangiosarcoma (1 in 5 Goldens).

The Golden Retriever Club of America and the Golden Retriever Foundation have dedicated significant resources to improving Golden health, and are actively supporting numerous research studies investigating cancer in the breed. We are pleased to see results of these studies regularly published in premier medical journals, and translated into improved care opportunities. For example, a recently published study (Modiano JF, Breen M, Burnett RC, Parker HG, Inusah S, Thomas R, Avery PR, Lindblad-Toh K, Ostrander EA, Cutter GC, Avery AC Distinct B-cell and T-cell lymphoproliferative disease prevalence among dog breeds indicates heritable risk. Cancer Res. 2005 Jul 1;65(13):5654-61.) shows that unlike published averages for all breeds (67% B-cell, 27% T-cell), Golden Retriever lymphomas are more heavily weighted toward T-cell disease (54%) rather than B-cell disease (46%). This information has the potential to impact therapy decisions, as owners and veterinarians can take breed specific data into consideration when they explore treatment options.

In addition to financial support, we also aid researchers in obtaining vital tissue and/or blood samples from affected dogs. Along with this letter we have supplied a Cancer Sample Donation Chart with contact information for several of the programs investigating various cancers in Golden Retrievers. Owners do not need to be members of GRCA to participate, and we find that many owners are comforted to know that samples from their affected dog may benefit other dogs in the future. We hope that you will consider discussing sample donation with your clients when their Golden Retriever is diagnosed with (or suspected of having) cancer.

Thank you for your consideration of this request, and please feel free to contact us or refer your clients to us for further information.

Sincerely,

The Health & Genetics Committee
Golden Retriever Club of America

Correspondence to: Rhonda Hovan, GRCA Research Facilitator
rhondahovan@aol.com
330-668-0044 or 330-338-4236
Contact Information for Participation in Golden Retriever Cancer Research

Please print this page and ask to have it put in your dog’s veterinary chart for immediate access in an emergency.

<table>
<thead>
<tr>
<th>Willing to Donate:</th>
<th>Lymphoma</th>
<th>Hemangiosarcoma, osteosarcoma, melanoma</th>
<th>Brain tumor</th>
<th>Malignant histiocytosis</th>
<th>Mast cell tumor, mammary tumor</th>
<th>Unknown or other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood &amp; tissue</td>
<td># 1 and/or # 5</td>
<td># 1</td>
<td># 2</td>
<td># 2</td>
<td>n/a</td>
<td>See Notes Below</td>
</tr>
<tr>
<td>Blood only</td>
<td># 1 and/or # 3* or # 4*</td>
<td># 1 and/or # 4</td>
<td># 4</td>
<td># 3</td>
<td># 4</td>
<td>See Notes Below</td>
</tr>
</tbody>
</table>

*if dog will not be treated, or is already undergoing treatment, and tumor was phenotyped, send blood for T-cell tumors to # 3, blood for B-cell tumors to # 4. Otherwise contact # 1 for eligibility to participate.

# 1 Jaime Modiano, VMD, PhD
Website: www.modianolab.org
Email: Info@modianolab.org
Phone: 303-239-3327 or 303-239-3408

# 2 Matthew Breen, PhD
Website: http://www.cvm.ncsu.edu/mbs/breen_matthew.htm
Email: CVM_K9Genomics@ncsu.edu

# 3 Elaine Ostrander, PhD
Sample Coordinator: Dana Mosher
Email: Mosherd@mail.nih.gov
Phone: 301-451-9390

# 4 Kerstin Lindblad-Toh, PhD
Website: http://www.broad.mit.edu/mammals/dog/donate.html
Sample Coordinator: Joanne Lai
Email: Dog-info@broad.mit.edu

# 5 Ed Breitschwerdt, DVM
Sample Coordinator: Ashlee Duncan
Email: awduncan@unity.ncsu.edu
Phone: 919-513-8279 or 919-513-1277

Additional Notes

- Participation in some studies may be limited based on eligibility and availability of research funds
- Handling of tissue samples is time sensitive and must follow specific protocols. Please contact the research lab as early as possible before collecting the sample to make arrangements.
- Most consent forms will ask you to sign or check a box to permit sharing of samples. Please sign or check the box to give this permission.
- If you are not certain who to contact, or would like to discuss options further, please contact the GRCA Research Facilitator, Rhonda Hovan, at rhondahovan@aol.com or 330-668-0044 or 330-338-4236.
- In addition to participating in the above current studies, blood can be stored in the OFA DNA bank to for use in research for decades to come. We encourage owners to participate, with further instructions available at http://www.caninehealthinfo.org/dnabank.html
- Unaffected dogs over the age of 10 can also participate by submitting a blood sample to Dr Kerstin Lindblad-Toh (# 4).

01/01/06