

* Unofficial translation. In case of any doubt, the original French text prevails.

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Summary

Set up by our Faculty's Delegate for integrity in accordance with the guidelines of the Swiss Academy of Medical Sciences, the Fact-Finding Commission has investigated allegations of breaches of scientific integrity made against Prof. Ragnar Rylander, associate professor at the University of Geneva, within the framework of the complaint for defamation filed by Prof. Rylander against Mr. Pascal Diethelm and Dr. Jean-Charles Rielle. It will be recalled that on 15 December 2003 the *Cour de Justice* [Court of Appeal], as the court of last instance, ruled that Messrs. Diethelm and Rielle had demonstrated the veracity of their allegations, dismissing Prof. Rylander's claims in their entirety.

On the basis of its inquiry, the present Commission has reached the following conclusions with regard to the activities on the effects of passive smoking carried out by Prof. Rylander in his capacity as a researcher and an expert:

Prof. Rylander cannot be considered as an independent researcher vis-à-vis the tobacco industry since he maintained long-standing and largely secret links with it as its consultant. Numerous documents show that Prof. Rylander took no initiatives in that field without consulting extensively his contacts within the tobacco industry, in particular the Philip Morris company; these included scientists employed by Philip Morris, as well as jurists from a law firm defending industry interests.

Epidemiological studies on passive smoking conducted by Prof. Rylander were undertaken in response to tobacco industry initiatives; they were intended to strengthen scepticism with regard to the effects of passive smoking, according to a strategic logic defined by the industry.

In addition, Prof. Rylander worked as a sponsored agent and not as an independent researcher in the following fields:

- as expert, e.g. in relation to the U.S. Environmental Protection Agency (EPA);
- as organiser of scientific gatherings on passive smoking;
- as Philip Morris's representative at one of its laboratories engaged in partly secret research on passive smoking;
- as influencing agent, calling on a University (Hong Kong) to grant a significant promotion to a researcher who was herself in the service of the tobacco industry, with a view to providing the industry with an academic platform in Asia.

It should be noted that:

- (a) at no time did the Commission criticise Prof. Rylander's opinions as such, or the fact that he accepted research funding from the tobacco industry;
- (b) the Commission did not consider Prof. Rylander's activities unrelated to the issue of smoking.

On the other hand, the Commission is of the opinion that *dissimulating* the true extent of dependent ties with the tobacco industry and *aligning* his activities as researcher and expert in tobacco-related issues with the industry's strategic objectives, constitute a violation of scientific integrity that the public and his peers are entitled to expect from a university researcher.

The Commission considers it part of its role to propose measures to compensate for the damage caused by Prof. Rylander's violations of the principles of scientific integrity and above all to prevent similar problems from arising in future. To this end, it proposes the following five measures:

1. The scientific community and the general public must be told that serious suspicion hangs over Ragnar Rylander's studies on the effects of environmental tobacco smoke on health because

the author has not disclosed conflicts of interest that may influence the significance of his research and that, given his role as secret employee of the industry, he cannot be considered as an independent scientist. The Fact-Finding Commission proposes that notification to this effect be sent to the following journals:

- European Journal of Public Health
- Archives of Environmental Health
- International Journal of Epidemiology
- 2. Prof. Rylander's infringements of scientific integrity take on their full significance only when viewed within the framework of a strategy devised and conducted by the tobacco industry to cast doubt on the toxicity of tobacco smoke, particularly for non-smokers. The case of one person should not make us forget that the most unforgivable fault lies with an institutional and commercial force, the tobacco industry, whose objectives and interests run counter to both public health and medical science. The huge mass of tobacco industry documents released as a result of rulings against it by United States courts shows that these companies have attempted to manipulate public opinion for decades and that the targeted involvement of numerous scientists has been a preferred tool in that disinformation campaign. The tobacco industry cannot be considered as a credible partner in independent scientific research. The Commission proposes that from now on University members be prohibited from soliciting research subsidies or direct or indirect consultancies with the tobacco industry. This measure is intended to protect researchers' scientific integrity.
- 3. In view of the current context, the scope of the prohibition mentioned above is probably quite symbolic. As the Commission is anxious to ensure that its recommendations should prove equal to future challenges, however, it is proposing that the Faculty and the University engage in reflection on relations between university research and the private sector. Private funding for biomedical research is an unavoidable reality of therapeutic innovation, especially in the pharmaceutical field. This is hardly new, and such partnerships are necessary to therapeutic advances. However, nowadays the very nature of the links between university research and industry is undergoing a profound change. From two distinct worlds obeying their own rules, we have moved towards an increasingly frequent and extensive interpenetration, due especially to the imperatives of economic valorisation of academic learning. How can such partnerships be organised in a mutually beneficial way while upholding the University's primary vocation, namely disinterested quest for scientific truth? This question should be addressed by the entire academic community as a matter of urgency. The Commission hopes that University authorities will take proactive measures to anticipate and control developments in this area.
- 4. Ragnar Rylander's serious breaches of scientific integrity were facilitated by the lack of vigilance prevailing at the time. The Commission would like all University members to be reminded of the well-established rules regarding transparency and disclosure of conflicts of interest, rules that must govern their relations with the university, its departments, research funding bodies, and scientific journals. Besides, the challenges confronting scientific integrity are evolving and require continued adaptation on the University's part. When the need for new rules becomes apparent, then those rules must be instituted and accompanied by sanctions in case of misconduct. What is more, University, faculty and department heads must be kept fully informed of accessory activities (consultancies, involvement in commercial enterprises) carried out by teaching staff and assistants, and that requirement must be reflected in standards governing curricula vitae. This applies also to associate professors; it is well known that such positions are extremely useful in attracting outside talent, but they should not become an opportunity for administrative laxity.

5. The Commission would like to see specific information and even training given to young researchers so as to enable them to exercise their vocation lucidly and handle their relations with industry with discernment and full awareness of their own role in that collaboration. The Commission proposes that the Rectorate and Offices of the Deans organise a consultation on what form this initiative should take. It would be in keeping with the Rectorate's current efforts to extend the guidelines on scientific integrity to all Faculties. Those guidelines should be taught in a separate course involving active researchers as well as other specialists.

Since Prof. Rylander has retired and the period of administrative liability has run out,¹ there is no need to propose any disciplinary measures.

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¹ Conclusions et mesures du Rectorat [Conclusions and measures of the Rectorate], 6 November 2001, § I.2.

Detailed report

1. Introduction

1.1 Situating the issue²

The present report defines as "tobacco industry" all commercial enterprises involved in the sale of cigarettes. In the context under consideration, these are for the most part Anglo-American companies that have made certain strategic alliances revealed by legal proceedings conducted in the United States. The proceedings resulted in agreements obliging the companies concerned to make a vast number of confidential documents available on the Internet.

The term "passive smoking" as used in this report denotes the exposure of a third party to tobacco smoke released into the atmosphere by smokers.

The present Commission was set up in the summer of 2003³ against a background of legal proceedings under way at the time; these came to an end with the decision handed down by the *Cour de Justice* on 15 December 2003. The existence of legal proceedings did not release the University from its obligation to conduct an inquiry into the allegations made against Prof. Rylander, since the accusations related to the scientific researcher's professional ethics, of which the academic institution is the guarantor.

Indeed, the responsible exercise of research freedom is above all a concern of the researchers themselves and their institutions, which implies that they have the right and the duty to bring to task those who breach the rules of scientific ethics. Experience shows that such infringements do not necessarily constitute punishable offences and often fall outside the law. As stated in the decision of the *Cour de Cassation pénale* in the case concerning Ragnar Rylander, "[s]cientific fraud is not a notion that comes within the province of federal law". The latter lays down a very general framework for scientific activity, dealing mainly with freedom of research.

From the very outset it became apparent that there were substantial differences between this case and past cases of scientific fraud that made headline news in Geneva and elsewhere. In those other instances it was often a colleague of the accused who suspected that experiments had been manipulated, or an attentive reader of a scientific publication who detected signs of falsification in the account of a supposedly spectacular discovery. In the case before us, it was the court-imposed obligation for Philip Morris to release a substantial number of secret documents that provided the material for the denunciators' initial investigation of Prof. Rylander. That inquiry revealed in particular the extent and long-standing nature of ties between Prof. Rylander and the tobacco industry. Paradoxically, later on it was the complaint filed by Prof. Rylander against his denunciators that added to the charges levelled against him, given the convergence between numerous witness accounts and the allegations made by the accusers.

² The documents resulting from litigation against the tobacco industry in the United States and posted on the Internet on the basis of agreements reached between states and the industry are referenced by a number or an alphanumerical sequence called the "Bates number". This identifier, used in the present report, allows the retrieval of corresponding documents from Internet sites such as Tobacco Documents Online (http://tobaccodocuments.org) or the industry's databases. Documents bearing the reference "AH" were provided to Prof. Mauron by Prof. Hedley.

³ In conformity with the guidelines of the Swiss Academy of Medical Sciences relating to scientific integrity, § 4.2.3.

⁴ Cour de Cassation pénale [Criminal Court of Cassation], ruling of 17 April 2003.

⁵ Freedom of research and teaching is guaranteed under Art. 20 of the Swiss Federal Constitution and by several federal and cantonal laws. See Auer A., Malinverni G. and Hottelier M. *Droit constitutionnel Suisse: volume II*. Berne: Staempfli (2000), § 559 ff.

Prof. Rylander's links with the tobacco industry had aroused questions and controversy in scientific journals⁶ even before the affair became public knowledge in Geneva. The actions he was accused of fall within the context of a large-scale operation conducted by the industry to conceal the harmfulness of its products and of passive smoking in particular. Indeed, as soon as it became impossible to deny the harmful effect of direct smoke, the tobacco industry mounted a new line of defence around the idea that smoking was a matter of personal choice, assumed by smokers advisedly. The findings indicating that smoke was also harmful to non-smokers⁸ represented an existential challenge for the industry since they stripped the free-choice argument of any credibility, thus paving the way for much stricter bans on smoking in public places. Disputing the harmfulness of passive smoking through industry-led studies intended to demonstrate the innocuousness of secondary smoke or at least put a question mark over it, became a strategic issue of the highest importance.⁹ The tobacco industry poured considerable human and financial resources into this effort. 10 It tried to get researchers to adopt positions and publish results minimising the hazards of passive smoking and to do it if possible under the cover of supposed scientific independence.¹¹ The Cour de Justice took account of this manipulatory dimension by recognising in its second decision, dated 15 December 2003, that the expression "unprecedented fraud" used by Prof. Rylander's accusers was not defamatory. 12

1.2 Specificity of the inquiry

Given the decision of the *Cour de Justice* of 15 December 2003 dismissing Ragnar Rylander's claims in their entirety, and the fact that he did not appeal to the *Tribunal fédéral* [Swiss Federal Supreme Court], it should be considered that the judicial aspect of the case is now closed and that the courts have recognised the veracity of the allegations made against Ragnar Rylander. There were three allegations, namely:

- 1. Ragnar Rylander had been "secretly employed" by a tobacco manufacturer;
- 2. Ragnar Rylander was "one of [its] most highly paid consultants";
- 3. Ragnar Rylander's actions constituted "unprecedented scientific fraud". The *Cour de Justice* pointed out that the expression referred to Ragnar Rylander's double role: that of independent researcher, as he presented himself, and, at the same time, the role of "collaborator at the service of an industry that has always positioned itself against public health". The term "scientific fraud" does not refer to the changes made to the database in the study conducted by Ragnar Rylander and Ysabelle Mégevand on the hazards of passive smoking for children. This modification was largely evoked in the court proceedings; it illustrates the influence enjoyed by T. Osdene, Ragnar Rylander's main scientific contact at Philip Morris, but it is impossible to prove that it corresponds to "invention of research results" or "deliberate falsification of basic data" within the meaning of paragraph 3.2 of SAMS Guidelines.

⁶ Ong E.K. and Glantz S.A. Constructing 'Sound Science' and 'Good Epidemiology': Tobacco, Lawyers, and Public Relations Firms. *Am J Public Health* 2001; 91:1749-57.

⁷ In the 1970s, tobacco manufacturers sought to stand up to their adversaries by entering into a joint secret undertaking (called *Operation Berkshire*) not to yield to accumulated evidence of the harmfulness of direct smoke. Although British American Tobacco broke ranks not long after, the plan led to a multitude of coordinated propagandist actions by national associations of cigarette makers; see Francey N. and Chapman S. 'Operation Berkshire': the international tobacco companies' conspiracy. *BMJ* 2000; 321:371-4

⁸ Hirayama T. Non smoking wives of heavy smokers have a higher risk of lung cancer: a study from Japan. *BMJ* 1981; 282:183-5.

⁹ Hong M.K. and Bero L.A. How the tobacco industry responded to an influential study of the health effects of second hand smoke. *BMJ* 2002; 325:1413-6.

¹⁰ Yach D. and Bialous S.A. Junking Science to Promote Tobacco. Am J Public Health 2001; 91: 1745-8.

¹¹ Memorandum from Thompson to Kloepfer, 18 October 1968, TIMN 0071488.

¹² Decision of the *Cour de Justice, chambre pénale* [Court of Appeal, Criminal division], hearing of 15 December 2003.

Our Commission was assigned the task of re-examining the evidence already produced in the four stages of legal action making up the "affair", and checking with Prof. Rylander whether there was any further evidence. It was not a review based on law – that is a matter for the courts – but a deontological one, aimed at ascertaining whether standards of university scientific integrity had been flouted. Indeed, these standards are implicit in any scientific research activity worthy of that name and necessary to its success. They include accuracy and objectivity in obtaining research results as well as in evaluating and publishing them. Moreover, a scientific publication must allow the scientific community, to the greatest extent possible, to get a clear idea of the value of the authors' contribution to the advancement of scientific knowledge; this necessarily entails disclosing the existence of any potential conflict of interest.

Deontological standards in the biomedical field are becoming increasingly codified, taking the form of regulations such as the guidelines of the Swiss Academy of Medical Sciences (SAMS),¹³ those of the Council for International Organization of Medical Sciences (CIOMS)¹⁴ and those laid down by medical journal editors.¹⁵ These guidelines set out in accurate terms the standards which traditionally were supposed to be self-evident within the scientific community. We therefore had to keep in mind the evolutive nature of these standards, especially those regarding collaboration between university researchers and industrial circles, so as not to judge by present-day sensibilities any facts that at least in part belong to the past. This point was taken into account in the review of Prof. Rylander's disputed activities.

As regards other deontological aspects, such as honesty and openness in scientific communications, recent codifications are a synthesis of ethical values that have become established through long usage because they are consubstantial with scientific activity.

2. Inquiry and documentary evidence

The inquiry was based on the following sources:

- documents furnished to the Commission by Mr. Pascal Diethelm and Dr. Jean-Charles Rielle;
- documents furnished by Prof. André Rougemont to Commission President for consultation;
- documents furnished by Vice-Rector Peter Suter to Commission President for consultation;
- correspondence sent to Prof. Martin McKee (London), Staffan Edén (Göteborg), and Anthony Hedley (Hong Kong), as well as documents handed over by A. Hedley to Prof. Mauron;
- manuscript of an article authored by P. Diethelm, J.-C. Rielle and M. McKee and accepted for publication in the British journal *The Lancet*;
- Prof. Mauron's interviews with:
 - 1. Prof. Théodore Abelin, Honorary Professor at the University of Bern
 - 2. Prof. André Rougemont, Director of the Institute for Social and Preventive Medicine
 - 3. Prof. Olivier Jeanneret, former director of the Institute for Social and Preventive Medicine (by telephone)
 - 4. Vice-Rector Peter Suter (former Dean of our Faculty), who handed over to Prof. Mauron certain documents kept at the Rectorate
 - 5. Ms. Ysabelle Mégevand, former associate of Prof. Rylander; her letter to Prof. Mauron was also taken into account

¹³ Integrity in science. Guidelines of the SAMS for scientific integrity in medical and biomedical research and the procedure to be followed in cases of misconduct (June 2002) (www.samw.ch/content/Dokumente/e cis.pdf).

¹⁴ 1991 Guidelines for Review of Epidemiological Studies (<u>www.cioms.ch/frame 1991 texts of guidelines.htm</u>).

¹⁵ Uniform Requirements for Manuscripts Submitted to Biomedical Journals (The Vancouver Guidelines). *Ann Intern Med.* 1997; 126:36-37.

- 6. Ms. Marie-Claire Snella, former associate of Prof. Rylander; her letter to Prof. Mauron was also taken into account
- 7. Mr. Jean-Pierre Etter, associate at the Institute for Social and Preventive Medicine.

On Wednesday, 10 September 2003, from 2 pm to 6 pm, the Commission heard Messrs. Rielle and Diethelm, who handed over the documents they had assembled in support of their allegations. They had been told in advance which four lines of inquiry the Commission wished to pursue more particularly; the in-depth review of the evidence produced thus focused on these four main topics. The Commission wished to examine in particular:

- 1. Any documents establishing a contractual link between Ragnar Rylander and the tobacco industry and its subsidiaries (INBIFO, *Fabriques de Tabac Réunies*), including the type of services, functional ties, amounts paid, participation in meetings restricted to industry consultants, etc.
- 2. Any documents evidencing Ragnar Rylander's possible active role in elaborating the industry's strategy (and not merely carrying out instructions), and permitting an assessment of his importance in relation to other scientists similarly implicated.
- 3. Any documents evidencing exchanges between Ragnar Rylander and the industry concerning the analysis and interpretation of studies conducted by him, prior to their publication.
- 4. Any documents setting out the intention to conceal links between Ragnar Rylander and the tobacco industry.
- 5. Any other pertinent documents naming or directly implicating Ragnar Rylander.

A certain number of items published in medical journals, some very recently, provided important additional evidence.

By letter of 25 November 2003 Prof. Rylander was invited to give his point of view. In a telephone call to Prof. Mauron on 17 December 2003 he offered to give a written answer to questions set out in the letter and indicated that he was available to be heard by the Commission. His replies to the charges formulated by the Commission are contained in a letter dated 26 January 2004, on which his interview by the Commission was based. This took place at the Office of the Dean of the Faculty of Medicine on 16 March 2004, from 2 pm to 4.45 pm. Prof. Rylander had the opportunity to justify himself in respect of the charges made against him. On 23 March 2004 Prof. Rylander sent a letter disputing the charges made against him.

The documents assembled by Prof. André Rougemont and those handed over by Vice-Rector Peter Suter provide an account of the various stages of the affair, starting with the complaint filed by Prof. Rylander against Mr. Pascal Diethelm and Dr. Jean-Charles Rielle; some of them relate to the inquiry conducted by the three deans, the Rectorate's conclusions and the report by Prof. Timothy Harding. The documents do not add any new elements to those revealed in the legal proceedings, with the exception of the curricula vitae furnished to the administration by Prof. Rylander. While listing various positions held by Prof. Rylander as expert and adviser, these make no mention of his links with the tobacco industry.

The interviews held with Professors Jeanneret and Rougemont as well as with Dr. Jean-Pierre Etter show that Ragnar Rylander enjoyed a very good reputation: he was seen as a productive researcher and appreciated as a teacher. His personal charisma and the influence he exercised over those working with him helped to provide him with considerable freedom of action within the Institute for Social and Preventive Medicine, all the more so since that was not his main place of affiliation. His ability to attract outside funding was known but it was actually favourably viewed, given the modest means at

the disposal of preventive medicine. The origin of the funding obtained by him does not seem to have raised any concern at the Institute, except for a controversial discussion initiated by Mr. Jean-Pierre Etter and still remembered by several staff members, but which went no further. According to Jean-Pierre Etter, on that occasion Ragnar Rylander denied receiving tobacco industry funding for his studies, though he did mention the name of an American foundation (according to Prof. Rylander, it was the Center for Indoor Air Research). It appears difficult to reconstitute exactly the extent of information on the nature of links between Ragnar Rylander and Philip Morris to which different members of the Institute had access at the time. Interviews with Ms. Mégevand and Ms. Snella added no new elements to the inquiry, either. In their opinion, Ragnar Rylander did not conceal his relationship with the tobacco industry.

Prof. Théodore Abelin started to take an interest in the tobacco industry's influence on certain researchers early on in his career, and over the years collected abundant material on the subject. On the occasion of the symposium organised by Ragnar Rylander in Geneva in 1983, he warned Prof. Olivier Jeanneret about the origin of the funding. In his discussion with Prof. Mauron, Prof. Abelin elaborated on his analysis of an article by Ragnar Rylander, published in the *International Journal of Epidemiology*. This analysis was also mentioned in his testimony before the *Tribunal de Police*. In the incriminated article Ragnar Rylander commented on a study which, according to him, suggested that in certain ethnic groups the risk of cancer in women who smoked a limited number of cigarettes daily might be lower than in women who did not smoke. In fact, based on a statistical test of which Ragnar Rylander could not be unaware, that result turned out not to be significant. What is more, in Prof. Abelin's view Ragnar Rylander knowingly suppressed some published scientific data that seemed to refute the claim that dietary habits were a confounding factor in studies on the harmful effects of passive smoking.

As for Prof. Anthony Hedley (Hong Kong), when he learned of the complaint filed by Prof. Rylander he contacted the Rector of the University of Geneva to inform him of the existence of documents implicating Ragnar Rylander in a 1989 attempt to infiltrate the Hong Kong Faculty of Medicine on behalf of Philip Morris. Put in touch with Prof. Mauron, Prof. Hedley gave him the documents in his possession; this information is commented on in section 3.2.3.

The most important source on which the Commission based itself was the vast number of documents retrieved from tobacco industry databases by Messrs. Diethelm and Rielle, together with the additional information supplied by Prof. Hedley. The Commission strove to make an independent and objective interpretation of these various items, which cannot be considered as second-hand information. Indeed, the documents are originals directly related to Ragnar Rylander: he is either the author or the recipient, or the documents originate from important players in the tobacco industry and shed light on Ragnar Rylander's position among industry consultants.

3. Findings

Our examination of the assembled documents is divided into three parts, organised by subject. First of all we will analyse the nature of Ragnar Rylander's links with the tobacco industry, then the effects of those links on his activities as researcher and expert in his relations with the scientific community and scientific journals, and finally we will examine the doubts surrounding the validity of Ragnar Rylander's scientific work on passive smoking.

¹⁶ Rylander R. Environmental Exposures with Decreased Risks for Lung Cancer. *Int J Epidemiology* 1990; 19/3 suppl1: S67-S72

3.1 Links between Ragnar Rylander and industry

Ragnar Rylander worked secretly for the tobacco industry from the 1960s and rendered 3.1.1 a wide variety of services to it

The contractual relationship is abundantly documented, especially from the time of the consultancy agreement of 7 December 1972 which links Ragnar Rylander to Philip Morris by way of INBIFO (Institut für Biologische Forschung), a research institute located in Cologne and belonging to Philip Morris. 17 As it happens, Ragnar Rylander's move to Geneva on a part-time basis (first as a research fellow, then as visiting professor and finally as associate professor) was connected to the possibility of being a consultant to Philip Morris. The financial aspect of the association appears from the outset in Ragnar Rylander's correspondence with Tom Osdene, then principal scientist at Philip Morris:

"I am still in the process of analyzing the possibilities to move to Geneva and several practical problems there have been solved. A main problem at the time is the financial situation as the salary, which I will be offered is considerably less than my present here in Stockholm. It will thus be necessary for me to obtain consultantships and I was glad to know from the conversation we had over the telephone that our present work can also be performed under the terms of a consultantship." ¹⁸

Ragnar Rylander's initial obligations vis-à-vis Philip Morris are defined in confidential exchanges of correspondence between H. Wakeham, Philip Morris research director, and T. Osdene. Rylander was to be Philip Morris representative at INBIFO and had to be present in Cologne three days a month. Officially he was to be remunerated by Fabriques de Tabac Réunies (Neuchâtel) but in reality he was to supervise Philip Morris projects at INBIFO. 19,20 In addition, an exclusivity clause obliged him to put an end to his earlier contractual relations with Lorillard (another cigarette manufacturer).²¹

Philip Morris had purchased INBIFO through the intermediary of its Neuchâtel subsidiary, Fabriques de Tabac Réunies, in order to conduct toxicological research on tobacco smoke discreetly, which was impossible to guarantee in the United States. The link between Philip Morris and Ragnar Rylander was part of an intricate network intended to make as opaque as possible the tobacco industry's financial backing for research on tobacco smoke at INBIFO and its use of Rylander as representative and influencing agent. Numerous documents attest to the continuity of this link between Philip Morris and Ragnar Rylander throughout the 1980s, 22,23 as well as in 1995, 24 199725 and 2002. 26 The related remuneration was substantial, and it was distinct from the amounts received by Rylander as financial backing for the work of his laboratory.^{27,28} This last document [see note 28] also shows that the consultancy fees were paid to him independently of specific tasks required by Philip Morris, at least during a certain time. Later on Philip Morris introduced more detailed accounting categories which at

¹⁷ Agreement dated 7 December 1972, 2081912524.

¹⁸ Letter from Rylander to Osdene, 19 July 1972, 2501367907.

¹⁹ Memorandum from Wakeham to Osdene, 28 July 1972, 1000259869/70. See also Memorandum from Osdene to Wakeham, 18 September 1972, 2501370551/4.

²⁰ Memorandum from Osdene to Wakeham, 18 September 1972, 2501370551/4.

²¹ Letter from Rylander to Spears, 11 December 1972, 01252244.

²² Consultant budget 1980-1984, 2015054704.

²³ Science and technology budget for consultants 1986-1989, 2001202325.

²⁴ INBIFO inspection report, 2050754433.

²⁵ Memorandum from Carchman to Banty, 10 July 1997, 2063590979.

²⁶ Tribunal de Police, hearing of 9 April 2002.

²⁷ Memorandum from Carchman to Banty, 10 July 1997, 2063590979.

²⁸ Memorandum PM Corporate Scientific Affairs, undated, 2023223287/90.

any rate show the diversity of services that Ragnar Rylander rendered to his secret employer:²⁹ making presentations and commentaries on passive smoking for public entities, organising colloquia, setting up training courses in "Good Epidemiological Practices", particularly in China,^{30,31} not counting his executive role at INBIFO, where he countersigned numerous invoices corresponding to various expenses incurred by the Institute.³²

Although he initially denied it, Ragnar Rylander no longer contests the fact that he received substantial sums from Philip Morris over the years, but he affirms that they were assigned to his research. These claims are refuted by numerous Philip Morris accounting documents which, year after year, show amounts budgeted as consultancy fees.³³ Furthermore, it transpires from the investigations carried out by Prof. Martin McKee (Editor of the *European Journal of Public Health*) that Ragnar Rylander lied when he claimed that his only links with the tobacco industry concerned Philip Morris (links that are impossible to hide due to the sheer volume of documents in which they are clearly apparent). In fact, he concealed his earlier links with other industry participants for whom he had already worked in Sweden, namely Lorillard and the Kansas City law firm of Shook, Hardy and Bacon.

3.1.2 Ragnar Rylander concealed his links with the tobacco industry to give his scientific activity an appearance of independence

The agreement contained a secrecy clause which, at first sight, is not unusual in consultancy agreements (in order to preserve the contracting company's intellectual property rights, for instance). Nevertheless, it also made it possible to conceal the nature of Ragnar Rylander's ties to Philip Morris. Rylander explains this in a letter of 23 June 1997, in which he protests against any negligence in respect of that clause:

"Throughout the years I have always been very strict to report to Richmond only and particularly not to get engaged in the activities of the Neuchâtel group. Also regarding specific projects, I have also adhered uniquely to Richmond and to CIAR. Finally, I have never been involved with any Philip Morris executive in meetings or contacts with outside persons, to retain as far as possible the image as an independent scientist."

Ragnar Rylander is clear: he has never shown himself in public with persons who might be associated with Philip Morris, in order "to retain as far as possible the image as an independent scientist". Our conclusions therefore coincide with those reached by the *Cour de Justice* in its decision of 13 January 2003, where it recognises that the allegation made by Messrs. Diethelm and Rielle that Ragnar Rylander was "secretly employed by Philip Morris" had been proven.

The deposition of a former Philip Morris employee shows that INBIFO's operation and the Rylander–Osdene network were treated with the utmost secrecy within Philip Morris, and that most managers were unaware of the existence of this network.³⁵ Other evidence shows the diligence with

³⁴ Letter from Rylander to Carchman, 23 June 1997, 2063590609. Philip Morris headquarters is in Richmond, Virginia, while the "Neuchâtel group" corresponds to *Fabriques de Tabac Réunies*, Philip Morris's subsidiary which pays Ragnar Rylander. CIAR is a nominee entity of the tobacco industry and is discussed below.

35 Statement Uydess, 2063121841/65.

²⁹ Letter from Rylander to Banty, 9 August 1997, 2063590558.

³⁰ Memorandum from R. Carchman to T. Banty, 10 July 1997, 2063590979/80.

³¹ Toxicologist by training, Ragnar Rylander came to epidemiology rather late. He played a non-negligible role in setting up a scientific disinformation operation orchestrated by the tobacco industry and aimed at instituting pseudo quality control in epidemiology (see below).

³² INBIFO expenses authorised by Ragnar Rylander for 1989 amounted to over DEM 12 million. See invoices 2021614760/1, 2021614777/8, 2021614795/804, 2021614806/811, 2021614957/960.

³³ See e.g. 2001202324/5.

which the links between Philip Morris and INBIFO were kept secret.³⁶ This helped to keep under wraps INBIFO's unpublished research which had implicated passive smoking in the 1980s but had not been made public, while the visible part of the Institute's work, published in scientific journals, was used mainly to cast doubt on the harmfulness of passive smoking. The testimony of William Farone, former director of applied research at Philip Morris, corroborates the fact that the tobacco industry was aware of the link between passive smoking and cancer from the 1960s, and also confirms the strict secrecy surrounding the transmission of INBIFO's research results and involving Ragnar Rylander and T. Osdene.³⁷

As the following examples show, Ragnar Rylander's services to the tobacco industry go well beyond scientific expertise and occasional research activity; they in fact correspond to services provided by a long-serving associate of the company. To be effective, Ragnar Rylander had to conceal the true nature of those ties beneath the veneer of academic independence of a researcher enjoying a certain authority in his field.

3.2 A scientist under the influence

3.2.1 The "Rylander symposia"

Documents concerning Ragnar Rylander's relations with the tobacco industry clearly indicate that he was considered as a high-ranking employee at Philip Morris and not as an occasional consultant. They also show that he had knowingly contributed to the industry's strategy aimed at denying the effects of passive smoking on health or at least tendentiously sowing doubt in people's minds over the issue. The symposia he organised in close cooperation with Philip Morris and other tobacco companies are an illustration of this. It was Ragnar Rylander who in 1973 proposed to his contact at Philip Morris to organise a symposium on the effects of tobacco smoke on non-smokers.³⁸ Philip Morris accepted the proposal (the symposium was held in the Bermudas in 1974) and offered forthwith to make a grant of USD 30,000 to the University of Geneva through Fabriques de Tabac Réunies (FTR).³⁹ What is more, Philip Morris put Ragnar Rylander in touch with a lawyer working for the industry in the hope that Rylander might convince him of the usefulness of such a symposium to strengthen the thesis of the innocuity of passive smoking.⁴⁰ Confronted with a researcher, one Dr. William Dublin, who was highlighting the hazard of passive smoking for children, 41 Ragnar Rylander turned immediately to his usual contact at Shook, Hardy and Bacon. 42 The exchanges between Ragnar Rylander and his sponsors essentially reveal a tactical intention to neutralise detractors without appearing biased. In the words of Philip Morris director of research, H. Wakeham, the symposium aimed to provide "a document we can use to quiet some of the hysteria on the subject" (namely, passive smoking), and was organised in accordance with instructions strictly defined by the company. The symposium report, intended for publication in the journal Science (but which Science refused to publish), was drafted under the direct influence of Philip Morris staff and lawyers. This is how H. Wakeham described the drafting process:

"The draft has been prepared by Nick Fina at the Philip Morris Research Center as a ghost writer and is intended to be published over the name of Ragnar Rylander". 44

³⁶ Letter from R. Seligman to Dr. Max Hausermann, 31 March 1977, 2000512794/5.

³⁷ Cour de Justice, Criminal division, hearing of 26 August 2002.

³⁸ Letter from Rylander to Osdene, 6 July 1973, 2501373517.

³⁹ Letter from Wakeham to Hausermann, 12 September 1973, 1000257859.

⁴⁰ Letter from Wakeham to Rylander, 10 August 1973, 1001813013.

⁴¹ Letter from Dublin to Rylander, 1 October 1973, 2015035616.

⁴² Letter from Rylander to Hoel, 5 October 1973, 2015035615.

⁴³ Letter from Wakeham to Bentley, 26 February 1974, 1004864214.

⁴⁴ Letter from Wakeham to Hoel, Holtzman, and attention Rylander, 16 August 1974, 1004863825.

Another Philip Morris researcher even suggested adding verbatim a paragraph clearing environmental tobacco smoke and carbon monoxide of any blame. While not distancing himself from its content, Ragnar Rylander thought it unwise to insert the paragraph because it might arouse the suspicion of other symposium participants. Philip Morris used the symposium report as a propaganda instrument to disparage its opponents. For example, in a letter to Ernest Conine of the *Los Angeles Times*, Herbert Wakeham wrote, quoting an extract from Ragnar Rylander's report to counter the concerns of anti-smoking "busybodies":

"... that the risk for the development of chronic pulmonary effects due to environmental tobacco smoke exposure is non-existent among the population in general."

Ragnar Rylander's views were also used in other similar propaganda texts. ^{49,50} It is interesting to note that in 2001, after the University of Geneva first took a stand in his regard, Ragnar Rylander denied purely and simply that his positions had been used to favour the tobacco industry, and requested clarification in that respect:

"... the Rectorate is inviting me and my associate to distance ourselves publicly from the tendentious use of our research by the tobacco industry. Since we are not aware of any such use, I should be grateful if you would inform me more specifically of the criteria on which the report was based to reach that conclusion, and to send me examples, statements or publications that will allow us to take action." ⁵¹

In reality, the "tendentious use" of the Bermuda symposium by the tobacco industry was a success for the latter. A second "Rylander symposium" took place in 1983, this time in Geneva. There too the influence of Philip Morris and its lawyers was decisive in shaping the project, which aimed to avoid providing a platform for tobacco industry opponents. The scientific state of the question had in fact undergone a change. A 1980 study by J.R. White and H.F. Froeb on the pulmonary function of passive smokers⁵² aroused concern in the tobacco industry, as shown in a confidential note sent to T. Osdene by a Philip Morris staff member who, moreover, found the article "excellent":

"I have reviewed the above paper and find it to be an excellent piece of work which could be very damaging to our business. (...) This is not a question that can be answered by anyone inside the tobacco industry. Even if one could answer such a question a rebuttal by the industry would have little impact. What is needed is an independent evaluation of the paper by members of the medical profession. I suggest that Ragnar Rylander be asked to review the paper and make the necessary contacts to define the real significance of the paper."53

The author went on to suggest action by Ragnar Rylander, who was meant to attend a meeting on thoracic medicine in Birmingham shortly after. Philip Morris mounted a wide-ranging strategy to refute the claims of White and Froeb, going as far as exerting pressure in U.S. Congress through a

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⁴⁵ Unattributed note, 1974, 1000260194/5.

⁴⁶ Letter from Rylander to Fagan, 3 October 1974, 1000260180/1.

⁴⁷ Rylander's scientific report, undated, 1000260165/179.

⁴⁸ Letter from Wakeham to Conine of the *Los Angeles Times*, 8 August 1977, 1000217977.

⁴⁹ BBDO. "Who says it's never been shown smoke causes disease in non-smokers. These scientists say so." 500008296/7.

⁵⁰ "Do you mind if I smoke?" Advertisement published in Australian media, 532000342.

⁵¹ Letter from Rylander to Vice-Rector Doelker, 12 December 2001.

⁵² White J.R. and Froeb H.F. Small Airways Dysfunction in Nonsmokers Chronically Exposed to Tobacco Smoke. *NEJM* 1980: 302:720-3

⁵³ Memorandum from Charles to Osdene, 30 March 1980, 1002641904/7.

member of Congress favourable to tobacco industry arguments.⁵⁴ Another scientific development dangerous to the tobacco industry came in the form of research by Takeshi Hirayama on links between lung cancer and passive smoking in non-smoking wives of smokers in Japan. 55 The industry riposted with rival studies aiming to refute the existence of such a link⁵⁶ and other initiatives in order to keep the controversy alive. The law firm of Shook, Hardy and Bacon contacted Ragnar Rylander to suggest another Bermuda symposium,⁵⁷ a proposal which was favourably received by other bodies associated with the tobacco industry, namely Lorillard⁵⁸ and the Tobacco Institute⁵⁹ (an organisation acting as a front for the industry). Ragnar Rylander accepted, pointing out that what was especially important was to maintain doubt on the question of harmfulness of passive smoking:

"His [Rylander's] major point was that he did not feel that the workshop could or would be in a position to give environmental smoke a "clean bill of health." However, Dr. Rylander did believe that he could bring a healthy scepticism to the conference and some of the claims made about environmental tobacco smoke."60

It appears that the organisation of a second "Rylander symposium" then encountered certain difficulties within the tobacco industry, in particular on account of reservations expressed within Philip Morris about the expected participation of some "adversaries", such as the epidemiologist from the American Cancer Society, Garfinkel, and the Japanese epidemiologist Hirayama, both authors of cohort studies on the effects of active and passive smoking on health.⁶¹ In the end the problem was solved, however, and in early 1982 Donald Hoel from the law firm of Shook, Hardy and Bacon wrote to T. Osdene at Philip Morris, praising Rylander's pliability:

"(...) he was very receptive to suggestions. He would not invite Garfinkel, Hirayama, etc." 62

The projected symposium having been definitively approved by the industry lawyers, Ragnar Rylander invited participants to Geneva on behalf of the Universities of Geneva and Göteborg. 63 The funding was provided by the tobacco industry, as shown in a confidential memorandum written by D. Hoel.⁶⁴ Contrary to Ragnar Rylander's later claims that financial support from the tobacco industry did not pose a problem at the time and that he would have never tried to conceal it, it is evident that he was concerned that the links between "his" symposium and such a source of funding might become evident:

"Dr. Rylander believes that CTR (Center for Tobacco Research) would be an appropriate sponsor. (...) Since CTR is a recognized independent research institution, he feels this source of funding would be much preferable to the Tobacco Institute. In addition, Dr. Rylander pointed out that in various news articles surrounding the Hirayama article the Institute was referred to as the "lobbying arm" of the U.S. tobacco industry. Therefore Dr. Rylander felt that there

⁵⁴ Charles Rose, who submitted a memorandum aimed at preventing White and Froeb's article from being considered by U.S. government agencies, 1005114242. This operation mobilised several experts favourable to the tobacco industry, all proposed as participants in the second Rylander symposium.

Hirayama T. Non-smoking wives of heavy smokers have a higher risk of lung cancer. BMJ 1981; 283:1464-6.

⁵⁶ Hong, M.K. and Bero, L.A. How the tobacco industry responded to an influential study of the health effects of second hand smoke. *BMJ* 2002; 325:1413-6.

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⁵⁸ Letter from Stevens to Shinn, 1 June 1981, 01331069.

⁵⁹ Memorandum from Kloepfer to Chilcote, 27 July 1981, TI1004-2072.

⁶⁰ Memorandum by Hoel, 31 August 1981, 680542958/62.

⁶¹ Memorandum from Spears to Judge and Stevens, 16 November 1981, 01346187/91.

⁶² Letter from Hoel to Osdene, 27 January 1982, 1000083924/6.

⁶³ Letter from Rylander to Aviado, 17 August 1982, 504339388.

⁶⁴ Memorandum by Hoel, 17 June 1982, 502122726/7.

might be, in some circles, some opinion that money coming from the Institute for such a conference was possibly 'tainted'."65

When his ties to the tobacco industry started to be revealed, Ragnar Rylander claimed that he had accepted industry funding because he was unable to interest "traditional research foundations".66 However, he was never able to produce the slightest evidence of such efforts; available documents show that the symposium was conceived and planned from the very beginning by the tobacco industry as a public relations operation.

The symposium went off to the industry's satisfaction, although the University of Geneva decided not to publish a press release at the close of proceedings.⁶⁷ As in the case of the first symposium, the presentation and distribution of the results were closely coordinated by Ragnar Rylander and Philip Morris lawyers. The introduction to Rylander's report is deliberately sceptical regarding the harmful effects of passive smoking and denies the existence of a serious public health problem.⁶⁸ The report was widely distributed by the industry to political authorities⁶⁹ and the press.⁷⁰ An advertisement paid for by Reynolds, a tobacco company, quotes the symposium summary drafted by Ragnar Rylander:

"An overall evaluation based upon available scientific data leads to the conclusion that an increased risk for non-smokers from ETS exposure has not been established."⁷¹

The abundant correspondence between Ragnar Rylander and his sponsors shows that far from being an independent and critical researcher, he willingly followed the directives received from his employer while putting forward his academic credentials to enhance his credibility vis-à-vis the outside world. This concerns the University in Geneva in particular; he used it and its infrastructure as the venue of the symposium and also, going by the content of a letter written by S.D. Chilcote of the Tobacco Institute, ⁷² to distribute the ensuing report to medical schools in the United States.

3.2.2 EPA report on passive smoking and Ragnar Rylander's role in the industry's response

A report on the effects of passive smoking, published in 1990 by the U.S. Environmental Protection Agency (EPA), caused alarm within the tobacco industry. On the basis of a review of epidemiological data available at the time, EPA concluded that there was a causal link between passive smoking and lung cancer in adults, and also between children's exposure to environmental tobacco smoke and various respiratory ailments.⁷³ The tobacco industry reacted, calling for comments from seemingly independent scientists to discredit the report and avert more stringent restrictions on smoking in public places.⁷⁴ Philip Morris's plan is clear:

⁶⁵ Memorandum by D. Hoel, 31 August 1981, 680542958. The organisers ignored Ragnar Rylander's advice and the symposium was funded by a Tobacco Institute grant to the University of Geneva. In the end, both CTR and the Tobacco Institute were recognised by courts as being fronts for the tobacco industry; they were thus ordered to be dissolved and were banned from being re-established.

Eletter by Ragnar Rylander, published in the *New Scientist* of 30 May 1988, p. 56.

⁶⁷ Memorandum from Kloepfer to Chilcote, 29 March 1983, TIMN 269624.

⁶⁸ Rylander R. Introduction. Eur J Respir Diseases, Supplementum No. 133, Vol. 65, 1984.

⁶⁹ Covering letter from Kornegay to Surgeon General Koop, 03753486/7.

⁷⁰ Tobacco Institute release, 14 February 1984, 506638902/4.

⁷¹ "Smoking in public: Let's separate fact from fiction", 511425456.

⁷² Letter from Chilcote to Tucker, 17 April 1984, 506638899/901. According to Ms. Snella, the reports were sent against payment and the University therefore did not disburse any funds in respect thereof. ⁷³ U.S. Environmental Protection Agency: EPA/600/6-90/006A.

⁷⁴ Muggli M.E., Forster J.L., Hurt R.D., and Repace J.L. The Smoke You Don't See: Uncovering Tobacco Industry Scientific Strategies Aimed Against Environmental Tobacco Smoke Policies. Am J Public Health 2001; 91:1419-23.

"Our overriding objective is to discredit the EPA report and to get the EPA to adopt a standard for risk assessment for all products.

Concurrently, it is our objective to prevent states and cities, as well as businesses from passing smoking bans."⁷⁵

The main weapon of this strategic plan consisted in forming a "coalition for integrity in science", defined as follows:

"A national coalition intended to educate the media, public officials and the public about the dangers of 'junk science'. Coalition will address credibility of government's scientific studies, risk assessment techniques and misuse of tax dollars."

The populist theme of taxpayers' money being wasted to promote "politically correct" science was used to discredit many honest researchers whose studies highlighted the dangers of tobacco smoke for non-smokers. This disinformation operation would not have been possible without the intervention of scientists seen as external to the industry. In fact, for the industry a "tobacco industry versus science" contest was lost in advance; it was therefore necessary to transform it into a battle of experts, presented as taking place within scientific circles:

"The Philip Morris approach is that the industry's position on the science is correct, but that it is better to have someone else say it because industry itself cannot win a causation argument."

While EPA invited comments from the public on the report, the tobacco industry encouraged consultant scientists to give their opinion. Ragnar Rylander was thus approached for this purpose. After consulting T. Osdene⁷⁷ and the law firm of Shook, Hardy and Bacon, he submitted his critique to EPA.⁷⁸ He attacked the biological plausibility of the causal mechanism invoked in respect of the harmful effects of passive smoking and suggested that the findings observed resulted from confounding factors, in particular dietary habits. This issue later became the focus of his own research on the subject. It is true that the argument of biological plausibility plays an important role in epidemiology. However, Ragnar Rylander's good faith on this issue is highly questionable. Indeed, as Philip Morris's representative at INBIFO he was perfectly aware of the toxicity of passive smoking since he received the findings of toxicological studies conducted at the institute. From the early 1980s, in fact, he mentioned studies showing that, *ceteris paribus*, passive smoking – described by toxicologists as the emission of indirect smoke (sidestream smoke) because it is released from the end of the cigarette when the tobacco is being consumed in between puffs drawn by the smoker – causes more serious histological anomalies in animals than the emission of direct smoke (mainstream smoke), namely smoke inhaled by a smoker puffing on a cigarette.⁷⁹

⁷⁵ Memorandum from Campbell to Merlo, 17 February 1993, 2021183916/30. Another significant quote: "Science should never be corrupted to achieve political ends." Who could disagree with a motto of such high moral standard? And yet, it is taken from the list of "key messages" concocted by the designers of Philip Morris's disinformation campaign. In cigarette manufacturers' "newspeak", corrupt science became upright, honest research became "the pursuit of political ends", truth became falsehood and falsehood became truth.

⁷⁶ Cited by K. Kleiner: "Us against them", New Scientist, 2 May 1988, p. 22.

⁷⁷ Faxes from Rylander to Osdene, 18 July 1990, 2021183916, respectively 7 August 1990, 2023533784.

⁷⁸ Memorandum by Rylander, 12 July 1990, 2023533785/91.

3.2.3 Ragnar Rylander's Chinese connections and the tobacco industry's policy in Asia

During the same period, Ragnar Rylander also suggested to Osdene that it might be politically advisable for Dr. XXX, a colleague from Hong Kong, to submit her comments to EPA.⁸⁰ epidemiologist working at the Department of Community Medicine at the University of Hong Kong, Dr. XXX had links to the tobacco industry similar to Rylander's. The long-term collaboration between Ragnar Rylander and XXX led to the industry attempting to infiltrate the University of Hong Kong, an attempt where Ragnar Rylander seems to have been the instigator. It is known that in the late 1980s certain leading figures in the tobacco industry, despairing of being able to durably counter the antismoking measures being gradually imposed in the Western world, shifted the bulk of their propaganda efforts to emerging Asian markets. 81 This is how a programme intended to "recruit and train" scientists from the region was set up, to conduct biased research programmes in line with the interests of the tobacco industry and to propose their "independent" expertise in political circles. 82 Prof. Anthony Hedley, Director of the department of the University of Hong Kong where XXX was working, discovered that Prof. Rylander was implicated in those operations. Ragnar Rylander undertook to influence XXX's professional career by writing to the Vice-Chancellor of Hong Kong University a highly laudatory letter about her, suggesting that she be promoted to head a cancer epidemiology unit to be set up from scratch and promising scientific and financial support from the University of Göteborg for the unit. 83 Coming as it did from a person foreign to the University, this step seems all the more bizarre when it is known that Ragnar Rylander contacted neither XXX's hierarchical superior, Dr. Hedley, nor the Dean of the Faculty of Medicine. Besides, at the time XXX was already embroiled in a dispute with the University. The conflict centred on doubts concerning her links with the tobacco industry; these were later corroborated by the publication of documents resulting from litigation in the United States. 84 Prof. Hedley informed the Dean of his negative reply and of his suspicions. 85 Yet, on 25 April 1989 Ragnar Rylander announced to T. Osdene that the plans for the new unit were progressing well, enclosing a copy of "a formal proposal made by XXX to the University". 86 Since such a proposal did not exist at the time when the dispute between XXX and the University took a judicial turn, Prof. Hedley believes that Rylander probably misled Philip Morris by dangling the prospect of an attractive but unfeasible scenario. Ragnar Rylander later attempted to approach Prof. Hedley directly, but without any success.⁸⁷

However, there are documents attesting to contacts in Hong Kong between Ragnar Rylander, T. Osdene, XXX and Dr. XXX. Dr. XXX ran a company, XXX. The latter was awarded a government contract for a study on the quality of air in offices and public places, 88 a study in which Ragnar Rylander became involved.⁸⁹ He was brought in by the team in charge of the study and most likely played a major role in it. The study, intended for the Department of Environmental Protection, was not very convincing from a scientific standpoint and was contested by Prof. Hedley, in particular the parts concerning passive smoking: indeed, the study was marred by serious conflicts of interest. Following an inquiry made possible by the publication of the first documents from the Minnesota

⁷⁹ Letter from Rylander to Osdene, 26 January 1982, 1000081782. This aspect of the affair is analysed in detail in Diethelm P., Rielle J.C., McKee M.: The whole truth and nothing but the truth? The research that Philip Morris does not want you to see, *The Lancet* (forthcoming).

80 Fax from Rylander to Osdene, 15 August 1990, 2023533777.

⁸¹ South China Morning Post, 18-20 January 1999, AH.

^{82 &}quot;Asia ETS Consultant Status Report", 2500048976/98.

⁸³ Letter from Rylander to Wang, 17 February 1989, AH.

⁸⁴ This particular aspect of the "affair XXX" - which also led to a law suit filed by Dr. XXX, but which she lost on appeal, is detailed in a letter written on 11 March 2004 by Prof. Hedley to Prof. Mauron, AH.

Letter by Hedley, 30 March 1989, AH.

⁸⁶ Letter from Rylander to Osdene, 25 April 1989, 2023537814.

⁸⁷ Letter from Rylander to Hedley, 9 November 1990, AH.

⁸⁸ Letter from Hedley to Mauron, 11 March 2004, AH.

⁸⁹ The same company co-opted Chinese scientists to work for CIAR, an entity mentioned below.

settlement, the press wrote about those conflicts of interest, especially with regard to Ragnar Rylander. 90 It should also be noted that Rylander was active in China throughout the 1990s. For example, he was on the scientific committee of an "International Workshop on Risk Assessment and Good Epidemiological Practices" held at Guangzhou from 14 to 17 July 1997. This seminar, funded by the Center for Indoor Air Research (CIAR), was part of the tobacco industry's disinformation campaign on passive smoking through the promotion of so-called "good epidemiological practices".

In sum, documentary evidence clearly shows that Ragnar Rylander took instructions from the tobacco industry respecting the conduct of his activities on the links between tobacco smoke and health. His language at times resembles that of a militant: tobacco industry's "case" must be defended, the opponents of tobacco are "antis". His association with the industry has brought him considerable financial benefit in the form of salary or reimbursement of travel expenses, and all this probably started at the beginning of his career as researcher. 93

3.3 Study on the dietary habits of non-smoking women living with smokers or non-smokers

In the wake of the controversy sparked by the EPA report and following the closing down of his toxicology laboratory in Geneva, Ragnar Rylander reoriented some of his activities towards epidemiology. Although he now invokes the fact that "academic tradition generally leaves the researcher free to deal with any determining problem he chooses", ⁹⁴ Philip Morris played an important role in his decision to direct his research towards epidemiology and the subject of passive smoking. Indeed, in the early 1990s the tobacco industry's scientific position was weakened by the accumulation of data incriminating passive smoking in many diseases affecting children and adults.

The idea of conducting one or more European studies on the dietary habits of non-smoking women living with smokers or non-smokers was launched by Philip Morris in 1993. The stated aim was to obtain data showing that the lifestyle of women exposed to passive smoking increased the risk of lung cancer independently of their exposure to passive smoking. The industry was encouraged in this move by the preliminary results of the analysis of data from the National Health and Nutrition Examination Survey carried out in Baltimore by Prof. G. Matanoski.

From the outset Philip Morris pointed out that all studies would be organised and funded through the Center for Indoor Air Research (CIAR), an entity controlled and almost entirely funded by the tobacco industry. Its purpose was to provide a façade of scientific independence to industry-sponsored research. CIAR had already funded a symposium on the methodological aspects of assessing low-risk agents for lung cancer; the gathering was held in Clearwater, Florida, and the report on it was published by Ragnar Rylander. He later claimed that CIAR was an ordinary research foundation that

⁹⁰ South China Morning Post, 18-20 January 1999, AH.

⁹¹ Fax from Rylander to Osdene, 15 August 1990, 2023533777.

⁹² Letter from Rylander to Carchman, 15 March 1996, 2074670553/4.

⁹³ Letter from Dalhamm to Parmele, 30 November 1962, 00105437.

⁹⁴ Letter from Rylander to Mauron, 26 January 2004.

⁹⁵ Fax from Rylander to Dempsey, 20 June 1994, 2026222501/2.

⁹⁶ Memorandum from Pages to Charles, 14 May 1992, 2021528170.

⁹⁷ McKee M. Smoke and Mirrors: Clearing the air to expose the tactics of the tobacco industry. *Eur J Public Health* 2000; 10:161-5.

^{10:161-5. 98} Rylander R., Peterson Y., and Lebowitz M.D. Assessing Low-Risk Agents for Lung Cancer. Methodological Aspects. *Int J Epidemiology* 1990; 19 supplement 1. It will be noted that scientific journal supplements are often the preferred vehicle for disinformation practised by Ragnar Rylander. In fact, they make it possible to publish meeting reports without going through a proper peer review.

allocated research grants on the basis of projects submitted on a competitive basis.⁹⁹ In reality, Ragnar Rylander's work on passive smoking was specifically and exclusively financed by Philip Morris though this was done through the intermediary of CIAR, as will be seen below.

On 26 May 1994 Ragnar Rylander replied to Richard Carchman, director at Philip Morris, saying that he was interested in submitting a study protocol on the dietary habits of non-smoking women living with smokers or non-smokers. The following month Ruth Dempsey from Philip Morris contacted Dr. Rylander and discussed with him the exact goals of his study, which was initially to have been conducted in Sweden only. In the summer of 1994 Dr. Rylander submitted his draft project to CIAR. CIAR's report of 11 August 1994 states clearly:

"Philip Morris is prepared to carry the full burden of support for this study through CIAR. Nevertheless, it requires CIAR Board of Directors approval in order for it to proceed as a center project." ¹⁰¹

Also on 11 August 1994, Ragnar Rylander proposed to extend the Swedish study to Switzerland as well and to conduct the two studies in parallel. On 25 September 1994 he wrote to Dr. Carchman at Philip Morris about some confidential data he had obtained from the National Cancer Institute, stating explicitly that the objective of his Geneva project was to demonstrate that differences in dietary habits explain the differences in the risk of cancer or cardiovascular diseases between women who are exposed to passive smoking and those who are not.

"From confidential data at the National Cancer Institute, I learned that when the intake of fat was corrected for, the risk due to ETS disappears. This is good news and supports our CIAR project. The questionnaires should be ready early next week and then we can start. I realize the time pressure." ¹⁰³

By letter of 9 February 1995, CIAR confirmed to Dr. Carchman that the Rylander study would be funded by Philip Morris only:

"The Rylander study will be solely funded by Philip Morris. Billing will commence in 1995." ¹⁰⁴

Data collection took place in 1995. Throughout the project, Ragnar Rylander regularly informed Dr. Carchman, his contact at Philip Morris, of the developments. Had he been granted CIAR funds for an independent scientific project, which he claimed was the case, there would have been no need for him to keep Philip Morris informed in this way.

On 23 February 1995 CIAR confirmed receipt of USD 151,600 from Philip Morris for the Rylander study. 105

On 15 March 1996, Ragnar Rylander wrote to Carchman about the passive smoking project in Geneva and Göteborg:

⁹⁹ Rylander R. Potential conflicts of interest and the need for full disclosure: reply. Eur J Public Health 2000; 10:235.

¹⁰⁰ Letter from Rylander to Carchman, 26 May 1994, 2026222511.

¹⁰¹ Memorandum from Eisenberg to Carchman, Grenn, Heck, Kass, Mueller, Rolf and Spears, 11 August 1994, 2050754285A.

Letter from Rylander to CIAR, with attachment, 11 August 1994, 2028381494/5.

¹⁰³ Fax from Rylander to Carchman, 25 September 1004, 2050754280.

¹⁰⁴ Letter from Eisenberg to Carchman, 9 February 1995, 2050764516/8.

¹⁰⁵ Invoice from CIAR to Philip Morris, attention Dr. Carchman, 23 February 1995, 2050764511.

"Interestingly, this project has so far not received any hostile comments although an outcome along the lines we have seen in the preliminary analyses would obviously represent an intellectual drawback for the antis." ¹⁰⁶

"Antis" being scientists convinced of the harmful effects of passive smoking.

In the autumn of 1996, Ragnar Rylander wanted to analyse the eating habits of smokers and non-smokers (in addition to those of passive smokers). CIAR refused because it does not sponsor studies concerning smokers. Rylander tried to negotiate with CIAR directly. On 21 October 1996 he wrote to Max Eisenberg at CIAR; the fax shows that he was fully aware of the funding mechanisms for his projects:

"How could we resolve the problem vis-à-vis CIAR? One possibility is to drop the manuscript completely. I think this would be a pity, considering the reasons given above. Another possibility is that it is published but that CIAR is now acknowledged. We need to further discuss this to avoid any unnecessary complications with CIAR policy." ¹⁰⁷

Later on Ragnar Rylander requested support in order to replicate the initial study, this time around including a comparison between smokers and non-smokers, but CIAR turned him down. It was thus Philip Morris again that directly funded the study in question. Ragnar Rylander is distorting reality when he states:

"All my requests for funding were submitted to CIAR." ¹⁰⁸

It should be noted that the manuscript of the second study, 109 which was never published, mentions funding by Philip Morris.

In parallel, Ragnar Rylander set up a study on the magnesium content of drinking water, still with the idea of demonstrating that passive smokers are exposed to risk factors other than tobacco smoke. On 27 November 1995, he wrote to Dr. Carchman as follows:

"The project has now become of interest to the Department of Internal Medicine at the University Hospital." ¹¹⁰

In a letter of 22 May 1996, Ragnar Rylander explained to Carchman that the conclusions of his work on magnesium were in line with industry expectations, namely:

"The bottom line of the magnesium story (...) is that you can never make a reliable epidemiological study on cardiovascular disease without controlling for magnesium intake." 111

Ragnar Rylander's close ties to the tobacco industry throughout this whole affair are abundantly documented in correspondence accessible on the Internet. The numerous documents concerned rule out the possibility that in matters relating to passive smoking Ragnar Rylander was an independent researcher whose work was partly funded by the tobacco industry. This image of himself that Ragnar Rylander strives to project is not borne out by facts.

109 "Dietary habits and smoking in Swedish and Swiss population samples", 2074457220/49.

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 $^{^{106}}$ Letter from Rylander to Carchman, 15 March 1996, 2074670553/4.

¹⁰⁷ Fax from Rylander to Eisenberg, 21 October 1996, 2063590941/3.

¹⁰⁸ Letter from Rylander to McKee, 18 July 2001.

Letter from Rylander to Carchman, 27 November 1995, 2505531000/1.

¹¹¹ Letter from Rylander to Carchman, 22 May 1996, 2063590992.

Similar behaviour can be noted in the context of another study conducted in Geneva, dealing with exposure of children to passive smoking; that study will not be discussed here because it was commented on at length during legal proceedings. Indeed, in its final decision the *Cour de Justice* wrote in detail about the influence of the tobacco industry on the conduct and interpretation of that study. 112

4. Conclusions

It is important to note that the Commission did not concern itself with Prof. Rylander's opinions or the quality of his epidemiological studies, or with the fact as such that he accepted research funding from the tobacco industry. What is at stake here is the *premeditated concealment* from the scientific community of his close links with the industry. Ragnar Rylander consciously concealed his ties to the tobacco industry so as to have the scientific community believe that he was an independent researcher. By doing so, he misled the scientific community. The Commission is of the opinion that through his close links with the tobacco industry Prof. Rylander compromised his independence as researcher, and it reproaches him for concealing the true extent of those links.

Considering his close association with the tobacco industry and the duplicity of his attitude throughout his professional career, it appears that Ragnar Rylander was not able to preserve his intellectual independence in the face of specific commercial interests. Documentary evidence leads one to believe that the attitude he adopted in his professional life consisted in unilaterally defending the interests of the tobacco industry in the conflict pitting the latter against scientists convinced of the harmful effects of passive smoking. He helped to elaborate the industry's strategy and in his agreements with the industry accepted a secrecy clause that led him to suppress information known to him regarding the toxic effects of smoking. The Commission considers it legitimate to doubt the validity of the body of Ragnar Rylander's work directly or indirectly concerned with tobacco smoke.

The main complaint against Ragnar Rylander is therefore that he concealed his links with the tobacco industry, lied about their nature and provided a falsely independent scientific cover in a disinformation campaign regarding the risks associated with passive smoking. The losers in this affair are:

- the Faculty [of Medicine] and the University of Geneva, whose infrastructure has been put to improper use and whose reputation has been tarnished by Ragnar Rylander's actions;
- the scientific community, misled by symposia whose preparation and results were manipulated by the tobacco industry and by tendentious epidemiological studies aimed at maintaining unnecessary uncertainty and controversy;
- lastly and above all, the general public, which was not given timely information on the specific toxicity of passive smoking. This information was secretly obtained in the 1980s and consciously suppressed, whereas it could have helped to advance prevention of tobacco-related diseases.

¹¹² Decision of the Cour de Justice, chambre pénale [Court of Appeal, Criminal division], hearing of Monday, 15 December 2003.

5. Prof. Rylander's defence¹¹³

In his defence, Prof. Rylander's initially played down his association with the tobacco industry and then stated that it was largely known in scientific circles. Besides, he considers that his links were legitimate on grounds of academic freedom. The opprobrium which today surrounds any association with the tobacco industry represents a "value judgement"; this was not the case at the time when such contacts were considered normal. His one regret is that he did not sense early enough the reversal of opinion on the issue. Moreover, he disqualifies tribunals that have tried him, for in his eyes they lack necessary scientific competence. Likewise, he disqualifies the scientists who have intervened in different capacities in the controversy (Abelin, McKee, Hedley) as they are "very anti-tobacco". In the course of his hearing before the Commission, Prof. Rylander described the "Rylander symposia" and his studies on passive smoking as arising from a purely scientific and impartial logic. He also stressed that there were other researchers who held opinions similar to his own. Confronted by documents illustrating the industry's guiding influence on the development of his research, Prof. Rylander put the blame on a selective reading of documents, prompted by Mr. Diethelm's and Dr. Rielle's malevolence towards him. He denied that his work or he personally served as instruments of the tobacco industry. He did acknowledge that some of his scientific conclusions were at times useful to the industry, but underlined that they at the same time served public health interests, notably with regard to knowledge about the importance of diet.

In his written conclusions, submitted after he was heard by the Commission, Prof. Rylander interpreted his collaboration with the tobacco industry as an ethically defendable contribution to the 'polluter pays' principle, since the tobacco industry was made to bear the costs of research on a harmful product.¹¹⁴

The Commission considers that this *a posteriori* rationalisation on Prof. Rylander's part would be more convincing if his scientific work on passive smoking, the manner in which it was produced under industry influence, and his numerous stands on the issue did not in fact aim to cast doubt on the harmful effects of passive smoking. The way in which symposia were organised and the continued collusion between Prof. Rylander and the tobacco industry in the course of his research go well beyond what is customary in academic research, even in cases of collaboration with an industry. Furthermore, the Commission notes that Prof. Rylander made no admission of any links with the tobacco industry spontaneously, that is, without being confronted with indisputable evidence of such links.

Having completed the inquiry, the Commission concludes that it has reached an impasse. In comparison with the many statements made in the course of legal proceedings, the hearing and its exchange of correspondence with Prof. Rylander have not shed further light on the case. The Commission considers that it is now up to the University authorities to assume their responsibilities in view of all the evidence gathered and presented here and in the court rulings; that evidence speaks for itself.

6. Recommendations

The Fact-Finding Commission deems it its duty to propose to the Delegate for integrity of the Faculty of Medicine and to Faculty and University authorities the adoption of the following measures:

¹¹³ Commission's hearing of Prof. Rylander, 16 March 2004, and letters from Rylander to Mauron, 26 January 2004 and 23 March 2004.

¹¹⁴ Letter from Rylander to Mauron, 23 March 2004. In it Prof. Rylander also expressed regret that the Commission had adopted public opinion's "popular and trivial" ideas on the subject of scientists' collaboration with the tobacco industry.

- 1. The scientific community and the general public must be told that serious suspicion hangs over Ragnar Rylander's studies on the effects of environmental tobacco smoke on health because the author has not disclosed conflicts of interest that may influence the significance of his research and that, given his role as secret employee of the industry, he cannot be considered as an independent scientist. The Fact-Finding Commission proposes that notification to this effect be sent to the following journals:
 - European Journal of Public Health
 - Archives of Environmental Health
 - International Journal of Epidemiology
- 2. Prof. Rylander's infringements of scientific integrity take on their full significance only when viewed within the framework of a strategy devised and conducted by the tobacco industry to cast doubt on the toxicity of tobacco smoke, particularly for non-smokers. The case of one person should not make us forget that the most unforgivable fault lies with an institutional and commercial force, the tobacco industry, whose objectives and interests run counter to both public health and medical science. The huge mass of tobacco industry documents released as a result of rulings against it by United States courts shows that these companies have attempted to manipulate public opinion for decades and that the targeted involvement of numerous scientists has been a preferred tool in that disinformation campaign. The tobacco industry cannot be considered as a credible partner in independent scientific research. The Commission proposes that from now on University members be prohibited from soliciting research subsidies or direct or indirect consultancies with the tobacco industry. This measure is intended to protect researchers' scientific integrity.
- 3. In view of the current context, the scope of the prohibition mentioned above is probably quite symbolic. As the Commission is anxious to ensure that its recommendations should prove equal to future challenges, however, it is proposing that the Faculty and the University engage in reflection on relations between university research and the private sector. Private funding for biomedical research is an unavoidable reality of therapeutic innovation, especially in the pharmaceutical field. This is hardly new, and such partnerships are necessary to therapeutic advances. However, nowadays the very nature of the links between university research and industry is undergoing a profound change. From two distinct worlds obeying their own rules, we have moved towards an increasingly frequent and extensive interpenetration, due especially to the imperatives of economic valorisation of academic learning. How can such partnerships be organised in a mutually beneficial way while upholding the University's primary vocation, namely disinterested quest for scientific truth? This question should be addressed by the entire academic community as a matter of urgency. The Commission hopes that University authorities will take proactive measures to anticipate and control developments in this area.
- 4. Ragnar Rylander's serious breaches of scientific integrity were facilitated by the lack of vigilance prevailing at the time. The Commission would like all University members to be reminded of the well-established rules regarding transparency and disclosure of conflicts of interest, rules that must govern their relations with the university, its departments, research funding bodies, and scientific journals. Besides, the challenges confronting scientific integrity are evolving and require continued adaptation on the University's part. When the need for new rules becomes apparent, then those rules must be instituted and accompanied by sanctions in case of misconduct. What is more, University, faculty and department heads must be kept fully informed of accessory activities (consultancies, involvement in commercial enterprises) carried out by teaching staff and assistants, and that requirement must be reflected in standards governing curricula vitae. This applies also to associate professors; it is well known that such positions are extremely useful in attracting outside talent, but they should not become an opportunity for administrative laxity.

5. The Commission would like to see specific information and even training given to young researchers so as to enable them to exercise their vocation lucidly and handle their relations with industry with discernment and full awareness of their own role in that collaboration. The Commission proposes that the Rectorate and Offices of the Deans organise a consultation on what form this initiative should take. It would be in keeping with the Rectorate's current efforts to extend the guidelines on scientific integrity to all Faculties. Those guidelines should be taught in a separate course involving active researchers as well as other specialists.

Since Prof. Rylander has retired and the period of administrative liability has run out, 115 there is no need to propose any disciplinary measures.

This being said – and it should continue to be said to the political authorities again and again – biomedical research needs a solid public financing base. Without it, the principles of research ethics defended here will be eroded by the ever-rising costs of pioneering research, especially in such fields as prevention and public health where the gap between common good and certain private interests often seems unbridgeable.

Finally, the Commission wishes to thank Mr. Pascal Diethelm, Dr. Jean-Charles Rielle and Professors Anthony Hedley and Martin McKee, who have played an essential role in elucidating the present affair.

Geneva, 6 September 2004		
Fact-Finding Commission:		
Prof. Alex Mauron, President		
Prof. Alfredo Morabia	Prof. Thomas Perneger	Prof. Thierry Rochat

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¹¹⁵ Conclusions et mesures du Rectorat [Conclusions and measures of the Rectorate], 6 November 2001, § I.2.