

Science for environmental solutions

# JOSHUA R. GINSBERG

#### **Education**

- Ph.D. Biology, Princeton University, January 1988
- M.A. Biology, Princeton University, March 1984
- Ph.D. Program, Dept. of Zoology, University of Cambridge, 1981/2 (transfer to Princeton)
- B.S. Yale University, May 1980, cum laude, Distinction in Geology (Paleontology)

## **Management Experience**

### **Cary Institute of Ecosystem Studies**

#### 2014-Present

#### President, Cary Institute of Ecosystem Studies:

As President, I am responsible for leadership and oversight of the Cary Institute of Ecosystem Studies, an independent institution located on 2,000-acres of recovering forests in New York's Hudson Valley. With an annual budget of over \$14 million, and an endowment of \$115 million, the Institute has a staff of over 100, including a core scientific staff of 14 Ph.D. scientists, who are joined by dozens of emeritus scientists, postdoctoral researchers, graduate and undergraduate students. The Institute is a world-class center for ecosystem science. With projects in 26 countries, our focal areas include: the ecosystem-level impacts of climate change; freshwater ecosystems and provisioning; disease ecology and the drivers of emerging infectious disease; invasive species ecology and impact; and urban ecology and sustainability. The science program is complemented by the Cary Institute's renowned education, communication, and outreach initiatives.

### Wildlife Conservation Society

#### 2010-2014

Senior Vice President, Global Conservation Program. The position was created in 2010 to take on the direct line management of the Global Program's five regional programs (North America, Asia, Africa, Latin America, and Marine) and the management and technical programs that supported them (Conservation Operations and Conservation Support). In 2013, the oversight of the Wildlife Health Program was added to my portfolio. I also oversaw the Division's \$87 million (FY14) budget and was an active participant in fund raising from private individuals, foundations, and government and agency sources. In 2013, I led the Science Subcommittee of the institutional strategic planning process overseen by CEO, Cristián Samper.

2004 - 2009

<u>Vice-President, Conservation Operations</u>. This position was created in 2004 to ensure the development and implementation of management systems to support the WCS Global Conservation Program that spans 52 countries with 2500 staff. Reporting to the Executive Vice-President, Conservation and Science, I was responsible for coordination with other divisions (Development, IT, OGC, Finance and Budget, HR), for development and management of the GCP budget (>\$60 million in FY08) and for overseeing monitoring and evaluation of our field projects and programs. My position also included chairing the Strategic Planning and Review Coordination committee (SPARC) overseeing strategic planning at the global, regional, national, and landscape levels, and integration of planning with management systems. The position entailed significant interaction with, and representation to, the Board, partner organizations and governments, and colleagues around the world.

1996-2004

<u>Director, Asia and Pacific Programs</u>. Responsible for program development and administration of a portfolio of conservation projects and programs in 17 Asian countries in Central Asia, East and Southeast Asia, and the Pacific. Activities covered a wide range of topics, from implementation of a Masterplan for Wildlife in Sarawak, community based conservation programs in Papua New Guinea, to research and conservation of tigers in Nagrahole National Park, India and the Russian Far East. The Asia Program budget grew from \$1.5 million in FY '97 to \$7.5 million in FY '05. I had 17 direct reports, and a total staff of 350 in the region. Responsibilities included extensive contact with and management of donors, developing new funding sources, and representing the Society internationally (e.g. CITES, IUCN).

Mar-Dec. 2002

<u>Director (Acting) Africa Program</u>. Concurrently with Asia Program activities, I was responsible for program development and administration of a portfolio of conservation programs in 14 African countries, overseeing a budget of \$6 million in FY '03 and planning a budget of \$15 million in FY '04.

### **Other Organizations**

2013-2017

| 2018-Present | <u>Foundation for Community Health</u> : Board of Directors.   |
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| 2017-Present | TRAFFIC International: Board of Directors.   |
| 2017-Present | Salisbury Forum: Board of Directors.   |
| 2017-Present | Scenic Hudson, Inc.: Science, Climate, and Stewardship Committee.  |
| 2016-Present | American Museum of Natural History, Center for Biodiversity and Conservation: Member, Advisory Council.  |
| 2016; 2017   | Smithsonian Environmental Research Center: Member, Review Panel.   |
| 2014-Present | <u>The Ocean Foundation</u> : Board member, Treasurer. A community foundation with a mission to support, strengthen, and promote organizations dedicated to reversing the trend of destruction of ocean environments around the world. |

<u>Foundation for the Exhibition of Photography</u>: Board member. The Foundation develops and tours photographic exhibits worldwide.

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| 2011-Present | Open Space Institute: Board member. Executive Committee member (2016-2019). Chair, Conservation Capital Committee (2012-present), Chair, Land Protection Impact Assessment Review Committee (2019-present). OSI is dedicated to land protection, management, and conservation.  |
| 2011-2017    | <u>Catskill Mountainkeeper</u> : Board member. CMK is dedicated to the protection and sustainable development of the Catskills.   |
| 1999-2015    | <u>Blacksmith Institute Pure Earth</u> : Founding Board member. NGO focusing on pollution remediation in the developing world.  |
| 2004- 2007   | <u>Video Volunteers</u> : Founding Board member of a start-up NGO focusing on empowerment of the voiceless through digital video.   |
| 2001-2013    | <b>NOAA-NMFS</b> : Chairman (2001-2007) and member of the NOAA-National Marine Fisheries Service (NMFS) Hawaiian Monk Seal Recovery Team. As Chairman, I led on the first revision of the species Recovery Plan in two decades.   |
| 1997         | NOAA/NMFS: Chairman Hawaiian Monk Seal Captive Care Review Panel.   |
| 1995-1996    | <b>USAID-AAAS</b> : American Association for the Advancement of Science (AAAS) Diplomacy Fellow, Office of Donor Partnerships, Bureau for Policy and Program Coordination (PPC), USAID, Washington. Office responsible for coordinating USAID's policies with those of all other multi-lateral and bilateral donors. Also served as advisor to the Director of PPC's Environment Division on matters relating to CITES and African biodiversity issues. |
| 1995         | <b>RSPCA</b> : On contract to the Zoological Society of London, consultant to the Royal Society for the Protection of Animals on a study of methods to control an introduced population of macaques on the island of Mauritius.   |
| 1995-2001    | <b>National Foundation for Integrative Medicine</b> : Berkeley, California. Board member.   |
| 1990-2001    | IUCN: Deputy Chairman, IUCN-SSC Canid Specialist Group.   |
| 1989- 2001   | IUCN: Member, Equid, Reintroductions & Captive Breeding Specialist Groups.  |
| 1994-95      | <b>IUCN</b> : Member, IUCN Data Management System Vision & Technical Working Groups.  |
| 1994         | <b>IUCN</b> : Member, IUCN Delegation, CITES 9th Meeting of the Conference of the Parties, Ft. Lauderdale. Expert on Criteria, Confiscation Guidelines.   |
| 1993-1994    | <b>IUCN</b> : Member, IUCN Categories of Threat Drafting Group, Georgina Mace, Chair.   |
| 1993         | <b>IUCN</b> : Chairman, Reintroduction Specialist Group Committee on Disposition of Confiscated Animals. Author of Draft Guidelines to be used by IUCN and as a basis for CITES Draft Resolution DOC. 9.55 Annex I.   |
| 1992-1997    | Biodiversity Foundation for Africa: (Bulawayo Museum) Board of Advisors.  |
| 1992-1997    | Hwange Conservation Trust, Zimbabwe: Trustee.   |

# Academic & Scientific Experience

| 2015-Present | Rutgers, The State University of New Jersey. Faculty, Ecology and Evolution Graduate Program, School of Environmental and Biological Sciences, New Brunswick, New Jersey.  |
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| 1998-Present | Columbia University. School of International and Public Affairs (SIPA); Department of Evolution, Ecology and Environmental Biology (E3B); Consortium for Environmental Research and Conservation (CERC). As a Full Professor (adjunct) I have supervised 11 Masters students, and six Ph.D. students, served on 12 Ph.D. committees, annually co-taught the core course in conservation biology for Masters and Ph.D. students (two terms, 1998-2010), and have served on faculty search committees. I also served on the Management committee of CERC for 5 years. From 2009 to 2014, I taught a course on International Environmental Policy at the School of International and Public Affairs (SIPA), and in 2013, I taught a graduate seminar in E3B on Emerging Issues in Conservation Biology. |
| 1991- 1996   | Institute of Zoology, Zoological Society of London. For four years, I held the position of Research Fellow in Ecology overseeing the work of three Ph.D. students and conducting ecologically focused research in Africa.  |
| 1993-1995    | <b>University College London, Department of Biology</b> . Honorary Research Fellow and Lecturer teaching both undergraduate and M.Sc. courses in Conservation Biology.   |
| 1987 to 1991 | Oxford University, Department of Zoology. I held an appointment in the Department of Zoology as a Research Fellow, supported by a N.A.T.O. Post-doctoral Fellowship, and then as the Guy Newton Junior Research Fellow, Wolfson College. In 1991, I held a fill-in appointment as a Visiting Lecturer teaching 18 lectures on the biology of mammals.  |
| 1986 to 1987 | <b>Natural Resources Defense Council</b> . Consultant for World Bank proposal for livestock development in Botswana.   |
| 1989-1994    | <b>African Wild Dog Research Project, Zimbabwe</b> . I was Principal Investigator on a study of the conservation biology of the endangered African wild dog, <i>Lycaon pictus</i> . I led a research team of two graduate students and one full time research assistant. Project completed March, 1994.  |
| 1983 - 1993  | <b>Grevy's Zebra Research Project</b> . I was Principal Investigator on a study of the behavior, ecology, and conservation of the Grevy's zebra in Kenya. The study served as the subject of my Ph.D., and then was followed up on by two Ph.D. students.  |
| 1980 to 1981 | <b>Henry Luce Scholar</b> . Fellowship providing support for one year's work in which I served as a naturalist in the Thai National Parks service, based in Taurtao National Park.   |
| 1980 to 1981 | <b>Sea Turtle Conservation, Tarutao Thailand</b> . While a Luce Scholar, I raised funds for research on endangered sea turtles, and was co-Principal Investigator, of World Wildlife Fund (International) Project 1816.  |

#### **Editorial Boards**

| 1999-2004 | <b>Animal Conservation</b> , journal of the Zoological Society of London. Editorial Board.  |
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| 1996-2006 | <b>Conservation Biology</b> , journal of the Society for Conservation Biology. For a decade, I served as one of two Associate Editors with the responsibility of conceiving, commissioning, and editing <i>Issues in International Conservation</i> . |
| 1993-2018 | Oryx, journal of the Flora and Fauna Preservation Society, Editorial Board.   |

### **Journal & Press Reviews**

American Naturalist, Animal Behavior, Animal Conservation, BBC Wildlife, Biological Conservation, BioScience, Conservation Biology, Ecological Applications, Ecological Economics, Environmental Management, Global Crime, Human Ecology, Journal of Animal Ecology, Journal of Tropical Ecology, MBG Annals, Nature, Oryx, PLoS Biology, PLOS One, Proceedings of the National Academy of Sciences, Proceedings of the Royal Society: Biological Sciences, Science, Zoo Biology, Cambridge University Press, Princeton University Press, National Geographic, Scholastic Press.

## Talks, Workshops, and Committees (selected)

| 2019         | American Planning Association Meeting, MD, Invited Lecture, 3 May  |
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| 2019         | Gund Institute, University of Vermont, Burlington, VT, Invited Lecture, 19 April   |
| 2019         | Archbold Biological Station, Venus, FL, Invited Lecture, 24 January  |
| 2018         | Wallace Center, FDR Library, Hyde Park, NY, Member, Lyme Disease Panel, 29 October   |
| 2018         | Cornell University, Ithaca, NY, Invited Lecture, 2 October   |
| 2018         | Ecological Society of America, 103 <sup>rd</sup> Annual Meeting, New Orleans, LA, Lecture, 6 August  |
| 2018         | Society for Conservation Biology, 29 <sup>th</sup> Int'l. Congress for Conservation Biology, Toronto, Ontario, Canada, Lecture, 25 July                      |
| 2017         | Hotchkiss School, Summer Portals Environmental Science Program, Invited Lecture, 7 July  |
| 2017         | Vassar College, Conservation Leaders of Tomorrow Conference, Panel Member, 20 April  |
| 2017         | Harvard University, Harvard Planetary Health Alliance Meeting, Invited Speaker, 28-20 April  |
| 2017         | University at Albany, SUNY, Albany, Invited Falconer Lecture Series, 4 April   |
| 2017-Present | Cary Institute of Ecosystem Studies, Fundamentals of Ecosystem Ecology Graduate Course Lecture, <i>The "New" Conservation Science</i> , Annually in January. |

| 2016 | Catskill Environmental Research & Monitoring Conference, Highmount, NY, Keynote Speaker, 27-28 October   |
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| 2016 | University at Albany, SUNY, Albany, NY, Commencement Speaker, Department of Atmospheric an Environmental Science, 14 May   |
| 2016 | Florida International University, the <i>Our Common Future</i> lecture series, Donald Blechman memorial lecture, 26 April  |
| 2016 | Columbia University, School of International and Public Affairs, New York, NY, Invited Lecture, 28 March   |
| 2016 | Cary Institute of Ecosystem Studies, Millbrook, NY, Public Lecture, <i>Roaring Back, The Fragile Global Recovery of Large Carnivores</i> , 19 February                               |
| 2016 | Cary Institute of Ecosystem Studies, Fundamentals of Ecosystem Ecology Graduate Course Lecture, <i>The "New" Conservation Science</i> , 8 January                                    |
| 2015 | Cary Institute of Ecosystem Studies, Fundamentals of Ecosystem Ecology, Graduate Course. Lecture, New Conservation NGO Response  |
| 2015 | Bard College, Environmental Science Colloquium, Invited speaker  |
| 2015 | Columbia University, Instruction/Lecturer, 9 March   |
| 2015 | Hotchkiss School, Summer Portals Environmental Science Program, Invited Lecture, 29 June   |
| 2014 | University of Georgia, Athens. Invited speaker, Center for Integrative Conservation Research and the Owens Institute for Behavioral Research.  |
| 2013 | Zoological Society of London. Plenary Speaker, Symposium Carnivore<br>Energetics and Macroecology. Paper on status of the world's large carnivores.                                  |
| 2011 | Bloomberg LLP, Earth Day celebration. Invited speaker on deforestation.  |
| 2010 | NRDC Visionary Speaker Series. <i>Time, Space and the Scale of Conservation</i> .  |
| 2010 | Fordham University, Conservation Conversations 2. Invited speaker. Paper title: How long is perpetuity?  |
| 2010 | Dumbarton Oaks, Garden and Landscape Studies. Designing Wildlife Habitats: A Symposium. Paper title: <i>The Impact of Ecology and Spatial Scale on Designing Wildlife Habitats</i> . |
| 2008 | Princeton Environmental Institute Grand Challenges Program, Panelist and Invited speaker, panel on rural poverty, land use, biodiversity and water in Africa.                        |
| 2007 | Pace University, Department of Biology and Health Science. Invited speaker.  |
| 2006 | Conference on Management of Conflicts between Wildlife and Human Resource Use. Plenary speaker. Leipzig 25-27th January 2006.  |

Languages French (adequate), Kenyan Swahili (basic), Thai (very rusty)

## Grants

| 2000 to 2014<br>1996-2003 | Global Conservation Program, WCS: Overall responsibility for management of Global budgets. In 2013, Global Programs closed books at \$83 million dollars with grants from government and multilateral agencies, foundations, corporations, and private individuals.  Asia Program, WCS: Overall responsibility for management of programs with |
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|                           | grants from government and multilateral agencies, foundations, corporations and private individuals. Budget grew from \$1.5 million to \$7 million in this time.   |
| 1995                      | <u>Dances for Elephants</u> : Funds to conduct survey of Grevy's zebra in Northern Kenya, June/July 1995.  |
| 1994                      | The Royal Society: Overseas Travel Grant to attend meetings in Mexico.   |
| 1993                      | EEC Human Capital and Mobility Grant: Grant to JRG and Daniela De Luca for Ph.D. Studentship to study banded mongoose ecology and behavior.  |
| 1993                      | NERC Life & Terrestrial Sciences: Grant to JRG and Dr. R. Woodroffe to study evolution of plural breeding in banded mongoose.  |
| 1990-1993                 | Wildlife Conservation International: Two grants to study wild dogs.  |
| 1992                      | <u>The Royal Society</u> : Overseas Research Fund grant to study genetic and social implications of dispersal in wild dogs.  |
| 1989-1993                 | National Geographic Society: Two grants to study wild dogs.  |
| 1989-1990                 | People's Trust for Endangered Species (UK): grant to study wild dogs.  |
| 1989-1990                 | American Philosophical Society: funds to study wild dogs.  |
| 1989-1990                 | Chicago Zoological Society: funds for field assistant on wild dog project.   |
| 1984 to 1985              | New York Zoological Society: grant to fund zebra study.  |
| 1983 to 1985              | National Geographic Society: two grants to fund zebra research.  |
| 1981 to 1982              | World Wildlife Fund/ IUCN Project 1816: grant to study sea turtles and conservation of natural resources in Tarutao National Park, Thailand.   |

# **Reviewed Publications**

| 2018 | Wynn-Grant, R., J. Ginsberg, C. Lackey, E. Sterling, and J. Beckmann. Risky business: Modeling mortality risk near the urban-wildland interface for a large carnivore. Global Ecology and Conservation 16:e00443. <a href="https://doi.org/10.1016/j.gecco.2018.e00443">https://doi.org/10.1016/j.gecco.2018.e00443</a>   |
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| 2017 | Ginsberg, J.R. When protected areas prove insufficient: Cheetah and "protection-reliant" species. PNAS 114(3):430-431. Doi/10.1073/pnas.1619817114  |
| 2016 | Yackulic, C.B. and J.R. Ginsberg. The scaling of geographic ranges: Implications for species distribution models. Landscape Ecology 31(6):1195-1208. <a href="http://dx.doi.org/10.1007/s10980-015-0333-y">http://dx.doi.org/10.1007/s10980-015-0333-y</a>  |
| 2016 | Rossi Lafferriere, N.A., R. Antelo, F. Alda, D. Mårtensson, F. Hailer, S. Castroviejo-Fisher, J. Ayarzagüena, J.R. Ginsberg, J. Castroviejo, I. Doadrio, C. Vilá, and G. Amato. Multiple paternity in a reintroduced population of the Orinoco Crocodile ( <i>Crocodylus intermedius</i> ) at the El Frio Biological Station, Venezuela. PLOS ONE 11(3):e0150245. <a href="http://dx.doi.org/10.1371/journal.pone.0150245">http://dx.doi.org/10.1371/journal.pone.0150245</a> |







| 1990 | Chaudury, M. and J.R. Ginsberg. Urinary testosterone concentrations and social status in two species of free ranging zebra. Journal of Reproduction and Fertility 88: 127-133. |
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| 1989 | Ginsberg, J.R. The ecology of female behaviour and male reproductive success in the Grevy's zebra, <i>Equus grevyi</i> . Zoological Society (London) Symposia 61: 89-110.      |
| 1989 | Ginsberg, J.R. and U.W. Huck. Sperm competition in mammals. Trends in Ecology and Evolution 4: 74-79.  |
| 1987 | Ginsberg, J.R. What is conservation biology. Trends in Ecology and Evolution 2: 262 264.   |
| 1982 | Ginsberg, J.R. Status of sea turtles in Tarutao National Park. Tigerpaper 8: 27-9.   |

## **Selected Popular Publications and Reports**

IUCN, Switzerland.

| 2014 | Wilkie, D. and J. Ginsberg. 2014. Why adoption of the medical model would cure conservation impact evaluation. Conservation Magazine. February 2014.   |
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| 2006 | Dinerstein, E., C. Loucks, A. Heydlauff, E. Wikramanayake, G. Bryja, J. Forrest, J. Ginsberg, S. Klenzendorf, P. Leimgruber, T. O'Brien, E. Sanderson, J. Seidensticker, and M. Songer. Setting Priorities for the Conservation and Recovery of Wild Tigers: 2005–2015. A User's Guide. WWF, WCS, Smithsonian, and NFWF-STF, Washington, DC, and New York, USA [http://www.savethetigerfund.org/AM/Template.cfm?Section= Full_Reports] |
| 2006 | Sanderson, E., J. Forrest, C. Loucks, J. Ginsberg, E. Dinerstein, J. Seidensticker, P. Leimgruber, M. Songer, A. Heydlauff, T. O'Brien, G. Bryja,S. Klenzendorf, and E. Wikramanayake. Setting Priorities for the Conservation and Recovery of Wild Tigers: 2005–2015. The Technical Assessment. New York, NY and Washington, DC, USA: WCS, WWF, Smithsonian, and NFWFSTF.   |
| 1998 | Williams, S. and J.R. Ginsberg. Grave times for Grevy's zebra. Natural History. 3/98.  |
| 1997 | Fanshawe, J.H., J.R. Ginsberg, and R. Woodroffe. Literature on <i>Lycaon pictus</i> . Pp. 148-158. In: R. Woodroffe, J.R. Ginsberg, and D.W. Macdonald (Eds.). The African Wild Dog: Status Survey and Conservation Action Plan. IUCN, Switzerland.  |
| 1997 | Fanshawe, J.H., J.R. Ginsberg, C. Sillero-Zubiri, and R. Woodroffe. The status and distribution of remaining wild dog populations. Pp. 11-57. In: R. Woodroffe, J.R. Ginsberg, and D.W. Macdonald (Eds.). The African Wild Dog: Status Survey and Conservation Action Plan. IUCN, Switzerland.   |
| 1997 | Ginsberg, J.R. and R. Woodroffe. Extinction risks faced by remaining wild dog populations. Pp. 75-87. In: R. Woodroffe, J.R. Ginsberg, and D.W. Macdonald (Eds.). The African Wild Dog: Status Survey and Conservation Action Plan. IUCN, Switzerland.   |
| 1997 | Woodroffe, R. and J.R. Ginsberg. Past and future causes of wild dogs' population   |

decline. Pp. 58-74. In: R. Woodroffe, J.R. Ginsberg, and D.W. Macdonald (Eds.). The African Wild Dog: Status Survey and Conservation Action Plan.

